

The Network Readiness Index 2022

Stepping into the
new digital era

How and why digital
natives will change
the world

Editors

Soumitra Dutta
and Bruno Lanvin

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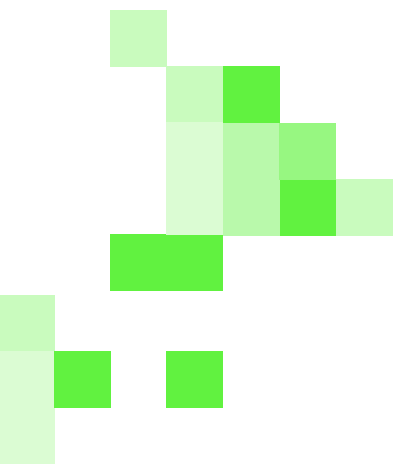
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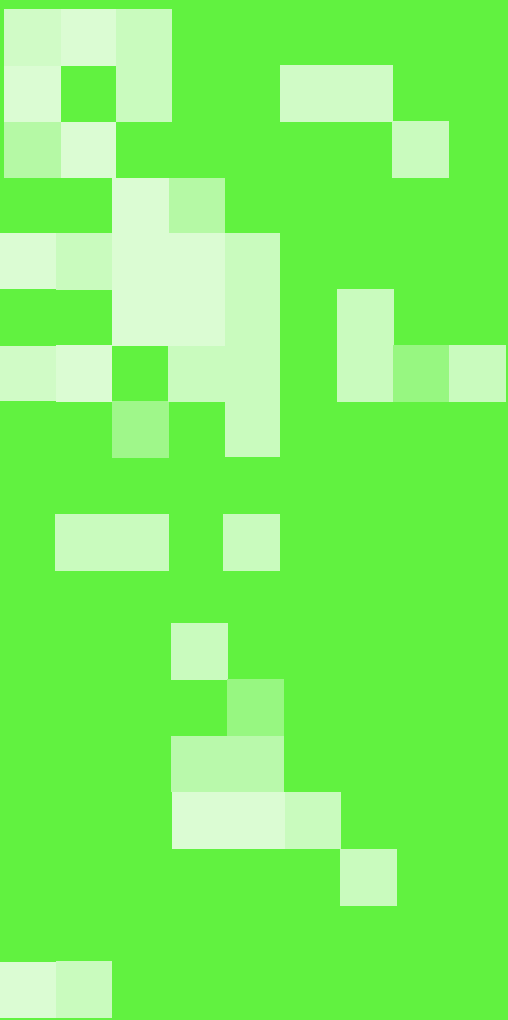
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Preface



Dr. Bruno Lanvin



Prof. Soumitra Dutta

"Digital natives are the generation that will soon dominate the workforce, which is why businesses and policy-makers need to anticipate and address their needs, habits, and beliefs."

Although it is too early to draw a precise picture of the Post-Covid world, it is safe to say the digital-led global recovery has been unequal, further amplifying the digital divide between different geographic and economic groups. More than half of the developing world remains digitally unconnected, with consumers and businesses lacking access to high quality, affordable, safe, and reliable internet, and adequate digital skills (ITU, 2021).¹

International tensions and geopolitical conflict have accelerated the global fragmentation of the Internet. As access to meaningful information promotes both the undesirable goals of the aggressors and the exigency of relief for the victims, this highlights the centrality of information networks to such political and physical conflicts. Slower growth and higher inflation pose economic uncertainty for the post-Covid world. Divisions across rich and poor regions within national boundaries continue to deepen, ushering in a new rise of poverty.

In this complex and volatile context, the role of digital transformation is bigger than ever. It has the potential to fundamentally change how organizations, governments and individuals operate and create more value for the economy and society at large. However, in the current climate of military conflicts and economic uncertainty, digital transformation faces the risks of being relegated to the category of second rank priorities.

While digital transformation impacts all aspects of our lives, it does so in uneven ways, affecting various cultural, economic, and age groups differently. The previous edition of the Network Readiness Index (NRI) focused on digital-led recovery from the Covid-19 pandemic and its effects of closing the digital divide between different groups of society. This year the focus is on one specific group - the younger generations, or 'digital natives', and the role they play in shaping the world as we step into the new digital era.

The accelerated digitalization of our societies has greater benefit for those that are digitally fluent - or 'digital natives' - than for older generations. However, we are yet to fully understand how and why digital natives will shape the process of digital transformation, with what goal and purpose they will do so, and whether they are ready to do so.

We must consider that digital natives are people who have never experienced life without internet connectivity and digital devices. Apart from the more remote and poorer regions of the world (see box by UNCDF below), this is a phenomenon that cuts across all regions and income groups. It reflects the geography of mobile phone networks and internet connectivity. Hence, collaboration and information sharing are an inherent part of their culture and lifestyle. They seek to connect with their peers and live fulfilled, sustainable, and flexible lives. This search for flexible, autonomous lifestyle is one of the key reasons behind the emergence of gig economy platforms and their growing popularity.

Digital natives are the generation that will soon dominate the workforce, which is why businesses and policy-makers need to anticipate and address their needs, habits, and beliefs. The proper way to start would be to ask the right questions:

- [What does the future of work look like?](#)
- [How are digital natives going to reshape the roles and responsibilities at the workplace?](#)
- [Do they possess the required mix of knowledge, technical skills, and social competencies?](#)
- [Are we collecting the right metrics at the national, regional, and city levels? Particularly about the new, emerging talent demographics and categories of these workers?](#)

Since its relocation to Portulans Institute in 2019, the Network Readiness Index has devoted priority attention to areas that matter directly to younger generations, including sustainability, inclusion, governance and trust to name a few. While some of the questions posed above surpass the realm of direct measurability, we also believe that the right metrics can help to provide adequate policy interventions that steer the process in the right direction and maximize benefits not just for younger generations, but also for the economy and society at large.

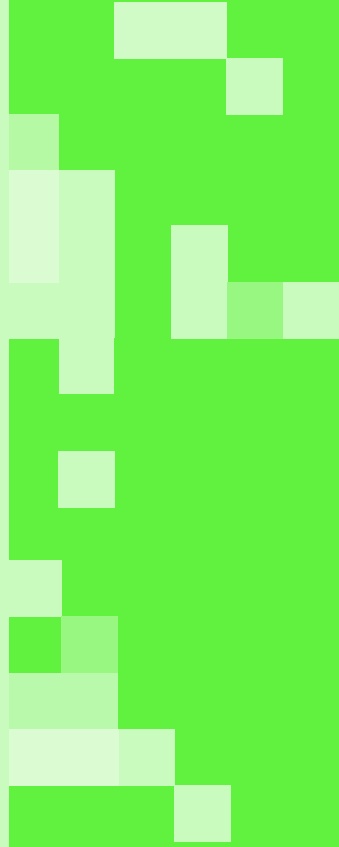


We hope that this report provides valuable evidence to guide decision-makers in developing policies that can support digital natives in their journey-shaping the future.

We would like to express our gratitude towards Saïd Business School at the University of Oxford for co-publishing the report. We would like to thank malomatia, the sponsor and knowledge partner for the NRI 2022. We are grateful for the continuous support and active participation of our partners, the Advisory Board, and the NRI Technical Advisory Group. We give additional thanks to the Joint Research Centre (JRC) for ensuring the accuracy of our metrics and findings. We also invite your comments and feedback as we continuously strive to improve the NRI and ensure that it remains a comprehensive assessment of digital readiness that reflects the critical role of digital technologies in today's society.

Note: According to the Oxford Dictionary, a digital native is a person born or brought up during the age of digital technology and so familiar with computers and the internet from an early age.

1. ITU, 2021 <https://www.itu.int/hub/2021/11/facts-and-figures-2021-2-9-billion-people-still-offline/>



Foreword

Since our inception, malomatia has strived to follow the strategic vision of supporting this young generation by enabling their capabilities, opening up fresh perspectives and opportunities, and listening to their aspirations.



We're stepping into a new phase in the Digital Era, wherein Digital Natives will play a pivotal role in developing our collective future. For those who are unfamiliar with the term, "Digital Natives" are those individuals who are new-age citizens and whose daily life is technology driven.

We have all witnessed how these young solution-makers led the initiatives and grabbed the opportunity amidst the COVID-19 pandemic. They met the rapid demands on technology through innovation and smart solutions created by their recent startups.

Since our inception, malomatia has strived to follow the strategic vision of supporting this young generation by enabling their capabilities, opening up fresh perspectives and opportunities, and listening to their aspirations.

We are thankful to our leadership for their foresight, vision and constant encouragement that has led us to include Digital Natives in successfully delivering numerous strategic, national digital transformation projects. This includes programs like Single Window, AI-Nadeeb, and TASMU Platform, to name a few.

Besides Digital Transformation, malomatia has the niche capabilities to deliver technology services and solutions in Cybersecurity, AI, IoT, Cloud Services, and Data Analytics. Digital Natives will embark on this technology journey showcasing their skills and acumen moving forward. This journey is a long haul and malomatia will help them hone their skills as a home of these many digital talents.

We strongly believe that Research and Development is a key element to building the nation and ensuring its prosperity. We are pleased to mention here that we are the knowledge partners of Network Readiness Index (NRI) this year, joining forces with the Portolans Institute to help realize its prime mission. We are here to collaborate and assist the policy-makers and decision-makers by producing independent, rigorous metrics and empirical research, thereby helping enable global sustainability and inclusive growth.

We hail Portulans Institute's decision to highlight Digital Natives in their latest report. We believe that Digital Natives will be the driving force for a paradigm shift in the technology of the future, and in the world-of-the-future as a whole.

I genuinely wish that the Business Owners and Organizations will pave the way and make available the necessary support and scope to Digital Natives in the times to come. I am confident that the Digital Natives will responsibly invest their acumen in a way that reflects positively into their future and the future of the World.

Dear Digital Natives, the floor now is yours. The pen is in your hand to boldly create the script of what makes all of you proud, not only today but tomorrow and in the future.

Yousef Al-Naama
Chief Executive Officer (CEO) -
Malomatia

Stepping into the new digital era

How and why digital natives will change the world

Soumitra Dutta

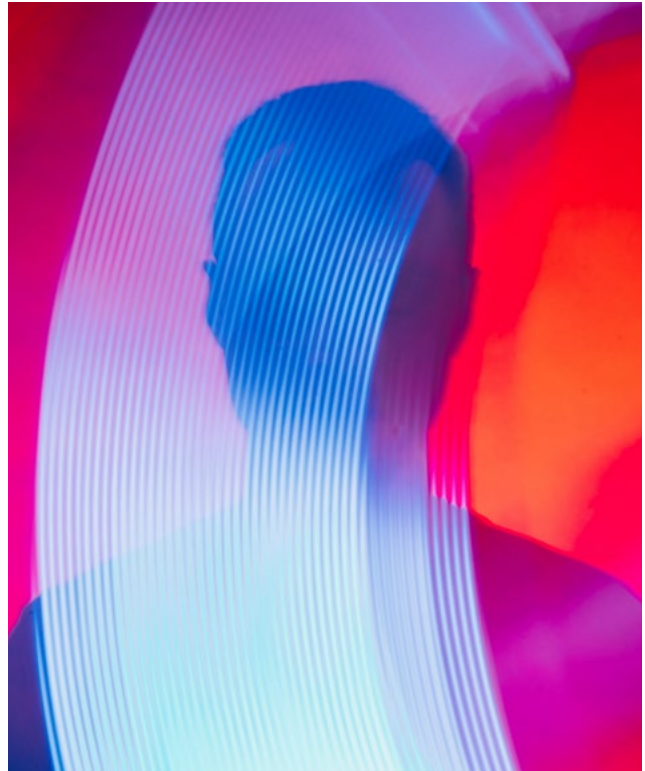
Saïd Business School, University of Oxford and Portulans Institute

Bruno Lanvin

Institut Européen d'Administration des Affaires (INSEAD) and Portulans Institute

Rafael Escalona Reyonoso, Mariam Chaduneli, Sylvie Antal, Jessica Sumner and Abdellah Bouhamidi Portulans Institute

The global data collected by the NRI team, and the subsequent analyses stemming from this data, reveals that much uncertainty remains about our collective international ability (and that of individual economies) to maximize the social and economic effects of this digital transformation.



stewart-maclean-unsplash

How and why digital natives will shape the world

Digital transformation is affecting all aspects of our lives but it is doing so in very uneven ways. Much has been said and written (including in previous NRI reports) about geographical and economic disparities across the societal impacts of digital change. Yet, less has been offered in terms of the intergenerational effects of technology and technological innovation. One might initially be tempted to conclude that the accelerated digitalization of our societies is benefitting more those who understand and master them. These 'digital natives' are typically the younger generations rather than the older generations. However, it is important to consider those challenges and opportunities facing the younger generations that will be ushered in by the advent of the digital era.¹

While there is no doubt that digital natives will shape the new world, critical issues remain to be addressed regarding how they will go about it, what goals and purposes will drive their efforts, and the degree of readiness they can employ to do so.

The global data collected by the NRI team, and the subsequent analyses stemming from this data, reveals that much uncertainty remains about our collective international ability (and that of individual economies) to maximize the social and economic effects of this digital transformation. If the world's youth is indeed expected to play the leading roles in this global process, then emerging economies have a definite demographic advantage.² Yet, simple numbers do not tell the whole story without careful consideration.

Note: This chapter draws significantly on the book 'The Future is Young', recently published by Bruno Lanvin (co-founder and director of Portulans Institute) and Osman Sultan (member of Portulans' Advisory Board). It indicates some of the key dimensions along which younger generations will build and manage the next stage of the world's digital era.

Why can we consider that we are entering a new digital era?

More data has been generated over the last two years than in the entirety of human history up to that point. A recent IDC study (Data Age 2025)³ predicts that worldwide data creation will grow to 163 ZB (zetabytes) by 2025. To appreciate the magnitude of this increase, this figure is 10 times the amount of data produced in 2017. Further, the total size of this data universe more than doubles every two years, meaning it has grown an estimated 50-fold from 2010 to 2020.

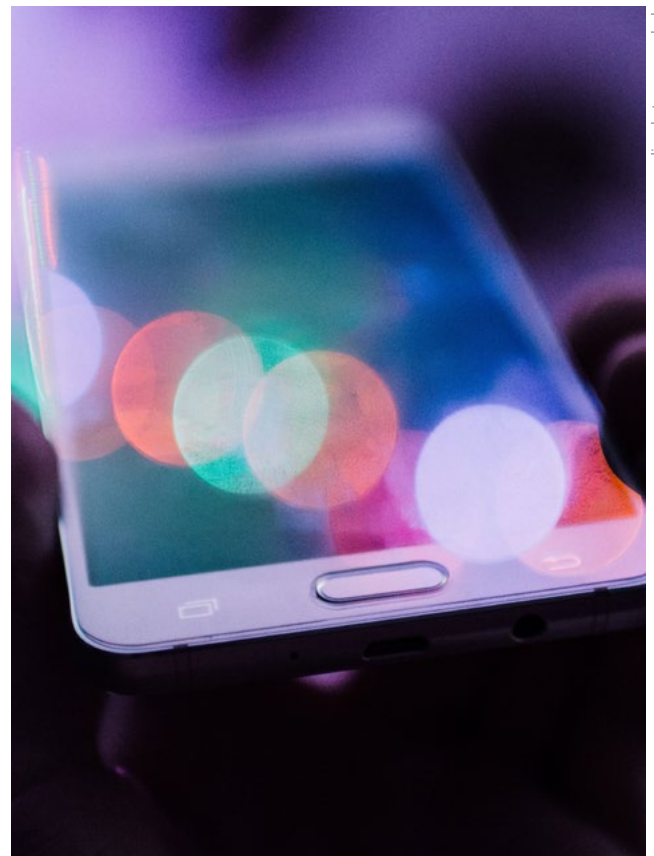
Yet, data must be collated and analyzed before becoming information. To be useful, this veritable explosion of data needs as much computing power as we can muster. That is why engineers in the 2020s are exploring cloud computing and artificial intelligence (AI), aspiring to create CPUs that can reach or even exceed the data processing capability of the human brain.

At the time of writing this report, more than 5 billion consumers interact with data on a daily basis (KEMP, 2022).⁴ By 2025, that number will likely be 6 billion, encompassing 75% of the world's population. Every day, YouTube users upload 82.2 years' worth of videos – that's 500 hours per minute – while WhatsApp transmits 65 billion messages (IDC, 2020).⁵ In 2025, each connected person will be expected to take part in one data interaction every 18 seconds. And it's not just about human users: Many of these interactions are initiated by the billions of Internet-of-Things (IoT) devices connected across the globe. Jointly, they are projected to create over 90 ZB of data in 2025 (Forbes, 2022).⁶

According to a 2019 survey by IDC⁷, all types of organizations, both private and public, are struggling with data overabundance: their data volumes are growing at an average of 63% per month, with 12% of organizations reporting over 100% percent growth every month. Over 90% of participants responded that it is a challenge to make data available in a format that is useful for analytics.

The main paradox behind today's massive quantity of data is that it is simultaneously overabundant and scarce. Successful data analytics should deliver the right insights to the right decision makers at the right time and in the right format. Its impact should be strong and clear. But in reality, meaningful data sets that accurately capture current trends and help us benchmark, predict and plan remain few and far between. Too many organizations have been seduced into believing that they can only extract valuable data by gathering more data combined with greater computing power. This 'better data = more data' school of thought has been a major contributor to the global data explosion – and addiction – that we are witnessing at present.

How will new generations cope with this new 'scarce and abundant' data? They will need to combine it with two additional dimensions of digital transformation, namely talent and learning.



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Box 1

Sir Richard Branson on being young in the digital age

Excerpt from Sir Richard Branson's preface to 'The Future Is Young' by Bruno Lanvin and Osman Sultan (IMD, 2022)

This century is also different because information technologies and networks, our ability to travel to all parts of the world, have brought us the kind of planetary knowledge and experience that generations before us could only dream of.

It is a privilege to be young. Our future has that privilege.

Our times are challenging ones. Previous times were as well. Why is this century different, and why is it reasonable to think that it will usher in a new era in human history?

It is different because the problems we face have reached a new degree of urgency. Whether we consider the dramatic consequences of climate change, the likely repetition of pandemics, the constant rise of inequality, or the resurgence of geo-political tensions, we feel the need to act. And this feeling comes from our hearts and guts as much as from our brains.

This century is also different because information technologies and networks, our ability to travel to all parts of the world, have brought us the kind of planetary knowledge and experience that generations before us could only dream of. Most strikingly, perhaps, humanity has more tools in its hands to address those challenges than ever before. We have progressively developed technologies to produce renewable energies. We have created new modes of travel and new ways of exchanging goods and services across the planet. People and ideas have been crossing borders, trading knowledge, and imagining the future together. We have expanded our capacity to express our

feelings in music and other forms of

art, and to disseminate them globally. Social networks have given younger generations the ability to share their observations, views and feelings in 'real time'. And within decades, space travel is expected to be an ordinary part of our lives.

In my life and in my work, through success and failure, I have met countless brilliant and value-driven young people. Many confirmed my deep belief that, when given a chance, everyone can grow and succeed based on their own talents. But I also drew another lesson from these encounters: those with enthusiasm and optimism have a greater chance of realizing their dreams. Every talent (however hidden or embryonic) deserves an ambition. Ambition guides talent, and enthusiasm and optimism make the ride enjoyable and creative. There are many ways to define success, but in my view two components are essential: the extent to which you have managed to make people's lives better, and the fun you've had and shared along the way.

Indeed, the future is young. Let us turn this privilege into something that our children and grandchildren will thank us for.

Sir Richard Branson
Founder, Virgin Group

How future-ready are the new generations?

Entering the 2020s, we continue moving ahead on the chessboard of exponential data growth and in technological capabilities. Our ability to bring together technology, innovation, and talent in ways that are mutually reinforcing is what it takes to earn the label of 'future-ready'. To be considered prepared to face the economic, technological, and social challenges of the future, we must continually ask ourselves, our schools, businesses, and government agencies:

- [Is the talent we produce compatible with data-driven organizations, cultures, data analytics, AI-human algorithms, and collaborations?](#)
- [Does it reflect the desired mix of knowledge, technical skills, and social competences?](#)
- [Are we collecting the right metrics – at national, regional, and city levels? Particularly about new, emerging talent demographics and categories of workers?](#)
- [Does the statistical data we collect reflect the new, post-Covid practices in education and employment?](#)

The 'tech + innovation + talent' equation is evolving so fast, the definition of 'future-ready' already looks different than it did only a few years ago. This change is part of the new normal, and its pace will not diminish. Further, the rate of change is not linear, making the path of change difficult to grasp and direct. In the next two chapters, we take a look at what this means for education, and we trace the rise of new types of players in the geography of future-readiness.

Box 2

Youth and Digital Transformation in Least Developed Countries (LDC)

United Nations Capital Development Fund (UNCDF)



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The first significant condition is infrastructure. One cannot thrive digitally with poor Internet or network coverage. As of 2021, only 53% of LDC territory (land) had access to 4G (ITU 2021). The second cause is affordability. As a percentage of their GNI, people in LDCs pay ten times more for their mobile broadband data than people in developed countries, and the youth usually have lower means. Yet, LDCs have experienced enormous progress, as almost half of their population has an active mobile broadband subscription (ITU, 2021). Youth do better in terms of the digital divide and are almost 1.4 times more likely to use the Internet than adults.

The digital transformation for youth in LDCs resembles that of their peers in some aspects and looks quite different in others. The mobile phone is king, as access to computers is very scarce. Since many young people only have a feature phone, they use many services via Unstructured Supplementary Service Data (USSD), for instance, to send money to a family member, or to buy credit. Sending money is not a random example, as the use of mobile money (digital financial services delivered through the phone) has grown exponentially in LDCs. From these essential services, young people are transitioning to low-cost or second-hand smartphones. This opens the door to the ubiquitous Facebook, which in some countries is synonymous with the Internet. As youth everywhere, they want to connect, stay tuned and share. But accessing the Internet from their phones also connects them to digital training opportunities, markets and job opportunities, and more sophisticated financial services.

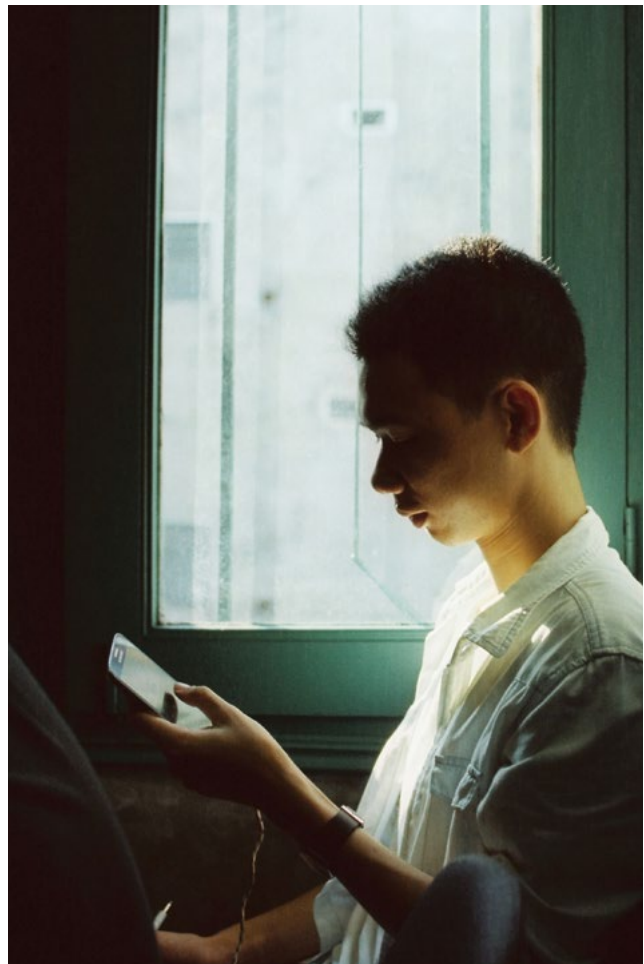
Despite a challenging environment, the digital journey can contribute to expanding the opportunities for youth in LDCs. Governments, civil society, and international donors are aware of it, and they are working on the digital transformation of their economies. This is where UNCDF brings its expertise and unique tools to ensure youth can thrive in LDCs.

Millennials and Gen Z are shaping the future of work

The new ways of working and organizing we have seen emerge in recent years have been shaped by the habits and preferences of a young workforce. But these changes are not implemented merely as a nod to the millennials, or as an effort to retain them longer and in greater numbers. The old cubicle-land is ceding ground to squads and tribes of workers with no spatial location.

Powered by digital technology, speed and customer-centricity, the dynamics of these new teams emulates such quintessentially human qualities as empathy, creativity, iteration, and spontaneity. Autonomous, cross-functional, cross-disciplinary teams are working hand in hand with customers. Teams of diverse talent are pulling work towards themselves rather than having it pushed onto them from on high. In addition, members of Gen Z have a natural desire to connect with and learn from their peers, especially in online environments.

Whatever the face of 21st-century education, graduates ultimately want to make a living and pay off their study loans. This particular space – of skills, employability, employment and job creation – has been dynamic and exciting, but also full of visible fissures that policymakers struggle to address. For example, the unemployment rate among Malaysia's university graduates has remained stubbornly high, at three times the national average – a troubling outcome when considering that education has for many years eaten up more than 20% of the national budget (US\$15 billion in 2020) (UNESCO National Commission, 2022).⁸ Entering the new millennium, the debates raged on what it would take to fashion a new space that could merit the label of '21st-century learning' (The Economist, 2022).⁹



manh-nghiem-unsplash

"The unemployment rate among Malaysia's university graduates has remained stubbornly high, at three times the national average – a troubling outcome when considering that education has for many years eaten up more than 20% of the national budget (US\$15 billion in 2020) (UNESCO National Commission, 2022)."

The health crisis of 2020 brought these issues to a head, encouraging even more soul searching on what education in the next decade should be about and how it should be delivered. Challenging the status quo had never been more important. Beyond the easy mantra of ‘distance learning’, the act of temporarily abandoning the physical classroom has spurred a lot of other, more important learning reinventions.

As former US president Obama explained at a ConnectED to the Future event, “In a country where we expect free wifi with our coffee, the least we can do is expect that our schools are properly wired.” But that is just the infrastructure component of the problem. To reconfigure what education is about, it is useful to ask fundamental questions like: what is education for? With blurred lines between traditional classroom education, home schooling, and online learning, what is it that students should take away from their instruction? What is it they miss when schools are closed during a public health crisis? For many years, the pragmatic answer had to do with employability and skills. But just as there are many new directions in learning, the process of learning and its intended objectives and outcomes also continues to evolve. New technologies, including AI, are unlikely to lead to the unsettling predictions of mass unemployment. But they will certainly require employers to redefine most occupations and employees to acquire newly requisite skills.

In a world where applications and their underlying software code itself are quickly evolving, and where many domains may soon take on a post-digital garb, real learning skills are increasingly seen as going beyond technologies and job descriptions. It is understood, albeit often intuitively, that students will do well to work on their self-awareness, comfort with ambiguity, and lateral and vertical collaboration skills. Another way of putting it is to achieve goals, work effectively with others, and manage their emotions. All of these boil down to building trust, which is why character traits have made it to the list of what schools are supposed to shape, as well as soft skills and life skills.

Box 3

GitHub on digital natives and measuring software development

GitHub

Software development plays an important role in the digital transformation taking place around the world. Software developers can build for their local context while drawing upon a global commons of open source software projects. They can also collaborate across borders to build innovative solutions or simply to learn new skills. Thus, measuring software development is a useful complement to other, often consumption-focused, measures of digital development.

The theme of this year’s Network Readiness Index is “digital natives.” While the arrival of the internet has varied for populations depending where they live around the world, the generations born after the arrival of the internet do things differently. GitHub caters to digital natives, especially those who are inclined to build software in the open, online.

GitHub is a code hosting and collaboration platform where over 83 million developers come together to build software. Activity on GitHub, thus serves to measure software development. This year, the Network Readiness Index uses an updated indicator with GitHub data. The GitHub indicator is defined as commit pushes received, scaled by working age population. Commit pushes received are assigned to the economy where the recipient project is located. This indicator thus highlights economies where the code attracts global contributions, as opposed to economies where developers primarily make contributions to foreign code bases. Scaling by working age population (15-69) enables comparisons across countries that account for differences in population distributions.

What will guide digital natives in their quest to change the world?

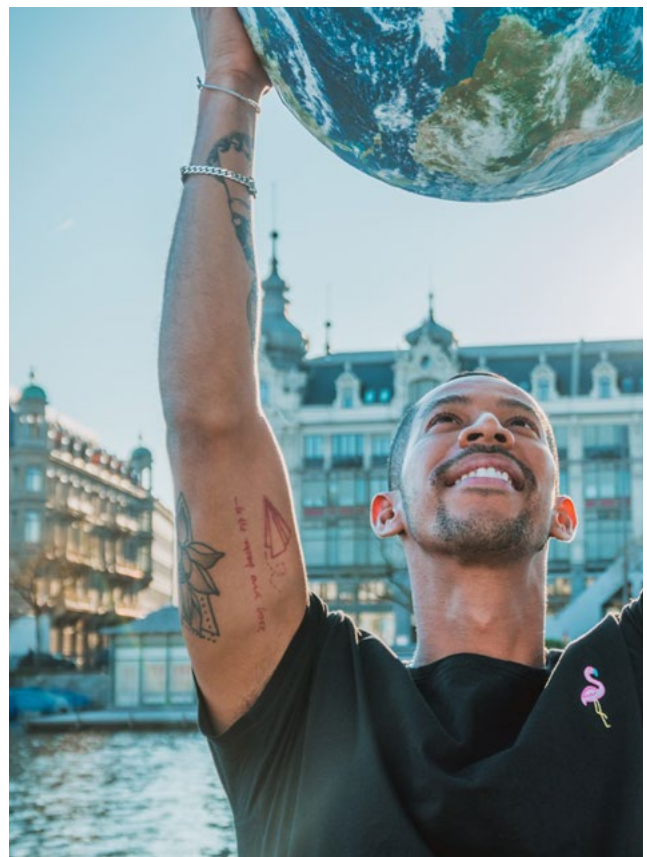
The magic word: Impact

Ultimately, skills, knowledge and habits won't stick unless they share a deep connection with the learner's own world. Real, active learning happens when students listen, absorb, and, crucially, form their own impressions and contextual meaning of the material. That is what the modern school encourages students to showcase and apply what they have learned. Terms like 'creativity' may sound old hat and are not always easy to visualize. But a simple community project can spur students to find and frame a complex problem, present it to others, and cooperatively piece together an enriching solution. Each of these steps calls for creativity, teamwork, and critical thinking.

Data specialists and digital entrepreneurs

As digital natives, many young people are drawn to work that involves creating digital assets such as content, design, and portfolios. They can promote their skills as programmers or as experts in creating data visualizations and dynamic user experiences. They can be specialists in digital marketing, including content marketing, marketing automation, social media marketing, and SEO. Those with extra ambition go on to set up digital startups that receive incubator, angel, and series A, B, and C funding, which allows them to build and expand digital enterprises. Others make a living from nothing more than their laptops. According to a 2019 study by Upwork (Upwork, 2022), 57 million Americans describe themselves as freelancers.¹⁰

"Ultimately, skills, knowledge and habits won't stick unless they share a deep connection with the learner's own world. Real, active learning happens when students listen, absorb, and, crucially, form their own impressions and contextual meaning of the material."



A large portion of this number leverage the power of the internet to market and deliver their services. Some experts have suggested that even before machine learning and AI penetrate all aspects of our lives, digital living and digital entrepreneurship are already unfolding before our eyes as the next industrial revolution. Yet this beneficial phenomenon in itself can be a potential source of aggravated digital divides.

Digital social entrepreneurs

Merging technology with a social purpose is the domain of digital social entrepreneurs. In the past, these entrepreneurs were mainly niche players who experimented with using technology to address social issues, often in developing countries. Today, many startups seek to take a stand on social issues and reach a younger, more socially conscious audience. On top of wishing to do good, there are practical, technical aspects that digital social entrepreneurs must consider. Increasingly, those seeking to create social impact must be comfortable with a variety of digital tools and platforms. Supporting a social cause and communicating that support requires not only conviction but also familiarity with and proficiency in Facebook Ads, Google AdSense, Google Analytics, WordPress, Chatfuel, CrowdTangle, BuzzSumo, and other digital tools.

Creating social impact with the aid of digital platforms today has its own version of the Academy Awards. The Shorty Social Good Awards honor the agencies, brands, and other industry players behind the best and most innovative work on social media and digital channels, campaigns, websites and applications.¹¹ Winners of the fifth edition in 2020 included a 12-hour TikTok streamathon that raised more than \$2 million for charities.



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Digital nomads

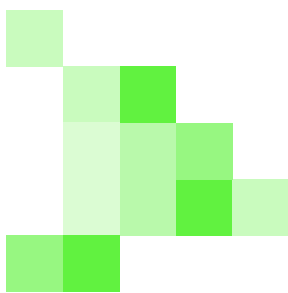
In one of their latest incarnations, cities – and particularly medium-sized cities – have fashioned themselves as hubs for digital nomads and other transient, remote workers. Digital nomads are location-independent people who are increasingly leaving major city centers and using evolving technology to perform their job. Flexible, light travelers, they are sociable and friendly; they aim for success and a healthy work-life balance. Armed with a laptop and a backpack, they are frequently on the road, exploring new destinations with the help of job opportunities, scholarships, and volunteer projects. They commonly include web developers, graphic designers, copywriters, movie editors, digital marketing specialists, photographers, journalists, bloggers, translators, and language instructors but also tantric healing gurus and internet poker players.

Female digital nomads and their formal and informal networks have also established themselves as a force to reckon with in the corporate world. Location-independent careers have offered many women the type of lifestyle and, in many cases, a desirable balance between work and parenting that traditional employment could rarely offer. For Natalie Sisson, the concept is simple: *“you design a business around your talents, skills, and knowledge, that gives you the freedom to do all the things you want, when you want. Using online tools, technologies, and systems, you can work in a way that sustains the lifestyle you want – whether that’s having more time to play with your children or being able to travel the world (Lanvin & Sultan, 2022)”*.

"Female digital nomads and their formal and informal networks have also established themselves as a force to reckon with in the corporate world. Location-independent careers have offered many women the type of lifestyle and, in many cases, a desirable balance between work and parenting that traditional employment could rarely offer."

How can NRI and digital metrics help?

Today, despite decades of economic growth, income inequalities across and within countries continue to rise in many parts of the world. At the time of writing this report, the global health crisis of 2020 has shown how vulnerable the world economy is, not only in terms of growth but also in public debt, employment and people’s wellbeing. Global government debt has reached its highest peacetime level and worldwide poverty is expected to increase for the first time in 30 years. As developing countries witness a capital flight to relatively safer financial harbors, Africa is entering its first recession in 25 years (The World Bank, 2022)¹². While the pandemic has prompted an increase in online learning in many countries, 89% of Sub-Saharan Africa students don’t have a home computer and 82% lack internet access (UNESCO, 2020).¹³ As many tables and analyses in this year’s Network Readiness Index Report show, statistics such as these are sobering. Growing geo-political tensions, combined with a spectacular return of inflationary pressures, does not make the picture any brighter.



Yet, facts and their quantification are important elements for triggering productive actions. Quantifiable and verifiable information can be used for enhancing social welfare, but also exploited for short-term, political or ideological considerations. The challenge lies in educating young professionals to recognize the difference.

Trust and confidence in the future will directly feed into young people's ambition

To tackle today's global challenges (as reflected in the SDGs, for example), we – managers, workers, policymakers, students, social activists – truly need to give the best of ourselves by looking at the world through the eyes of younger, future generations. A more open world, where inequalities are shrinking rather than growing, is a big part of the ambition that the younger generation can claim as its own.

It is hardly an exaggeration to say that today's young generation has an 'embarrassment of riches' at their fingertips. Knowledge, technology, imagination, and innovation, which increasingly includes AI-enhanced 'superpowers,' all have potentially edifying value in promoting human wellbeing. However, the capacity of emerging technology is dependent on the values and intent of users, which is why understanding the intentions/aspirations of youth is exceedingly important. Technology should be a tool for nurturing the presence of human spirit that thrives on caring, compassion, and social impact. If the rest of society can help the youth activate its ambition and enthusiasm, the outcomes may well be impossible to beat. In addition, we need to be acutely aware of where young talent has been gravitating and concentrating; what issues (economic but also psychological and existential ones) it has been grappling with; and which players are in the best position to attract and develop that talent.

The question of metrics, and their limits

Many of the conceptual priorities mentioned in this chapter lay outside the realm of measurability. Yet, as in all thoughtful pursuits, we need tools to process what is unfolding around us and to formulate an optimal response. This requires identifying firm departure points and predicting where we will all be heading so that we may shape our future path. We believe that the wealth of data points and trend analyses that we have collected and published since 2000 in the form of annual global indices – the Network Readiness Index, the Global Innovation Index and the Global Talent Competitiveness Index – constitute a robust volume of information and knowledge that can serve as a reliable starting point in this project. We also recognize the limits of any kind of benchmarking. It remains at best a useful indication, but never a detailed roadmap.

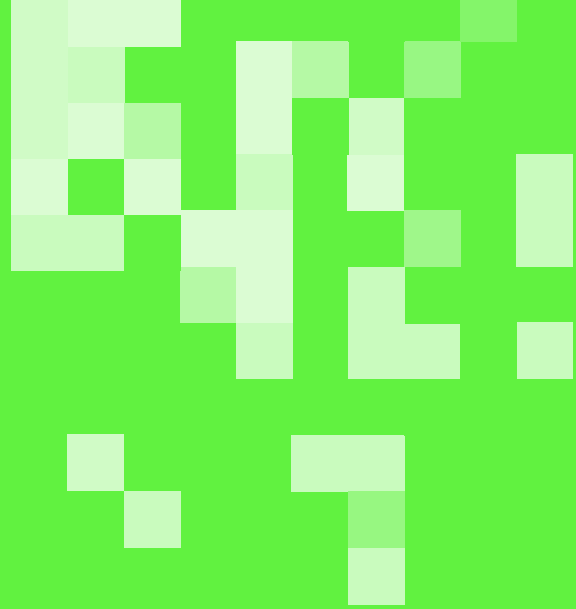
Data provides us with the cognitive handles we need to comprehend present-day reality – especially those trends that facilitate the efficient adoption of technology. Quantitative tools like rankings and indices are especially important as we live in the age of complexity where a small change in one part of the system can produce big changes in other, remote parts of the system.

Since its relocation to Portulans Institute, the Network Readiness Index has devoted priority attention to areas that matter directly to younger generations, including sustainability, inclusion, governance, and trust to name a few. This present edition is a further step in that direction.

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Key Messages NRI 2022





Digital transformation is a global imperative in today's data-driven world. This became most evident during the COVID-19 pandemic, which accelerated the need to rapidly adopt digital solutions. As many aspects of life now rely on online connections, the amount of data generated daily continues to grow at exponential rates and is expected to continue for the foreseeable future.



ucrezia-carmelos-lunsplash

1

We are entering a new digital era

Digital transformation is a global imperative in today's data-driven world. This became most evident during the COVID-19 pandemic, which accelerated the need to rapidly adopt digital solutions. As many aspects of life now rely on online connections, the amount of data generated daily continues to grow at exponential rates and is expected to continue for the foreseeable future. This raises new issues regarding our individual and collective ability to derive value from data, as well as the governance that should be put in place around data and data flows.

2

Digital transformation may create new inequalities

To this day, over 2.9 billion people, mostly in developing countries, lack stable internet access. As of 2021, only 53% of LDC (least developed countries) territory had access to 4G (ITU, 2021). As the demand for digital skills increases, such disparities in access and connectivity will only amplify existing divides among, as well as within, national economies and regions. Such inequalities within these countries and regions may also hinder the ability of younger generations to meaningfully engage in the digital economy. Regardless of their appetite for digital technologies, they will be unable to fully harness the rich opportunities brought about by the digital era.

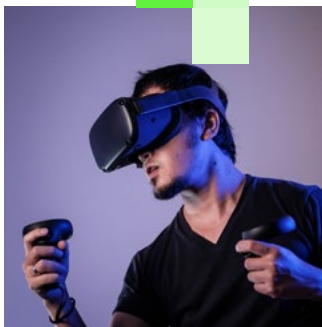


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3

Digital transformation remains a powerful way to do more with less at all levels of income

A group of middle- and low-income economies stand out as being highly efficient in one or more of the elements that lead to successful digital transformation. These economies - led by China, India, and Rwanda - are creating the necessary opportunities to induce faster paced change above their expected levels of development. Many of these economies are located in Africa. They perform particularly well in two pillars of the NRI model, namely technology and impact. Such successes can be a source of inspiration for other emerging economies.



minh-pham-unsplash



pexels-andrea-piacquadio

4

Digital Natives are shaping the future of work, and ready to lead in the new digital era

With the age of digital transformation, new ways of working have emerged. Digital natives operate in a more collaborative and less hierarchical manner than what has been traditionally seen in the office workplace. This flexible work environment is further supported by the emergence of gig work. To fully leverage the potential of new generations to create value in those environments in which they feel comfortable, public and private organizations should encourage the involvement of young people in conversations that govern how they work and communicate.

5

Formal education is evolving, and will continue to do so

Technologies and ways of working will continue to see cumulative innovations in the coming years. By 2025, it is estimated that 50% of all employees will need reskilling due to the adoption of new technologies. Further, a third of these essential skills will consist of technical competencies not yet regarded as crucial to today's job requirements (WEF, 2021). Thus, the process of learning and its intended objectives will continue to evolve, becoming an essential dimension in the lives of digital natives. Higher education institutions, non-traditional programs, and employers must commit to making opportunities for reskilling and upskilling accessible, available, and affordable. Giving all people the opportunities they need to develop the necessary skills to fully participate in the future workplace will contribute to more inclusive and sustainable economies and societies.



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6

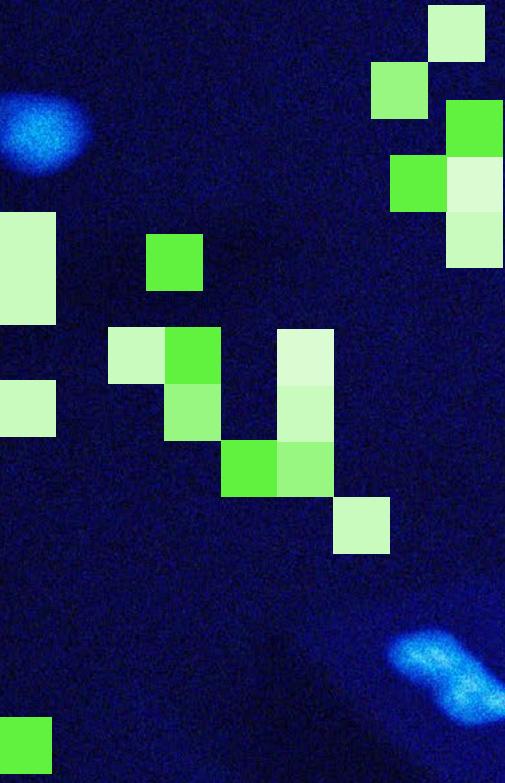
Metrics are important

While we cannot fully measure digital transformation, or the direct impact of digital natives in this process, it is important to harness the appropriate metrics to support informed policy-making. As we enter a new digital era, understanding the limits of existing measures and developing new metrics that effectively track core dimensions of digital transformation is key. For example, this year's NRI uses an updated software development indicator with GitHub data. These results allow for metrics that better identify those countries which have attracted global contributions, as well as enable more accurate and insightful comparisons across all countries. Through such improvements, we hope the NRI can remain a 'frontier tool' that will help decision makers better prepare for the future.



mathew-schwartz-unsplash

Key Results of NRI 2022



The top three regional leaders reflect the performance divide that exists across the different regions of the NRI.

Foremost, Europe leads by having a majority in the top 10 economies.

The Top 10

In contrast to previous years, the top 10 performers in the NRI 2022 repositioned themselves in their relative level of network readiness. Specifically, the Republic of Korea makes its first appearance in the top 10. Additionally, the United States climbed three spots to displace the Netherlands in the top position, which had previously dominated the NRI rankings throughout the years. Singapore also climbed five spots to earn a place among the top five for the first time since 2020. This addition to the top 10 created a more geographically balanced distribution than in previous years.

The top 10 performers all demonstrate solid performance metrics across the dimensions of the NRI. They all rank as the top 25 countries on each of the four primary pillars (Technology, People, Governance, Impact), demonstrating a comprehensive approach to maintaining digital readiness. The top 10 countries exhibit a pattern of high-income economies devoted to investing in and adopting information and communications technologies (ICTs) across governments, businesses, and individuals.

Table A: Top 10 performers in NRI 2022

Country	NRI rank	NRI score	Pillars			
			Technology	People	Governance	Impact
United States	1	80,30	1	2	7	20
Singapore	2	79,35	4	4	10	2
Sweden	3	78,91	8	5	5	1
Netherlands	4	78,82	3	14	4	4
Switzerland	5	78,45	2	11	12	5
Denmark	6	78,26	11	7	2	7
Finland	7	77,90	13	6	3	3
Germany	8	76,11	7	9	14	8
Korea, Rep.	9	75,95	14	1	22	13
Norway	10	75,68	12	12	1	14

Source: Network Readiness Index Database, Portulans Institute, 2022.

Regional Leaders

The top three regional leaders reflect the performance divide that exists across the different regions of the NRI. Foremost, Europe leads by having a majority in the top 10 economies. They are followed by Asia, with Singapore and the Republic of Korea achieving spots respectively in the top 10. Africa, on the other hand, remains the region with the lowest quartile performance. The highest ranking economies in each region

tend to ensure their population is digitally well equipped, as well as continuously pressing forward by readily adopting future technologies. A particular example of this trend is Sweden's position as the top performer in Europe, followed by the Netherlands' consistent positive ranking. The United Arab Emirates, Singapore, the Russian Federation, the United States, and South Africa all continue to lead in their respective regions.

Table B: Top 3 countries by region

Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas
1. South Africa (68)	1. United Arab Emirates (28)	1. Singapore (2)	1. Russian Federation (40)	1. Sweden (3)	1. United States (1)
2. Mauritius (72)	2. Saudi Arabia (35)	2. Korea, Rep. (9)	2. Kazakhstan (58)	2. Netherlands (4)	2. Canada (11)
3. Kenya (77)	3. Qatar (42)	3. Japan (13)	3. Armenia (64)	3. Switzerland (5)	3. Chile (43)

Note: Global ranks in parentheses. CIS = Commonwealth of Independent States.
Source: Network Readiness Index Database, Portulans Institute, 2022.

Income group leaders

The top performing economies for each income group reflect the positive correlation between income levels and network readiness, as demonstrated by the achievements of the United States, Singapore, and the Netherlands. Each of these countries tend to invest relatively more than the others in their group in the human capital of their workforce, and have attained more new technologies. Of those economies that performed the best overall, the high-income groups

dominate the top quartile and earn the top three spots in the overall ranking. Comparatively, China represents the upper middle-income economies ranked in the upper quartile, whereas, Ukraine is the only lower middle-income economy that appears in the upper half of the NRI rankings. While higher-income countries have generally performed better in the area of network readiness, this may be the result of having invested previously in the technologies and regulatory policies that have proven to streamline digital growth.

Table C: Top 3 countries by income group

High-income economies	Upper middle-income economies	Lower middle-income economies	Low-income economies
1. United States (1)	1. China (23)	1. Ukraine (50)	1. Rwanda (101)
2. Singapore (2)	2. Malaysia (36)	2. Indonesia (59)	2. Zambia (113)
3. Sweden (3)	3. Russian Federation (40)	3. India (61)	3. Uganda (116)

Note: Global ranks in parentheses.
Source: Network Readiness Index Database, Portulans Institute, 2022.



cut-in-a-moment-unsplash

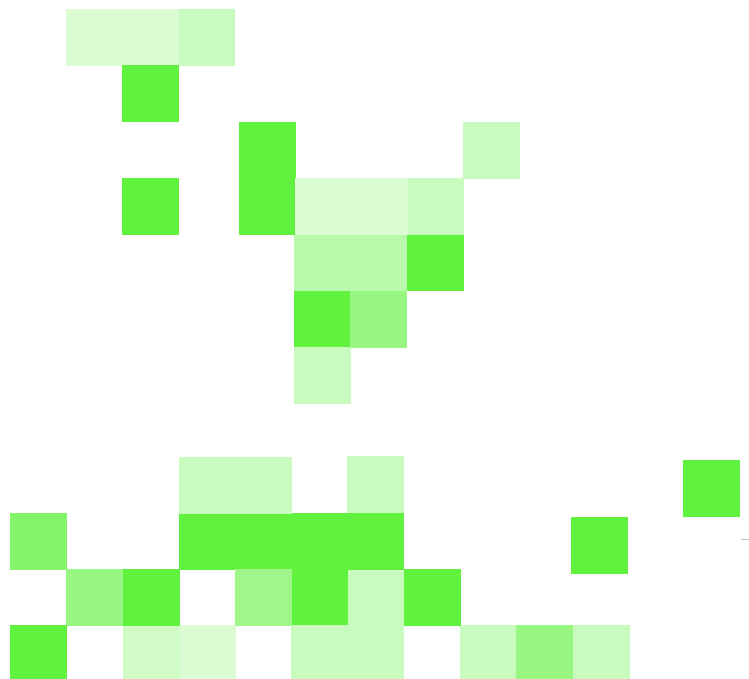
Outstanding pillar performance among middle- and low-income economies

The NRI 2022 results show that a group of 44 middle- and low-income economies stand out above their expected levels of development in one or more of the four pillar categories of digital readiness: technology, people, impact, and government. China, India, and Rwanda further distinguish themselves as the only countries to do so in all four categories.

Most of the outstanding pillar performers are among the lower middle-income group, and are predominantly located in Africa and the Asia & the Pacific regions. Across income groups, most countries exhibit an advantage in technology, impact, and government, while regionally most economies outperform in the categories of government, technology, and people.

Other economies in the outstanding pillar performance group include Brazil, Kenya, Viet Nam, Pakistan, and Ukraine.

"The NRI 2022 results show that a group of 44 middle- and low-income economies stand out above their expected levels of development in one or more of the four pillar categories of digital readiness: technology, people, impact, and government."



Continuing to improve the NRI model

Digital transformation demands a continual reexamination of the sources that enrich the NRI model. Each year the NRI team examined multiple general and technology-specific sources to identify novel indicators that can help measure and assess the dynamic landscape of digital transformation and network readiness.

Improvements to the NRI occurred through the replacement, development, or inclusion of coherent metrics. Yet, the main concept underlying the NRI model relies on the notion that our collective future will require a harmonious integration of People and Technology.

As Technology continues to evolve, its interaction with People will increase, with each having a collaborative role as partners on both social and business planes. Implementing appropriate governance mechanisms that address issues related to trust, security, and inclusion must continue to ensure the effectiveness of this integration. The ultimate objective for improving how people can productively leverage technology can be assessed in three key areas of societal wellbeing:

- 1 [To have a positive impact on the economy](#)
- 2 [To have a positive impact on a country's quality of life](#)
- 3 [To help a country achieve all Sustainable Development Goals \(SDGs\)](#)

Each of these objectives reflects the goals agreed upon by the United Nations for a better and more sustainable future.

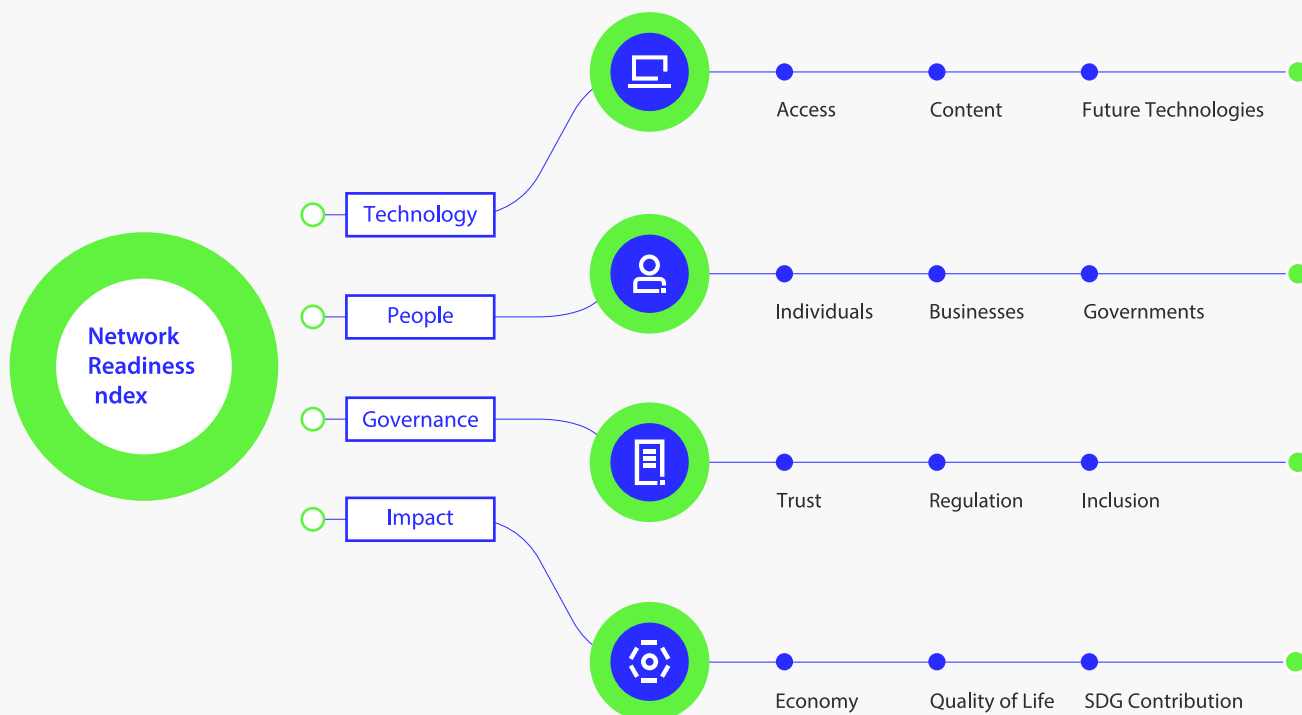
The Network Readiness Index

The 2022 NRI Report utilizes the three primary principles defined by the NRI Technical Advisory Group in 2019 as a guideline to future-proof the NRI model:

- 1 [To maintain continuity with the major components of the NRI from previous years.](#)
- 2 [To reflect the current issues concerning ICT deployment that the previous NRI models may not have adequately captured.](#)
- 3 [To future-proof the NRI model regardless of developing future technology trends.](#)

The NRI 2022 model reflects its staple four-pillar structure: Technology, People, Governance, and Impact. Each pillar consists of three sub-pillars depicted in Figure 1.

Figure A: NRI 2022 model



Primary updates to the NRI 2022 apply across six sub-pillars: Access, Content, Individuals, Businesses, Economy, and SDG Contribution. A total of 58 indicators populate all 12 sub-pillars in the NRI. Details about any improvements within the complete list of indicators are found in Appendix I: Technical Notes and Appendix II: Sources and Definitions. The structure of the pillars and sub-pillars of the NRI model can be explained as follows:

Technology

Technology is at the heart of the network economy. Therefore, as a primary category of the NRI, the Technology pillar seeks to assess the level of technology that is a sine qua non for a country to participate in the global economy. Three sub-pillars accomplish the Technology pillar's purpose:

- **Access:** People's fundamental access level to ICT in countries, including issues about communications infrastructure and affordability.
- **Content:** The type of digital technology produced in countries and the content/applications that can be deployed locally. This includes research findings on the subject derived from scientific and technical articles, software spending, GitHub commits, and mobile app creation.
- **Future Technologies:** The extent that countries have prepared for the future of the network economy and new technology trends. This includes employing Artificial Intelligence (AI), the Internet of Things (IoT) and the levels of spending in emerging technologies.

People

The prevalence and quality of technology reflect the skill, access, and ability of the people and organizations within a country to utilize technology resources in productive ways. Therefore, the People pillar measures how people apply ICT at three levels of analysis: individuals, businesses, and governments.

- **Individuals:** how individuals use technology and leverage their skills to participate in the network economy.
- **Businesses:** How businesses use ICT and participate in the network economy including their spending on R&D.
- **Governments:** How governments use, invest in, and deploy ICT for the benefit of the general population.

Governance

Governance refers to the structures that uphold an integrated network for the safety and security of its users. Therefore, the Governance pillar concerns the establishment and accessibility of systems that promote activity within the network economy across three levels:

- **Trust:** The safety of individuals and firms in the context of the network economy, reflected in an environment that is conducive to trust and the trusting behavior of the population.
- **Regulation:** The extent to which a government promotes participation in the network economy through regulation, policy, and planning.
- **Inclusion:** The digital divides within countries where governance can address issues such as inequality based on gender, disabilities, and socioeconomic status.

Impact

Readiness in the network economy is a means to improve the growth and well-being of society and the economy in general. Therefore, the Impact pillar seeks to assess the economic, social, and human impact of participation in the network economy across three levels:

- **Economy:** The economic impact of participating in the network economy - including the size of the local market.
- **Quality of life:** The social impact of participating in the network economy.
- **SDG contribution:** The impact of participating in the network economy within the context of SDGs. ICT has a critical role within the network economy and receives particular focus with indicators integrated across health, education, gender equality, and the environment.

Detailed results of NRI 2022



The Networked Readiness Index (NRI) was first published in 2002 by the World Economic Forum as part of the Global Information Technology Report.



Overall rankings

The Network Readiness Index 2022 ranks a total of 131 economies across various components of digital readiness, noting that data availability and changes to the NRI model framework influence year-on-year comparisons of the NRI rankings. The United States moved up three positions from last year, emerging as the most network-ready country. Singapore experienced the most positive movement among the top 10 economies, moving up five positions from last year to secure the 2nd spot. Singapore is followed by Sweden and the Netherlands, which maintained their leadership positions ranking 3rd and 4th, respectively. Switzerland moved into the top five, improving its performance by one position since 2021 to claim the 5th spot. The Republic of Korea made a significant leap this year, moving up from the 12th spot to the 9th. The other five countries that make up the top 10 are Denmark (6th, down from 3rd in NRI 2021), Finland (7th, down from 5th), Germany (8th, as in 2021), and Norway (10th, down from 9th).

The top ten performers in the NRI 2022 reveal that advanced economies in Europe, the Americas, and Asia and the Pacific are the world's most network-ready societies. More specifically, of the top 25 countries, 17 are from Europe (predominantly Northern and Western Europe), four are from Eastern and Southeastern Asia (Singapore, the Republic of Korea, China, and Japan), two are from Oceania (Australia and New Zealand), and two are from North America (Canada and the United States).

Overall, country coverage has increased from 130 economies to 131 economies covered in the NRI 2022. This increased coverage is due to the addition of Benin to this year's report. Of the 131 countries covered in the 2022 index, 49 are high-income economies, 32 are upper middle-income countries, 36 are lower middle-income countries, and 14 are low-income countries. In terms of regional distribution, there are 31 African countries, 12 Arab States, 21 economies are from Asia and the Pacific, six are from the Commonwealth of Independent States (CIS), 41 are European countries, and 20 countries are from the Americas.

Note: Countries are grouped according to the World Bank Income Classifications (1 July 2022).

Table 1: NRI 2022 rankings

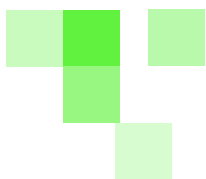
Rank	Economy	Score	Income	Region
1	United States	80,30	High income	The Americas
2	Singapore	79,35	High income	Asia & Pacific
3	Sweden	78,91	High income	Europe
4	Netherlands	78,82	High income	Europe
5	Switzerland	78,45	High income	Europe
6	Denmark	78,26	High income	Europe
7	Finland	77,90	High income	Europe
8	Germany	76,11	High income	Europe
9	Korea, Rep.	75,95	High income	Asia & Pacific
10	Norway	75,68	High income	Europe
11	Canada	74,22	High income	The Americas
12	United Kingdom	73,41	High income	Europe
13	Japan	73,09	High income	Asia & Pacific
14	Australia	72,83	High income	Asia & Pacific
15	Israel	72,20	High income	Europe
16	France	72,19	High income	Europe
17	Luxembourg	72,10	High income	Europe
18	Austria	71,31	High income	Europe
19	New Zealand	70,32	High income	Asia & Pacific
20	Ireland	70,15	High income	Europe
21	Belgium	70,04	High income	Europe
22	Estonia	69,79	High income	Europe
23	China	68,83	Upper middle income	Asia & Pacific
24	Iceland	67,48	High income	Europe
25	Czech Republic	66,83	High income	Europe
26	Spain	66,51	High income	Europe
27	Slovenia	65,67	High income	Europe
28	United Arab Emirates	65,64	High income	Arab States
29	Portugal	65,63	High income	Europe
30	Hong Kong, China	65,40	High income	Asia & Pacific
31	Malta	64,87	High income	Europe
32	Italy	64,11	High income	Europe
33	Lithuania	62,78	High income	Europe
34	Poland	61,16	High income	Europe
35	Saudi Arabia	61,09	High income	Arab States
36	Malaysia	60,58	Upper middle income	Asia & Pacific
37	Slovakia	60,27	High income	Europe
38	Cyprus	59,95	High income	Europe
39	Latvia	59,86	High income	Europe
40	Russian Federation	59,54	Upper middle income	CIS
41	Hungary	59,20	High income	Europe
42	Qatar	57,87	High income	Arab States
43	Chile	57,19	High income	The Americas
44	Brazil	57,01	Upper middle income	The Americas
45	Croatia	56,86	High income	Europe
46	Thailand	56,56	Upper middle income	Asia & Pacific
47	Uruguay	56,12	High income	The Americas
48	Türkiye	55,77	Upper middle income	Europe
49	Greece	55,74	High income	Europe
50	Ukraine	55,71	Lower middle income	Europe
51	Bulgaria	55,51	Upper middle income	Europe
52	Romania	54,89	High income	Europe
53	Oman	54,72	High income	Arab States
54	Bahrain	54,34	High income	Arab States
55	Serbia	53,52	Upper middle income	Europe
56	Costa Rica	53,34	Upper middle income	The Americas

Rank	Economy	Score	Income	Region
57	Argentina	52,96	Upper middle income	The Americas
58	Kazakhstan	52,46	Upper middle income	CIS
59	Indonesia	51,51	Lower middle income	Asia & Pacific
60	Mexico	51,33	Upper middle income	The Americas
61	India	51,19	Lower middle income	Asia & Pacific
62	Viet Nam	51,07	Lower middle income	Asia & Pacific
63	Kuwait	51,04	High income	Arab States
64	Armenia	50,40	Upper middle income	CIS
65	Montenegro	50,38	Upper middle income	Europe
66	Colombia	49,99	Upper middle income	The Americas
67	Moldova	49,54	Upper middle income	Europe
68	South Africa	48,90	Upper middle income	Africa
69	North Macedonia	48,46	Upper middle income	Europe
70	Jordan	48,31	Upper middle income	Arab States
71	Philippines	48,06	Lower middle income	Asia & Pacific
72	Mauritius	47,87	Upper middle income	Africa
73	Egypt	47,76	Lower middle income	Arab States
74	Azerbaijan	47,74	Upper middle income	CIS
75	Georgia	47,14	Upper middle income	Europe
76	Jamaica	46,96	Upper middle income	The Americas
77	Kenya	46,90	Lower middle income	Africa
78	Peru	46,71	Upper middle income	The Americas
79	Morocco	46,50	Lower middle income	Arab States
80	Albania	46,50	Upper middle income	Europe
81	Sri Lanka	46,45	Lower middle income	Asia & Pacific
82	Iran, Islamic Rep.	46,07	Lower middle income	Asia & Pacific
83	Panama	45,72	High income	The Americas
84	Tunisia	45,46	Lower middle income	Arab States
85	Dominican Republic	45,33	Upper middle income	The Americas
86	Ecuador	43,81	Upper middle income	The Americas
87	Mongolia	43,53	Lower middle income	Asia & Pacific
88	Bangladesh	42,74	Lower middle income	Asia & Pacific
89	Pakistan	42,70	Lower middle income	Asia & Pacific
90	Bosnia and Herzegovina	42,67	Upper middle income	Europe
91	Lebanon	42,30	Lower middle income	Arab States
92	Trinidad and Tobago	42,18	High income	The Americas
93	Paraguay	41,86	Upper middle income	The Americas
94	Cabo Verde	41,68	Lower middle income	Africa
95	Kyrgyzstan	41,03	Lower middle income	CIS
96	El Salvador	40,66	Lower middle income	The Americas
97	Bolivia	40,41	Lower middle income	The Americas
98	Senegal	39,62	Lower middle income	Africa
99	Cote d'Ivoire	39,56	Lower middle income	Africa
100	Algeria	39,48	Lower middle income	Arab States
101	Rwanda	39,48	Low income	Africa
102	Lao PDR	39,45	Lower middle income	Asia & Pacific
103	Ghana	38,89	Lower middle income	Africa
104	Cambodia	38,48	Lower middle income	Asia & Pacific
105	Honduras	37,90	Lower middle income	The Americas
106	Guatemala	37,85	Upper middle income	The Americas
107	Tanzania	37,84	Lower middle income	Africa
108	Botswana	37,72	Upper middle income	Africa
109	Nigeria	36,67	Lower middle income	Africa
110	Benin	36,05	Lower middle income	Africa
111	Tajikistan	34,73	Lower middle income	CIS
112	Nepal	34,66	Lower middle income	Asia & Pacific

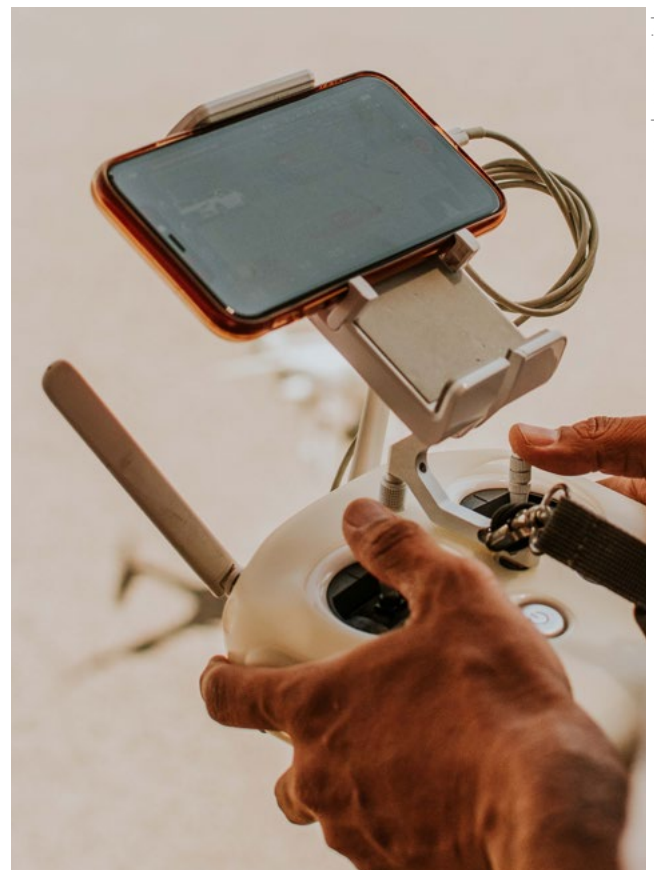
Rank	Economy	Score	Income	Region
113	Zambia	34,02	Low income	Africa
114	Cameroon	33,72	Lower middle income	Africa
115	Namibia	33,45	Upper middle income	Africa
116	Uganda	33,33	Low income	Africa
117	Gambia	33,06	Low income	Africa
118	Zimbabwe	31,95	Lower middle income	Africa
119	Malawi	31,30	Low income	Africa
120	Madagascar	30,53	Low income	Africa
121	Mali	30,02	Low income	Africa
122	Burkina Faso	29,76	Low income	Africa
123	Ethiopia	29,68	Low income	Africa
124	Guinea	28,92	Low income	Africa
125	Mozambique	28,18	Low income	Africa
126	Eswatini	27,95	Lower middle income	Africa
127	Lesotho	27,90	Lower middle income	Africa
128	Angola	27,40	Lower middle income	Africa
129	Congo, Dem. Rep.	23,34	Low income	Africa
130	Burundi	21,11	Low income	Africa
131	Chad	20,12	Low income	Africa

Note: CIS = Commonwealth of Independent States.

Source: Network Readiness Index Database, Portulans Institute, 2022.



"The United States is the top-ranking economy in the Technology pillar, further substantiated by the high rankings of sub-pillars such as high-quality digital Content (2nd) and stable investments in Future Technologies (1st)."



Pillar-level performances

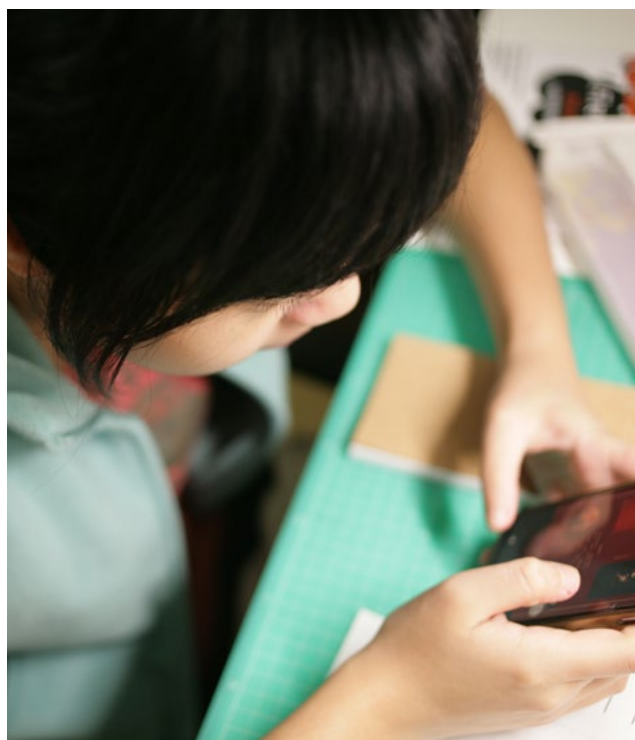
Top performers generally demonstrate strength in all components of digital readiness: Technology, People, Governance, and Impact. Typically, these economies also do well in each of the different dimensions, or pillars, of digital readiness. This year seven out of the top 10 economies rank within the top 10 in at least three pillars of the NRI. Similarly, among the lower 10 performing economies, seven stand out as having at least three areas among the lowest ranked. This finding emphasizes that a multidimensional approach towards digital readiness plays an important role in achieving successful NRI performance. It also displays the broad range of approaches economies can take to strengthen their digital strategies and design policies that lead to a faster pace of digital development.

Likewise, countries with less consistent showings across the NRI pillars often score lower in the sub-pillars of Access, Economy, and Inclusion. Through further investments in areas such as Digital Infrastructure, these economies have the potential to improve the Quality of Education. Additionally, a more ubiquitous digital infrastructure could simultaneously improve inclusion rates within the economy for women and various other often under-represented groups in society.

Technology: The United States is the top-ranking economy in the Technology pillar, further substantiated by the high rankings of sub-pillars such as high-quality digital Content (2nd) and stable investments in Future Technologies (1st). Switzerland (2nd) also displays a notable performance in the Technology pillar, particularly when it comes to the production of digital Content (1st). The Netherlands (3rd) follows, showing strength in Content (3rd) as well. China, a top performer among the upper middle-income economies, emerges as the global leader in Access to digital technologies (1st).

People: The Republic of Korea leads in People (1st), supported by its high levels of digital technology adoption by Businesses (1st), Individuals (1st), and Governments (2nd). The United States (2nd) showcases leadership in having digitally engaged Businesses (5th) and Governments (10th) boosted by strong Annual investment in telecommunication services (1st). Japan (3rd) and Singapore (4th) also emerge as strong performers in the People pillar. Sweden (5th) rounds out the top 5, showing particular strength in the Businesses sub-pillar (2nd). Denmark emerges as the global leader in the Governments sub-pillar, supported by high levels of R&D expenditure by governments and higher education.

Governance: Northern European economies like Norway (1st), Denmark (2nd), and Finland (3rd) continue to dominate the Governance pillar. Norway remains a strong performer when it comes to Regulation (2nd) of digital technologies,



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boosted by balanced showings in E-commerce legislation (1st). Denmark follows in the ranks, demonstrating a high level of Trust (1st) towards digital technologies, as evidenced by the number of Secure Internet Servers (1st), high rates of Online Access to Financial Accounts (2nd), and popularity of Online shopping (2nd). Finland and Sweden round out the top 5 with sophisticated Governance of network technologies, attributed partly to their sophisticated E-commerce legislation. Singapore earns the top spot in Inclusion (1st) of different groups of society in digital governance, with high output in Regulatory Quality (1st), E-commerce legislation (1st), as well as in its success to reduce the Rural gap in use of digital payments (2nd). Luxembourg emerges as a leader in Regulation (1st), supported by a strong legal framework of emerging technologies (1st).

Impact: Sweden, Singapore, and Finland dominate in terms of the Impact of technologies on their economies and societies as a whole. Finland takes the top spot in the Quality of Life sub-pillar, also ranking first in the Happiness of its citizens, and demonstrating a great degree of Freedom to make life choices (2nd). China emerges as a global leader in the Economy sub-pillar, with strong scores in domestic market size (1st), a prevalent gig economy (1st), and notable level of high-tech exports (4th). Ireland is the global leader in SDG Contribution, ranking among the top 5 in a few sustainable development goals, namely: SDG 5: Women's economic opportunity (1st), SDG 7: Affordable and Clean Energy (1st), and SDG 11: Sustainable Cities and Communities (4th). The Netherlands (4th) and Switzerland (5th) round out the top 5 in Impact.

Table 2: Rankings by pillar

Economy	NRI ranking	Technology	People	Governance	Impact
United States	1	1	2	7	20
Singapore	2	4	4	10	2
Sweden	3	8	5	5	1
Netherlands	4	3	14	4	4
Switzerland	5	2	11	12	5
Denmark	6	11	7	2	7
Finland	7	13	6	3	3
Germany	8	7	9	14	8
Korea, Rep.	9	14	1	22	13
Norway	10	12	12	1	14
Canada	11	9	17	9	15
United Kingdom	12	10	19	16	11
Japan	13	18	3	25	12
Australia	14	17	13	8	22
Israel	15	20	10	26	9
France	16	15	16	18	10
Luxembourg	17	6	28	13	19
Austria	18	23	15	15	18
New Zealand	19	16	26	11	23
Ireland	20	19	36	23	6
Belgium	21	21	22	20	17
Estonia	22	29	21	6	24
China	23	25	8	35	21
Iceland	24	22	29	19	31
Czech Republic	25	26	39	21	16
Spain	26	28	25	27	25
Slovenia	27	34	24	30	26
United Arab Emirates	28	24	20	46	29
Portugal	29	27	32	31	27
Hong Kong, China	30	5	31	39	47
Malta	31	30	27	32	30
Italy	32	33	30	33	28
Lithuania	33	38	33	17	40
Poland	34	44	43	28	33
Saudi Arabia	35	32	18	50	49
Malaysia	36	36	35	40	39
Slovakia	37	37	65	29	32
Cyprus	38	55	38	34	35
Latvia	39	49	55	24	36
Russian Federation	40	35	23	43	69
Hungary	41	40	54	38	34
Qatar	42	31	63	36	53
Chile	43	42	47	41	54
Brazil	44	43	40	44	61
Croatia	45	71	50	37	38
Thailand	46	47	45	48	46
Uruguay	47	54	44	54	42
Türkiye	48	51	34	52	72
Greece	49	69	41	42	52
Ukraine	50	45	37	57	57
Bulgaria	51	53	52	47	58
Romania	52	66	58	53	37
Oman	53	58	51	45	64
Bahrain	54	41	70	51	59
Serbia	55	77	57	49	48

Economy	NRI ranking	Technology	People	Governance	Impact
Costa Rica	56	46	75	58	44
Argentina	57	72	42	60	56
Kazakhstan	58	74	49	55	65
Indonesia	59	48	66	64	67
Mexico	60	63	67	72	43
India	61	56	46	83	62
Viet Nam	62	50	80	76	41
Kuwait	63	57	61	66	68
Armenia	64	64	59	79	55
Montenegro	65	39	74	69	81
Colombia	66	61	60	68	77
Moldova	67	84	71	63	60
South Africa	68	52	72	59	105
North Macedonia	69	95	77	61	51
Jordan	70	70	53	73	97
Philippines	71	85	73	82	50
Mauritius	72	83	94	56	71
Egypt	73	65	81	74	78
Azerbaijan	74	68	56	95	82
Georgia	75	82	64	67	99
Jamaica	76	76	95	70	63
Kenya	77	62	88	62	98
Peru	78	86	69	85	74
Morocco	79	78	85	80	66
Albania	80	94	48	92	79
Sri Lanka	81	67	83	88	75
Iran, Islamic Rep.	82	80	62	75	106
Panama	83	79	82	93	73
Tunisia	84	73	76	90	95
Dominican Republic	85	91	79	71	91
Ecuador	86	87	89	100	70
Mongolia	87	90	91	65	102
Bangladesh	88	81	92	101	88
Pakistan	89	59	87	116	90
Bosnia and Herzegovina	90	99	96	77	85
Lebanon	91	60	68	119	108
Trinidad and Tobago	92	102	93	78	94
Paraguay	93	109	97	86	76
Cabo Verde	94	101	90	94	92
Kyrgyzstan	95	111	98	81	89
El Salvador	96	108	104	103	45
Bolivia	97	106	78	117	83
Senegal	98	92	111	96	100
Cote d'Ivoire	99	97	110	87	103
Algeria	100	100	86	107	96
Rwanda	101	105	105	84	104
Lao PDR	102	75	84	127	84
Ghana	103	98	103	89	111
Cambodia	104	89	102	122	87
Honduras	105	115	106	102	86
Guatemala	106	103	116	105	80
Tanzania	107	96	109	98	113
Botswana	108	93	101	99	119

Economy	NRI ranking	Technology	People	Governance	Impact
Nigeria	109	88	99	115	118
Benin	110	118	113	91	117
Tajikistan	111	114	115	123	93
Nepal	112	112	117	109	101
Zambia	113	117	100	104	122
Cameroon	114	116	108	118	112
Namibia	115	122	107	112	116
Uganda	116	104	130	97	121
Gambia	117	107	124	108	110
Zimbabwe	118	113	112	110	128
Malawi	119	126	118	114	114
Madagascar	120	124	122	106	123
Mali	121	119	129	121	115
Burkina Faso	122	129	119	111	120
Ethiopia	123	110	123	129	107
Guinea	124	127	121	126	109
Mozambique	125	121	128	120	125
Eswatini	126	120	114	125	131
Lesotho	127	123	125	113	130
Angola	128	125	120	124	127
Congo, Dem. Rep.	129	128	127	130	126
Burundi	130	130	126	131	124
Chad	131	131	131	128	129

Source: Network Readiness Index Database, Portulans Institute, 2022.

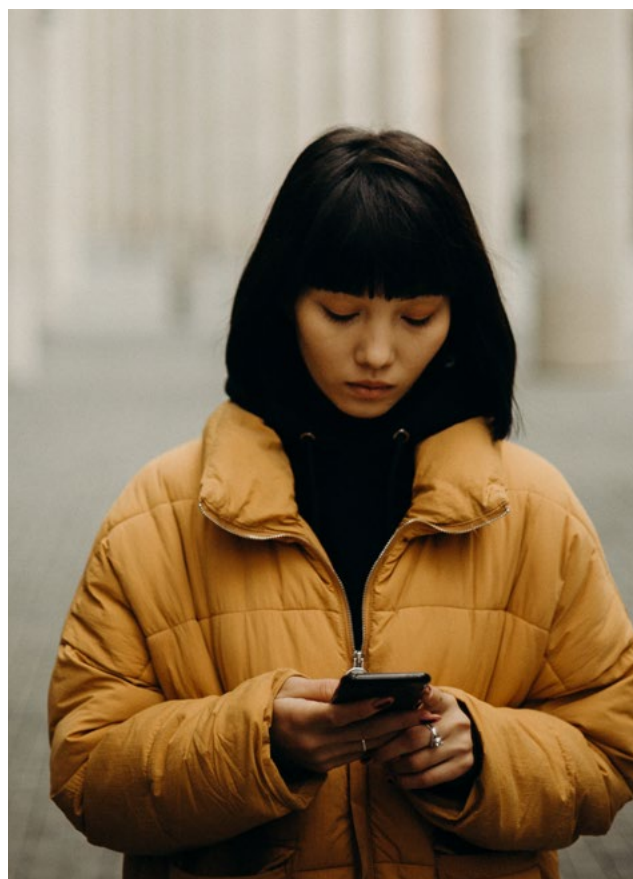
Top 10 NRI performers

This year, the United States rises to the top of the NRI rankings from last year's position of 4th. Singapore moves up to 2nd place, and the Republic of Korea enters the top 10.

It is noteworthy that the top 10 performers are all high-income economies and do well across most of the pillar dimensions comprising the NRI. Each of the top 10 countries achieves top 25 rankings across all four primary pillars (Technology, People, Governance, Impact). As for regional distribution, Singapore and Korea are the only top 10 countries located in Asia and the Pacific, and the United States is the only economy located in the Americas. The rest of the top 10 rankings consist of European countries.

A detailed look at the top ten performers can demonstrate the comparative strengths and weaknesses of each country's performance regarding network readiness. Repeatedly, what makes the performances of the highest-ranked economies stand out are (i) consistently strong showings in most, if not all, dimensions of network readiness, and (ii) impressive efforts in ensuring technologies are tangible, accessible, and beneficial for the economy and society at large. These top 10 economies have an edge above the rest by taking the lead on implementing regulatory frameworks, adopting new technologies, AI, robotics, Internet of Things, 5G, and investing in educational opportunities. They have also led in expanding Internet access in schools and promoting ICT skills in the education system.

1 The United States is at the forefront of the most network-ready societies in the NRI 2022. Its overall impressive performance is attributable to a comprehensive approach to investing in the pillars of Technology (1st) and People (2nd). Through the affordability of handset prices (1st), the United States is able to equip a larger number of users with the technology they need to be digitally literate. Additionally, the United States engages in high-levels of computer software spending (1st), and e-participation (1st), which combine to create an involved and accessible network of technology. The United States' continuous leadership in the Technology (1st) domain is largely due to its stable investment in emerging technologies (1st) and adoption of emerging tech and telecommunication services (1st), providing users with access to an up-to-date digital infrastructure. These technologies are enhanced by a thriving regulatory environment when it comes to secure internet servers (2nd) and exceedingly effective cybersecurity (1st). On the contrary, the country's NRI rating value could benefit from enhancing privacy protection by law content (61st) designed to protect Internet users' privacy and data, and subsequently promote a more digitally engaged society.



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2 Singapore rises to 2nd place in the NRI 2022. The economy's strongest area of network readiness relates to Impact (2nd) of digital technologies on the economy and society at large. Followed by stable investments in Technology (4th) and its increasing adoption by People (4th). The country benefits from positive performances at the sub-pillar level due to wide-sweeping access and adoption of Future Technologies (2nd), impressive levels of Inclusion (1st) and the impact of network technologies on the overall Economy (3rd). Some areas of opportunity relate to better addressing the gender gap in Internet use (54th) and enhancing privacy protection by law content (94th), which is uncharacteristically low for a top-ranked country. Improving these areas could foster public trust in digital technologies by ensuring a degree of security over users' data.

3 Sweden follows in 3rd place, reaffirming its place in the Top 10. Similar to the well-rounded ranks attained by Singapore, Sweden maintains a strong overall performance in all areas of network readiness. Sweden's greatest strength is characterized by Impact (1st) of digital technologies in its ability to successfully work towards accomplishing the Sustainable Development Goals (SDGs), including Women's Economic Opportunity (1st), and Good Health and Well-being (3rd).



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These SDGs promote higher degrees of economic and social choices by providing quality care, citizen involvement, and accessibility. Similarly, Sweden's commendable achievements in the adoption of digital technologies by Businesses (2nd) and stable investments in Future Technologies (3rd) demonstrate its ability to encourage knowledge-intensive employment, where workers possess high levels of technical knowledge and are able to adapt to innovative new technologies. Some areas of opportunity for Sweden include addressing the gender gap in internet usage (46th), which could lead to a more inclusive digital environment, and improving its ICT regulatory framework (51st), which would promote security, protection, and control of ICT systems.

4 The Netherlands ranks 4th in the NRI 2022 with commendable achievements in investment (1st) and adoption of Technology (5th), particularly with regards to providing Internet access in schools, Internet domain registrations, and mobile app developments. Furthermore, the Netherlands excels at producing quality online Content (3rd) and having robust e-commerce legislation (1st). These initiatives are further complemented by secure internet servers (3rd), emboldening it as a leader of Governance (4th) of digital technologies. The prevalence of the gig economy acts as a contributing factor towards the overall strength of the country's economy. Similarly, the combination of large amounts of high and medium-tech manufacturing (12th) with a high number of PCT patent applications (9th) results in a high rank for Impact (4th), demonstrating that the economy encourages innovation and idea generation. Likewise, the country benefits from overall success in all the measured NRI areas, such as the wide-scale availability of Internet access in schools (1st), promoting digital literacy from an early age. Furthermore, the prevalence of Internet Domain Registrations (1st), and the adoption of Emerging Technologies (1st) reflect a drive to invest in and adopt digital technologies across the economy. Opportunities for improvement include AI talent concentration (30th) and Population covered by at least a 3G mobile network (55th). Such improvement can be achieved through further investing in tech talent and in enhancing the level of mobile coverage.

5 Switzerland re-enters the top 5, ranking 5th. Switzerland's areas of strength include strong investments and adoption of Technology (2nd) through its high-coverage rate of at least a 3G network, internet access in schools, and GitHub commits, all of which provide users with a variety of opportunities to access digital networks and showcase their technical abilities. The Swiss Economy (11th) benefits from the country's involvement in high-tech and medium-high-tech manufacturing, which is effectively shown through digital Content (1st) production and investments in Future Technologies (4th). Switzerland demonstrates a high aptitude for overall quality of life (8th), supported by elements of healthy life expectancy at birth (4th), SDG 3: good health and well-being (5th), and happiness (8th) measured by life satisfaction and emotional well-being. When it comes to the societal aspects of the NRI, adoption of digital solutions by People (11th) and Governance (12th) of network

"The Netherlands ranks 4th in the NRI 2022 with commendable achievements in investment (1st) and adoption of Technology (5th), particularly with regards to providing Internet access in schools, Internet domain registrations, and mobile app developments. "

technologies, Switzerland has potential opportunities for improvement by supporting its resources in cybersecurity (50th) and improving the mobile broadband internet traffic (43rd) within the country to increase online access.

6 **Denmark** falls just outside of the top 5, ranking 6th. Its main strength is the ability to provide effective Governance (2nd) of digital technologies, as demonstrated through the number and quality of secure internet servers (1st) and e-commerce legislation (1st) ensuring vital areas of e-transactions, consumer protection, privacy, and cybersecurity are adequately addressed. Furthermore, achievements in the Impact (7th) of digital technologies on society are attributable to a high volume of PCT patent applications which signal high levels of digital productivity. Denmark also successfully implements ICT skills in the education system, equipping students for the digital future. Namely, Denmark demonstrates investments in its digitally-focused labor force, People (7th), as reflected through expenditure on R&D efforts by the governments and higher education (1st). Likewise, the availability of government online services (3rd) allows digital users to more easily access public services and information. On the other hand, Denmark can improve features related to investment and adoption of Technology (11th) by ensuring the quality and availability of international Internet bandwidth (73rd) as well as the availability and affordability of handsets (46th).

7 **Finland** continues to be at the forefront of network readiness (7th), being particularly skilled in facets of digital Governance (3rd) and Impact (3rd) of network technologies. With respect to Governance, the country demonstrates superior aptitude in robust e-commerce legislation (1st) through rigorous regulatory policy. As such, emerging technologies are readily adopted and regulated due to robust governmental policies that extend onto private-sector development. Still, Finland stands out in areas that encompass high standards for Quality of Life (1st) as provided through remarkable degrees of happiness, freedom to make life choices, and low levels of income inequality. Moreover, there is space for improvement in how accessible technological services are to the public. The latter is accounted for through lower levels of FTTH/building Internet subscriptions (47th) and international Internet bandwidth (81st), demonstrating perceptible inequality in accessing digital technology within the economy.

8 **Germany** maintains its 8th place ranking with a strong overall performance across the NRI pillars. The country's greatest area of network readiness is Technology (7th) which can be attributed to notable investments in future technologies (5th) and in annual investments in telecommunication services (5th). This gives Germany the advantage of having a more digitally forward society characterized by digitally engaged Businesses (7th) and Governments (11th). Meanwhile, its greatest area for improvement is Governance (14th). Germany could further improve its overall score through making government online services (58th) more accessible, as well as by implementing structures for ICT skills within the education system (64th). This would lead to educating young people from an early age on how to harness innovation and take advantage of digital technologies.

9 **The Republic of Korea** achieves a spot in NRI's top 10 ranks and thus contributes to the regional representation of Asia in the top 10. The country's strength lies in a digital workforce, supporting a superior rank in the People (1st) pillar. The high concentration of AI talent (1st) enables its people to utilize the substantive amount of publications and use of open data (4th). Uniquely, the Republic of Korea is able to stand out in how it harnesses its technology through achieving superior levels of robot density (1st). This strength is further complemented by a developed business scene where business-financed research and development is manifested through GERD performed by business enterprises (1st). Similarly, there is a notable amount of inclusivity when it comes to e-participation (1st), which has a positive effect on the number of digital users who seek out PCT patent applications (2nd). Improvements can be made in areas of Regulation (39th), specifically to ICT regulatory environment (101st) and privacy protection by law content (52nd) which demonstrate an overall need for more comprehensive oversight frameworks.

10 **Norway** rounds out the top ten by maintaining its global leadership in network readiness. The country demonstrates notable achievements in progressive ICT regulation, which contributes to subsequent high levels of public trust towards digital technologies. This is illustrated through its performance in Regulation (2nd), Trust (2nd), and Access (2nd). Norway also exhibits positive trends in investing in emerging technologies, producing high-quality digital Content (9th), and demonstrating a solid ability to encourage digital innovation. However, marked improvements are possible through increasing mobile broadband internet traffic within the country (73rd) and enhancing its international internet bandwidth (74th) to ensure that users are able to engage digitally, wherever they are. Similarly, by encouraging ICT service exports (57th), Norway's workforce could become more technologically robust.

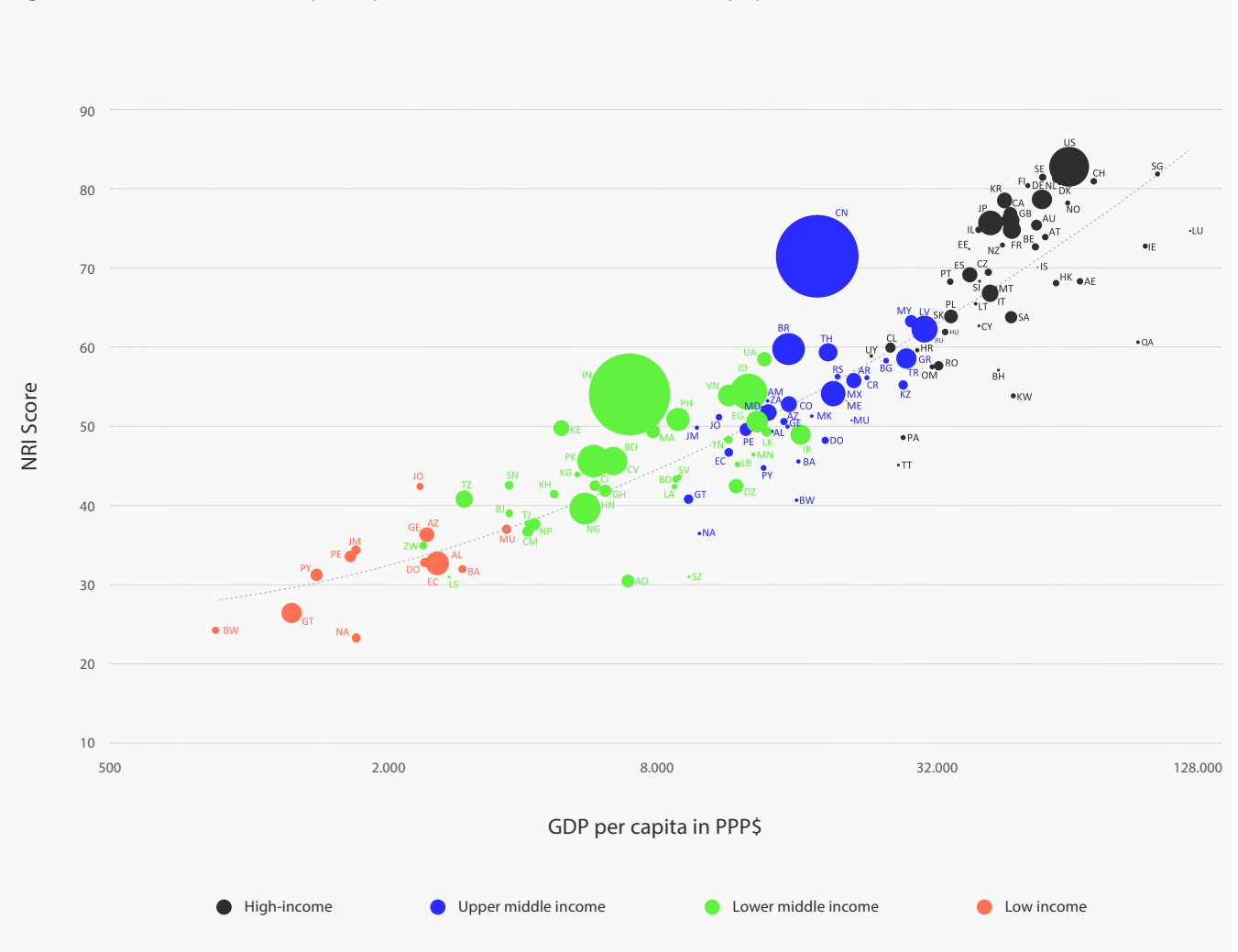
NRI Performances by Income Group¹⁴

More developed economies display higher degrees of digital readiness, and vice versa. This quite foreseeable trend is captured in **figure 1** that displays the relationship between NRI scores and GDP per capita. This analysis shows that a few non-high-income economies display higher than expected levels of network readiness. China (23rd) and Brazil (44th) are in this cluster within the upper middle-income group;

Ukraine (50th), India (61st), Viet Nam (62nd), and Philippines (71st) do so in the lower middle-income group while Rwanda (101st) and Malawi (119th) stand out among the lower-income group. This analysis also shows that most economies achieving levels of digital readiness beyond expectations are mostly from the lower middle-income group and are located in both Asia & Pacific and Africa regions.¹⁵

Summary statistics of each income group also reinforce the positive correlation between NRI score and income level. Figure 2 shows how NRI scores differ across the four income groups. The dispersion of NRI scores among high-income economies is greater than in the other income groups, as reflected by the size of the box-and-whisker plots.

Figure 1: NRI scores and GDP per capita in PPP\$ NRI 2022 (bubble size: population)



Note:

1. Countries are grouped according to the World Bank country classifications by income level (July 2022). GDP per capita and population data (represented by the size of the bubbles) are for 2021 or the latest year available. This data is respectively drawn from the International Monetary Fund's World Economic Outlook (October 2021) and from the 2022 Revision of World Population Prospects prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.
2. The general trend line is a polynomial of degree two ($R^2 = 0.8376$).

Source: Network Readiness Index Database, Portulans Institute, 2022.

Country/Economy codes for the chart

Code	Economy	Code	Economy	Code	Economy	Code	Economy
AE	United Arab Emirates	DO	Dominican Republic	KR	Korea, Rep.	PK	Pakistan
AL	Albania	DZ	Algeria	KW	Kuwait	PL	Poland
AM	Armenia	EC	Ecuador	KZ	Kazakhstan	PT	Portugal
AO	Angola	EE	Estonia	LA	Lao PDR	PY	Paraguay
AR	Argentina	EG	Egypt	LB	Lebanon	QA	Qatar
AT	Austria	ES	Spain	LK	Sri Lanka	RO	Romania
AU	Australia	ET	Ethiopia	LS	Lesotho	RS	Serbia
AZ	Azerbaijan	FI	Finland	LT	Lithuania	RU	Russian Federation
BA	Bosnia and Herzegovina	FR	France	LU	Luxembourg	RW	Rwanda
BD	Bangladesh	GB	United Kingdom	LV	Latvia	SA	Saudi Arabia
BE	Belgium	GE	Georgia	MA	Morocco	SE	Sweden
BF	Burkina Faso	GH	Ghana	MD	Moldova	SG	Singapore
BG	Bulgaria	GM	Gambia	ME	Montenegro	SI	Slovenia
BH	Bahrain	GN	Guinea	MG	Madagascar	SK	Slovakia
BI	Burundi	GR	Greece	MK	North Macedonia	SN	Senegal
BO	Bolivia	GT	Guatemala	ML	Mali	SV	El Salvador
BR	Brazil	HK	Hong Kong (China)	MN	Mongolia	SZ	Eswatini
BW	Botswana	HN	Honduras	MT	Malta	TD	Chad
CA	Canada	HR	Croatia	MU	Mauritius	TH	Thailand
CD	Congo, Dem. Rep.	HU	Hungary	MW	Malawi	TJ	Tajikistan
CH	Switzerland	ID	Indonesia	MX	Mexico	TN	Tunisia
CI	Côte d'Ivoire	IE	Ireland	MY	Malaysia	TR	Turkey
CL	Chile	IL	Israel	MZ	Mozambique	TT	Trinidad and Tobago
CM	Cameroon	IN	India	NA	Namibia	TZ	Tanzania
CN	China	IR	Iran, Islamic Rep.	NG	Nigeria	UA	Ukraine
CO	Colombia	IS	Iceland	NL	Netherlands	UG	Uganda
CR	Costa Rica	IT	Italy	NO	Norway	US	United States
CV	Cabo Verde	JM	Jamaica	NP	Nepal	UY	Uruguay
CY	Cyprus	JO	Jordan	NZ	New Zealand	VN	Viet Nam
CZ	Czech Republic	JP	Japan	OM	Oman	ZA	South Africa
DE	Germany	KE	Kenya	PA	Panama	ZM	Zambia
DK	Denmark	KG	Kyrgyzstan	PE	Peru	ZW	Zimbabwe
		KH	Cambodia	PH	Philippines		

Figure 2 further depicts the existing gap in NRI scores between high-income economies and the other income groups, with clear gaps between the upper middle-income, lower middle-income, and low-income groups as well. The results suggest that the 25th percentile of one income group

performs at a slightly higher level than the 75th percentile of the income group just below it. Upper middle-income economies at the 25th percentile scored 46.66 in 2022, just above the 46.16 score of lower middle-income economies at the 75th percentile.

Figure 2: Box plot by income group



Note:

1. Countries are grouped according to the World Bank country classifications by income level (July 2022). GDP per capita and population data (represented by the size of the bubbles) are for 2021 or the latest year available. This data is respectively drawn from the International Monetary Fund's World Economic Outlook (October 2021) and from the 2022 Revision of World Population Prospects prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.
2. The general trend line is a polynomial of degree two ($R^2 = 0.8376$).

Table 3 lists the top three economies of each income group. The United States (1st), Singapore (2nd), and Sweden (3rd) are the top-performers among high-income economies, and Rwanda (101st), Zambia (113th), and Uganda (116th) earn top performance scores for low-income economies. The top

three upper middle-income economies are China (23rd), Malaysia (36th), and Russian Federation (40th). Comparative performances in each pillar vary among economies and provide insight into the relationship between network readiness and income.

Table 3: Top 3 countries by income group

High-income economies	Upper middle-income economies	Lower middle-income economies	Low-income economies
1. United States (1)	1. China (23)	1. Ukraine (50)	1. Rwanda (101)
2. Singapore (2)	2. Malaysia (36)	2. Indonesia (59)	2. Zambia (113)
3. Sweden (3)	3. Russian Federation (40)	3. India (61)	3. Uganda (116)

Note: Global ranks in parentheses.

Source: Network Readiness Index Database, Portulans Institute, 2022.

China is the only economy outside the high-income category to earn a ranking in the top quartile of the NRI 2022. China does exceedingly well in the aspects of technology adoption by Businesses (8th) and Individuals (5th), which is indicated by its strength in annual investment in telecommunication services and the number of active mobile broadband subscriptions. Indeed, China's highest ranking is in the People dimension (8th), due to an active digital presence throughout society. This is demonstrated through its superior mobile broadband internet traffic within the country (1st), AI talent concentration (8th), and ICT skills in the education system (16th). In contrast, China's weakest pillar is Governance (35th), which is impacted adversely by the state of Regulation (81st). Areas for improvement include bolstering the ICT regulatory environment (124th) and encouraging Privacy protection by law content (122nd).

Malaysia's performance also displays a sophisticated degree of network readiness. Compared to its income group peers, Malaysia's economy stands as one of the strongest with high-tech exports (1st), a prevalent gig economy (6th), and efficient high-tech and medium-high tech manufacturing sectors (18th). Malaysia ranks 36th in Technology, where it exhibits positive performance scores for Internet access in schools (1st) and International Internet bandwidth (15th), contributing to its relative success in the Access (38th) sub-pillar. Malaysia's weakest dimension is Governance (40th), with lower scores in Regulation (51st) and Inclusion (48th). The economy has areas for improvement in adoption of digital solutions by Businesses (58th), Quality of Life (61st), and SDG Contribution (87th). Malaysia displays a balanced profile when it comes to the distribution of performance across the four pillars. Its rankings across the four primary pillars differ by only one position, ranking 36th in Technology, 39th Impact, 35th in People, and 40th in Governance.

The Russian Federation's most exemplary dimension is People (23rd), where scores in the Individuals sub-pillar (4th) and the Governments (31st) sub-pillar reflect high levels of publication and use of open data (19th) and knowledge-intensive employment (20th). Conversely, the Russian Federation has the largest scope of improvement when it comes to the Impact (69th) of digital technologies. This reveals that there is more to be done towards achieving SDG goals, namely SDG 5: Women's economic opportunity (101st) and SDG 7: Affordable and Clean Energy (121st).

The group of lower middle-income economies is led by Ukraine (50th), Indonesia (59th), and India (61st).

Ukraine's strongest showing is in the People dimension (37th), particularly when it comes to the adoption of digital technologies by Individuals (7th), where the economy benefits from high rates of adult literacy (1st) and tertiary education enrollment (18th). Improvements have been made in the Government sub-pillar (52nd), partly due to increased trust by initiatives like publication and use of open data (23rd) and government investment in emerging tech (45th). Ukraine also scores well in Technology (45th) adoption and investment, due to its international internet bandwidth (33rd) and FTTH/building Internet subscriptions (9th), improving

the citizens' ability to be connected. Its weakest dimension relates equally to Governance (57th) and Impact (57th) of digital technologies. Improving cybersecurity (84th) as well as the ICT regulatory environment (82nd) could boost Ukraine's performance in the areas of Trust (54th) and Regulation (84th).

Indonesia scores higher than the income group average in each of the four pillars. Particularly, its scoring in Technology (48th) stands out as a distinct strength for the economy. This score can be attributed to high levels of investment in emerging technologies (28th) and computer software spending (24th), as well as its high capacity international internet bandwidth (7th) and prevalence of internet subscriptions (7th). The economy also shows strength in the adoption of digital technologies by Individuals (10th), which is supported by an abundance of Mobile broadband internet traffic within the country (5th) and a strong focus on ICT skills in the education system (19th). Room for improvement remains within the ICT regulatory environment (122nd), as well as the economy's SDG contribution (97th).

India also displays a relatively strong performance in Technology (56th), benefiting from high capacity international internet bandwidth (2nd) and FTTH/building Internet subscriptions (5th). India also stands out when it



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comes to the production of AI scientific publications (5th) and its large investments in emerging technologies (26th). The economy's highest ranking pillar, however, is People (46th), where high levels of Mobile broadband internet traffic within the country (2nd) and large Annual investment in telecommunication services (3rd) benefits citizens. The country also displays a notable concentration of AI talent (1st). India's domestic market size (3rd) and high levels of ICT services exports (4th) strengthen its performance in the Economy sub-pillar (23rd), where the country again ranks in top quartile. Meanwhile, the area with the greatest scope of improvement is Governance (83rd), where the Gender gap in Internet use (102nd) and low levels of Online access to financial accounts (117th) slightly offset its many positive outcomes.

The top performers in the low-income group include Rwanda (101st), Zambia (113th), Uganda (116th). Each economy shows moderate to high levels of variation across the four pillars with several countries ranking 1st within certain indicators (ie., Rwanda in E-commerce legislation).

The following countries comprise the highest ranking low-income group economies, and they vary in strengths and weaknesses across pillars and sub-pillars.

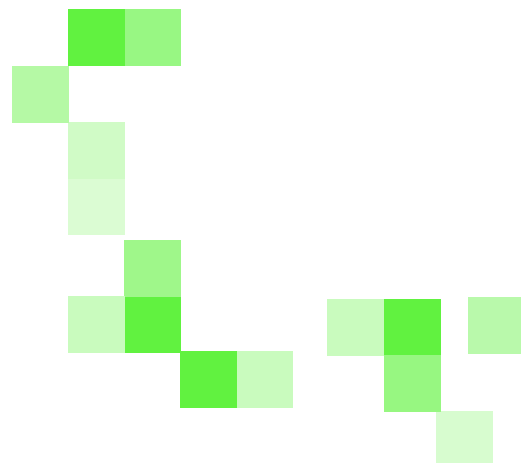


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Rwanda shows relative strength in Governance (84th) of digital technologies, due to its balanced performance across the three composite sub-pillars. The country's showings in Regulation (58th) improved by 31 rankings due to a well established ICT regulatory environment (61st) and improved regulatory quality (64th), particularly when it comes to regulation of emerging technologies (57th). Areas of opportunity are apparent in Technology (105th), with challenges regarding the lack of Internet domain registrations (120th), mobile tariffs (118th), and the price of handset devices (125th). Also, there is the possibility for improvement with the People pillar (105th) in areas such as the use of virtual social networks (125th), tertiary education enrolment (119th), and knowledge-intensive employment (117th).

Zambia demonstrates promise in the areas of People (100th) and Governance (104th). This ranking can be attributed to having digitally engaged Businesses (54th), as well as high number firms with websites (55th) and relatively strong adult literacy rates (72nd). Zambia does find itself ranking lower across the remaining pillars of Impact (122nd) and Technology (117th). Performances in the mid-ranking pillars indicate room for improvement in the adoption of digital solutions by Governments (130th), particularly when it comes to government online services (125th) and E-Participation (123rd). In the country's lowest ranking pillar, Impact (122nd), the areas with the greatest margin for improvement are indicators related to healthy life expectancy at birth (121st) and ICT service exports (116th).

Uganda ranks highest in Governance (97th) of digital technologies, where its achievements in Trust (87th) and Regulation (92nd) reflects on its ICT regulatory environment (58th) and cybersecurity measures (78th). Uganda's second highest ranking dimension, Technology (104th), is bolstered by strong international internet bandwidth (34th), production of AI scientific publications (52nd), and increasing investments in emerging technologies (77th). Conversely, there are areas to improve on, as demonstrated by the Individuals sub-pillar, where low levels of tertiary enrollment (122nd) and use of virtual social networks (127th) dampen performance levels in the People pillar (130th).



NRI Performances by Region

Figure 3 displays an overview of NRI statistics across six regions: Africa, the Arab States, Asia and the Pacific, the Commonwealth of Independent States (CIS), Europe, and the Americas. Within each region, there is a clear correlation between regional performances and the frequency of income groups. Over three-quarters of the countries in Europe (76 percent) are high-income economies, and Europe maintains its strong leadership position in the NRI 2022. In contrast, the region of Africa earns the lowest scores and has the highest concentration of lower-middle-income or low-income economies.

In general, regions with a higher number of countries demonstrate a wider performance range as measured by the dispersion of NRI scores. Asia and the Pacific (a total of 21 countries) shows the highest range while the Commonwealth of Independent States (a total of 6 countries) shows the smallest. However, Africa (31 countries) demonstrated a different pattern showing less variation in scores than Europe (41 countries) despite the fact that both regions compile a sizable amount of economies. Furthermore, Africa's spread is similar to that of the much smaller group of Commonwealth of Independent States. Reviewing performance dispersion based on the score's standard deviation, economies in Asia and the Pacific and in the Americas (20 economies), experience the highest relative dispersion. This analysis also suggests that the performance dispersion among countries in Africa is similar to that noted for both the Arab States (31 countries) and the Commonwealth of Independent States and is the smallest among regions.

Figure 3: Box plot by region



Note:
 Note: The whiskers indicate minimum and maximum values, while the extremes of a box indicate the 25th and 75th percentiles. The line within a box represents the median (i.e. 50th percentile)

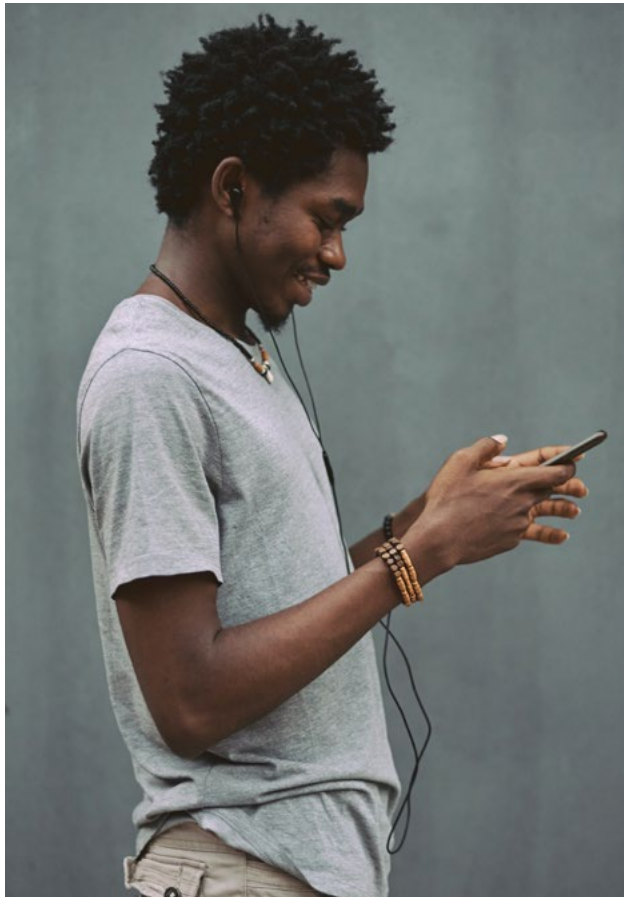
Source:
 Network Readiness Index Database, Portulans Institute, 2022.

Notable scores by individual countries

Table 4: Top 3 countries by region

Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas
1. South Africa (68)	1. United Arab Emirates (28)	1. Singapore (2)	1. Russian Federation (40)	1. Sweden (3)	1. United States (1)
2. Mauritius (72)	2. Saudi Arabia (35)	2. Korea, Rep. (9)	2. Kazakhstan (58)	2. Netherlands (4)	2. Canada (11)
3. Kenya (77)	3. Qatar (42)	3. Japan (13)	3. Armenia (64)	3. Switzerland (5)	3. Chile (43)

Note: Global ranks in parentheses. CIS = Commonwealth of Independent States.
Source: Network Readiness Index Database, Portulans Institute, 2022.



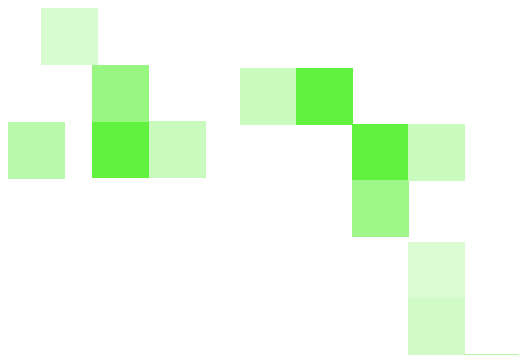
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Africa

The highest-ranked economies in Africa are South Africa (68th), Mauritius (72nd), and Kenya (77th).

South Africa's strongest area of network readiness relates to Technology (52nd), consistently achieving high marks in investing and adopting quality Future Technologies (48th) and ensuring a high caliber of digital Content (52nd). These factors are complemented by the economy's ability to make digital services available to a wide scope of the population by providing widespread international Internet bandwidth (38th). The country also performs well in Governance (59th) supported by initiatives in Trust (60th) and Regulation (61st). These initiatives are evident in the economy's achievements in providing Secure Internet Servers (38th), comprehensive Regulatory quality (62nd), and sophisticated E-commerce legislation (1st), which further emphasizes the importance of consistent regulatory practices. South Africa's weakest performance relates to the Impact (105th) of digital technologies on the economy and society. There's a possibility to improve in areas such as the quality of life (124th) and SDG Contribution (70th) by addressing evident disparities of income inequality (117th) and SDG 7: Affordable and Clean Energy (120th).

Mauritius is the second-best performing African country with overall success attributed to the Governance (56th) of digital technologies. At the forefront of its achievements is the country's efforts to create balanced Regulation (52nd) of digital technologies and to ensure an inclusive environment is provided (59th in Inclusion), in how these resources are accessed. In particular, Mauritius works towards its inclusivity through progress made in closing rural gaps in the use of digital payments (44th). The country's weakest area, relates to the insufficient investment in its digital workforce (94th in People), and could be improved by better promoting digitally-engaged Businesses (129th) especially by encouraging more firms to develop websites (95th) and upskilling through computer software spending (73rd).



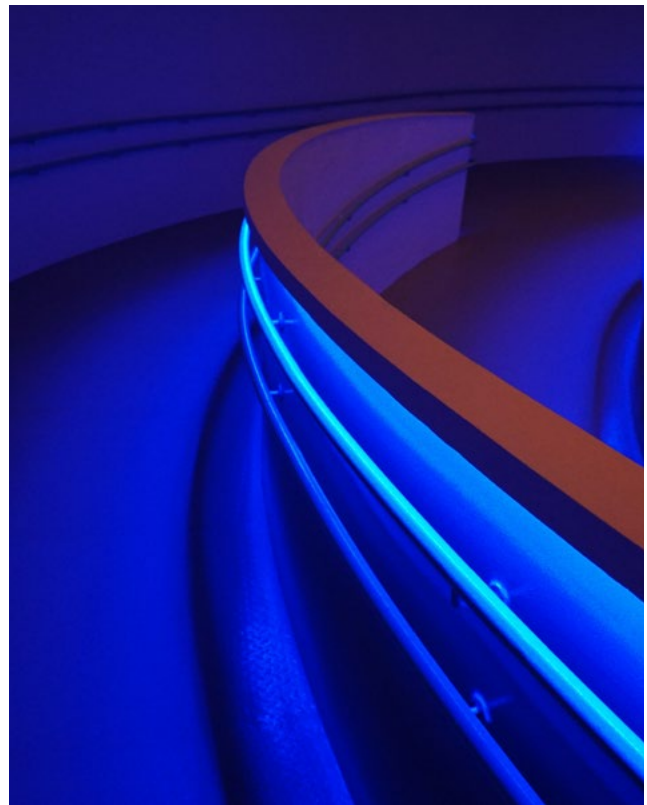
Kenya, similar to South Africa, demonstrates promise in its ability to capitalize on the nexus between Technology (62nd) and Governance (62nd), particularly in Future Technologies (40th). Simultaneously, Kenya does well at ensuring that these digital technologies maintain a high-level of availability, providing users with access to online financial accounts (18th). Kenya demonstrates strength in providing Access (69th) through its coverage of international Internet bandwidth (8th). To ensure security in the digital domain, Kenya also excels at implementing regulatory mechanisms through E-commerce legislation (1st). Kenya still faces challenges in ensuring inclusion (80th), where a noticeable Gender gap in internet use (96th) is apparent and prevents a fully involved society from accessing or generating digital content. To improve its rankings, Kenya could work towards raising healthy life expectancy at birth (107th) and the freedom to make life choices (108th), both of which contribute to the economy's ability to fully empower its digital workforce.

Arab States

The United Arab Emirates (28th), Saudi Arabia (35th), and Qatar (42nd) are the highest ranked Arab States in the NRI 2022.

The United Arab Emirates has a solid overall performance but demonstrates particular strength in the dimensions of People (20th) and Technology (24th). The United Arab Emirates benefits from one of the most digitally engaged governments, (25th in Governments), alongside a digitally invested talent pool, due to the widespread ICT skill set of individuals (9th). Similarly, technological skills are enforced through impressive levels of ICT access in the education system (9th). Notwithstanding, the leadership it exemplifies in Businesses (23rd) is revealed through a high level of GERD by business enterprises (5th) and Investment in emerging technologies (10th). Moreover, the UAE could improve its underdeveloped privacy protection by law content (128th) and Regulation (71st), which diminishes an overall strong performance in Trust (47th). Balanced e-commerce regulation and better safeguarding of privacy could assist the country's overall performance in digital readiness.

Saudi Arabia ranks well within the region due to its focus on investing in Technology (32nd) and the talent of its People (18th). The country benefits from high levels of ICT Access (32nd) and significant rates of investment in Future Technologies (20th), which provide a balanced synergy between technological forwardness and accessibility. The economy's digital workforce remains Saudi Arabia's best performance, resulting from widespread ICT usage and skills



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among Individuals (3rd), Governments (29th), and Businesses (24th). The country's weakest area relates to Impact (49th), reflecting the minimal effect of ICTs on its society. However, overall improvements can be made in Regulation (97th) and SDG Contribution (92nd), where measures such as prioritizing education, SDG 4: quality education (70th), and SDG 7: improving the sustainability of cities (95th) could all have a positive impact on the country's overall demonstration of network readiness.

Qatar demonstrates notable achievements in its ability to capitalize on Technology (31st) and its subsequent Governance (36th), leading to a strong overall NRI performance. Generous investments towards Future Technologies (18th) and ICT Access (21st) help bolster Qatar's ability to adapt and benefit from digital technologies. The country performs particularly well in ensuring the affordability of mobile tariffs (33rd), which is further complemented by the overall widespread coverage of at least a 3G mobile network (1st), and the availability of Internet access in schools (1st). To improve its network readiness, an area that could be addressed is the creation of digital Content (61st), where producing new technologies and promoting research can improve the country's overall performance.

Asia and the Pacific

Singapore (2nd), the Republic of Korea (9th), and Japan (13th) are the leading economies for network readiness in Asia and the Pacific.

Singapore: find a detailed review of Singapore's NRI 2022 performance in the Top 10 NRI performers section.

The Republic of Korea: find a detailed review of Korea's NRI 2022 performance in the Top 10 NRI performers section.

Japan ranks as one of the strongest performers in the region (13th, NRI), standing amongst the top 20 in its ability to have a technological Impact (12th) and capitalize upon its People (3rd). The country shows good performances in the Economy (10th) because of continued exports of high-tech products (11th) helping facilitate a profound impact on the domestic economy. Weaker rankings in the freedom to make life choices (71st) is one area that could improve the economy's network readiness. ICT services export (77th) and the overall Happiness (52nd) indicators offset progress in other areas, as Japan faces a challenge with Gender gap in internet usage (74th). However, Japan is a leader in Quality Education (5th), benefiting strongly from a digitally ready workforce. Japan's strength in utilizing Technology (18th) reveals its ability to balance Access (9th) to ICTs, robust creation of digital Content (30th), and extended investment in Future Technologies (10th).

Australia is a top performer in network readiness, (14th), as demonstrated through high levels of Access, (8th), boosted by the affordability of mobile tariffs (17th), competitive prices for handsets (1st), and improved internet access for schools (1st). These factors combined ensure that a wider percentage of the population are able to possess digital literacy throughout their lifetime. The country also ranks near the top 10 in the creation of Content (14th), and has a satisfactory level of output in investment and adoption of Future Technologies (32nd). Although Australia does not present a particularly strong performance in investing in Individuals (43rd), it maintains a spot in the top 20 range through digitally engaged Governments (8th) and Businesses (18th), which together allow for a solid private-public intersection. Regulation displays positive showings in providing high Regulatory quality (5th) and thoroughly balanced E-commerce legislation (1st). When assessing the Impact (22nd) of digital technologies on Australian society, improvements could be made in ICT services exports (75th) which would boost the overall digital Impact (22nd) on society and economy. **India:** find a detailed review of India's NRI 2022 performance in the NRI Performances by Income Group section.

The Commonwealth of Independent States (CIS)

The Russian Federation (40th), Kazakhstan (58th), and Armenia (64th) lead the region of the Commonwealth of Independent States (CIS).

The Russian Federation: find a detailed review of the Russian Federation's NRI 2022 performance in the NRI Performances by Income Group section.

Kazakhstan's strongest area of network readiness relates to People (49th), reflecting the continuous adoption of ICTs by Individuals (36th) followed by a similar pattern of investments in promoting digitally engaged Businesses (55th). In regards to Governance (55th), improvements in privacy protection by law content (120th) and to the ICT regulatory environment (127th) would further embolden this country's NRI performance. Still, Kazakhstan could expand its network readiness impact by emphasizing ICT services exports (112th) and encouraging PCT patent applications (72nd). Overall, Kazakhstan has made remarkable achievements in Trust (49th) towards digital technologies, as well as in the Quality of Life (40th), both of which support the economy's achievements in the region.

Armenia shows its best outcome through its ability to have a profound digital Impact (55th), as reflected on the overall Quality of Life (44th) and its SDG Contributions (52nd). For Armenia, People (59th) and Individuals (57th) both are areas of excellence in which adults enjoy a high rate of adult literacy (7th). The affordability of mobile tariffs (67th) and devices (98th in Handset prices) could benefit from a prioritization to boost accessibility, even though the country does display positive showings in population covered by at least a 3G mobile network (1st) and Internet access in schools (1st). Armenia can improve its overall aptitude in Governance (79th) through adjustments in building Trust (91st) in digital technologies. This could be done by improving E-commerce regulation (87th) and addressing the socioeconomic divide in the use of digital payments (86th).



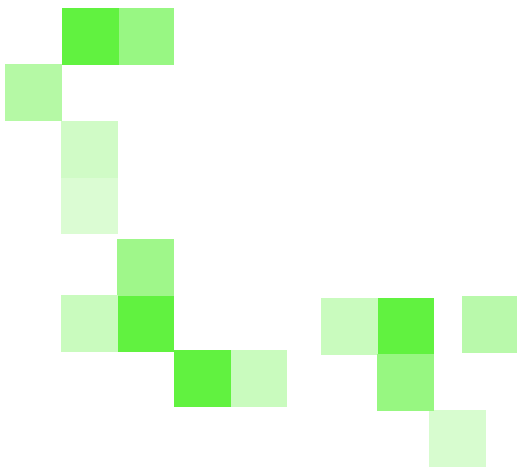
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Europe

Sweden, the Netherlands, and Switzerland are the top three performers in the region of Europe. Detailed remarks about each country can be found in the Top 10 NRI performers section. France (16th) and Austria (18th) demonstrated performance rank improvements in the 2022 NRI that deserve further analysis.

France earns a 16th place with an overall strong performance in the areas of Technology (15th), People (16th), Impact (10th), and Governance (18th). With its accomplishments achieved through utilizing technology, it also capitalizes on making these devices readily available through affordable handset prices (13th). However, the country could improve upon its mobile network access (55th) in the population covered by at least a 3G network indicator. In regards to its workforce, France's People ranking (16th) reveals that it is a world-class leader in the ability to harness information and data. The country also performs well in its annual investment in telecommunication services (6th) and its publication and use of open data (4th). France also demonstrates strong governance due to its progressive regulatory frameworks for ICTs (16th in Regulation). The country can further improve its overall scores by enhancing Inclusion (18th) and minimizing the gender gap in Internet use (60th).

Austria is another European economy with a top performance in network readiness, achieving an overall ranking of 18th. While Austria remains outside the top 10, it demonstrates remarkable aptitude in all aspects of digital readiness. Particularly, it shows readiness in areas of its digitally connected People (15th) and its ability to regulate the technological mechanisms in place, as revealed by its Governance rank (15th). These successes are complemented by high levels of ICT engagement through prioritizing Businesses (12th), involving Governments (14th), and benefitting both the private and public sector inclusion (10th). More specifically, Austria succeeds in advancements in Robot density (15th) and in the Adoption of emerging technologies (21st). Improvements can be made by increasing technology access (55th) to society by covering a larger part of the population with 3G (75th).



"France earns a 16th place with an overall strong performance in the areas of Technology (15th), People (16th), Impact (10th), and Governance (18th)."

The Americas

The United States (1st) leads the region of the Americas, alongside Canada (11th) and Chile (43rd). A detailed analysis on the performance of the US can be found in the Top 10 NRI performers section. Canada (11th) and Chile (43rd) follow the US in second and third place within the region. Improved performances by Brazil deserve further additional insight.

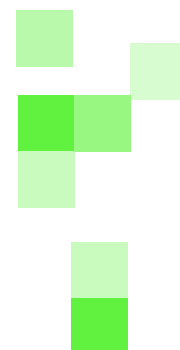
Canada scores one rank outside the top 10 (11th, NRI). The country boasts a well-rounded overall performance by earning top 20 rankings across all aspects of network readiness. Canada's best performance relates to Governance (9th) of digital Technology (9th), particularly when it comes to its global leadership in Trust (9th). The latter is boosted by the country's overall positive regulatory quality (11th), especially in the area of e-commerce regulation (1st). Canada also demonstrates leadership in the publication and use of open data (1st) and in annual investment in telecommunication services (9th). Canada's performance in the Technology (9th) dimension shows strong investments in Future Technologies (12th), and high-levels of digital content creation (8th in Content). Canada does show comparative weakness in People (17th), where performance of Individuals (58th) and Businesses (26th) is somewhat slowed by facets such as GERD financed by business enterprises (38th).

Chile earns third place in the Americas region with a positive performance in Governance (41st), as well as in adoption and investment in Technology (42nd). The widespread adoption and access (25th) to digital content, even with a surprisingly low economic ranking (69th), demonstrates Chile's ability to still promote digital engagement throughout the economy. Chile is particularly successful at enacting balanced e-commerce legislation (1st), which is complemented by high rates of e-participation (29th). Similarly, it benefits from a relatively small socio-economic gap in use of digital payments (11th).

Chile's performance in Impact (54th) of digital technologies could benefit from improving factors that perpetuate income inequality (98th), providing women with economic opportunities (77th), and focusing on raising levels of ICT service exports (94th). By improving these areas, Chile's digital impact can have a stronger effect on its overall economy and society.

Brazil achieves a spot within the top 50, with a 44th overall position. Brazil earns its strongest showing in its ability to capitalize on its digitally connected People, (40th), with equally progressive achievements relating to Technology (43rd) and Governance (44th). Brazil is successful at providing Access (27th) to digital technologies, and at ensuring an environment that promotes inclusive (21st) engagement. Similarly, the country demonstrates merit in domestic market size (8th), allowing for growth within the domestic economy of digital services. It also has a minimal gender gap in Internet usage (3rd), along with widespread availability of international Internet bandwidth (19th). On the other hand, it shows high levels of income inequality (106th) and a small degree of the freedom to make life choices (74th), both of which are facets of social structures within the economy to be improved upon.

"Brazil earns its strongest showing in its ability to capitalize on its digitally connected People, (40th), with equally progressive achievements relating to Technology (43rd) and Governance (44th)."



Outstanding pillar performance among middle- and low-income economies

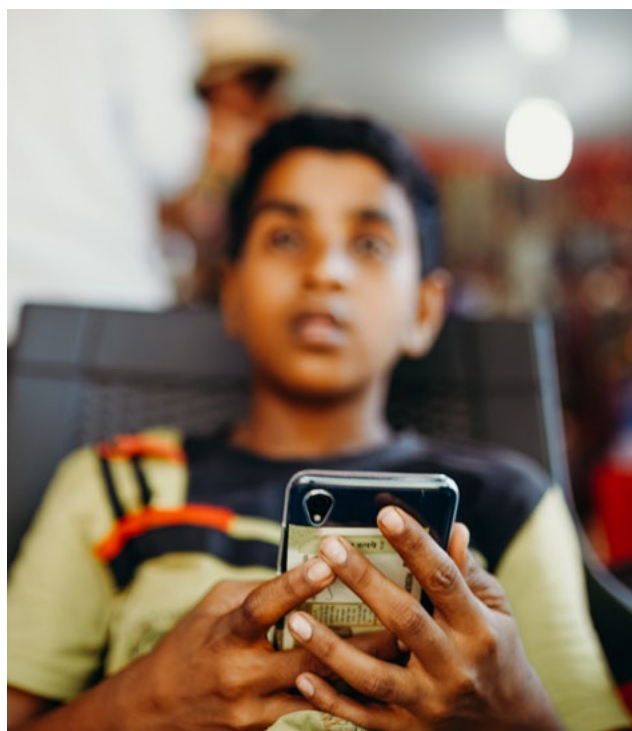
"Regionally, most of those countries that are exceeding expectations in at least one category are located in Africa, with 20 economies in total."

A group of middle- and low-income economies stand out as performing above their expected levels of development in one or more of the structural categories comprising the four main pillars of the NRI.¹⁶ Although at a different scale, this achievement highlights similarities in performance among these economies and others that are at higher stages of digital transformation and ranking tiers. These economies show a pillar score that is above their predicted performance given their income level.¹

China, India, and Rwanda distinguish themselves overall and in their respective income groups as those economies which have over-performed across all four main categories of digital readiness. Among the upper middle-income group, Brazil and Jamaica over-perform in three of the four categories. Kenya, Senegal, the United Republic of Tanzania, Pakistan, and Zimbabwe also exceeded expectations among the lower middle-income economies. Malawi is a single low-income economy that also displays this achievement.

Overall, the most outstanding performers within these four main pillar scores are among the lower middle-income group, which comprises a total of 24 economies. The rest are almost equally distributed among the upper middle- and low-income groups, with a total of 9 and 11 economies, respectively. In general, upper middle-income economies show an advantage in the categories of technology and people. The high achievers of the lower middle-income economies excel more evenly in technology, impact, and governance pillars. Those economies in the low-income bracket display excellence in the people and government categories.

Regionally, most of those countries that are exceeding expectations in at least one category are located in Africa, with 20 economies in total. Ten such economies are located in the Asia & Pacific region, and five are located in the Americas.




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The regions of CIS, Arab States, and Europe round out the group, with 4, 3, and 2 economies in each region, respectively.

Uganda, Gambia, Ethiopia, and Madagascar are other top outperformers in Africa, and Viet Nam, Bangladesh, Cambodia, and the Philippines stand out in the Asia & Pacific region. Bolivia, El Salvador, and Honduras are the top performers in The Americas. Jordan, Morocco, and Lebanon excel in the Arab States, while Kyrgyzstan in CIS and Ukraine in Europe round out the world's best.

Most economies in Africa outperform in the categories of government, technology, and people, while economies in Asia & the Pacific mostly excel in the categories of technology and impact. Economies in The Americas show a more widely-spread level of distinguished performance across all four categories, while the few economies from the CIS region stand out in the People and Impact pillars, yet none outperform in the Technology pillar. Conversely, those economies among the Arab States stand out in the category of technology, while none do so in government. Lastly, two economies from Europe stand out in the people category, but neither does so in impact. Table 5 shows the full list and further details about the identified outstanding pillar performers.

1. An economy is identified as displaying outstanding performance when its pillar score is at least 10% above the trendline that is generated across all economies for that particular pillar. Trendlines are produced for each pillar by estimating a linear model to describe the relationship between pillar scores and GDP per capita. These trendlines are independent of, and display different results than, those presented in Figure which shows the outcome of modeling the relationship between the overall NRI scores and GDP per capita

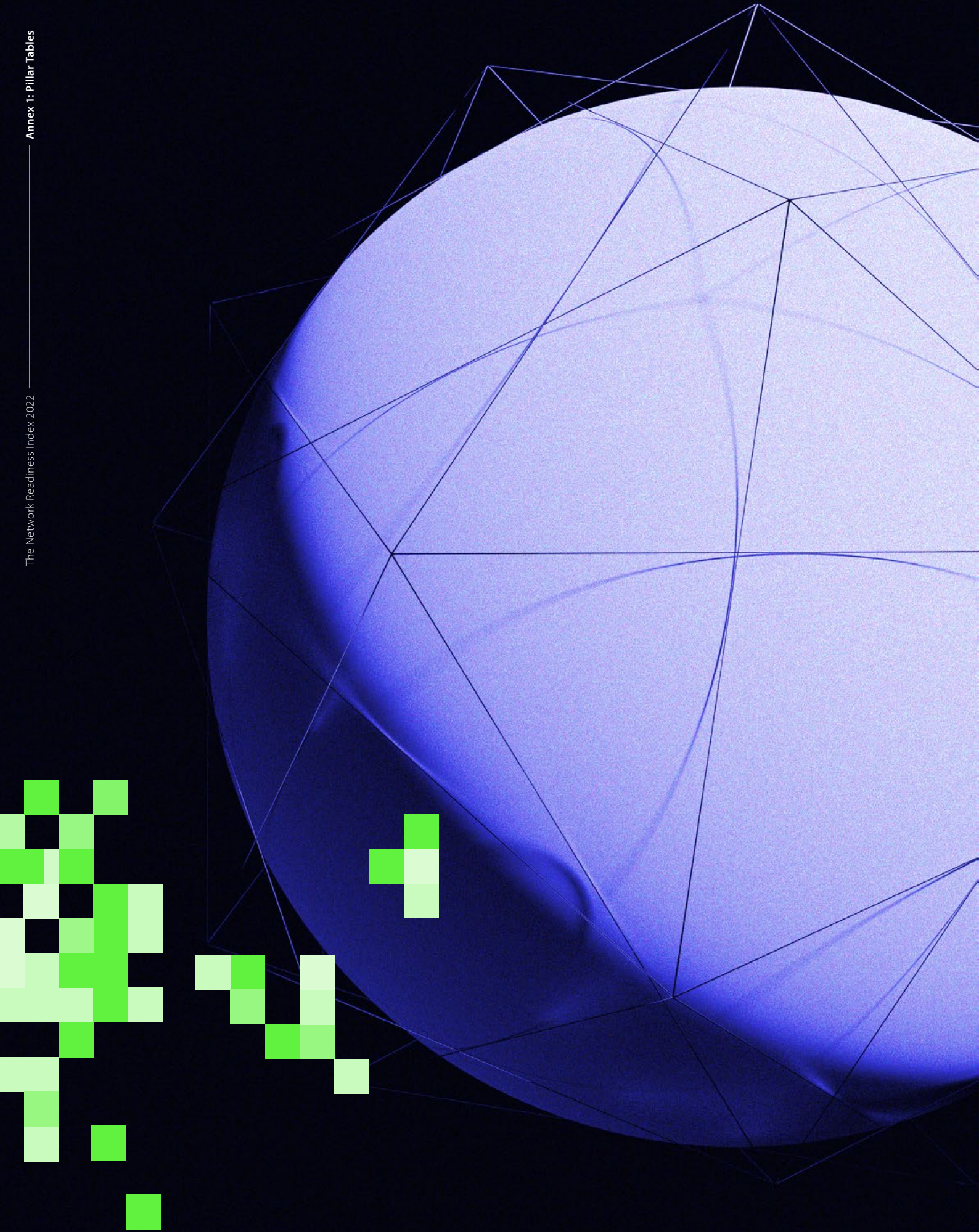
Table 5: Middle- and low-income economies with outstanding pillar performance by region, income group, and pillar


Region	Economy	Income	Technology	People	Governance	Impact
Africa	Rwanda	Low-income	•	•	•	•
	Kenya	Lower middle-income	•	•	•	
	Senegal	Lower middle-income	•		•	•
	United Republic of Tanzania	Lower middle-income	•	•	•	
	Zimbabwe	Lower middle-income	•	•	•	
	Malawi	Low-income		•	•	•
	Uganda	Low-income	•		•	
	Gambia	Low-income	•		•	
	Ethiopia	Low-income	•			•
	Madagascar	Low-income		•	•	
	South Africa	Upper middle-income	•			
	Nigeria	Lower middle-income	•			
	Zambia	Low-income		•		
	Democratic Republic of the Congo	Low-income		•		
	Burundi	Low-income		•		
	Cote d'Ivoire	Lower middle-income			•	
	Ghana	Lower middle-income			•	
	Benin	Lower middle-income			•	
	Burkina Faso	Low-income			•	
	Mozambique	Low-income			•	
Asia & Pacific	China	Upper middle-income	•	•	•	•
	India	Lower middle-income	•	•	•	•
	Pakistan	Lower middle-income	•	•		•
	Viet Nam	Lower middle-income	•			•
	Bangladesh	Lower middle-income	•			•
	Cambodia	Lower middle-income	•			•
	Philippines	Lower middle-income		•		•
	Indonesia	Lower middle-income	•			
	Lao People's Democratic Republic	Lower middle-income	•			
	Thailand	Upper middle-income			•	
The Americas	Brazil	Upper middle-income	•	•	•	•
	Jamaica	Upper middle-income	•		•	•
	Bolivia (Plurinational State of)	Lower middle-income		•		
	El Salvador	Lower middle-income				•
	Honduras	Lower middle income				•
CIS	Kyrgyzstan	Lower-middle-income		•	•	•
	Russian Federation	Upper-middle-income		•		
	Armenia	Upper-middle-income		•		
	Tajikistan	Lower-middle-income				•
Arab States	Jordan	Upper middle-income	•	•		•
	Morocco	Lower middle-income	•			•
	Lebanon	Lower middle-income	•	•		
Europe	Ukraine	Lower middle-income	•	•	•	
	Albania	Upper middle-income		•		

Source: Network Readiness Index database, Portulans Institute, 2022.



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Annex 1: Pillar Tables

Table A-1.1: Rankings in the Technology pillar and associated sub-pillars

Economy	Pillars	Sub-pillars		
	Technology	Access	Content	Future Technologies
United States	1	4	2	1
Switzerland	2	16	1	4
Netherlands	3	18	3	6
Singapore	4	6	10	2
Hong Kong, China	5	7	4	15
Luxembourg	6	30	5	9
Germany	7	17	12	5
Sweden	8	28	13	3
Canada	9	22	8	12
United Kingdom	10	12	11	14
Denmark	11	35	7	11
Norway	12	2	9	31
Finland	13	19	17	8
Korea, Rep.	14	13	25	7
France	15	3	28	16
New Zealand	16	5	16	35
Australia	17	8	14	32
Japan	18	9	30	10
Ireland	19	31	15	21
Israel	20	40	19	17
Belgium	21	24	18	22
Iceland	22	66	6	34
Austria	23	55	22	19
United Arab Emirates	24	10	43	13
China	25	1	39	29
Czech Republic	26	54	20	36
Portugal	27	29	27	26
Spain	28	15	35	24
Estonia	29	44	21	49
Malta	30	83	23	23
Qatar	31	21	61	18
Saudi Arabia	32	32	54	20
Italy	33	23	44	25
Slovenia	34	41	29	39
Russian Federation	35	11	34	61
Malaysia	36	38	47	28
Slovakia	37	39	37	46
Lithuania	38	45	31	57
Montenegro	39	88	24	47
Hungary	40	34	32	79
Bahrain	41	56	60	27
Chile	42	25	45	54
Brazil	43	27	36	68
Poland	44	20	38	74
Ukraine	45	37	50	51
Costa Rica	46	50	65	37
Thailand	47	26	59	52
Indonesia	48	36	66	45
Latvia	49	52	33	78
Viet Nam	50	14	55	80
Türkiye	51	42	42	67
South Africa	52	61	52	48
Bulgaria	53	43	41	76

Economy	Pillars	Sub-pillars		
	Technology	Access	Content	Future Technologies
Uruguay	54	33	56	63
Cyprus	55	78	26	70
India	56	59	49	59
Kuwait	57	60	69	44
Oman	58	53	76	50
Pakistan	59	67	71	42
Lebanon	60	51	57	81
Colombia	61	72	53	60
Kenya	62	69	89	40
Mexico	63	62	58	77
Armenia	64	63	75	55
Egypt	65	46	72	86
Romania	66	57	64	84
Sri Lanka	67	93	67	38
Azerbaijan	68	80	93	33
Greece	69	77	48	73
Jordan	70	99	63	41
Croatia	71	64	40	107
Argentina	72	75	51	85
Tunisia	73	70	68	72
Kazakhstan	74	49	79	96
Lao PDR	75	74	113	30
Jamaica	76	82	92	43
Serbia	77	65	46	113
Morocco	78	68	80	69
Panama	79	95	70	56
Iran, Islamic Rep.	80	92	62	64
Bangladesh	81	58	82	99
Georgia	82	48	73	114
Mauritius	83	76	83	75
Moldova	84	47	94	104
Philippines	85	90	86	62
Peru	86	73	74	105
Ecuador	87	89	78	89
Nigeria	88	85	85	97
Cambodia	89	84	90	95
Mongolia	90	87	87	100
Dominican Republic	91	81	106	94
Senegal	92	102	111	58
Botswana	93	79	102	101
Albania	94	86	84	122
North Macedonia	95	101	77	106
Tanzania	96	98	104	93
Cote d'Ivoire	97	71	121	102
Ghana	98	108	91	88
Bosnia and Herzegovina	99	94	81	126
Algeria	100	110	96	90
Cabo Verde	101	120	99	66
Trinidad and Tobago	102	96	115	98
Guatemala	103	105	105	92
Uganda	104	103	100	103
Rwanda	105	118	109	65
Bolivia	106	100	108	108

Economy	Pillars		Sub-pillars		
	Technology	Access	Content	Future Technologies	
Gambia	107	112	125	53	
El Salvador	108	91	120	109	
Paraguay	109	106	95	120	
Ethiopia	110	104	101	116	
Kyrgyzstan	111	97	107	127	
Nepal	112	121	88	115	
Zimbabwe	113	115	98	110	
Tajikistan	114	116	122	91	
Honduras	115	123	119	83	
Cameroon	116	129	97	87	
Zambia	117	119	112	111	
Benin	118	114	110	118	
Mali	119	122	103	119	
Eswatini	120	111	116	121	
Mozambique	121	113	114	125	
Namibia	122	109	131	71	
Lesotho	123	117	124	117	
Madagascar	124	126	117	112	
Angola	125	107	123	130	
Malawi	126	124	118	128	
Guinea	127	127	129	82	
Congo, Dem. Rep.	128	128	128	124	
Burkina Faso	129	125	126	129	
Burundi	130	131	127	123	
Chad	131	130	130	131	

Source: Network Readiness Index Database, Portulans Institute, 2022.

Table A-1.2: Rankings in the People pillar and associated sub-pillars

Economy	Pillars	Sub-pillars		
	People	Individuals	Businesses	Governments
Korea, Rep.	1	1	1	2
United States	2	15	5	10
Japan	3	11	6	12
Singapore	4	6	16	9
Sweden	5	42	2	7
Finland	6	14	11	6
Denmark	7	54	9	1
China	8	5	8	19
Germany	9	37	7	11
Israel	10	2	13	21
Switzerland	11	49	4	18
Norway	12	60	19	3
Australia	13	43	18	8
Netherlands	14	62	10	15
Austria	15	59	12	14
France	16	75	15	5
Canada	17	58	26	4
Saudi Arabia	18	3	24	29
United Kingdom	19	61	22	13
United Arab Emirates	20	9	23	25
Estonia	21	23	27	20
Belgium	22	82	3	22
Russian Federation	23	4	41	31
Slovenia	24	47	14	32
Spain	25	29	32	23
New Zealand	26	88	25	17
Malta	27	17	33	35
Luxembourg	28	101	20	16
Iceland	29	63	21	33
Italy	30	46	28	37
Hong Kong, China	31	31	40	26
Portugal	32	52	34	28
Lithuania	33	51	37	24
Türkiye	34	8	48	43
Malaysia	35	12	58	27
Ireland	36	68	17	41
Ukraine	37	7	50	52
Cyprus	38	13	46	53
Czech Republic	39	91	31	34
Brazil	40	84	35	30
Greece	41	20	45	62
Argentina	42	21	60	42
Poland	43	80	30	48
Uruguay	44	19	74	38
Thailand	45	16	59	58
India	46	30	64	39
Chile	47	41	49	57
Albania	48	69	43	46
Kazakhstan	49	36	55	64
Croatia	50	48	39	71
Oman	51	35	75	40
Bulgaria	52	33	57	67
Jordan	53	40	29	96

Economy	Pillars	Sub-pillars		
	People	Individuals	Businesses	Governments
Hungary	54	72	38	68
Latvia	55	44	53	74
Azerbaijan	56	66	66	44
Serbia	57	53	65	50
Romania	58	45	52	76
Armenia	59	57	62	54
Colombia	60	74	51	61
Kuwait	61	18	78	72
Iran, Islamic Rep.	62	64	70	47
Qatar	63	24	101	49
Georgia	64	28	69	78
Slovakia	65	102	36	63
Indonesia	66	10	115	56
Mexico	67	87	85	36
Lebanon	68	22	44	111
Peru	69	39	61	90
Bahrain	70	26	90	69
Moldova	71	65	80	66
South Africa	72	109	47	51
Philippines	73	34	99	70
Montenegro	74	56	63	92
Costa Rica	75	38	91	81
Tunisia	76	81	84	55
North Macedonia	77	79	68	80
Bolivia	78	32	72	99
Dominican Republic	79	67	106	59
Viet Nam	80	27	105	87
Egypt	81	85	92	65
Panama	82	25	103	95
Sri Lanka	83	92	87	73
Lao PDR	84	76	82	93
Morocco	85	90	81	86
Algeria	86	78	109	77
Pakistan	87	99	56	94
Kenya	88	105	104	45
Ecuador	89	70	114	85
Cabo Verde	90	96	89	82
Mongolia	91	50	100	105
Bangladesh	92	100	79	88
Trinidad and Tobago	93	55	96	113
Mauritius	94	71	129	75
Jamaica	95	94	97	89
Bosnia and Herzegovina	96	89	67	124
Paraguay	97	73	116	97
Kyrgyzstan	98	83	93	112
Nigeria	99	121	42	101
Zambia	100	103	54	130
Botswana	101	93	98	110
Cambodia	102	86	113	104
Ghana	103	106	118	84
El Salvador	104	97	88	119
Rwanda	105	117	117	60
Honduras	106	104	83	114

Economy	Pillars	Sub-pillars		
	People	Individuals	Businesses	Governments
Namibia	107	107	107	100
Cameroon	108	112	86	103
Tanzania	109	114	121	79
Cote d'Ivoire	110	108	95	109
Senegal	111	110	123	83
Zimbabwe	112	113	71	118
Benin	113	119	77	98
Eswatini	114	98	111	120
Tajikistan	115	77	130	122
Guatemala	116	95	125	117
Nepal	117	111	127	108
Malawi	118	125	76	121
Burkina Faso	119	130	110	91
Angola	120	126	73	123
Guinea	121	127	102	106
Madagascar	122	120	94	126
Ethiopia	123	123	120	107
Gambia	124	116	124	129
Lesotho	125	115	122	131
Burundi	126	122	128	116
Congo, Dem. Rep.	127	124	112	127
Mozambique	128	128	126	115
Mali	129	129	108	128
Uganda	130	118	131	102
Chad	131	131	119	125

Source: Network Readiness Index Database, Portulans Institute, 2022.

Table A-1.3: Rankings in the Governance pillar and associated sub-pillars

Economy	Pillars	Sub-pillars		
	Governance	Trust	Regulation	Inclusion
Norway	1	2	2	15
Denmark	2	1	8	11
Finland	3	5	3	8
Netherlands	4	3	5	4
Sweden	5	6	7	12
Estonia	6	7	6	3
United States	7	4	18	5
Australia	8	8	10	14
Canada	9	9	12	13
Singapore	10	17	9	1
New Zealand	11	10	17	6
Switzerland	12	25	4	9
Luxembourg	13	23	1	25
Germany	14	13	11	24
Austria	15	21	13	10
United Kingdom	16	18	26	2
Lithuania	17	24	15	22
France	18	26	16	18
Iceland	19	11	33	19
Belgium	20	14	24	31
Czech Republic	21	15	22	33
Korea, Rep.	22	12	39	20
Ireland	23	20	28	23
Latvia	24	19	20	43
Japan	25	35	23	7
Israel	26	31	19	32
Spain	27	33	27	16
Poland	28	16	46	26
Slovakia	29	22	32	40
Slovenia	30	36	21	36
Portugal	31	43	14	38
Malta	32	37	25	41
Italy	33	40	31	37
Cyprus	34	41	34	30
China	35	28	81	17
Qatar	36	29	43	49
Croatia	37	39	40	46
Hungary	38	32	35	57
Hong Kong, China	39	30	73	27
Malaysia	40	38	51	48
Chile	41	48	38	45
Greece	42	42	42	54
Russian Federation	43	27	103	29
Brazil	44	52	50	21
Oman	45	34	90	34
United Arab Emirates	46	47	71	28
Bulgaria	47	55	30	52
Thailand	48	50	56	44
Serbia	49	53	48	50
Saudi Arabia	50	45	97	39
Bahrain	51	62	53	35
Türkiye	52	46	60	61
Romania	53	51	44	63
Uruguay	54	58	41	55

	Pillars	Sub-pillars		
Economy	Governance	Trust	Regulation	Inclusion
Kazakhstan	55	49	102	42
Mauritius	56	63	52	59
Ukraine	57	54	84	60
Costa Rica	58	65	36	76
South Africa	59	60	61	62
Argentina	60	69	82	47
North Macedonia	61	61	77	64
Kenya	62	56	66	80
Moldova	63	59	75	68
Indonesia	64	64	79	70
Mongolia	65	67	101	53
Kuwait	66	66	74	69
Georgia	67	68	76	71
Colombia	68	80	57	67
Montenegro	69	89	69	58
Jamaica	70	98	29	81
Dominican Republic	71	93	47	77
Mexico	72	77	45	86
Jordan	73	92	64	66
Egypt	74	70	93	75
Iran, Islamic Rep.	75	44	121	74
Viet Nam	76	57	95	95
Bosnia and Herzegovina	77	86	70	73
Trinidad and Tobago	78	106	87	51
Armenia	79	91	59	82
Morocco	80	81	37	111
Kyrgyzstan	81	82	109	56
Philippines	82	71	83	99
India	83	73	80	97
Rwanda	84	95	58	89
Peru	85	94	72	83
Paraguay	86	97	91	72
Cote d'Ivoire	87	72	86	100
Sri Lanka	88	96	105	65
Ghana	89	76	55	115
Tunisia	90	74	98	94
Benin	91	85	65	103
Albania	92	79	63	107
Panama	93	99	78	88
Cabo Verde	94	101	67	93
Azerbaijan	95	78	106	87
Senegal	96	105	54	101
Uganda	97	87	92	104
Tanzania	98	75	89	114
Botswana	99	90	68	113
Ecuador	100	108	96	78
Bangladesh	101	88	117	85
Honduras	102	127	88	84
El Salvador	103	117	94	106
Zambia	104	84	99	123
Guatemala	105	124	100	98
Madagascar	106	125	62	116
Algeria	107	116	104	108
Gambia	108	113	49	129

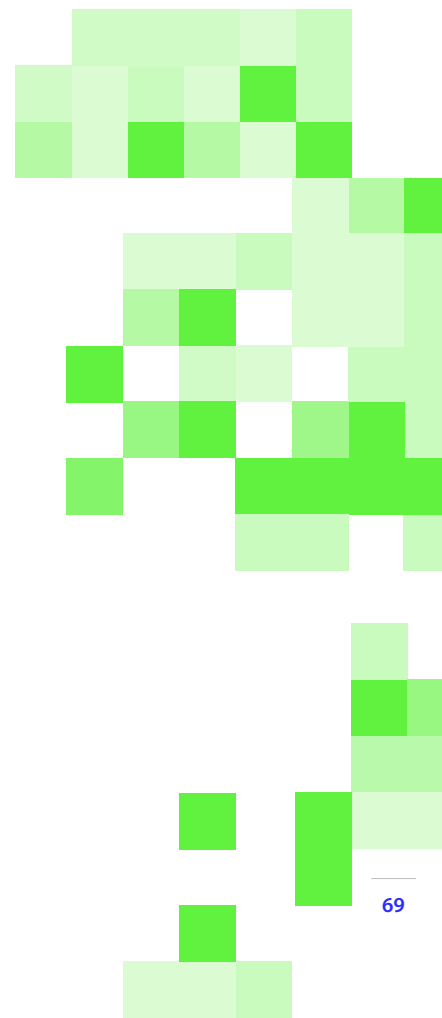
Economy	Pillars		Sub-pillars	
	Governance	Trust	Regulation	Inclusion
Nepal	109	107	115	109
Zimbabwe	110	100	122	92
Burkina Faso	111	114	85	119
Namibia	112	102	120	102
Lesotho	113	118	119	91
Malawi	114	111	112	110
Nigeria	115	83	113	126
Pakistan	116	103	114	117
Bolivia	117	115	123	90
Cameroon	118	109	107	121
Lebanon	119	110	126	96
Mozambique	120	112	111	118
Mali	121	129	108	112
Cambodia	122	122	118	105
Tajikistan	123	120	129	79
Angola	124	121	116	120
Eswatini	125	104	125	122
Guinea	126	128	110	130
Lao PDR	127	119	124	127
Chad	128	126	128	124
Ethiopia	129	130	127	125
Congo, Dem. Rep.	130	123	130	128
Burundi	131	131	131	131

Table A-1.4: Rankings in the Impact pillar and associated sub-pillars

Economy	Pillars	Sub-pillars		
	Impact	Economy	Quality of life	SDG Contribution
Sweden	1	6	4	4
Singapore	2	3	10	6
Finland	3	12	1	18
Netherlands	4	5	11	9
Switzerland	5	11	8	10
Ireland	6	9	18	1
Denmark	7	16	3	2
Germany	8	8	30	13
Israel	9	4	22	27
France	10	14	20	14
United Kingdom	11	13	32	3
Japan	12	10	31	23
Korea, Rep.	13	2	39	28
Norway	14	32	5	8
Canada	15	20	15	19
Czech Republic	16	18	7	30
Belgium	17	19	21	17
Austria	18	21	19	20
Luxembourg	19	36	9	7
United States	20	7	55	29
China	21	1	50	54
Australia	22	31	14	15
New Zealand	23	41	6	16
Estonia	24	24	16	26
Spain	25	26	33	12
Slovenia	26	40	12	22
Portugal	27	37	25	11
Italy	28	22	48	21
United Arab Emirates	29	25	13	39
Malta	30	48	17	25
Iceland	31	58	2	45
Slovakia	32	33	29	43
Poland	33	30	51	32
Hungary	34	27	52	37
Cyprus	35	52	38	31
Latvia	36	45	49	36
Romania	37	29	36	58
Croatia	38	62	28	38
Malaysia	39	15	61	87
Lithuania	40	53	56	40
Viet Nam	41	28	54	63
Uruguay	42	66	42	41
Mexico	43	35	78	47
Costa Rica	44	55	58	42
El Salvador	45	85	46	33
Thailand	46	34	53	79
Hong Kong, China	47	60	104	5
Serbia	48	59	43	61
Saudi Arabia	49	38	35	92
Philippines	50	17	68	105
North Macedonia	51	56	45	69
Greece	52	73	70	35
Qatar	53	47	23	108
Chile	54	69	60	49

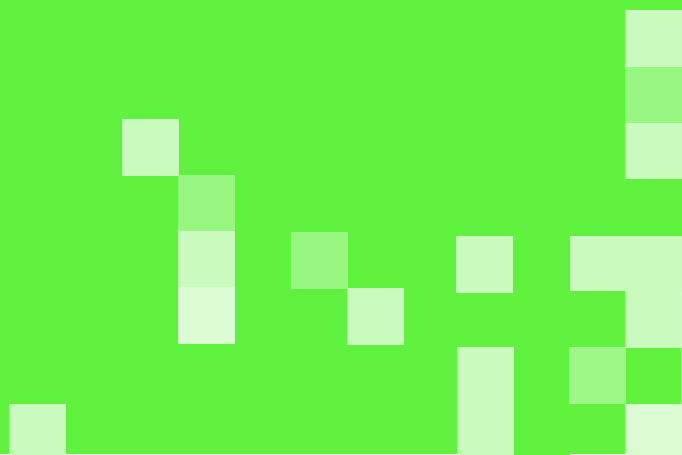
Economy	Pillars	Sub-pillars		
	Impact	Economy	Quality of life	SDG Contribution
Armenia	55	82	44	52
Argentina	56	50	66	62
Ukraine	57	43	57	83
Bulgaria	58	39	71	71
Bahrain	59	79	26	76
Moldova	60	74	37	67
Brazil	61	57	87	57
India	62	23	97	89
Jamaica	63	70	75	56
Oman	64	72	24	102
Kazakhstan	65	78	40	84
Morocco	66	49	86	72
Indonesia	67	44	65	97
Kuwait	68	61	27	114
Russian Federation	69	46	88	75
Ecuador	70	113	83	24
Mauritius	71	96	64	53
Türkiye	72	54	115	34
Panama	73	95	74	55
Peru	74	102	67	46
Sri Lanka	75	64	91	64
Paraguay	76	112	69	44
Colombia	77	80	99	51
Egypt	78	51	96	81
Albania	79	111	47	65
Guatemala	80	76	79	77
Montenegro	81	97	62	73
Azerbaijan	82	93	76	68
Bolivia	83	108	82	48
Lao PDR	84	92	80	82
Bosnia and Herzegovina	85	88	59	107
Honduras	86	106	85	59
Cambodia	87	101	73	80
Bangladesh	88	77	72	110
Kyrgyzstan	89	118	34	98
Pakistan	90	42	94	115
Dominican Republic	91	84	63	113
Cabo Verde	92	121	90	50
Tajikistan	93	128	77	60
Trinidad and Tobago	94	117	41	111
Tunisia	95	81	98	91
Algeria	96	87	84	104
Jordan	97	83	92	100
Kenya	98	68	112	78
Georgia	99	100	81	101
Senegal	100	91	100	95
Nepal	101	99	93	94
Mongolia	102	123	89	86
Cote d'Ivoire	103	86	105	103
Rwanda	104	105	107	74
South Africa	105	71	124	70
Iran, Islamic Rep.	106	65	101	124
Ethiopia	107	89	95	120
Lebanon	108	67	122	93
Guinea	109	75	103	125
Gambia	110	116	102	106

Economy	Pillars	Sub-pillars		
	Impact	Economy	Quality of life	SDG Contribution
Ghana	111	103	111	96
Cameroon	112	63	116	121
Tanzania	113	107	106	112
Malawi	114	124	110	88
Mali	115	94	114	118
Namibia	116	109	127	66
Benin	117	104	109	119
Nigeria	118	98	108	128
Botswana	119	125	123	85
Burkina Faso	120	115	120	109
Uganda	121	110	113	123
Zambia	122	122	126	90
Madagascar	123	90	121	129
Burundi	124	120	119	127
Mozambique	125	129	118	126
Congo, Dem. Rep.	126	114	117	131
Angola	127	127	130	99
Zimbabwe	128	126	128	117
Chad	129	119	125	130
Lesotho	130	130	129	122
Eswatini	131	131	131	116





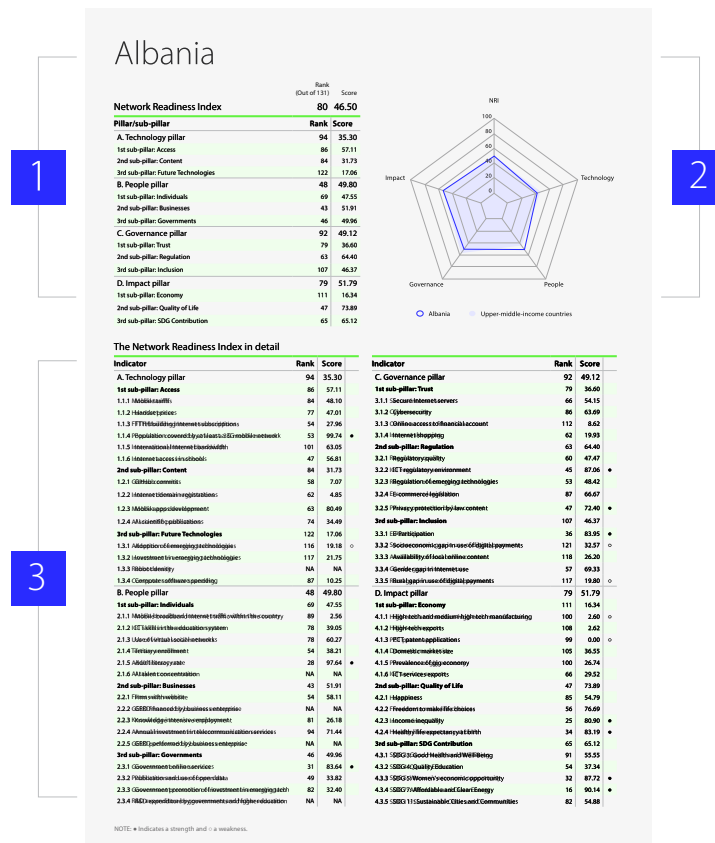
Country/ Economy Profiles



How to read the Country/Economy Profiles

The Country/Economy Profiles presents a scorecard that summarizes the individual performance of each economy (131 total) covered in The Network Readiness Index 2022.

Each Country/Economy Profile consists of three parts:



1 Performance highlights

The first section displays each Country/Economy's overall performance across the NRI, the four primary pillars, and the twelve sub-pillars. For each level of the NRI, the economy's ranking (out of the 131 economies) and individual score (on a 0-to-100 scale) is shown.

2 Radar chart

The second section uses a radar chart to visually depict the individual economy's performance in the overall NRI, its four pillars, and sub-pillars. The dark blue line plots the economy's score, while the light blue line represents the average score of all economies found in the same income class. The World Bank defines each country's income classification and reflects data current to July 2022.

3 Detailed network readiness index reporting

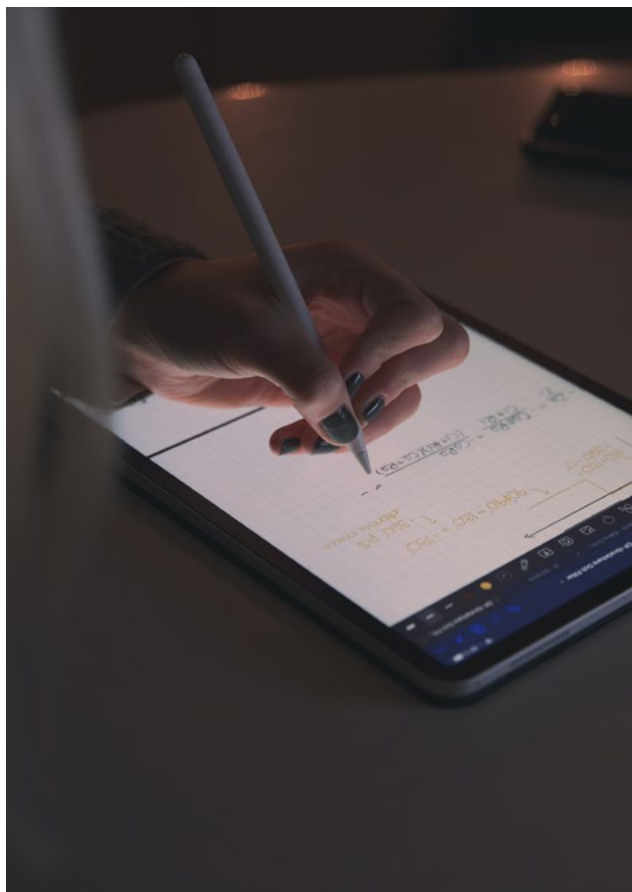
The third section demonstrates how a particular economy performed across each of the 58 indicators comprising the NRI. All indicators organize into primary and secondary level pillars, and their numbering matches the data tables found in the other report sections with additional information such as descriptions, years, rankings, values, and normalized scores for all the indicators

Strengths and weaknesses

The indicators considered a strength of a particular economy are notated on the far right-hand side by a solid circle. Indicators signaled as a weakness receive a hollow circle. For all economies, indicators with rankings of 1, 2, and 3 are highlighted as strengths, while indicator rankings of 129, 130, and 131 represent weaknesses.

For any remaining indicators, the strengths and weaknesses of a particular economy are based on the percentage of economies with scores that fall above or below a score determined by percent ranks. Indicators highlighted as strengths earn a score in the 10th largest percent rank among the 58 possible indicators of each economy. Indicators highlighted as weaknesses include scores that rank below the 5th lowest percent rank of the 58 indicators.

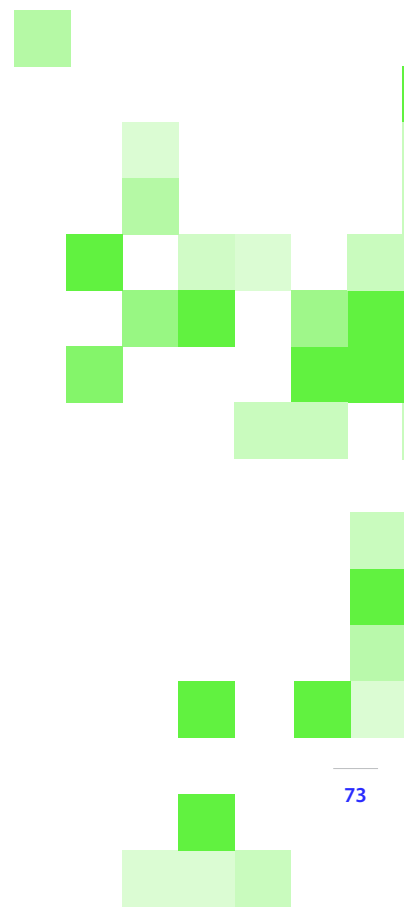
It is important to note that the absence of data may have an effect on the rankings of those sub-pillars, pillars where these absences are noted. Thus, caution should be averted when reviewing the rankings of elements in the NRI under these circumstances. This includes the signaling of strengths and weaknesses.



samuël-bryngelsson-unsplash

The NRI online

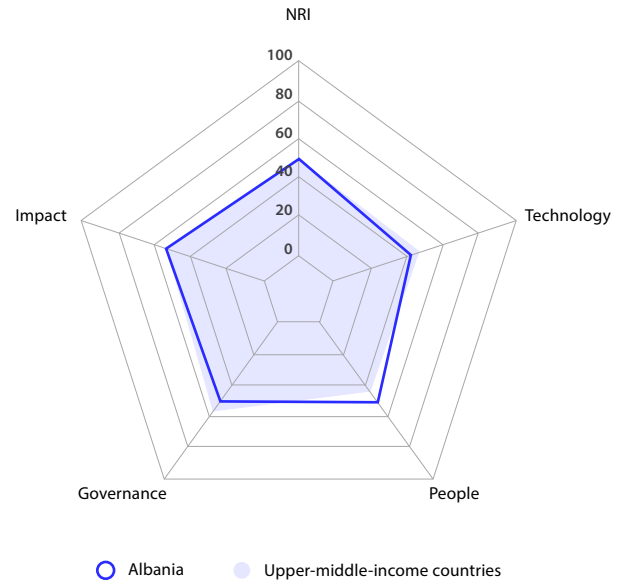
The NRI website (<https://networkreadinessindex.org/>) offers additional analysis, analytical tools, individual country/economy profiles, and visualizations such as sortable rankings and maps.



Albania

Rank (Out of 131) Score
80 46.50

Pillar/sub-pillar	Rank	Score
A. Technology pillar	94	35.30
1st sub-pillar: Access	86	57.11
2nd sub-pillar: Content	84	31.73
3rd sub-pillar: Future Technologies	122	17.06
B. People pillar	48	49.80
1st sub-pillar: Individuals	69	47.55
2nd sub-pillar: Businesses	43	51.91
3rd sub-pillar: Governments	46	49.96
C. Governance pillar	92	49.12
1st sub-pillar: Trust	79	36.60
2nd sub-pillar: Regulation	63	64.40
3rd sub-pillar: Inclusion	107	46.37
D. Impact pillar	79	51.79
1st sub-pillar: Economy	111	16.34
2nd sub-pillar: Quality of Life	47	73.89
3rd sub-pillar: SDG Contribution	65	65.12



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	94	35.30
1st sub-pillar: Access	86	57.11
1.1.1 Mobile tariffs	84	48.10
1.1.2 Handset prices	77	47.01
1.1.3 FTTH/building Internet subscriptions	54	27.96
1.1.4 Population covered by at least a 3G mobile network	53	99.74 ●
1.1.5 International Internet bandwidth	101	63.05
1.1.6 Internet access in schools	47	56.81
2nd sub-pillar: Content	84	31.73
1.2.1 GitHub commits	58	7.07
1.2.2 Internet domain registrations	62	4.85
1.2.3 Mobile apps development	63	80.49
1.2.4 AI scientific publications	74	34.49
3rd sub-pillar: Future Technologies	122	17.06
1.3.1 Adoption of emerging technologies	116	19.18 ○
1.3.2 Investment in emerging technologies	117	21.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	87	10.25
B. People pillar	48	49.80
1st sub-pillar: Individuals	69	47.55
2.1.1 Mobile broadband internet traffic within the country	89	2.56
2.1.2 ICT skills in the education system	78	39.05
2.1.3 Use of virtual social networks	78	60.27
2.1.4 Tertiary enrollment	54	38.21
2.1.5 Adult literacy rate	28	97.64 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	43	51.91
2.2.1 Firms with website	54	58.11
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	81	26.18
2.2.4 Annual investment in telecommunication services	94	71.44
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	46	49.96
2.3.1 Government online services	31	83.64 ●
2.3.2 Publication and use of open data	49	33.82
2.3.3 Government promotion of investment in emerging tech	82	32.40
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	92	49.12
1st sub-pillar: Trust	79	36.60
3.1.1 Secure Internet servers	66	54.15
3.1.2 Cybersecurity	86	63.69
3.1.3 Online access to financial account	112	8.62
3.1.4 Internet shopping	62	19.93
2nd sub-pillar: Regulation	63	64.40
3.2.1 Regulatory quality	60	47.47
3.2.2 ICT regulatory environment	45	87.06 ●
3.2.3 Regulation of emerging technologies	53	48.42
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	47	72.40 ●
3rd sub-pillar: Inclusion	107	46.37
3.3.1 E-Participation	36	83.95 ●
3.3.2 Socioeconomic gap in use of digital payments	121	32.57 ○
3.3.3 Availability of local online content	118	26.20
3.3.4 Gender gap in Internet use	57	69.33
3.3.5 Rural gap in use of digital payments	117	19.80 ○
D. Impact pillar	79	51.79
1st sub-pillar: Economy	111	16.34
4.1.1 High-tech and medium-high-tech manufacturing	100	2.60 ○
4.1.2 High-tech exports	108	2.62
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	105	36.55
4.1.5 Prevalence of gig economy	100	26.74
4.1.6 ICT services exports	66	29.52
2nd sub-pillar: Quality of Life	47	73.89
4.2.1 Happiness	85	54.79
4.2.2 Freedom to make life choices	56	76.69
4.2.3 Income inequality	25	80.90 ●
4.2.4 Healthy life expectancy at birth	34	83.19 ●
3rd sub-pillar: SDG Contribution	65	65.12
4.3.1 SDG 3: Good Health and Well-Being	91	55.55
4.3.2 SDG 4: Quality Education	54	37.34
4.3.3 SDG 5: Women's economic opportunity	32	87.72 ●
4.3.4 SDG 7: Affordable and Clean Energy	16	90.14 ●
4.3.5 SDG 11: Sustainable Cities and Communities	82	54.88

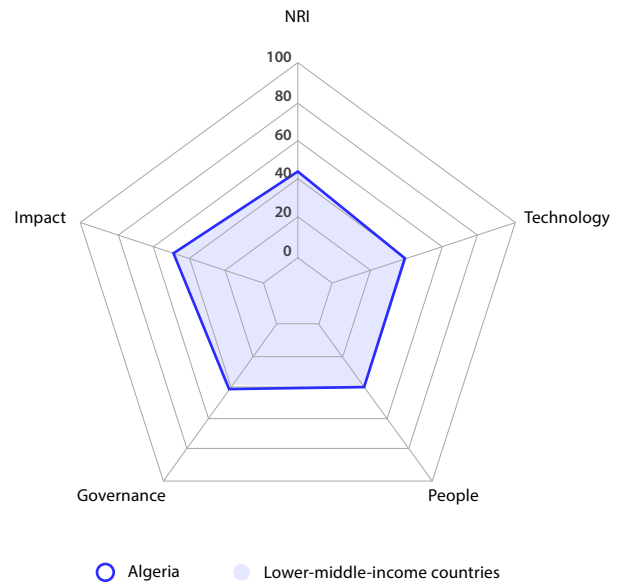
NOTE: ● Indicates a strength and ○ a weakness.

Algeria

Rank
(Out of 131) Score

Network Readiness Index **100 39.48**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	100	33.58
1st sub-pillar: Access	110	45.95
2nd sub-pillar: Content	96	27.54
3rd sub-pillar: Future Technologies	90	27.25
B. People pillar	86	37.92
1st sub-pillar: Individuals	78	45.08
2nd sub-pillar: Businesses	109	28.75
3rd sub-pillar: Governments	77	39.95
C. Governance pillar	107	39.41
1st sub-pillar: Trust	116	19.32
2nd sub-pillar: Regulation	104	52.70
3rd sub-pillar: Inclusion	108	46.22
D. Impact pillar	96	47.02
1st sub-pillar: Economy	87	25.98
2nd sub-pillar: Quality of Life	84	62.10
3rd sub-pillar: SDG Contribution	104	53.00



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	100	33.58
1st sub-pillar: Access	110	45.95
1.1.1 Mobile tariffs	88	46.81
1.1.2 Handset prices	115	30.40
1.1.3 FTTH/building Internet subscriptions	71	19.64
1.1.4 Population covered by at least a 3G mobile network	72	99.41
1.1.5 International Internet bandwidth	47	74.10
1.1.6 Internet access in schools	75	5.33
2nd sub-pillar: Content	96	27.54
1.2.1 GitHub commits	84	3.10
1.2.2 Internet domain registrations	112	0.34
1.2.3 Mobile apps development	117	50.95
1.2.4 AI scientific publications	45	55.77
3rd sub-pillar: Future Technologies	90	27.25
1.3.1 Adoption of emerging technologies	65	47.15
1.3.2 Investment in emerging technologies	85	34.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	120	0.60
B. People pillar	86	37.92
1st sub-pillar: Individuals	78	45.08
2.1.1 Mobile broadband internet traffic within the country	36	19.83
2.1.2 ICT skills in the education system	77	40.53
2.1.3 Use of virtual social networks	85	54.33
2.1.4 Tertiary enrollment	60	34.59
2.1.5 Adult literacy rate	76	76.09
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	109	28.75
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	82	8.29
2.2.3 Knowledge intensive employment	86	25.37
2.2.4 Annual investment in telecommunication services	44	80.40
2.2.5 GERD performed by business enterprise	76	0.95
3rd sub-pillar: Governments	77	39.95
2.3.1 Government online services	124	25.46
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	42	48.54
2.3.4 R&D expenditure by governments and higher education	37	45.84

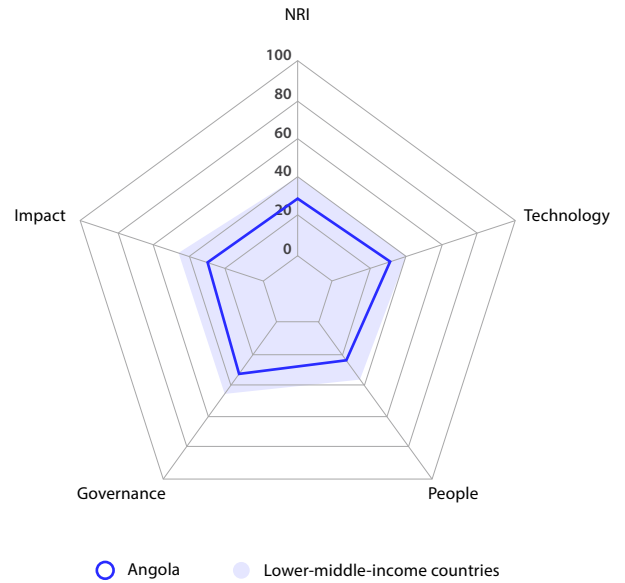
Indicator	Rank	Score
C. Governance pillar	107	39.41
1st sub-pillar: Trust	116	19.32
3.1.1 Secure Internet servers	112	30.89
3.1.2 Cybersecurity	104	32.79
3.1.3 Online access to financial account	120	4.16
3.1.4 Internet shopping	85	9.43
2nd sub-pillar: Regulation	104	52.70
3.2.1 Regulatory quality	128	6.67
3.2.2 ICT regulatory environment	110	62.35
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	114	41.77
3rd sub-pillar: Inclusion	108	46.22
3.3.1 E-Participation	129	12.35
3.3.2 Socioeconomic gap in use of digital payments	109	41.78
3.3.3 Availability of local online content	92	47.84
3.3.4 Gender gap in internet use	97	39.16
3.3.5 Rural gap in use of digital payments	3	89.99
D. Impact pillar	96	47.02
1st sub-pillar: Economy	87	25.98
4.1.1 High-tech and medium-high-tech manufacturing	99	2.69
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	92	0.53
4.1.4 Domestic market size	42	61.46
4.1.5 Prevalence of gig economy	33	59.59
4.1.6 ICT services exports	120	5.62
2nd sub-pillar: Quality of Life	84	62.10
4.2.1 Happiness	86	54.10
4.2.2 Freedom to make life choices	122	31.15
4.2.3 Income inequality	10	88.94
4.2.4 Healthy life expectancy at birth	59	74.19
3rd sub-pillar: SDG Contribution	104	53.00
4.3.1 SDG 3: Good Health and Well-Being	50	76.52
4.3.2 SDG 4: Quality Education	76	14.49
4.3.3 SDG 5: Women's economic opportunity	119	40.35
4.3.4 SDG 7: Affordable and Clean Energy	102	66.58
4.3.5 SDG 11: Sustainable Cities and Communities	63	67.05

NOTE: ● Indicates a strength and ○ a weakness.

Angola

Network Readiness Index **128** **27.40**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	125	24.30
1st sub-pillar: Access	107	47.35
2nd sub-pillar: Content	123	17.33
3rd sub-pillar: Future Technologies	130	8.21
B. People pillar	120	23.46
1st sub-pillar: Individuals	126	13.50
2nd sub-pillar: Businesses	73	38.16
3rd sub-pillar: Governments	123	18.72
C. Governance pillar	124	32.27
1st sub-pillar: Trust	121	17.68
2nd sub-pillar: Regulation	116	44.87
3rd sub-pillar: Inclusion	120	34.28
D. Impact pillar	127	29.56
1st sub-pillar: Economy	127	11.18
2nd sub-pillar: Quality of Life	130	23.42
3rd sub-pillar: SDG Contribution	99	54.07



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	125	24.30
1st sub-pillar: Access	107	47.35
1.1.1 Mobile tariffs	87	47.09
1.1.2 Handset prices	64	52.19
1.1.3 FTTH/building Internet subscriptions	61	25.65
1.1.4 Population covered by at least a 3G mobile network	107	95.42
1.1.5 International Internet bandwidth	108	61.07
1.1.6 Internet access in schools	77	2.70
2nd sub-pillar: Content	123	17.33
1.2.1 GitHub commits	120	0.32
1.2.2 Internet domain registrations	126	0.09
1.2.3 Mobile apps development	122	46.78
1.2.4 AI scientific publications	86	22.16
3rd sub-pillar: Future Technologies	130	8.21
1.3.1 Adoption of emerging technologies	120	16.41
1.3.2 Investment in emerging technologies	130	0.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	120	23.46
1st sub-pillar: Individuals	126	13.50
2.1.1 Mobile broadband internet traffic within the country	100	1.47
2.1.2 ICT skills in the education system	131	0.00
2.1.3 Use of virtual social networks	124	4.58
2.1.4 Tertiary enrollment	111	5.19
2.1.5 Adult literacy rate	94	56.29
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	73	38.16
2.2.1 Firms with website	102	22.41
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	104	14.29
2.2.4 Annual investment in telecommunication services	57	77.78
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	123	18.72
2.3.1 Government online services	105	47.27
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	120	8.28
2.3.4 R&D expenditure by governments and higher education	109	0.62

Indicator	Rank	Score
C. Governance pillar	124	32.27
1st sub-pillar: Trust	121	17.68
3.1.1 Secure Internet servers	120	23.90
3.1.2 Cybersecurity	124	11.46
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	116	44.87
3.2.1 Regulatory quality	121	16.80
3.2.2 ICT regulatory environment	89	71.38
3.2.3 Regulation of emerging technologies	117	0.53
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	58	68.96
3rd sub-pillar: Inclusion	120	34.28
3.3.1 E-Participation	104	43.21
3.3.2 Socioeconomic gap in use of digital payments	126	12.39
3.3.3 Availability of local online content	123	23.08
3.3.4 Gender gap in Internet use	86	58.42
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	127	29.56
1st sub-pillar: Economy	127	11.18
4.1.1 High-tech and medium-high-tech manufacturing	105	1.21
4.1.2 High-tech exports	95	6.03
4.1.3 PCT patent applications	95	0.19
4.1.4 Domestic market size	62	52.63
4.1.5 Prevalence of gig economy	122	5.23
4.1.6 ICT services exports	127	1.82
2nd sub-pillar: Quality of Life	130	23.42
4.2.1 Happiness	127	28.78
4.2.2 Freedom to make life choices	117	0.00
4.2.3 Income inequality	110	29.40
4.2.4 Healthy life expectancy at birth	117	35.51
3rd sub-pillar: SDG Contribution	99	54.07
4.3.1 SDG 3: Good Health and Well-Being	124	17.18
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	101	62.28
4.3.4 SDG 7: Affordable and Clean Energy	33	86.47
4.3.5 SDG 11: Sustainable Cities and Communities	88	50.37

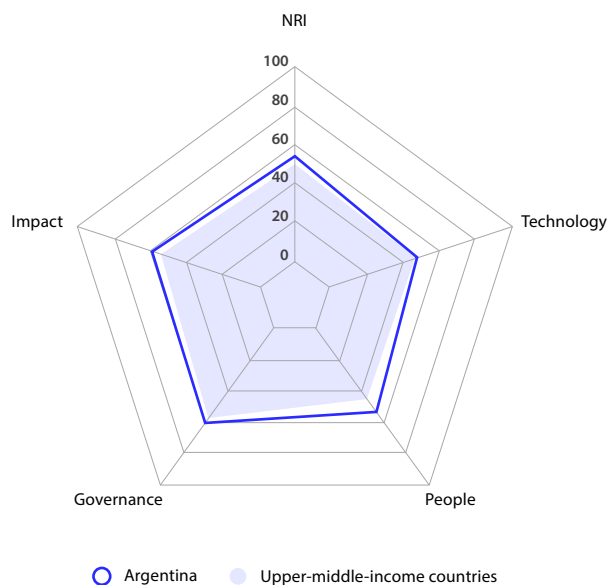
NOTE: ● Indicates a strength and ○ a weakness.

Argentina

Rank
(Out of 131) Score

Network Readiness Index 57 52.96

Pillar/sub-pillar	Rank	Score
A. Technology pillar	72	43.42
1st sub-pillar: Access	75	60.98
2nd sub-pillar: Content	51	41.25
3rd sub-pillar: Future Technologies	85	28.03
B. People pillar	42	51.88
1st sub-pillar: Individuals	21	58.31
2nd sub-pillar: Businesses	60	45.72
3rd sub-pillar: Governments	42	51.62
C. Governance pillar	60	59.26
1st sub-pillar: Trust	69	43.73
2nd sub-pillar: Regulation	82	60.18
3rd sub-pillar: Inclusion	47	73.87
D. Impact pillar	56	57.30
1st sub-pillar: Economy	50	38.64
2nd sub-pillar: Quality of Life	66	67.61
3rd sub-pillar: SDG Contribution	62	65.65



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	72	43.42
1st sub-pillar: Access	75	60.98
1.1.1 Mobile tariffs	86	47.34
1.1.2 Handset prices	65	51.73
1.1.3 FTTH/building Internet subscriptions	27	40.79
1.1.4 Population covered by at least a 3G mobile network	70	99.51
1.1.5 International Internet bandwidth	39	75.34
1.1.6 Internet access in schools	48	51.15
2nd sub-pillar: Content	51	41.25
1.2.1 GitHub commits	50	10.63
1.2.2 Internet domain registrations	58	5.21
1.2.3 Mobile apps development	58	81.57
1.2.4 AI scientific publications	28	67.61
3rd sub-pillar: Future Technologies	85	28.03
1.3.1 Adoption of emerging technologies	51	51.97
1.3.2 Investment in emerging technologies	84	34.50
1.3.3 Robot density	40	3.41
1.3.4 Computer software spending	53	22.23
B. People pillar	42	51.88
1st sub-pillar: Individuals	21	58.31
2.1.1 Mobile broadband internet traffic within the country	46	15.00
2.1.2 ICT skills in the education system	97	33.14
2.1.3 Use of virtual social networks	21	80.82
2.1.4 Tertiary enrollment	5	63.84
2.1.5 Adult literacy rate	19	98.75
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	60	45.72
2.2.1 Firms with website	38	69.09
2.2.2 GERD financed by business enterprise	61	32.69
2.2.3 Knowledge intensive employment	58	37.50
2.2.4 Annual investment in telecommunication services	21	84.95
2.2.5 GERD performed by business enterprise	56	4.36
3rd sub-pillar: Governments	42	51.62
2.3.1 Government online services	30	84.25
2.3.2 Publication and use of open data	23	57.35
2.3.3 Government promotion of investment in emerging tech	72	34.82
2.3.4 R&D expenditure by governments and higher education	58	30.05

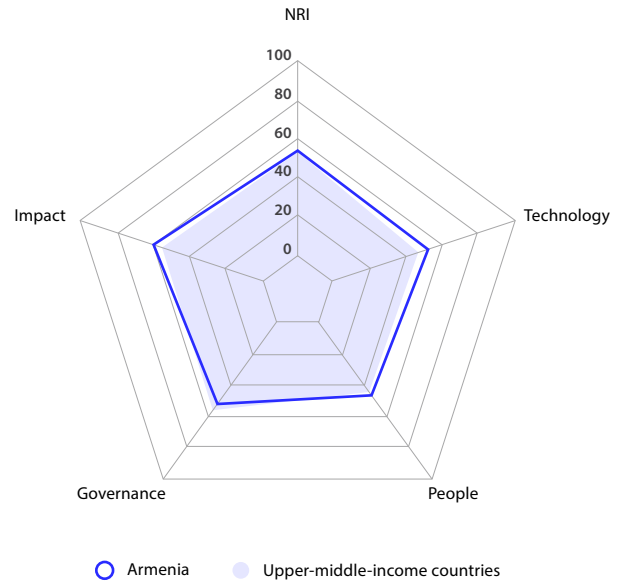
Indicator	Rank	Score
C. Governance pillar	60	59.26
1st sub-pillar: Trust	69	43.73
3.1.1 Secure Internet servers	49	65.53
3.1.2 Cybersecurity	94	49.24
3.1.3 Online access to financial account	75	22.93
3.1.4 Internet shopping	49	37.21
2nd sub-pillar: Regulation	82	60.18
3.2.1 Regulatory quality	102	25.87
3.2.2 ICT regulatory environment	97	68.82
3.2.3 Regulation of emerging technologies	77	34.74
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	50	71.46
3rd sub-pillar: Inclusion	47	73.87
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	53	81.47
3.3.3 Availability of local online content	59	64.18
3.3.4 Gender gap in internet use	53	70.09
3.3.5 Rural gap in use of digital payments	52	68.43
D. Impact pillar	56	57.30
1st sub-pillar: Economy	50	38.64
4.1.1 High-tech and medium-high-tech manufacturing	46	32.79
4.1.2 High-tech exports	70	16.92
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	27	68.13
4.1.5 Prevalence of gig economy	81	35.17
4.1.6 ICT services exports	36	40.20
2nd sub-pillar: Quality of Life	66	67.61
4.2.1 Happiness	61	66.41
4.2.2 Freedom to make life choices	60	75.34
4.2.3 Income inequality	88	52.01
4.2.4 Healthy life expectancy at birth	49	76.66
3rd sub-pillar: SDG Contribution	62	65.65
4.3.1 SDG 3: Good Health and Well-Being	54	73.93
4.3.2 SDG 4: Quality Education	68	27.59
4.3.3 SDG 5: Women's economic opportunity	92	66.67
4.3.4 SDG 7: Affordable and Clean Energy	48	83.04
4.3.5 SDG 11: Sustainable Cities and Communities	45	77.02

NOTE: ● Indicates a strength and ○ a weakness.

Armenia

Rank (Out of 131) Score
64 50.40

Pillar/sub-pillar	Rank	Score
A. Technology pillar	64	44.96
1st sub-pillar: Access	63	66.00
2nd sub-pillar: Content	75	33.65
3rd sub-pillar: Future Technologies	55	35.21
B. People pillar	59	47.13
1st sub-pillar: Individuals	57	50.59
2nd sub-pillar: Businesses	62	43.68
3rd sub-pillar: Governments	54	47.12
C. Governance pillar	79	52.21
1st sub-pillar: Trust	91	34.00
2nd sub-pillar: Regulation	59	64.98
3rd sub-pillar: Inclusion	82	57.66
D. Impact pillar	55	57.31
1st sub-pillar: Economy	82	27.12
2nd sub-pillar: Quality of Life	44	74.61
3rd sub-pillar: SDG Contribution	52	70.22



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	64	44.96
1st sub-pillar: Access	63	66.00
1.1.1 Mobile tariffs	67	55.98
1.1.2 Handset prices	98	38.94
1.1.3 FTTH/building Internet subscriptions	49	29.75
1.1.4 Population covered by at least a 3G mobile network	1	100.00
1.1.5 International Internet bandwidth	63	71.34
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	75	33.65
1.2.1 GitHub commits	47	12.15
1.2.2 Internet domain registrations	64	4.53
1.2.3 Mobile apps development	49	83.59
1.2.4 AI scientific publications	75	34.35
3rd sub-pillar: Future Technologies	55	35.21
1.3.1 Adoption of emerging technologies	64	47.72
1.3.2 Investment in emerging technologies	51	46.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	82	11.67
B. People pillar	59	47.13
1st sub-pillar: Individuals	57	50.59
2.1.1 Mobile broadband internet traffic within the country	86	3.41
2.1.2 ICT skills in the education system	52	52.37
2.1.3 Use of virtual social networks	73	63.97
2.1.4 Tertiary enrollment	63	33.44
2.1.5 Adult literacy rate	7	99.76
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	62	43.68
2.2.1 Firms with website	58	55.45
2.2.2 GERD financed by business enterprise	70	20.60
2.2.3 Knowledge intensive employment	79	27.55
2.2.4 Annual investment in telecommunication services	96	71.10
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	54	47.12
2.3.1 Government online services	67	69.09
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	29	56.72
2.3.4 R&D expenditure by governments and higher education	83	15.54

Indicator	Rank	Score
C. Governance pillar	79	52.21
1st sub-pillar: Trust	91	34.00
3.1.1 Secure Internet servers	68	50.88
3.1.2 Cybersecurity	93	49.60
3.1.3 Online access to financial account	84	17.52
3.1.4 Internet shopping	68	18.00
2nd sub-pillar: Regulation	59	64.98
3.2.1 Regulatory quality	59	47.73
3.2.2 ICT regulatory environment	39	87.65
3.2.3 Regulation of emerging technologies	41	58.95
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	67	63.89
3rd sub-pillar: Inclusion	82	57.66
3.3.1 E-Participation	56	74.07
3.3.2 Socioeconomic gap in use of digital payments	86	55.89
3.3.3 Availability of local online content	71	59.38
3.3.4 Gender gap in Internet use	7	80.38
3.3.5 Rural gap in use of digital payments	118	18.57
D. Impact pillar	55	57.31
1st sub-pillar: Economy	82	27.12
4.1.1 High-tech and medium-high-tech manufacturing	96	4.54
4.1.2 High-tech exports	81	12.94
4.1.3 PCT patent applications	64	3.58
4.1.4 Domestic market size	106	36.32
4.1.5 Prevalence of gig economy	58	44.48
4.1.6 ICT services exports	9	60.85
2nd sub-pillar: Quality of Life	44	74.61
4.2.1 Happiness	81	55.59
4.2.2 Freedom to make life choices	72	71.23
4.2.3 Income inequality	3	94.97
4.2.4 Healthy life expectancy at birth	50	76.63
3rd sub-pillar: SDG Contribution	52	70.22
4.3.1 SDG 3: Good Health and Well-Being	75	67.15
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	59	81.54
4.3.5 SDG 11: Sustainable Cities and Communities	84	53.25

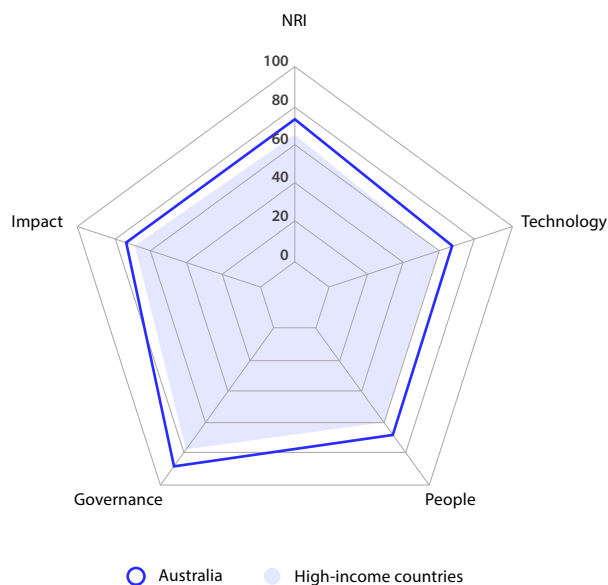
NOTE: ● Indicates a strength and ○ a weakness.

Australia

Rank
(Out of 131) Score

Network Readiness Index **14 72.83**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	17	65.35
1st sub-pillar: Access	8	82.27
2nd sub-pillar: Content	14	68.49
3rd sub-pillar: Future Technologies	32	45.28
B. People pillar	13	67.18
1st sub-pillar: Individuals	43	53.65
2nd sub-pillar: Businesses	18	67.75
3rd sub-pillar: Governments	8	80.14
C. Governance pillar	8	86.74
1st sub-pillar: Trust	8	87.67
2nd sub-pillar: Regulation	10	87.66
3rd sub-pillar: Inclusion	14	84.87
D. Impact pillar	22	72.05
1st sub-pillar: Economy	31	44.66
2nd sub-pillar: Quality of Life	14	85.11
3rd sub-pillar: SDG Contribution	15	86.38



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	17	65.35
1st sub-pillar: Access	8	82.27
1.1.1 Mobile tariffs	17	83.95
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	38	35.94
1.1.4 Population covered by at least a 3G mobile network	47	99.84
1.1.5 International Internet bandwidth	48	73.91
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	14	68.49
1.2.1 GitHub commits	21	45.54
1.2.2 Internet domain registrations	21	44.98
1.2.3 Mobile apps development	21	96.01
1.2.4 AI scientific publications	7	87.42 ●
3rd sub-pillar: Future Technologies	32	45.28
1.3.1 Adoption of emerging technologies	15	82.33
1.3.2 Investment in emerging technologies	24	65.75
1.3.3 Robot density	26	10.84
1.3.4 Computer software spending	55	22.18
B. People pillar	13	67.18
1st sub-pillar: Individuals	43	53.65
2.1.1 Mobile broadband internet traffic within the country	25	29.10
2.1.2 ICT skills in the education system	23	71.01
2.1.3 Use of virtual social networks	31	77.31
2.1.4 Tertiary enrollment	3	76.61 ●
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	28	14.23 ○
2nd sub-pillar: Businesses	18	67.75
2.2.1 Firms with website	20	81.87
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	13	74.28
2.2.4 Annual investment in telecommunication services	7	90.76 ●
2.2.5 GERD performed by business enterprise	25	24.09
3rd sub-pillar: Governments	8	80.14
2.3.1 Government online services	7	94.55 ●
2.3.2 Publication and use of open data	3	98.53 ●
2.3.3 Government promotion of investment in emerging tech	37	51.19
2.3.4 R&D expenditure by governments and higher education	9	76.28

Indicator	Rank	Score
C. Governance pillar	8	86.74
1st sub-pillar: Trust	8	87.67
3.1.1 Secure Internet servers	18	84.51
3.1.2 Cybersecurity	17	97.43
3.1.3 Online access to financial account	11	79.37
3.1.4 Internet shopping	5	89.37 ●
2nd sub-pillar: Regulation	10	87.66
3.2.1 Regulatory quality	5	89.60 ●
3.2.2 ICT regulatory environment	11	94.71
3.2.3 Regulation of emerging technologies	22	73.95
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	33	80.07
3rd sub-pillar: Inclusion	14	84.87
3.3.1 E-Participation	9	96.30
3.3.2 Socioeconomic gap in use of digital payments	20	96.29
3.3.3 Availability of local online content	9	93.03 ●
3.3.4 Gender gap in Internet use	41	71.94
3.3.5 Rural gap in use of digital payments	55	66.79
D. Impact pillar	22	72.05
1st sub-pillar: Economy	31	44.66
4.1.1 High-tech and medium-high-tech manufacturing	47	31.01
4.1.2 High-tech exports	57	28.55 ○
4.1.3 PCT patent applications	26	34.09
4.1.4 Domestic market size	18	71.15
4.1.5 Prevalence of gig economy	12	78.20
4.1.6 ICT services exports	75	24.95 ○
2nd sub-pillar: Quality of Life	14	85.11
4.2.1 Happiness	11	87.84
4.2.2 Freedom to make life choices	16	91.08
4.2.3 Income inequality	46	72.11
4.2.4 Healthy life expectancy at birth	22	89.42
3rd sub-pillar: SDG Contribution	15	86.38
4.3.1 SDG 3: Good Health and Well-Being	4	96.39 ●
4.3.2 SDG 4: Quality Education	20	68.50
4.3.3 SDG 5: Women's economic opportunity	20	95.61
4.3.4 SDG 7: Affordable and Clean Energy	78	75.10 ○
4.3.5 SDG 11: Sustainable Cities and Communities	9	96.29

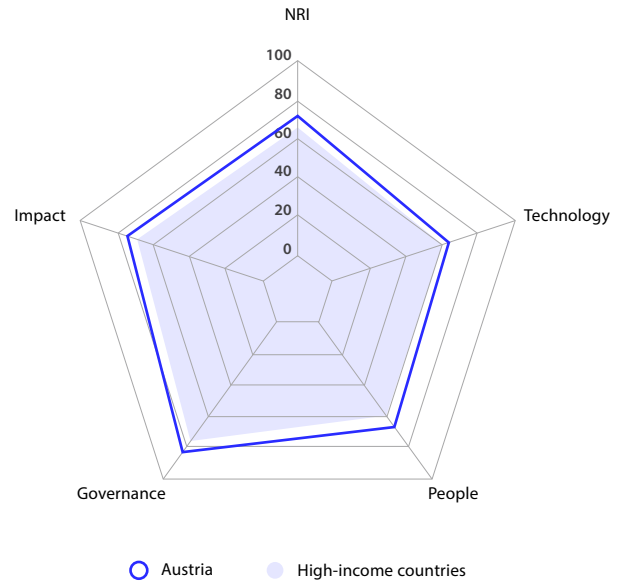
NOTE: ● Indicates a strength and ○ a weakness.

Austria

Rank
(Out of 131) Score

Network Readiness Index **18 71.31**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	23	62.30
1st sub-pillar: Access	55	68.65
2nd sub-pillar: Content	22	64.10
3rd sub-pillar: Future Technologies	19	54.13
B. People pillar	15	66.35
1st sub-pillar: Individuals	59	50.28
2nd sub-pillar: Businesses	12	72.66
3rd sub-pillar: Governments	14	76.10
C. Governance pillar	15	83.18
1st sub-pillar: Trust	21	77.66
2nd sub-pillar: Regulation	13	86.22
3rd sub-pillar: Inclusion	10	85.66
D. Impact pillar	18	73.43
1st sub-pillar: Economy	21	52.71
2nd sub-pillar: Quality of Life	19	82.58
3rd sub-pillar: SDG Contribution	20	85.00



The Network Readiness Index in detail

Indicator	Rank	Score	
A. Technology pillar	23	62.30	
1st sub-pillar: Access	55	68.65	
1.1.1 Mobile tariffs	9	89.31	●
1.1.2 Handset prices	24	74.44	
1.1.3 FTTH/building Internet subscriptions	87	11.00	○
1.1.4 Population covered by at least a 3G mobile network	75	99.35	
1.1.5 International Internet bandwidth	79	69.17	○
1.1.6 Internet access in schools	NA	NA	
2nd sub-pillar: Content	22	64.10	
1.2.1 GitHub commits	22	43.11	
1.2.2 Internet domain registrations	13	53.17	
1.2.3 Mobile apps development	20	96.03	
1.2.4 AI scientific publications	NA	NA	
3rd sub-pillar: Future Technologies	19	54.13	
1.3.1 Adoption of emerging technologies	21	74.59	
1.3.2 Investment in emerging technologies	26	64.25	
1.3.3 Robot density	15	29.18	
1.3.4 Computer software spending	17	48.52	
B. People pillar	15	66.35	
1st sub-pillar: Individuals	59	50.28	
2.1.1 Mobile broadband internet traffic within the country	29	26.82	
2.1.2 ICT skills in the education system	33	63.91	
2.1.3 Use of virtual social networks	36	76.05	
2.1.4 Tertiary enrollment	14	57.73	
2.1.5 Adult literacy rate	NA	NA	
2.1.6 AI talent concentration	15	26.90	
2nd sub-pillar: Businesses	12	72.66	
2.2.1 Firms with website	6	94.14	●
2.2.2 GERD financed by business enterprise	29	61.95	
2.2.3 Knowledge intensive employment	25	67.18	
2.2.4 Annual investment in telecommunication services	37	81.74	
2.2.5 GERD performed by business enterprise	7	58.29	●
3rd sub-pillar: Governments	14	76.10	
2.3.1 Government online services	7	94.55	●
2.3.2 Publication and use of open data	17	69.12	
2.3.3 Government promotion of investment in emerging tech	33	53.65	
2.3.4 R&D expenditure by governments and higher education	6	87.09	●

Indicator	Rank	Score	
C. Governance pillar	15	83.18	
1st sub-pillar: Trust	21	77.66	
3.1.1 Secure Internet servers	22	83.21	
3.1.2 Cybersecurity	36	93.78	
3.1.3 Online access to financial account	22	59.89	
3.1.4 Internet shopping	18	73.76	
2nd sub-pillar: Regulation	13	86.22	
3.2.1 Regulatory quality	18	78.40	
3.2.2 ICT regulatory environment	37	88.82	
3.2.3 Regulation of emerging technologies	13	80.53	
3.2.4 E-commerce legislation	1	100.00	●
3.2.5 Privacy protection by law content	24	83.33	
3rd sub-pillar: Inclusion	10	85.66	
3.3.1 E-Participation	6	97.53	●
3.3.2 Socioeconomic gap in use of digital payments	10	98.14	●
3.3.3 Availability of local online content	23	85.34	
3.3.4 Gender gap in Internet use	65	67.76	○
3.3.5 Rural gap in use of digital payments	7	79.51	●
D. Impact pillar	18	73.43	
1st sub-pillar: Economy	21	52.71	
4.1.1 High-tech and medium-high-tech manufacturing	17	60.17	
4.1.2 High-tech exports	25	54.49	
4.1.3 PCT patent applications	11	59.18	●
4.1.4 Domestic market size	43	61.44	
4.1.5 Prevalence of gig economy	79	35.47	○
4.1.6 ICT services exports	26	45.53	
2nd sub-pillar: Quality of Life	19	82.58	
4.2.1 Happiness	12	87.27	●
4.2.2 Freedom to make life choices	73	71.17	
4.2.3 Income inequality	22	82.41	
4.2.4 Healthy life expectancy at birth	21	89.44	
3rd sub-pillar: SDG Contribution	20	85.00	
4.3.1 SDG 3: Good Health and Well-Being	26	88.39	
4.3.2 SDG 4: Quality Education	27	65.38	
4.3.3 SDG 5: Women's economic opportunity	20	95.61	
4.3.4 SDG 7: Affordable and Clean Energy	30	87.47	
4.3.5 SDG 11: Sustainable Cities and Communities	23	88.14	

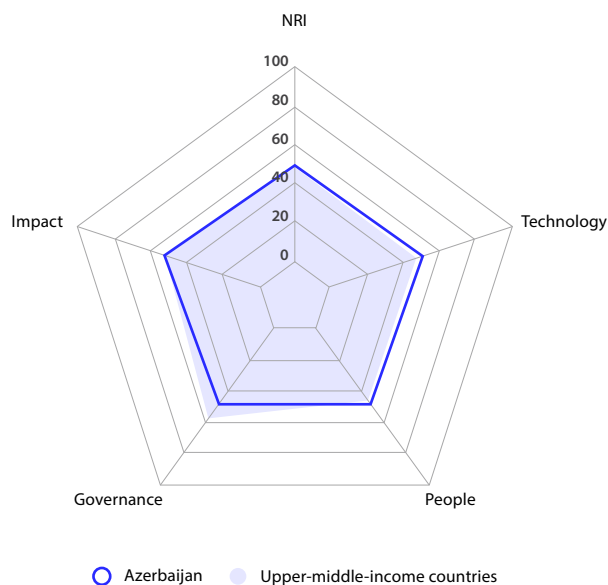
NOTE: ● Indicates a strength and ○ a weakness.

Azerbaijan

Rank
(Out of 131) Score

Network Readiness Index **74** **47.74**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	68	44.12
1st sub-pillar: Access	80	58.89
2nd sub-pillar: Content	93	28.22
3rd sub-pillar: Future Technologies	33	45.24
B. People pillar	56	47.58
1st sub-pillar: Individuals	66	48.83
2nd sub-pillar: Businesses	66	42.76
3rd sub-pillar: Governments	44	51.14
C. Governance pillar	95	47.96
1st sub-pillar: Trust	78	36.77
2nd sub-pillar: Regulation	106	52.02
3rd sub-pillar: Inclusion	87	55.10
D. Impact pillar	82	51.29
1st sub-pillar: Economy	93	24.64
2nd sub-pillar: Quality of Life	76	66.52
3rd sub-pillar: SDG Contribution	68	62.71



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	68	44.12
1st sub-pillar: Access	80	58.89
1.1.1 Mobile tariffs	64	60.86
1.1.2 Handset prices	114	32.50
1.1.3 FTTH/building Internet subscriptions	53	28.06
1.1.4 Population covered by at least a 3G mobile network	47	99.84
1.1.5 International Internet bandwidth	59	71.74
1.1.6 Internet access in schools	46	60.37
2nd sub-pillar: Content	93	28.22
1.2.1 GitHub commits	88	2.77
1.2.2 Internet domain registrations	91	1.23
1.2.3 Mobile apps development	78	73.21
1.2.4 AI scientific publications	73	35.70
3rd sub-pillar: Future Technologies	33	45.24
1.3.1 Adoption of emerging technologies	34	62.72
1.3.2 Investment in emerging technologies	23	67.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	96	5.99
B. People pillar	56	47.58
1st sub-pillar: Individuals	66	48.83
2.1.1 Mobile broadband internet traffic within the country	87	3.18
2.1.2 ICT skills in the education system	19	72.19
2.1.3 Use of virtual social networks	93	46.15
2.1.4 Tertiary enrollment	79	22.84
2.1.5 Adult literacy rate	6	99.77
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	66	42.76
2.2.1 Firms with website	44	65.50
2.2.2 GERD financed by business enterprise	57	38.04
2.2.3 Knowledge intensive employment	66	33.98
2.2.4 Annual investment in telecommunication services	67	76.19
2.2.5 GERD performed by business enterprise	88	0.11
3rd sub-pillar: Governments	44	51.14
2.3.1 Government online services	64	69.70
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	20	69.04
2.3.4 R&D expenditure by governments and higher education	84	14.67

The Network Readiness Index in detail

Indicator	Rank	Score
C. Governance pillar	95	47.96
1st sub-pillar: Trust	78	36.77
3.1.1 Secure Internet servers	83	45.49
3.1.2 Cybersecurity	48	89.12
3.1.3 Online access to financial account	115	6.93
3.1.4 Internet shopping	95	5.53
2nd sub-pillar: Regulation	106	52.02
3.2.1 Regulatory quality	92	32.80
3.2.2 ICT regulatory environment	114	61.18
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	103	47.42
3rd sub-pillar: Inclusion	87	55.10
3.3.1 E-Participation	71	67.90
3.3.2 Socioeconomic gap in use of digital payments	117	36.84
3.3.3 Availability of local online content	24	85.10
3.3.4 Gender gap in Internet use	75	64.93
3.3.5 Rural gap in use of digital payments	116	20.72
D. Impact pillar	82	51.29
1st sub-pillar: Economy	93	24.64
4.1.1 High-tech and medium-high-tech manufacturing	80	12.80
4.1.2 High-tech exports	99	5.00
4.1.3 PCT patent applications	90	0.77
4.1.4 Domestic market size	71	49.29
4.1.5 Prevalence of gig economy	16	70.06
4.1.6 ICT services exports	105	9.92
2nd sub-pillar: Quality of Life	76	66.52
4.2.1 Happiness	88	53.33
4.2.2 Freedom to make life choices	41	81.23
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	88	65.00
3rd sub-pillar: SDG Contribution	68	62.71
4.3.1 SDG 3: Good Health and Well-Being	85	60.63
4.3.2 SDG 4: Quality Education	64	30.43
4.3.3 SDG 5: Women's economic opportunity	81	70.18
4.3.4 SDG 7: Affordable and Clean Energy	89	72.51
4.3.5 SDG 11: Sustainable Cities and Communities	39	79.80

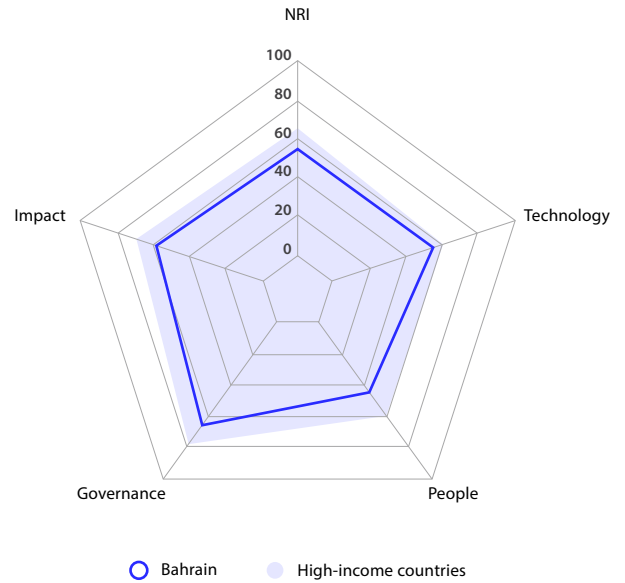
NOTE: ● Indicates a strength and ○ a weakness.

Bahrain

Rank
(Out of 131) Score

Network Readiness Index **54** **54.34**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	41	51.47
1st sub-pillar: Access	56	68.61
2nd sub-pillar: Content	60	38.15
3rd sub-pillar: Future Technologies	27	47.67
B. People pillar	70	44.26
1st sub-pillar: Individuals	26	56.40
2nd sub-pillar: Businesses	90	33.41
3rd sub-pillar: Governments	69	42.97
C. Governance pillar	51	65.17
1st sub-pillar: Trust	62	48.50
2nd sub-pillar: Regulation	53	68.86
3rd sub-pillar: Inclusion	35	78.14
D. Impact pillar	59	56.46
1st sub-pillar: Economy	79	28.56
2nd sub-pillar: Quality of Life	26	80.08
3rd sub-pillar: SDG Contribution	76	60.75



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	41	51.47
1st sub-pillar: Access	56	68.61
1.1.1 Mobile tariffs	73	52.94
1.1.2 Handset prices	32	72.04
1.1.3 FTTH/building Internet subscriptions	84	12.93
1.1.4 Population covered by at least a 3G mobile network	1	100.00
1.1.5 International Internet bandwidth	49	73.73
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	60	38.15
1.2.1 GitHub commits	65	5.49
1.2.2 Internet domain registrations	67	3.80
1.2.3 Mobile apps development	44	85.61
1.2.4 AI scientific publications	43	57.68
3rd sub-pillar: Future Technologies	27	47.67
1.3.1 Adoption of emerging technologies	30	65.71
1.3.2 Investment in emerging technologies	NA	NA
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	31	29.63
B. People pillar	70	44.26
1st sub-pillar: Individuals	26	56.40
2.1.1 Mobile broadband internet traffic within the country	63	8.39
2.1.2 ICT skills in the education system	35	63.02
2.1.3 Use of virtual social networks	16	82.28
2.1.4 Tertiary enrollment	50	39.91
2.1.5 Adult literacy rate	63	88.42
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	90	33.41
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	65	26.89
2.2.3 Knowledge intensive employment	69	31.96
2.2.4 Annual investment in telecommunication services	78	74.27
2.2.5 GERD performed by business enterprise	80	0.54
3rd sub-pillar: Governments	69	42.97
2.3.1 Government online services	45	78.18
2.3.2 Publication and use of open data	77	17.65
2.3.3 Government promotion of investment in emerging tech	18	70.90
2.3.4 R&D expenditure by governments and higher education	98	5.16

Indicator	Rank	Score
C. Governance pillar	51	65.17
1st sub-pillar: Trust	62	48.50
3.1.1 Secure Internet servers	77	47.65
3.1.2 Cybersecurity	68	77.47
3.1.3 Online access to financial account	45	40.00
3.1.4 Internet shopping	56	28.89
2nd sub-pillar: Regulation	53	68.86
3.2.1 Regulatory quality	41	57.87
3.2.2 ICT regulatory environment	55	85.68
3.2.3 Regulation of emerging technologies	19	76.05
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	124	24.72
3rd sub-pillar: Inclusion	35	78.14
3.3.1 E-Participation	50	76.54
3.3.2 Socioeconomic gap in use of digital payments	62	75.64
3.3.3 Availability of local online content	14	88.94
3.3.4 Gender gap in Internet use	28	74.31
3.3.5 Rural gap in use of digital payments	26	75.26
D. Impact pillar	59	56.46
1st sub-pillar: Economy	79	28.56
4.1.1 High-tech and medium-high-tech manufacturing	88	10.63
4.1.2 High-tech exports	84	12.24
4.1.3 PCT patent applications	70	2.50
4.1.4 Domestic market size	89	42.46
4.1.5 Prevalence of gig economy	25	63.66
4.1.6 ICT services exports	38	39.89
2nd sub-pillar: Quality of Life	26	80.08
4.2.1 Happiness	47	71.13
4.2.2 Freedom to make life choices	5	96.64
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	68	72.47
3rd sub-pillar: SDG Contribution	76	60.75
4.3.1 SDG 3: Good Health and Well-Being	64	70.70
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	120	37.72
4.3.4 SDG 7: Affordable and Clean Energy	124	38.10
4.3.5 SDG 11: Sustainable Cities and Communities	8	96.47

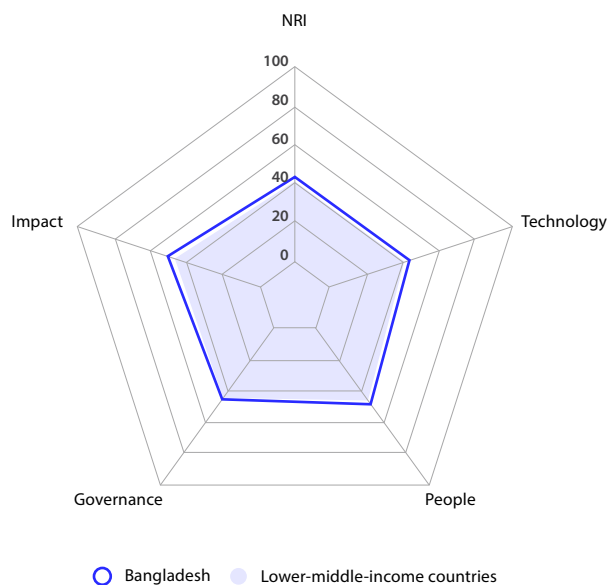
NOTE: ● Indicates a strength and ○ a weakness.

Bangladesh

Rank
(Out of 131) Score

Network Readiness Index **88** **42.74**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	81	41.24
1st sub-pillar: Access	58	67.49
2nd sub-pillar: Content	82	32.18
3rd sub-pillar: Future Technologies	99	24.05
B. People pillar	92	35.72
1st sub-pillar: Individuals	100	34.41
2nd sub-pillar: Businesses	79	37.15
3rd sub-pillar: Governments	88	35.59
C. Governance pillar	101	44.79
1st sub-pillar: Trust	88	34.48
2nd sub-pillar: Regulation	117	44.48
3rd sub-pillar: Inclusion	85	55.40
D. Impact pillar	88	49.23
1st sub-pillar: Economy	77	28.83
2nd sub-pillar: Quality of Life	72	66.88
3rd sub-pillar: SDG Contribution	110	51.97



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	81	41.24
1st sub-pillar: Access	58	67.49
1.1.1 Mobile tariffs	53	68.17 ●
1.1.2 Handset prices	109	35.99
1.1.3 FTTH/building Internet subscriptions	2	73.51 ●
1.1.4 Population covered by at least a 3G mobile network	73	99.38
1.1.5 International Internet bandwidth	29	78.61 ●
1.1.6 Internet access in schools	49	49.30
2nd sub-pillar: Content	82	32.18
1.2.1 GitHub commits	94	1.94
1.2.2 Internet domain registrations	116	0.26
1.2.3 Mobile apps development	103	59.12
1.2.4 AI scientific publications	29	67.40 ●
3rd sub-pillar: Future Technologies	99	24.05
1.3.1 Adoption of emerging technologies	106	27.75
1.3.2 Investment in emerging technologies	98	29.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	76	15.39
B. People pillar	92	35.72
1st sub-pillar: Individuals	100	34.41
2.1.1 Mobile broadband internet traffic within the country	24	30.54 ●
2.1.2 ICT skills in the education system	96	33.73
2.1.3 Use of virtual social networks	105	25.71
2.1.4 Tertiary enrollment	93	14.38
2.1.5 Adult literacy rate	87	67.73
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	79	37.15
2.2.1 Firms with website	104	19.41
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	114	9.80
2.2.4 Annual investment in telecommunication services	34	82.24 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	88	35.59
2.3.1 Government online services	83	60.00
2.3.2 Publication and use of open data	87	11.76
2.3.3 Government promotion of investment in emerging tech	71	35.01
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	101	44.79
1st sub-pillar: Trust	88	34.48
3.1.1 Secure Internet servers	95	39.43
3.1.2 Cybersecurity	61	80.94
3.1.3 Online access to financial account	96	14.08
3.1.4 Internet shopping	104	3.48 ○
2nd sub-pillar: Regulation	117	44.48
3.2.1 Regulatory quality	120	17.07 ○
3.2.2 ICT regulatory environment	113	61.38
3.2.3 Regulation of emerging technologies	91	27.89
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	101	49.40
3rd sub-pillar: Inclusion	85	55.40
3.3.1 E-Participation	89	55.55
3.3.2 Socioeconomic gap in use of digital payments	52	82.35
3.3.3 Availability of local online content	89	50.00
3.3.4 Gender gap in internet use	100	15.35 ○
3.3.5 Rural gap in use of digital payments	37	73.73 ●
D. Impact pillar	88	49.23
1st sub-pillar: Economy	77	28.83
4.1.1 High-tech and medium-high-tech manufacturing	95	6.04
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	30	67.19 ●
4.1.5 Prevalence of gig economy	103	24.42
4.1.6 ICT services exports	85	17.66
2nd sub-pillar: Quality of Life	72	66.88
4.2.1 Happiness	84	55.22
4.2.2 Freedom to make life choices	77	68.23
4.2.3 Income inequality	33	76.88 ●
4.2.4 Healthy life expectancy at birth	82	67.17
3rd sub-pillar: SDG Contribution	110	51.97
4.3.1 SDG 3: Good Health and Well-Being	107	36.88
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	124	28.95 ○
4.3.4 SDG 7: Affordable and Clean Energy	13	91.31 ●
4.3.5 SDG 11: Sustainable Cities and Communities	87	50.75

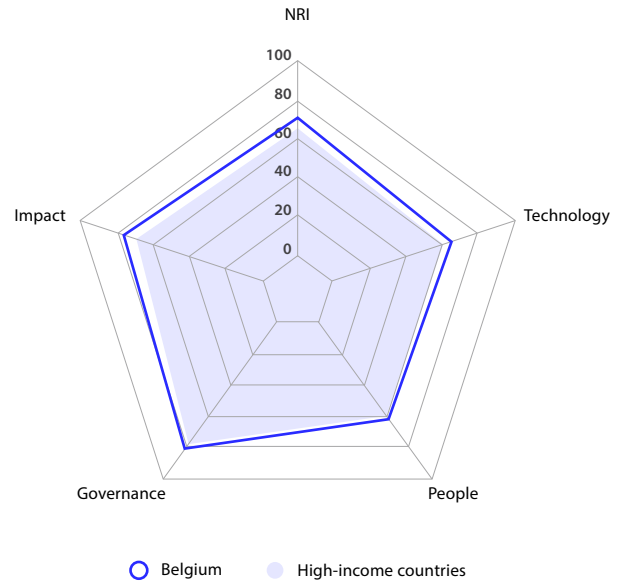
NOTE: ● Indicates a strength and ○ a weakness.

Belgium

Rank
(Out of 131) Score

Network Readiness Index 21 70.04

Pillar/sub-pillar	Rank	Score
A. Technology pillar	21	63.78
1st sub-pillar: Access	24	75.46
2nd sub-pillar: Content	18	65.74
3rd sub-pillar: Future Technologies	22	50.13
B. People pillar	22	61.79
1st sub-pillar: Individuals	82	43.18
2nd sub-pillar: Businesses	3	79.33
3rd sub-pillar: Governments	22	62.84
C. Governance pillar	20	80.72
1st sub-pillar: Trust	14	82.19
2nd sub-pillar: Regulation	24	81.17
3rd sub-pillar: Inclusion	31	78.81
D. Impact pillar	17	73.87
1st sub-pillar: Economy	19	54.12
2nd sub-pillar: Quality of Life	21	81.88
3rd sub-pillar: SDG Contribution	17	85.60



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	21	63.78
1st sub-pillar: Access	24	75.46
1.1.1 Mobile tariffs	52	68.26
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	90	8.97 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	37	75.54
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	18	65.74
1.2.1 GitHub commits	16	55.93
1.2.2 Internet domain registrations	15	51.69
1.2.3 Mobile apps development	35	89.61
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	22	50.13
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	21	67.50
1.3.3 Robot density	14	29.52
1.3.4 Computer software spending	10	53.38 ●
B. People pillar	22	61.79
1st sub-pillar: Individuals	82	43.18
2.1.1 Mobile broadband internet traffic within the country	67	7.91
2.1.2 ICT skills in the education system	29	66.57
2.1.3 Use of virtual social networks	35	76.34
2.1.4 Tertiary enrollment	21	53.41
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	34	11.70 ○
2nd sub-pillar: Businesses	3	79.33
2.2.1 Firms with website	9	89.09 ●
2.2.2 GERD financed by business enterprise	9	79.53 ●
2.2.3 Knowledge intensive employment	9	77.18 ●
2.2.4 Annual investment in telecommunication services	24	84.36
2.2.5 GERD performed by business enterprise	6	66.50 ●
3rd sub-pillar: Governments	22	62.84
2.3.1 Government online services	74	64.85
2.3.2 Publication and use of open data	27	50.00
2.3.3 Government promotion of investment in emerging tech	NA	NA
2.3.4 R&D expenditure by governments and higher education	10	73.68

Indicator	Rank	Score
C. Governance pillar	20	80.72
1st sub-pillar: Trust	14	82.19
3.1.1 Secure Internet servers	28	80.55
3.1.2 Cybersecurity	26	96.18
3.1.3 Online access to financial account	13	73.15
3.1.4 Internet shopping	15	78.87
2nd sub-pillar: Regulation	24	81.17
3.2.1 Regulatory quality	19	77.07
3.2.2 ICT regulatory environment	25	92.94
3.2.3 Regulation of emerging technologies	8	82.11 ●
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	16	87.07
3rd sub-pillar: Inclusion	31	78.81
3.3.1 E-Participation	75	64.20 ○
3.3.2 Socioeconomic gap in use of digital payments	23	95.02
3.3.3 Availability of local online content	25	84.62
3.3.4 Gender gap in Internet use	39	72.14
3.3.5 Rural gap in use of digital payments	10	78.08 ●
D. Impact pillar	17	73.87
1st sub-pillar: Economy	19	54.12
4.1.1 High-tech and medium-high-tech manufacturing	21	57.96
4.1.2 High-tech exports	22	57.56
4.1.3 PCT patent applications	16	48.74
4.1.4 Domestic market size	36	63.35
4.1.5 Prevalence of gig economy	NA	NA
4.1.6 ICT services exports	29	42.97
2nd sub-pillar: Quality of Life	21	81.88
4.2.1 Happiness	18	82.98
4.2.2 Freedom to make life choices	84	66.44 ○
4.2.3 Income inequality	9	89.95 ●
4.2.4 Healthy life expectancy at birth	26	88.15
3rd sub-pillar: SDG Contribution	17	85.60
4.3.1 SDG 3: Good Health and Well-Being	15	93.69
4.3.2 SDG 4: Quality Education	19	68.86
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	69	78.70
4.3.5 SDG 11: Sustainable Cities and Communities	28	86.75

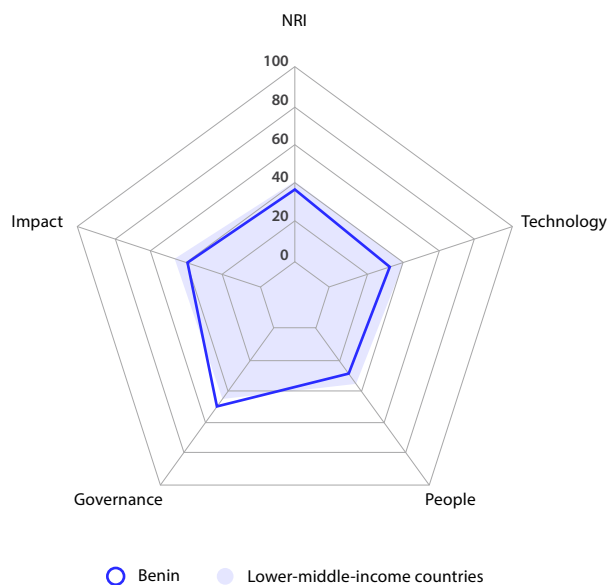
NOTE: ● Indicates a strength and ○ a weakness.

Benin

Rank
(Out of 131) Score

Network Readiness Index **110 36.05**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	118	27.95
1st sub-pillar: Access	114	43.63
2nd sub-pillar: Content	110	22.57
3rd sub-pillar: Future Technologies	118	17.64
B. People pillar	113	29.23
1st sub-pillar: Individuals	119	20.19
2nd sub-pillar: Businesses	77	37.38
3rd sub-pillar: Governments	98	30.13
C. Governance pillar	91	49.19
1st sub-pillar: Trust	85	34.63
2nd sub-pillar: Regulation	65	64.15
3rd sub-pillar: Inclusion	103	48.80
D. Impact pillar	117	37.81
1st sub-pillar: Economy	104	18.44
2nd sub-pillar: Quality of Life	109	50.37
3rd sub-pillar: SDG Contribution	119	44.62



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	118	27.95
1st sub-pillar: Access	114	43.63
1.1.1 Mobile tariffs	120	25.36
1.1.2 Handset prices	111	34.47
1.1.3 FTTH/building Internet subscriptions	98	3.61 ○
1.1.4 Population covered by at least a 3G mobile network	119	92.35
1.1.5 International Internet bandwidth	106	62.37
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	110	22.57
1.2.1 GitHub commits	111	0.57
1.2.2 Internet domain registrations	109	0.41
1.2.3 Mobile apps development	120	47.80
1.2.4 AI scientific publications	65	41.49 ●
3rd sub-pillar: Future Technologies	118	17.64
1.3.1 Adoption of emerging technologies	109	26.30
1.3.2 Investment in emerging technologies	116	22.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	100	4.61
B. People pillar	113	29.23
1st sub-pillar: Individuals	119	20.19
2.1.1 Mobile broadband internet traffic within the country	91	2.29
2.1.2 ICT skills in the education system	43	56.80 ●
2.1.3 Use of virtual social networks	117	9.64
2.1.4 Tertiary enrollment	106	6.38
2.1.5 Adult literacy rate	102	25.82 ○
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	77	37.38
2.2.1 Firms with website	91	33.27
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	121	6.11
2.2.4 Annual investment in telecommunication services	85	72.75
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	98	30.13
2.3.1 Government online services	101	49.70
2.3.2 Publication and use of open data	96	7.35
2.3.3 Government promotion of investment in emerging tech	79	33.33
2.3.4 R&D expenditure by governments and higher education	NA	NA

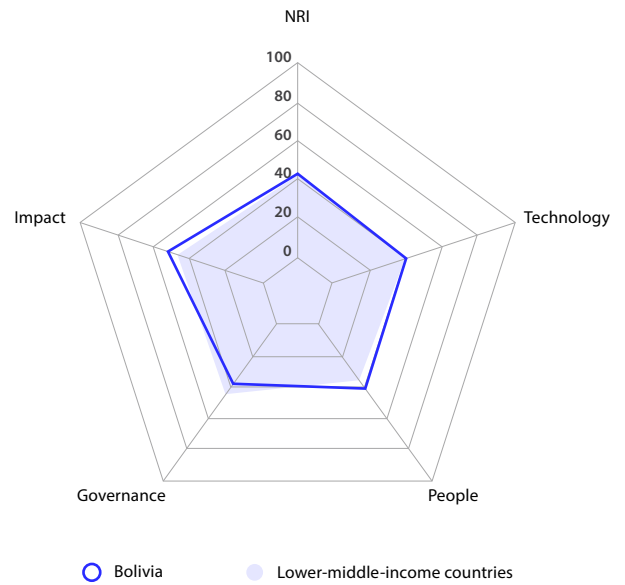
Indicator	Rank	Score
C. Governance pillar	91	49.19
1st sub-pillar: Trust	85	34.63
3.1.1 Secure Internet servers	121	23.50
3.1.2 Cybersecurity	64	79.71 ●
3.1.3 Online access to financial account	61	30.59 ●
3.1.4 Internet shopping	99	4.71
2nd sub-pillar: Regulation	65	64.15
3.2.1 Regulatory quality	94	31.20
3.2.2 ICT regulatory environment	115	60.39
3.2.3 Regulation of emerging technologies	62	43.95 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	20	85.19 ●
3rd sub-pillar: Inclusion	103	48.80
3.3.1 E-Participation	92	53.09
3.3.2 Socioeconomic gap in use of digital payments	82	58.72 ●
3.3.3 Availability of local online content	112	29.57
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	84	53.85
D. Impact pillar	117	37.81
1st sub-pillar: Economy	104	18.44
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	115	1.52 ○
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	103	37.00
4.1.5 Prevalence of gig economy	60	43.60 ●
4.1.6 ICT services exports	103	10.10
2nd sub-pillar: Quality of Life	109	50.37
4.2.1 Happiness	102	41.22
4.2.2 Freedom to make life choices	96	59.19
4.2.3 Income inequality	68	63.32 ●
4.2.4 Healthy life expectancy at birth	115	37.78
3rd sub-pillar: SDG Contribution	119	44.62
4.3.1 SDG 3: Good Health and Well-Being	126	16.39 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	88	68.42
4.3.4 SDG 7: Affordable and Clean Energy	105	63.49
4.3.5 SDG 11: Sustainable Cities and Communities	120	30.17

NOTE: ● Indicates a strength and ○ a weakness.

Bolivia

Rank (Out of 131) Score
Network Readiness Index 97 40.41

Pillar/sub-pillar	Rank	Score
A. Technology pillar	106	32.35
1st sub-pillar: Access	100	53.11
2nd sub-pillar: Content	108	23.54
3rd sub-pillar: Future Technologies	108	20.39
B. People pillar	78	41.40
1st sub-pillar: Individuals	32	55.70
2nd sub-pillar: Businesses	72	38.47
3rd sub-pillar: Governments	99	30.02
C. Governance pillar	117	36.68
1st sub-pillar: Trust	115	20.80
2nd sub-pillar: Regulation	123	34.51
3rd sub-pillar: Inclusion	90	54.71
D. Impact pillar	83	51.23
1st sub-pillar: Economy	108	17.95
2nd sub-pillar: Quality of Life	82	63.84
3rd sub-pillar: SDG Contribution	48	71.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	106	32.35
1st sub-pillar: Access	100	53.11
1.1.1 Mobile tariffs	70	55.04 ●
1.1.2 Handset prices	106	36.81
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	101	97.06
1.1.5 International Internet bandwidth	80	69.13
1.1.6 Internet access in schools	72	7.52
2nd sub-pillar: Content	108	23.54
1.2.1 GitHub commits	85	3.08
1.2.2 Internet domain registrations	92	1.19
1.2.3 Mobile apps development	90	68.80
1.2.4 AI scientific publications	89	21.08
3rd sub-pillar: Future Technologies	108	20.39
1.3.1 Adoption of emerging technologies	105	27.75
1.3.2 Investment in emerging technologies	128	12.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	57	21.43 ●
B. People pillar	78	41.40
1st sub-pillar: Individuals	32	55.70
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	125	9.17
2.1.3 Use of virtual social networks	69	65.82 ●
2.1.4 Tertiary enrollment	NA	NA
2.1.5 Adult literacy rate	54	92.12 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	72	38.47
2.2.1 Firms with website	68	46.10
2.2.2 GERD financed by business enterprise	83	6.39
2.2.3 Knowledge intensive employment	91	21.89
2.2.4 Annual investment in telecommunication services	50	79.50 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	99	30.02
2.3.1 Government online services	87	56.98
2.3.2 Publication and use of open data	61	26.47
2.3.3 Government promotion of investment in emerging tech	123	6.60
2.3.4 R&D expenditure by governments and higher education	NA	NA

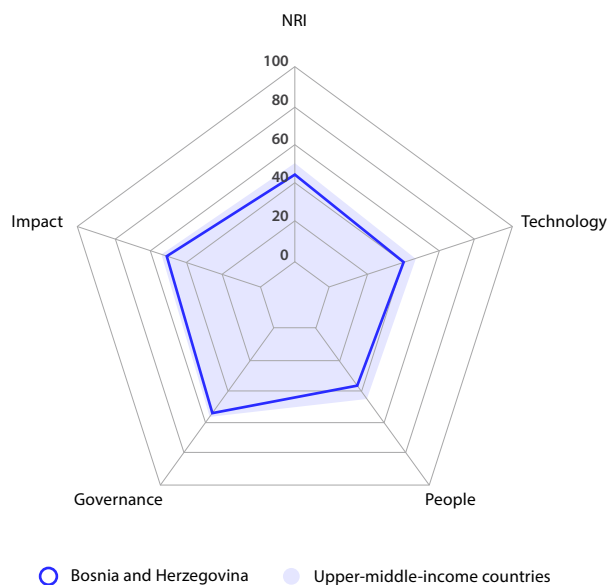
Indicator	Rank	Score
C. Governance pillar	117	36.68
1st sub-pillar: Trust	115	20.80
3.1.1 Secure Internet servers	90	42.67
3.1.2 Cybersecurity	121	14.66
3.1.3 Online access to financial account	101	12.41
3.1.4 Internet shopping	76	13.48
2nd sub-pillar: Regulation	123	34.51
3.2.1 Regulatory quality	124	13.87 ○
3.2.2 ICT regulatory environment	120	57.06
3.2.3 Regulation of emerging technologies	116	2.11 ○
3.2.4 E-commerce legislation	118	33.33
3.2.5 Privacy protection by law content	64	66.21 ●
3rd sub-pillar: Inclusion	90	54.71
3.3.1 E-Participation	85	58.02
3.3.2 Socioeconomic gap in use of digital payments	99	49.89
3.3.3 Availability of local online content	114	28.37
3.3.4 Gender gap in Internet use	76	63.87
3.3.5 Rural gap in use of digital payments	38	73.42 ●
D. Impact pillar	83	51.23
1st sub-pillar: Economy	108	17.95
4.1.1 High-tech and medium-high-tech manufacturing	84	11.67
4.1.2 High-tech exports	80	13.21
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	84	45.34
4.1.5 Prevalence of gig economy	123	4.94 ○
4.1.6 ICT services exports	92	14.58
2nd sub-pillar: Quality of Life	82	63.84
4.2.1 Happiness	71	60.36
4.2.2 Freedom to make life choices	37	82.50 ●
4.2.3 Income inequality	95	48.74
4.2.4 Healthy life expectancy at birth	89	63.74
3rd sub-pillar: SDG Contribution	48	71.91
4.3.1 SDG 3: Good Health and Well-Being	82	63.05
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	40	84.21 ●
4.3.4 SDG 7: Affordable and Clean Energy	67	79.11 ●
4.3.5 SDG 11: Sustainable Cities and Communities	74	61.26

NOTE: ● Indicates a strength and ○ a weakness.

Bosnia and Herzegovina

Rank (Out of 131) Score
90 42.67

Pillar/sub-pillar	Rank	Score
A. Technology pillar	99	33.92
1st sub-pillar: Access	94	54.75
2nd sub-pillar: Content	81	32.50
3rd sub-pillar: Future Technologies	126	14.51
B. People pillar	96	34.36
1st sub-pillar: Individuals	89	41.63
2nd sub-pillar: Businesses	67	42.72
3rd sub-pillar: Governments	124	18.72
C. Governance pillar	77	53.11
1st sub-pillar: Trust	86	34.62
2nd sub-pillar: Regulation	70	62.53
3rd sub-pillar: Inclusion	73	62.18
D. Impact pillar	85	49.31
1st sub-pillar: Economy	88	25.50
2nd sub-pillar: Quality of Life	59	70.23
3rd sub-pillar: SDG Contribution	107	52.21



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	99	33.92
1st sub-pillar: Access	94	54.75
1.1.1 Mobile tariffs	93	44.80
1.1.2 Handset prices	63	52.65
1.1.3 FTTH/building Internet subscriptions	82	13.44
1.1.4 Population covered by at least a 3G mobile network	78	99.01
1.1.5 International Internet bandwidth	98	63.85
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	81	32.50
1.2.1 GitHub commits	53	8.57 ●
1.2.2 Internet domain registrations	77	2.57
1.2.3 Mobile apps development	75	74.87
1.2.4 AI scientific publications	60	43.98
3rd sub-pillar: Future Technologies	126	14.51
1.3.1 Adoption of emerging technologies	95	33.05
1.3.2 Investment in emerging technologies	125	17.00 ○
1.3.3 Robot density	54	0.24 ○
1.3.4 Computer software spending	91	7.76
B. People pillar	96	34.36
1st sub-pillar: Individuals	89	41.63
2.1.1 Mobile broadband internet traffic within the country	101	1.41
2.1.2 ICT skills in the education system	105	27.81
2.1.3 Use of virtual social networks	83	58.13
2.1.4 Tertiary enrollment	76	24.66
2.1.5 Adult literacy rate	34	96.16 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	67	42.72
2.2.1 Firms with website	41	67.70 ●
2.2.2 GERD financed by business enterprise	51	44.63
2.2.3 Knowledge intensive employment	83	25.62
2.2.4 Annual investment in telecommunication services	82	73.83
2.2.5 GERD performed by business enterprise	64	1.83
3rd sub-pillar: Governments	124	18.72
2.3.1 Government online services	94	52.12
2.3.2 Publication and use of open data	91	8.82
2.3.3 Government promotion of investment in emerging tech	125	4.46
2.3.4 R&D expenditure by governments and higher education	90	9.47

The Network Readiness Index in detail

Indicator	Rank	Score
C. Governance pillar	77	53.11
1st sub-pillar: Trust	86	34.62
3.1.1 Secure Internet servers	52	64.31 ●
3.1.2 Cybersecurity	108	28.20
3.1.3 Online access to financial account	103	10.71
3.1.4 Internet shopping	51	35.26
2nd sub-pillar: Regulation	70	62.53
3.2.1 Regulatory quality	89	34.93
3.2.2 ICT regulatory environment	36	89.41 ●
3.2.3 Regulation of emerging technologies	107	16.05 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	48	72.23 ●
3rd sub-pillar: Inclusion	73	62.18
3.3.1 E-Participation	83	59.26
3.3.2 Socioeconomic gap in use of digital payments	74	65.63
3.3.3 Availability of local online content	75	54.33
3.3.4 Gender gap in internet use	88	56.66
3.3.5 Rural gap in use of digital payments	28	75.01 ●
D. Impact pillar	85	49.31
1st sub-pillar: Economy	88	25.50
4.1.1 High-tech and medium-high-tech manufacturing	70	18.29
4.1.2 High-tech exports	51	32.63
4.1.3 PCT patent applications	47	8.97 ●
4.1.4 Domestic market size	100	38.40
4.1.5 Prevalence of gig economy	109	21.80
4.1.6 ICT services exports	56	32.88
2nd sub-pillar: Quality of Life	59	70.23
4.2.1 Happiness	64	63.57
4.2.2 Freedom to make life choices	87	65.10
4.2.3 Income inequality	39	75.38 ●
4.2.4 Healthy life expectancy at birth	48	76.87 ●
3rd sub-pillar: SDG Contribution	107	52.21
4.3.1 SDG 3: Good Health and Well-Being	87	59.55
4.3.2 SDG 4: Quality Education	62	30.58
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	106	59.73
4.3.5 SDG 11: Sustainable Cities and Communities	118	32.25 ○

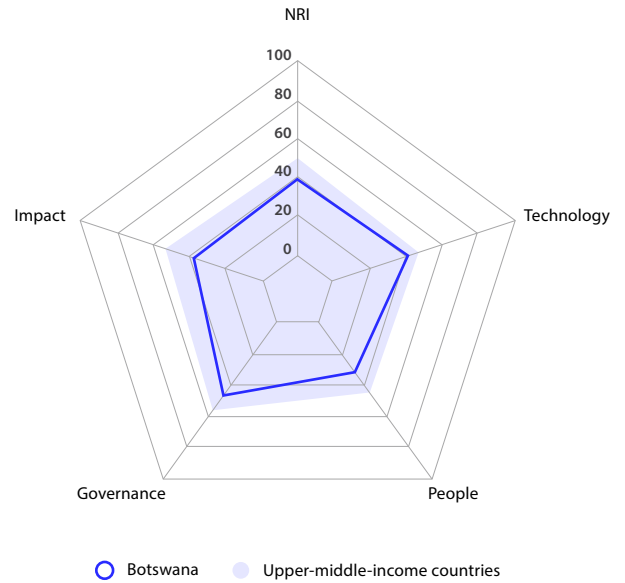
NOTE: ● Indicates a strength and ○ a weakness.

Botswana

Rank
(Out of 131) Score

Network Readiness Index **108 37.72**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	93	35.86
1st sub-pillar: Access	79	59.04
2nd sub-pillar: Content	102	25.85
3rd sub-pillar: Future Technologies	101	22.69
B. People pillar	101	31.66
1st sub-pillar: Individuals	93	38.81
2nd sub-pillar: Businesses	98	31.13
3rd sub-pillar: Governments	110	25.04
C. Governance pillar	99	46.41
1st sub-pillar: Trust	90	34.27
2nd sub-pillar: Regulation	68	63.34
3rd sub-pillar: Inclusion	113	41.63
D. Impact pillar	119	36.93
1st sub-pillar: Economy	125	12.83
2nd sub-pillar: Quality of Life	123	39.31
3rd sub-pillar: SDG Contribution	85	58.65



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	93	35.86
1st sub-pillar: Access	79	59.04
1.1.1 Mobile tariffs	78	50.38
1.1.2 Handset prices	30	72.79 ●
1.1.3 FTTH/building Internet subscriptions	101	3.05 ○
1.1.4 Population covered by at least a 3G mobile network	75	99.35
1.1.5 International Internet bandwidth	76	69.64 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	102	25.85
1.2.1 GitHub commits	106	1.20
1.2.2 Internet domain registrations	86	1.53
1.2.3 Mobile apps development	100	63.08
1.2.4 AI scientific publications	70	37.60
3rd sub-pillar: Future Technologies	101	22.69
1.3.1 Adoption of emerging technologies	108	26.73
1.3.2 Investment in emerging technologies	96	30.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	85	10.58
B. People pillar	101	31.66
1st sub-pillar: Individuals	93	38.81
2.1.1 Mobile broadband internet traffic within the country	94	1.69
2.1.2 ICT skills in the education system	61	47.63 ●
2.1.3 Use of virtual social networks	95	45.08
2.1.4 Tertiary enrollment	88	16.60
2.1.5 Adult literacy rate	70	83.07
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	98	31.13
2.2.1 Firms with website	93	31.31
2.2.2 GERD financed by business enterprise	69	21.83
2.2.3 Knowledge intensive employment	76	28.65
2.2.4 Annual investment in telecommunication services	95	71.36
2.2.5 GERD performed by business enterprise	63	2.49
3rd sub-pillar: Governments	110	25.04
2.3.1 Government online services	116	34.55
2.3.2 Publication and use of open data	97	5.88
2.3.3 Government promotion of investment in emerging tech	91	29.57
2.3.4 R&D expenditure by governments and higher education	57	30.18 ●

The Network Readiness Index in detail

Indicator	Rank	Score
C. Governance pillar	99	46.41
1st sub-pillar: Trust	90	34.27
3.1.1 Secure Internet servers	85	44.49
3.1.2 Cybersecurity	92	52.23
3.1.3 Online access to financial account	49	36.21 ●
3.1.4 Internet shopping	101	4.14
2nd sub-pillar: Regulation	68	63.34
3.2.1 Regulatory quality	52	52.27 ●
3.2.2 ICT regulatory environment	99	67.65
3.2.3 Regulation of emerging technologies	102	21.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	38	75.47 ●
3rd sub-pillar: Inclusion	113	41.63
3.3.1 E-Participation	113	34.56
3.3.2 Socioeconomic gap in use of digital payments	112	39.83
3.3.3 Availability of local online content	121	23.56
3.3.4 Gender gap in Internet use	94	47.77
3.3.5 Rural gap in use of digital payments	67	62.45 ●
D. Impact pillar	119	36.93
1st sub-pillar: Economy	125	12.83
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	94	6.19
4.1.3 PCT patent applications	69	2.87
4.1.4 Domestic market size	109	35.72
4.1.5 Prevalence of gig economy	118	11.92 ○
4.1.6 ICT services exports	111	7.46
2nd sub-pillar: Quality of Life	123	39.31
4.2.1 Happiness	123	23.01 ○
4.2.2 Freedom to make life choices	54	77.55 ●
4.2.3 Income inequality	111	24.37 ○
4.2.4 Healthy life expectancy at birth	124	32.31 ○
3rd sub-pillar: SDG Contribution	85	58.65
4.3.1 SDG 3: Good Health and Well-Being	105	41.65
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	115	49.12
4.3.4 SDG 7: Affordable and Clean Energy	27	88.55 ●
4.3.5 SDG 11: Sustainable Cities and Communities	81	55.29

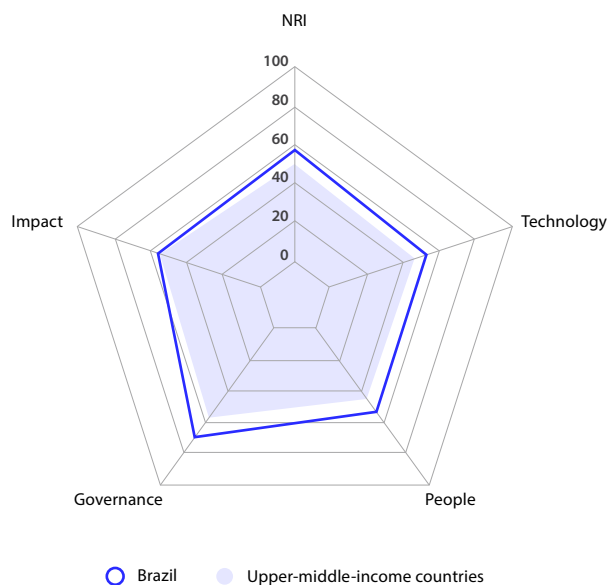
NOTE: ● Indicates a strength and ○ a weakness.

Brazil

Rank
(Out of 131) Score

Network Readiness Index **44 57.01**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	43	50.87
1st sub-pillar: Access	27	74.90
2nd sub-pillar: Content	36	46.87
3rd sub-pillar: Future Technologies	68	30.85
B. People pillar	40	53.07
1st sub-pillar: Individuals	84	42.90
2nd sub-pillar: Businesses	35	57.38
3rd sub-pillar: Governments	30	58.95
C. Governance pillar	44	68.88
1st sub-pillar: Trust	52	55.17
2nd sub-pillar: Regulation	50	69.53
3rd sub-pillar: Inclusion	21	81.95
D. Impact pillar	61	55.21
1st sub-pillar: Economy	57	36.33
2nd sub-pillar: Quality of Life	87	61.28
3rd sub-pillar: SDG Contribution	57	68.02



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	43	50.87
1st sub-pillar: Access	27	74.90
1.1.1 Mobile tariffs	24	78.49 ●
1.1.2 Handset prices	52	62.32
1.1.3 FTTH/building Internet subscriptions	4	69.02 ●
1.1.4 Population covered by at least a 3G mobile network	103	96.57 ○
1.1.5 International Internet bandwidth	19	80.95 ●
1.1.6 Internet access in schools	45	62.04
2nd sub-pillar: Content	36	46.87
1.2.1 GitHub commits	48	11.92
1.2.2 Internet domain registrations	51	7.35
1.2.3 Mobile apps development	47	84.23
1.2.4 AI scientific publications	9	83.98 ●
3rd sub-pillar: Future Technologies	68	30.85
1.3.1 Adoption of emerging technologies	46	55.65
1.3.2 Investment in emerging technologies	66	39.00
1.3.3 Robot density	44	2.34
1.3.4 Computer software spending	40	26.41
B. People pillar	40	53.07
1st sub-pillar: Individuals	84	42.90
2.1.1 Mobile broadband internet traffic within the country	20	35.59 ●
2.1.2 ICT skills in the education system	116	19.53 ○
2.1.3 Use of virtual social networks	45	74.59
2.1.4 Tertiary enrollment	57	36.38
2.1.5 Adult literacy rate	59	91.31
2.1.6 AI talent concentration	41	0.00 ○
2nd sub-pillar: Businesses	35	57.38
2.2.1 Firms with website	63	50.13
2.2.2 GERD financed by business enterprise	36	53.77
2.2.3 Knowledge intensive employment	60	36.23
2.2.4 Annual investment in telecommunication services	10	89.38 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	30	58.95
2.3.1 Government online services	20	86.67 ●
2.3.2 Publication and use of open data	20	61.76
2.3.3 Government promotion of investment in emerging tech	95	28.41
2.3.4 R&D expenditure by governments and higher education	NA	NA

The Network Readiness Index in detail

Indicator	Rank	Score
C. Governance pillar	44	68.88
1st sub-pillar: Trust	52	55.17
3.1.1 Secure Internet servers	54	64.12
3.1.2 Cybersecurity	25	96.54
3.1.3 Online access to financial account	77	19.93
3.1.4 Internet shopping	47	40.08
2nd sub-pillar: Regulation	50	69.53
3.2.1 Regulatory quality	84	36.80
3.2.2 ICT regulatory environment	28	91.76
3.2.3 Regulation of emerging technologies	59	45.26
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	43	73.81
3rd sub-pillar: Inclusion	21	81.95
3.3.1 E-Participation	18	90.13 ●
3.3.2 Socioeconomic gap in use of digital payments	41	88.16
3.3.3 Availability of local online content	50	67.55
3.3.4 Gender gap in internet use	3	88.66 ●
3.3.5 Rural gap in use of digital payments	25	75.26
D. Impact pillar	61	55.21
1st sub-pillar: Economy	57	36.33
4.1.1 High-tech and medium-high-tech manufacturing	32	48.81
4.1.2 High-tech exports	52	32.57
4.1.3 PCT patent applications	54	6.77
4.1.4 Domestic market size	8	79.77 ●
4.1.5 Prevalence of gig economy	94	29.36
4.1.6 ICT services exports	83	20.73
2nd sub-pillar: Quality of Life	87	61.28
4.2.1 Happiness	55	68.22
4.2.2 Freedom to make life choices	74	70.61
4.2.3 Income inequality	106	35.43 ○
4.2.4 Healthy life expectancy at birth	73	70.87
3rd sub-pillar: SDG Contribution	57	68.02
4.3.1 SDG 3: Good Health and Well-Being	49	76.58
4.3.2 SDG 4: Quality Education	67	29.56 ○
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	70	78.20
4.3.5 SDG 11: Sustainable Cities and Communities	47	76.80

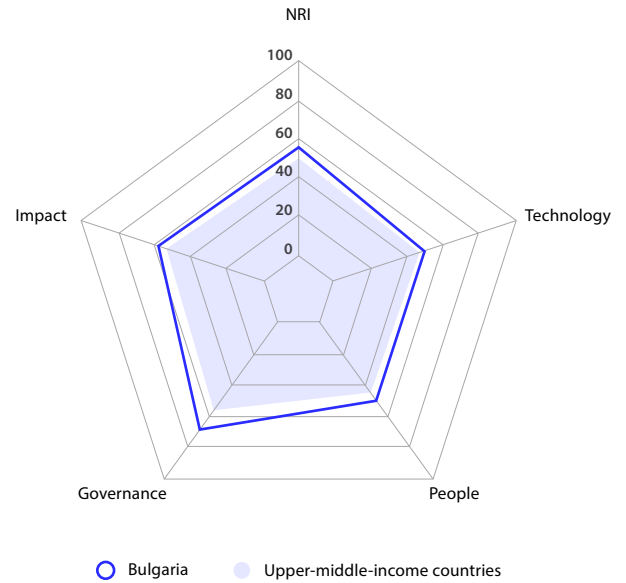
NOTE: ● Indicates a strength and ○ a weakness.

Bulgaria

Rank
(Out of 131) Score

Network Readiness Index 51 55.51

Pillar/sub-pillar	Rank	Score
A. Technology pillar	53	48.77
1st sub-pillar: Access	43	71.73
2nd sub-pillar: Content	41	44.78
3rd sub-pillar: Future Technologies	76	29.79
B. People pillar	52	48.71
1st sub-pillar: Individuals	33	55.60
2nd sub-pillar: Businesses	57	46.15
3rd sub-pillar: Governments	67	44.39
C. Governance pillar	47	67.50
1st sub-pillar: Trust	55	53.48
2nd sub-pillar: Regulation	30	77.61
3rd sub-pillar: Inclusion	52	71.41
D. Impact pillar	58	57.07
1st sub-pillar: Economy	39	42.05
2nd sub-pillar: Quality of Life	71	66.91
3rd sub-pillar: SDG Contribution	71	62.24



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	53	48.77
1st sub-pillar: Access	43	71.73
1.1.1 Mobile tariffs	45	70.13
1.1.2 Handset prices	35	71.05
1.1.3 FTTH/building Internet subscriptions	31	38.93
1.1.4 Population covered by at least a 3G mobile network	19	100.00 ●
1.1.5 International Internet bandwidth	30	78.56 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	41	44.78
1.2.1 GitHub commits	34	23.62
1.2.2 Internet domain registrations	37	17.62
1.2.3 Mobile apps development	27	93.11 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	76	29.79
1.3.1 Adoption of emerging technologies	60	48.94
1.3.2 Investment in emerging technologies	50	46.50
1.3.3 Robot density	41	3.30 ○
1.3.4 Computer software spending	63	20.43
B. People pillar	52	48.71
1st sub-pillar: Individuals	33	55.60
2.1.1 Mobile broadband internet traffic within the country	71	7.18
2.1.2 ICT skills in the education system	32	64.20
2.1.3 Use of virtual social networks	79	59.88
2.1.4 Tertiary enrollment	29	48.81 ●
2.1.5 Adult literacy rate	26	97.91
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	57	46.15
2.2.1 Firms with website	76	41.82
2.2.2 GERD financed by business enterprise	47	46.48
2.2.3 Knowledge intensive employment	44	50.65
2.2.4 Annual investment in telecommunication services	66	76.56
2.2.5 GERD performed by business enterprise	38	15.23
3rd sub-pillar: Governments	67	44.39
2.3.1 Government online services	46	76.37
2.3.2 Publication and use of open data	41	38.24
2.3.3 Government promotion of investment in emerging tech	50	45.61
2.3.4 R&D expenditure by governments and higher education	77	17.36 ○

Indicator	Rank	Score
C. Governance pillar	47	67.50
1st sub-pillar: Trust	55	53.48
3.1.1 Secure Internet servers	14	86.02 ●
3.1.2 Cybersecurity	83	66.81
3.1.3 Online access to financial account	92	16.23 ○
3.1.4 Internet shopping	43	44.88
2nd sub-pillar: Regulation	30	77.61
3.2.1 Regulatory quality	45	54.93
3.2.2 ICT regulatory environment	25	92.94 ●
3.2.3 Regulation of emerging technologies	41	58.95
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	29	81.25 ●
3rd sub-pillar: Inclusion	52	71.41
3.3.1 E-Participation	23	88.89 ●
3.3.2 Socioeconomic gap in use of digital payments	72	67.26
3.3.3 Availability of local online content	36	78.12
3.3.4 Gender gap in Internet use	70	67.32
3.3.5 Rural gap in use of digital payments	79	55.45
D. Impact pillar	58	57.07
1st sub-pillar: Economy	39	42.05
4.1.1 High-tech and medium-high-tech manufacturing	53	29.65
4.1.2 High-tech exports	35	48.46
4.1.3 PCT patent applications	45	9.08
4.1.4 Domestic market size	68	50.60
4.1.5 Prevalence of gig economy	24	63.95 ●
4.1.6 ICT services exports	18	50.58 ●
2nd sub-pillar: Quality of Life	71	66.91
4.2.1 Happiness	77	57.75
4.2.2 Freedom to make life choices	46	79.02
4.2.3 Income inequality	80	57.04
4.2.4 Healthy life expectancy at birth	60	73.83
3rd sub-pillar: SDG Contribution	71	62.24
4.3.1 SDG 3: Good Health and Well-Being	68	68.14
4.3.2 SDG 4: Quality Education	49	40.04
4.3.3 SDG 5: Women's economic opportunity	35	86.84
4.3.4 SDG 7: Affordable and Clean Energy	92	71.43 ○
4.3.5 SDG 11: Sustainable Cities and Communities	103	44.76 ○

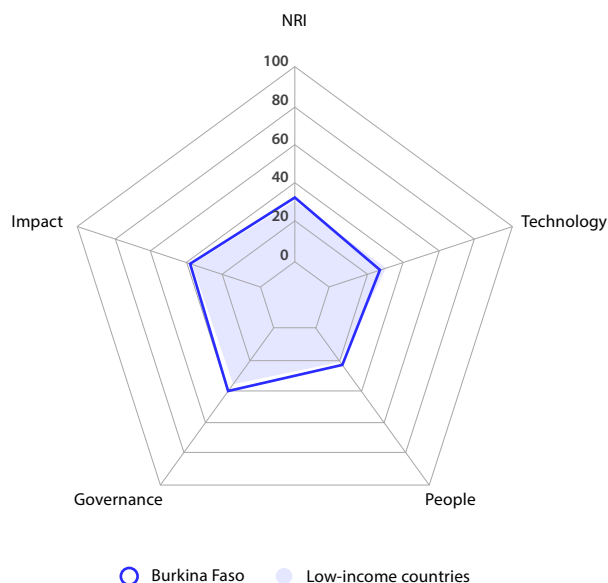
NOTE: ● Indicates a strength and ○ a weakness.

Burkina Faso

Rank
(Out of 131) Score

Network Readiness Index 122 29.76

Pillar/sub-pillar	Rank	Score
A. Technology pillar	129	20.27
1st sub-pillar: Access	125	36.17
2nd sub-pillar: Content	126	15.03
3rd sub-pillar: Future Technologies	129	9.62
B. People pillar	119	23.84
1st sub-pillar: Individuals	130	8.30
2nd sub-pillar: Businesses	110	28.68
3rd sub-pillar: Governments	91	34.55
C. Governance pillar	111	38.65
1st sub-pillar: Trust	114	21.50
2nd sub-pillar: Regulation	85	59.72
3rd sub-pillar: Inclusion	119	34.74
D. Impact pillar	120	36.28
1st sub-pillar: Economy	115	15.70
2nd sub-pillar: Quality of Life	120	41.10
3rd sub-pillar: SDG Contribution	109	52.03



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	129	20.27
1st sub-pillar: Access	125	36.17
1.1.1 Mobile tariffs	114	28.66
1.1.2 Handset prices	129	15.55 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	127	74.23
1.1.5 International Internet bandwidth	115	57.67
1.1.6 Internet access in schools	76	4.74
2nd sub-pillar: Content	126	15.03
1.2.1 GitHub commits	128	0.06 ○
1.2.2 Internet domain registrations	129	0.04 ○
1.2.3 Mobile apps development	127	37.49
1.2.4 AI scientific publications	85	22.52
3rd sub-pillar: Future Technologies	129	9.62
1.3.1 Adoption of emerging technologies	125	2.44 ○
1.3.2 Investment in emerging technologies	110	24.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	109	2.43
B. People pillar	119	23.84
1st sub-pillar: Individuals	130	8.30
2.1.1 Mobile broadband internet traffic within the country	115	0.20
2.1.2 ICT skills in the education system	126	8.58
2.1.3 Use of virtual social networks	121	6.62
2.1.4 Tertiary enrollment	113	4.17
2.1.5 Adult literacy rate	104	21.93
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	110	28.68
2.2.1 Firms with website	118	8.90
2.2.2 GERD financed by business enterprise	73	14.72 ●
2.2.3 Knowledge intensive employment	97	17.88
2.2.4 Annual investment in telecommunication services	83	73.21
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	91	34.55
2.3.1 Government online services	108	44.85
2.3.2 Publication and use of open data	72	20.59 ●
2.3.3 Government promotion of investment in emerging tech	106	18.36
2.3.4 R&D expenditure by governments and higher education	26	54.41 ●

Indicator	Rank	Score
C. Governance pillar	111	38.65
1st sub-pillar: Trust	114	21.50
3.1.1 Secure Internet servers	128	14.30 ○
3.1.2 Cybersecurity	99	38.92
3.1.3 Online access to financial account	67	27.27 ●
3.1.4 Internet shopping	96	5.50
2nd sub-pillar: Regulation	85	59.72
3.2.1 Regulatory quality	96	29.87 ●
3.2.2 ICT regulatory environment	67	82.35 ●
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	82	60.00 ●
3rd sub-pillar: Inclusion	119	34.74
3.3.1 E-Participation	96	49.38
3.3.2 Socioeconomic gap in use of digital payments	102	46.40
3.3.3 Availability of local online content	130	8.41 ○
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	106	34.76
D. Impact pillar	120	36.28
1st sub-pillar: Economy	115	15.70
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	111	1.92
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	101	38.29
4.1.5 Prevalence of gig economy	115	15.99
4.1.6 ICT services exports	80	22.31 ●
2nd sub-pillar: Quality of Life	120	41.10
4.2.1 Happiness	97	43.75
4.2.2 Freedom to make life choices	118	45.65
4.2.3 Income inequality	102	39.45
4.2.4 Healthy life expectancy at birth	116	35.57
3rd sub-pillar: SDG Contribution	109	52.03
4.3.1 SDG 3: Good Health and Well-Being	122	24.54
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	65	75.44 ●
4.3.4 SDG 7: Affordable and Clean Energy	83	73.52 ●
4.3.5 SDG 11: Sustainable Cities and Communities	116	34.61

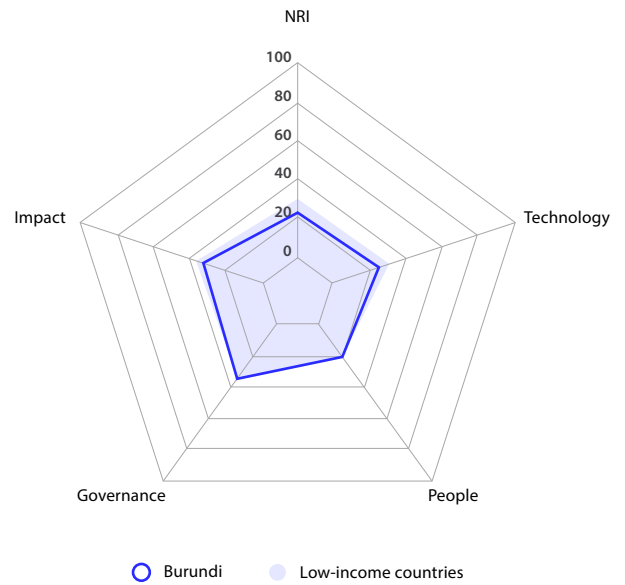
NOTE: ● Indicates a strength and ○ a weakness.

Burundi

Network Readiness Index **130** **21.11**

Rank (Out of 131) Score

Pillar/sub-pillar	Rank	Score
A. Technology pillar	130	17.23
1st sub-pillar: Access	131	21.04
2nd sub-pillar: Content	127	14.89
3rd sub-pillar: Future Technologies	123	15.74
B. People pillar	126	19.21
1st sub-pillar: Individuals	122	17.45
2nd sub-pillar: Businesses	128	18.45
3rd sub-pillar: Governments	116	21.73
C. Governance pillar	131	15.48
1st sub-pillar: Trust	131	8.77
2nd sub-pillar: Regulation	131	23.40
3rd sub-pillar: Inclusion	131	14.27
D. Impact pillar	124	32.52
1st sub-pillar: Economy	120	13.57
2nd sub-pillar: Quality of Life	119	43.44
3rd sub-pillar: SDG Contribution	127	40.54



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	130	17.23
1st sub-pillar: Access	131	21.04
1.1.1 Mobile tariffs	128	7.11 ○
1.1.2 Handset prices	130	0.00 ○
1.1.3 FTTH/building Internet subscriptions	104	1.24
1.1.4 Population covered by at least a 3G mobile network	128	71.29 ○
1.1.5 International Internet bandwidth	127	46.62
1.1.6 Internet access in schools	79	0.00
2nd sub-pillar: Content	127	14.89
1.2.1 GitHub commits	126	0.13
1.2.2 Internet domain registrations	123	0.09
1.2.3 Mobile apps development	114	52.92
1.2.4 AI scientific publications	98	6.44
3rd sub-pillar: Future Technologies	123	15.74
1.3.1 Adoption of emerging technologies	117	17.31
1.3.2 Investment in emerging technologies	111	23.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	95	6.41 ●
B. People pillar	126	19.21
1st sub-pillar: Individuals	122	17.45
2.1.1 Mobile broadband internet traffic within the country	113	0.23
2.1.2 ICT skills in the education system	113	22.78
2.1.3 Use of virtual social networks	126	2.73
2.1.4 Tertiary enrollment	123	2.21
2.1.5 Adult literacy rate	92	59.31
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	128	18.45
2.2.1 Firms with website	106	18.60
2.2.2 GERD financed by business enterprise	78	10.85 ●
2.2.3 Knowledge intensive employment	130	0.00 ○
2.2.4 Annual investment in telecommunication services	109	62.34
2.2.5 GERD performed by business enterprise	81	0.48 ●
3rd sub-pillar: Governments	116	21.73
2.3.1 Government online services	119	33.33
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	103	21.15
2.3.4 R&D expenditure by governments and higher education	88	10.70 ●

Indicator	Rank	Score
C. Governance pillar	131	15.48
1st sub-pillar: Trust	131	8.77
3.1.1 Secure Internet servers	126	17.53
3.1.2 Cybersecurity	130	0.00 ○
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	131	23.40
3.2.1 Regulatory quality	124	13.87
3.2.2 ICT regulatory environment	118	57.65
3.2.3 Regulation of emerging technologies	82	32.37 ●
3.2.4 E-commerce legislation	126	0.00 ○
3.2.5 Privacy protection by law content	129	13.12 ○
3rd sub-pillar: Inclusion	131	14.27
3.3.1 E-Participation	118	30.86
3.3.2 Socioeconomic gap in use of digital payments	127	0.00 ○
3.3.3 Availability of local online content	118	26.20
3.3.4 Gender gap in Internet use	104	0.00 ○
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	124	32.52
1st sub-pillar: Economy	120	13.57
4.1.1 High-tech and medium-high-tech manufacturing	101	2.41
4.1.2 High-tech exports	121	0.07
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	128	18.65 ○
4.1.5 Prevalence of gig economy	91	30.81 ●
4.1.6 ICT services exports	88	15.90 ●
2nd sub-pillar: Quality of Life	119	43.44
4.2.1 Happiness	118	28.43
4.2.2 Freedom to make life choices	117	46.03
4.2.3 Income inequality	72	61.31 ●
4.2.4 Healthy life expectancy at birth	114	37.99
3rd sub-pillar: SDG Contribution	127	40.54
4.3.1 SDG 3: Good Health and Well-Being	120	26.46
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	101	62.28 ●
4.3.4 SDG 7: Affordable and Clean Energy	119	47.37
4.3.5 SDG 11: Sustainable Cities and Communities	123	26.06

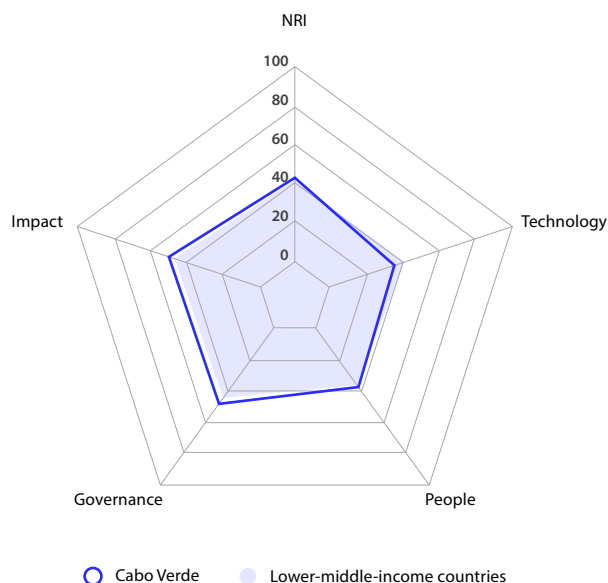
NOTE: ● Indicates a strength and ○ a weakness.

Cabo Verde

Rank
(Out of 131) Score

Network Readiness Index **94 41.68**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	101	33.53
1st sub-pillar: Access	120	42.21
2nd sub-pillar: Content	99	26.50
3rd sub-pillar: Future Technologies	66	31.87
B. People pillar	90	36.26
1st sub-pillar: Individuals	96	37.33
2nd sub-pillar: Businesses	89	34.07
3rd sub-pillar: Governments	82	37.40
C. Governance pillar	94	48.47
1st sub-pillar: Trust	101	28.82
2nd sub-pillar: Regulation	67	63.68
3rd sub-pillar: Inclusion	93	52.91
D. Impact pillar	92	48.45
1st sub-pillar: Economy	121	13.46
2nd sub-pillar: Quality of Life	90	60.31
3rd sub-pillar: SDG Contribution	50	71.59



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	101	33.53
1st sub-pillar: Access	120	42.21
1.1.1 Mobile tariffs	113	29.41
1.1.2 Handset prices	92	41.34
1.1.3 FTTH/building Internet subscriptions	100	3.19 ○
1.1.4 Population covered by at least a 3G mobile network	96	97.91
1.1.5 International Internet bandwidth	123	52.28
1.1.6 Internet access in schools	60	29.14
2nd sub-pillar: Content	99	26.50
1.2.1 GitHub commits	74	4.11 ●
1.2.2 Internet domain registrations	85	1.69
1.2.3 Mobile apps development	77	73.69 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	66	31.87
1.3.1 Adoption of emerging technologies	101	29.74
1.3.2 Investment in emerging technologies	85	34.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	90	36.26
1st sub-pillar: Individuals	96	37.33
2.1.1 Mobile broadband internet traffic within the country	112	0.27 ○
2.1.2 ICT skills in the education system	78	39.05 ●
2.1.3 Use of virtual social networks	89	49.37
2.1.4 Tertiary enrollment	92	14.91
2.1.5 Adult literacy rate	71	83.02
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	89	34.07
2.2.1 Firms with website	113	11.21
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	87	24.15
2.2.4 Annual investment in telecommunication services	106	66.85 ○
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	82	37.40
2.3.1 Government online services	103	48.49
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	99	26.31
2.3.4 R&D expenditure by governments and higher education	NA	NA

The Network Readiness Index in detail

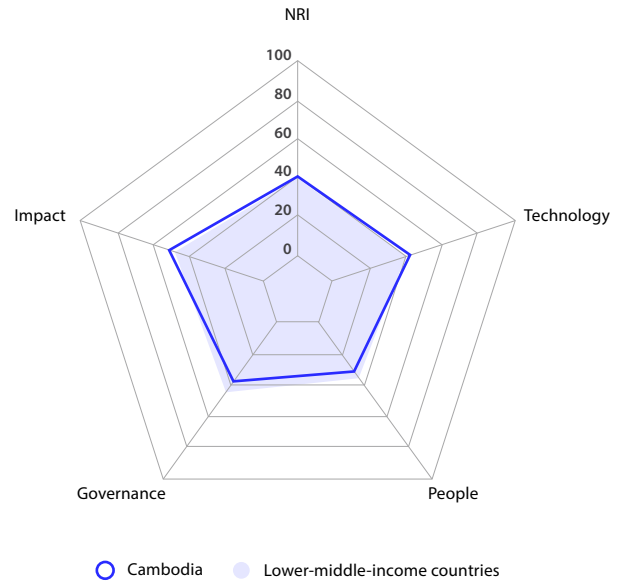
Indicator	Rank	Score
C. Governance pillar	94	48.47
1st sub-pillar: Trust	101	28.82
3.1.1 Secure Internet servers	93	41.35
3.1.2 Cybersecurity	119	16.29
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	67	63.68
3.2.1 Regulatory quality	76	39.20 ●
3.2.2 ICT regulatory environment	81	75.68
3.2.3 Regulation of emerging technologies	86	30.53
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	45	73.00 ●
3rd sub-pillar: Inclusion	93	52.91
3.3.1 E-Participation	108	39.51
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	87	50.48
3.3.4 Gender gap in internet use	61	68.73 ●
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	92	48.45
1st sub-pillar: Economy	121	13.46
4.1.1 High-tech and medium-high-tech manufacturing	87	10.83
4.1.2 High-tech exports	120	0.11 ○
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	131	0.00 ○
4.1.5 Prevalence of gig economy	84	34.01
4.1.6 ICT services exports	79	22.34
2nd sub-pillar: Quality of Life	90	60.31
4.2.1 Happiness	NA	NA
4.2.2 Freedom to make life choices	NA	NA
4.2.3 Income inequality	90	51.76
4.2.4 Healthy life expectancy at birth	77	68.87 ●
3rd sub-pillar: SDG Contribution	50	71.59
4.3.1 SDG 3: Good Health and Well-Being	74	67.38 ●
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	49	80.70 ●
4.3.4 SDG 7: Affordable and Clean Energy	21	89.31 ●
4.3.5 SDG 11: Sustainable Cities and Communities	94	48.98

NOTE: ● Indicates a strength and ○ a weakness.

Cambodia

Rank (Out of 131) Score
Network Readiness Index 104 38.48

Pillar/sub-pillar	Rank	Score
A. Technology pillar	89	38.03
1st sub-pillar: Access	84	57.69
2nd sub-pillar: Content	90	30.29
3rd sub-pillar: Future Technologies	95	26.10
B. People pillar	102	31.25
1st sub-pillar: Individuals	86	42.53
2nd sub-pillar: Businesses	113	25.27
3rd sub-pillar: Governments	104	25.95
C. Governance pillar	122	35.37
1st sub-pillar: Trust	122	17.45
2nd sub-pillar: Regulation	118	41.82
3rd sub-pillar: Inclusion	105	46.82
D. Impact pillar	87	49.29
1st sub-pillar: Economy	101	20.64
2nd sub-pillar: Quality of Life	73	66.72
3rd sub-pillar: SDG Contribution	80	60.50



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	89	38.03
1st sub-pillar: Access	84	57.69
1.1.1 Mobile tariffs	92	44.93
1.1.2 Handset prices	103	37.08
1.1.3 FTTH/building Internet subscriptions	33	37.84 ●
1.1.4 Population covered by at least a 3G mobile network	85	98.57
1.1.5 International Internet bandwidth	70	70.05 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	90	30.29
1.2.1 GitHub commits	97	1.78
1.2.2 Internet domain registrations	99	0.79
1.2.3 Mobile apps development	94	66.81
1.2.4 AI scientific publications	50	51.77 ●
3rd sub-pillar: Future Technologies	95	26.10
1.3.1 Adoption of emerging technologies	98	32.06
1.3.2 Investment in emerging technologies	55	43.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	108	2.49
B. People pillar	102	31.25
1st sub-pillar: Individuals	86	42.53
2.1.1 Mobile broadband internet traffic within the country	32	24.59 ●
2.1.2 ICT skills in the education system	92	35.50
2.1.3 Use of virtual social networks	61	68.74 ●
2.1.4 Tertiary enrollment	99	8.87
2.1.5 Adult literacy rate	78	74.96
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	113	25.27
2.2.1 Firms with website	107	16.98
2.2.2 GERD financed by business enterprise	66	24.01 ●
2.2.3 Knowledge intensive employment	113	10.21
2.2.4 Annual investment in telecommunication services	77	74.72
2.2.5 GERD performed by business enterprise	83	0.41
3rd sub-pillar: Governments	104	25.95
2.3.1 Government online services	110	43.63
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	87	31.10
2.3.4 R&D expenditure by governments and higher education	106	3.11 ○

Indicator	Rank	Score
C. Governance pillar	122	35.37
1st sub-pillar: Trust	122	17.45
3.1.1 Secure Internet servers	92	41.83
3.1.2 Cybersecurity	117	17.70 ○
3.1.3 Online access to financial account	118	5.27 ○
3.1.4 Internet shopping	98	5.02
2nd sub-pillar: Regulation	118	41.82
3.2.1 Regulatory quality	105	24.53
3.2.2 ICT regulatory environment	106	62.74
3.2.3 Regulation of emerging technologies	87	30.00
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	123	25.18 ○
3rd sub-pillar: Inclusion	105	46.82
3.3.1 E-Participation	108	39.51
3.3.2 Socioeconomic gap in use of digital payments	106	43.37
3.3.3 Availability of local online content	95	45.19
3.3.4 Gender gap in Internet use	33	73.53 ●
3.3.5 Rural gap in use of digital payments	109	32.51
D. Impact pillar	87	49.29
1st sub-pillar: Economy	101	20.64
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	65	22.97 ●
4.1.3 PCT patent applications	86	1.03
4.1.4 Domestic market size	91	42.34
4.1.5 Prevalence of gig economy	97	27.62
4.1.6 ICT services exports	107	9.23
2nd sub-pillar: Quality of Life	73	66.72
4.2.1 Happiness	99	42.32
4.2.2 Freedom to make life choices	1	100.00 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	96	57.83
3rd sub-pillar: SDG Contribution	80	60.50
4.3.1 SDG 3: Good Health and Well-Being	95	53.95
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	95	64.91
4.3.4 SDG 7: Affordable and Clean Energy	91	71.93
4.3.5 SDG 11: Sustainable Cities and Communities	85	51.22

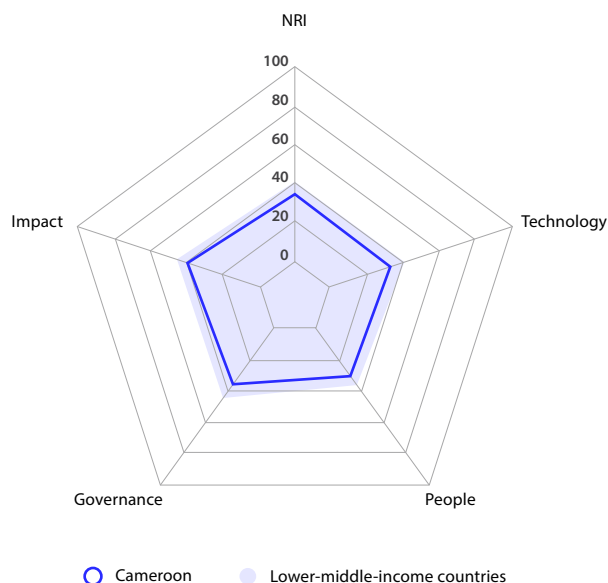
NOTE: ● Indicates a strength and ○ a weakness.

Cameroon

Rank
(Out of 131) Score

Network Readiness Index **114 33.72**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	116	28.32
1st sub-pillar: Access	129	30.10
2nd sub-pillar: Content	97	27.42
3rd sub-pillar: Future Technologies	87	27.45
B. People pillar	108	29.69
1st sub-pillar: Individuals	112	27.53
2nd sub-pillar: Businesses	86	35.04
3rd sub-pillar: Governments	103	26.49
C. Governance pillar	118	36.46
1st sub-pillar: Trust	109	24.35
2nd sub-pillar: Regulation	107	51.44
3rd sub-pillar: Inclusion	121	33.59
D. Impact pillar	112	40.42
1st sub-pillar: Economy	63	32.68
2nd sub-pillar: Quality of Life	116	45.73
3rd sub-pillar: SDG Contribution	121	42.86



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	116	28.32
1st sub-pillar: Access	129	30.10
1.1.1 Mobile tariffs	108	35.97
1.1.2 Handset prices	97	39.37
1.1.3 FTTH/building Internet subscriptions	66	20.94 ●
1.1.4 Population covered by at least a 3G mobile network	131	0.00 ○
1.1.5 International Internet bandwidth	120	54.21
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	97	27.42
1.2.1 GitHub commits	108	0.87
1.2.2 Internet domain registrations	100	0.78
1.2.3 Mobile apps development	107	58.12
1.2.4 AI scientific publications	55	49.91 ●
3rd sub-pillar: Future Technologies	87	27.45
1.3.1 Adoption of emerging technologies	92	36.36
1.3.2 Investment in emerging technologies	89	33.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	80	12.74 ●
B. People pillar	108	29.69
1st sub-pillar: Individuals	112	27.53
2.1.1 Mobile broadband internet traffic within the country	62	8.47 ●
2.1.2 ICT skills in the education system	88	37.28
2.1.3 Use of virtual social networks	113	12.85
2.1.4 Tertiary enrollment	100	8.54
2.1.5 Adult literacy rate	82	70.51
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	86	35.04
2.2.1 Firms with website	108	15.13
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	106	13.96
2.2.4 Annual investment in telecommunication services	70	76.04 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	103	26.49
2.3.1 Government online services	107	45.46
2.3.2 Publication and use of open data	99	4.41 ○
2.3.3 Government promotion of investment in emerging tech	90	29.59
2.3.4 R&D expenditure by governments and higher education	NA	NA

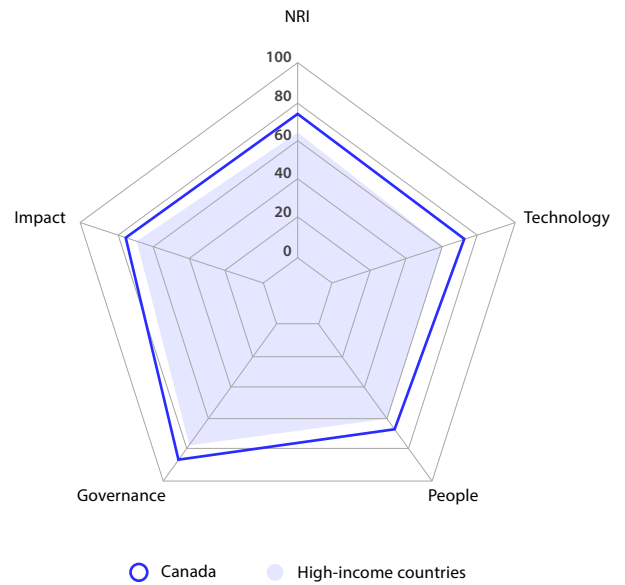
Indicator	Rank	Score
C. Governance pillar	118	36.46
1st sub-pillar: Trust	109	24.35
3.1.1 Secure Internet servers	122	22.61 ○
3.1.2 Cybersecurity	96	44.67
3.1.3 Online access to financial account	71	24.15 ●
3.1.4 Internet shopping	92	5.98
2nd sub-pillar: Regulation	107	51.44
3.2.1 Regulatory quality	117	19.20
3.2.2 ICT regulatory environment	96	69.80
3.2.3 Regulation of emerging technologies	96	23.95
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	112	44.23
3rd sub-pillar: Inclusion	121	33.59
3.3.1 E-Participation	108	39.51
3.3.2 Socioeconomic gap in use of digital payments	108	41.96
3.3.3 Availability of local online content	120	24.76
3.3.4 Gender gap in internet use	98	27.32
3.3.5 Rural gap in use of digital payments	107	34.43
D. Impact pillar	112	40.42
1st sub-pillar: Economy	63	32.68
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	80	1.52
4.1.4 Domestic market size	83	45.34 ●
4.1.5 Prevalence of gig economy	41	56.10 ●
4.1.6 ICT services exports	71	27.77 ●
2nd sub-pillar: Quality of Life	116	45.73
4.2.1 Happiness	91	49.58
4.2.2 Freedom to make life choices	101	57.70
4.2.3 Income inequality	101	41.21
4.2.4 Healthy life expectancy at birth	120	34.42
3rd sub-pillar: SDG Contribution	121	42.86
4.3.1 SDG 3: Good Health and Well-Being	121	26.36 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	118	43.86
4.3.4 SDG 7: Affordable and Clean Energy	80	74.85 ●
4.3.5 SDG 11: Sustainable Cities and Communities	122	26.38 ○

NOTE: ● Indicates a strength and ○ a weakness.

Canada

Rank (Out of 131) Score
11 74.22

Pillar/sub-pillar	Rank	Score
A. Technology pillar	9	71.49
1st sub-pillar: Access	22	75.97
2nd sub-pillar: Content	8	77.52
3rd sub-pillar: Future Technologies	12	60.99
B. People pillar	17	65.08
1st sub-pillar: Individuals	58	50.40
2nd sub-pillar: Businesses	26	63.26
3rd sub-pillar: Governments	4	81.57
C. Governance pillar	9	85.93
1st sub-pillar: Trust	9	86.14
2nd sub-pillar: Regulation	12	86.62
3rd sub-pillar: Inclusion	13	85.03
D. Impact pillar	15	74.39
1st sub-pillar: Economy	20	53.51
2nd sub-pillar: Quality of Life	15	84.64
3rd sub-pillar: SDG Contribution	19	85.02



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	9	71.49
1st sub-pillar: Access	22	75.97
1.1.1 Mobile tariffs	32	76.85
1.1.2 Handset prices	16	83.12
1.1.3 FTTH/building Internet subscriptions	26	41.35
1.1.4 Population covered by at least a 3G mobile network	44	99.90
1.1.5 International Internet bandwidth	28	78.63
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	8	77.52
1.2.1 GitHub commits	12	63.22
1.2.2 Internet domain registrations	8	62.27
1.2.3 Mobile apps development	17	96.57
1.2.4 AI scientific publications	4	88.00
3rd sub-pillar: Future Technologies	12	60.99
1.3.1 Adoption of emerging technologies	11	85.04
1.3.2 Investment in emerging technologies	20	68.25
1.3.3 Robot density	16	28.43
1.3.4 Computer software spending	3	62.25
B. People pillar	17	65.08
1st sub-pillar: Individuals	58	50.40
2.1.1 Mobile broadband internet traffic within the country	40	17.52
2.1.2 ICT skills in the education system	18	73.67
2.1.3 Use of virtual social networks	17	81.60
2.1.4 Tertiary enrollment	25	50.39
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	13	28.85
2nd sub-pillar: Businesses	26	63.26
2.2.1 Firms with website	18	83.53
2.2.2 GERD financed by business enterprise	38	51.81
2.2.3 Knowledge intensive employment	24	67.56
2.2.4 Annual investment in telecommunication services	9	90.68
2.2.5 GERD performed by business enterprise	28	22.70
3rd sub-pillar: Governments	4	81.57
2.3.1 Government online services	31	83.64
2.3.2 Publication and use of open data	1	100.00
2.3.3 Government promotion of investment in emerging tech	13	74.15
2.3.4 R&D expenditure by governments and higher education	13	68.50

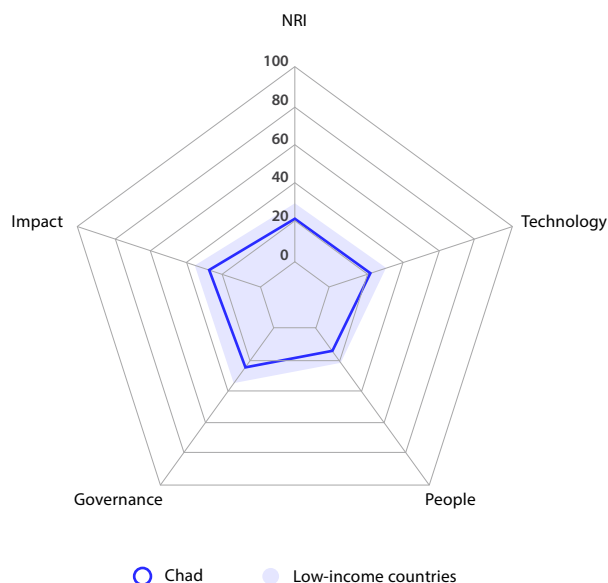
Indicator	Rank	Score
C. Governance pillar	9	85.93
1st sub-pillar: Trust	9	86.14
3.1.1 Secure Internet servers	17	84.53
3.1.2 Cybersecurity	13	97.63
3.1.3 Online access to financial account	10	81.53
3.1.4 Internet shopping	13	80.89
2nd sub-pillar: Regulation	12	86.62
3.2.1 Regulatory quality	11	83.73
3.2.2 ICT regulatory environment	50	86.47
3.2.3 Regulation of emerging technologies	16	78.95
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	23	83.95
3rd sub-pillar: Inclusion	13	85.03
3.3.1 E-Participation	16	93.83
3.3.2 Socioeconomic gap in use of digital payments	19	96.33
3.3.3 Availability of local online content	15	88.70
3.3.4 Gender gap in Internet use	59	69.17
3.3.5 Rural gap in use of digital payments	12	77.09
D. Impact pillar	15	74.39
1st sub-pillar: Economy	20	53.51
4.1.1 High-tech and medium-high-tech manufacturing	34	47.82
4.1.2 High-tech exports	32	50.92
4.1.3 PCT patent applications	25	34.99
4.1.4 Domestic market size	15	74.59
4.1.5 Prevalence of gig economy	9	81.98
4.1.6 ICT services exports	61	30.77
2nd sub-pillar: Quality of Life	15	84.64
4.2.1 Happiness	14	84.78
4.2.2 Freedom to make life choices	23	88.68
4.2.3 Income inequality	43	74.62
4.2.4 Healthy life expectancy at birth	16	90.48
3rd sub-pillar: SDG Contribution	19	85.02
4.3.1 SDG 3: Good Health and Well-Being	1	100.00
4.3.2 SDG 4: Quality Education	7	75.47
4.3.3 SDG 5: Women's economic opportunity	1	100.00
4.3.4 SDG 7: Affordable and Clean Energy	112	53.05
4.3.5 SDG 11: Sustainable Cities and Communities	7	96.57

NOTE: ● Indicates a strength and ○ a weakness.

Chad

Network Readiness Index **131** **20.12**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	131	13.91
1st sub-pillar: Access	130	29.12
2nd sub-pillar: Content	130	4.54
3rd sub-pillar: Future Technologies	131	8.06
B. People pillar	131	13.81
1st sub-pillar: Individuals	131	0.72
2nd sub-pillar: Businesses	119	23.10
3rd sub-pillar: Governments	125	17.62
C. Governance pillar	128	24.33
1st sub-pillar: Trust	126	14.50
2nd sub-pillar: Regulation	128	27.17
3rd sub-pillar: Inclusion	124	31.33
D. Impact pillar	129	28.44
1st sub-pillar: Economy	119	13.64
2nd sub-pillar: Quality of Life	125	38.64
3rd sub-pillar: SDG Contribution	130	33.04



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	131	13.91
1st sub-pillar: Access	130	29.12
1.1.1 Mobile tariffs	131	0.00 ○
1.1.2 Handset prices	130	0.00 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	129	67.89 ○
1.1.5 International Internet bandwidth	126	48.59
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	130	4.54
1.2.1 GitHub commits	130	0.00 ○
1.2.2 Internet domain registrations	127	0.06
1.2.3 Mobile apps development	130	10.93 ○
1.2.4 AI scientific publications	96	7.18
3rd sub-pillar: Future Technologies	131	8.06
1.3.1 Adoption of emerging technologies	124	3.37
1.3.2 Investment in emerging technologies	126	12.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	131	13.81
1st sub-pillar: Individuals	131	0.72
2.1.1 Mobile broadband internet traffic within the country	114	0.21
2.1.2 ICT skills in the education system	129	2.37 ○
2.1.3 Use of virtual social networks	131	0.00 ○
2.1.4 Tertiary enrollment	125	1.04
2.1.5 Adult literacy rate	106	0.00
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	119	23.10
2.2.1 Firms with website	121	0.00
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	129	0.89 ○
2.2.4 Annual investment in telecommunication services	105	68.40
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	125	17.62
2.3.1 Government online services	127	17.58
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	118	9.08
2.3.4 R&D expenditure by governments and higher education	62	26.19

Indicator	Rank	Score
C. Governance pillar	128	24.33
1st sub-pillar: Trust	126	14.50
3.1.1 Secure Internet servers	131	0.00 ○
3.1.2 Cybersecurity	98	39.39
3.1.3 Online access to financial account	88	16.73
3.1.4 Internet shopping	109	1.89
2nd sub-pillar: Regulation	128	27.17
3.2.1 Regulatory quality	127	10.67
3.2.2 ICT regulatory environment	123	55.68
3.2.3 Regulation of emerging technologies	112	7.11
3.2.4 E-commerce legislation	126	0.00 ○
3.2.5 Privacy protection by law content	72	62.39
3rd sub-pillar: Inclusion	124	31.33
3.3.1 E-Participation	126	23.46
3.3.2 Socioeconomic gap in use of digital payments	116	37.42
3.3.3 Availability of local online content	131	0.00 ○
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	62	64.45
D. Impact pillar	129	28.44
1st sub-pillar: Economy	119	13.64
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	122	31.49
4.1.5 Prevalence of gig economy	119	10.76
4.1.6 ICT services exports	96	12.30
2nd sub-pillar: Quality of Life	125	38.64
4.2.1 Happiness	111	36.90
4.2.2 Freedom to make life choices	124	27.55
4.2.3 Income inequality	67	64.07
4.2.4 Healthy life expectancy at birth	127	26.04
3rd sub-pillar: SDG Contribution	130	33.04
4.3.1 SDG 3: Good Health and Well-Being	130	0.00 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	111	52.63
4.3.4 SDG 7: Affordable and Clean Energy	64	79.53
4.3.5 SDG 11: Sustainable Cities and Communities	130	0.00 ○

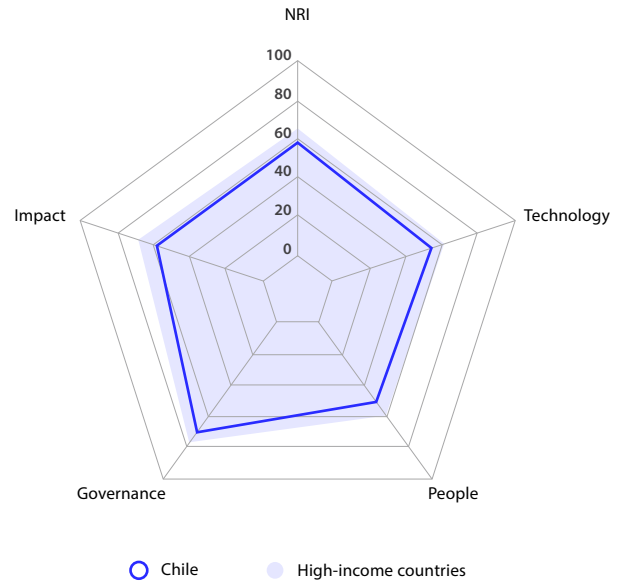
NOTE: ● Indicates a strength and ○ a weakness.

Chile

Rank
(Out of 131) Score

Network Readiness Index **43 57.19**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	42	51.14
1st sub-pillar: Access	25	75.26
2nd sub-pillar: Content	45	42.78
3rd sub-pillar: Future Technologies	54	35.37
B. People pillar	47	50.38
1st sub-pillar: Individuals	41	53.75
2nd sub-pillar: Businesses	49	50.53
3rd sub-pillar: Governments	57	46.87
C. Governance pillar	41	69.84
1st sub-pillar: Trust	48	59.91
2nd sub-pillar: Regulation	38	74.50
3rd sub-pillar: Inclusion	45	75.11
D. Impact pillar	54	57.42
1st sub-pillar: Economy	69	30.56
2nd sub-pillar: Quality of Life	60	70.09
3rd sub-pillar: SDG Contribution	49	71.61



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	42	51.14
1st sub-pillar: Access	25	75.26
1.1.1 Mobile tariffs	66	58.97
1.1.2 Handset prices	51	62.90
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	89	98.33 ○
1.1.5 International Internet bandwidth	22	80.84 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	45	42.78
1.2.1 GitHub commits	57	7.63
1.2.2 Internet domain registrations	40	12.23
1.2.3 Mobile apps development	56	82.15
1.2.4 AI scientific publications	26	69.10
3rd sub-pillar: Future Technologies	54	35.37
1.3.1 Adoption of emerging technologies	36	61.55
1.3.2 Investment in emerging technologies	68	38.50
1.3.3 Robot density	52	0.48 ○
1.3.4 Computer software spending	21	40.96 ●
B. People pillar	47	50.38
1st sub-pillar: Individuals	41	53.75
2.1.1 Mobile broadband internet traffic within the country	26	29.10 ●
2.1.2 ICT skills in the education system	63	47.04
2.1.3 Use of virtual social networks	7	87.15 ●
2.1.4 Tertiary enrollment	7	62.24 ●
2.1.5 Adult literacy rate	38	95.40
2.1.6 AI talent concentration	40	1.56 ○
2nd sub-pillar: Businesses	49	50.53
2.2.1 Firms with website	24	79.95 ●
2.2.2 GERD financed by business enterprise	56	38.32
2.2.3 Knowledge intensive employment	46	47.87
2.2.4 Annual investment in telecommunication services	26	83.52
2.2.5 GERD performed by business enterprise	60	3.00
3rd sub-pillar: Governments	57	46.87
2.3.1 Government online services	24	84.84 ●
2.3.2 Publication and use of open data	31	47.06
2.3.3 Government promotion of investment in emerging tech	64	38.03
2.3.4 R&D expenditure by governments and higher education	75	17.55

Indicator	Rank	Score
C. Governance pillar	41	69.84
1st sub-pillar: Trust	48	59.91
3.1.1 Secure Internet servers	40	75.53
3.1.2 Cybersecurity	80	68.28
3.1.3 Online access to financial account	46	39.41
3.1.4 Internet shopping	37	56.40
2nd sub-pillar: Regulation	38	74.50
3.2.1 Regulatory quality	31	69.07
3.2.2 ICT regulatory environment	51	85.88
3.2.3 Regulation of emerging technologies	51	49.74
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	60	67.81
3rd sub-pillar: Inclusion	45	75.11
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	11	97.84 ●
3.3.3 Availability of local online content	54	66.35
3.3.4 Gender gap in Internet use	67	67.52
3.3.5 Rural gap in use of digital payments	73	58.69
D. Impact pillar	54	57.42
1st sub-pillar: Economy	69	30.56
4.1.1 High-tech and medium-high-tech manufacturing	52	30.00
4.1.2 High-tech exports	62	26.95
4.1.3 PCT patent applications	37	11.41
4.1.4 Domestic market size	44	61.27
4.1.5 Prevalence of gig economy	65	40.41
4.1.6 ICT services exports	94	13.32 ○
2nd sub-pillar: Quality of Life	60	70.09
4.2.1 Happiness	33	75.80
4.2.2 Freedom to make life choices	68	72.62
4.2.3 Income inequality	98	45.48 ○
4.2.4 Healthy life expectancy at birth	30	86.45 ●
3rd sub-pillar: SDG Contribution	49	71.61
4.3.1 SDG 3: Good Health and Well-Being	30	84.45 ●
4.3.2 SDG 4: Quality Education	45	44.41
4.3.3 SDG 5: Women's economic opportunity	77	71.93
4.3.4 SDG 7: Affordable and Clean Energy	61	80.45
4.3.5 SDG 11: Sustainable Cities and Communities	46	76.81

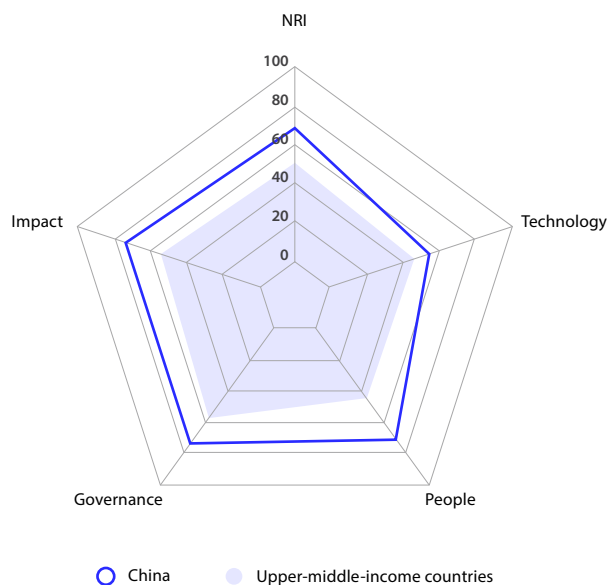
NOTE: ● Indicates a strength and ○ a weakness.

China

Rank
(Out of 131) Score

Network Readiness Index **23 68.83**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	25	59.69
1st sub-pillar: Access	1	87.84
2nd sub-pillar: Content	39	45.47
3rd sub-pillar: Future Technologies	29	45.75
B. People pillar	8	70.77
1st sub-pillar: Individuals	5	68.54
2nd sub-pillar: Businesses	8	76.81
3rd sub-pillar: Governments	19	66.94
C. Governance pillar	35	72.52
1st sub-pillar: Trust	28	73.83
2nd sub-pillar: Regulation	81	60.45
3rd sub-pillar: Inclusion	17	83.29
D. Impact pillar	21	72.32
1st sub-pillar: Economy	1	74.10
2nd sub-pillar: Quality of Life	50	73.49
3rd sub-pillar: SDG Contribution	54	69.37



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	25	59.69
1st sub-pillar: Access	1	87.84
1.1.1 Mobile tariffs	21	80.18
1.1.2 Handset prices	60	53.87
1.1.3 FTTH/building Internet subscriptions	1	100.00 ●
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	3	94.59 ●
1.1.6 Internet access in schools	32	98.43
2nd sub-pillar: Content	39	45.47
1.2.1 GitHub commits	91	2.57
1.2.2 Internet domain registrations	70	3.40
1.2.3 Mobile apps development	70	76.96
1.2.4 AI scientific publications	2	98.97 ●
3rd sub-pillar: Future Technologies	29	45.75
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	33	59.75
1.3.3 Robot density	5	47.96
1.3.4 Computer software spending	32	29.55
B. People pillar	8	70.77
1st sub-pillar: Individuals	5	68.54
2.1.1 Mobile broadband internet traffic within the country	1	100.00 ●
2.1.2 ICT skills in the education system	16	77.81
2.1.3 Use of virtual social networks	75	63.00
2.1.4 Tertiary enrollment	51	38.62
2.1.5 Adult literacy rate	35	95.97
2.1.6 AI talent concentration	8	35.87
2nd sub-pillar: Businesses	8	76.81
2.2.1 Firms with website	45	65.39
2.2.2 GERD financed by business enterprise	3	95.82 ●
2.2.3 Knowledge intensive employment	NA	NA
2.2.4 Annual investment in telecommunication services	2	97.77 ●
2.2.5 GERD performed by business enterprise	12	48.27
3rd sub-pillar: Governments	19	66.94
2.3.1 Government online services	12	90.30
2.3.2 Publication and use of open data	49	33.82
2.3.3 Government promotion of investment in emerging tech	1	100.00
2.3.4 R&D expenditure by governments and higher education	44	43.64

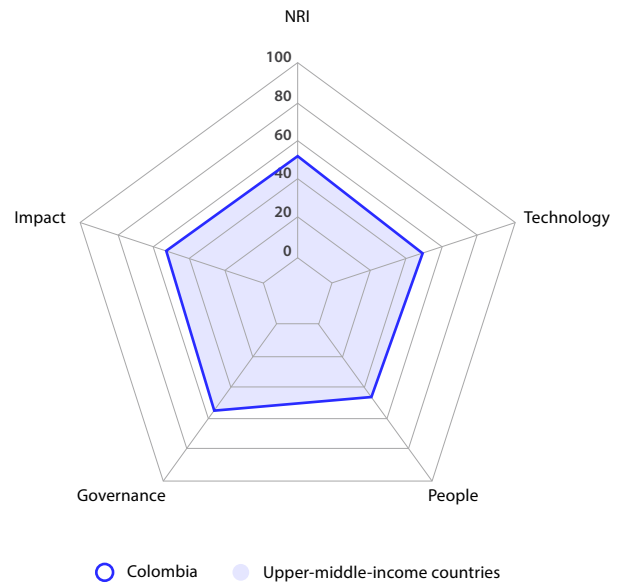
Indicator	Rank	Score
C. Governance pillar	35	72.52
1st sub-pillar: Trust	28	73.83
3.1.1 Secure Internet servers	64	54.69
3.1.2 Cybersecurity	40	92.40
3.1.3 Online access to financial account	28	55.81
3.1.4 Internet shopping	3	92.42 ●
2nd sub-pillar: Regulation	81	60.45
3.2.1 Regulatory quality	77	38.93
3.2.2 ICT regulatory environment	124	54.12 ○
3.2.3 Regulation of emerging technologies	7	83.68
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	122	25.49 ○
3rd sub-pillar: Inclusion	17	83.29
3.3.1 E-Participation	9	96.30
3.3.2 Socioeconomic gap in use of digital payments	51	83.52
3.3.3 Availability of local online content	3	97.12 ●
3.3.4 Gender gap in internet use	18	75.28
3.3.5 Rural gap in use of digital payments	63	64.25
D. Impact pillar	21	72.32
1st sub-pillar: Economy	1	74.10
4.1.1 High-tech and medium-high-tech manufacturing	14	63.97
4.1.2 High-tech exports	4	90.66
4.1.3 PCT patent applications	14	54.29
4.1.4 Domestic market size	1	100.00 ●
4.1.5 Prevalence of gig economy	1	100.00 ●
4.1.6 ICT services exports	49	35.69
2nd sub-pillar: Quality of Life	50	73.49
4.2.1 Happiness	62	65.60
4.2.2 Freedom to make life choices	32	84.70
4.2.3 Income inequality	70	62.31
4.2.4 Healthy life expectancy at birth	41	81.36
3rd sub-pillar: SDG Contribution	54	69.37
4.3.1 SDG 3: Good Health and Well-Being	27	88.24
4.3.2 SDG 4: Quality Education	1	100.00 ●
4.3.3 SDG 5: Women's economic opportunity	93	65.79 ○
4.3.4 SDG 7: Affordable and Clean Energy	109	58.31 ○
4.3.5 SDG 11: Sustainable Cities and Communities	117	34.51 ○

NOTE: ● Indicates a strength and ○ a weakness.

Colombia

Rank (Out of 131) Score
66 49.99

Pillar/sub-pillar	Rank	Score
A. Technology pillar	61	45.43
1st sub-pillar: Access	72	61.77
2nd sub-pillar: Content	53	40.41
3rd sub-pillar: Future Technologies	60	34.12
B. People pillar	60	47.04
1st sub-pillar: Individuals	74	46.18
2nd sub-pillar: Businesses	51	48.98
3rd sub-pillar: Governments	61	45.94
C. Governance pillar	68	55.37
1st sub-pillar: Trust	80	36.41
2nd sub-pillar: Regulation	57	65.84
3rd sub-pillar: Inclusion	67	63.87
D. Impact pillar	77	52.11
1st sub-pillar: Economy	80	28.40
2nd sub-pillar: Quality of Life	99	57.02
3rd sub-pillar: SDG Contribution	51	70.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	61	45.43
1st sub-pillar: Access	72	61.77
1.1.1 Mobile tariffs	91	45.43
1.1.2 Handset prices	55	60.83
1.1.3 FTTH/building Internet subscriptions	19	44.26 ●
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	14	84.89 ●
1.1.6 Internet access in schools	56	35.21
2nd sub-pillar: Content	53	40.41
1.2.1 GitHub commits	60	6.89
1.2.2 Internet domain registrations	34	20.21 ●
1.2.3 Mobile apps development	92	68.22
1.2.4 AI scientific publications	31	66.33
3rd sub-pillar: Future Technologies	60	34.12
1.3.1 Adoption of emerging technologies	67	46.99
1.3.2 Investment in emerging technologies	67	38.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	71	16.62
B. People pillar	60	47.04
1st sub-pillar: Individuals	74	46.18
2.1.1 Mobile broadband internet traffic within the country	35	19.87
2.1.2 ICT skills in the education system	67	44.67
2.1.3 Use of virtual social networks	37	75.95
2.1.4 Tertiary enrollment	58	35.77
2.1.5 Adult literacy rate	45	94.41
2.1.6 AI talent concentration	37	6.43 ○
2nd sub-pillar: Businesses	51	48.98
2.2.1 Firms with website	43	67.36
2.2.2 GERD financed by business enterprise	24	66.06 ●
2.2.3 Knowledge intensive employment	34	58.60
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	57	3.90
3rd sub-pillar: Governments	61	45.94
2.3.1 Government online services	48	75.76
2.3.2 Publication and use of open data	18	64.71 ●
2.3.3 Government promotion of investment in emerging tech	65	37.89
2.3.4 R&D expenditure by governments and higher education	97	5.42 ○

Indicator	Rank	Score
C. Governance pillar	68	55.37
1st sub-pillar: Trust	80	36.41
3.1.1 Secure Internet servers	76	47.93
3.1.2 Cybersecurity	87	63.08
3.1.3 Online access to financial account	85	17.15
3.1.4 Internet shopping	69	17.47
2nd sub-pillar: Regulation	57	65.84
3.2.1 Regulatory quality	55	49.60
3.2.2 ICT regulatory environment	67	82.35
3.2.3 Regulation of emerging technologies	55	47.37
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	99	49.88
3rd sub-pillar: Inclusion	67	63.87
3.3.1 E-Participation	27	86.42 ●
3.3.2 Socioeconomic gap in use of digital payments	88	55.54
3.3.3 Availability of local online content	78	53.85
3.3.4 Gender gap in Internet use	9	77.89 ●
3.3.5 Rural gap in use of digital payments	97	45.66 ○
D. Impact pillar	77	52.11
1st sub-pillar: Economy	80	28.40
4.1.1 High-tech and medium-high-tech manufacturing	63	24.46
4.1.2 High-tech exports	64	24.02
4.1.3 PCT patent applications	60	4.69
4.1.4 Domestic market size	32	65.62 ●
4.1.5 Prevalence of gig economy	81	35.17
4.1.6 ICT services exports	86	16.42
2nd sub-pillar: Quality of Life	99	57.02
4.2.1 Happiness	82	55.40
4.2.2 Freedom to make life choices	79	67.75
4.2.3 Income inequality	113	22.11 ○
4.2.4 Healthy life expectancy at birth	35	82.82
3rd sub-pillar: SDG Contribution	51	70.91
4.3.1 SDG 3: Good Health and Well-Being	37	81.88
4.3.2 SDG 4: Quality Education	61	31.72 ○
4.3.3 SDG 5: Women's economic opportunity	70	74.56
4.3.4 SDG 7: Affordable and Clean Energy	17	90.06 ●
4.3.5 SDG 11: Sustainable Cities and Communities	48	76.31

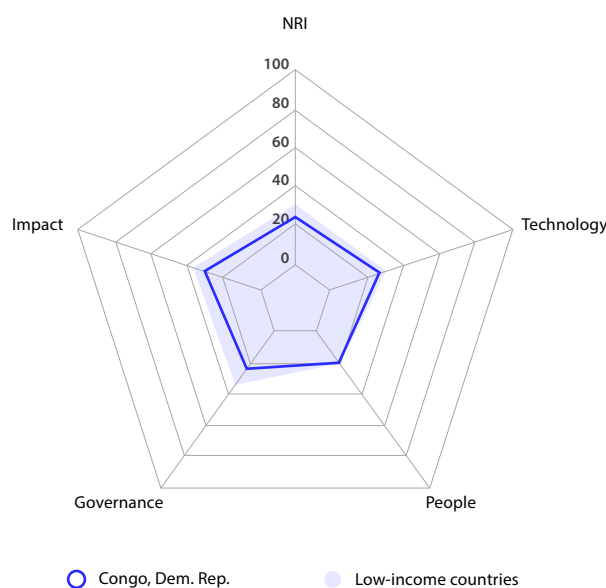
NOTE: ● Indicates a strength and ○ a weakness.

Congo, Dem. Rep.

Rank
(Out of 131) Score

Network Readiness Index 129 23.34

Pillar/sub-pillar	Rank	Score
A. Technology pillar	128	21.15
1st sub-pillar: Access	128	33.76
2nd sub-pillar: Content	128	14.20
3rd sub-pillar: Future Technologies	124	15.48
B. People pillar	127	19.20
1st sub-pillar: Individuals	124	15.75
2nd sub-pillar: Businesses	112	25.50
3rd sub-pillar: Governments	127	16.33
C. Governance pillar	130	23.32
1st sub-pillar: Trust	123	16.07
2nd sub-pillar: Regulation	130	26.02
3rd sub-pillar: Inclusion	128	27.88
D. Impact pillar	126	29.68
1st sub-pillar: Economy	114	15.79
2nd sub-pillar: Quality of Life	117	44.83
3rd sub-pillar: SDG Contribution	131	28.44



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	128	21.15
1st sub-pillar: Access	128	33.76
1.1.1 Mobile tariffs	126	10.33
1.1.2 Handset prices	121	25.33
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	125	75.06
1.1.5 International Internet bandwidth	114	58.09
1.1.6 Internet access in schools	79	0.00
2nd sub-pillar: Content	128	14.20
1.2.1 GitHub commits	119	0.33
1.2.2 Internet domain registrations	130	0.02 ○
1.2.3 Mobile apps development	128	22.72 ○
1.2.4 AI scientific publications	77	33.74
3rd sub-pillar: Future Technologies	124	15.48
1.3.1 Adoption of emerging technologies	122	13.47
1.3.2 Investment in emerging technologies	123	17.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	127	19.20
1st sub-pillar: Individuals	124	15.75
2.1.1 Mobile broadband internet traffic within the country	90	2.43
2.1.2 ICT skills in the education system	130	0.89 ○
2.1.3 Use of virtual social networks	129	1.66 ○
2.1.4 Tertiary enrollment	118	3.32
2.1.5 Adult literacy rate	83	70.47
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	112	25.50
2.2.1 Firms with website	119	8.66
2.2.2 GERD financed by business enterprise	105	0.00 ○
2.2.3 Knowledge intensive employment	112	11.40
2.2.4 Annual investment in telecommunication services	36	81.93
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	127	16.33
2.3.1 Government online services	129	10.30 ○
2.3.2 Publication and use of open data	87	11.76
2.3.3 Government promotion of investment in emerging tech	121	7.91
2.3.4 R&D expenditure by governments and higher education	53	35.36

Indicator	Rank	Score
C. Governance pillar	130	23.32
1st sub-pillar: Trust	123	16.07
3.1.1 Secure Internet servers	130	11.06 ○
3.1.2 Cybersecurity	128	3.63 ○
3.1.3 Online access to financial account	55	33.51
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	130	26.02
3.2.1 Regulatory quality	131	0.00 ○
3.2.2 ICT regulatory environment	98	68.62
3.2.3 Regulation of emerging technologies	118	0.00 ○
3.2.4 E-commerce legislation	126	0.00 ○
3.2.5 Privacy protection by law content	77	61.46
3rd sub-pillar: Inclusion	128	27.88
3.3.1 E-Participation	128	17.29 ○
3.3.2 Socioeconomic gap in use of digital payments	97	50.55
3.3.3 Availability of local online content	129	10.34 ○
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	108	33.34
D. Impact pillar	126	29.68
1st sub-pillar: Economy	114	15.79
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	106	3.17
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	82	45.90
4.1.5 Prevalence of gig economy	117	13.37
4.1.6 ICT services exports	128	0.70 ○
2nd sub-pillar: Quality of Life	117	44.83
4.2.1 Happiness	110	37.97
4.2.2 Freedom to make life choices	105	55.83
4.2.3 Income inequality	87	52.51
4.2.4 Healthy life expectancy at birth	123	33.00
3rd sub-pillar: SDG Contribution	131	28.44
4.3.1 SDG 3: Good Health and Well-Being	125	16.95
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	81	70.18
4.3.4 SDG 7: Affordable and Clean Energy	130	0.00 ○
4.3.5 SDG 11: Sustainable Cities and Communities	121	26.64

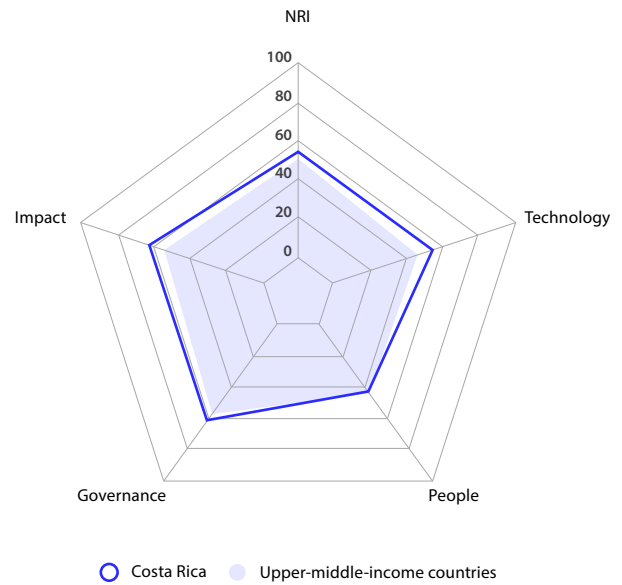
NOTE: ● Indicates a strength and ○ a weakness.

Costa Rica

Rank
(Out of 131) Score

Network Readiness Index **56** **53.34**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	46	50.26
1st sub-pillar: Access	50	69.74
2nd sub-pillar: Content	65	36.81
3rd sub-pillar: Future Technologies	37	44.24
B. People pillar	75	42.11
1st sub-pillar: Individuals	38	54.16
2nd sub-pillar: Businesses	91	33.36
3rd sub-pillar: Governments	81	38.83
C. Governance pillar	58	60.45
1st sub-pillar: Trust	65	45.10
2nd sub-pillar: Regulation	36	74.66
3rd sub-pillar: Inclusion	76	61.60
D. Impact pillar	44	60.54
1st sub-pillar: Economy	55	36.74
2nd sub-pillar: Quality of Life	58	70.66
3rd sub-pillar: SDG Contribution	42	74.23



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	46	50.26
1st sub-pillar: Access	50	69.74
1.1.1 Mobile tariffs	48	69.16
1.1.2 Handset prices	36	70.31 ●
1.1.3 FTTH/building Internet subscriptions	68	20.14
1.1.4 Population covered by at least a 3G mobile network	95	97.97 ○
1.1.5 International Internet bandwidth	43	74.57
1.1.6 Internet access in schools	36	86.29
2nd sub-pillar: Content	65	36.81
1.2.1 GitHub commits	45	13.31
1.2.2 Internet domain registrations	48	8.22
1.2.3 Mobile apps development	57	81.76
1.2.4 AI scientific publications	61	43.93
3rd sub-pillar: Future Technologies	37	44.24
1.3.1 Adoption of emerging technologies	43	57.76
1.3.2 Investment in emerging technologies	48	48.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	38	26.71
B. People pillar	75	42.11
1st sub-pillar: Individuals	38	54.16
2.1.1 Mobile broadband internet traffic within the country	83	4.12
2.1.2 ICT skills in the education system	45	56.21
2.1.3 Use of virtual social networks	43	75.07
2.1.4 Tertiary enrollment	55	38.11
2.1.5 Adult literacy rate	30	97.28 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	91	33.36
2.2.1 Firms with website	62	51.41
2.2.2 GERD financed by business enterprise	89	2.79 ○
2.2.3 Knowledge intensive employment	68	32.06
2.2.4 Annual investment in telecommunication services	65	76.73
2.2.5 GERD performed by business enterprise	58	3.79
3rd sub-pillar: Governments	81	38.83
2.3.1 Government online services	70	67.28
2.3.2 Publication and use of open data	49	33.82
2.3.3 Government promotion of investment in emerging tech	74	34.26
2.3.4 R&D expenditure by governments and higher education	73	19.94

Indicator	Rank	Score
C. Governance pillar	58	60.45
1st sub-pillar: Trust	65	45.10
3.1.1 Secure Internet servers	62	57.34
3.1.2 Cybersecurity	82	66.88
3.1.3 Online access to financial account	63	29.47
3.1.4 Internet shopping	57	26.70
2nd sub-pillar: Regulation	36	74.66
3.2.1 Regulatory quality	50	53.07
3.2.2 ICT regulatory environment	38	88.24 ●
3.2.3 Regulation of emerging technologies	43	56.58
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	39	75.44
3rd sub-pillar: Inclusion	76	61.60
3.3.1 E-Participation	75	64.20
3.3.2 Socioeconomic gap in use of digital payments	85	55.92
3.3.3 Availability of local online content	65	60.34
3.3.4 Gender gap in Internet use	20	75.01 ●
3.3.5 Rural gap in use of digital payments	87	52.52 ○
D. Impact pillar	44	60.54
1st sub-pillar: Economy	55	36.74
4.1.1 High-tech and medium-high-tech manufacturing	75	16.07
4.1.2 High-tech exports	33	49.42 ●
4.1.3 PCT patent applications	77	1.78
4.1.4 Domestic market size	80	45.97
4.1.5 Prevalence of gig economy	52	45.64
4.1.6 ICT services exports	8	61.58 ●
2nd sub-pillar: Quality of Life	58	70.66
4.2.1 Happiness	36	75.32 ●
4.2.2 Freedom to make life choices	28	86.72 ●
4.2.3 Income inequality	107	34.42 ○
4.2.4 Healthy life expectancy at birth	31	86.20 ●
3rd sub-pillar: SDG Contribution	42	74.23
4.3.1 SDG 3: Good Health and Well-Being	38	81.78
4.3.2 SDG 4: Quality Education	57	35.38 ○
4.3.3 SDG 5: Women's economic opportunity	49	80.70
4.3.4 SDG 7: Affordable and Clean Energy	9	93.40 ●
4.3.5 SDG 11: Sustainable Cities and Communities	38	79.86

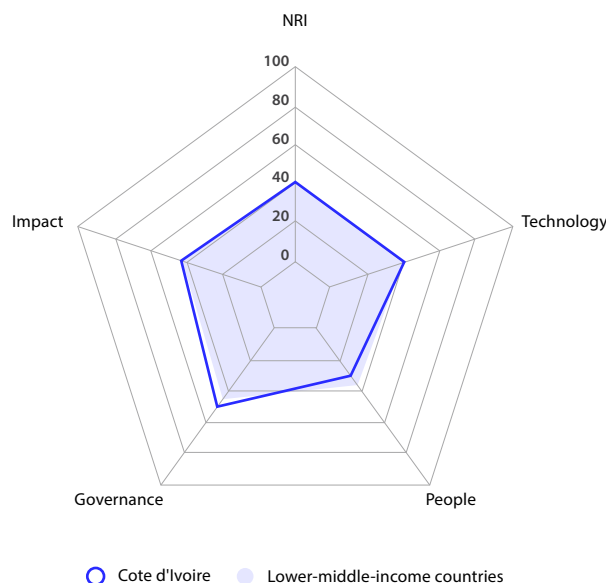
NOTE: ● Indicates a strength and ○ a weakness.

Cote d'Ivoire

Rank
(Out of 131) Score

Network Readiness Index 99 39.56

Pillar/sub-pillar	Rank	Score
A. Technology pillar	97	34.70
1st sub-pillar: Access	71	62.93
2nd sub-pillar: Content	121	18.72
3rd sub-pillar: Future Technologies	102	22.45
B. People pillar	110	29.43
1st sub-pillar: Individuals	108	31.59
2nd sub-pillar: Businesses	95	31.56
3rd sub-pillar: Governments	109	25.15
C. Governance pillar	87	50.25
1st sub-pillar: Trust	72	41.13
2nd sub-pillar: Regulation	86	59.60
3rd sub-pillar: Inclusion	100	50.02
D. Impact pillar	103	43.86
1st sub-pillar: Economy	86	26.15
2nd sub-pillar: Quality of Life	105	52.36
3rd sub-pillar: SDG Contribution	103	53.07



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	97	34.70
1st sub-pillar: Access	71	62.93
1.1.1 Mobile tariffs	102	38.12
1.1.2 Handset prices	72	48.83
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	79	98.79
1.1.5 International Internet bandwidth	89	66.00
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	121	18.72
1.2.1 GitHub commits	117	0.38
1.2.2 Internet domain registrations	113	0.31
1.2.3 Mobile apps development	121	47.21
1.2.4 AI scientific publications	81	26.95
3rd sub-pillar: Future Technologies	102	22.45
1.3.1 Adoption of emerging technologies	88	37.49
1.3.2 Investment in emerging technologies	100	28.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	115	1.36
B. People pillar	110	29.43
1st sub-pillar: Individuals	108	31.59
2.1.1 Mobile broadband internet traffic within the country	64	8.19
2.1.2 ICT skills in the education system	85	37.57
2.1.3 Use of virtual social networks	108	19.57
2.1.4 Tertiary enrollment	110	5.58
2.1.5 Adult literacy rate	65	87.02
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	95	31.56
2.2.1 Firms with website	117	9.94
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	118	7.80
2.2.4 Annual investment in telecommunication services	64	76.93
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	109	25.15
2.3.1 Government online services	110	43.63
2.3.2 Publication and use of open data	83	13.24
2.3.3 Government promotion of investment in emerging tech	58	39.61
2.3.4 R&D expenditure by governments and higher education	103	4.14

Indicator	Rank	Score
C. Governance pillar	87	50.25
1st sub-pillar: Trust	72	41.13
3.1.1 Secure Internet servers	110	32.26
3.1.2 Cybersecurity	81	67.25
3.1.3 Online access to financial account	72	23.87
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	86	59.60
3.2.1 Regulatory quality	90	33.60
3.2.2 ICT regulatory environment	106	62.74
3.2.3 Regulation of emerging technologies	56	46.32
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	88	55.35
3rd sub-pillar: Inclusion	100	50.02
3.3.1 E-Participation	112	38.28
3.3.2 Socioeconomic gap in use of digital payments	63	74.56
3.3.3 Availability of local online content	110	33.17
3.3.4 Gender gap in Internet use	95	46.83
3.3.5 Rural gap in use of digital payments	75	57.24
D. Impact pillar	103	43.86
1st sub-pillar: Economy	86	26.15
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	67	18.54
4.1.3 PCT patent applications	99	0.00
4.1.4 Domestic market size	70	49.45
4.1.5 Prevalence of gig economy	64	40.99
4.1.6 ICT services exports	81	21.76
2nd sub-pillar: Quality of Life	105	52.36
4.2.1 Happiness	90	51.23
4.2.2 Freedom to make life choices	98	58.01
4.2.3 Income inequality	65	64.82
4.2.4 Healthy life expectancy at birth	118	35.38
3rd sub-pillar: SDG Contribution	103	53.07
4.3.1 SDG 3: Good Health and Well-Being	116	28.21
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	64	76.32
4.3.4 SDG 7: Affordable and Clean Energy	44	83.29
4.3.5 SDG 11: Sustainable Cities and Communities	125	24.48

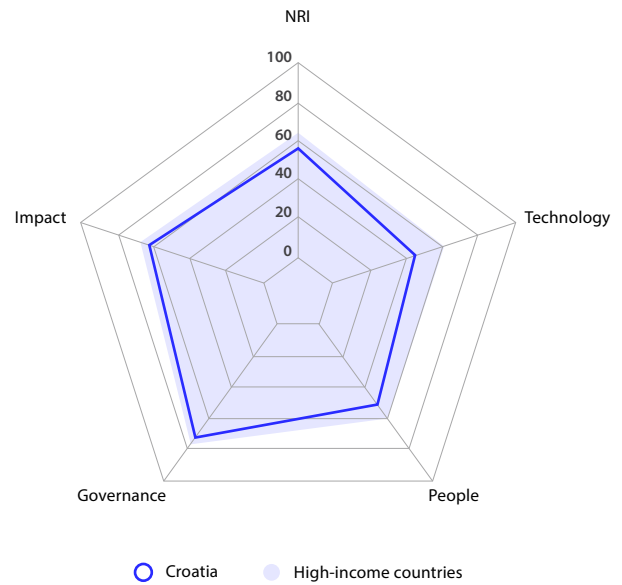
NOTE: ● Indicates a strength and ○ a weakness.

Croatia

Rank
(Out of 131) Score

Network Readiness Index **45 56.86**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	71	43.69
1st sub-pillar: Access	64	65.22
2nd sub-pillar: Content	40	45.42
3rd sub-pillar: Future Technologies	107	20.43
B. People pillar	50	49.37
1st sub-pillar: Individuals	48	51.82
2nd sub-pillar: Businesses	39	54.35
3rd sub-pillar: Governments	71	41.95
C. Governance pillar	37	71.68
1st sub-pillar: Trust	39	66.74
2nd sub-pillar: Regulation	40	73.73
3rd sub-pillar: Inclusion	46	74.57
D. Impact pillar	38	62.71
1st sub-pillar: Economy	62	33.42
2nd sub-pillar: Quality of Life	28	79.91
3rd sub-pillar: SDG Contribution	38	74.81



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	71	43.69
1st sub-pillar: Access	64	65.22
1.1.1 Mobile tariffs	13	87.54 ●
1.1.2 Handset prices	69	50.20
1.1.3 FTTH/building Internet subscriptions	78	15.91
1.1.4 Population covered by at least a 3G mobile network	19	100.00 ●
1.1.5 International Internet bandwidth	52	72.47
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	40	45.42
1.2.1 GitHub commits	25	38.29 ●
1.2.2 Internet domain registrations	44	10.80
1.2.3 Mobile apps development	39	87.19
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	107	20.43
1.3.1 Adoption of emerging technologies	57	49.87
1.3.2 Investment in emerging technologies	108	25.25 ○
1.3.3 Robot density	45	1.63 ○
1.3.4 Computer software spending	97	4.96 ○
B. People pillar	50	49.37
1st sub-pillar: Individuals	48	51.82
2.1.1 Mobile broadband internet traffic within the country	53	11.55
2.1.2 ICT skills in the education system	85	37.57
2.1.3 Use of virtual social networks	68	66.11
2.1.4 Tertiary enrollment	39	44.96
2.1.5 Adult literacy rate	17	98.91 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	39	54.35
2.2.1 Firms with website	30	75.56
2.2.2 GERD financed by business enterprise	47	46.48
2.2.3 Knowledge intensive employment	41	55.55
2.2.4 Annual investment in telecommunication services	55	78.41
2.2.5 GERD performed by business enterprise	37	15.75
3rd sub-pillar: Governments	71	41.95
2.3.1 Government online services	51	74.54
2.3.2 Publication and use of open data	57	29.41
2.3.3 Government promotion of investment in emerging tech	107	18.13
2.3.4 R&D expenditure by governments and higher education	38	45.70

Indicator	Rank	Score
C. Governance pillar	37	71.68
1st sub-pillar: Trust	39	66.74
3.1.1 Secure Internet servers	30	79.91 ●
3.1.2 Cybersecurity	40	92.40
3.1.3 Online access to financial account	38	43.89
3.1.4 Internet shopping	39	50.74
2nd sub-pillar: Regulation	40	73.73
3.2.1 Regulatory quality	51	52.53
3.2.2 ICT regulatory environment	14	94.12 ●
3.2.3 Regulation of emerging technologies	69	42.37
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	35	79.61
3rd sub-pillar: Inclusion	46	74.57
3.3.1 E-Participation	23	88.89 ●
3.3.2 Socioeconomic gap in use of digital payments	59	77.08
3.3.3 Availability of local online content	56	65.87
3.3.4 Gender gap in Internet use	82	60.55
3.3.5 Rural gap in use of digital payments	5	80.46 ●
D. Impact pillar	38	62.71
1st sub-pillar: Economy	62	33.42
4.1.1 High-tech and medium-high-tech manufacturing	48	30.86
4.1.2 High-tech exports	41	42.58
4.1.3 PCT patent applications	39	11.19
4.1.4 Domestic market size	76	47.07
4.1.5 Prevalence of gig economy	104	23.55 ○
4.1.6 ICT services exports	27	45.26 ●
2nd sub-pillar: Quality of Life	28	79.91
4.2.1 Happiness	39	73.15
4.2.2 Freedom to make life choices	45	79.13
4.2.3 Income inequality	15	85.68 ●
4.2.4 Healthy life expectancy at birth	39	81.67
3rd sub-pillar: SDG Contribution	38	74.81
4.3.1 SDG 3: Good Health and Well-Being	57	73.09
4.3.2 SDG 4: Quality Education	36	57.82
4.3.3 SDG 5: Women's economic opportunity	27	91.23
4.3.4 SDG 7: Affordable and Clean Energy	37	85.38
4.3.5 SDG 11: Sustainable Cities and Communities	65	66.54

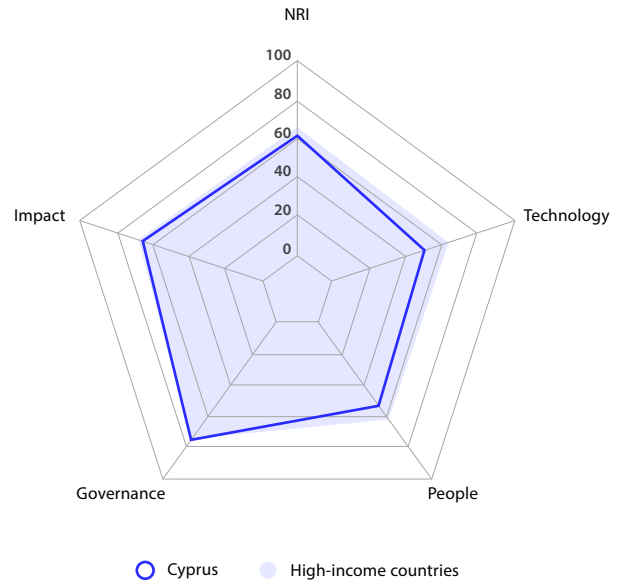
NOTE: ● Indicates a strength and ○ a weakness.

Cyprus

Rank
(Out of 131) Score

Network Readiness Index 38 59.95

Pillar/sub-pillar	Rank	Score
A. Technology pillar	55	48.61
1st sub-pillar: Access	78	59.73
2nd sub-pillar: Content	26	55.64
3rd sub-pillar: Future Technologies	70	30.46
B. People pillar	38	53.38
1st sub-pillar: Individuals	13	61.60
2nd sub-pillar: Businesses	46	51.41
3rd sub-pillar: Governments	53	47.12
C. Governance pillar	34	73.67
1st sub-pillar: Trust	41	66.28
2nd sub-pillar: Regulation	34	75.55
3rd sub-pillar: Inclusion	30	79.17
D. Impact pillar	35	64.15
1st sub-pillar: Economy	52	37.57
2nd sub-pillar: Quality of Life	38	76.30
3rd sub-pillar: SDG Contribution	31	78.57



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	55	48.61
1st sub-pillar: Access	78	59.73
1.1.1 Mobile tariffs	77	50.71
1.1.2 Handset prices	43	67.72
1.1.3 FTTH/building Internet subscriptions	96	5.38 ○
1.1.4 Population covered by at least a 3G mobile network	27	99.98
1.1.5 International Internet bandwidth	42	74.88
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	26	55.64
1.2.1 GitHub commits	40	15.65
1.2.2 Internet domain registrations	16	51.27 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	70	30.46
1.3.1 Adoption of emerging technologies	72	44.07
1.3.2 Investment in emerging technologies	92	31.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	74	16.07
B. People pillar	38	53.38
1st sub-pillar: Individuals	13	61.60
2.1.1 Mobile broadband internet traffic within the country	108	0.78 ○
2.1.2 ICT skills in the education system	47	55.62
2.1.3 Use of virtual social networks	3	94.16 ●
2.1.4 Tertiary enrollment	11	59.10 ●
2.1.5 Adult literacy rate	24	98.33
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	46	51.41
2.2.1 Firms with website	34	71.63
2.2.2 GERD financed by business enterprise	50	45.00
2.2.3 Knowledge intensive employment	36	58.17
2.2.4 Annual investment in telecommunication services	88	72.55 ○
2.2.5 GERD performed by business enterprise	45	9.71
3rd sub-pillar: Governments	53	47.12
2.3.1 Government online services	20	86.67 ●
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	88	30.26
2.3.4 R&D expenditure by governments and higher education	65	24.43

Indicator	Rank	Score
C. Governance pillar	34	73.67
1st sub-pillar: Trust	41	66.28
3.1.1 Secure Internet servers	27	80.80
3.1.2 Cybersecurity	49	88.62
3.1.3 Online access to financial account	42	42.11
3.1.4 Internet shopping	38	53.60
2nd sub-pillar: Regulation	34	75.55
3.2.1 Regulatory quality	33	67.73
3.2.2 ICT regulatory environment	56	85.49
3.2.3 Regulation of emerging technologies	60	44.74
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	34	79.77
3rd sub-pillar: Inclusion	30	79.17
3.3.1 E-Participation	14	95.06 ●
3.3.2 Socioeconomic gap in use of digital payments	50	83.94
3.3.3 Availability of local online content	44	72.36
3.3.4 Gender gap in internet use	25	74.49
3.3.5 Rural gap in use of digital payments	49	70.01
D. Impact pillar	35	64.15
1st sub-pillar: Economy	52	37.57
4.1.1 High-tech and medium-high-tech manufacturing	69	18.98
4.1.2 High-tech exports	71	16.66
4.1.3 PCT patent applications	22	37.39 ●
4.1.4 Domestic market size	111	35.04 ○
4.1.5 Prevalence of gig economy	86	33.72
4.1.6 ICT services exports	2	83.64 ●
2nd sub-pillar: Quality of Life	38	76.30
4.2.1 Happiness	40	72.84
4.2.2 Freedom to make life choices	97	58.10 ○
4.2.3 Income inequality	28	79.90
4.2.4 Healthy life expectancy at birth	5	94.37 ●
3rd sub-pillar: SDG Contribution	31	78.57
4.3.1 SDG 3: Good Health and Well-Being	33	82.64
4.3.2 SDG 4: Quality Education	44	44.51
4.3.3 SDG 5: Women's economic opportunity	32	87.72
4.3.4 SDG 7: Affordable and Clean Energy	25	88.72
4.3.5 SDG 11: Sustainable Cities and Communities	21	89.25 ●

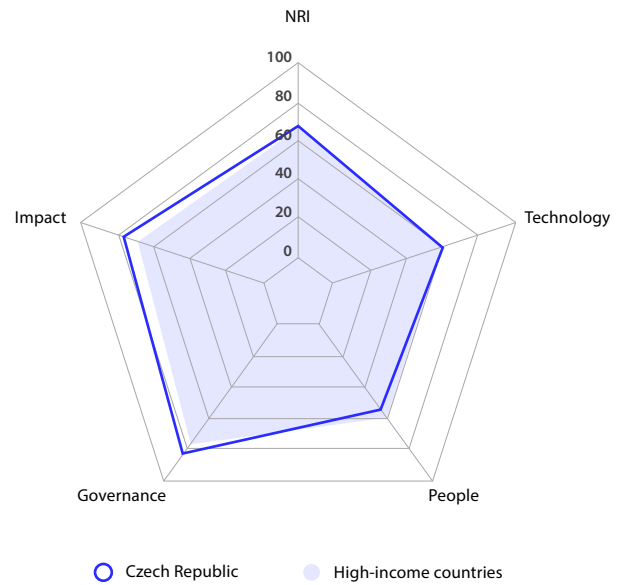
NOTE: ● Indicates a strength and ○ a weakness.

Czech Republic

Rank
(Out of 131) Score

Network Readiness Index 25 66.83

Pillar/sub-pillar	Rank	Score
A. Technology pillar	26	59.46
1st sub-pillar: Access	54	68.91
2nd sub-pillar: Content	20	65.11
3rd sub-pillar: Future Technologies	36	44.36
B. People pillar	39	53.33
1st sub-pillar: Individuals	91	41.29
2nd sub-pillar: Businesses	31	60.71
3rd sub-pillar: Governments	34	57.98
C. Governance pillar	21	80.49
1st sub-pillar: Trust	15	81.13
2nd sub-pillar: Regulation	22	81.90
3rd sub-pillar: Inclusion	33	78.43
D. Impact pillar	16	74.03
1st sub-pillar: Economy	18	54.73
2nd sub-pillar: Quality of Life	7	88.48
3rd sub-pillar: SDG Contribution	30	78.87



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	26	59.46
1st sub-pillar: Access	54	68.91
1.1.1 Mobile tariffs	43	71.13
1.1.2 Handset prices	23	74.44
1.1.3 FTTH/building Internet subscriptions	51	28.69
1.1.4 Population covered by at least a 3G mobile network	40	99.94
1.1.5 International Internet bandwidth	68	70.35
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	20	65.11
1.2.1 GitHub commits	15	56.72 ●
1.2.2 Internet domain registrations	20	46.51
1.2.3 Mobile apps development	30	92.11
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	36	44.36
1.3.1 Adoption of emerging technologies	24	72.11
1.3.2 Investment in emerging technologies	36	55.00
1.3.3 Robot density	17	25.02
1.3.4 Computer software spending	43	25.32
B. People pillar	39	53.33
1st sub-pillar: Individuals	91	41.29
2.1.1 Mobile broadband internet traffic within the country	68	7.84 ○
2.1.2 ICT skills in the education system	28	67.75
2.1.3 Use of virtual social networks	59	69.81
2.1.4 Tertiary enrollment	43	43.50
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	26	17.54 ○
2nd sub-pillar: Businesses	31	60.71
2.2.1 Firms with website	14	84.73 ●
2.2.2 GERD financed by business enterprise	52	44.01
2.2.3 Knowledge intensive employment	31	62.41
2.2.4 Annual investment in telecommunication services	43	80.54
2.2.5 GERD performed by business enterprise	20	31.87
3rd sub-pillar: Governments	34	57.98
2.3.1 Government online services	60	71.51
2.3.2 Publication and use of open data	35	44.12
2.3.3 Government promotion of investment in emerging tech	40	49.14
2.3.4 R&D expenditure by governments and higher education	14	67.17 ●

Indicator	Rank	Score
C. Governance pillar	21	80.49
1st sub-pillar: Trust	15	81.13
3.1.1 Secure Internet servers	12	88.74 ●
3.1.2 Cybersecurity	76	73.92 ○
3.1.3 Online access to financial account	12	75.65 ●
3.1.4 Internet shopping	9	86.21 ●
2nd sub-pillar: Regulation	22	81.90
3.2.1 Regulatory quality	21	74.13
3.2.2 ICT regulatory environment	45	87.06
3.2.3 Regulation of emerging technologies	36	62.37
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	19	85.93
3rd sub-pillar: Inclusion	33	78.43
3.3.1 E-Participation	63	71.61
3.3.2 Socioeconomic gap in use of digital payments	14	96.86 ●
3.3.3 Availability of local online content	19	86.30
3.3.4 Gender gap in Internet use	68	67.34 ○
3.3.5 Rural gap in use of digital payments	48	70.07
D. Impact pillar	16	74.03
1st sub-pillar: Economy	18	54.73
4.1.1 High-tech and medium-high-tech manufacturing	4	80.00 ●
4.1.2 High-tech exports	7	82.90 ●
4.1.3 PCT patent applications	32	19.60
4.1.4 Domestic market size	46	60.21
4.1.5 Prevalence of gig economy	53	45.35
4.1.6 ICT services exports	35	40.33
2nd sub-pillar: Quality of Life	7	88.48
4.2.1 Happiness	NA	NA
4.2.2 Freedom to make life choices	NA	NA
4.2.3 Income inequality	4	94.72 ●
4.2.4 Healthy life expectancy at birth	36	82.23
3rd sub-pillar: SDG Contribution	30	78.87
4.3.1 SDG 3: Good Health and Well-Being	35	82.04
4.3.2 SDG 4: Quality Education	23	67.13
4.3.3 SDG 5: Women's economic opportunity	27	91.23
4.3.4 SDG 7: Affordable and Clean Energy	74	76.61
4.3.5 SDG 11: Sustainable Cities and Communities	43	77.34

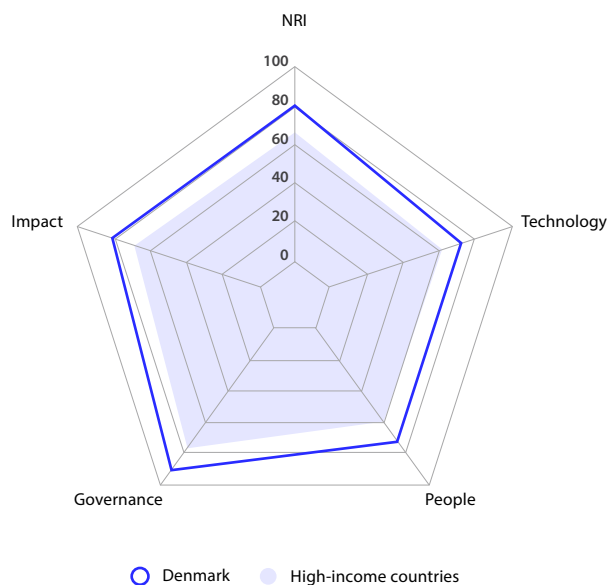
NOTE: ● Indicates a strength and ○ a weakness.

Denmark

Rank
(Out of 131) Score

Network Readiness Index 6 78.26

Pillar/sub-pillar	Rank	Score
A. Technology pillar	11	71.16
1st sub-pillar: Access	35	73.76
2nd sub-pillar: Content	7	78.45
3rd sub-pillar: Future Technologies	11	61.27
B. People pillar	7	71.89
1st sub-pillar: Individuals	54	51.07
2nd sub-pillar: Businesses	9	75.40
3rd sub-pillar: Governments	1	89.19
C. Governance pillar	2	90.19
1st sub-pillar: Trust	1	97.41
2nd sub-pillar: Regulation	8	87.98
3rd sub-pillar: Inclusion	11	85.17
D. Impact pillar	7	79.80
1st sub-pillar: Economy	16	56.72
2nd sub-pillar: Quality of Life	3	92.85
3rd sub-pillar: SDG Contribution	2	89.82



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	11	71.16
1st sub-pillar: Access	35	73.76
1.1.1 Mobile tariffs	28	77.68
1.1.2 Handset prices	46	66.39
1.1.3 FTTH/building Internet subscriptions	52	28.57 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	73	69.91 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	7	78.45
1.2.1 GitHub commits	18	52.92
1.2.2 Internet domain registrations	5	82.43 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	11	61.27
1.3.1 Adoption of emerging technologies	13	84.22
1.3.2 Investment in emerging technologies	14	76.75
1.3.3 Robot density	11	34.84
1.3.4 Computer software spending	16	49.27
B. People pillar	7	71.89
1st sub-pillar: Individuals	54	51.07
2.1.1 Mobile broadband internet traffic within the country	45	15.61
2.1.2 ICT skills in the education system	4	86.98 ●
2.1.3 Use of virtual social networks	23	79.84
2.1.4 Tertiary enrollment	19	54.57
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	25	18.32 ○
2nd sub-pillar: Businesses	9	75.40
2.2.1 Firms with website	2	96.20 ●
2.2.2 GERD financed by business enterprise	14	73.71
2.2.3 Knowledge intensive employment	10	75.68
2.2.4 Annual investment in telecommunication services	30	83.11
2.2.5 GERD performed by business enterprise	11	48.32
3rd sub-pillar: Governments	1	89.19
2.3.1 Government online services	3	96.97 ●
2.3.2 Publication and use of open data	14	70.59
2.3.3 Government promotion of investment in emerging tech	NA	NA
2.3.4 R&D expenditure by governments and higher education	1	100.00 ●

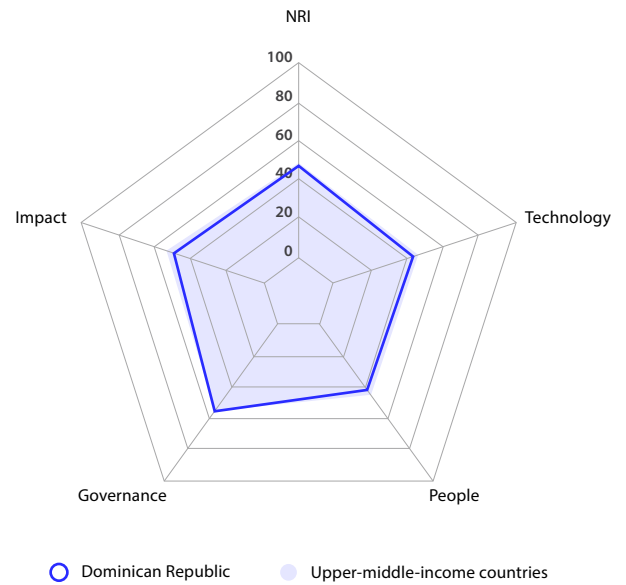
Indicator	Rank	Score
C. Governance pillar	2	90.19
1st sub-pillar: Trust	1	97.41
3.1.1 Secure Internet servers	1	100.00 ●
3.1.2 Cybersecurity	39	92.47
3.1.3 Online access to financial account	2	97.24 ●
3.1.4 Internet shopping	2	99.93 ●
2nd sub-pillar: Regulation	8	87.98
3.2.1 Regulatory quality	6	88.80 ●
3.2.2 ICT regulatory environment	6	96.47
3.2.3 Regulation of emerging technologies	17	77.63
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	37	77.02
3rd sub-pillar: Inclusion	11	85.17
3.3.1 E-Participation	9	96.30
3.3.2 Socioeconomic gap in use of digital payments	7	99.19
3.3.3 Availability of local online content	34	79.09
3.3.4 Gender gap in internet use	24	74.74
3.3.5 Rural gap in use of digital payments	15	76.53
D. Impact pillar	7	79.80
1st sub-pillar: Economy	16	56.72
4.1.1 High-tech and medium-high-tech manufacturing	15	63.63
4.1.2 High-tech exports	34	49.34
4.1.3 PCT patent applications	8	70.64
4.1.4 Domestic market size	51	57.87 ○
4.1.5 Prevalence of gig economy	NA	NA
4.1.6 ICT services exports	34	42.11
2nd sub-pillar: Quality of Life	3	92.85
4.2.1 Happiness	2	98.30 ●
4.2.2 Freedom to make life choices	7	94.64
4.2.3 Income inequality	11	88.69
4.2.4 Healthy life expectancy at birth	18	89.75
3rd sub-pillar: SDG Contribution	2	89.82
4.3.1 SDG 3: Good Health and Well-Being	17	92.69
4.3.2 SDG 4: Quality Education	17	69.32
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	7	94.32
4.3.5 SDG 11: Sustainable Cities and Communities	15	92.79

NOTE: ● Indicates a strength and ○ a weakness.

Dominican Republic

Rank (Out of 131) Score
Network Readiness Index 85 45.33

Pillar/sub-pillar	Rank	Score
A. Technology pillar	91	36.45
1st sub-pillar: Access	81	58.74
2nd sub-pillar: Content	106	24.34
3rd sub-pillar: Future Technologies	94	26.26
B. People pillar	79	41.33
1st sub-pillar: Individuals	67	47.89
2nd sub-pillar: Businesses	106	29.59
3rd sub-pillar: Governments	59	46.51
C. Governance pillar	71	54.82
1st sub-pillar: Trust	93	33.77
2nd sub-pillar: Regulation	47	70.96
3rd sub-pillar: Inclusion	77	59.71
D. Impact pillar	91	48.72
1st sub-pillar: Economy	84	27.04
2nd sub-pillar: Quality of Life	63	68.90
3rd sub-pillar: SDG Contribution	113	50.22



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	91	36.45
1st sub-pillar: Access	81	58.74
1.1.1 Mobile tariffs	83	48.16
1.1.2 Handset prices	50	63.79 ●
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	47	99.84 ●
1.1.5 International Internet bandwidth	NA	NA
1.1.6 Internet access in schools	62	23.16
2nd sub-pillar: Content	106	24.34
1.2.1 GitHub commits	78	3.54
1.2.2 Internet domain registrations	84	1.74
1.2.3 Mobile apps development	89	69.37
1.2.4 AI scientific publications	84	22.69 ○
3rd sub-pillar: Future Technologies	94	26.26
1.3.1 Adoption of emerging technologies	62	48.00
1.3.2 Investment in emerging technologies	98	29.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	113	1.77 ○
B. People pillar	79	41.33
1st sub-pillar: Individuals	67	47.89
2.1.1 Mobile broadband internet traffic within the country	39	17.74 ●
2.1.2 ICT skills in the education system	111	25.15 ○
2.1.3 Use of virtual social networks	72	64.07
2.1.4 Tertiary enrollment	47	40.49 ●
2.1.5 Adult literacy rate	55	92.02
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	106	29.59
2.2.1 Firms with website	84	37.55
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	92	21.64
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	59	46.51
2.3.1 Government online services	48	75.76 ●
2.3.2 Publication and use of open data	55	32.35
2.3.3 Government promotion of investment in emerging tech	85	31.43
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	71	54.82
1st sub-pillar: Trust	93	33.77
3.1.1 Secure Internet servers	98	38.65
3.1.2 Cybersecurity	74	74.61
3.1.3 Online access to financial account	99	12.98
3.1.4 Internet shopping	87	8.84
2nd sub-pillar: Regulation	47	70.96
3.2.1 Regulatory quality	73	40.80
3.2.2 ICT regulatory environment	5	97.06 ●
3.2.3 Regulation of emerging technologies	92	26.58
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	10	90.37 ●
3rd sub-pillar: Inclusion	77	59.71
3.3.1 E-Participation	50	76.54
3.3.2 Socioeconomic gap in use of digital payments	105	43.97
3.3.3 Availability of local online content	68	60.10
3.3.4 Gender gap in Internet use	27	74.43 ●
3.3.5 Rural gap in use of digital payments	98	43.53
D. Impact pillar	91	48.72
1st sub-pillar: Economy	84	27.04
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	49	34.59
4.1.3 PCT patent applications	96	0.18
4.1.4 Domestic market size	61	52.75
4.1.5 Prevalence of gig economy	79	35.47
4.1.6 ICT services exports	97	12.21
2nd sub-pillar: Quality of Life	63	68.90
4.2.1 Happiness	53	68.59
4.2.2 Freedom to make life choices	38	82.10 ●
4.2.3 Income inequality	78	58.79
4.2.4 Healthy life expectancy at birth	85	66.11
3rd sub-pillar: SDG Contribution	113	50.22
4.3.1 SDG 3: Good Health and Well-Being	84	61.36
4.3.2 SDG 4: Quality Education	78	3.62 ○
4.3.3 SDG 5: Women's economic opportunity	49	80.70
4.3.4 SDG 7: Affordable and Clean Energy	8	93.65 ●
4.3.5 SDG 11: Sustainable Cities and Communities	129	11.76 ○

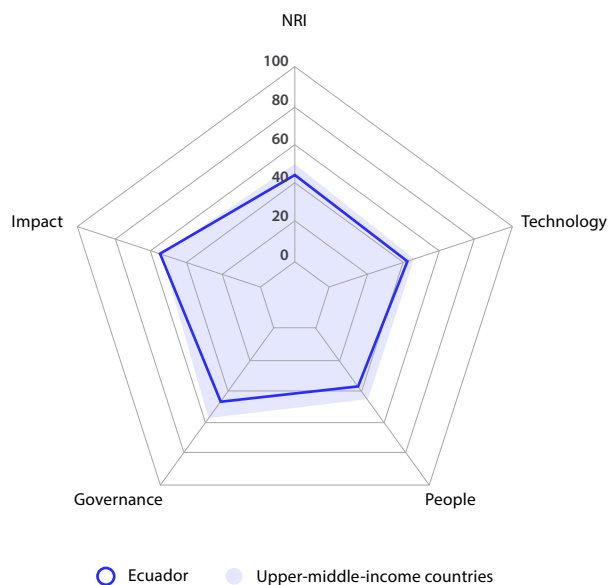
NOTE: ● Indicates a strength and ○ a weakness.

Ecuador

Rank
(Out of 131) Score

Network Readiness Index **86** **43.81**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	87	38.62
1st sub-pillar: Access	89	55.43
2nd sub-pillar: Content	78	33.16
3rd sub-pillar: Future Technologies	89	27.28
B. People pillar	89	36.37
1st sub-pillar: Individuals	70	47.46
2nd sub-pillar: Businesses	114	25.23
3rd sub-pillar: Governments	85	36.41
C. Governance pillar	100	46.33
1st sub-pillar: Trust	108	24.40
2nd sub-pillar: Regulation	96	55.49
3rd sub-pillar: Inclusion	78	59.10
D. Impact pillar	70	53.94
1st sub-pillar: Economy	113	16.03
2nd sub-pillar: Quality of Life	83	63.56
3rd sub-pillar: SDG Contribution	24	82.22



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	87	38.62
1st sub-pillar: Access	89	55.43
1.1.1 Mobile tariffs	98	40.51
1.1.2 Handset prices	84	44.47
1.1.3 FTTH/building Internet subscriptions	17	45.76
1.1.4 Population covered by at least a 3G mobile network	94	98.26
1.1.5 International Internet bandwidth	105	62.46
1.1.6 Internet access in schools	54	41.10
2nd sub-pillar: Content	78	33.16
1.2.1 GitHub commits	77	3.61
1.2.2 Internet domain registrations	87	1.40
1.2.3 Mobile apps development	84	72.11
1.2.4 AI scientific publications	46	55.52
3rd sub-pillar: Future Technologies	89	27.28
1.3.1 Adoption of emerging technologies	82	38.94
1.3.2 Investment in emerging technologies	113	23.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	65	19.64
B. People pillar	89	36.37
1st sub-pillar: Individuals	70	47.46
2.1.1 Mobile broadband internet traffic within the country	72	7.15
2.1.2 ICT skills in the education system	98	31.07
2.1.3 Use of virtual social networks	39	75.75
2.1.4 Tertiary enrollment	65	31.48
2.1.5 Adult literacy rate	57	91.83
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	114	25.23
2.2.1 Firms with website	25	79.48
2.2.2 GERD financed by business enterprise	102	0.19
2.2.3 Knowledge intensive employment	100	16.35
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	55	4.91
3rd sub-pillar: Governments	85	36.41
2.3.1 Government online services	40	80.61
2.3.2 Publication and use of open data	69	22.06
2.3.3 Government promotion of investment in emerging tech	102	21.66
2.3.4 R&D expenditure by governments and higher education	69	21.29

Indicator	Rank	Score
C. Governance pillar	100	46.33
1st sub-pillar: Trust	108	24.40
3.1.1 Secure Internet servers	79	47.40
3.1.2 Cybersecurity	110	25.00
3.1.3 Online access to financial account	109	9.80
3.1.4 Internet shopping	75	15.40
2nd sub-pillar: Regulation	96	55.49
3.2.1 Regulatory quality	119	17.33
3.2.2 ICT regulatory environment	76	76.47
3.2.3 Regulation of emerging technologies	98	23.42
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	81	60.21
3rd sub-pillar: Inclusion	78	59.10
3.3.1 E-Participation	48	79.01
3.3.2 Socioeconomic gap in use of digital payments	91	54.30
3.3.3 Availability of local online content	101	39.18
3.3.4 Gender gap in internet use	50	70.52
3.3.5 Rural gap in use of digital payments	88	52.47
D. Impact pillar	70	53.94
1st sub-pillar: Economy	113	16.03
4.1.1 High-tech and medium-high-tech manufacturing	81	12.25
4.1.2 High-tech exports	96	5.65
4.1.3 PCT patent applications	68	3.07
4.1.4 Domestic market size	64	52.01
4.1.5 Prevalence of gig economy	116	14.53
4.1.6 ICT services exports	108	8.65
2nd sub-pillar: Quality of Life	83	63.56
4.2.1 Happiness	75	57.98
4.2.2 Freedom to make life choices	58	75.60
4.2.3 Income inequality	102	39.45
4.2.4 Healthy life expectancy at birth	42	81.20
3rd sub-pillar: SDG Contribution	24	82.22
4.3.1 SDG 3: Good Health and Well-Being	29	85.26
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	37	85.09
4.3.4 SDG 7: Affordable and Clean Energy	42	83.79
4.3.5 SDG 11: Sustainable Cities and Communities	51	74.75

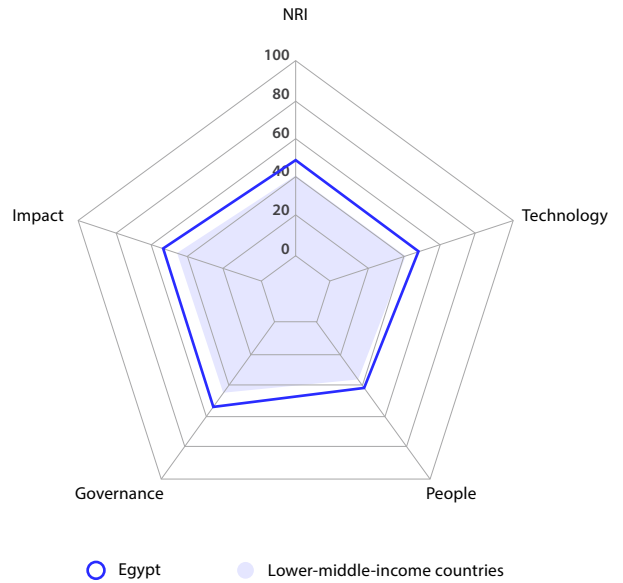
NOTE: ● Indicates a strength and ○ a weakness.

Egypt

Rank
(Out of 131) Score

Network Readiness Index 73 47.76

Pillar/sub-pillar	Rank	Score
A. Technology pillar	65	44.53
1st sub-pillar: Access	46	70.77
2nd sub-pillar: Content	72	35.04
3rd sub-pillar: Future Technologies	86	27.78
B. People pillar	81	40.41
1st sub-pillar: Individuals	85	42.84
2nd sub-pillar: Businesses	92	33.25
3rd sub-pillar: Governments	65	45.15
C. Governance pillar	74	54.00
1st sub-pillar: Trust	70	42.99
2nd sub-pillar: Regulation	93	57.28
3rd sub-pillar: Inclusion	75	61.72
D. Impact pillar	78	52.08
1st sub-pillar: Economy	51	38.09
2nd sub-pillar: Quality of Life	96	57.66
3rd sub-pillar: SDG Contribution	81	60.50



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	65	44.53
1st sub-pillar: Access	46	70.77
1.1.1 Mobile tariffs	14	86.35 ●
1.1.2 Handset prices	68	50.86 ●
1.1.3 FTTH/building Internet subscriptions	41	35.20
1.1.4 Population covered by at least a 3G mobile network	47	99.84
1.1.5 International Internet bandwidth	18	81.08 ●
1.1.6 Internet access in schools	40	71.28
2nd sub-pillar: Content	72	35.04
1.2.1 GitHub commits	96	1.80
1.2.2 Internet domain registrations	98	0.79
1.2.3 Mobile apps development	99	63.66
1.2.4 AI scientific publications	22	73.91 ●
3rd sub-pillar: Future Technologies	86	27.78
1.3.1 Adoption of emerging technologies	48	54.92
1.3.2 Investment in emerging technologies	74	37.00
1.3.3 Robot density	55	0.10 ○
1.3.4 Computer software spending	68	19.12
B. People pillar	81	40.41
1st sub-pillar: Individuals	85	42.84
2.1.1 Mobile broadband internet traffic within the country	34	21.20
2.1.2 ICT skills in the education system	42	60.36
2.1.3 Use of virtual social networks	96	44.40
2.1.4 Tertiary enrollment	75	25.33
2.1.5 Adult literacy rate	91	62.91
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	92	33.25
2.2.1 Firms with website	82	38.01
2.2.2 GERD financed by business enterprise	87	4.81
2.2.3 Knowledge intensive employment	55	39.95
2.2.4 Annual investment in telecommunication services	32	82.77 ●
2.2.5 GERD performed by business enterprise	77	0.73
3rd sub-pillar: Governments	65	45.15
2.3.1 Government online services	91	55.76
2.3.2 Publication and use of open data	83	13.24
2.3.3 Government promotion of investment in emerging tech	43	47.75
2.3.4 R&D expenditure by governments and higher education	18	63.86 ●

Indicator	Rank	Score
C. Governance pillar	74	54.00
1st sub-pillar: Trust	70	42.99
3.1.1 Secure Internet servers	113	30.20 ○
3.1.2 Cybersecurity	30	95.40 ●
3.1.3 Online access to financial account	122	3.38 ○
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	93	57.28
3.2.1 Regulatory quality	109	22.67
3.2.2 ICT regulatory environment	39	87.65
3.2.3 Regulation of emerging technologies	84	31.58
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	111	44.51
3rd sub-pillar: Inclusion	75	61.72
3.3.1 E-Participation	96	49.38
3.3.2 Socioeconomic gap in use of digital payments	107	42.95
3.3.3 Availability of local online content	35	78.61 ●
3.3.4 Gender gap in Internet use	64	67.89
3.3.5 Rural gap in use of digital payments	50	69.77
D. Impact pillar	78	52.08
1st sub-pillar: Economy	51	38.09
4.1.1 High-tech and medium-high-tech manufacturing	55	28.29
4.1.2 High-tech exports	83	12.25
4.1.3 PCT patent applications	79	1.53
4.1.4 Domestic market size	20	70.83 ●
4.1.5 Prevalence of gig economy	7	85.17 ●
4.1.6 ICT services exports	62	30.44
2nd sub-pillar: Quality of Life	96	57.66
4.2.1 Happiness	115	32.89 ○
4.2.2 Freedom to make life choices	104	55.86
4.2.3 Income inequality	30	79.15 ●
4.2.4 Healthy life expectancy at birth	91	62.73
3rd sub-pillar: SDG Contribution	81	60.50
4.3.1 SDG 3: Good Health and Well-Being	70	68.03
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	127	22.81 ○
4.3.4 SDG 7: Affordable and Clean Energy	54	82.54
4.3.5 SDG 11: Sustainable Cities and Communities	57	68.63

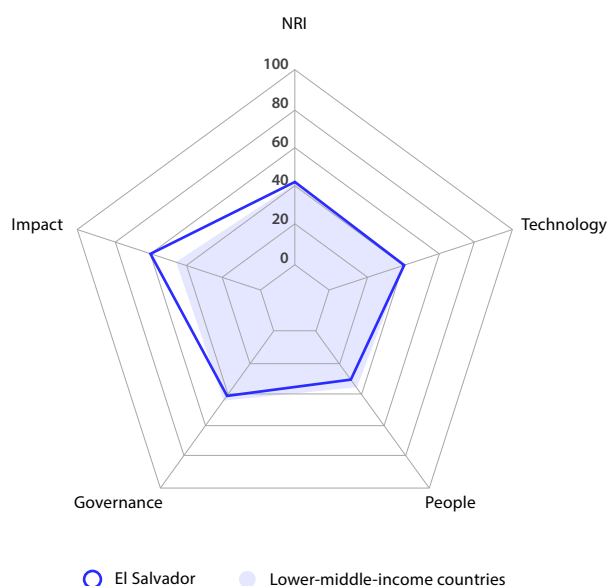
NOTE: ● Indicates a strength and ○ a weakness.

El Salvador

Rank
(Out of 131) Score

Network Readiness Index **96** **40.66**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	108	31.52
1st sub-pillar: Access	91	55.04
2nd sub-pillar: Content	120	19.41
3rd sub-pillar: Future Technologies	109	20.11
B. People pillar	104	30.80
1st sub-pillar: Individuals	97	37.31
2nd sub-pillar: Businesses	88	34.19
3rd sub-pillar: Governments	119	20.90
C. Governance pillar	103	40.93
1st sub-pillar: Trust	117	19.24
2nd sub-pillar: Regulation	94	56.81
3rd sub-pillar: Inclusion	106	46.75
D. Impact pillar	45	59.39
1st sub-pillar: Economy	85	26.19
2nd sub-pillar: Quality of Life	46	74.28
3rd sub-pillar: SDG Contribution	33	77.68



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	108	31.52
1st sub-pillar: Access	91	55.04
1.1.1 Mobile tariffs	104	36.99
1.1.2 Handset prices	74	48.44
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	99	97.25
1.1.5 International Internet bandwidth	78	69.25
1.1.6 Internet access in schools	61	23.24
2nd sub-pillar: Content	120	19.41
1.2.1 GitHub commits	79	3.45
1.2.2 Internet domain registrations	82	1.83
1.2.3 Mobile apps development	82	72.36
1.2.4 AI scientific publications	99	0.00 ○
3rd sub-pillar: Future Technologies	109	20.11
1.3.1 Adoption of emerging technologies	91	36.60
1.3.2 Investment in emerging technologies	121	19.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	99	4.74
B. People pillar	104	30.80
1st sub-pillar: Individuals	97	37.31
2.1.1 Mobile broadband internet traffic within the country	98	1.54
2.1.2 ICT skills in the education system	122	13.31
2.1.3 Use of virtual social networks	70	65.34
2.1.4 Tertiary enrollment	84	19.21
2.1.5 Adult literacy rate	64	87.14
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	88	34.19
2.2.1 Firms with website	81	38.12
2.2.2 GERD financed by business enterprise	55	38.92 ●
2.2.3 Knowledge intensive employment	99	16.42
2.2.4 Annual investment in telecommunication services	69	76.12
2.2.5 GERD performed by business enterprise	70	1.35
3rd sub-pillar: Governments	119	20.90
2.3.1 Government online services	90	56.37
2.3.2 Publication and use of open data	83	13.24
2.3.3 Government promotion of investment in emerging tech	124	5.86
2.3.4 R&D expenditure by governments and higher education	91	8.14

Indicator	Rank	Score
C. Governance pillar	103	40.93
1st sub-pillar: Trust	117	19.24
3.1.1 Secure Internet servers	97	39.14
3.1.2 Cybersecurity	122	11.77 ○
3.1.3 Online access to financial account	91	16.25
3.1.4 Internet shopping	83	9.80
2nd sub-pillar: Regulation	94	56.81
3.2.1 Regulatory quality	75	40.53
3.2.2 ICT regulatory environment	104	65.29
3.2.3 Regulation of emerging technologies	104	18.95
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	5	92.60 ●
3rd sub-pillar: Inclusion	106	46.75
3.3.1 E-Participation	73	66.67
3.3.2 Socioeconomic gap in use of digital payments	122	30.53 ○
3.3.3 Availability of local online content	107	35.82
3.3.4 Gender gap in internet use	83	60.51
3.3.5 Rural gap in use of digital payments	102	40.24
D. Impact pillar	45	59.39
1st sub-pillar: Economy	85	26.19
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	50	34.10 ●
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	96	40.02
4.1.5 Prevalence of gig economy	111	19.19
4.1.6 ICT services exports	47	37.66 ●
2nd sub-pillar: Quality of Life	46	74.28
4.2.1 Happiness	34	75.73 ●
4.2.2 Freedom to make life choices	15	91.50 ●
4.2.3 Income inequality	74	60.80
4.2.4 Healthy life expectancy at birth	76	69.10
3rd sub-pillar: SDG Contribution	33	77.68
4.3.1 SDG 3: Good Health and Well-Being	47	77.37 ●
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	40	84.21 ●
4.3.4 SDG 7: Affordable and Clean Energy	50	82.87 ●
4.3.5 SDG 11: Sustainable Cities and Communities	67	66.27 ●

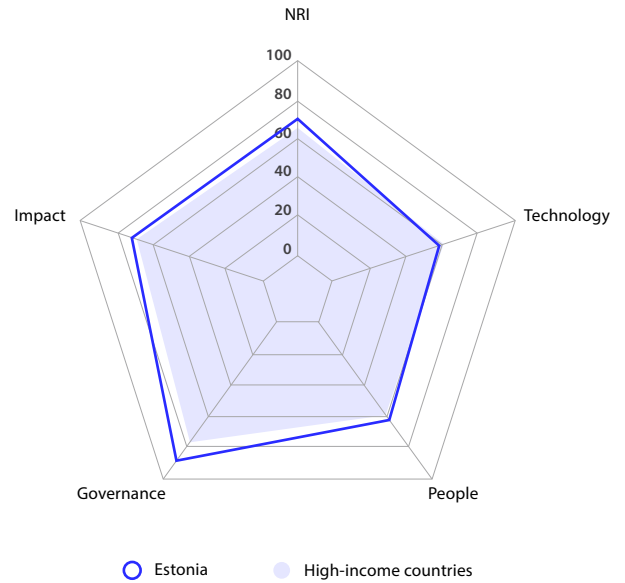
NOTE: ● Indicates a strength and ○ a weakness.

Estonia

Rank
(Out of 131) Score

Network Readiness Index **22 69.79**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	29	57.91
1st sub-pillar: Access	44	71.48
2nd sub-pillar: Content	21	64.60
3rd sub-pillar: Future Technologies	49	37.65
B. People pillar	21	62.24
1st sub-pillar: Individuals	23	58.10
2nd sub-pillar: Businesses	27	63.14
3rd sub-pillar: Governments	20	65.49
C. Governance pillar	6	87.83
1st sub-pillar: Trust	7	87.96
2nd sub-pillar: Regulation	6	88.39
3rd sub-pillar: Inclusion	3	87.13
D. Impact pillar	24	71.19
1st sub-pillar: Economy	24	47.51
2nd sub-pillar: Quality of Life	16	83.97
3rd sub-pillar: SDG Contribution	26	82.09



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	29	57.91
1st sub-pillar: Access	44	71.48
1.1.1 Mobile tariffs	47	69.63
1.1.2 Handset prices	19	77.81
1.1.3 FTTH/building Internet subscriptions	75	17.98 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	100	63.47 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	21	64.60
1.2.1 GitHub commits	14	57.82
1.2.2 Internet domain registrations	23	38.66
1.2.3 Mobile apps development	14	97.31
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	49	37.65
1.3.1 Adoption of emerging technologies	22	73.19
1.3.2 Investment in emerging technologies	35	58.75
1.3.3 Robot density	37	5.05
1.3.4 Computer software spending	78	13.61
B. People pillar	21	62.24
1st sub-pillar: Individuals	23	58.10
2.1.1 Mobile broadband internet traffic within the country	74	6.26
2.1.2 ICT skills in the education system	5	86.69 ●
2.1.3 Use of virtual social networks	47	74.00
2.1.4 Tertiary enrollment	27	49.39
2.1.5 Adult literacy rate	3	99.89 ●
2.1.6 AI talent concentration	11	32.36
2nd sub-pillar: Businesses	27	63.14
2.2.1 Firms with website	21	81.21
2.2.2 GERD financed by business enterprise	32	60.73
2.2.3 Knowledge intensive employment	12	74.94 ●
2.2.4 Annual investment in telecommunication services	84	72.97 ○
2.2.5 GERD performed by business enterprise	22	25.86
3rd sub-pillar: Governments	20	65.49
2.3.1 Government online services	2	99.39 ●
2.3.2 Publication and use of open data	41	38.24
2.3.3 Government promotion of investment in emerging tech	35	51.84
2.3.4 R&D expenditure by governments and higher education	11	72.49

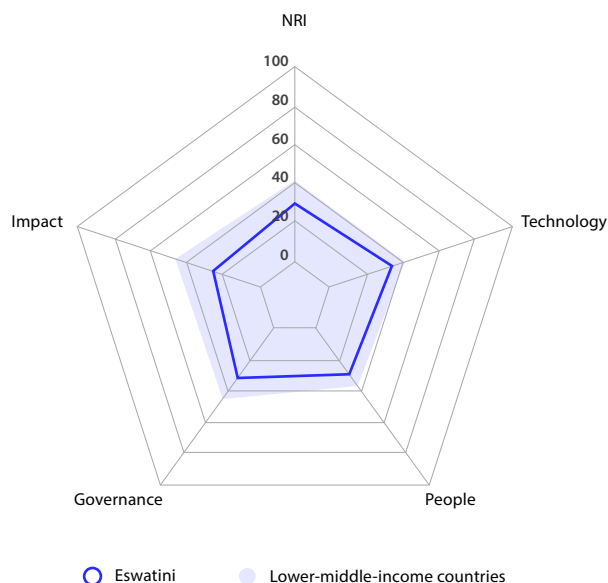
Indicator	Rank	Score
C. Governance pillar	6	87.83
1st sub-pillar: Trust	7	87.96
3.1.1 Secure Internet servers	8	90.51 ●
3.1.2 Cybersecurity	4	99.47 ●
3.1.3 Online access to financial account	8	82.82 ●
3.1.4 Internet shopping	14	79.02
2nd sub-pillar: Regulation	6	88.39
3.2.1 Regulatory quality	14	82.13
3.2.2 ICT regulatory environment	29	91.18
3.2.3 Regulation of emerging technologies	11	81.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	15	87.33
3rd sub-pillar: Inclusion	3	87.13
3.3.1 E-Participation	1	100.00 ●
3.3.2 Socioeconomic gap in use of digital payments	13	97.51
3.3.3 Availability of local online content	20	86.06
3.3.4 Gender gap in Internet use	15	75.49
3.3.5 Rural gap in use of digital payments	14	76.59
D. Impact pillar	24	71.19
1st sub-pillar: Economy	24	47.51
4.1.1 High-tech and medium-high-tech manufacturing	41	39.30
4.1.2 High-tech exports	17	62.84
4.1.3 PCT patent applications	28	29.53
4.1.4 Domestic market size	99	38.88 ○
4.1.5 Prevalence of gig economy	27	63.37
4.1.6 ICT services exports	17	51.12
2nd sub-pillar: Quality of Life	16	83.97
4.2.1 Happiness	25	77.91
4.2.2 Freedom to make life choices	10	93.35 ●
4.2.3 Income inequality	25	80.90
4.2.4 Healthy life expectancy at birth	33	83.73
3rd sub-pillar: SDG Contribution	26	82.09
4.3.1 SDG 3: Good Health and Well-Being	41	80.73
4.3.2 SDG 4: Quality Education	4	78.94 ●
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	83	73.52
4.3.5 SDG 11: Sustainable Cities and Communities	35	80.79

NOTE: ● Indicates a strength and ○ a weakness.

Eswatini

Network Readiness Index **126** **27.95**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	120	27.57
1st sub-pillar: Access	111	44.73
2nd sub-pillar: Content	116	20.74
3rd sub-pillar: Future Technologies	121	17.26
B. People pillar	114	28.54
1st sub-pillar: Individuals	98	36.19
2nd sub-pillar: Businesses	111	28.61
3rd sub-pillar: Governments	120	20.81
C. Governance pillar	125	31.11
1st sub-pillar: Trust	104	27.15
2nd sub-pillar: Regulation	125	33.88
3rd sub-pillar: Inclusion	122	32.30
D. Impact pillar	131	24.58
1st sub-pillar: Economy	131	6.97
2nd sub-pillar: Quality of Life	131	20.29
3rd sub-pillar: SDG Contribution	116	46.46



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	120	27.57
1st sub-pillar: Access	111	44.73
1.1.1 Mobile tariffs	97	42.34 ●
1.1.2 Handset prices	88	43.13 ●
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	125	75.06
1.1.5 International Internet bandwidth	130	0.00 ○
1.1.6 Internet access in schools	44	63.11 ●
2nd sub-pillar: Content	116	20.74
1.2.1 GitHub commits	110	0.67
1.2.2 Internet domain registrations	106	0.58
1.2.3 Mobile apps development	111	55.33
1.2.4 AI scientific publications	82	26.38
3rd sub-pillar: Future Technologies	121	17.26
1.3.1 Adoption of emerging technologies	114	22.76
1.3.2 Investment in emerging technologies	129	11.75 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	114	28.54
1st sub-pillar: Individuals	98	36.19
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	109	25.74
2.1.3 Use of virtual social networks	101	30.48
2.1.4 Tertiary enrollment	117	3.42
2.1.5 Adult literacy rate	68	85.12 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	111	28.61
2.2.1 Firms with website	50	61.23 ●
2.2.2 GERD financed by business enterprise	64	27.59 ●
2.2.3 Knowledge intensive employment	84	25.57 ●
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	90	0.04
3rd sub-pillar: Governments	120	20.81
2.3.1 Government online services	105	47.27
2.3.2 Publication and use of open data	105	0.00 ○
2.3.3 Government promotion of investment in emerging tech	104	20.27
2.3.4 R&D expenditure by governments and higher education	82	15.71 ●

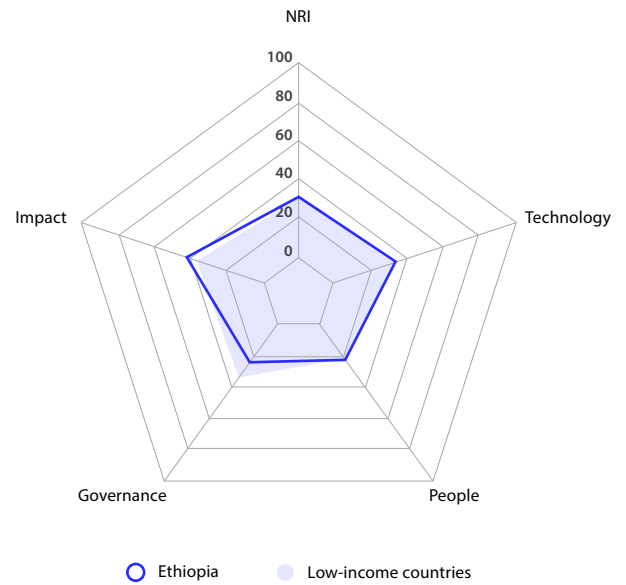
Indicator	Rank	Score
C. Governance pillar	125	31.11
1st sub-pillar: Trust	104	27.15
3.1.1 Secure Internet servers	100	37.51
3.1.2 Cybersecurity	118	16.79
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	125	33.88
3.2.1 Regulatory quality	101	26.13
3.2.2 ICT regulatory environment	111	61.96
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	126	0.00 ○
3.2.5 Privacy protection by law content	103	47.42
3rd sub-pillar: Inclusion	122	32.30
3.3.1 E-Participation	104	43.21
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	124	21.39
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	131	24.58
1st sub-pillar: Economy	131	6.97
4.1.1 High-tech and medium-high-tech manufacturing	104	1.47
4.1.2 High-tech exports	101	4.87
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	127	20.25
4.1.5 Prevalence of gig economy	120	10.17
4.1.6 ICT services exports	122	5.09
2nd sub-pillar: Quality of Life	131	20.29
4.2.1 Happiness	NA	NA
4.2.2 Freedom to make life choices	NA	NA
4.2.3 Income inequality	114	21.11
4.2.4 Healthy life expectancy at birth	129	19.48 ○
3rd sub-pillar: SDG Contribution	116	46.46
4.3.1 SDG 3: Good Health and Well-Being	98	48.90 ●
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	126	24.56
4.3.4 SDG 7: Affordable and Clean Energy	90	72.01 ●
4.3.5 SDG 11: Sustainable Cities and Communities	108	40.37

NOTE: ● Indicates a strength and ○ a weakness.

Ethiopia

Rank (Out of 131) **123** Score **29.68**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	110	30.97
1st sub-pillar: Access	104	48.97
2nd sub-pillar: Content	101	25.92
3rd sub-pillar: Future Technologies	116	18.01
B. People pillar	123	21.92
1st sub-pillar: Individuals	123	17.45
2nd sub-pillar: Businesses	120	22.75
3rd sub-pillar: Governments	107	25.57
C. Governance pillar	129	23.51
1st sub-pillar: Trust	130	10.19
2nd sub-pillar: Regulation	127	29.10
3rd sub-pillar: Inclusion	125	31.25
D. Impact pillar	107	42.30
1st sub-pillar: Economy	89	25.45
2nd sub-pillar: Quality of Life	95	57.93
3rd sub-pillar: SDG Contribution	120	43.52



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	110	30.97
1st sub-pillar: Access	104	48.97
1.1.1 Mobile tariffs	117	27.10
1.1.2 Handset prices	124	19.53
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	109	94.53
1.1.5 International Internet bandwidth	117	54.71
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	101	25.92
1.2.1 GitHub commits	121	0.30
1.2.2 Internet domain registrations	131	0.00 ○
1.2.3 Mobile apps development	126	38.53
1.2.4 AI scientific publications	33	64.87 ●
3rd sub-pillar: Future Technologies	116	18.01
1.3.1 Adoption of emerging technologies	112	25.79
1.3.2 Investment in emerging technologies	101	28.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	122	0.00 ○
B. People pillar	123	21.92
1st sub-pillar: Individuals	123	17.45
2.1.1 Mobile broadband internet traffic within the country	69	7.40 ●
2.1.2 ICT skills in the education system	95	34.02
2.1.3 Use of virtual social networks	128	1.95 ○
2.1.4 Tertiary enrollment	107	5.93
2.1.5 Adult literacy rate	100	37.93
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	120	22.75
2.2.1 Firms with website	96	29.23
2.2.2 GERD financed by business enterprise	95	1.82
2.2.3 Knowledge intensive employment	123	3.57
2.2.4 Annual investment in telecommunication services	53	78.96 ●
2.2.5 GERD performed by business enterprise	86	0.16
3rd sub-pillar: Governments	107	25.57
2.3.1 Government online services	116	34.55
2.3.2 Publication and use of open data	78	16.18
2.3.3 Government promotion of investment in emerging tech	92	29.47
2.3.4 R&D expenditure by governments and higher education	67	22.08 ●

Indicator	Rank	Score
C. Governance pillar	129	23.51
1st sub-pillar: Trust	130	10.19
3.1.1 Secure Internet servers	128	14.30 ○
3.1.2 Cybersecurity	109	26.47
3.1.3 Online access to financial account	123	0.00 ○
3.1.4 Internet shopping	114	0.00 ○
2nd sub-pillar: Regulation	127	29.10
3.2.1 Regulatory quality	122	15.47
3.2.2 ICT regulatory environment	129	22.35 ○
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	118	33.33
3.2.5 Privacy protection by law content	108	45.26
3rd sub-pillar: Inclusion	125	31.25
3.3.1 E-Participation	118	30.86
3.3.2 Socioeconomic gap in use of digital payments	125	13.40
3.3.3 Availability of local online content	111	30.53
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	90	50.20
D. Impact pillar	107	42.30
1st sub-pillar: Economy	89	25.45
4.1.1 High-tech and medium-high-tech manufacturing	76	15.76 ●
4.1.2 High-tech exports	91	7.56
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	56	55.75 ●
4.1.5 Prevalence of gig economy	96	27.91
4.1.6 ICT services exports	84	20.30 ●
2nd sub-pillar: Quality of Life	95	57.93
4.2.1 Happiness	100	42.21
4.2.2 Freedom to make life choices	83	66.74 ●
4.2.3 Income inequality	52	70.35 ●
4.2.4 Healthy life expectancy at birth	102	52.43
3rd sub-pillar: SDG Contribution	120	43.52
4.3.1 SDG 3: Good Health and Well-Being	127	16.26
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	90	67.54 ●
4.3.4 SDG 7: Affordable and Clean Energy	118	48.12
4.3.5 SDG 11: Sustainable Cities and Communities	105	42.15

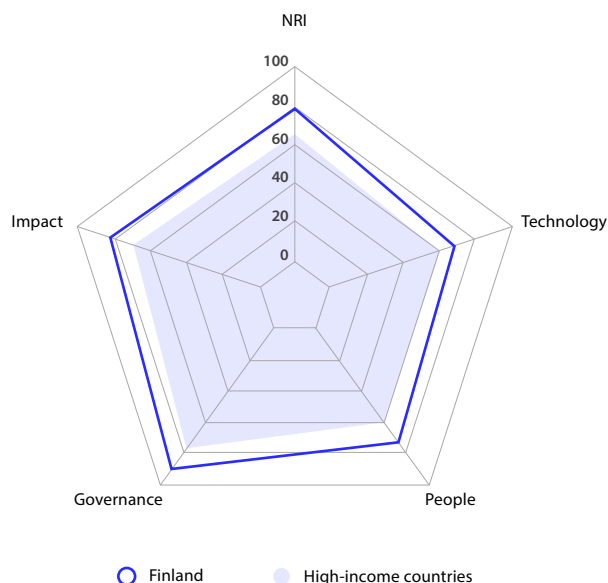
NOTE: ● Indicates a strength and ○ a weakness.

Finland

Rank
(Out of 131) Score

Network Readiness Index 7 77.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	13	68.53
1st sub-pillar: Access	19	76.37
2nd sub-pillar: Content	17	66.35
3rd sub-pillar: Future Technologies	8	62.87
B. People pillar	6	71.98
1st sub-pillar: Individuals	14	60.80
2nd sub-pillar: Businesses	11	74.37
3rd sub-pillar: Governments	6	80.76
C. Governance pillar	3	89.71
1st sub-pillar: Trust	5	90.29
2nd sub-pillar: Regulation	3	93.09
3rd sub-pillar: Inclusion	8	85.77
D. Impact pillar	3	81.37
1st sub-pillar: Economy	12	64.33
2nd sub-pillar: Quality of Life	1	94.50
3rd sub-pillar: SDG Contribution	18	85.28



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	13	68.53
1st sub-pillar: Access	19	76.37
1.1.1 Mobile tariffs	27	77.74
1.1.2 Handset prices	18	81.08
1.1.3 FTTH/building Internet subscriptions	47	30.40 ○
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	81	69.06 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	17	66.35
1.2.1 GitHub commits	11	69.25
1.2.2 Internet domain registrations	24	33.51
1.2.3 Mobile apps development	19	96.29
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	8	62.87
1.3.1 Adoption of emerging technologies	3	96.95 ●
1.3.2 Investment in emerging technologies	5	87.75
1.3.3 Robot density	20	23.89
1.3.4 Computer software spending	19	42.89
B. People pillar	6	71.98
1st sub-pillar: Individuals	14	60.80
2.1.1 Mobile broadband internet traffic within the country	28	27.63
2.1.2 ICT skills in the education system	1	100.00 ●
2.1.3 Use of virtual social networks	24	79.75
2.1.4 Tertiary enrollment	8	62.14
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	10	34.50
2nd sub-pillar: Businesses	11	74.37
2.2.1 Firms with website	1	100.00 ●
2.2.2 GERD financed by business enterprise	22	67.19
2.2.3 Knowledge intensive employment	17	73.26
2.2.4 Annual investment in telecommunication services	48	79.67
2.2.5 GERD performed by business enterprise	10	51.74
3rd sub-pillar: Governments	6	80.76
2.3.1 Government online services	3	96.97 ●
2.3.2 Publication and use of open data	23	57.35
2.3.3 Government promotion of investment in emerging tech	7	83.08
2.3.4 R&D expenditure by governments and higher education	7	85.65

Indicator	Rank	Score
C. Governance pillar	3	89.71
1st sub-pillar: Trust	5	90.29
3.1.1 Secure Internet servers	9	90.25
3.1.2 Cybersecurity	29	95.71
3.1.3 Online access to financial account	3	93.95 ●
3.1.4 Internet shopping	12	81.24
2nd sub-pillar: Regulation	3	93.09
3.2.1 Regulatory quality	3	90.40 ●
3.2.2 ICT regulatory environment	6	96.47
3.2.3 Regulation of emerging technologies	2	94.47 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	22	84.09
3rd sub-pillar: Inclusion	8	85.77
3.3.1 E-Participation	14	95.06
3.3.2 Socioeconomic gap in use of digital payments	22	95.97
3.3.3 Availability of local online content	13	90.14
3.3.4 Gender gap in internet use	47	70.95 ○
3.3.5 Rural gap in use of digital payments	13	76.73
D. Impact pillar	3	81.37
1st sub-pillar: Economy	12	64.33
4.1.1 High-tech and medium-high-tech manufacturing	19	58.58
4.1.2 High-tech exports	37	44.16
4.1.3 PCT patent applications	5	87.37
4.1.4 Domestic market size	57	55.58
4.1.5 Prevalence of gig economy	23	64.83
4.1.6 ICT services exports	5	75.48 ●
2nd sub-pillar: Quality of Life	1	94.50
4.2.1 Happiness	1	100.00 ●
4.2.2 Freedom to make life choices	2	99.68 ●
4.2.3 Income inequality	11	88.69
4.2.4 Healthy life expectancy at birth	19	89.62
3rd sub-pillar: SDG Contribution	18	85.28
4.3.1 SDG 3: Good Health and Well-Being	22	89.99
4.3.2 SDG 4: Quality Education	8	75.36
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	98	67.67 ○
4.3.5 SDG 11: Sustainable Cities and Communities	5	96.88

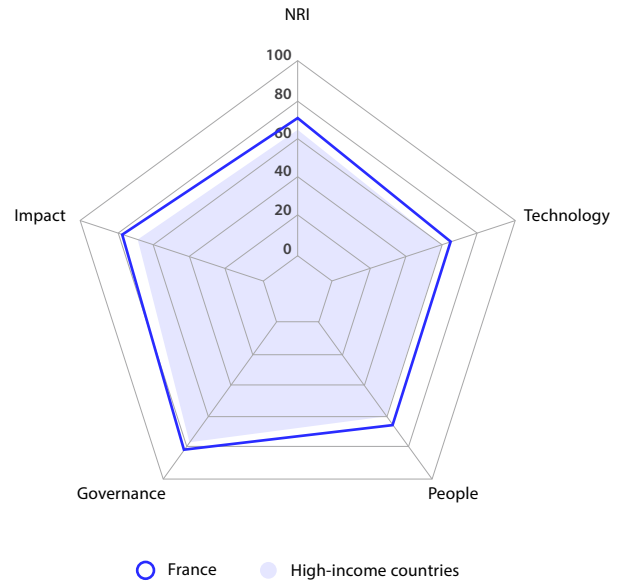
NOTE: ● Indicates a strength and ○ a weakness.

France

Rank
(Out of 131) Score

Network Readiness Index **16 72.19**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	15	65.71
1st sub-pillar: Access	3	85.83
2nd sub-pillar: Content	28	55.06
3rd sub-pillar: Future Technologies	16	56.24
B. People pillar	16	65.43
1st sub-pillar: Individuals	75	46.11
2nd sub-pillar: Businesses	15	69.35
3rd sub-pillar: Governments	5	80.83
C. Governance pillar	18	81.09
1st sub-pillar: Trust	26	75.66
2nd sub-pillar: Regulation	16	84.48
3rd sub-pillar: Inclusion	18	83.12
D. Impact pillar	10	76.55
1st sub-pillar: Economy	14	60.80
2nd sub-pillar: Quality of Life	20	82.04
3rd sub-pillar: SDG Contribution	14	86.79



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	15	65.71
1st sub-pillar: Access	3	85.83
1.1.1 Mobile tariffs	55	67.07 ○
1.1.2 Handset prices	13	83.83 ●
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	55	99.68 ○
1.1.5 International Internet bandwidth	27	79.55
1.1.6 Internet access in schools	31	99.00
2nd sub-pillar: Content	28	55.06
1.2.1 GitHub commits	23	41.35
1.2.2 Internet domain registrations	25	30.94
1.2.3 Mobile apps development	28	92.89
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	16	56.24
1.3.1 Adoption of emerging technologies	14	83.82
1.3.2 Investment in emerging technologies	22	67.25
1.3.3 Robot density	19	24.29
1.3.4 Computer software spending	14	49.60
B. People pillar	16	65.43
1st sub-pillar: Individuals	75	46.11
2.1.1 Mobile broadband internet traffic within the country	17	38.41
2.1.2 ICT skills in the education system	51	52.66
2.1.3 Use of virtual social networks	44	74.98
2.1.4 Tertiary enrollment	36	45.39
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	22	19.10 ○
2nd sub-pillar: Businesses	15	69.35
2.2.1 Firms with website	36	70.47
2.2.2 GERD financed by business enterprise	18	70.18
2.2.3 Knowledge intensive employment	15	73.55
2.2.4 Annual investment in telecommunication services	6	91.60 ●
2.2.5 GERD performed by business enterprise	15	40.93
3rd sub-pillar: Governments	5	80.83
2.3.1 Government online services	18	87.88
2.3.2 Publication and use of open data	4	94.12 ●
2.3.3 Government promotion of investment in emerging tech	12	74.76
2.3.4 R&D expenditure by governments and higher education	16	66.56

Indicator	Rank	Score
C. Governance pillar	18	81.09
1st sub-pillar: Trust	26	75.66
3.1.1 Secure Internet servers	21	83.77
3.1.2 Cybersecurity	14	97.56
3.1.3 Online access to financial account	21	60.62
3.1.4 Internet shopping	28	60.69
2nd sub-pillar: Regulation	16	84.48
3.2.1 Regulatory quality	25	73.07
3.2.2 ICT regulatory environment	8	95.88 ●
3.2.3 Regulation of emerging technologies	9	81.84 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	49	71.63
3rd sub-pillar: Inclusion	18	83.12
3.3.1 E-Participation	18	90.13
3.3.2 Socioeconomic gap in use of digital payments	17	96.60
3.3.3 Availability of local online content	28	83.65
3.3.4 Gender gap in Internet use	60	69.06 ○
3.3.5 Rural gap in use of digital payments	18	76.15
D. Impact pillar	10	76.55
1st sub-pillar: Economy	14	60.80
4.1.1 High-tech and medium-high-tech manufacturing	10	68.90 ●
4.1.2 High-tech exports	15	64.57
4.1.3 PCT patent applications	15	49.78
4.1.4 Domestic market size	9	79.44 ●
4.1.5 Prevalence of gig economy	21	66.86
4.1.6 ICT services exports	50	35.26
2nd sub-pillar: Quality of Life	20	82.04
4.2.1 Happiness	23	79.73
4.2.2 Freedom to make life choices	49	78.30
4.2.3 Income inequality	33	76.88
4.2.4 Healthy life expectancy at birth	8	93.27 ●
3rd sub-pillar: SDG Contribution	14	86.79
4.3.1 SDG 3: Good Health and Well-Being	20	91.09
4.3.2 SDG 4: Quality Education	25	66.41
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	43	83.54
4.3.5 SDG 11: Sustainable Cities and Communities	14	92.93

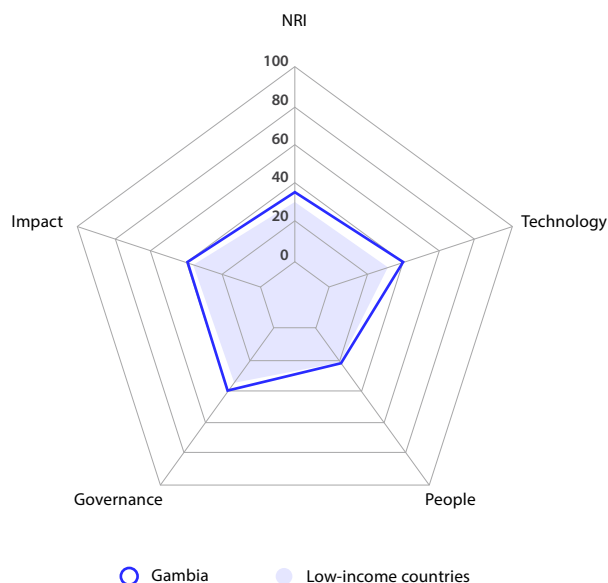
NOTE: ● Indicates a strength and ○ a weakness.

Gambia

Rank
(Out of 131) Score

Network Readiness Index 117 33.06

Pillar/sub-pillar	Rank	Score
A. Technology pillar	107	31.93
1st sub-pillar: Access	112	44.36
2nd sub-pillar: Content	125	15.51
3rd sub-pillar: Future Technologies	53	35.91
B. People pillar	124	20.33
1st sub-pillar: Individuals	116	23.56
2nd sub-pillar: Businesses	124	21.86
3rd sub-pillar: Governments	129	15.57
C. Governance pillar	108	39.34
1st sub-pillar: Trust	113	22.08
2nd sub-pillar: Regulation	49	69.72
3rd sub-pillar: Inclusion	129	26.22
D. Impact pillar	110	40.64
1st sub-pillar: Economy	116	15.61
2nd sub-pillar: Quality of Life	102	53.82
3rd sub-pillar: SDG Contribution	106	52.49



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	107	31.93
1st sub-pillar: Access	112	44.36
1.1.1 Mobile tariffs	125	14.19
1.1.2 Handset prices	128	17.05 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	106	95.74
1.1.5 International Internet bandwidth	124	50.46
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	125	15.51
1.2.1 GitHub commits	116	0.38
1.2.2 Internet domain registrations	117	0.23
1.2.3 Mobile apps development	116	51.59
1.2.4 AI scientific publications	95	9.85
3rd sub-pillar: Future Technologies	53	35.91
1.3.1 Adoption of emerging technologies	94	35.57
1.3.2 Investment in emerging technologies	76	36.25 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	124	20.33
1st sub-pillar: Individuals	116	23.56
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	72	42.31 ●
2.1.3 Use of virtual social networks	111	14.61
2.1.4 Tertiary enrollment	126	0.68 ○
2.1.5 Adult literacy rate	101	36.65
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	124	21.86
2.2.1 Firms with website	110	14.90
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	108	12.88
2.2.4 Annual investment in telecommunication services	110	59.64
2.2.5 GERD performed by business enterprise	93	0.02
3rd sub-pillar: Governments	129	15.57
2.3.1 Government online services	130	0.00 ○
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	86	31.15
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	108	39.34
1st sub-pillar: Trust	113	22.08
3.1.1 Secure Internet servers	117	26.87
3.1.2 Cybersecurity	106	30.93
3.1.3 Online access to financial account	113	8.45
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	49	69.72
3.2.1 Regulatory quality	109	22.67
3.2.2 ICT regulatory environment	93	70.20
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	18	86.02 ●
3rd sub-pillar: Inclusion	129	26.22
3.3.1 E-Participation	130	0.00 ○
3.3.2 Socioeconomic gap in use of digital payments	110	41.16
3.3.3 Availability of local online content	104	37.50
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	110	40.64
1st sub-pillar: Economy	116	15.61
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	122	0.00 ○
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	129	11.26 ○
4.1.5 Prevalence of gig economy	71	37.50 ●
4.1.6 ICT services exports	67	29.27 ●
2nd sub-pillar: Quality of Life	102	53.82
4.2.1 Happiness	89	53.15 ●
4.2.2 Freedom to make life choices	109	51.15
4.2.3 Income inequality	60	68.09 ●
4.2.4 Healthy life expectancy at birth	110	42.87
3rd sub-pillar: SDG Contribution	106	52.49
4.3.1 SDG 3: Good Health and Well-Being	113	32.03
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	107	57.02
4.3.4 SDG 7: Affordable and Clean Energy	34	86.22 ●
4.3.5 SDG 11: Sustainable Cities and Communities	115	34.70

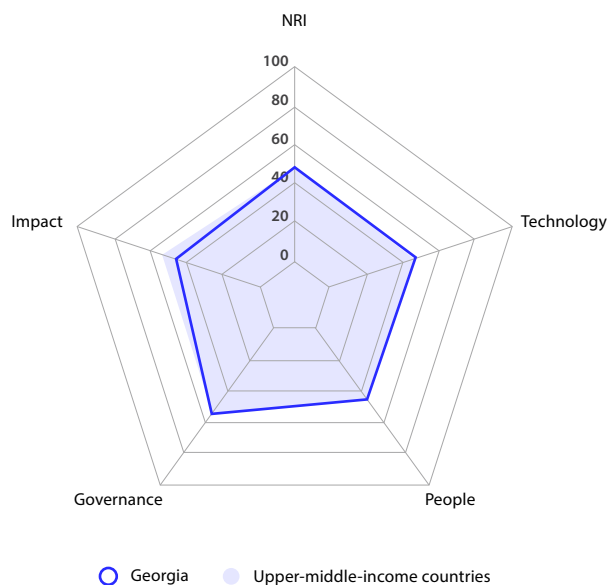
NOTE: ● Indicates a strength and ○ a weakness.

Georgia

Network Readiness Index **75** 47.14

Rank (Out of 131) Score

Pillar/sub-pillar	Rank	Score
A. Technology pillar	82	40.94
1st sub-pillar: Access	48	70.04
2nd sub-pillar: Content	73	34.34
3rd sub-pillar: Future Technologies	114	18.44
B. People pillar	64	45.29
1st sub-pillar: Individuals	28	56.16
2nd sub-pillar: Businesses	69	40.18
3rd sub-pillar: Governments	78	39.54
C. Governance pillar	67	56.02
1st sub-pillar: Trust	68	44.75
2nd sub-pillar: Regulation	76	61.06
3rd sub-pillar: Inclusion	71	62.26
D. Impact pillar	99	46.30
1st sub-pillar: Economy	100	21.06
2nd sub-pillar: Quality of Life	81	64.22
3rd sub-pillar: SDG Contribution	101	53.61



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	82	40.94
1st sub-pillar: Access	48	70.04
1.1.1 Mobile tariffs	57	66.22
1.1.2 Handset prices	86	44.01
1.1.3 FTTH/building Internet subscriptions	29	39.62 ●
1.1.4 Population covered by at least a 3G mobile network	24	99.99 ●
1.1.5 International Internet bandwidth	67	70.38
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	73	34.34
1.2.1 GitHub commits	54	8.21
1.2.2 Internet domain registrations	60	4.96
1.2.3 Mobile apps development	55	82.20
1.2.4 AI scientific publications	64	41.98
3rd sub-pillar: Future Technologies	114	18.44
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	97	30.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	93	6.89
B. People pillar	64	45.29
1st sub-pillar: Individuals	28	56.16
2.1.1 Mobile broadband internet traffic within the country	80	4.95
2.1.2 ICT skills in the education system	49	53.25 ●
2.1.3 Use of virtual social networks	26	78.87 ●
2.1.4 Tertiary enrollment	40	44.25 ●
2.1.5 Adult literacy rate	12	99.46 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	69	40.18
2.2.1 Firms with website	66	48.18
2.2.2 GERD financed by business enterprise	92	2.06 ○
2.2.3 Knowledge intensive employment	59	36.54
2.2.4 Annual investment in telecommunication services	80	73.95
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	78	39.54
2.3.1 Government online services	85	57.57
2.3.2 Publication and use of open data	45	36.76
2.3.3 Government promotion of investment in emerging tech	NA	NA
2.3.4 R&D expenditure by governments and higher education	66	24.29

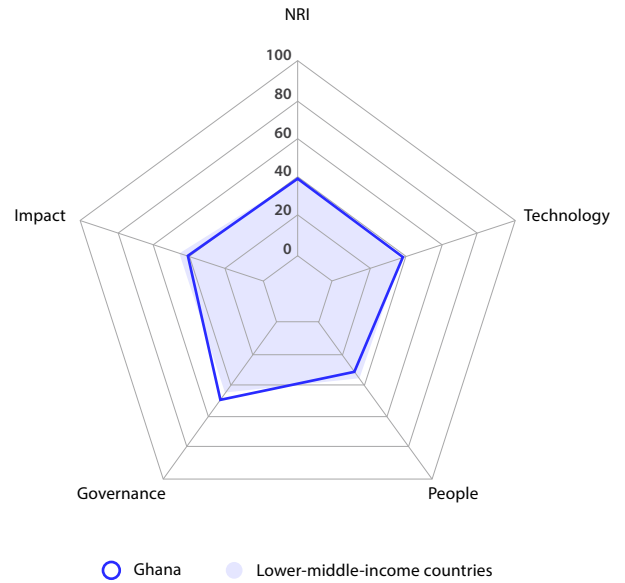
Indicator	Rank	Score
C. Governance pillar	67	56.02
1st sub-pillar: Trust	68	44.75
3.1.1 Secure Internet servers	50	65.11
3.1.2 Cybersecurity	63	80.73
3.1.3 Online access to financial account	93	15.90
3.1.4 Internet shopping	70	17.26
2nd sub-pillar: Regulation	76	61.06
3.2.1 Regulatory quality	28	70.67 ●
3.2.2 ICT regulatory environment	27	92.35 ●
3.2.3 Regulation of emerging technologies	58	45.79
3.2.4 E-commerce legislation	118	33.33 ○
3.2.5 Privacy protection by law content	69	63.16
3rd sub-pillar: Inclusion	71	62.26
3.3.1 E-Participation	78	62.97
3.3.2 Socioeconomic gap in use of digital payments	64	73.20
3.3.3 Availability of local online content	81	51.68
3.3.4 Gender gap in Internet use	51	70.48
3.3.5 Rural gap in use of digital payments	86	52.98
D. Impact pillar	99	46.30
1st sub-pillar: Economy	100	21.06
4.1.1 High-tech and medium-high-tech manufacturing	83	12.19 ○
4.1.2 High-tech exports	74	16.26
4.1.3 PCT patent applications	41	10.54 ●
4.1.4 Domestic market size	97	39.91
4.1.5 Prevalence of gig economy	NA	NA
4.1.6 ICT services exports	74	26.41
2nd sub-pillar: Quality of Life	81	64.22
4.2.1 Happiness	94	48.66
4.2.2 Freedom to make life choices	78	68.16
4.2.3 Income inequality	48	71.61
4.2.4 Healthy life expectancy at birth	78	68.46
3rd sub-pillar: SDG Contribution	101	53.61
4.3.1 SDG 3: Good Health and Well-Being	86	60.44
4.3.2 SDG 4: Quality Education	69	24.30 ○
4.3.3 SDG 5: Women's economic opportunity	53	79.82
4.3.4 SDG 7: Affordable and Clean Energy	68	79.03
4.3.5 SDG 11: Sustainable Cities and Communities	126	24.47 ○

NOTE: ● Indicates a strength and ○ a weakness.

Ghana

Rank (Out of 131) **103** Score **38.89**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	98	34.65
1st sub-pillar: Access	108	47.00
2nd sub-pillar: Content	91	29.58
3rd sub-pillar: Future Technologies	88	27.36
B. People pillar	103	30.83
1st sub-pillar: Individuals	106	32.34
2nd sub-pillar: Businesses	118	23.28
3rd sub-pillar: Governments	84	36.89
C. Governance pillar	89	49.54
1st sub-pillar: Trust	76	40.31
2nd sub-pillar: Regulation	55	67.38
3rd sub-pillar: Inclusion	115	40.93
D. Impact pillar	111	40.53
1st sub-pillar: Economy	103	18.50
2nd sub-pillar: Quality of Life	111	48.60
3rd sub-pillar: SDG Contribution	96	54.48



The Network Readiness Index in detail

Indicator	Rank	Score	
A. Technology pillar	98	34.65	
1st sub-pillar: Access	108	47.00	
1.1.1 Mobile tariffs	62	61.71	●
1.1.2 Handset prices	94	40.87	
1.1.3 FTTH/building Internet subscriptions	105	0.00	○
1.1.4 Population covered by at least a 3G mobile network	84	98.61	
1.1.5 International Internet bandwidth	54	72.43	●
1.1.6 Internet access in schools	70	8.41	
2nd sub-pillar: Content	91	29.58	
1.2.1 GitHub commits	102	1.40	
1.2.2 Internet domain registrations	107	0.42	
1.2.3 Mobile apps development	110	57.60	
1.2.4 AI scientific publications	41	58.90	●
3rd sub-pillar: Future Technologies	88	27.36	
1.3.1 Adoption of emerging technologies	97	32.17	
1.3.2 Investment in emerging technologies	44	49.25	●
1.3.3 Robot density	NA	NA	
1.3.4 Computer software spending	119	0.68	○
B. People pillar	103	30.83	
1st sub-pillar: Individuals	106	32.34	
2.1.1 Mobile broadband internet traffic within the country	51	12.80	●
2.1.2 ICT skills in the education system	75	40.83	
2.1.3 Use of virtual social networks	106	23.47	
2.1.4 Tertiary enrollment	97	11.56	
2.1.5 Adult literacy rate	79	73.04	
2.1.6 AI talent concentration	NA	NA	
2nd sub-pillar: Businesses	118	23.28	
2.2.1 Firms with website	98	27.38	
2.2.2 GERD financed by business enterprise	103	0.07	○
2.2.3 Knowledge intensive employment	110	11.85	
2.2.4 Annual investment in telecommunication services	62	77.08	
2.2.5 GERD performed by business enterprise	95	0.01	○
3rd sub-pillar: Governments	84	36.89	
2.3.1 Government online services	78	62.43	
2.3.2 Publication and use of open data	65	25.00	
2.3.3 Government promotion of investment in emerging tech	98	26.73	
2.3.4 R&D expenditure by governments and higher education	55	33.39	●

Indicator	Rank	Score	
C. Governance pillar	89	49.54	
1st sub-pillar: Trust	76	40.31	
3.1.1 Secure Internet servers	109	32.54	
3.1.2 Cybersecurity	51	86.46	●
3.1.3 Online access to financial account	57	32.31	●
3.1.4 Internet shopping	82	9.92	
2nd sub-pillar: Regulation	55	67.38	
3.2.1 Regulatory quality	72	41.07	
3.2.2 ICT regulatory environment	76	76.47	
3.2.3 Regulation of emerging technologies	83	31.84	
3.2.4 E-commerce legislation	1	100.00	●
3.2.5 Privacy protection by law content	14	87.53	●
3rd sub-pillar: Inclusion	115	40.93	
3.3.1 E-Participation	80	61.73	
3.3.2 Socioeconomic gap in use of digital payments	76	64.96	
3.3.3 Availability of local online content	104	37.50	
3.3.4 Gender gap in Internet use	103	0.66	○
3.3.5 Rural gap in use of digital payments	103	39.78	
D. Impact pillar	111	40.53	
1st sub-pillar: Economy	103	18.50	
4.1.1 High-tech and medium-high-tech manufacturing	82	12.21	
4.1.2 High-tech exports	118	0.88	
4.1.3 PCT patent applications	94	0.21	
4.1.4 Domestic market size	66	51.45	
4.1.5 Prevalence of gig economy	75	36.63	
4.1.6 ICT services exports	106	9.63	
2nd sub-pillar: Quality of Life	111	48.60	
4.2.1 Happiness	107	39.16	
4.2.2 Freedom to make life choices	93	60.24	
4.2.3 Income inequality	93	48.99	
4.2.4 Healthy life expectancy at birth	106	46.02	
3rd sub-pillar: SDG Contribution	96	54.48	
4.3.1 SDG 3: Good Health and Well-Being	117	27.64	
4.3.2 SDG 4: Quality Education	NA	NA	
4.3.3 SDG 5: Women's economic opportunity	95	64.91	
4.3.4 SDG 7: Affordable and Clean Energy	31	87.22	●
4.3.5 SDG 11: Sustainable Cities and Communities	111	38.13	

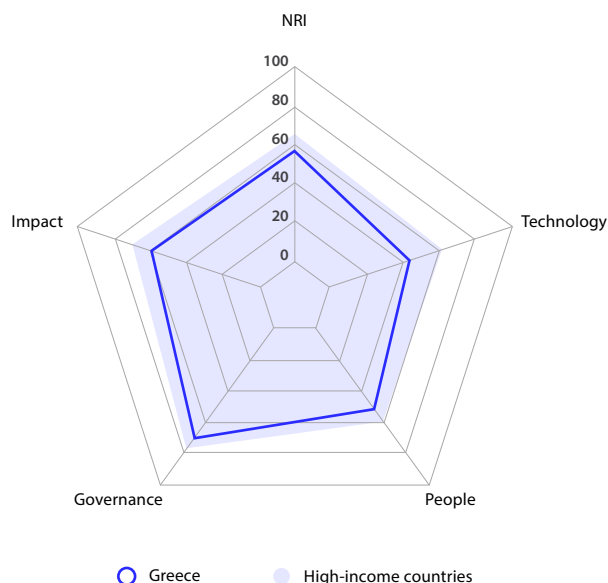
NOTE: ● Indicates a strength and ○ a weakness.

Greece

Rank
(Out of 131) Score

Network Readiness Index 49 55.74

Pillar/sub-pillar	Rank	Score
A. Technology pillar	69	44.11
1st sub-pillar: Access	77	60.50
2nd sub-pillar: Content	48	41.82
3rd sub-pillar: Future Technologies	73	30.01
B. People pillar	41	51.94
1st sub-pillar: Individuals	20	58.32
2nd sub-pillar: Businesses	45	51.71
3rd sub-pillar: Governments	62	45.79
C. Governance pillar	42	69.15
1st sub-pillar: Trust	42	65.13
2nd sub-pillar: Regulation	42	71.80
3rd sub-pillar: Inclusion	54	70.53
D. Impact pillar	52	57.76
1st sub-pillar: Economy	73	29.42
2nd sub-pillar: Quality of Life	70	67.00
3rd sub-pillar: SDG Contribution	35	76.87



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	69	44.11
1st sub-pillar: Access	77	60.50
1.1.1 Mobile tariffs	71	54.95
1.1.2 Handset prices	41	68.49
1.1.3 FTTH/building Internet subscriptions	102	2.45
1.1.4 Population covered by at least a 3G mobile network	44	99.90
1.1.5 International Internet bandwidth	35	76.70
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	48	41.82
1.2.1 GitHub commits	38	20.23
1.2.2 Internet domain registrations	38	17.04
1.2.3 Mobile apps development	37	88.18
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	73	30.01
1.3.1 Adoption of emerging technologies	85	38.50
1.3.2 Investment in emerging technologies	111	23.50
1.3.3 Robot density	42	2.85
1.3.4 Computer software spending	7	55.21
B. People pillar	41	51.94
1st sub-pillar: Individuals	20	58.32
2.1.1 Mobile broadband internet traffic within the country	58	8.82
2.1.2 ICT skills in the education system	85	37.57
2.1.3 Use of virtual social networks	67	66.41
2.1.4 Tertiary enrollment	1	100.00
2.1.5 Adult literacy rate	29	97.38
2.1.6 AI talent concentration	7	39.77
2nd sub-pillar: Businesses	45	51.71
2.2.1 Firms with website	52	60.73
2.2.2 GERD financed by business enterprise	41	49.65
2.2.3 Knowledge intensive employment	45	47.92
2.2.4 Annual investment in telecommunication services	35	82.06
2.2.5 GERD performed by business enterprise	34	18.22
3rd sub-pillar: Governments	62	45.79
2.3.1 Government online services	64	69.70
2.3.2 Publication and use of open data	38	41.18
2.3.3 Government promotion of investment in emerging tech	108	17.76
2.3.4 R&D expenditure by governments and higher education	25	54.51

Indicator	Rank	Score
C. Governance pillar	42	69.15
1st sub-pillar: Trust	42	65.13
3.1.1 Secure Internet servers	44	72.57
3.1.2 Cybersecurity	35	93.87
3.1.3 Online access to financial account	74	23.33
3.1.4 Internet shopping	20	70.73
2nd sub-pillar: Regulation	42	71.80
3.2.1 Regulatory quality	43	55.73
3.2.2 ICT regulatory environment	35	89.80
3.2.3 Regulation of emerging technologies	66	42.89
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	55	70.56
3rd sub-pillar: Inclusion	54	70.53
3.3.1 E-Participation	49	77.78
3.3.2 Socioeconomic gap in use of digital payments	43	86.52
3.3.3 Availability of local online content	63	61.30
3.3.4 Gender gap in internet use	77	63.32
3.3.5 Rural gap in use of digital payments	65	63.76
D. Impact pillar	52	57.76
1st sub-pillar: Economy	73	29.42
4.1.1 High-tech and medium-high-tech manufacturing	64	22.07
4.1.2 High-tech exports	47	36.07
4.1.3 PCT patent applications	43	9.85
4.1.4 Domestic market size	53	57.02
4.1.5 Prevalence of gig economy	105	23.26
4.1.6 ICT services exports	69	28.24
2nd sub-pillar: Quality of Life	70	67.00
4.2.1 Happiness	51	69.90
4.2.2 Freedom to make life choices	121	33.78
4.2.3 Income inequality	41	75.13
4.2.4 Healthy life expectancy at birth	24	89.21
3rd sub-pillar: SDG Contribution	35	76.87
4.3.1 SDG 3: Good Health and Well-Being	40	80.83
4.3.2 SDG 4: Quality Education	42	50.59
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	32	86.80
4.3.5 SDG 11: Sustainable Cities and Communities	56	69.65

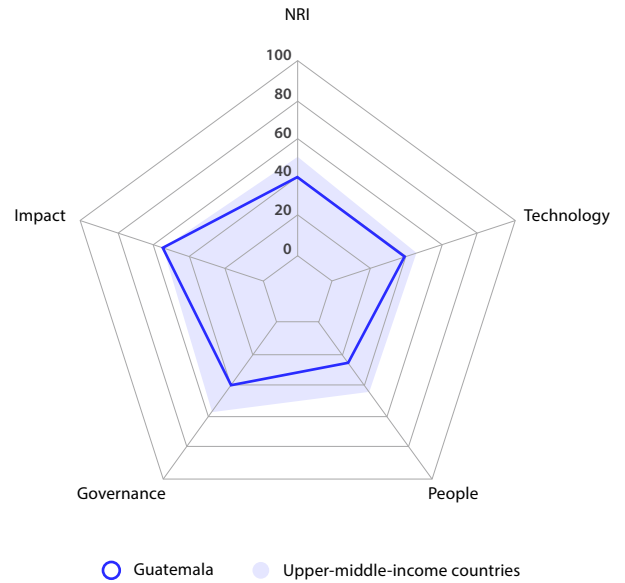
NOTE: ● Indicates a strength and ○ a weakness.

Guatemala

Rank
(Out of 131) Score

Network Readiness Index **106 37.85**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	103	33.21
1st sub-pillar: Access	105	48.31
2nd sub-pillar: Content	105	24.69
3rd sub-pillar: Future Technologies	92	26.64
B. People pillar	116	26.46
1st sub-pillar: Individuals	95	37.84
2nd sub-pillar: Businesses	125	20.30
3rd sub-pillar: Governments	117	21.25
C. Governance pillar	105	40.29
1st sub-pillar: Trust	124	15.59
2nd sub-pillar: Regulation	100	53.95
3rd sub-pillar: Inclusion	98	51.32
D. Impact pillar	80	51.45
1st sub-pillar: Economy	76	28.85
2nd sub-pillar: Quality of Life	79	64.81
3rd sub-pillar: SDG Contribution	77	60.68



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	103	33.21
1st sub-pillar: Access	105	48.31
1.1.1 Mobile tariffs	119	26.23
1.1.2 Handset prices	81	45.09
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	89	98.33
1.1.5 International Internet bandwidth	103	62.81
1.1.6 Internet access in schools	69	9.12
2nd sub-pillar: Content	105	24.69
1.2.1 GitHub commits	82	3.22
1.2.2 Internet domain registrations	74	2.86
1.2.3 Mobile apps development	93	67.07
1.2.4 AI scientific publications	83	25.59
3rd sub-pillar: Future Technologies	92	26.64
1.3.1 Adoption of emerging technologies	78	41.14
1.3.2 Investment in emerging technologies	72	37.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	116	1.27
B. People pillar	116	26.46
1st sub-pillar: Individuals	95	37.84
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	120	14.79
2.1.3 Use of virtual social networks	91	47.32
2.1.4 Tertiary enrollment	94	13.91
2.1.5 Adult literacy rate	77	75.32
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	125	20.30
2.2.1 Firms with website	57	56.03
2.2.2 GERD financed by business enterprise	75	13.67
2.2.3 Knowledge intensive employment	111	11.43
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	89	0.07
3rd sub-pillar: Governments	117	21.25
2.3.1 Government online services	101	49.70
2.3.2 Publication and use of open data	61	26.47
2.3.3 Government promotion of investment in emerging tech	119	8.83
2.3.4 R&D expenditure by governments and higher education	111	0.00

Indicator	Rank	Score
C. Governance pillar	105	40.29
1st sub-pillar: Trust	124	15.59
3.1.1 Secure Internet servers	101	37.29
3.1.2 Cybersecurity	123	11.60
3.1.3 Online access to financial account	114	7.65
3.1.4 Internet shopping	93	5.83
2nd sub-pillar: Regulation	100	53.95
3.2.1 Regulatory quality	85	36.53
3.2.2 ICT regulatory environment	125	52.55
3.2.3 Regulation of emerging technologies	103	20.26
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	80	60.42
3rd sub-pillar: Inclusion	98	51.32
3.3.1 E-Participation	99	48.15
3.3.2 Socioeconomic gap in use of digital payments	98	50.12
3.3.3 Availability of local online content	102	38.70
3.3.4 Gender gap in Internet use	89	55.79
3.3.5 Rural gap in use of digital payments	64	63.86
D. Impact pillar	80	51.45
1st sub-pillar: Economy	76	28.85
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	63	26.92
4.1.3 PCT patent applications	93	0.49
4.1.4 Domestic market size	69	49.75
4.1.5 Prevalence of gig economy	110	19.77
4.1.6 ICT services exports	24	47.35
2nd sub-pillar: Quality of Life	79	64.81
4.2.1 Happiness	41	72.72
4.2.2 Freedom to make life choices	21	89.09
4.2.3 Income inequality	105	36.93
4.2.4 Healthy life expectancy at birth	93	60.50
3rd sub-pillar: SDG Contribution	77	60.68
4.3.1 SDG 3: Good Health and Well-Being	99	47.29
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	106	58.77
4.3.4 SDG 7: Affordable and Clean Energy	75	75.61
4.3.5 SDG 11: Sustainable Cities and Communities	75	61.06

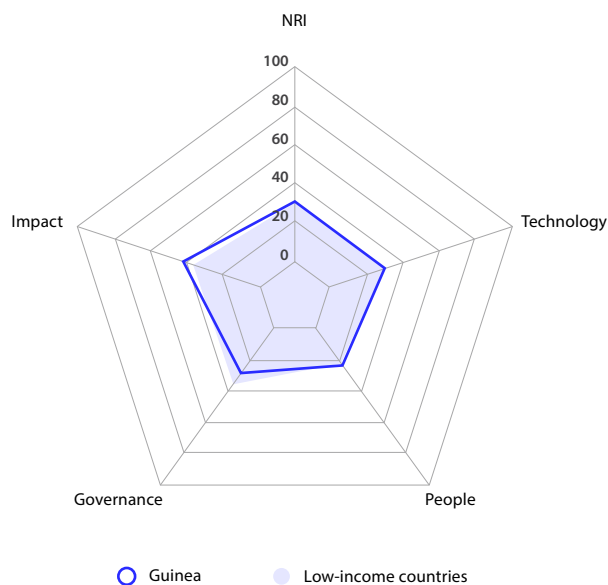
NOTE: ● Indicates a strength and ○ a weakness.

Guinea

Rank
(Out of 131) Score

Network Readiness Index **124 28.92**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	127	23.24
1st sub-pillar: Access	127	34.38
2nd sub-pillar: Content	129	6.85
3rd sub-pillar: Future Technologies	82	28.48
B. People pillar	121	23.10
1st sub-pillar: Individuals	127	13.50
2nd sub-pillar: Businesses	102	30.12
3rd sub-pillar: Governments	106	25.68
C. Governance pillar	126	27.96
1st sub-pillar: Trust	128	14.03
2nd sub-pillar: Regulation	110	48.79
3rd sub-pillar: Inclusion	130	21.04
D. Impact pillar	109	41.40
1st sub-pillar: Economy	75	29.08
2nd sub-pillar: Quality of Life	103	53.67
3rd sub-pillar: SDG Contribution	125	41.45



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	127	23.24
1st sub-pillar: Access	127	34.38
1.1.1 Mobile tariffs	106	36.26
1.1.2 Handset prices	118	29.30
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	130	51.91 ○
1.1.5 International Internet bandwidth	119	54.45
1.1.6 Internet access in schools	79	0.00 ○
2nd sub-pillar: Content	129	6.85
1.2.1 GitHub commits	127	0.06
1.2.2 Internet domain registrations	128	0.04 ○
1.2.3 Mobile apps development	129	20.45 ○
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	82	28.48
1.3.1 Adoption of emerging technologies	93	36.01 ●
1.3.2 Investment in emerging technologies	53	45.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	104	3.69
B. People pillar	121	23.10
1st sub-pillar: Individuals	127	13.50
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	121	14.20
2.1.3 Use of virtual social networks	112	13.92
2.1.4 Tertiary enrollment	116	3.61
2.1.5 Adult literacy rate	103	22.28
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	102	30.12
2.2.1 Firms with website	115	10.98
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	116	8.30
2.2.4 Annual investment in telecommunication services	97	71.09
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	106	25.68
2.3.1 Government online services	126	19.39
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	83	31.97
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	126	27.96
1st sub-pillar: Trust	128	14.03
3.1.1 Secure Internet servers	127	15.53
3.1.2 Cybersecurity	115	19.13
3.1.3 Online access to financial account	86	16.91 ●
3.1.4 Internet shopping	100	4.56
2nd sub-pillar: Regulation	110	48.79
3.2.1 Regulatory quality	118	18.93
3.2.2 ICT regulatory environment	115	60.39
3.2.3 Regulation of emerging technologies	111	8.95
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	11	89.04 ●
3rd sub-pillar: Inclusion	130	21.04
3.3.1 E-Participation	123	28.39
3.3.2 Socioeconomic gap in use of digital payments	100	49.14
3.3.3 Availability of local online content	128	10.58 ○
3.3.4 Gender gap in internet use	104	0.00 ○
3.3.5 Rural gap in use of digital payments	119	17.10
D. Impact pillar	109	41.40
1st sub-pillar: Economy	75	29.08
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	110	35.52
4.1.5 Prevalence of gig economy	35	58.43 ●
4.1.6 ICT services exports	78	22.36 ●
2nd sub-pillar: Quality of Life	103	53.67
4.2.1 Happiness	92	49.25 ●
4.2.2 Freedom to make life choices	110	51.10
4.2.3 Income inequality	19	83.92 ●
4.2.4 Healthy life expectancy at birth	125	30.41
3rd sub-pillar: SDG Contribution	125	41.45
4.3.1 SDG 3: Good Health and Well-Being	128	14.73 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	100	63.16 ●
4.3.4 SDG 7: Affordable and Clean Energy	103	64.49
4.3.5 SDG 11: Sustainable Cities and Communities	127	23.41

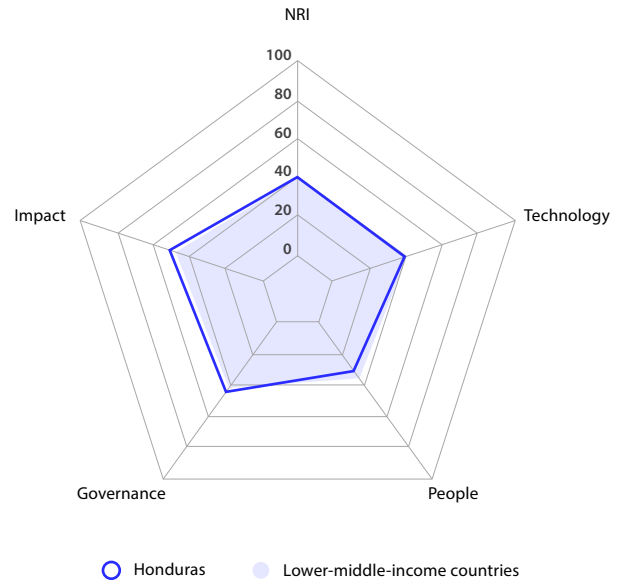
NOTE: ● Indicates a strength and ○ a weakness.

Honduras

Rank
(Out of 131) Score

Network Readiness Index 105 37.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	115	28.93
1st sub-pillar: Access	123	39.05
2nd sub-pillar: Content	119	19.43
3rd sub-pillar: Future Technologies	83	28.30
B. People pillar	106	30.40
1st sub-pillar: Individuals	104	32.82
2nd sub-pillar: Businesses	83	35.77
3rd sub-pillar: Governments	114	22.62
C. Governance pillar	102	42.97
1st sub-pillar: Trust	127	14.08
2nd sub-pillar: Regulation	88	58.97
3rd sub-pillar: Inclusion	84	55.85
D. Impact pillar	86	49.30
1st sub-pillar: Economy	106	18.30
2nd sub-pillar: Quality of Life	85	62.00
3rd sub-pillar: SDG Contribution	59	67.60



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	115	28.93
1st sub-pillar: Access	123	39.05
1.1.1 Mobile tariffs	127	9.53 ○
1.1.2 Handset prices	107	36.34
1.1.3 FTTH/building Internet subscriptions	89	9.67
1.1.4 Population covered by at least a 3G mobile network	118	92.67
1.1.5 International Internet bandwidth	72	69.97 ●
1.1.6 Internet access in schools	65	16.14
2nd sub-pillar: Content	119	19.43
1.2.1 GitHub commits	101	1.69
1.2.2 Internet domain registrations	108	0.41
1.2.3 Mobile apps development	96	65.10
1.2.4 AI scientific publications	94	10.51 ○
3rd sub-pillar: Future Technologies	83	28.30
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	78	35.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	60	20.85 ●
B. People pillar	106	30.40
1st sub-pillar: Individuals	104	32.82
2.1.1 Mobile broadband internet traffic within the country	60	8.63 ●
2.1.2 ICT skills in the education system	127	8.28 ○
2.1.3 Use of virtual social networks	94	45.76
2.1.4 Tertiary enrollment	89	16.17
2.1.5 Adult literacy rate	67	85.23
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	83	35.77
2.2.1 Firms with website	79	39.28
2.2.2 GERD financed by business enterprise	76	12.82
2.2.3 Knowledge intensive employment	101	16.22
2.2.4 Annual investment in telecommunication services	76	74.78
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	114	22.62
2.3.1 Government online services	108	44.85
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	NA	NA
2.3.4 R&D expenditure by governments and higher education	110	0.40 ○

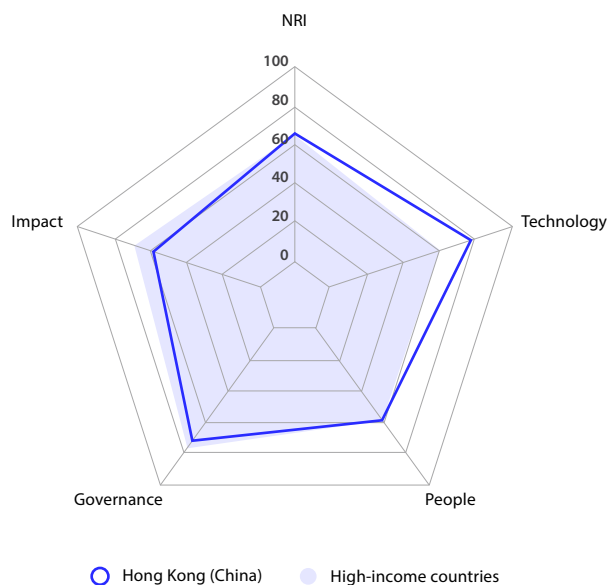
Indicator	Rank	Score
C. Governance pillar	102	42.97
1st sub-pillar: Trust	127	14.08
3.1.1 Secure Internet servers	102	36.67
3.1.2 Cybersecurity	129	0.48 ○
3.1.3 Online access to financial account	108	9.92
3.1.4 Internet shopping	86	9.23
2nd sub-pillar: Regulation	88	58.97
3.2.1 Regulatory quality	100	27.73
3.2.2 ICT regulatory environment	76	76.47 ●
3.2.3 Regulation of emerging technologies	106	16.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	41	74.35 ●
3rd sub-pillar: Inclusion	84	55.85
3.3.1 E-Participation	101	46.91
3.3.2 Socioeconomic gap in use of digital payments	101	49.12
3.3.3 Availability of local online content	97	43.51
3.3.4 Gender gap in Internet use	5	84.66 ●
3.3.5 Rural gap in use of digital payments	81	55.03
D. Impact pillar	86	49.30
1st sub-pillar: Economy	106	18.30
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	107	3.07
4.1.3 PCT patent applications	91	0.69
4.1.4 Domestic market size	98	39.36
4.1.5 Prevalence of gig economy	NA	NA
4.1.6 ICT services exports	65	30.06 ●
2nd sub-pillar: Quality of Life	85	62.00
4.2.1 Happiness	48	70.07 ●
4.2.2 Freedom to make life choices	51	77.98 ●
4.2.3 Income inequality	104	37.19
4.2.4 Healthy life expectancy at birth	90	62.78
3rd sub-pillar: SDG Contribution	59	67.60
4.3.1 SDG 3: Good Health and Well-Being	90	56.85
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	95	64.91
4.3.4 SDG 7: Affordable and Clean Energy	78	75.10
4.3.5 SDG 11: Sustainable Cities and Communities	52	73.53 ●

NOTE: ● Indicates a strength and ○ a weakness.

Hong Kong (China)

Rank (Out of 131) Score
Network Readiness Index 30 65.40

Pillar/sub-pillar	Rank	Score
A. Technology pillar	5	75.18
1st sub-pillar: Access	7	84.49
2nd sub-pillar: Content	4	83.90
3rd sub-pillar: Future Technologies	15	57.14
B. People pillar	31	56.82
1st sub-pillar: Individuals	31	55.78
2nd sub-pillar: Businesses	40	54.08
3rd sub-pillar: Governments	26	60.59
C. Governance pillar	39	70.87
1st sub-pillar: Trust	30	70.80
2nd sub-pillar: Regulation	73	62.06
3rd sub-pillar: Inclusion	27	79.75
D. Impact pillar	47	58.73
1st sub-pillar: Economy	60	34.60
2nd sub-pillar: Quality of Life	104	52.88
3rd sub-pillar: SDG Contribution	5	88.69



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	5	75.18
1st sub-pillar: Access	7	84.49
1.1.1 Mobile tariffs	12	87.90 ●
1.1.2 Handset prices	14	83.55
1.1.3 FTTH/building Internet subscriptions	37	36.29
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	1	100.00 ●
1.1.6 Internet access in schools	30	99.54
2nd sub-pillar: Content	4	83.90
1.2.1 GitHub commits	1	100.00 ●
1.2.2 Internet domain registrations	12	54.80
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	12	80.79
3rd sub-pillar: Future Technologies	15	57.14
1.3.1 Adoption of emerging technologies	19	76.65
1.3.2 Investment in emerging technologies	15	74.75
1.3.3 Robot density	7	45.26
1.3.4 Computer software spending	28	31.92
B. People pillar	31	56.82
1st sub-pillar: Individuals	31	55.78
2.1.1 Mobile broadband internet traffic within the country	48	14.41
2.1.2 ICT skills in the education system	25	69.82
2.1.3 Use of virtual social networks	15	82.57
2.1.4 Tertiary enrollment	16	56.31
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	40	54.08
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	31	60.89
2.2.3 Knowledge intensive employment	29	63.80
2.2.4 Annual investment in telecommunication services	38	81.44
2.2.5 GERD performed by business enterprise	43	10.18
3rd sub-pillar: Governments	26	60.59
2.3.1 Government online services	NA	NA
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	9	78.29
2.3.4 R&D expenditure by governments and higher education	46	42.90

Indicator	Rank	Score
C. Governance pillar	39	70.87
1st sub-pillar: Trust	30	70.80
3.1.1 Secure Internet servers	11	89.09 ●
3.1.2 Cybersecurity	NA	NA
3.1.3 Online access to financial account	29	52.51
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	73	62.06
3.2.1 Regulatory quality	6	88.80 ●
3.2.2 ICT regulatory environment	72	80.98
3.2.3 Regulation of emerging technologies	28	67.37
3.2.4 E-commerce legislation	NA	NA
3.2.5 Privacy protection by law content	130	11.09 ○
3rd sub-pillar: Inclusion	27	79.75
3.3.1 E-Participation	NA	NA
3.3.2 Socioeconomic gap in use of digital payments	44	85.93
3.3.3 Availability of local online content	8	93.27 ●
3.3.4 Gender gap in Internet use	56	69.55
3.3.5 Rural gap in use of digital payments	47	70.25
D. Impact pillar	47	58.73
1st sub-pillar: Economy	60	34.60
4.1.1 High-tech and medium-high-tech manufacturing	51	30.04
4.1.2 High-tech exports	109	2.53 ○
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	45	60.61
4.1.5 Prevalence of gig economy	18	68.90
4.1.6 ICT services exports	99	10.94 ○
2nd sub-pillar: Quality of Life	104	52.88
4.2.1 Happiness	79	55.96 ○
4.2.2 Freedom to make life choices	113	49.80 ○
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	NA	NA
3rd sub-pillar: SDG Contribution	5	88.69
4.3.1 SDG 3: Good Health and Well-Being	NA	NA
4.3.2 SDG 4: Quality Education	3	80.99 ●
4.3.3 SDG 5: Women's economic opportunity	37	85.09
4.3.4 SDG 7: Affordable and Clean Energy	1	100.00 ●
4.3.5 SDG 11: Sustainable Cities and Communities	NA	NA

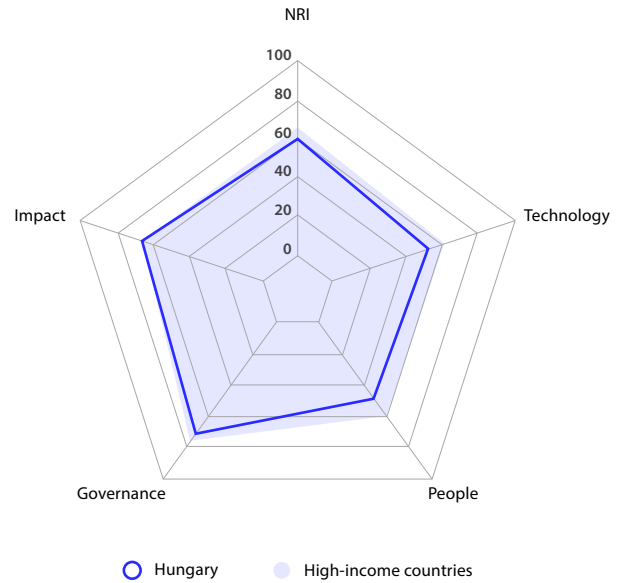
NOTE: ● Indicates a strength and ○ a weakness.

Hungary

Rank
(Out of 131) Score

Network Readiness Index 41 59.20

Pillar/sub-pillar	Rank	Score
A. Technology pillar	40	51.50
1st sub-pillar: Access	34	73.96
2nd sub-pillar: Content	32	51.13
3rd sub-pillar: Future Technologies	79	29.42
B. People pillar	54	48.48
1st sub-pillar: Individuals	72	46.88
2nd sub-pillar: Businesses	38	54.93
3rd sub-pillar: Governments	68	43.63
C. Governance pillar	38	71.66
1st sub-pillar: Trust	32	70.67
2nd sub-pillar: Regulation	35	75.53
3rd sub-pillar: Inclusion	57	68.78
D. Impact pillar	34	65.15
1st sub-pillar: Economy	27	46.75
2nd sub-pillar: Quality of Life	52	72.91
3rd sub-pillar: SDG Contribution	37	75.79



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	40	51.50
1st sub-pillar: Access	34	73.96
1.1.1 Mobile tariffs	40	72.18
1.1.2 Handset prices	39	68.60
1.1.3 FTTH/building Internet subscriptions	42	33.69
1.1.4 Population covered by at least a 3G mobile network	53	99.74
1.1.5 International Internet bandwidth	77	69.56
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	32	51.13
1.2.1 GitHub commits	27	36.23
1.2.2 Internet domain registrations	26	29.27
1.2.3 Mobile apps development	38	87.87
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	79	29.42
1.3.1 Adoption of emerging technologies	63	47.82
1.3.2 Investment in emerging technologies	101	28.25
1.3.3 Robot density	22	17.11
1.3.4 Computer software spending	46	24.51
B. People pillar	54	48.48
1st sub-pillar: Individuals	72	46.88
2.1.1 Mobile broadband internet traffic within the country	55	10.87
2.1.2 ICT skills in the education system	66	44.97
2.1.3 Use of virtual social networks	57	70.40
2.1.4 Tertiary enrollment	61	34.55
2.1.5 Adult literacy rate	18	98.87
2.1.6 AI talent concentration	18	21.64
2nd sub-pillar: Businesses	38	54.93
2.2.1 Firms with website	49	62.29
2.2.2 GERD financed by business enterprise	25	65.42
2.2.3 Knowledge intensive employment	33	59.75
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	19	32.28
3rd sub-pillar: Governments	68	43.63
2.3.1 Government online services	54	73.94
2.3.2 Publication and use of open data	69	22.06
2.3.3 Government promotion of investment in emerging tech	47	46.49
2.3.4 R&D expenditure by governments and higher education	56	32.02

Indicator	Rank	Score
C. Governance pillar	38	71.66
1st sub-pillar: Trust	32	70.67
3.1.1 Secure Internet servers	23	82.98
3.1.2 Cybersecurity	43	91.13
3.1.3 Online access to financial account	39	43.79
3.1.4 Internet shopping	25	64.77
2nd sub-pillar: Regulation	35	75.53
3.2.1 Regulatory quality	48	53.87
3.2.2 ICT regulatory environment	14	94.12
3.2.3 Regulation of emerging technologies	46	55.53
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	42	74.14
3rd sub-pillar: Inclusion	57	68.78
3.3.1 E-Participation	73	66.67
3.3.2 Socioeconomic gap in use of digital payments	54	81.42
3.3.3 Availability of local online content	58	65.38
3.3.4 Gender gap in Internet use	19	75.01
3.3.5 Rural gap in use of digital payments	80	55.43
D. Impact pillar	34	65.15
1st sub-pillar: Economy	27	46.75
4.1.1 High-tech and medium-high-tech manufacturing	5	79.47
4.1.2 High-tech exports	10	71.37
4.1.3 PCT patent applications	38	11.32
4.1.4 Domestic market size	52	57.59
4.1.5 Prevalence of gig economy	99	27.33
4.1.6 ICT services exports	53	33.43
2nd sub-pillar: Quality of Life	52	72.91
4.2.1 Happiness	44	72.08
4.2.2 Freedom to make life choices	94	59.77
4.2.3 Income inequality	21	82.91
4.2.4 Healthy life expectancy at birth	47	76.88
3rd sub-pillar: SDG Contribution	37	75.79
4.3.1 SDG 3: Good Health and Well-Being	60	72.65
4.3.2 SDG 4: Quality Education	33	60.77
4.3.3 SDG 5: Women's economic opportunity	20	95.61
4.3.4 SDG 7: Affordable and Clean Energy	57	81.70
4.3.5 SDG 11: Sustainable Cities and Communities	61	68.19

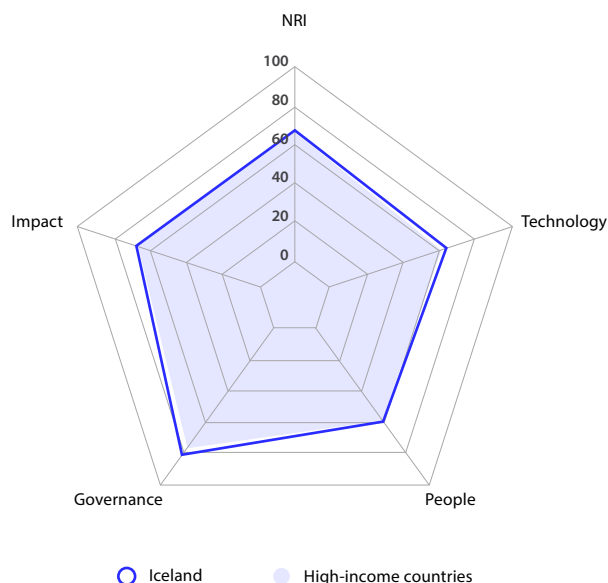
NOTE: ● Indicates a strength and ○ a weakness.

Iceland

Rank
(Out of 131) Score

Network Readiness Index **24 67.48**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	22	63.52
1st sub-pillar: Access	66	63.91
2nd sub-pillar: Content	6	82.08
3rd sub-pillar: Future Technologies	34	44.55
B. People pillar	29	57.98
1st sub-pillar: Individuals	63	49.49
2nd sub-pillar: Businesses	21	65.98
3rd sub-pillar: Governments	33	58.46
C. Governance pillar	19	80.76
1st sub-pillar: Trust	11	84.11
2nd sub-pillar: Regulation	33	75.66
3rd sub-pillar: Inclusion	19	82.52
D. Impact pillar	31	67.68
1st sub-pillar: Economy	58	36.24
2nd sub-pillar: Quality of Life	2	93.61
3rd sub-pillar: SDG Contribution	45	73.19



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	22	63.52
1st sub-pillar: Access	66	63.91
1.1.1 Mobile tariffs	60	63.27
1.1.2 Handset prices	17	82.53
1.1.3 FTTH/building Internet subscriptions	88	9.80 ○
1.1.4 Population covered by at least a 3G mobile network	24	99.99
1.1.5 International Internet bandwidth	97	63.98
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	6	82.08
1.2.1 GitHub commits	7	71.41 ●
1.2.2 Internet domain registrations	6	74.84 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	34	44.55
1.3.1 Adoption of emerging technologies	16	78.69
1.3.2 Investment in emerging technologies	24	65.75
1.3.3 Robot density	35	5.70
1.3.4 Computer software spending	35	28.06
B. People pillar	29	57.98
1st sub-pillar: Individuals	63	49.49
2.1.1 Mobile broadband internet traffic within the country	92	1.70
2.1.2 ICT skills in the education system	7	84.91 ●
2.1.3 Use of virtual social networks	5	90.46 ●
2.1.4 Tertiary enrollment	23	51.68
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	24	18.71
2nd sub-pillar: Businesses	21	65.98
2.2.1 Firms with website	16	84.42
2.2.2 GERD financed by business enterprise	42	47.74
2.2.3 Knowledge intensive employment	6	81.44 ●
2.2.4 Annual investment in telecommunication services	92	72.17 ○
2.2.5 GERD performed by business enterprise	13	44.11
3rd sub-pillar: Governments	33	58.46
2.3.1 Government online services	42	78.79
2.3.2 Publication and use of open data	38	41.18
2.3.3 Government promotion of investment in emerging tech	46	46.91
2.3.4 R&D expenditure by governments and higher education	15	66.97

The Network Readiness Index in detail

Indicator	Rank	Score
C. Governance pillar	19	80.76
1st sub-pillar: Trust	11	84.11
3.1.1 Secure Internet servers	10	89.63
3.1.2 Cybersecurity	66	79.45
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	10	83.24
2nd sub-pillar: Regulation	33	75.66
3.2.1 Regulatory quality	17	79.73
3.2.2 ICT regulatory environment	45	87.06
3.2.3 Regulation of emerging technologies	23	73.68
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	51	71.14
3rd sub-pillar: Inclusion	19	82.52
3.3.1 E-Participation	50	76.54
3.3.2 Socioeconomic gap in use of digital payments	4	99.45 ●
3.3.3 Availability of local online content	33	79.33
3.3.4 Gender gap in internet use	23	74.75
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	31	67.68
1st sub-pillar: Economy	58	36.24
4.1.1 High-tech and medium-high-tech manufacturing	78	13.55
4.1.2 High-tech exports	59	27.56
4.1.3 PCT patent applications	23	36.33
4.1.4 Domestic market size	125	28.91 ○
4.1.5 Prevalence of gig economy	29	62.21
4.1.6 ICT services exports	20	48.92
2nd sub-pillar: Quality of Life	2	93.61
4.2.1 Happiness	4	95.91 ●
4.2.2 Freedom to make life choices	12	92.91
4.2.3 Income inequality	8	92.71 ●
4.2.4 Healthy life expectancy at birth	9	92.92
3rd sub-pillar: SDG Contribution	45	73.19
4.3.1 SDG 3: Good Health and Well-Being	7	95.84 ●
4.3.2 SDG 4: Quality Education	30	61.58
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	129	8.52 ○
4.3.5 SDG 11: Sustainable Cities and Communities	1	100.00 ●

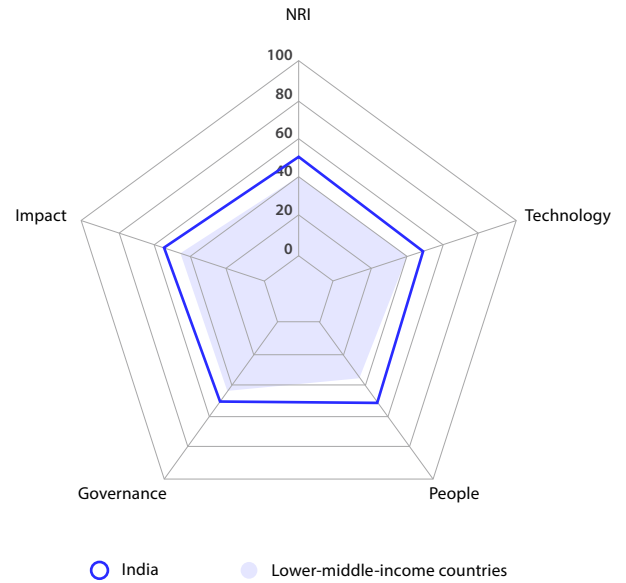
NOTE: ● Indicates a strength and ○ a weakness.

India

Network Readiness Index **61** **51.19**

Rank (Out of 131) Score

Pillar/sub-pillar	Rank	Score
A. Technology pillar	56	47.84
1st sub-pillar: Access	59	67.44
2nd sub-pillar: Content	49	41.58
3rd sub-pillar: Future Technologies	59	34.49
B. People pillar	46	50.90
1st sub-pillar: Individuals	30	55.84
2nd sub-pillar: Businesses	64	42.86
3rd sub-pillar: Governments	39	54.01
C. Governance pillar	83	50.96
1st sub-pillar: Trust	73	40.56
2nd sub-pillar: Regulation	80	60.65
3rd sub-pillar: Inclusion	97	51.68
D. Impact pillar	62	55.07
1st sub-pillar: Economy	23	50.22
2nd sub-pillar: Quality of Life	97	57.58
3rd sub-pillar: SDG Contribution	89	57.43



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	56	47.84
1st sub-pillar: Access	59	67.44
1.1.1 Mobile tariffs	41	71.85
1.1.2 Handset prices	53	62.30
1.1.3 FTTH/building Internet subscriptions	5	68.28 ●
1.1.4 Population covered by at least a 3G mobile network	68	99.57
1.1.5 International Internet bandwidth	2	94.73 ●
1.1.6 Internet access in schools	71	7.90 ○
2nd sub-pillar: Content	49	41.58
1.2.1 GitHub commits	66	5.43
1.2.2 Internet domain registrations	104	0.68
1.2.3 Mobile apps development	81	72.44
1.2.4 AI scientific publications	5	87.79 ●
3rd sub-pillar: Future Technologies	59	34.49
1.3.1 Adoption of emerging technologies	53	51.54
1.3.2 Investment in emerging technologies	26	64.25 ●
1.3.3 Robot density	49	0.99
1.3.4 Computer software spending	59	21.18
B. People pillar	46	50.90
1st sub-pillar: Individuals	30	55.84
2.1.1 Mobile broadband internet traffic within the country	2	90.53 ●
2.1.2 ICT skills in the education system	102	29.29
2.1.3 Use of virtual social networks	102	29.31
2.1.4 Tertiary enrollment	85	18.88
2.1.5 Adult literacy rate	88	67.04
2.1.6 AI talent concentration	1	100.00 ●
2nd sub-pillar: Businesses	64	42.86
2.2.1 Firms with website	70	45.52
2.2.2 GERD financed by business enterprise	49	45.46
2.2.3 Knowledge intensive employment	88	23.89
2.2.4 Annual investment in telecommunication services	3	93.12 ●
2.2.5 GERD performed by business enterprise	50	6.30
3rd sub-pillar: Governments	39	54.01
2.3.1 Government online services	24	84.84
2.3.2 Publication and use of open data	22	58.82
2.3.3 Government promotion of investment in emerging tech	70	35.47
2.3.4 R&D expenditure by governments and higher education	51	36.89

Indicator	Rank	Score
C. Governance pillar	83	50.96
1st sub-pillar: Trust	73	40.56
3.1.1 Secure Internet servers	69	49.26
3.1.2 Cybersecurity	15	97.46 ●
3.1.3 Online access to financial account	117	5.99 ○
3.1.4 Internet shopping	84	9.53
2nd sub-pillar: Regulation	80	60.65
3.2.1 Regulatory quality	81	37.33
3.2.2 ICT regulatory environment	64	83.53
3.2.3 Regulation of emerging technologies	34	63.95
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	92	51.79
3rd sub-pillar: Inclusion	97	51.68
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	90	54.30
3.3.3 Availability of local online content	72	58.17
3.3.4 Gender gap in Internet use	102	11.15 ○
3.3.5 Rural gap in use of digital payments	92	49.60
D. Impact pillar	62	55.07
1st sub-pillar: Economy	23	50.22
4.1.1 High-tech and medium-high-tech manufacturing	37	45.09
4.1.2 High-tech exports	38	43.45
4.1.3 PCT patent applications	52	7.68
4.1.4 Domestic market size	3	90.42 ●
4.1.5 Prevalence of gig economy	71	37.50
4.1.6 ICT services exports	4	77.18 ●
2nd sub-pillar: Quality of Life	97	57.58
4.2.1 Happiness	121	24.56 ○
4.2.2 Freedom to make life choices	36	83.24
4.2.3 Income inequality	58	68.59
4.2.4 Healthy life expectancy at birth	99	53.91
3rd sub-pillar: SDG Contribution	89	57.43
4.3.1 SDG 3: Good Health and Well-Being	94	53.96
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	99	64.04
4.3.4 SDG 7: Affordable and Clean Energy	77	75.27
4.3.5 SDG 11: Sustainable Cities and Communities	112	36.45

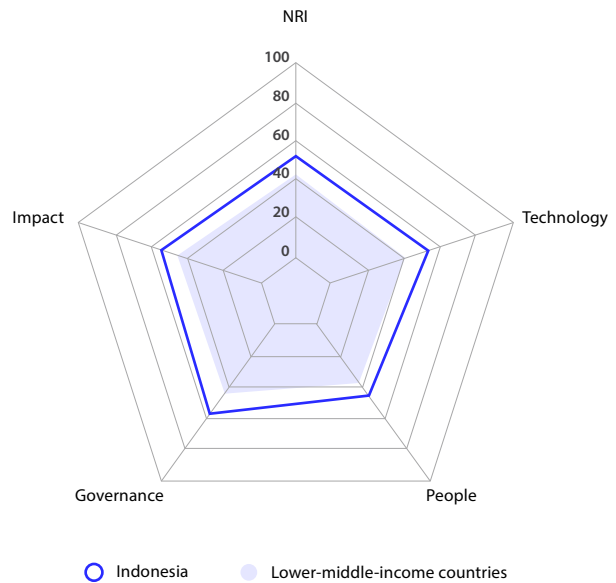
NOTE: ● Indicates a strength and ○ a weakness.

Indonesia

Rank
(Out of 131) Score

Network Readiness Index 59 51.51

Pillar/sub-pillar	Rank	Score
A. Technology pillar	48	49.82
1st sub-pillar: Access	36	73.55
2nd sub-pillar: Content	66	36.61
3rd sub-pillar: Future Technologies	45	39.30
B. People pillar	66	45.05
1st sub-pillar: Individuals	10	63.47
2nd sub-pillar: Businesses	115	24.74
3rd sub-pillar: Governments	56	46.94
C. Governance pillar	64	56.93
1st sub-pillar: Trust	64	47.73
2nd sub-pillar: Regulation	79	60.71
3rd sub-pillar: Inclusion	70	62.35
D. Impact pillar	67	54.26
1st sub-pillar: Economy	44	40.72
2nd sub-pillar: Quality of Life	65	67.80
3rd sub-pillar: SDG Contribution	97	54.25



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	48	49.82
1st sub-pillar: Access	36	73.55
1.1.1 Mobile tariffs	36	73.22
1.1.2 Handset prices	100	38.29
1.1.3 FTTH/building Internet subscriptions	7	67.26 ●
1.1.4 Population covered by at least a 3G mobile network	81	98.74
1.1.5 International Internet bandwidth	7	90.25 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	66	36.61
1.2.1 GitHub commits	71	4.34
1.2.2 Internet domain registrations	95	1.07
1.2.3 Mobile apps development	83	72.28
1.2.4 AI scientific publications	27	68.73
3rd sub-pillar: Future Technologies	45	39.30
1.3.1 Adoption of emerging technologies	41	59.47
1.3.2 Investment in emerging technologies	28	62.75 ●
1.3.3 Robot density	51	0.76 ○
1.3.4 Computer software spending	24	34.21 ●
B. People pillar	66	45.05
1st sub-pillar: Individuals	10	63.47
2.1.1 Mobile broadband internet traffic within the country	5	62.86 ●
2.1.2 ICT skills in the education system	19	72.19 ●
2.1.3 Use of virtual social networks	74	63.88
2.1.4 Tertiary enrollment	77	23.56
2.1.5 Adult literacy rate	41	94.88
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	115	24.74
2.2.1 Firms with website	112	12.71 ○
2.2.2 GERD financed by business enterprise	80	9.81
2.2.3 Knowledge intensive employment	105	14.06
2.2.4 Annual investment in telecommunication services	16	86.71 ●
2.2.5 GERD performed by business enterprise	82	0.43
3rd sub-pillar: Governments	56	46.94
2.3.1 Government online services	70	67.28
2.3.2 Publication and use of open data	36	42.65
2.3.3 Government promotion of investment in emerging tech	25	60.34
2.3.4 R&D expenditure by governments and higher education	76	17.50

Indicator	Rank	Score
C. Governance pillar	64	56.93
1st sub-pillar: Trust	64	47.73
3.1.1 Secure Internet servers	58	60.15
3.1.2 Cybersecurity	31	94.79
3.1.3 Online access to financial account	94	14.96
3.1.4 Internet shopping	61	21.01
2nd sub-pillar: Regulation	79	60.71
3.2.1 Regulatory quality	68	43.20
3.2.2 ICT regulatory environment	122	56.47 ○
3.2.3 Regulation of emerging technologies	37	62.11
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	114	41.77
3rd sub-pillar: Inclusion	70	62.35
3.3.1 E-Participation	56	74.07
3.3.2 Socioeconomic gap in use of digital payments	56	78.99
3.3.3 Availability of local online content	46	70.19
3.3.4 Gender gap in internet use	87	57.52
3.3.5 Rural gap in use of digital payments	110	30.99 ○
D. Impact pillar	67	54.26
1st sub-pillar: Economy	44	40.72
4.1.1 High-tech and medium-high-tech manufacturing	43	38.29
4.1.2 High-tech exports	45	40.31
4.1.3 PCT patent applications	98	0.09
4.1.4 Domestic market size	7	80.03 ●
4.1.5 Prevalence of gig economy	17	69.77 ●
4.1.6 ICT services exports	89	15.83
2nd sub-pillar: Quality of Life	65	67.80
4.2.1 Happiness	76	57.95
4.2.2 Freedom to make life choices	29	86.41
4.2.3 Income inequality	66	64.57
4.2.4 Healthy life expectancy at birth	92	62.27
3rd sub-pillar: SDG Contribution	97	54.25
4.3.1 SDG 3: Good Health and Well-Being	97	49.89
4.3.2 SDG 4: Quality Education	71	22.43 ○
4.3.3 SDG 5: Women's economic opportunity	113	50.00
4.3.4 SDG 7: Affordable and Clean Energy	39	84.63
4.3.5 SDG 11: Sustainable Cities and Communities	69	64.30

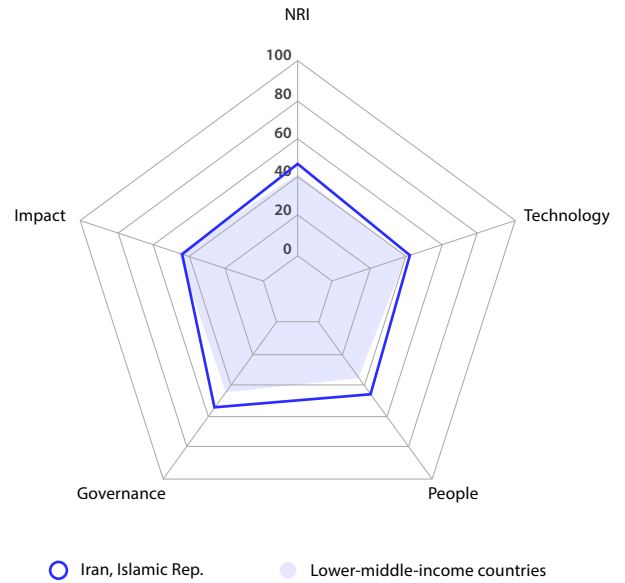
NOTE: ● Indicates a strength and ○ a weakness.

Iran, Islamic Rep.

Rank
(Out of 131) Score

Network Readiness Index 82 46.07

Pillar/sub-pillar	Rank	Score
A. Technology pillar	80	41.57
1st sub-pillar: Access	92	54.99
2nd sub-pillar: Content	62	37.33
3rd sub-pillar: Future Technologies	64	32.40
B. People pillar	62	46.02
1st sub-pillar: Individuals	64	49.25
2nd sub-pillar: Businesses	70	39.69
3rd sub-pillar: Governments	47	49.12
C. Governance pillar	75	53.92
1st sub-pillar: Trust	44	64.55
2nd sub-pillar: Regulation	121	35.17
3rd sub-pillar: Inclusion	74	62.02
D. Impact pillar	106	42.79
1st sub-pillar: Economy	65	32.26
2nd sub-pillar: Quality of Life	101	53.87
3rd sub-pillar: SDG Contribution	124	42.25



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	80	41.57
1st sub-pillar: Access	92	54.99
1.1.1 Mobile tariffs	19	82.25 ●
1.1.2 Handset prices	99	38.35
1.1.3 FTTH/building Internet subscriptions	64	23.66
1.1.4 Population covered by at least a 3G mobile network	109	94.53
1.1.5 International Internet bandwidth	23	80.58 ●
1.1.6 Internet access in schools	67	10.55
2nd sub-pillar: Content	62	37.33
1.2.1 GitHub commits	103	1.36
1.2.2 Internet domain registrations	56	5.65
1.2.3 Mobile apps development	106	58.40
1.2.4 AI scientific publications	10	83.89 ●
3rd sub-pillar: Future Technologies	64	32.40
1.3.1 Adoption of emerging technologies	81	39.26
1.3.2 Investment in emerging technologies	103	27.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	30	30.19 ●
B. People pillar	62	46.02
1st sub-pillar: Individuals	64	49.25
2.1.1 Mobile broadband internet traffic within the country	12	44.75 ●
2.1.2 ICT skills in the education system	101	30.47
2.1.3 Use of virtual social networks	88	51.12
2.1.4 Tertiary enrollment	52	38.49
2.1.5 Adult literacy rate	73	81.42
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	70	39.69
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	78	28.39
2.2.4 Annual investment in telecommunication services	19	85.22 ●
2.2.5 GERD performed by business enterprise	53	5.47
3rd sub-pillar: Governments	47	49.12
2.3.1 Government online services	85	57.57
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	76	33.71
2.3.4 R&D expenditure by governments and higher education	23	56.09 ●

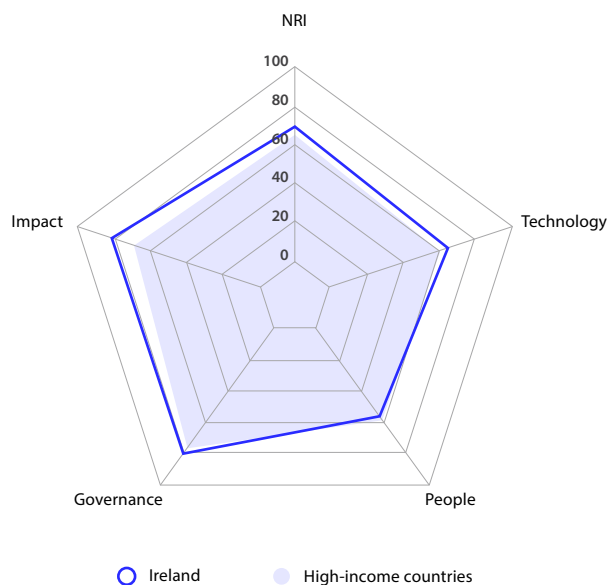
Indicator	Rank	Score
C. Governance pillar	75	53.92
1st sub-pillar: Trust	44	64.55
3.1.1 Secure Internet servers	55	62.18
3.1.2 Cybersecurity	62	80.74
3.1.3 Online access to financial account	33	50.73 ●
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	121	35.17
3.2.1 Regulatory quality	130	2.13 ○
3.2.2 ICT regulatory environment	58	84.71
3.2.3 Regulation of emerging technologies	101	22.37
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	131	0.00 ○
3rd sub-pillar: Inclusion	74	62.02
3.3.1 E-Participation	103	44.45
3.3.2 Socioeconomic gap in use of digital payments	39	88.98
3.3.3 Availability of local online content	92	47.84
3.3.4 Gender gap in Internet use	92	50.09
3.3.5 Rural gap in use of digital payments	9	78.75 ●
D. Impact pillar	106	42.79
1st sub-pillar: Economy	65	32.26
4.1.1 High-tech and medium-high-tech manufacturing	29	50.02
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	40	10.99
4.1.4 Domestic market size	22	69.36 ●
4.1.5 Prevalence of gig economy	101	26.16
4.1.6 ICT services exports	124	4.75 ○
2nd sub-pillar: Quality of Life	101	53.87
4.2.1 Happiness	96	46.46
4.2.2 Freedom to make life choices	119	39.75
4.2.3 Income inequality	83	55.53
4.2.4 Healthy life expectancy at birth	61	73.75
3rd sub-pillar: SDG Contribution	124	42.25
4.3.1 SDG 3: Good Health and Well-Being	43	79.11
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	129	3.51 ○
4.3.4 SDG 7: Affordable and Clean Energy	127	18.13 ○
4.3.5 SDG 11: Sustainable Cities and Communities	60	68.25

NOTE: ● Indicates a strength and ○ a weakness.

Ireland

Network Readiness Index **20** **70.15**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	19	64.91
1st sub-pillar: Access	31	74.32
2nd sub-pillar: Content	15	68.24
3rd sub-pillar: Future Technologies	21	52.18
B. People pillar	36	55.90
1st sub-pillar: Individuals	68	47.79
2nd sub-pillar: Businesses	17	67.97
3rd sub-pillar: Governments	41	51.94
C. Governance pillar	23	79.27
1st sub-pillar: Trust	20	78.06
2nd sub-pillar: Regulation	28	78.19
3rd sub-pillar: Inclusion	23	81.54
D. Impact pillar	6	80.51
1st sub-pillar: Economy	9	66.56
2nd sub-pillar: Quality of Life	18	83.49
3rd sub-pillar: SDG Contribution	1	91.47



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	19	64.91
1st sub-pillar: Access	31	74.32
1.1.1 Mobile tariffs	3	95.88 ●
1.1.2 Handset prices	5	97.08 ●
1.1.3 FTTH/building Internet subscriptions	85	12.47 ○
1.1.4 Population covered by at least a 3G mobile network	89	98.33 ○
1.1.5 International Internet bandwidth	84	67.86
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	15	68.24
1.2.1 GitHub commits	13	62.79
1.2.2 Internet domain registrations	22	41.93
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	21	52.18
1.3.1 Adoption of emerging technologies	26	71.34
1.3.2 Investment in emerging technologies	18	70.50
1.3.3 Robot density	32	7.96
1.3.4 Computer software spending	4	58.91 ●
B. People pillar	36	55.90
1st sub-pillar: Individuals	68	47.79
2.1.1 Mobile broadband internet traffic within the country	77	5.74 ○
2.1.2 ICT skills in the education system	17	77.51
2.1.3 Use of virtual social networks	48	73.71
2.1.4 Tertiary enrollment	26	50.04
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	12	31.97
2nd sub-pillar: Businesses	17	67.97
2.2.1 Firms with website	17	84.18
2.2.2 GERD financed by business enterprise	11	77.67
2.2.3 Knowledge intensive employment	16	73.40
2.2.4 Annual investment in telecommunication services	41	80.73
2.2.5 GERD performed by business enterprise	26	23.88
3rd sub-pillar: Governments	41	51.94
2.3.1 Government online services	46	76.37
2.3.2 Publication and use of open data	30	48.53
2.3.3 Government promotion of investment in emerging tech	27	57.74
2.3.4 R&D expenditure by governments and higher education	63	25.11

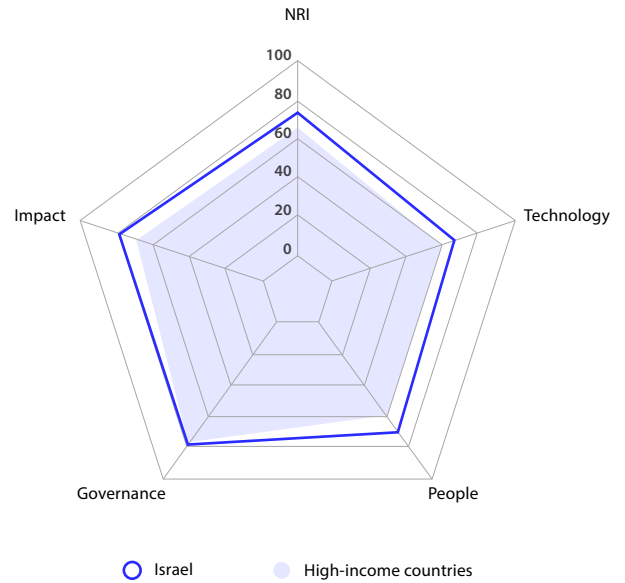
Indicator	Rank	Score
C. Governance pillar	23	79.27
1st sub-pillar: Trust	20	78.06
3.1.1 Secure Internet servers	6	93.04 ●
3.1.2 Cybersecurity	54	85.61
3.1.3 Online access to financial account	32	50.93
3.1.4 Internet shopping	11	82.66
2nd sub-pillar: Regulation	28	78.19
3.2.1 Regulatory quality	16	80.27
3.2.2 ICT regulatory environment	4	97.65 ●
3.2.3 Regulation of emerging technologies	35	62.89
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	98	50.16 ○
3rd sub-pillar: Inclusion	23	81.54
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	25	93.94
3.3.3 Availability of local online content	38	77.16
3.3.4 Gender gap in internet use	13	76.96
3.3.5 Rural gap in use of digital payments	31	74.48
D. Impact pillar	6	80.51
1st sub-pillar: Economy	9	66.56
4.1.1 High-tech and medium-high-tech manufacturing	6	77.76 ●
4.1.2 High-tech exports	20	59.35
4.1.3 PCT patent applications	21	38.62
4.1.4 Domestic market size	40	61.98
4.1.5 Prevalence of gig economy	31	61.63
4.1.6 ICT services exports	1	100.00 ●
2nd sub-pillar: Quality of Life	18	83.49
4.2.1 Happiness	19	82.78
4.2.2 Freedom to make life choices	44	79.89
4.2.3 Income inequality	24	81.41
4.2.4 Healthy life expectancy at birth	17	89.89
3rd sub-pillar: SDG Contribution	1	91.47
4.3.1 SDG 3: Good Health and Well-Being	24	89.29
4.3.2 SDG 4: Quality Education	10	70.71
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	1	100.00 ●
4.3.5 SDG 11: Sustainable Cities and Communities	4	97.34 ●

NOTE: ● Indicates a strength and ○ a weakness.

Israel

Network Readiness Index **15** **72.20**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	20	64.64
1st sub-pillar: Access	40	72.50
2nd sub-pillar: Content	19	65.32
3rd sub-pillar: Future Technologies	17	56.12
B. People pillar	10	69.25
1st sub-pillar: Individuals	2	73.77
2nd sub-pillar: Businesses	13	70.79
3rd sub-pillar: Governments	21	63.20
C. Governance pillar	26	77.63
1st sub-pillar: Trust	31	70.75
2nd sub-pillar: Regulation	19	83.42
3rd sub-pillar: Inclusion	32	78.73
D. Impact pillar	9	77.27
1st sub-pillar: Economy	4	69.04
2nd sub-pillar: Quality of Life	22	81.77
3rd sub-pillar: SDG Contribution	27	80.99



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	20	64.64
1st sub-pillar: Access	40	72.50
1.1.1 Mobile tariffs	8	89.40
1.1.2 Handset prices	28	72.89
1.1.3 FTTH/building Internet subscriptions	73	19.13 ○
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	82	68.89 ○
1.1.6 Internet access in schools	37	85.00
2nd sub-pillar: Content	19	65.32
1.2.1 GitHub commits	9	69.68
1.2.2 Internet domain registrations	39	15.57
1.2.3 Mobile apps development	11	98.62
1.2.4 AI scientific publications	16	77.38
3rd sub-pillar: Future Technologies	17	56.12
1.3.1 Adoption of emerging technologies	4	96.84 ●
1.3.2 Investment in emerging technologies	2	96.25 ●
1.3.3 Robot density	27	10.63
1.3.4 Computer software spending	61	20.74
B. People pillar	10	69.25
1st sub-pillar: Individuals	2	73.77
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	12	80.77
2.1.3 Use of virtual social networks	46	74.39
2.1.4 Tertiary enrollment	49	39.92
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	1	100.00 ●
2nd sub-pillar: Businesses	13	70.79
2.2.1 Firms with website	51	60.94
2.2.2 GERD financed by business enterprise	44	47.09
2.2.3 Knowledge intensive employment	11	75.14
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	1	100.00 ●
3rd sub-pillar: Governments	21	63.20
2.3.1 Government online services	54	73.94
2.3.2 Publication and use of open data	31	47.06
2.3.3 Government promotion of investment in emerging tech	6	83.26
2.3.4 R&D expenditure by governments and higher education	34	48.54

Indicator	Rank	Score
C. Governance pillar	26	77.63
1st sub-pillar: Trust	31	70.75
3.1.1 Secure Internet servers	41	75.18
3.1.2 Cybersecurity	44	90.77
3.1.3 Online access to financial account	25	58.49
3.1.4 Internet shopping	34	58.58
2nd sub-pillar: Regulation	19	83.42
3.2.1 Regulatory quality	21	74.13
3.2.2 ICT regulatory environment	90	71.18 ○
3.2.3 Regulation of emerging technologies	4	91.58 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	32	80.21
3rd sub-pillar: Inclusion	32	78.73
3.3.1 E-Participation	64	70.37
3.3.2 Socioeconomic gap in use of digital payments	37	89.70
3.3.3 Availability of local online content	5	95.91 ●
3.3.4 Gender gap in Internet use	40	72.10
3.3.5 Rural gap in use of digital payments	61	65.55
D. Impact pillar	9	77.27
1st sub-pillar: Economy	4	69.04
4.1.1 High-tech and medium-high-tech manufacturing	38	44.31
4.1.2 High-tech exports	13	67.14
4.1.3 PCT patent applications	6	77.62 ●
4.1.4 Domestic market size	48	59.16
4.1.5 Prevalence of gig economy	8	84.30
4.1.6 ICT services exports	3	81.69 ●
2nd sub-pillar: Quality of Life	22	81.77
4.2.1 Happiness	3	96.14 ●
4.2.2 Freedom to make life choices	59	75.39
4.2.3 Income inequality	72	61.31 ○
4.2.4 Healthy life expectancy at birth	6	94.25 ●
3rd sub-pillar: SDG Contribution	27	80.99
4.3.1 SDG 3: Good Health and Well-Being	19	91.69
4.3.2 SDG 4: Quality Education	38	55.21
4.3.3 SDG 5: Women's economic opportunity	74	72.81
4.3.4 SDG 7: Affordable and Clean Energy	17	90.06
4.3.5 SDG 11: Sustainable Cities and Communities	10	95.18

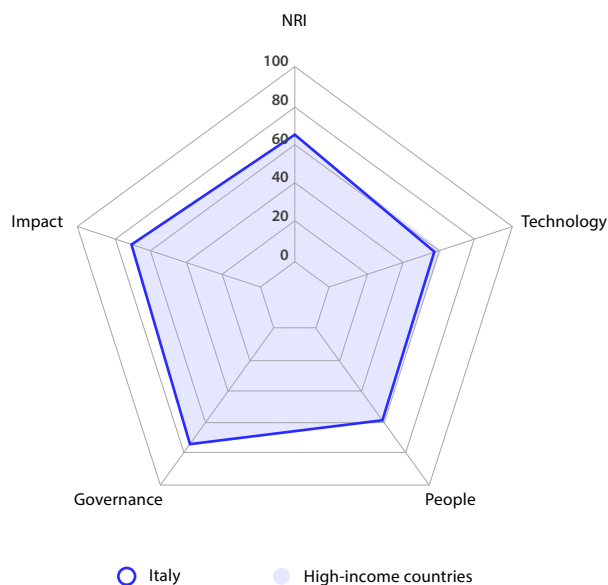
NOTE: ● Indicates a strength and ○ a weakness.

Italy

Rank
(Out of 131) Score

Network Readiness Index **32 64.11**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	33	55.69
1st sub-pillar: Access	23	75.66
2nd sub-pillar: Content	44	43.11
3rd sub-pillar: Future Technologies	25	48.29
B. People pillar	30	57.22
1st sub-pillar: Individuals	46	52.42
2nd sub-pillar: Businesses	28	62.90
3rd sub-pillar: Governments	37	56.35
C. Governance pillar	33	73.91
1st sub-pillar: Trust	40	66.63
2nd sub-pillar: Regulation	31	77.42
3rd sub-pillar: Inclusion	37	77.69
D. Impact pillar	28	69.63
1st sub-pillar: Economy	22	51.06
2nd sub-pillar: Quality of Life	48	73.63
3rd sub-pillar: SDG Contribution	21	84.21



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	33	55.69
1st sub-pillar: Access	23	75.66
1.1.1 Mobile tariffs	11	88.36 ●
1.1.2 Handset prices	15	83.14 ●
1.1.3 FTTH/building Internet subscriptions	35	37.33
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	41	75.14
1.1.6 Internet access in schools	42	70.00
2nd sub-pillar: Content	44	43.11
1.2.1 GitHub commits	39	17.25
1.2.2 Internet domain registrations	36	20.06
1.2.3 Mobile apps development	31	92.03
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	25	48.29
1.3.1 Adoption of emerging technologies	32	65.18
1.3.2 Investment in emerging technologies	61	41.00
1.3.3 Robot density	13	32.36
1.3.4 Computer software spending	8	54.61 ●
B. People pillar	30	57.22
1st sub-pillar: Individuals	46	52.42
2.1.1 Mobile broadband internet traffic within the country	14	40.95 ●
2.1.2 ICT skills in the education system	55	51.78
2.1.3 Use of virtual social networks	66	66.50
2.1.4 Tertiary enrollment	41	43.82
2.1.5 Adult literacy rate	15	99.19
2.1.6 AI talent concentration	31	12.28 ○
2nd sub-pillar: Businesses	28	62.90
2.2.1 Firms with website	31	75.40
2.2.2 GERD financed by business enterprise	19	69.18
2.2.3 Knowledge intensive employment	42	54.69
2.2.4 Annual investment in telecommunication services	8	90.73 ●
2.2.5 GERD performed by business enterprise	23	24.48
3rd sub-pillar: Governments	37	56.35
2.3.1 Government online services	36	82.42
2.3.2 Publication and use of open data	20	61.76
2.3.3 Government promotion of investment in emerging tech	69	35.66
2.3.4 R&D expenditure by governments and higher education	39	45.57

Indicator	Rank	Score
C. Governance pillar	33	73.91
1st sub-pillar: Trust	40	66.63
3.1.1 Secure Internet servers	34	79.29
3.1.2 Cybersecurity	27	96.06
3.1.3 Online access to financial account	68	26.71
3.1.4 Internet shopping	26	64.45
2nd sub-pillar: Regulation	31	77.42
3.2.1 Regulatory quality	47	54.40
3.2.2 ICT regulatory environment	1	100.00 ●
3.2.3 Regulation of emerging technologies	38	61.84
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	54	70.88
3rd sub-pillar: Inclusion	37	77.69
3.3.1 E-Participation	41	81.48
3.3.2 Socioeconomic gap in use of digital payments	29	92.67
3.3.3 Availability of local online content	41	75.00
3.3.4 Gender gap in internet use	84	59.53 ○
3.3.5 Rural gap in use of digital payments	6	79.77 ●
D. Impact pillar	28	69.63
1st sub-pillar: Economy	22	51.06
4.1.1 High-tech and medium-high-tech manufacturing	27	51.60
4.1.2 High-tech exports	27	52.99
4.1.3 PCT patent applications	24	35.59
4.1.4 Domestic market size	12	77.39 ●
4.1.5 Prevalence of gig economy	32	61.34
4.1.6 ICT services exports	72	27.47 ○
2nd sub-pillar: Quality of Life	48	73.63
4.2.1 Happiness	30	76.36
4.2.2 Freedom to make life choices	107	55.59 ○
4.2.3 Income inequality	56	69.85
4.2.4 Healthy life expectancy at birth	10	92.72 ●
3rd sub-pillar: SDG Contribution	21	84.21
4.3.1 SDG 3: Good Health and Well-Being	21	90.22
4.3.2 SDG 4: Quality Education	34	59.84
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	15	90.56 ●
4.3.5 SDG 11: Sustainable Cities and Communities	30	83.93

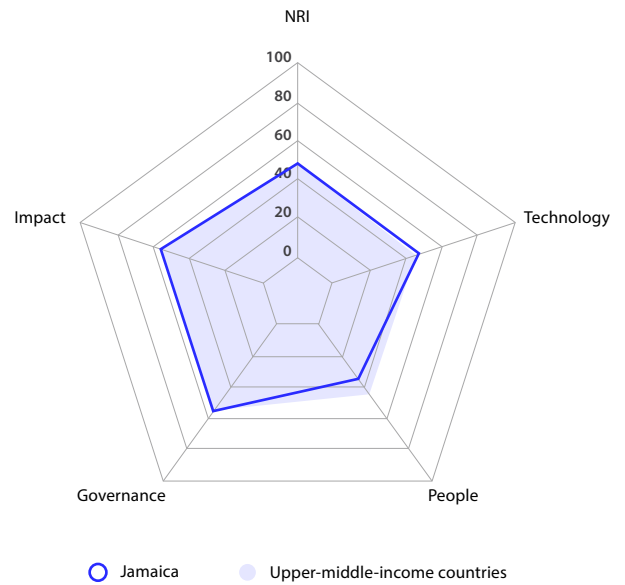
NOTE: ● Indicates a strength and ○ a weakness.

Jamaica

Rank
(Out of 131) Score

Network Readiness Index 76 46.96

Pillar/sub-pillar	Rank	Score
A. Technology pillar	76	42.51
1st sub-pillar: Access	82	58.53
2nd sub-pillar: Content	92	29.52
3rd sub-pillar: Future Technologies	43	39.49
B. People pillar	95	35.10
1st sub-pillar: Individuals	94	38.76
2nd sub-pillar: Businesses	97	31.31
3rd sub-pillar: Governments	89	35.24
C. Governance pillar	70	55.16
1st sub-pillar: Trust	98	30.12
2nd sub-pillar: Regulation	29	77.63
3rd sub-pillar: Inclusion	81	57.73
D. Impact pillar	63	55.07
1st sub-pillar: Economy	70	29.78
2nd sub-pillar: Quality of Life	75	66.59
3rd sub-pillar: SDG Contribution	56	68.83



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	76	42.51
1st sub-pillar: Access	82	58.53
1.1.1 Mobile tariffs	103	37.13
1.1.2 Handset prices	80	46.09
1.1.3 FTTH/building Internet subscriptions	65	22.57
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	86	66.87
1.1.6 Internet access in schools	39	78.83
2nd sub-pillar: Content	92	29.52
1.2.1 GitHub commits	87	2.80
1.2.2 Internet domain registrations	90	1.32
1.2.3 Mobile apps development	87	71.00
1.2.4 AI scientific publications	63	42.95
3rd sub-pillar: Future Technologies	43	39.49
1.3.1 Adoption of emerging technologies	75	43.00
1.3.2 Investment in emerging technologies	71	38.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	23	37.48
B. People pillar	95	35.10
1st sub-pillar: Individuals	94	38.76
2.1.1 Mobile broadband internet traffic within the country	106	1.13
2.1.2 ICT skills in the education system	89	36.69
2.1.3 Use of virtual social networks	86	53.94
2.1.4 Tertiary enrollment	87	17.31
2.1.5 Adult literacy rate	69	84.71
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	97	31.31
2.2.1 Firms with website	94	31.08
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	71	31.54
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	89	35.24
2.3.1 Government online services	115	36.97
2.3.2 Publication and use of open data	47	35.29
2.3.3 Government promotion of investment in emerging tech	78	33.47
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	70	55.16
1st sub-pillar: Trust	98	30.12
3.1.1 Secure Internet servers	94	40.50
3.1.2 Cybersecurity	105	31.34
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	67	18.51
2nd sub-pillar: Regulation	29	77.63
3.2.1 Regulatory quality	67	43.47
3.2.2 ICT regulatory environment	84	74.71
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	6	92.35
3rd sub-pillar: Inclusion	81	57.73
3.3.1 E-Participation	113	34.56
3.3.2 Socioeconomic gap in use of digital payments	84	56.09
3.3.3 Availability of local online content	65	60.34
3.3.4 Gender gap in Internet use	2	96.76
3.3.5 Rural gap in use of digital payments	101	40.88
D. Impact pillar	63	55.07
1st sub-pillar: Economy	70	29.78
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	102	4.42
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	120	32.23
4.1.5 Prevalence of gig economy	56	44.77
4.1.6 ICT services exports	46	37.70
2nd sub-pillar: Quality of Life	75	66.59
4.2.1 Happiness	63	64.73
4.2.2 Freedom to make life choices	92	60.30
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	58	74.73
3rd sub-pillar: SDG Contribution	56	68.83
4.3.1 SDG 3: Good Health and Well-Being	67	68.54
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	109	55.26
4.3.4 SDG 7: Affordable and Clean Energy	82	73.85
4.3.5 SDG 11: Sustainable Cities and Communities	42	77.67

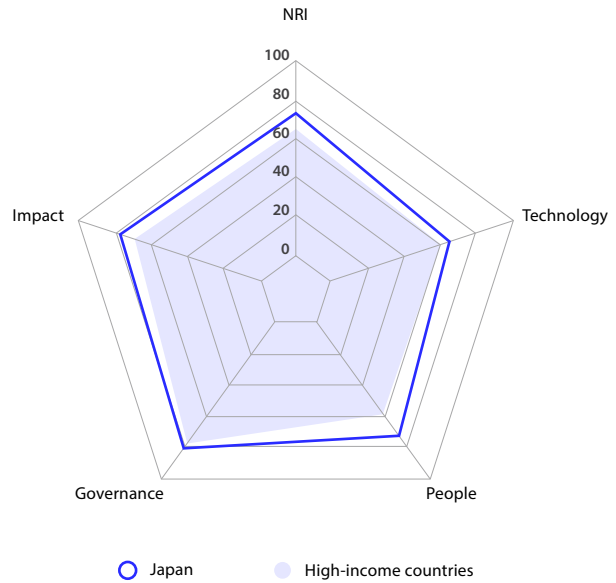
NOTE: ● Indicates a strength and ○ a weakness.

Japan

Rank
(Out of 131) Score

Network Readiness Index **13 73.09**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	18	65.02
1st sub-pillar: Access	9	80.72
2nd sub-pillar: Content	30	52.55
3rd sub-pillar: Future Technologies	10	61.79
B. People pillar	3	72.49
1st sub-pillar: Individuals	11	62.40
2nd sub-pillar: Businesses	6	78.05
3rd sub-pillar: Governments	12	77.01
C. Governance pillar	25	78.81
1st sub-pillar: Trust	35	69.33
2nd sub-pillar: Regulation	23	81.23
3rd sub-pillar: Inclusion	7	85.86
D. Impact pillar	12	76.04
1st sub-pillar: Economy	10	66.49
2nd sub-pillar: Quality of Life	31	79.39
3rd sub-pillar: SDG Contribution	23	82.24



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	18	65.02
1st sub-pillar: Access	9	80.72
1.1.1 Mobile tariffs	42	71.36
1.1.2 Handset prices	9	86.73
1.1.3 FTTH/building Internet subscriptions	8	65.89
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	25	79.67
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	30	52.55
1.2.1 GitHub commits	37	20.27
1.2.2 Internet domain registrations	41	11.87
1.2.3 Mobile apps development	33	90.38
1.2.4 AI scientific publications	6	87.67
3rd sub-pillar: Future Technologies	10	61.79
1.3.1 Adoption of emerging technologies	10	85.26
1.3.2 Investment in emerging technologies	9	80.00
1.3.3 Robot density	3	59.45
1.3.4 Computer software spending	52	22.45
B. People pillar	3	72.49
1st sub-pillar: Individuals	11	62.40
2.1.1 Mobile broadband internet traffic within the country	7	56.36
2.1.2 ICT skills in the education system	90	35.80
2.1.3 Use of virtual social networks	39	75.75
2.1.4 Tertiary enrollment	NA	NA
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	4	81.68
2nd sub-pillar: Businesses	6	78.05
2.2.1 Firms with website	4	95.19
2.2.2 GERD financed by business enterprise	2	96.86
2.2.3 Knowledge intensive employment	57	38.53
2.2.4 Annual investment in telecommunication services	4	92.04
2.2.5 GERD performed by business enterprise	4	67.65
3rd sub-pillar: Governments	12	77.01
2.3.1 Government online services	12	90.30
2.3.2 Publication and use of open data	7	88.24
2.3.3 Government promotion of investment in emerging tech	16	71.64
2.3.4 R&D expenditure by governments and higher education	21	57.85

Indicator	Rank	Score
C. Governance pillar	25	78.81
1st sub-pillar: Trust	35	69.33
3.1.1 Secure Internet servers	29	80.09
3.1.2 Cybersecurity	12	97.78
3.1.3 Online access to financial account	47	38.84
3.1.4 Internet shopping	29	60.61
2nd sub-pillar: Regulation	23	81.23
3.2.1 Regulatory quality	19	77.07
3.2.2 ICT regulatory environment	95	70.00
3.2.3 Regulation of emerging technologies	26	72.63
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	17	86.44
3rd sub-pillar: Inclusion	7	85.86
3.3.1 E-Participation	4	98.77
3.3.2 Socioeconomic gap in use of digital payments	21	96.17
3.3.3 Availability of local online content	2	97.60
3.3.4 Gender gap in internet use	74	65.04
3.3.5 Rural gap in use of digital payments	42	71.73
D. Impact pillar	12	76.04
1st sub-pillar: Economy	10	66.49
4.1.1 High-tech and medium-high-tech manufacturing	9	73.18
4.1.2 High-tech exports	11	68.17
4.1.3 PCT patent applications	1	100.00
4.1.4 Domestic market size	4	84.62
4.1.5 Prevalence of gig economy	50	50.29
4.1.6 ICT services exports	77	22.67
2nd sub-pillar: Quality of Life	31	79.39
4.2.1 Happiness	52	69.67
4.2.2 Freedom to make life choices	71	72.27
4.2.3 Income inequality	38	75.63
4.2.4 Healthy life expectancy at birth	1	100.00
3rd sub-pillar: SDG Contribution	23	82.24
4.3.1 SDG 3: Good Health and Well-Being	16	92.78
4.3.2 SDG 4: Quality Education	5	76.77
4.3.3 SDG 5: Women's economic opportunity	81	70.18
4.3.4 SDG 7: Affordable and Clean Energy	45	83.21
4.3.5 SDG 11: Sustainable Cities and Communities	22	88.26

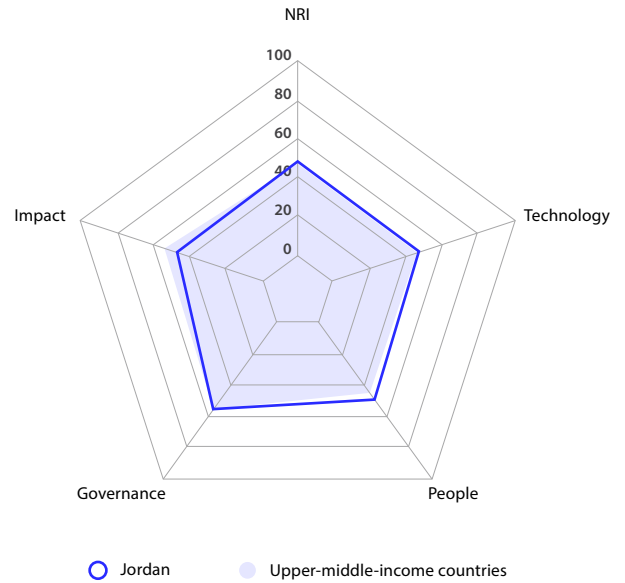
NOTE: ● Indicates a strength and ○ a weakness.

Jordan

Rank
(Out of 131) Score

Network Readiness Index 70 48.31

Pillar/sub-pillar	Rank	Score
A. Technology pillar	70	43.74
1st sub-pillar: Access	99	53.34
2nd sub-pillar: Content	63	37.26
3rd sub-pillar: Future Technologies	41	40.63
B. People pillar	53	48.58
1st sub-pillar: Individuals	40	53.78
2nd sub-pillar: Businesses	29	61.31
3rd sub-pillar: Governments	96	30.65
C. Governance pillar	73	54.32
1st sub-pillar: Trust	92	33.84
2nd sub-pillar: Regulation	64	64.17
3rd sub-pillar: Inclusion	66	64.95
D. Impact pillar	97	46.60
1st sub-pillar: Economy	83	27.11
2nd sub-pillar: Quality of Life	92	58.85
3rd sub-pillar: SDG Contribution	100	53.83



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	70	43.74
1st sub-pillar: Access	99	53.34
1.1.1 Mobile tariffs	110	34.52
1.1.2 Handset prices	70	49.97
1.1.3 FTTH/building Internet subscriptions	48	30.30
1.1.4 Population covered by at least a 3G mobile network	40	99.94
1.1.5 International Internet bandwidth	58	71.76
1.1.6 Internet access in schools	58	33.56
2nd sub-pillar: Content	63	37.26
1.2.1 GitHub commits	64	5.85
1.2.2 Internet domain registrations	72	3.18
1.2.3 Mobile apps development	66	78.97
1.2.4 AI scientific publications	37	61.06
3rd sub-pillar: Future Technologies	41	40.63
1.3.1 Adoption of emerging technologies	59	49.03
1.3.2 Investment in emerging technologies	44	49.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	48	23.60
B. People pillar	53	48.58
1st sub-pillar: Individuals	40	53.78
2.1.1 Mobile broadband internet traffic within the country	44	15.65
2.1.2 ICT skills in the education system	19	72.19
2.1.3 Use of virtual social networks	77	61.64
2.1.4 Tertiary enrollment	81	21.68
2.1.5 Adult literacy rate	27	97.75
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	29	61.31
2.2.1 Firms with website	27	78.10
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	74	30.48
2.2.4 Annual investment in telecommunication services	73	75.34
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	96	30.65
2.3.1 Government online services	118	33.94
2.3.2 Publication and use of open data	87	11.76
2.3.3 Government promotion of investment in emerging tech	48	46.26
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	73	54.32
1st sub-pillar: Trust	92	33.84
3.1.1 Secure Internet servers	96	39.20
3.1.2 Cybersecurity	77	70.45
3.1.3 Online access to financial account	111	9.24
3.1.4 Internet shopping	71	16.45
2nd sub-pillar: Regulation	64	64.17
3.2.1 Regulatory quality	61	47.20
3.2.2 ICT regulatory environment	14	94.12
3.2.3 Regulation of emerging technologies	45	55.79
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	85	57.07
3rd sub-pillar: Inclusion	66	64.95
3.3.1 E-Participation	118	30.86
3.3.2 Socioeconomic gap in use of digital payments	89	54.42
3.3.3 Availability of local online content	42	74.52
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	1	100.00
D. Impact pillar	97	46.60
1st sub-pillar: Economy	83	27.11
4.1.1 High-tech and medium-high-tech manufacturing	56	28.02
4.1.2 High-tech exports	66	21.21
4.1.3 PCT patent applications	50	7.98
4.1.4 Domestic market size	81	45.95
4.1.5 Prevalence of gig economy	39	57.27
4.1.6 ICT services exports	126	2.22
2nd sub-pillar: Quality of Life	92	58.85
4.2.1 Happiness	116	30.81
4.2.2 Freedom to make life choices	80	67.49
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	45	78.25
3rd sub-pillar: SDG Contribution	100	53.83
4.3.1 SDG 3: Good Health and Well-Being	96	51.25
4.3.2 SDG 4: Quality Education	56	35.86
4.3.3 SDG 5: Women's economic opportunity	125	25.44
4.3.4 SDG 7: Affordable and Clean Energy	65	79.28
4.3.5 SDG 11: Sustainable Cities and Communities	44	77.30

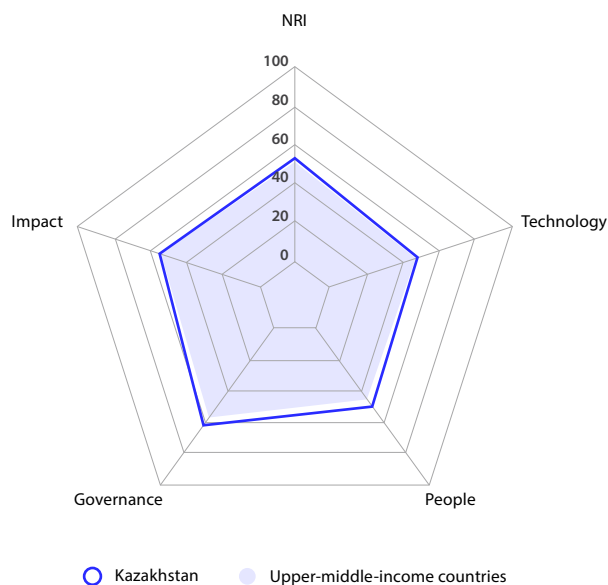
NOTE: ● Indicates a strength and ○ a weakness.

Kazakhstan

Rank
(Out of 131) Score

Network Readiness Index 58 52.46

Pillar/sub-pillar	Rank	Score
A. Technology pillar	74	42.87
1st sub-pillar: Access	49	69.99
2nd sub-pillar: Content	79	33.01
3rd sub-pillar: Future Technologies	96	25.60
B. People pillar	49	49.51
1st sub-pillar: Individuals	36	55.39
2nd sub-pillar: Businesses	55	47.89
3rd sub-pillar: Governments	64	45.25
C. Governance pillar	55	62.87
1st sub-pillar: Trust	49	59.23
2nd sub-pillar: Regulation	102	52.96
3rd sub-pillar: Inclusion	42	76.42
D. Impact pillar	65	54.60
1st sub-pillar: Economy	78	28.70
2nd sub-pillar: Quality of Life	40	75.98
3rd sub-pillar: SDG Contribution	84	59.12



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	74	42.87
1st sub-pillar: Access	49	69.99
1.1.1 Mobile tariffs	7	90.16 ●
1.1.2 Handset prices	73	48.52
1.1.3 FTTH/building Internet subscriptions	32	38.30
1.1.4 Population covered by at least a 3G mobile network	97	97.76
1.1.5 International Internet bandwidth	40	75.22
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	79	33.01
1.2.1 GitHub commits	83	3.21
1.2.2 Internet domain registrations	73	3.07
1.2.3 Mobile apps development	74	75.26
1.2.4 AI scientific publications	53	50.48
3rd sub-pillar: Future Technologies	96	25.60
1.3.1 Adoption of emerging technologies	84	38.60
1.3.2 Investment in emerging technologies	74	37.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	117	1.20 ○
B. People pillar	49	49.51
1st sub-pillar: Individuals	36	55.39
2.1.1 Mobile broadband internet traffic within the country	31	24.87 ●
2.1.2 ICT skills in the education system	81	38.17
2.1.3 Use of virtual social networks	64	67.19
2.1.4 Tertiary enrollment	32	46.97 ●
2.1.5 Adult literacy rate	8	99.75 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	55	47.89
2.2.1 Firms with website	67	47.25
2.2.2 GERD financed by business enterprise	34	58.64
2.2.3 Knowledge intensive employment	39	56.45
2.2.4 Annual investment in telecommunication services	72	75.82
2.2.5 GERD performed by business enterprise	72	1.31
3rd sub-pillar: Governments	64	45.25
2.3.1 Government online services	11	92.12 ●
2.3.2 Publication and use of open data	61	26.47
2.3.3 Government promotion of investment in emerging tech	26	59.69
2.3.4 R&D expenditure by governments and higher education	107	2.73 ○

Indicator	Rank	Score
C. Governance pillar	55	62.87
1st sub-pillar: Trust	49	59.23
3.1.1 Secure Internet servers	51	64.66
3.1.2 Cybersecurity	38	93.03 ●
3.1.3 Online access to financial account	51	35.30
3.1.4 Internet shopping	44	43.93
2nd sub-pillar: Regulation	102	52.96
3.2.1 Regulatory quality	65	44.80
3.2.2 ICT regulatory environment	127	48.24 ○
3.2.3 Regulation of emerging technologies	72	41.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	120	30.44 ○
3rd sub-pillar: Inclusion	42	76.42
3.3.1 E-Participation	26	87.66 ●
3.3.2 Socioeconomic gap in use of digital payments	9	98.66 ●
3.3.3 Availability of local online content	70	59.86
3.3.4 Gender gap in internet use	55	69.71
3.3.5 Rural gap in use of digital payments	57	66.23
D. Impact pillar	65	54.60
1st sub-pillar: Economy	78	28.70
4.1.1 High-tech and medium-high-tech manufacturing	71	18.21
4.1.2 High-tech exports	36	46.95
4.1.3 PCT patent applications	72	2.43
4.1.4 Domestic market size	41	61.53
4.1.5 Prevalence of gig economy	78	35.76
4.1.6 ICT services exports	112	7.31 ○
2nd sub-pillar: Quality of Life	40	75.98
4.2.1 Happiness	42	72.67
4.2.2 Freedom to make life choices	67	73.31
4.2.3 Income inequality	14	88.44 ●
4.2.4 Healthy life expectancy at birth	75	69.50
3rd sub-pillar: SDG Contribution	84	59.12
4.3.1 SDG 3: Good Health and Well-Being	45	78.00
4.3.2 SDG 4: Quality Education	63	30.49
4.3.3 SDG 5: Women's economic opportunity	107	57.02
4.3.4 SDG 7: Affordable and Clean Energy	108	58.65
4.3.5 SDG 11: Sustainable Cities and Communities	54	71.43

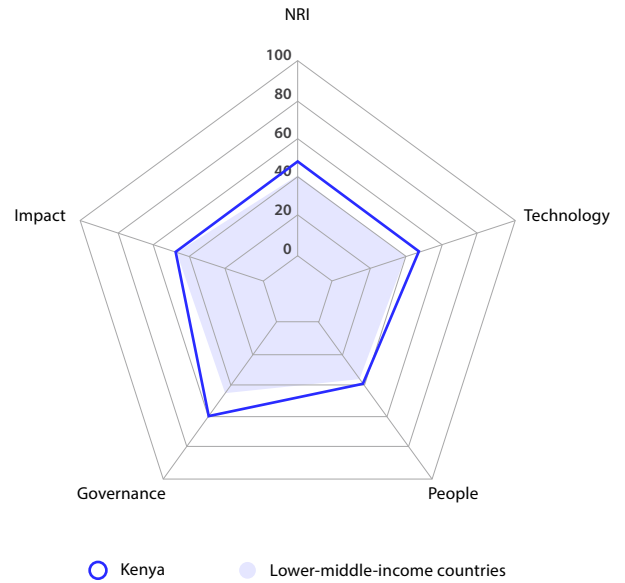
NOTE: ● Indicates a strength and ○ a weakness.

Kenya

Rank
(Out of 131) Score

Network Readiness Index 77 46.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	62	45.12
1st sub-pillar: Access	69	63.27
2nd sub-pillar: Content	89	30.55
3rd sub-pillar: Future Technologies	40	41.53
B. People pillar	88	37.69
1st sub-pillar: Individuals	105	32.68
2nd sub-pillar: Businesses	104	29.68
3rd sub-pillar: Governments	45	50.72
C. Governance pillar	62	58.28
1st sub-pillar: Trust	56	52.56
2nd sub-pillar: Regulation	66	64.11
3rd sub-pillar: Inclusion	80	58.16
D. Impact pillar	98	46.50
1st sub-pillar: Economy	68	30.64
2nd sub-pillar: Quality of Life	112	48.22
3rd sub-pillar: SDG Contribution	78	60.65



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	62	45.12
1st sub-pillar: Access	69	63.27
1.1.1 Mobile tariffs	85	47.89
1.1.2 Handset prices	96	40.61
1.1.3 FTTH/building Internet subscriptions	25	41.40
1.1.4 Population covered by at least a 3G mobile network	89	98.33
1.1.5 International Internet bandwidth	8	88.14
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	89	30.55
1.2.1 GitHub commits	72	4.23
1.2.2 Internet domain registrations	102	0.70
1.2.3 Mobile apps development	97	64.38
1.2.4 AI scientific publications	48	52.91
3rd sub-pillar: Future Technologies	40	41.53
1.3.1 Adoption of emerging technologies	55	50.77
1.3.2 Investment in emerging technologies	32	60.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	77	13.83
B. People pillar	88	37.69
1st sub-pillar: Individuals	105	32.68
2.1.1 Mobile broadband internet traffic within the country	54	10.88
2.1.2 ICT skills in the education system	49	53.25
2.1.3 Use of virtual social networks	110	17.33
2.1.4 Tertiary enrollment	109	5.66
2.1.5 Adult literacy rate	75	76.26
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	104	29.68
2.2.1 Firms with website	74	43.67
2.2.2 GERD financed by business enterprise	85	5.32
2.2.3 Knowledge intensive employment	95	18.74
2.2.4 Annual investment in telecommunication services	54	78.90
2.2.5 GERD performed by business enterprise	66	1.78
3rd sub-pillar: Governments	45	50.72
2.3.1 Government online services	73	66.67
2.3.2 Publication and use of open data	41	38.24
2.3.3 Government promotion of investment in emerging tech	57	40.73
2.3.4 R&D expenditure by governments and higher education	22	57.25

Indicator	Rank	Score
C. Governance pillar	62	58.28
1st sub-pillar: Trust	56	52.56
3.1.1 Secure Internet servers	86	43.70
3.1.2 Cybersecurity	59	81.38
3.1.3 Online access to financial account	18	66.35
3.1.4 Internet shopping	66	18.80
2nd sub-pillar: Regulation	66	64.11
3.2.1 Regulatory quality	98	29.33
3.2.2 ICT regulatory environment	33	90.00
3.2.3 Regulation of emerging technologies	75	39.74
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	76	61.49
3rd sub-pillar: Inclusion	80	58.16
3.3.1 E-Participation	85	58.02
3.3.2 Socioeconomic gap in use of digital payments	66	72.59
3.3.3 Availability of local online content	83	51.44
3.3.4 Gender gap in Internet use	96	43.07
3.3.5 Rural gap in use of digital payments	59	65.69
D. Impact pillar	98	46.50
1st sub-pillar: Economy	68	30.64
4.1.1 High-tech and medium-high-tech manufacturing	79	12.85
4.1.2 High-tech exports	82	12.60
4.1.3 PCT patent applications	82	1.34
4.1.4 Domestic market size	59	54.72
4.1.5 Prevalence of gig economy	41	56.10
4.1.6 ICT services exports	25	46.24
2nd sub-pillar: Quality of Life	112	48.22
4.2.1 Happiness	106	40.70
4.2.2 Freedom to make life choices	108	51.40
4.2.3 Income inequality	82	55.78
4.2.4 Healthy life expectancy at birth	107	45.01
3rd sub-pillar: SDG Contribution	78	60.65
4.3.1 SDG 3: Good Health and Well-Being	100	45.39
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	74	72.81
4.3.4 SDG 7: Affordable and Clean Energy	100	66.67
4.3.5 SDG 11: Sustainable Cities and Communities	78	57.73

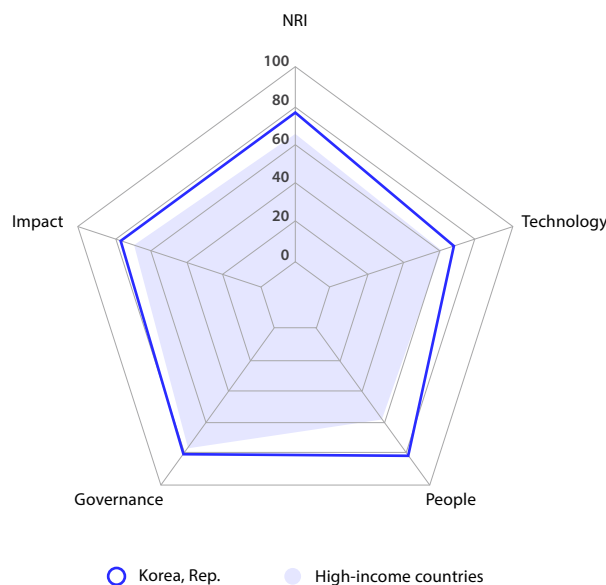
NOTE: ● Indicates a strength and ○ a weakness.

Korea, Rep.

Rank
(Out of 131) Score

Network Readiness Index 9 75.95

Pillar/sub-pillar	Rank	Score
A. Technology pillar	14	66.33
1st sub-pillar: Access	13	79.56
2nd sub-pillar: Content	25	55.82
3rd sub-pillar: Future Technologies	7	63.59
B. People pillar	1	81.58
1st sub-pillar: Individuals	1	75.03
2nd sub-pillar: Businesses	1	82.69
3rd sub-pillar: Governments	2	87.03
C. Governance pillar	22	80.01
1st sub-pillar: Trust	12	83.49
2nd sub-pillar: Regulation	39	74.10
3rd sub-pillar: Inclusion	20	82.43
D. Impact pillar	13	75.89
1st sub-pillar: Economy	2	70.99
2nd sub-pillar: Quality of Life	39	76.00
3rd sub-pillar: SDG Contribution	28	80.67



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	14	66.33
1st sub-pillar: Access	13	79.56
1.1.1 Mobile tariffs	50	68.99
1.1.2 Handset prices	42	68.18
1.1.3 FTTH/building Internet subscriptions	11	59.30
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	21	80.92
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	25	55.82
1.2.1 GitHub commits	28	36.21
1.2.2 Internet domain registrations	52	6.57
1.2.3 Mobile apps development	25	94.17
1.2.4 AI scientific publications	8	86.34
3rd sub-pillar: Future Technologies	7	63.59
1.3.1 Adoption of emerging technologies	20	75.40
1.3.2 Investment in emerging technologies	34	59.50
1.3.3 Robot density	1	100.00
1.3.4 Computer software spending	67	19.47
B. People pillar	1	81.58
1st sub-pillar: Individuals	1	75.03
2.1.1 Mobile broadband internet traffic within the country	13	42.30
2.1.2 ICT skills in the education system	11	81.36
2.1.3 Use of virtual social networks	9	85.59
2.1.4 Tertiary enrollment	4	65.88
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	1	100.00
2nd sub-pillar: Businesses	1	82.69
2.2.1 Firms with website	37	69.31
2.2.2 GERD financed by business enterprise	4	94.72
2.2.3 Knowledge intensive employment	32	60.11
2.2.4 Annual investment in telecommunication services	11	89.33
2.2.5 GERD performed by business enterprise	1	100.00
3rd sub-pillar: Governments	2	87.03
2.3.1 Government online services	1	100.00
2.3.2 Publication and use of open data	4	94.12
2.3.3 Government promotion of investment in emerging tech	10	77.45
2.3.4 R&D expenditure by governments and higher education	8	76.53

Indicator	Rank	Score
C. Governance pillar	22	80.01
1st sub-pillar: Trust	12	83.49
3.1.1 Secure Internet servers	47	69.34
3.1.2 Cybersecurity	5	98.49
3.1.3 Online access to financial account	9	82.64
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	39	74.10
3.2.1 Regulatory quality	32	68.53
3.2.2 ICT regulatory environment	101	66.67
3.2.3 Regulation of emerging technologies	32	64.21
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	52	71.07
3rd sub-pillar: Inclusion	20	82.43
3.3.1 E-Participation	1	100.00
3.3.2 Socioeconomic gap in use of digital payments	26	93.43
3.3.3 Availability of local online content	32	81.01
3.3.4 Gender gap in internet use	45	71.07
3.3.5 Rural gap in use of digital payments	56	66.67
D. Impact pillar	13	75.89
1st sub-pillar: Economy	2	70.99
4.1.1 High-tech and medium-high-tech manufacturing	8	74.70
4.1.2 High-tech exports	6	87.66
4.1.3 PCT patent applications	2	96.89
4.1.4 Domestic market size	14	76.66
4.1.5 Prevalence of gig economy	20	68.31
4.1.6 ICT services exports	82	21.73
2nd sub-pillar: Quality of Life	39	76.00
4.2.1 Happiness	49	70.05
4.2.2 Freedom to make life choices	99	58.00
4.2.3 Income inequality	29	79.40
4.2.4 Healthy life expectancy at birth	3	96.53
3rd sub-pillar: SDG Contribution	28	80.67
4.3.1 SDG 3: Good Health and Well-Being	6	96.29
4.3.2 SDG 4: Quality Education	6	76.64
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	100	66.67
4.3.5 SDG 11: Sustainable Cities and Communities	29	84.81

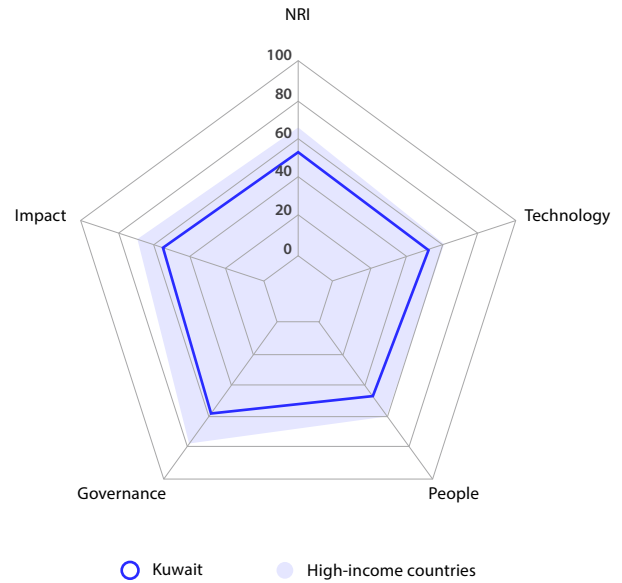
NOTE: ● Indicates a strength and ○ a weakness.

Kuwait

Rank
(Out of 131) Score

Network Readiness Index **63 51.04**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	57	47.41
1st sub-pillar: Access	60	67.18
2nd sub-pillar: Content	69	35.66
3rd sub-pillar: Future Technologies	44	39.40
B. People pillar	61	46.12
1st sub-pillar: Individuals	18	59.34
2nd sub-pillar: Businesses	78	37.16
3rd sub-pillar: Governments	72	41.87
C. Governance pillar	66	56.43
1st sub-pillar: Trust	66	45.01
2nd sub-pillar: Regulation	74	61.43
3rd sub-pillar: Inclusion	69	62.84
D. Impact pillar	68	54.19
1st sub-pillar: Economy	61	34.53
2nd sub-pillar: Quality of Life	27	79.98
3rd sub-pillar: SDG Contribution	114	48.06



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	57	47.41
1st sub-pillar: Access	60	67.18
1.1.1 Mobile tariffs	75	52.25
1.1.2 Handset prices	27	72.92 ●
1.1.3 FTTH/building Internet subscriptions	95	5.47 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	53	72.46
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	69	35.66
1.2.1 GitHub commits	98	1.75
1.2.2 Internet domain registrations	54	5.67
1.2.3 Mobile apps development	50	83.53
1.2.4 AI scientific publications	51	51.68
3rd sub-pillar: Future Technologies	44	39.40
1.3.1 Adoption of emerging technologies	76	42.95
1.3.2 Investment in emerging technologies	57	42.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	26	32.75 ●
B. People pillar	61	46.12
1st sub-pillar: Individuals	18	59.34
2.1.1 Mobile broadband internet traffic within the country	27	29.02 ●
2.1.2 ICT skills in the education system	69	44.38
2.1.3 Use of virtual social networks	6	87.34 ●
2.1.4 Tertiary enrollment	48	40.47
2.1.5 Adult literacy rate	37	95.47
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	78	37.16
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	96	1.13 ○
2.2.3 Knowledge intensive employment	67	33.18
2.2.4 Annual investment in telecommunication services	60	77.18
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	72	41.87
2.3.1 Government online services	31	83.64 ●
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	62	38.49
2.3.4 R&D expenditure by governments and higher education	104	3.49 ○

Indicator	Rank	Score
C. Governance pillar	66	56.43
1st sub-pillar: Trust	66	45.01
3.1.1 Secure Internet servers	75	48.08
3.1.2 Cybersecurity	73	74.63
3.1.3 Online access to financial account	54	34.02
3.1.4 Internet shopping	58	23.30
2nd sub-pillar: Regulation	74	61.43
3.2.1 Regulatory quality	57	48.80
3.2.2 ICT regulatory environment	88	71.76
3.2.3 Regulation of emerging technologies	76	38.42
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	102	48.18
3rd sub-pillar: Inclusion	69	62.84
3.3.1 E-Participation	18	90.13 ●
3.3.2 Socioeconomic gap in use of digital payments	60	76.49
3.3.3 Availability of local online content	48	68.51
3.3.4 Gender gap in Internet use	43	71.55
3.3.5 Rural gap in use of digital payments	121	7.53 ○
D. Impact pillar	68	54.19
1st sub-pillar: Economy	61	34.53
4.1.1 High-tech and medium-high-tech manufacturing	61	25.86
4.1.2 High-tech exports	93	6.53
4.1.3 PCT patent applications	83	1.32
4.1.4 Domestic market size	63	52.32
4.1.5 Prevalence of gig economy	46	53.20
4.1.6 ICT services exports	6	67.98 ●
2nd sub-pillar: Quality of Life	27	79.98
4.2.1 Happiness	50	69.94
4.2.2 Freedom to make life choices	35	83.44 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	29	86.58 ●
3rd sub-pillar: SDG Contribution	114	48.06
4.3.1 SDG 3: Good Health and Well-Being	71	67.63
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	131	0.00 ○
4.3.4 SDG 7: Affordable and Clean Energy	117	49.21
4.3.5 SDG 11: Sustainable Cities and Communities	50	75.41

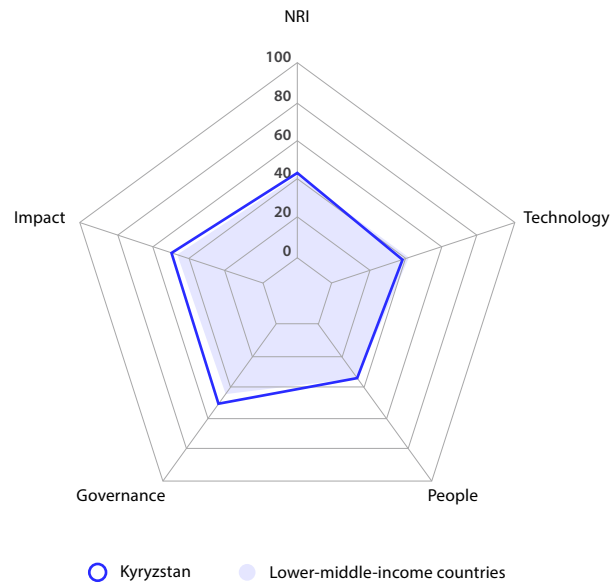
NOTE: ● Indicates a strength and ○ a weakness.

Kyrgyzstan

Rank
(Out of 131) Score

Network Readiness Index 95 41.03

Pillar/sub-pillar	Rank	Score
A. Technology pillar	111	30.64
1st sub-pillar: Access	97	53.65
2nd sub-pillar: Content	107	23.91
3rd sub-pillar: Future Technologies	127	14.37
B. People pillar	98	33.48
1st sub-pillar: Individuals	83	43.15
2nd sub-pillar: Businesses	93	32.70
3rd sub-pillar: Governments	112	24.60
C. Governance pillar	81	51.21
1st sub-pillar: Trust	82	35.86
2nd sub-pillar: Regulation	109	48.81
3rd sub-pillar: Inclusion	56	68.97
D. Impact pillar	89	48.79
1st sub-pillar: Economy	118	14.69
2nd sub-pillar: Quality of Life	34	77.46
3rd sub-pillar: SDG Contribution	98	54.21



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	111	30.64
1st sub-pillar: Access	97	53.65
1.1.1 Mobile tariffs	107	36.01
1.1.2 Handset prices	117	29.80
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	102	96.89
1.1.5 International Internet bandwidth	95	64.20
1.1.6 Internet access in schools	53	41.37
2nd sub-pillar: Content	107	23.91
1.2.1 GitHub commits	70	4.54
1.2.2 Internet domain registrations	105	0.65
1.2.3 Mobile apps development	91	68.29
1.2.4 AI scientific publications	86	22.16
3rd sub-pillar: Future Technologies	127	14.37
1.3.1 Adoption of emerging technologies	121	15.66
1.3.2 Investment in emerging technologies	120	19.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	89	8.19
B. People pillar	98	33.48
1st sub-pillar: Individuals	83	43.15
2.1.1 Mobile broadband internet traffic within the country	65	8.12
2.1.2 ICT skills in the education system	103	28.40
2.1.3 Use of virtual social networks	90	49.27
2.1.4 Tertiary enrollment	67	30.47
2.1.5 Adult literacy rate	11	99.50
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	93	32.70
2.2.1 Firms with website	59	55.11
2.2.2 GERD financed by business enterprise	81	8.53
2.2.3 Knowledge intensive employment	77	28.42
2.2.4 Annual investment in telecommunication services	100	70.70
2.2.5 GERD performed by business enterprise	78	0.72
3rd sub-pillar: Governments	112	24.60
2.3.1 Government online services	77	63.64
2.3.2 Publication and use of open data	83	13.24
2.3.3 Government promotion of investment in emerging tech	111	17.02
2.3.4 R&D expenditure by governments and higher education	102	4.53

Indicator	Rank	Score
C. Governance pillar	81	51.21
1st sub-pillar: Trust	82	35.86
3.1.1 Secure Internet servers	74	48.22
3.1.2 Cybersecurity	95	48.75
3.1.3 Online access to financial account	104	10.62
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	109	48.81
3.2.1 Regulatory quality	95	30.40
3.2.2 ICT regulatory environment	84	74.71
3.2.3 Regulation of emerging technologies	92	26.58
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	107	45.70
3rd sub-pillar: Inclusion	56	68.97
3.3.1 E-Participation	64	70.37
3.3.2 Socioeconomic gap in use of digital payments	30	92.28
3.3.3 Availability of local online content	99	41.35
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	41	71.88
D. Impact pillar	89	48.79
1st sub-pillar: Economy	118	14.69
4.1.1 High-tech and medium-high-tech manufacturing	107	0.00
4.1.2 High-tech exports	75	15.48
4.1.3 PCT patent applications	99	0.00
4.1.4 Domestic market size	117	33.86
4.1.5 Prevalence of gig economy	95	28.49
4.1.6 ICT services exports	101	10.32
2nd sub-pillar: Quality of Life	34	77.46
4.2.1 Happiness	72	60.28
4.2.2 Freedom to make life choices	13	92.00
4.2.3 Income inequality	16	85.43
4.2.4 Healthy life expectancy at birth	70	72.13
3rd sub-pillar: SDG Contribution	98	54.21
4.3.1 SDG 3: Good Health and Well-Being	66	68.88
4.3.2 SDG 4: Quality Education	79	0.00
4.3.3 SDG 5: Women's economic opportunity	90	67.54
4.3.4 SDG 7: Affordable and Clean Energy	96	69.59
4.3.5 SDG 11: Sustainable Cities and Communities	68	65.02

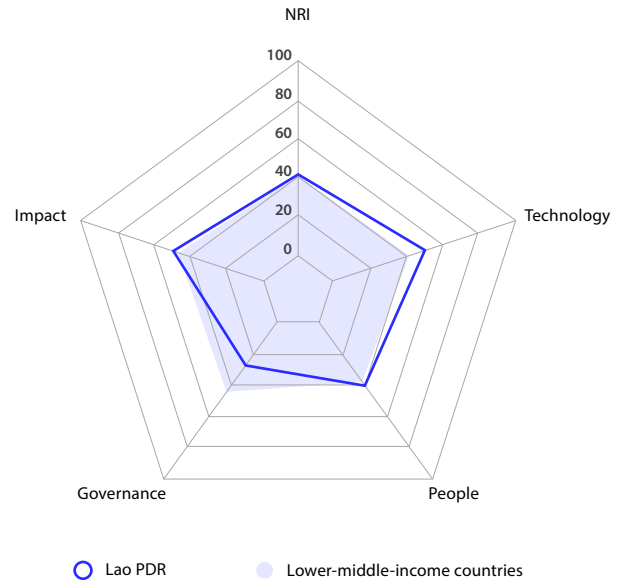
NOTE: ● Indicates a strength and ○ a weakness.

Lao PDR

Rank
(Out of 131) Score

Network Readiness Index **102 39.45**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	75	42.83
1st sub-pillar: Access	74	61.26
2nd sub-pillar: Content	113	21.76
3rd sub-pillar: Future Technologies	30	45.47
B. People pillar	84	38.22
1st sub-pillar: Individuals	76	45.94
2nd sub-pillar: Businesses	82	36.37
3rd sub-pillar: Governments	93	32.36
C. Governance pillar	127	27.09
1st sub-pillar: Trust	119	18.58
2nd sub-pillar: Regulation	124	34.11
3rd sub-pillar: Inclusion	127	28.57
D. Impact pillar	84	49.68
1st sub-pillar: Economy	92	24.84
2nd sub-pillar: Quality of Life	80	64.45
3rd sub-pillar: SDG Contribution	82	59.76



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	75	42.83
1st sub-pillar: Access	74	61.26
1.1.1 Mobile tariffs	89	46.75
1.1.2 Handset prices	93	40.90
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	109	94.53
1.1.5 International Internet bandwidth	102	62.88
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	113	21.76
1.2.1 GitHub commits	113	0.44
1.2.2 Internet domain registrations	78	1.95
1.2.3 Mobile apps development	98	64.32
1.2.4 AI scientific publications	90	20.31
3rd sub-pillar: Future Technologies	30	45.47
1.3.1 Adoption of emerging technologies	69	44.69
1.3.2 Investment in emerging technologies	51	46.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	84	38.22
1st sub-pillar: Individuals	76	45.94
2.1.1 Mobile broadband internet traffic within the country	9	54.02
2.1.2 ICT skills in the education system	75	40.83
2.1.3 Use of virtual social networks	92	46.54
2.1.4 Tertiary enrollment	102	8.01
2.1.5 Adult literacy rate	74	80.28
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	82	36.37
2.2.1 Firms with website	99	24.72
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	96	18.40
2.2.4 Annual investment in telecommunication services	108	66.00
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	93	32.36
2.3.1 Government online services	128	16.97
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	43	47.75
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	127	27.09
1st sub-pillar: Trust	119	18.58
3.1.1 Secure Internet servers	111	31.68
3.1.2 Cybersecurity	116	18.94
3.1.3 Online access to financial account	119	5.12
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	124	34.11
3.2.1 Regulatory quality	116	19.73
3.2.2 ICT regulatory environment	128	25.49
3.2.3 Regulation of emerging technologies	69	42.37
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	127	16.30
3rd sub-pillar: Inclusion	127	28.57
3.3.1 E-Participation	127	18.52
3.3.2 Socioeconomic gap in use of digital payments	124	14.18
3.3.3 Availability of local online content	73	56.49
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	112	25.09
D. Impact pillar	84	49.68
1st sub-pillar: Economy	92	24.84
4.1.1 High-tech and medium-high-tech manufacturing	98	3.55
4.1.2 High-tech exports	44	40.46
4.1.3 PCT patent applications	99	0.00
4.1.4 Domestic market size	95	40.03
4.1.5 Prevalence of gig economy	43	54.36
4.1.6 ICT services exports	100	10.61
2nd sub-pillar: Quality of Life	80	64.45
4.2.1 Happiness	93	48.93
4.2.2 Freedom to make life choices	9	93.56
4.2.3 Income inequality	74	60.80
4.2.4 Healthy life expectancy at birth	98	54.50
3rd sub-pillar: SDG Contribution	82	59.76
4.3.1 SDG 3: Good Health and Well-Being	109	36.00
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	45	83.33
4.3.4 SDG 7: Affordable and Clean Energy	81	74.69
4.3.5 SDG 11: Sustainable Cities and Communities	101	45.00

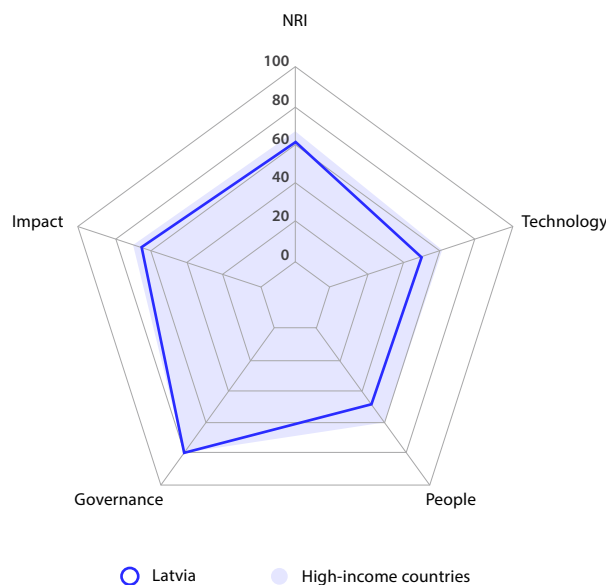
NOTE: ● Indicates a strength and ○ a weakness.

Latvia

Rank
(Out of 131) Score

Network Readiness Index 39 59.86

Pillar/sub-pillar	Rank	Score
A. Technology pillar	49	49.20
1st sub-pillar: Access	52	69.42
2nd sub-pillar: Content	33	48.67
3rd sub-pillar: Future Technologies	78	29.49
B. People pillar	55	47.79
1st sub-pillar: Individuals	44	53.10
2nd sub-pillar: Businesses	53	48.84
3rd sub-pillar: Governments	74	41.41
C. Governance pillar	24	78.93
1st sub-pillar: Trust	19	78.08
2nd sub-pillar: Regulation	20	83.34
3rd sub-pillar: Inclusion	43	75.38
D. Impact pillar	36	63.52
1st sub-pillar: Economy	45	40.64
2nd sub-pillar: Quality of Life	49	73.57
3rd sub-pillar: SDG Contribution	36	76.34



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	49	49.20
1st sub-pillar: Access	52	69.42
1.1.1 Mobile tariffs	61	62.04
1.1.2 Handset prices	48	65.03
1.1.3 FTTH/building Internet subscriptions	63	24.29
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	91	65.51
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	33	48.67
1.2.1 GitHub commits	30	31.06
1.2.2 Internet domain registrations	29	24.25
1.2.3 Mobile apps development	32	90.70
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	78	29.49
1.3.1 Adoption of emerging technologies	38	61.35
1.3.2 Investment in emerging technologies	54	44.75
1.3.3 Robot density	46	1.56
1.3.4 Computer software spending	86	10.31
B. People pillar	55	47.79
1st sub-pillar: Individuals	44	53.10
2.1.1 Mobile broadband internet traffic within the country	50	12.91
2.1.2 ICT skills in the education system	38	62.43
2.1.3 Use of virtual social networks	54	72.74
2.1.4 Tertiary enrollment	6	63.44
2.1.5 Adult literacy rate	2	99.89
2.1.6 AI talent concentration	36	7.21
2nd sub-pillar: Businesses	53	48.84
2.2.1 Firms with website	42	67.40
2.2.2 GERD financed by business enterprise	62	30.02
2.2.3 Knowledge intensive employment	23	68.77
2.2.4 Annual investment in telecommunication services	91	72.26
2.2.5 GERD performed by business enterprise	51	5.74
3rd sub-pillar: Governments	74	41.41
2.3.1 Government online services	87	56.98
2.3.2 Publication and use of open data	58	27.94
2.3.3 Government promotion of investment in emerging tech	67	37.28
2.3.4 R&D expenditure by governments and higher education	45	43.45

Indicator	Rank	Score
C. Governance pillar	24	78.93
1st sub-pillar: Trust	19	78.08
3.1.1 Secure Internet servers	36	79.16
3.1.2 Cybersecurity	21	97.23
3.1.3 Online access to financial account	16	69.36
3.1.4 Internet shopping	24	66.58
2nd sub-pillar: Regulation	20	83.34
3.2.1 Regulatory quality	26	72.80
3.2.2 ICT regulatory environment	45	87.06
3.2.3 Regulation of emerging technologies	39	60.53
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	2	96.32
3rd sub-pillar: Inclusion	43	75.38
3.3.1 E-Participation	87	56.79
3.3.2 Socioeconomic gap in use of digital payments	31	91.94
3.3.3 Availability of local online content	31	81.25
3.3.4 Gender gap in Internet use	14	75.59
3.3.5 Rural gap in use of digital payments	46	71.31
D. Impact pillar	36	63.52
1st sub-pillar: Economy	45	40.64
4.1.1 High-tech and medium-high-tech manufacturing	72	17.77
4.1.2 High-tech exports	19	59.80
4.1.3 PCT patent applications	33	19.50
4.1.4 Domestic market size	93	40.48
4.1.5 Prevalence of gig economy	40	56.40
4.1.6 ICT services exports	19	49.93
2nd sub-pillar: Quality of Life	49	73.57
4.2.1 Happiness	38	74.33
4.2.2 Freedom to make life choices	63	74.63
4.2.3 Income inequality	48	71.61
4.2.4 Healthy life expectancy at birth	62	73.72
3rd sub-pillar: SDG Contribution	36	76.34
4.3.1 SDG 3: Good Health and Well-Being	62	71.24
4.3.2 SDG 4: Quality Education	28	63.93
4.3.3 SDG 5: Women's economic opportunity	1	100.00
4.3.4 SDG 7: Affordable and Clean Energy	40	84.46
4.3.5 SDG 11: Sustainable Cities and Communities	72	62.07

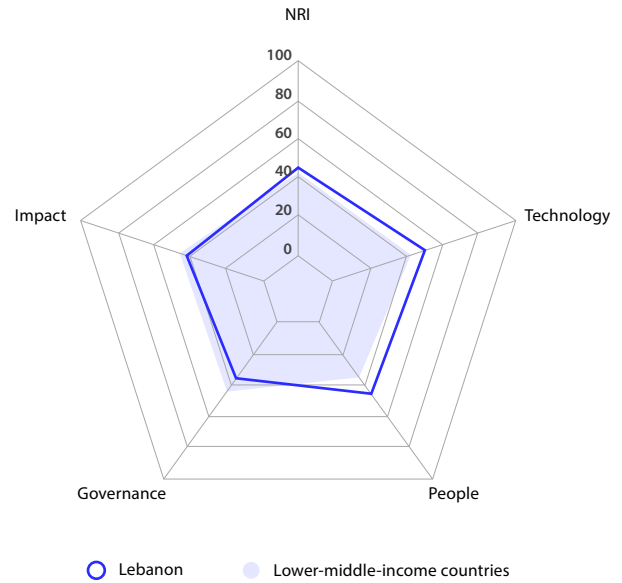
NOTE: ● Indicates a strength and ○ a weakness.

Lebanon

Rank
(Out of 131) Score

Network Readiness Index 91 42.30

Pillar/sub-pillar	Rank	Score
A. Technology pillar	60	45.71
1st sub-pillar: Access	51	69.49
2nd sub-pillar: Content	57	39.00
3rd sub-pillar: Future Technologies	81	28.62
B. People pillar	68	44.94
1st sub-pillar: Individuals	22	58.21
2nd sub-pillar: Businesses	44	51.78
3rd sub-pillar: Governments	111	24.82
C. Governance pillar	119	36.36
1st sub-pillar: Trust	110	23.79
2nd sub-pillar: Regulation	126	33.55
3rd sub-pillar: Inclusion	96	51.73
D. Impact pillar	108	42.18
1st sub-pillar: Economy	67	31.80
2nd sub-pillar: Quality of Life	122	39.83
3rd sub-pillar: SDG Contribution	93	54.92



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	60	45.71
1st sub-pillar: Access	51	69.49
1.1.1 Mobile tariffs	111	31.03
1.1.2 Handset prices	57	58.57
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	46	99.87
1.1.5 International Internet bandwidth	88	66.67
1.1.6 Internet access in schools	35	91.32
2nd sub-pillar: Content	57	39.00
1.2.1 GitHub commits	51	9.60
1.2.2 Internet domain registrations	57	5.62
1.2.3 Mobile apps development	59	81.55
1.2.4 AI scientific publications	40	59.24
3rd sub-pillar: Future Technologies	81	28.62
1.3.1 Adoption of emerging technologies	79	40.87
1.3.2 Investment in emerging technologies	62	40.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	102	4.24
B. People pillar	68	44.94
1st sub-pillar: Individuals	22	58.21
2.1.1 Mobile broadband internet traffic within the country	107	0.80
2.1.2 ICT skills in the education system	27	68.34
2.1.3 Use of virtual social networks	58	70.01
2.1.4 Tertiary enrollment	NA	NA
2.1.5 Adult literacy rate	48	93.68
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	44	51.78
2.2.1 Firms with website	47	62.38
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	52	41.18
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	111	24.82
2.3.1 Government online services	113	40.00
2.3.2 Publication and use of open data	97	5.88
2.3.3 Government promotion of investment in emerging tech	94	28.59
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	119	36.36
1st sub-pillar: Trust	110	23.79
3.1.1 Secure Internet servers	84	44.64
3.1.2 Cybersecurity	107	29.22
3.1.3 Online access to financial account	100	12.96
3.1.4 Internet shopping	88	8.34
2nd sub-pillar: Regulation	126	33.55
3.2.1 Regulatory quality	107	24.27
3.2.2 ICT regulatory environment	130	18.44
3.2.3 Regulation of emerging technologies	96	23.95
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	118	34.46
3rd sub-pillar: Inclusion	96	51.73
3.3.1 E-Participation	118	30.86
3.3.2 Socioeconomic gap in use of digital payments	93	52.99
3.3.3 Availability of local online content	81	51.68
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	45	71.37
D. Impact pillar	108	42.18
1st sub-pillar: Economy	67	31.80
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	76	14.58
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	90	42.44
4.1.5 Prevalence of gig economy	68	38.37
4.1.6 ICT services exports	NA	NA
2nd sub-pillar: Quality of Life	122	39.83
4.2.1 Happiness	127	0.00
4.2.2 Freedom to make life choices	126	8.15
4.2.3 Income inequality	32	78.39
4.2.4 Healthy life expectancy at birth	67	72.76
3rd sub-pillar: SDG Contribution	93	54.92
4.3.1 SDG 3: Good Health and Well-Being	61	71.60
4.3.2 SDG 4: Quality Education	72	20.44
4.3.3 SDG 5: Women's economic opportunity	122	33.33
4.3.4 SDG 7: Affordable and Clean Energy	60	80.79
4.3.5 SDG 11: Sustainable Cities and Communities	58	68.47

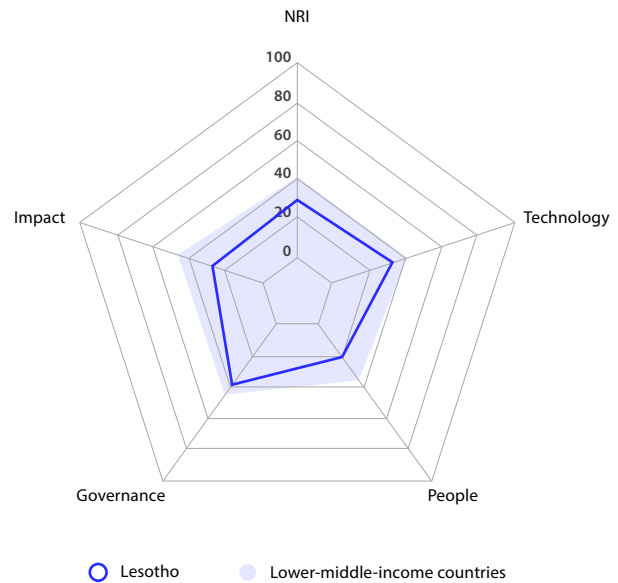
NOTE: ● Indicates a strength and ○ a weakness.

Lesotho

Rank
(Out of 131) Score

Network Readiness Index 127 27.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	123	25.56
1st sub-pillar: Access	117	43.19
2nd sub-pillar: Content	124	15.61
3rd sub-pillar: Future Technologies	117	17.88
B. People pillar	125	20.20
1st sub-pillar: Individuals	115	26.31
2nd sub-pillar: Businesses	122	22.38
3rd sub-pillar: Governments	131	11.90
C. Governance pillar	113	37.98
1st sub-pillar: Trust	118	18.66
2nd sub-pillar: Regulation	119	41.25
3rd sub-pillar: Inclusion	91	54.03
D. Impact pillar	130	27.85
1st sub-pillar: Economy	130	9.11
2nd sub-pillar: Quality of Life	129	31.77
3rd sub-pillar: SDG Contribution	122	42.66



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	123	25.56
1st sub-pillar: Access	117	43.19
1.1.1 Mobile tariffs	116	27.55
1.1.2 Handset prices	102	37.90
1.1.3 FTTH/building Internet subscriptions	91	6.90
1.1.4 Population covered by at least a 3G mobile network	75	99.35
1.1.5 International Internet bandwidth	128	44.27
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	124	15.61
1.2.1 GitHub commits	123	0.22
1.2.2 Internet domain registrations	114	0.29
1.2.3 Mobile apps development	123	44.86
1.2.4 AI scientific publications	91	17.05
3rd sub-pillar: Future Technologies	117	17.88
1.3.1 Adoption of emerging technologies	126	0.00
1.3.2 Investment in emerging technologies	78	35.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	125	20.20
1st sub-pillar: Individuals	115	26.31
2.1.1 Mobile broadband internet traffic within the country	118	0.00
2.1.2 ICT skills in the education system	93	35.21
2.1.3 Use of virtual social networks	107	20.64
2.1.4 Tertiary enrollment	108	5.77
2.1.5 Adult literacy rate	85	69.95
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	122	22.38
2.2.1 Firms with website	120	6.24
2.2.2 GERD financed by business enterprise	98	0.91
2.2.3 Knowledge intensive employment	102	16.06
2.2.4 Annual investment in telecommunication services	107	66.31
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	131	11.90
2.3.1 Government online services	119	33.33
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	126	0.00
2.3.4 R&D expenditure by governments and higher education	108	2.38

Indicator	Rank	Score
C. Governance pillar	113	37.98
1st sub-pillar: Trust	118	18.66
3.1.1 Secure Internet servers	108	33.90
3.1.2 Cybersecurity	127	7.48
3.1.3 Online access to financial account	59	30.94
3.1.4 Internet shopping	107	2.33
2nd sub-pillar: Regulation	119	41.25
3.2.1 Regulatory quality	102	25.87
3.2.2 ICT regulatory environment	100	66.86
3.2.3 Regulation of emerging technologies	110	9.21
3.2.4 E-commerce legislation	118	33.33
3.2.5 Privacy protection by law content	53	70.98
3rd sub-pillar: Inclusion	91	54.03
3.3.1 E-Participation	116	32.10
3.3.2 Socioeconomic gap in use of digital payments	114	38.72
3.3.3 Availability of local online content	117	26.44
3.3.4 Gender gap in internet use	1	100.00
3.3.5 Rural gap in use of digital payments	39	72.92
D. Impact pillar	130	27.85
1st sub-pillar: Economy	130	9.11
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	113	1.55
4.1.3 PCT patent applications	99	0.00
4.1.4 Domestic market size	130	10.57
4.1.5 Prevalence of gig economy	88	33.43
4.1.6 ICT services exports	130	0.00
2nd sub-pillar: Quality of Life	129	31.77
4.2.1 Happiness	122	23.74
4.2.2 Freedom to make life choices	100	57.87
4.2.3 Income inequality	98	45.48
4.2.4 Healthy life expectancy at birth	130	0.00
3rd sub-pillar: SDG Contribution	122	42.66
4.3.1 SDG 3: Good Health and Well-Being	112	32.54
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	86	69.30
4.3.4 SDG 7: Affordable and Clean Energy	122	43.02
4.3.5 SDG 11: Sustainable Cities and Communities	124	25.76

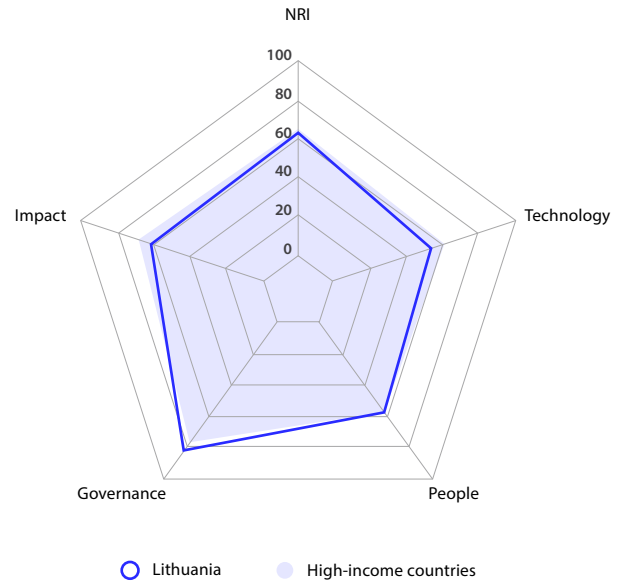
NOTE: ● Indicates a strength and ○ a weakness.

Lithuania

Rank
(Out of 131) Score

Network Readiness Index **33 62.78**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	38	52.43
1st sub-pillar: Access	45	70.80
2nd sub-pillar: Content	31	51.95
3rd sub-pillar: Future Technologies	57	34.55
B. People pillar	33	56.30
1st sub-pillar: Individuals	51	51.54
2nd sub-pillar: Businesses	37	55.62
3rd sub-pillar: Governments	24	61.74
C. Governance pillar	17	81.30
1st sub-pillar: Trust	24	76.25
2nd sub-pillar: Regulation	15	85.97
3rd sub-pillar: Inclusion	22	81.67
D. Impact pillar	40	61.10
1st sub-pillar: Economy	53	37.56
2nd sub-pillar: Quality of Life	56	71.15
3rd sub-pillar: SDG Contribution	40	74.58



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	38	52.43
1st sub-pillar: Access	45	70.80
1.1.1 Mobile tariffs	18	82.37 ●
1.1.2 Handset prices	44	67.69
1.1.3 FTTH/building Internet subscriptions	56	27.60
1.1.4 Population covered by at least a 3G mobile network	19	100.00
1.1.5 International Internet bandwidth	36	76.32
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	31	51.95
1.2.1 GitHub commits	29	33.04
1.2.2 Internet domain registrations	27	27.71
1.2.3 Mobile apps development	22	95.09
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	57	34.55
1.3.1 Adoption of emerging technologies	31	65.18
1.3.2 Investment in emerging technologies	29	61.75
1.3.3 Robot density	39	4.35 ○
1.3.4 Computer software spending	92	6.94 ○
B. People pillar	33	56.30
1st sub-pillar: Individuals	51	51.54
2.1.1 Mobile broadband internet traffic within the country	52	11.77
2.1.2 ICT skills in the education system	31	65.09
2.1.3 Use of virtual social networks	55	72.44
2.1.4 Tertiary enrollment	30	47.88
2.1.5 Adult literacy rate	4	99.80 ●
2.1.6 AI talent concentration	31	12.28 ○
2nd sub-pillar: Businesses	37	55.62
2.2.1 Firms with website	26	78.99
2.2.2 GERD financed by business enterprise	53	42.03
2.2.3 Knowledge intensive employment	22	70.14
2.2.4 Annual investment in telecommunication services	89	72.49 ○
2.2.5 GERD performed by business enterprise	39	14.45
3rd sub-pillar: Governments	24	61.74
2.3.1 Government online services	24	84.84
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	38	50.58
2.3.4 R&D expenditure by governments and higher education	31	49.78

Indicator	Rank	Score
C. Governance pillar	17	81.30
1st sub-pillar: Trust	24	76.25
3.1.1 Secure Internet servers	15	85.86 ●
3.1.2 Cybersecurity	11	97.89 ●
3.1.3 Online access to financial account	20	60.65
3.1.4 Internet shopping	30	60.60
2nd sub-pillar: Regulation	15	85.97
3.2.1 Regulatory quality	29	70.13
3.2.2 ICT regulatory environment	2	99.41 ●
3.2.3 Regulation of emerging technologies	27	71.58
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	13	88.72 ●
3rd sub-pillar: Inclusion	22	81.67
3.3.1 E-Participation	62	72.84
3.3.2 Socioeconomic gap in use of digital payments	33	91.15
3.3.3 Availability of local online content	16	87.74 ●
3.3.4 Gender gap in Internet use	12	77.41 ●
3.3.5 Rural gap in use of digital payments	8	79.18 ●
D. Impact pillar	40	61.10
1st sub-pillar: Economy	53	37.56
4.1.1 High-tech and medium-high-tech manufacturing	66	20.59
4.1.2 High-tech exports	28	52.77
4.1.3 PCT patent applications	36	13.87
4.1.4 Domestic market size	78	46.48
4.1.5 Prevalence of gig economy	44	53.78
4.1.6 ICT services exports	45	37.89
2nd sub-pillar: Quality of Life	56	71.15
4.2.1 Happiness	16	83.44 ●
4.2.2 Freedom to make life choices	103	56.36 ○
4.2.3 Income inequality	57	69.60
4.2.4 Healthy life expectancy at birth	57	75.19
3rd sub-pillar: SDG Contribution	40	74.58
4.3.1 SDG 3: Good Health and Well-Being	73	67.57
4.3.2 SDG 4: Quality Education	32	60.92
4.3.3 SDG 5: Women's economic opportunity	27	91.23
4.3.4 SDG 7: Affordable and Clean Energy	38	85.30
4.3.5 SDG 11: Sustainable Cities and Communities	62	67.89

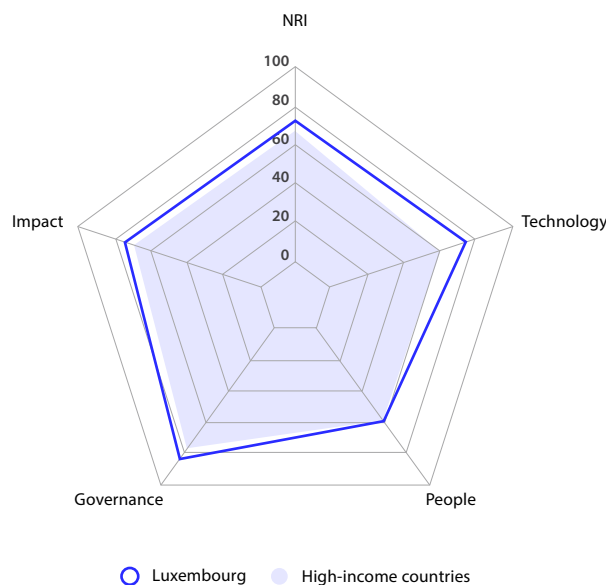
NOTE: ● Indicates a strength and ○ a weakness.

Luxembourg

Rank
(Out of 131) Score

Network Readiness Index 17 72.10

Pillar/sub-pillar	Rank	Score
A. Technology pillar	6	73.54
1st sub-pillar: Access	30	74.57
2nd sub-pillar: Content	5	83.56
3rd sub-pillar: Future Technologies	9	62.49
B. People pillar	28	58.07
1st sub-pillar: Individuals	101	34.23
2nd sub-pillar: Businesses	20	66.89
3rd sub-pillar: Governments	16	73.09
C. Governance pillar	13	83.82
1st sub-pillar: Trust	23	77.10
2nd sub-pillar: Regulation	1	93.89
3rd sub-pillar: Inclusion	25	80.48
D. Impact pillar	19	72.96
1st sub-pillar: Economy	36	42.80
2nd sub-pillar: Quality of Life	9	87.75
3rd sub-pillar: SDG Contribution	7	88.33



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	6	73.54
1st sub-pillar: Access	30	74.57
1.1.1 Mobile tariffs	1	100.00 ●
1.1.2 Handset prices	11	84.24
1.1.3 FTTH/building Internet subscriptions	92	6.69 ○
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	17	82.24
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	5	83.56
1.2.1 GitHub commits	4	90.29 ●
1.2.2 Internet domain registrations	9	61.11
1.2.3 Mobile apps development	10	99.28
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	9	62.49
1.3.1 Adoption of emerging technologies	7	92.18 ●
1.3.2 Investment in emerging technologies	10	79.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	75	15.78
B. People pillar	28	58.07
1st sub-pillar: Individuals	101	34.23
2.1.1 Mobile broadband internet traffic within the country	110	0.75 ○
2.1.2 ICT skills in the education system	24	70.41
2.1.3 Use of virtual social networks	62	67.77
2.1.4 Tertiary enrollment	98	11.38 ○
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	20	20.86
2nd sub-pillar: Businesses	20	66.89
2.2.1 Firms with website	19	82.33
2.2.2 GERD financed by business enterprise	27	63.44
2.2.3 Knowledge intensive employment	1	100.00 ●
2.2.4 Annual investment in telecommunication services	86	72.75 ○
2.2.5 GERD performed by business enterprise	36	15.93
3rd sub-pillar: Governments	16	73.09
2.3.1 Government online services	48	75.76
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	3	94.93
2.3.4 R&D expenditure by governments and higher education	33	48.57

Indicator	Rank	Score
C. Governance pillar	13	83.82
1st sub-pillar: Trust	23	77.10
3.1.1 Secure Internet servers	16	85.48
3.1.2 Cybersecurity	18	97.36
3.1.3 Online access to financial account	17	66.56
3.1.4 Internet shopping	32	59.01
2nd sub-pillar: Regulation	1	93.89
3.2.1 Regulatory quality	4	90.13 ●
3.2.2 ICT regulatory environment	51	85.88
3.2.3 Regulation of emerging technologies	1	100.00 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	4	93.44 ●
3rd sub-pillar: Inclusion	25	80.48
3.3.1 E-Participation	68	69.14
3.3.2 Socioeconomic gap in use of digital payments	15	96.82
3.3.3 Availability of local online content	17	86.54
3.3.4 Gender gap in Internet use	30	73.66
3.3.5 Rural gap in use of digital payments	17	76.25
D. Impact pillar	19	72.96
1st sub-pillar: Economy	36	42.80
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	85	10.34 ○
4.1.3 PCT patent applications	7	70.77 ●
4.1.4 Domestic market size	88	42.68
4.1.5 Prevalence of gig economy	50	50.29
4.1.6 ICT services exports	37	39.91
2nd sub-pillar: Quality of Life	9	87.75
4.2.1 Happiness	6	93.05 ●
4.2.2 Freedom to make life choices	8	94.11
4.2.3 Income inequality	45	72.36
4.2.4 Healthy life expectancy at birth	12	91.48
3rd sub-pillar: SDG Contribution	7	88.33
4.3.1 SDG 3: Good Health and Well-Being	8	95.29
4.3.2 SDG 4: Quality Education	35	59.74
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	12	91.48
4.3.5 SDG 11: Sustainable Cities and Communities	11	95.15

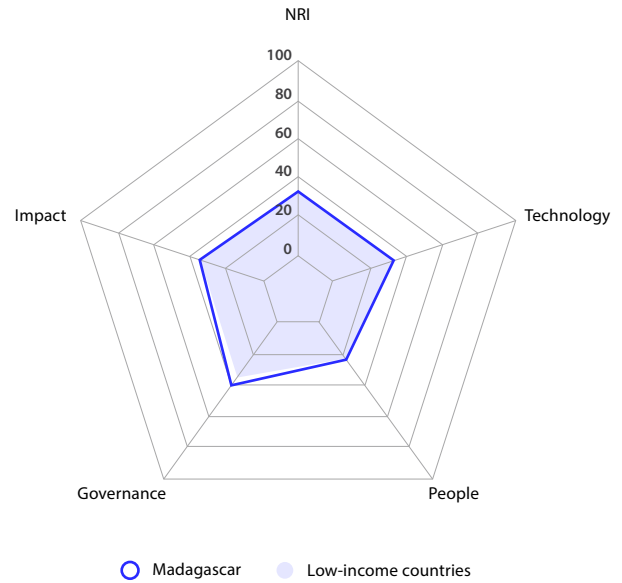
NOTE: ● Indicates a strength and ○ a weakness.

Madagascar

Rank
(Out of 131) Score

Network Readiness Index **120 30.53**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	124	25.20
1st sub-pillar: Access	126	35.97
2nd sub-pillar: Content	117	20.07
3rd sub-pillar: Future Technologies	112	19.55
B. People pillar	122	22.81
1st sub-pillar: Individuals	120	19.47
2nd sub-pillar: Businesses	94	32.35
3rd sub-pillar: Governments	126	16.59
C. Governance pillar	106	39.50
1st sub-pillar: Trust	125	15.06
2nd sub-pillar: Regulation	62	64.54
3rd sub-pillar: Inclusion	116	38.90
D. Impact pillar	123	34.62
1st sub-pillar: Economy	90	24.99
2nd sub-pillar: Quality of Life	121	40.78
3rd sub-pillar: SDG Contribution	129	38.07



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	124	25.20
1st sub-pillar: Access	126	35.97
1.1.1 Mobile tariffs	130	6.00 ○
1.1.2 Handset prices	116	29.99
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	123	85.44
1.1.5 International Internet bandwidth	112	58.27
1.1.6 Internet access in schools	78	0.12
2nd sub-pillar: Content	117	20.07
1.2.1 GitHub commits	115	0.39
1.2.2 Internet domain registrations	125	0.09
1.2.3 Mobile apps development	108	57.75
1.2.4 AI scientific publications	88	22.06
3rd sub-pillar: Future Technologies	112	19.55
1.3.1 Adoption of emerging technologies	115	22.75
1.3.2 Investment in emerging technologies	87	33.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	111	2.16
B. People pillar	122	22.81
1st sub-pillar: Individuals	120	19.47
2.1.1 Mobile broadband internet traffic within the country	93	1.69 ●
2.1.2 ICT skills in the education system	119	15.68
2.1.3 Use of virtual social networks	118	7.40
2.1.4 Tertiary enrollment	120	2.59
2.1.5 Adult literacy rate	84	70.01
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	94	32.35
2.2.1 Firms with website	101	23.11
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	126	2.20 ○
2.2.4 Annual investment in telecommunication services	93	71.75
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	126	16.59
2.3.1 Government online services	123	26.66
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	112	16.92
2.3.4 R&D expenditure by governments and higher education	96	6.19

Indicator	Rank	Score
C. Governance pillar	106	39.50
1st sub-pillar: Trust	125	15.06
3.1.1 Secure Internet servers	125	18.37
3.1.2 Cybersecurity	113	21.98
3.1.3 Online access to financial account	80	18.78 ●
3.1.4 Internet shopping	111	1.11 ○
2nd sub-pillar: Regulation	62	64.54
3.2.1 Regulatory quality	115	21.33
3.2.2 ICT regulatory environment	112	61.76
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	40	75.05 ●
3rd sub-pillar: Inclusion	116	38.90
3.3.1 E-Participation	125	27.16
3.3.2 Socioeconomic gap in use of digital payments	87	55.58 ●
3.3.3 Availability of local online content	109	34.13
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	104	38.73
D. Impact pillar	123	34.62
1st sub-pillar: Economy	90	24.99
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	104	3.55
4.1.3 PCT patent applications	88	0.87 ●
4.1.4 Domestic market size	104	36.91
4.1.5 Prevalence of gig economy	59	44.19 ●
4.1.6 ICT services exports	40	39.43 ●
2nd sub-pillar: Quality of Life	121	40.78
4.2.1 Happiness	109	38.47
4.2.2 Freedom to make life choices	123	29.63 ○
4.2.3 Income inequality	91	51.26 ●
4.2.4 Healthy life expectancy at birth	108	43.78
3rd sub-pillar: SDG Contribution	129	38.07
4.3.1 SDG 3: Good Health and Well-Being	129	10.58 ○
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	105	60.53
4.3.4 SDG 7: Affordable and Clean Energy	123	39.52
4.3.5 SDG 11: Sustainable Cities and Communities	106	41.67

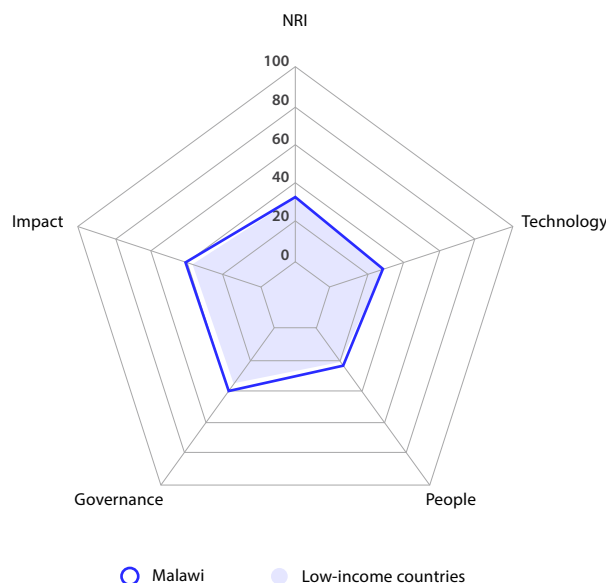
NOTE: ● Indicates a strength and ○ a weakness.

Malawi

Rank
(Out of 131) Score

Network Readiness Index **119** **31.30**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	126	23.44
1st sub-pillar: Access	124	38.67
2nd sub-pillar: Content	118	19.52
3rd sub-pillar: Future Technologies	128	12.13
B. People pillar	118	23.93
1st sub-pillar: Individuals	125	14.27
2nd sub-pillar: Businesses	76	37.56
3rd sub-pillar: Governments	121	19.95
C. Governance pillar	114	37.89
1st sub-pillar: Trust	111	22.83
2nd sub-pillar: Regulation	112	47.43
3rd sub-pillar: Inclusion	110	43.40
D. Impact pillar	114	39.94
1st sub-pillar: Economy	124	13.09
2nd sub-pillar: Quality of Life	110	48.81
3rd sub-pillar: SDG Contribution	88	57.92



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	126	23.44
1st sub-pillar: Access	124	38.67
1.1.1 Mobile tariffs	129	6.20 ○
1.1.2 Handset prices	110	34.57
1.1.3 FTTH/building Internet subscriptions	97	4.42
1.1.4 Population covered by at least a 3G mobile network	116	94.28
1.1.5 International Internet bandwidth	121	53.89
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	118	19.52
1.2.1 GitHub commits	124	0.19
1.2.2 Internet domain registrations	122	0.11
1.2.3 Mobile apps development	125	39.71
1.2.4 AI scientific publications	68	38.08
3rd sub-pillar: Future Technologies	128	12.13
1.3.1 Adoption of emerging technologies	123	13.46
1.3.2 Investment in emerging technologies	118	19.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	106	3.18
B. People pillar	118	23.93
1st sub-pillar: Individuals	125	14.27
2.1.1 Mobile broadband internet traffic within the country	102	1.25
2.1.2 ICT skills in the education system	117	18.05
2.1.3 Use of virtual social networks	130	0.78 ○
2.1.4 Tertiary enrollment	127	0.00 ○
2.1.5 Adult literacy rate	95	51.29
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	76	37.56
2.2.1 Firms with website	78	40.90 ●
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	125	2.28
2.2.4 Annual investment in telecommunication services	104	69.51
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	121	19.95
2.3.1 Government online services	112	40.60
2.3.2 Publication and use of open data	91	8.82
2.3.3 Government promotion of investment in emerging tech	117	10.41
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	114	37.89
1st sub-pillar: Trust	111	22.83
3.1.1 Secure Internet servers	122	22.61
3.1.2 Cybersecurity	100	35.72
3.1.3 Online access to financial account	58	31.01 ●
3.1.4 Internet shopping	108	1.99
2nd sub-pillar: Regulation	112	47.43
3.2.1 Regulatory quality	113	21.87
3.2.2 ICT regulatory environment	64	83.53 ●
3.2.3 Regulation of emerging technologies	115	3.95
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	78	61.16 ●
3rd sub-pillar: Inclusion	110	43.40
3.3.1 E-Participation	108	39.51
3.3.2 Socioeconomic gap in use of digital payments	83	56.69 ●
3.3.3 Availability of local online content	127	16.59
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	70	60.81 ●
D. Impact pillar	114	39.94
1st sub-pillar: Economy	124	13.09
4.1.1 High-tech and medium-high-tech manufacturing	89	8.98
4.1.2 High-tech exports	114	1.55
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	118	33.14
4.1.5 Prevalence of gig economy	125	3.49 ○
4.1.6 ICT services exports	59	31.39 ●
2nd sub-pillar: Quality of Life	110	48.81
4.2.1 Happiness	120	25.94
4.2.2 Freedom to make life choices	89	64.81
4.2.3 Income inequality	71	61.56 ●
4.2.4 Healthy life expectancy at birth	109	42.93
3rd sub-pillar: SDG Contribution	88	57.92
4.3.1 SDG 3: Good Health and Well-Being	111	32.83
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	88	68.42 ●
4.3.4 SDG 7: Affordable and Clean Energy	40	84.46 ●
4.3.5 SDG 11: Sustainable Cities and Communities	98	45.96

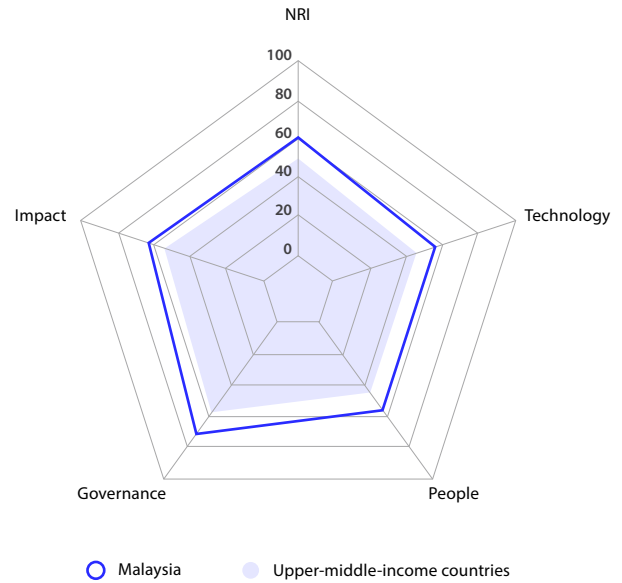
NOTE: ● Indicates a strength and ○ a weakness.

Malaysia

Rank
(Out of 131) Score

Network Readiness Index **36 60.58**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	36	54.18
1st sub-pillar: Access	38	72.82
2nd sub-pillar: Content	47	42.42
3rd sub-pillar: Future Technologies	28	47.32
B. People pillar	35	56.07
1st sub-pillar: Individuals	12	61.72
2nd sub-pillar: Businesses	58	45.91
3rd sub-pillar: Governments	27	60.57
C. Governance pillar	40	70.06
1st sub-pillar: Trust	38	67.69
2nd sub-pillar: Regulation	51	69.34
3rd sub-pillar: Inclusion	48	73.15
D. Impact pillar	39	62.01
1st sub-pillar: Economy	15	57.58
2nd sub-pillar: Quality of Life	61	70.07
3rd sub-pillar: SDG Contribution	87	58.37



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	36	54.18
1st sub-pillar: Access	38	72.82
1.1.1 Mobile tariffs	58	65.25
1.1.2 Handset prices	83	44.69
1.1.3 FTTH/building Internet subscriptions	18	44.36 ●
1.1.4 Population covered by at least a 3G mobile network	87	98.46 ○
1.1.5 International Internet bandwidth	15	84.15 ●
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	47	42.42
1.2.1 GitHub commits	63	6.49
1.2.2 Internet domain registrations	63	4.79
1.2.3 Mobile apps development	51	83.52
1.2.4 AI scientific publications	19	74.87
3rd sub-pillar: Future Technologies	28	47.32
1.3.1 Adoption of emerging technologies	25	71.90
1.3.2 Investment in emerging technologies	12	78.75 ●
1.3.3 Robot density	29	9.41
1.3.4 Computer software spending	34	29.21
B. People pillar	35	56.07
1st sub-pillar: Individuals	12	61.72
2.1.1 Mobile broadband internet traffic within the country	11	45.24 ●
2.1.2 ICT skills in the education system	46	55.92
2.1.3 Use of virtual social networks	8	86.08 ●
2.1.4 Tertiary enrollment	73	27.82
2.1.5 Adult literacy rate	50	93.56
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	58	45.91
2.2.1 Firms with website	72	44.71
2.2.2 GERD financed by business enterprise	43	47.25
2.2.3 Knowledge intensive employment	51	42.29
2.2.4 Annual investment in telecommunication services	29	83.29
2.2.5 GERD performed by business enterprise	41	12.00
3rd sub-pillar: Governments	27	60.57
2.3.1 Government online services	24	84.84
2.3.2 Publication and use of open data	58	27.94
2.3.3 Government promotion of investment in emerging tech	11	76.38
2.3.4 R&D expenditure by governments and higher education	27	53.10

Indicator	Rank	Score
C. Governance pillar	40	70.06
1st sub-pillar: Trust	38	67.69
3.1.1 Secure Internet servers	45	71.19
3.1.2 Cybersecurity	8	98.03 ●
3.1.3 Online access to financial account	40	43.40
3.1.4 Internet shopping	36	58.16
2nd sub-pillar: Regulation	51	69.34
3.2.1 Regulatory quality	39	61.60
3.2.2 ICT regulatory environment	67	82.35
3.2.3 Regulation of emerging technologies	40	59.47
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	113	43.30 ○
3rd sub-pillar: Inclusion	48	73.15
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	55	79.29
3.3.3 Availability of local online content	39	76.68
3.3.4 Gender gap in Internet use	66	67.52
3.3.5 Rural gap in use of digital payments	76	57.10
D. Impact pillar	39	62.01
1st sub-pillar: Economy	15	57.58
4.1.1 High-tech and medium-high-tech manufacturing	18	59.78 ●
4.1.2 High-tech exports	1	100.00 ●
4.1.3 PCT patent applications	58	5.40
4.1.4 Domestic market size	29	67.35
4.1.5 Prevalence of gig economy	6	85.76 ●
4.1.6 ICT services exports	73	27.22
2nd sub-pillar: Quality of Life	61	70.07
4.2.1 Happiness	54	68.30
4.2.2 Freedom to make life choices	31	85.23
4.2.3 Income inequality	84	55.03 ○
4.2.4 Healthy life expectancy at birth	72	71.74
3rd sub-pillar: SDG Contribution	87	58.37
4.3.1 SDG 3: Good Health and Well-Being	46	77.85
4.3.2 SDG 4: Quality Education	47	41.72
4.3.3 SDG 5: Women's economic opportunity	123	29.82 ○
4.3.4 SDG 7: Affordable and Clean Energy	76	75.52
4.3.5 SDG 11: Sustainable Cities and Communities	64	66.91

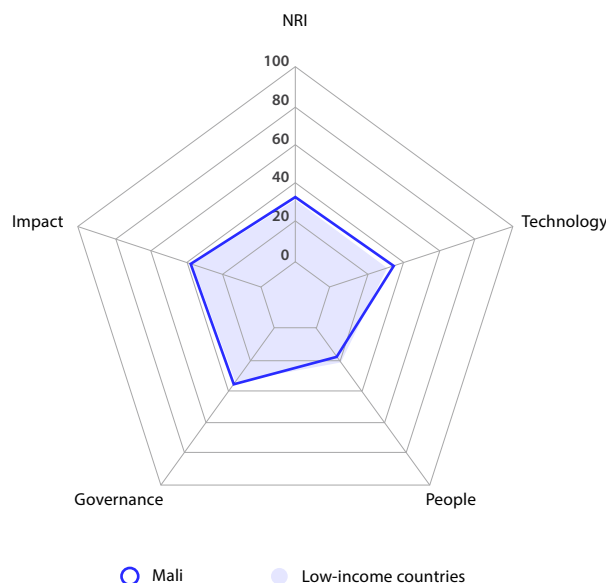
NOTE: ● Indicates a strength and ○ a weakness.

Mali

Rank
(Out of 131) Score

Network Readiness Index 121 30.02

Pillar/sub-pillar	Rank	Score
A. Technology pillar	119	27.91
1st sub-pillar: Access	122	41.46
2nd sub-pillar: Content	103	24.87
3rd sub-pillar: Future Technologies	119	17.39
B. People pillar	129	17.74
1st sub-pillar: Individuals	129	8.39
2nd sub-pillar: Businesses	108	28.96
3rd sub-pillar: Governments	128	15.86
C. Governance pillar	121	35.75
1st sub-pillar: Trust	129	13.95
2nd sub-pillar: Regulation	108	51.12
3rd sub-pillar: Inclusion	112	42.16
D. Impact pillar	115	38.71
1st sub-pillar: Economy	94	24.45
2nd sub-pillar: Quality of Life	114	46.83
3rd sub-pillar: SDG Contribution	118	44.84



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	119	27.91
1st sub-pillar: Access	122	41.46
1.1.1 Mobile tariffs	122	23.98
1.1.2 Handset prices	120	28.30
1.1.3 FTTH/building Internet subscriptions	79	15.73
1.1.4 Population covered by at least a 3G mobile network	122	86.00
1.1.5 International Internet bandwidth	122	53.28
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	103	24.87
1.2.1 GitHub commits	129	0.05 ○
1.2.2 Internet domain registrations	59	5.00 ●
1.2.3 Mobile apps development	101	62.71
1.2.4 AI scientific publications	79	31.70
3rd sub-pillar: Future Technologies	119	17.39
1.3.1 Adoption of emerging technologies	119	16.80
1.3.2 Investment in emerging technologies	89	33.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	112	2.13
B. People pillar	129	17.74
1st sub-pillar: Individuals	129	8.39
2.1.1 Mobile broadband internet traffic within the country	117	0.17 ○
2.1.2 ICT skills in the education system	115	21.60
2.1.3 Use of virtual social networks	119	6.72
2.1.4 Tertiary enrollment	121	2.57
2.1.5 Adult literacy rate	105	10.88 ○
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	108	28.96
2.2.1 Firms with website	83	37.78 ●
2.2.2 GERD financed by business enterprise	97	0.97
2.2.3 Knowledge intensive employment	127	2.03 ○
2.2.4 Annual investment in telecommunication services	75	75.08 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	128	15.86
2.3.1 Government online services	121	32.73
2.3.2 Publication and use of open data	103	1.47 ○
2.3.3 Government promotion of investment in emerging tech	113	16.46
2.3.4 R&D expenditure by governments and higher education	85	12.78

Indicator	Rank	Score
C. Governance pillar	121	35.75
1st sub-pillar: Trust	129	13.95
3.1.1 Secure Internet servers	124	19.13
3.1.2 Cybersecurity	126	8.56
3.1.3 Online access to financial account	70	24.23 ●
3.1.4 Internet shopping	103	3.90
2nd sub-pillar: Regulation	108	51.12
3.2.1 Regulatory quality	104	24.80
3.2.2 ICT regulatory environment	82	75.29 ●
3.2.3 Regulation of emerging technologies	95	24.47
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	66	64.39 ●
3rd sub-pillar: Inclusion	112	42.16
3.3.1 E-Participation	122	29.63
3.3.2 Socioeconomic gap in use of digital payments	77	63.47 ●
3.3.3 Availability of local online content	112	29.57
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	95	45.97
D. Impact pillar	115	38.71
1st sub-pillar: Economy	94	24.45
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	100	4.90
4.1.3 PCT patent applications	89	0.79
4.1.4 Domestic market size	102	37.98
4.1.5 Prevalence of gig economy	90	31.10
4.1.6 ICT services exports	23	47.46 ●
2nd sub-pillar: Quality of Life	114	46.83
4.2.1 Happiness	113	34.45
4.2.2 Freedom to make life choices	111	50.50
4.2.3 Income inequality	62	67.59 ●
4.2.4 Healthy life expectancy at birth	119	34.79
3rd sub-pillar: SDG Contribution	118	44.84
4.3.1 SDG 3: Good Health and Well-Being	123	21.85
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	117	44.74
4.3.4 SDG 7: Affordable and Clean Energy	87	72.68 ●
4.3.5 SDG 11: Sustainable Cities and Communities	109	40.08

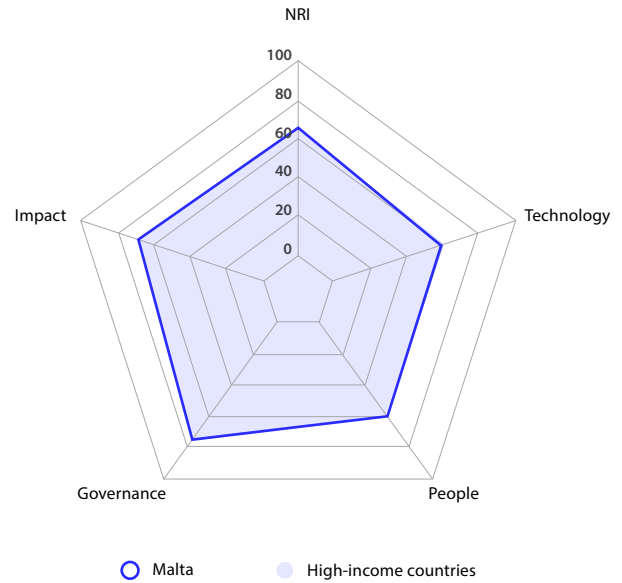
NOTE: ● Indicates a strength and ○ a weakness.

Malta

Rank
(Out of 131) Score

Network Readiness Index **31 64.87**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	30	56.93
1st sub-pillar: Access	83	58.51
2nd sub-pillar: Content	23	63.71
3rd sub-pillar: Future Technologies	23	48.58
B. People pillar	27	59.06
1st sub-pillar: Individuals	17	59.45
2nd sub-pillar: Businesses	33	60.18
3rd sub-pillar: Governments	35	57.54
C. Governance pillar	32	75.05
1st sub-pillar: Trust	37	67.83
2nd sub-pillar: Regulation	25	80.87
3rd sub-pillar: Inclusion	41	76.47
D. Impact pillar	30	68.42
1st sub-pillar: Economy	48	39.47
2nd sub-pillar: Quality of Life	17	83.66
3rd sub-pillar: SDG Contribution	25	82.13



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	30	56.93
1st sub-pillar: Access	83	58.51
1.1.1 Mobile tariffs	68	55.56
1.1.2 Handset prices	40	68.50
1.1.3 FTTH/building Internet subscriptions	94	5.81 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	104	62.71 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	23	63.71
1.2.1 GitHub commits	26	36.80
1.2.2 Internet domain registrations	10	57.90 ●
1.2.3 Mobile apps development	18	96.45 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	23	48.58
1.3.1 Adoption of emerging technologies	37	61.51
1.3.2 Investment in emerging technologies	38	53.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	29	30.72
B. People pillar	27	59.06
1st sub-pillar: Individuals	17	59.45
2.1.1 Mobile broadband internet traffic within the country	109	0.77 ○
2.1.2 ICT skills in the education system	30	65.38
2.1.3 Use of virtual social networks	2	95.13 ●
2.1.4 Tertiary enrollment	45	43.02
2.1.5 Adult literacy rate	52	92.96
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	33	60.18
2.2.1 Firms with website	12	85.26 ●
2.2.2 GERD financed by business enterprise	15	72.60
2.2.3 Knowledge intensive employment	19	71.58
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	42	11.29
3rd sub-pillar: Governments	35	57.54
2.3.1 Government online services	40	80.61
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	15	73.13
2.3.4 R&D expenditure by governments and higher education	74	18.89

Indicator	Rank	Score
C. Governance pillar	32	75.05
1st sub-pillar: Trust	37	67.83
3.1.1 Secure Internet servers	37	76.43
3.1.2 Cybersecurity	57	83.36
3.1.3 Online access to financial account	31	51.17
3.1.4 Internet shopping	31	60.34
2nd sub-pillar: Regulation	25	80.87
3.2.1 Regulatory quality	24	73.60
3.2.2 ICT regulatory environment	10	95.29 ●
3.2.3 Regulation of emerging technologies	14	80.00 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	87	55.44
3rd sub-pillar: Inclusion	41	76.47
3.3.1 E-Participation	38	82.71
3.3.2 Socioeconomic gap in use of digital payments	47	84.38
3.3.3 Availability of local online content	54	66.35
3.3.4 Gender gap in Internet use	29	73.94
3.3.5 Rural gap in use of digital payments	29	74.97
D. Impact pillar	30	68.42
1st sub-pillar: Economy	48	39.47
4.1.1 High-tech and medium-high-tech manufacturing	35	46.99
4.1.2 High-tech exports	40	42.75
4.1.3 PCT patent applications	18	45.32
4.1.4 Domestic market size	124	30.19 ○
4.1.5 Prevalence of gig economy	33	59.59
4.1.6 ICT services exports	98	11.95 ○
2nd sub-pillar: Quality of Life	17	83.66
4.2.1 Happiness	32	75.95
4.2.2 Freedom to make life choices	26	87.13
4.2.3 Income inequality	27	80.40
4.2.4 Healthy life expectancy at birth	13	91.17 ●
3rd sub-pillar: SDG Contribution	25	82.13
4.3.1 SDG 3: Good Health and Well-Being	28	86.75
4.3.2 SDG 4: Quality Education	41	52.71
4.3.3 SDG 5: Women's economic opportunity	40	84.21
4.3.4 SDG 7: Affordable and Clean Energy	3	99.58 ●
4.3.5 SDG 11: Sustainable Cities and Communities	25	87.38

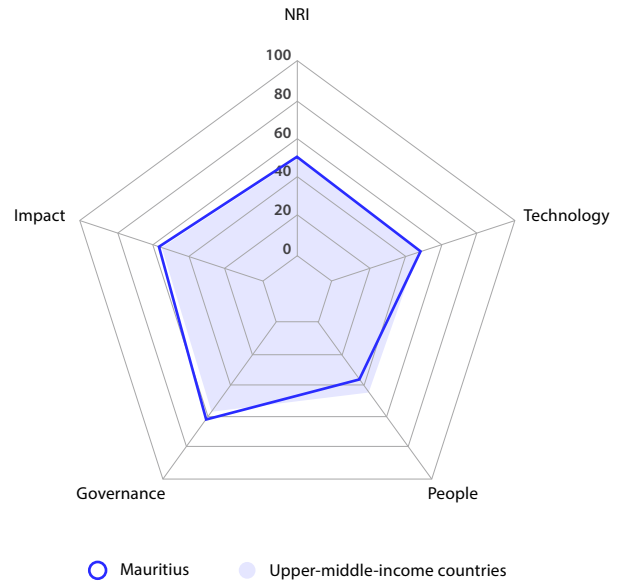
NOTE: ● Indicates a strength and ○ a weakness.

Mauritius

Rank
(Out of 131) Score

Network Readiness Index **72** **47.87**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	83	40.79
1st sub-pillar: Access	76	60.76
2nd sub-pillar: Content	83	31.74
3rd sub-pillar: Future Technologies	75	29.86
B. People pillar	94	35.28
1st sub-pillar: Individuals	71	47.16
2nd sub-pillar: Businesses	129	17.92
3rd sub-pillar: Governments	75	40.76
C. Governance pillar	56	61.74
1st sub-pillar: Trust	63	47.89
2nd sub-pillar: Regulation	52	69.10
3rd sub-pillar: Inclusion	59	68.22
D. Impact pillar	71	53.68
1st sub-pillar: Economy	96	23.48
2nd sub-pillar: Quality of Life	64	67.85
3rd sub-pillar: SDG Contribution	53	69.71



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	83	40.79
1st sub-pillar: Access	76	60.76
1.1.1 Mobile tariffs	69	55.18
1.1.2 Handset prices	62	53.04
1.1.3 FTTH/building Internet subscriptions	59	25.87
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	96	64.13
1.1.6 Internet access in schools	43	66.67
2nd sub-pillar: Content	83	31.74
1.2.1 GitHub commits	59	7.00
1.2.2 Internet domain registrations	46	9.05
1.2.3 Mobile apps development	52	83.15
1.2.4 AI scientific publications	80	27.74
3rd sub-pillar: Future Technologies	75	29.86
1.3.1 Adoption of emerging technologies	86	38.18
1.3.2 Investment in emerging technologies	81	35.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	73	16.40
B. People pillar	94	35.28
1st sub-pillar: Individuals	71	47.16
2.1.1 Mobile broadband internet traffic within the country	105	1.15
2.1.2 ICT skills in the education system	74	41.12
2.1.3 Use of virtual social networks	49	73.32
2.1.4 Tertiary enrollment	70	28.97
2.1.5 Adult literacy rate	60	91.22
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	129	17.92
2.2.1 Firms with website	95	30.50
2.2.2 GERD financed by business enterprise	86	5.02
2.2.3 Knowledge intensive employment	62	35.58
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	79	0.57
3rd sub-pillar: Governments	75	40.76
2.3.1 Government online services	67	69.09
2.3.2 Publication and use of open data	61	26.47
2.3.3 Government promotion of investment in emerging tech	60	38.96
2.3.4 R&D expenditure by governments and higher education	59	28.54

Indicator	Rank	Score
C. Governance pillar	56	61.74
1st sub-pillar: Trust	63	47.89
3.1.1 Secure Internet servers	65	54.41
3.1.2 Cybersecurity	23	96.84
3.1.3 Online access to financial account	82	18.11
3.1.4 Internet shopping	59	22.19
2nd sub-pillar: Regulation	52	69.10
3.2.1 Regulatory quality	27	71.20
3.2.2 ICT regulatory environment	80	75.88
3.2.3 Regulation of emerging technologies	65	43.16
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	89	55.25
3rd sub-pillar: Inclusion	59	68.22
3.3.1 E-Participation	78	62.97
3.3.2 Socioeconomic gap in use of digital payments	49	83.94
3.3.3 Availability of local online content	77	54.09
3.3.4 Gender gap in internet use	62	68.70
3.3.5 Rural gap in use of digital payments	44	71.42
D. Impact pillar	71	53.68
1st sub-pillar: Economy	96	23.48
4.1.1 High-tech and medium-high-tech manufacturing	103	2.35
4.1.2 High-tech exports	88	9.99
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	121	31.71
4.1.5 Prevalence of gig economy	84	34.01
4.1.6 ICT services exports	42	39.35
2nd sub-pillar: Quality of Life	64	67.85
4.2.1 Happiness	60	67.14
4.2.2 Freedom to make life choices	69	72.44
4.2.3 Income inequality	63	65.83
4.2.4 Healthy life expectancy at birth	86	65.98
3rd sub-pillar: SDG Contribution	53	69.71
4.3.1 SDG 3: Good Health and Well-Being	88	59.47
4.3.2 SDG 4: Quality Education	58	35.29
4.3.3 SDG 5: Women's economic opportunity	37	85.09
4.3.4 SDG 7: Affordable and Clean Energy	10	93.23
4.3.5 SDG 11: Sustainable Cities and Communities	49	75.46

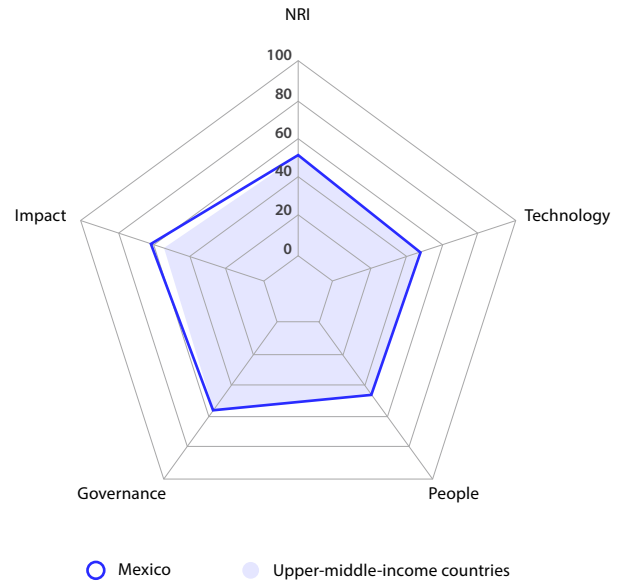
NOTE: ● Indicates a strength and ○ a weakness.

Mexico

Rank
(Out of 131) Score

Network Readiness Index **60 51.33**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	63	45.03
1st sub-pillar: Access	62	66.60
2nd sub-pillar: Content	58	38.71
3rd sub-pillar: Future Technologies	77	29.76
B. People pillar	67	44.98
1st sub-pillar: Individuals	87	42.19
2nd sub-pillar: Businesses	85	35.58
3rd sub-pillar: Governments	36	57.18
C. Governance pillar	72	54.75
1st sub-pillar: Trust	77	37.95
2nd sub-pillar: Regulation	45	71.11
3rd sub-pillar: Inclusion	86	55.19
D. Impact pillar	43	60.56
1st sub-pillar: Economy	35	43.95
2nd sub-pillar: Quality of Life	78	65.63
3rd sub-pillar: SDG Contribution	47	72.09



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	63	45.03
1st sub-pillar: Access	62	66.60
1.1.1 Mobile tariffs	74	52.70
1.1.2 Handset prices	29	72.86
1.1.3 FTTH/building Internet subscriptions	12	57.01
1.1.4 Population covered by at least a 3G mobile network	86	98.56
1.1.5 International Internet bandwidth	26	79.57
1.1.6 Internet access in schools	55	38.88
2nd sub-pillar: Content	58	38.71
1.2.1 GitHub commits	75	3.75
1.2.2 Internet domain registrations	69	3.47
1.2.3 Mobile apps development	79	72.98
1.2.4 AI scientific publications	20	74.66
3rd sub-pillar: Future Technologies	77	29.76
1.3.1 Adoption of emerging technologies	47	55.16
1.3.2 Investment in emerging technologies	65	39.75
1.3.3 Robot density	33	7.62
1.3.4 Computer software spending	72	16.53
B. People pillar	67	44.98
1st sub-pillar: Individuals	87	42.19
2.1.1 Mobile broadband internet traffic within the country	22	31.11
2.1.2 ICT skills in the education system	114	22.19
2.1.3 Use of virtual social networks	51	73.03
2.1.4 Tertiary enrollment	72	28.00
2.1.5 Adult literacy rate	47	93.91
2.1.6 AI talent concentration	38	4.87
2nd sub-pillar: Businesses	85	35.58
2.2.1 Firms with website	85	36.91
2.2.2 GERD financed by business enterprise	68	21.97
2.2.3 Knowledge intensive employment	75	29.46
2.2.4 Annual investment in telecommunication services	14	87.90
2.2.5 GERD performed by business enterprise	67	1.67
3rd sub-pillar: Governments	36	57.18
2.3.1 Government online services	38	81.82
2.3.2 Publication and use of open data	6	89.71
2.3.3 Government promotion of investment in emerging tech	68	36.77
2.3.4 R&D expenditure by governments and higher education	71	20.44

Indicator	Rank	Score
C. Governance pillar	72	54.75
1st sub-pillar: Trust	77	37.95
3.1.1 Secure Internet servers	82	46.10
3.1.2 Cybersecurity	60	81.36
3.1.3 Online access to financial account	90	16.28
3.1.4 Internet shopping	89	8.04
2nd sub-pillar: Regulation	45	71.11
3.2.1 Regulatory quality	68	43.20
3.2.2 ICT regulatory environment	30	90.59
3.2.3 Regulation of emerging technologies	73	40.53
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	29	81.25
3rd sub-pillar: Inclusion	86	55.19
3.3.1 E-Participation	41	81.48
3.3.2 Socioeconomic gap in use of digital payments	113	39.73
3.3.3 Availability of local online content	65	60.34
3.3.4 Gender gap in Internet use	52	70.38
3.3.5 Rural gap in use of digital payments	113	24.03
D. Impact pillar	43	60.56
1st sub-pillar: Economy	35	43.95
4.1.1 High-tech and medium-high-tech manufacturing	11	66.37
4.1.2 High-tech exports	9	74.47
4.1.3 PCT patent applications	71	2.46
4.1.4 Domestic market size	13	77.35
4.1.5 Prevalence of gig economy	61	42.73
4.1.6 ICT services exports	129	0.34
2nd sub-pillar: Quality of Life	78	65.63
4.2.1 Happiness	56	67.88
4.2.2 Freedom to make life choices	48	78.34
4.2.3 Income inequality	100	44.22
4.2.4 Healthy life expectancy at birth	71	72.07
3rd sub-pillar: SDG Contribution	47	72.09
4.3.1 SDG 3: Good Health and Well-Being	53	74.70
4.3.2 SDG 4: Quality Education	55	35.91
4.3.3 SDG 5: Women's economic opportunity	40	84.21
4.3.4 SDG 7: Affordable and Clean Energy	36	85.46
4.3.5 SDG 11: Sustainable Cities and Communities	37	80.15

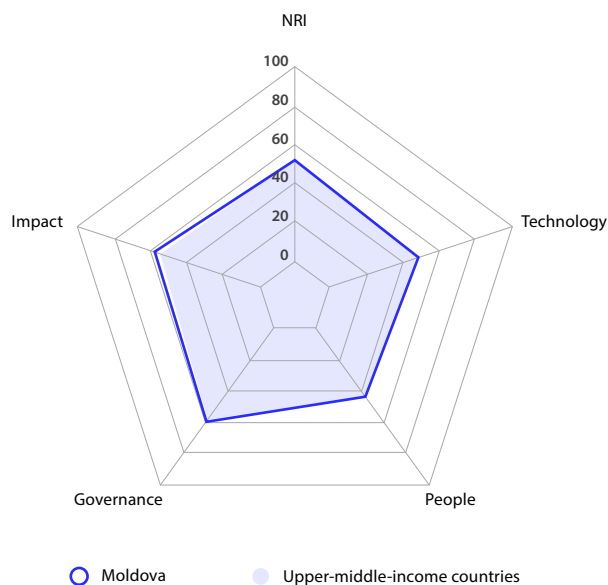
NOTE: ● Indicates a strength and ○ a weakness.

Moldova

Rank
(Out of 131) Score

Network Readiness Index 67 49.54

Pillar/sub-pillar	Rank	Score
A. Technology pillar	84	40.21
1st sub-pillar: Access	47	70.38
2nd sub-pillar: Content	94	28.19
3rd sub-pillar: Future Technologies	104	22.06
B. People pillar	71	43.57
1st sub-pillar: Individuals	65	49.08
2nd sub-pillar: Businesses	80	36.66
3rd sub-pillar: Governments	66	44.98
C. Governance pillar	63	58.07
1st sub-pillar: Trust	59	49.71
2nd sub-pillar: Regulation	75	61.13
3rd sub-pillar: Inclusion	68	63.37
D. Impact pillar	60	56.32
1st sub-pillar: Economy	74	29.25
2nd sub-pillar: Quality of Life	37	76.46
3rd sub-pillar: SDG Contribution	67	63.24



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	84	40.21
1st sub-pillar: Access	47	70.38
1.1.1 Mobile tariffs	54	67.26
1.1.2 Handset prices	61	53.28
1.1.3 FTTH/building Internet subscriptions	36	36.44 ●
1.1.4 Population covered by at least a 3G mobile network	28	99.97 ●
1.1.5 International Internet bandwidth	51	72.84
1.1.6 Internet access in schools	34	92.49
2nd sub-pillar: Content	94	28.19
1.2.1 GitHub commits	49	11.20
1.2.2 Internet domain registrations	71	3.37
1.2.3 Mobile apps development	54	82.29
1.2.4 AI scientific publications	92	15.91 ○
3rd sub-pillar: Future Technologies	104	22.06
1.3.1 Adoption of emerging technologies	89	37.40
1.3.2 Investment in emerging technologies	119	19.50 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	88	9.29
B. People pillar	71	43.57
1st sub-pillar: Individuals	65	49.08
2.1.1 Mobile broadband internet traffic within the country	88	3.07
2.1.2 ICT skills in the education system	37	62.72 ●
2.1.3 Use of virtual social networks	97	42.06
2.1.4 Tertiary enrollment	53	38.32
2.1.5 Adult literacy rate	14	99.21 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	80	36.66
2.2.1 Firms with website	73	44.59
2.2.2 GERD financed by business enterprise	71	19.13
2.2.3 Knowledge intensive employment	47	47.36 ●
2.2.4 Annual investment in telecommunication services	98	71.09 ○
2.2.5 GERD performed by business enterprise	74	1.15
3rd sub-pillar: Governments	66	44.98
2.3.1 Government online services	51	74.54
2.3.2 Publication and use of open data	34	45.59 ●
2.3.3 Government promotion of investment in emerging tech	54	42.45
2.3.4 R&D expenditure by governments and higher education	78	17.34

Indicator	Rank	Score
C. Governance pillar	63	58.07
1st sub-pillar: Trust	59	49.71
3.1.1 Secure Internet servers	48	68.88
3.1.2 Cybersecurity	71	75.35
3.1.3 Online access to financial account	69	25.65
3.1.4 Internet shopping	55	28.94
2nd sub-pillar: Regulation	75	61.13
3.2.1 Regulatory quality	70	42.13
3.2.2 ICT regulatory environment	30	90.59 ●
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	110	45.12
3rd sub-pillar: Inclusion	68	63.37
3.3.1 E-Participation	54	75.31
3.3.2 Socioeconomic gap in use of digital payments	73	66.08
3.3.3 Availability of local online content	61	62.74
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	93	49.37
D. Impact pillar	60	56.32
1st sub-pillar: Economy	74	29.25
4.1.1 High-tech and medium-high-tech manufacturing	62	24.49
4.1.2 High-tech exports	77	14.28
4.1.3 PCT patent applications	74	2.15
4.1.4 Domestic market size	115	34.57 ○
4.1.5 Prevalence of gig economy	62	42.15
4.1.6 ICT services exports	12	57.88 ●
2nd sub-pillar: Quality of Life	37	76.46
4.2.1 Happiness	59	67.32
4.2.2 Freedom to make life choices	52	77.56
4.2.3 Income inequality	6	92.96 ●
4.2.4 Healthy life expectancy at birth	80	67.99
3rd sub-pillar: SDG Contribution	67	63.24
4.3.1 SDG 3: Good Health and Well-Being	79	64.14
4.3.2 SDG 4: Quality Education	50	39.14
4.3.3 SDG 5: Women's economic opportunity	47	82.46 ●
4.3.4 SDG 7: Affordable and Clean Energy	93	70.68
4.3.5 SDG 11: Sustainable Cities and Communities	76	59.81

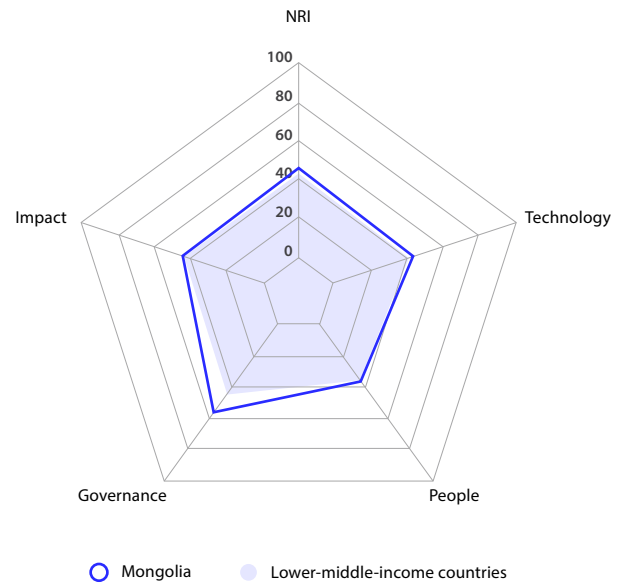
NOTE: ● Indicates a strength and ○ a weakness.

Mongolia

Rank
(Out of 131) Score

Network Readiness Index **87** **43.53**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	90	37.17
1st sub-pillar: Access	87	56.90
2nd sub-pillar: Content	87	30.83
3rd sub-pillar: Future Technologies	100	23.76
B. People pillar	91	36.14
1st sub-pillar: Individuals	50	51.56
2nd sub-pillar: Businesses	100	30.94
3rd sub-pillar: Governments	105	25.91
C. Governance pillar	65	56.60
1st sub-pillar: Trust	67	44.99
2nd sub-pillar: Regulation	101	53.51
3rd sub-pillar: Inclusion	53	71.31
D. Impact pillar	102	44.21
1st sub-pillar: Economy	123	13.36
2nd sub-pillar: Quality of Life	89	60.61
3rd sub-pillar: SDG Contribution	86	58.65



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	90	37.17
1st sub-pillar: Access	87	56.90
1.1.1 Mobile tariffs	72	53.20
1.1.2 Handset prices	122	22.59 ○
1.1.3 FTTH/building Internet subscriptions	46	31.41
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	99	63.56
1.1.6 Internet access in schools	41	70.66
2nd sub-pillar: Content	87	30.83
1.2.1 GitHub commits	69	4.79
1.2.2 Internet domain registrations	83	1.76
1.2.3 Mobile apps development	53	83.00
1.2.4 AI scientific publications	76	33.77
3rd sub-pillar: Future Technologies	100	23.76
1.3.1 Adoption of emerging technologies	111	25.94
1.3.2 Investment in emerging technologies	91	33.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	81	12.35
B. People pillar	91	36.14
1st sub-pillar: Individuals	50	51.56
2.1.1 Mobile broadband internet traffic within the country	76	5.82
2.1.2 ICT skills in the education system	105	27.81
2.1.3 Use of virtual social networks	25	79.55 ●
2.1.4 Tertiary enrollment	35	45.66 ●
2.1.5 Adult literacy rate	16	98.98 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	100	30.94
2.2.1 Firms with website	92	32.35
2.2.2 GERD financed by business enterprise	79	9.96
2.2.3 Knowledge intensive employment	56	39.52
2.2.4 Annual investment in telecommunication services	87	72.67
2.2.5 GERD performed by business enterprise	85	0.22
3rd sub-pillar: Governments	105	25.91
2.3.1 Government online services	95	51.51
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	105	19.76
2.3.4 R&D expenditure by governments and higher education	95	6.45

Indicator	Rank	Score
C. Governance pillar	65	56.60
1st sub-pillar: Trust	67	44.99
3.1.1 Secure Internet servers	59	59.52
3.1.2 Cybersecurity	111	24.90
3.1.3 Online access to financial account	36	46.58 ●
3.1.4 Internet shopping	40	48.97 ●
2nd sub-pillar: Regulation	101	53.51
3.2.1 Regulatory quality	78	38.67
3.2.2 ICT regulatory environment	86	73.53
3.2.3 Regulation of emerging technologies	88	29.74
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	83	58.95
3rd sub-pillar: Inclusion	53	71.31
3.3.1 E-Participation	83	59.26
3.3.2 Socioeconomic gap in use of digital payments	6	99.34 ●
3.3.3 Availability of local online content	98	42.55
3.3.4 Gender gap in Internet use	6	81.23 ●
3.3.5 Rural gap in use of digital payments	32	74.19 ●
D. Impact pillar	102	44.21
1st sub-pillar: Economy	123	13.36
4.1.1 High-tech and medium-high-tech manufacturing	102	2.38 ○
4.1.2 High-tech exports	117	0.91 ○
4.1.3 PCT patent applications	87	0.93
4.1.4 Domestic market size	107	36.24
4.1.5 Prevalence of gig economy	92	29.65
4.1.6 ICT services exports	104	10.03
2nd sub-pillar: Quality of Life	89	60.61
4.2.1 Happiness	66	63.08
4.2.2 Freedom to make life choices	115	49.50 ○
4.2.3 Income inequality	35	76.13 ●
4.2.4 Healthy life expectancy at birth	100	53.74
3rd sub-pillar: SDG Contribution	86	58.65
4.3.1 SDG 3: Good Health and Well-Being	89	57.38
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	114	52.46
4.3.5 SDG 11: Sustainable Cities and Communities	99	45.81

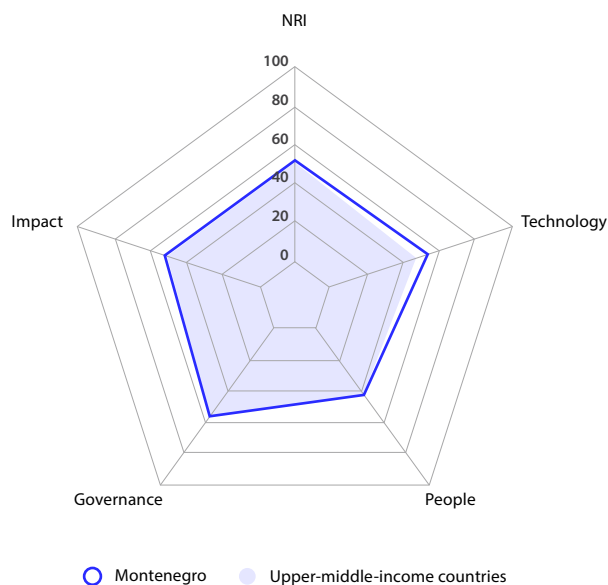
NOTE: ● Indicates a strength and ○ a weakness.

Montenegro

Rank
(Out of 131) Score

Network Readiness Index **65 50.38**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	39	52.08
1st sub-pillar: Access	88	55.60
2nd sub-pillar: Content	24	62.06
3rd sub-pillar: Future Technologies	47	38.57
B. People pillar	74	42.73
1st sub-pillar: Individuals	56	51.03
2nd sub-pillar: Businesses	63	43.33
3rd sub-pillar: Governments	92	33.82
C. Governance pillar	69	55.33
1st sub-pillar: Trust	89	34.36
2nd sub-pillar: Regulation	69	63.22
3rd sub-pillar: Inclusion	58	68.40
D. Impact pillar	81	51.40
1st sub-pillar: Economy	97	22.72
2nd sub-pillar: Quality of Life	62	69.36
3rd sub-pillar: SDG Contribution	73	62.11



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	39	52.08
1st sub-pillar: Access	88	55.60
1.1.1 Mobile tariffs	82	48.89
1.1.2 Handset prices	78	47.00
1.1.3 FTTH/building Internet subscriptions	80	15.33
1.1.4 Population covered by at least a 3G mobile network	74	99.35
1.1.5 International Internet bandwidth	85	67.42
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	24	62.06
1.2.1 GitHub commits	56	7.82
1.2.2 Internet domain registrations	1	100.00 ●
1.2.3 Mobile apps development	67	78.36
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	47	38.57
1.3.1 Adoption of emerging technologies	70	44.68
1.3.2 Investment in emerging technologies	88	33.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	22	37.54 ●
B. People pillar	74	42.73
1st sub-pillar: Individuals	56	51.03
2.1.1 Mobile broadband internet traffic within the country	104	1.20 ○
2.1.2 ICT skills in the education system	73	42.01
2.1.3 Use of virtual social networks	34	76.73 ●
2.1.4 Tertiary enrollment	56	36.65
2.1.5 Adult literacy rate	20	98.55 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	63	43.33
2.2.1 Firms with website	86	36.39
2.2.2 GERD financed by business enterprise	46	46.73
2.2.3 Knowledge intensive employment	40	56.13 ●
2.2.4 Annual investment in telecommunication services	90	72.43 ○
2.2.5 GERD performed by business enterprise	54	4.98
3rd sub-pillar: Governments	92	33.82
2.3.1 Government online services	93	52.73
2.3.2 Publication and use of open data	80	14.71
2.3.3 Government promotion of investment in emerging tech	55	41.38
2.3.4 R&D expenditure by governments and higher education	61	26.46

Indicator	Rank	Score
C. Governance pillar	69	55.33
1st sub-pillar: Trust	89	34.36
3.1.1 Secure Internet servers	67	53.18
3.1.2 Cybersecurity	91	52.41
3.1.3 Online access to financial account	89	16.36
3.1.4 Internet shopping	74	15.51
2nd sub-pillar: Regulation	69	63.22
3.2.1 Regulatory quality	53	51.73 ●
3.2.2 ICT regulatory environment	14	94.12 ●
3.2.3 Regulation of emerging technologies	79	34.47
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	57	69.12
3rd sub-pillar: Inclusion	58	68.40
3.3.1 E-Participation	92	53.09
3.3.2 Socioeconomic gap in use of digital payments	68	71.40
3.3.3 Availability of local online content	57	65.62
3.3.4 Gender gap in internet use	48	70.81
3.3.5 Rural gap in use of digital payments	4	81.06 ●
D. Impact pillar	81	51.40
1st sub-pillar: Economy	97	22.72
4.1.1 High-tech and medium-high-tech manufacturing	85	11.29 ○
4.1.2 High-tech exports	89	9.97
4.1.3 PCT patent applications	48	8.34
4.1.4 Domestic market size	126	23.02 ○
4.1.5 Prevalence of gig economy	63	41.57
4.1.6 ICT services exports	33	42.16 ●
2nd sub-pillar: Quality of Life	62	69.36
4.2.1 Happiness	65	63.10
4.2.2 Freedom to make life choices	70	72.36
4.2.3 Income inequality	63	65.83
4.2.4 Healthy life expectancy at birth	53	76.15
3rd sub-pillar: SDG Contribution	73	62.11
4.3.1 SDG 3: Good Health and Well-Being	80	63.72
4.3.2 SDG 4: Quality Education	53	38.19
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	53	82.62 ●
4.3.5 SDG 11: Sustainable Cities and Communities	96	47.07

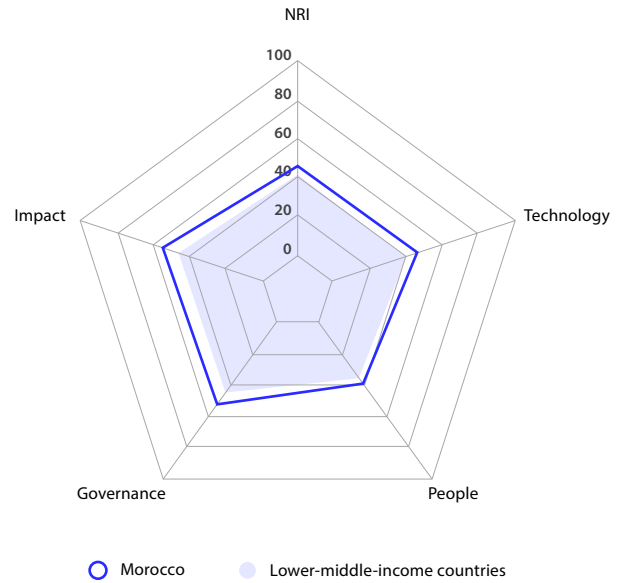
NOTE: ● Indicates a strength and ○ a weakness.

Morocco

Rank
(Out of 131) Score

Network Readiness Index 79 46.50

Pillar/sub-pillar	Rank	Score
A. Technology pillar	78	42.19
1st sub-pillar: Access	68	63.42
2nd sub-pillar: Content	80	32.53
3rd sub-pillar: Future Technologies	69	30.61
B. People pillar	85	38.15
1st sub-pillar: Individuals	90	41.54
2nd sub-pillar: Businesses	81	36.53
3rd sub-pillar: Governments	86	36.40
C. Governance pillar	80	51.35
1st sub-pillar: Trust	81	36.34
2nd sub-pillar: Regulation	37	74.51
3rd sub-pillar: Inclusion	111	43.19
D. Impact pillar	66	54.33
1st sub-pillar: Economy	49	39.38
2nd sub-pillar: Quality of Life	86	61.45
3rd sub-pillar: SDG Contribution	72	62.15



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	78	42.19
1st sub-pillar: Access	68	63.42
1.1.1 Mobile tariffs	96	42.60
1.1.2 Handset prices	85	44.24
1.1.3 FTTH/building Internet subscriptions	44	33.12
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	31	78.03
1.1.6 Internet access in schools	38	82.85
2nd sub-pillar: Content	80	32.53
1.2.1 GitHub commits	92	2.39
1.2.2 Internet domain registrations	94	1.13
1.2.3 Mobile apps development	88	69.73
1.2.4 AI scientific publications	44	56.88
3rd sub-pillar: Future Technologies	69	30.61
1.3.1 Adoption of emerging technologies	90	37.16
1.3.2 Investment in emerging technologies	81	35.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	64	19.66
B. People pillar	85	38.15
1st sub-pillar: Individuals	90	41.54
2.1.1 Mobile broadband internet traffic within the country	33	21.83
2.1.2 ICT skills in the education system	94	34.62
2.1.3 Use of virtual social networks	82	58.52
2.1.4 Tertiary enrollment	74	26.50
2.1.5 Adult literacy rate	89	66.23
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	81	36.53
2.2.1 Firms with website	61	53.03
2.2.2 GERD financed by business enterprise	59	37.00
2.2.3 Knowledge intensive employment	119	7.48
2.2.4 Annual investment in telecommunication services	49	79.51
2.2.5 GERD performed by business enterprise	52	5.61
3rd sub-pillar: Governments	86	36.40
2.3.1 Government online services	96	50.91
2.3.2 Publication and use of open data	78	16.18
2.3.3 Government promotion of investment in emerging tech	80	33.24
2.3.4 R&D expenditure by governments and higher education	40	45.27

Indicator	Rank	Score
C. Governance pillar	80	51.35
1st sub-pillar: Trust	81	36.34
3.1.1 Secure Internet servers	72	48.55
3.1.2 Cybersecurity	58	82.10
3.1.3 Online access to financial account	121	3.56
3.1.4 Internet shopping	80	11.13
2nd sub-pillar: Regulation	37	74.51
3.2.1 Regulatory quality	80	37.87
3.2.2 ICT regulatory environment	39	87.65
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	46	72.54
3rd sub-pillar: Inclusion	111	43.19
3.3.1 E-Participation	96	49.38
3.3.2 Socioeconomic gap in use of digital payments	104	44.22
3.3.3 Availability of local online content	68	60.10
3.3.4 Gender gap in Internet use	79	62.26
3.3.5 Rural gap in use of digital payments	123	0.00
D. Impact pillar	66	54.33
1st sub-pillar: Economy	49	39.38
4.1.1 High-tech and medium-high-tech manufacturing	24	56.12
4.1.2 High-tech exports	56	28.71
4.1.3 PCT patent applications	51	7.75
4.1.4 Domestic market size	55	55.88
4.1.5 Prevalence of gig economy	66	39.83
4.1.6 ICT services exports	22	47.97
2nd sub-pillar: Quality of Life	86	61.45
4.2.1 Happiness	78	56.05
4.2.2 Freedom to make life choices	86	65.58
4.2.3 Income inequality	77	59.05
4.2.4 Healthy life expectancy at birth	87	65.13
3rd sub-pillar: SDG Contribution	72	62.15
4.3.1 SDG 3: Good Health and Well-Being	59	72.84
4.3.2 SDG 4: Quality Education	74	16.92
4.3.3 SDG 5: Women's economic opportunity	93	65.79
4.3.4 SDG 7: Affordable and Clean Energy	47	83.12
4.3.5 SDG 11: Sustainable Cities and Communities	53	72.07

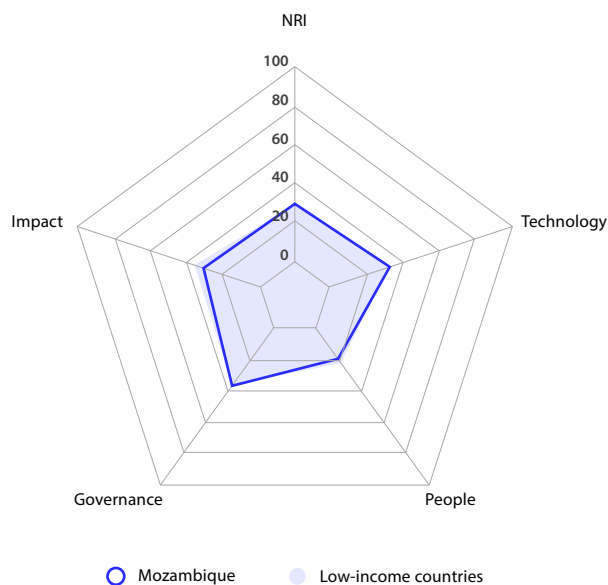
NOTE: ● Indicates a strength and ○ a weakness.

Mozambique

Rank
(Out of 131) Score

Network Readiness Index 125 28.18

Pillar/sub-pillar	Rank	Score
A. Technology pillar	121	26.98
1st sub-pillar: Access	113	44.34
2nd sub-pillar: Content	114	21.47
3rd sub-pillar: Future Technologies	125	15.13
B. People pillar	128	18.04
1st sub-pillar: Individuals	128	12.87
2nd sub-pillar: Businesses	126	19.34
3rd sub-pillar: Governments	115	21.91
C. Governance pillar	120	36.14
1st sub-pillar: Trust	112	22.42
2nd sub-pillar: Regulation	111	47.95
3rd sub-pillar: Inclusion	118	38.05
D. Impact pillar	125	31.57
1st sub-pillar: Economy	129	10.03
2nd sub-pillar: Quality of Life	118	43.75
3rd sub-pillar: SDG Contribution	126	40.93



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	121	26.98
1st sub-pillar: Access	113	44.34
1.1.1 Mobile tariffs	121	24.02
1.1.2 Handset prices	119	29.11
1.1.3 FTTH/building Internet subscriptions	81	13.58
1.1.4 Population covered by at least a 3G mobile network	109	94.53
1.1.5 International Internet bandwidth	109	60.48
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	114	21.47
1.2.1 GitHub commits	125	0.16
1.2.2 Internet domain registrations	118	0.17
1.2.3 Mobile apps development	124	42.29
1.2.4 AI scientific publications	62	43.25
3rd sub-pillar: Future Technologies	125	15.13
1.3.1 Adoption of emerging technologies	118	17.19
1.3.2 Investment in emerging technologies	107	26.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	110	2.20
B. People pillar	128	18.04
1st sub-pillar: Individuals	128	12.87
2.1.1 Mobile broadband internet traffic within the country	103	1.20
2.1.2 ICT skills in the education system	128	4.14
2.1.3 Use of virtual social networks	123	5.84
2.1.4 Tertiary enrollment	115	3.81
2.1.5 Adult literacy rate	97	49.37
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	126	19.34
2.2.1 Firms with website	88	35.58
2.2.2 GERD financed by business enterprise	100	0.53
2.2.3 Knowledge intensive employment	124	2.51
2.2.4 Annual investment in telecommunication services	111	58.06
2.2.5 GERD performed by business enterprise	91	0.03
3rd sub-pillar: Governments	115	21.91
2.3.1 Government online services	99	50.30
2.3.2 Publication and use of open data	100	2.94
2.3.3 Government promotion of investment in emerging tech	115	12.83
2.3.4 R&D expenditure by governments and higher education	68	21.56

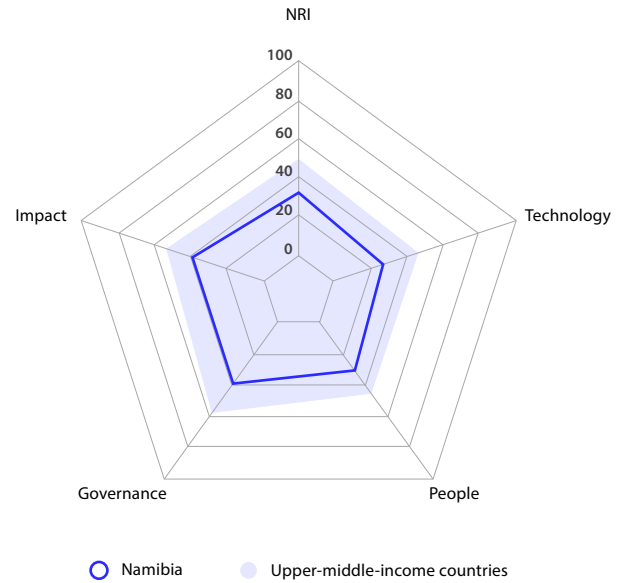
Indicator	Rank	Score
C. Governance pillar	120	36.14
1st sub-pillar: Trust	112	22.42
3.1.1 Secure Internet servers	117	26.87
3.1.2 Cybersecurity	112	22.85
3.1.3 Online access to financial account	53	34.30
3.1.4 Internet shopping	94	5.67
2nd sub-pillar: Regulation	111	47.95
3.2.1 Regulatory quality	109	22.67
3.2.2 ICT regulatory environment	109	62.55
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	118	33.33
3.2.5 Privacy protection by law content	44	73.25
3rd sub-pillar: Inclusion	118	38.05
3.3.1 E-Participation	94	50.62
3.3.2 Socioeconomic gap in use of digital payments	115	38.26
3.3.3 Availability of local online content	126	18.27
3.3.4 Gender gap in internet use	99	17.48
3.3.5 Rural gap in use of digital payments	60	65.60
D. Impact pillar	125	31.57
1st sub-pillar: Economy	129	10.03
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	119	0.78
4.1.3 PCT patent applications	99	0.00
4.1.4 Domestic market size	108	36.20
4.1.5 Prevalence of gig economy	121	5.52
4.1.6 ICT services exports	110	7.63
2nd sub-pillar: Quality of Life	118	43.75
4.2.1 Happiness	87	53.42
4.2.2 Freedom to make life choices	47	78.50
4.2.3 Income inequality	112	22.61
4.2.4 Healthy life expectancy at birth	128	20.48
3rd sub-pillar: SDG Contribution	126	40.93
4.3.1 SDG 3: Good Health and Well-Being	114	30.43
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	65	75.44
4.3.4 SDG 7: Affordable and Clean Energy	128	11.36
4.3.5 SDG 11: Sustainable Cities and Communities	97	46.50

NOTE: ● Indicates a strength and ○ a weakness.

Namibia

	Rank (Out of 131)	Score
Network Readiness Index	115	33.45

Pillar/sub-pillar	Rank	Score
A. Technology pillar	122	26.61
1st sub-pillar: Access	109	46.56
2nd sub-pillar: Content	131	3.16
3rd sub-pillar: Future Technologies	71	30.11
B. People pillar	107	30.19
1st sub-pillar: Individuals	107	32.04
2nd sub-pillar: Businesses	107	29.00
3rd sub-pillar: Governments	100	29.52
C. Governance pillar	112	38.46
1st sub-pillar: Trust	102	28.65
2nd sub-pillar: Regulation	120	37.72
3rd sub-pillar: Inclusion	102	49.00
D. Impact pillar	116	38.54
1st sub-pillar: Economy	109	17.64
2nd sub-pillar: Quality of Life	127	34.66
3rd sub-pillar: SDG Contribution	66	63.33



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	122	26.61
1st sub-pillar: Access	109	46.56
1.1.1 Mobile tariffs	100	39.96
1.1.2 Handset prices	82	45.02
1.1.3 FTTH/building Internet subscriptions	103	2.41 ○
1.1.4 Population covered by at least a 3G mobile network	105	96.13
1.1.5 International Internet bandwidth	125	49.27
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	131	3.16
1.2.1 GitHub commits	NA	NA
1.2.2 Internet domain registrations	53	6.32 ●
1.2.3 Mobile apps development	131	0.00 ○
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	71	30.11
1.3.1 Adoption of emerging technologies	71	44.52 ●
1.3.2 Investment in emerging technologies	83	34.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	83	11.06
B. People pillar	107	30.19
1st sub-pillar: Individuals	107	32.04
2.1.1 Mobile broadband internet traffic within the country	116	0.18 ○
2.1.2 ICT skills in the education system	107	26.92
2.1.3 Use of virtual social networks	103	28.72
2.1.4 Tertiary enrollment	90	15.24
2.1.5 Adult literacy rate	62	89.12 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	107	29.00
2.2.1 Firms with website	89	34.54
2.2.2 GERD financed by business enterprise	74	13.68
2.2.3 Knowledge intensive employment	82	25.72
2.2.4 Annual investment in telecommunication services	102	70.02
2.2.5 GERD performed by business enterprise	75	1.05
3rd sub-pillar: Governments	100	29.52
2.3.1 Government online services	96	50.91
2.3.2 Publication and use of open data	91	8.82
2.3.3 Government promotion of investment in emerging tech	77	33.66
2.3.4 R&D expenditure by governments and higher education	64	24.71 ●

Indicator	Rank	Score
C. Governance pillar	112	38.46
1st sub-pillar: Trust	102	28.65
3.1.1 Secure Internet servers	89	42.82
3.1.2 Cybersecurity	125	9.91
3.1.3 Online access to financial account	35	48.77 ●
3.1.4 Internet shopping	78	13.10
2nd sub-pillar: Regulation	120	37.72
3.2.1 Regulatory quality	79	38.13 ●
3.2.2 ICT regulatory environment	87	72.55
3.2.3 Regulation of emerging technologies	84	31.58
3.2.4 E-commerce legislation	126	0.00 ○
3.2.5 Privacy protection by law content	106	46.33
3rd sub-pillar: Inclusion	102	49.00
3.3.1 E-Participation	99	48.15
3.3.2 Socioeconomic gap in use of digital payments	92	53.45
3.3.3 Availability of local online content	103	37.74
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	77	56.68
D. Impact pillar	116	38.54
1st sub-pillar: Economy	109	17.64
4.1.1 High-tech and medium-high-tech manufacturing	97	3.57
4.1.2 High-tech exports	79	13.65
4.1.3 PCT patent applications	35	13.88 ●
4.1.4 Domestic market size	123	30.38
4.1.5 Prevalence of gig economy	71	37.50 ●
4.1.6 ICT services exports	115	6.84
2nd sub-pillar: Quality of Life	127	34.66
4.2.1 Happiness	103	41.18
4.2.2 Freedom to make life choices	116	48.08
4.2.3 Income inequality	116	9.80 ○
4.2.4 Healthy life expectancy at birth	113	39.57
3rd sub-pillar: SDG Contribution	66	63.33
4.3.1 SDG 3: Good Health and Well-Being	92	54.58
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	49	80.70 ●
4.3.4 SDG 7: Affordable and Clean Energy	58	81.62 ●
4.3.5 SDG 11: Sustainable Cities and Communities	113	36.42

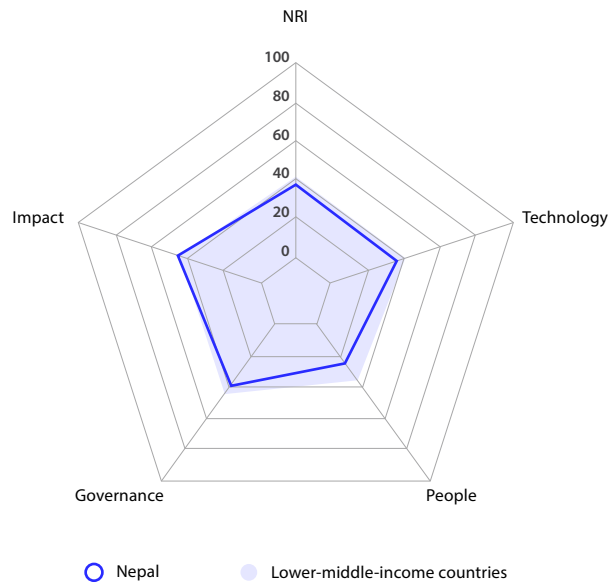
NOTE: ● Indicates a strength and ○ a weakness.

Nepal

Rank
(Out of 131) Score

Network Readiness Index **112 34.66**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	112	30.36
1st sub-pillar: Access	121	42.01
2nd sub-pillar: Content	88	30.65
3rd sub-pillar: Future Technologies	115	18.43
B. People pillar	117	23.97
1st sub-pillar: Individuals	111	27.84
2nd sub-pillar: Businesses	127	18.50
3rd sub-pillar: Governments	108	25.56
C. Governance pillar	109	39.15
1st sub-pillar: Trust	107	24.51
2nd sub-pillar: Regulation	115	46.94
3rd sub-pillar: Inclusion	109	46.01
D. Impact pillar	101	45.16
1st sub-pillar: Economy	99	22.08
2nd sub-pillar: Quality of Life	93	58.60
3rd sub-pillar: SDG Contribution	94	54.81



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	112	30.36
1st sub-pillar: Access	121	42.01
1.1.1 Mobile tariffs	94	44.09
1.1.2 Handset prices	127	17.15 ○
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	124	75.16 ○
1.1.5 International Internet bandwidth	93	64.52
1.1.6 Internet access in schools	68	9.13
2nd sub-pillar: Content	88	30.65
1.2.1 GitHub commits	80	3.29 ●
1.2.2 Internet domain registrations	96	1.00
1.2.3 Mobile apps development	85	71.55 ●
1.2.4 AI scientific publications	57	46.77 ●
3rd sub-pillar: Future Technologies	115	18.43
1.3.1 Adoption of emerging technologies	107	27.45
1.3.2 Investment in emerging technologies	106	26.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	114	1.59
B. People pillar	117	23.97
1st sub-pillar: Individuals	111	27.84
2.1.1 Mobile broadband internet traffic within the country	111	0.45
2.1.2 ICT skills in the education system	100	30.77
2.1.3 Use of virtual social networks	99	41.29
2.1.4 Tertiary enrollment	103	7.99
2.1.5 Adult literacy rate	93	58.71
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	127	18.50
2.2.1 Firms with website	105	19.18
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	98	17.82
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	108	25.56
2.3.1 Government online services	114	38.18
2.3.2 Publication and use of open data	80	14.71
2.3.3 Government promotion of investment in emerging tech	101	23.80
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	109	39.15
1st sub-pillar: Trust	107	24.51
3.1.1 Secure Internet servers	91	42.63 ●
3.1.2 Cybersecurity	97	44.02
3.1.3 Online access to financial account	116	6.34 ○
3.1.4 Internet shopping	97	5.06
2nd sub-pillar: Regulation	115	46.94
3.2.1 Regulatory quality	112	22.40
3.2.2 ICT regulatory environment	118	57.65
3.2.3 Regulation of emerging technologies	114	4.47 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	97	50.19
3rd sub-pillar: Inclusion	109	46.01
3.3.1 E-Participation	113	34.56
3.3.2 Socioeconomic gap in use of digital payments	94	52.44
3.3.3 Availability of local online content	108	34.38
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	66	62.65 ●
D. Impact pillar	101	45.16
1st sub-pillar: Economy	99	22.08
4.1.1 High-tech and medium-high-tech manufacturing	94	6.47
4.1.2 High-tech exports	116	1.48 ○
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	77	46.94 ●
4.1.5 Prevalence of gig economy	107	22.09
4.1.6 ICT services exports	54	33.41 ●
2nd sub-pillar: Quality of Life	93	58.60
4.2.1 Happiness	98	43.51
4.2.2 Freedom to make life choices	61	75.02 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	97	57.28
3rd sub-pillar: SDG Contribution	94	54.81
4.3.1 SDG 3: Good Health and Well-Being	106	40.67
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	74	72.81 ●
4.3.4 SDG 7: Affordable and Clean Energy	99	67.34
4.3.5 SDG 11: Sustainable Cities and Communities	110	38.42

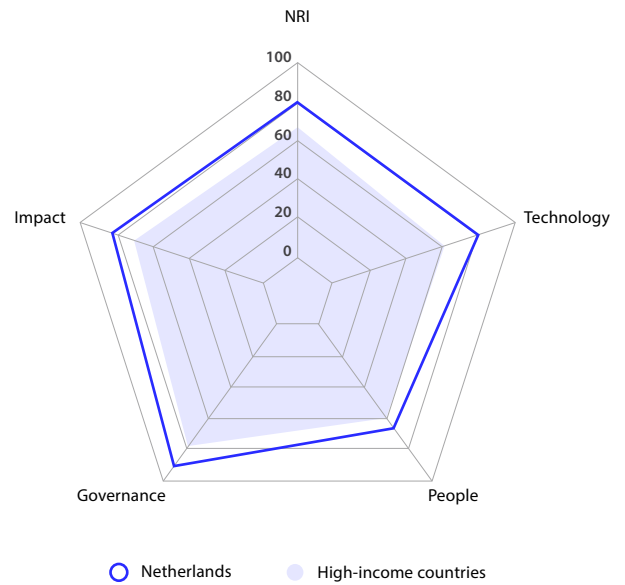
NOTE: ● Indicates a strength and ○ a weakness.

Netherlands

Rank
(Out of 131) Score

Network Readiness Index **4 78.82**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	3	78.36
1st sub-pillar: Access	18	77.35
2nd sub-pillar: Content	3	89.83
3rd sub-pillar: Future Technologies	6	67.90
B. People pillar	14	66.53
1st sub-pillar: Individuals	62	49.92
2nd sub-pillar: Businesses	10	74.96
3rd sub-pillar: Governments	15	74.73
C. Governance pillar	4	89.60
1st sub-pillar: Trust	3	91.92
2nd sub-pillar: Regulation	5	90.28
3rd sub-pillar: Inclusion	4	86.60
D. Impact pillar	4	80.77
1st sub-pillar: Economy	5	67.25
2nd sub-pillar: Quality of Life	11	87.26
3rd sub-pillar: SDG Contribution	9	87.79



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	3	78.36
1st sub-pillar: Access	18	77.35
1.1.1 Mobile tariffs	29	77.62
1.1.2 Handset prices	22	76.39
1.1.3 FTTH/building Internet subscriptions	45	32.95 ○
1.1.4 Population covered by at least a 3G mobile network	55	99.68 ○
1.1.5 International Internet bandwidth	32	77.47
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	3	89.83
1.2.1 GitHub commits	10	69.50
1.2.2 Internet domain registrations	1	100.00 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	6	67.90
1.3.1 Adoption of emerging technologies	1	100.00 ●
1.3.2 Investment in emerging technologies	5	87.75 ●
1.3.3 Robot density	12	33.36
1.3.4 Computer software spending	12	50.51
B. People pillar	14	66.53
1st sub-pillar: Individuals	62	49.92
2.1.1 Mobile broadband internet traffic within the country	47	14.97
2.1.2 ICT skills in the education system	15	78.70
2.1.3 Use of virtual social networks	11	85.10
2.1.4 Tertiary enrollment	13	58.15
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	30	12.67 ○
2nd sub-pillar: Businesses	10	74.96
2.2.1 Firms with website	3	95.67 ●
2.2.2 GERD financed by business enterprise	16	71.23
2.2.3 Knowledge intensive employment	5	81.68 ●
2.2.4 Annual investment in telecommunication services	18	85.65
2.2.5 GERD performed by business enterprise	16	40.55
3rd sub-pillar: Governments	15	74.73
2.3.1 Government online services	12	90.30
2.3.2 Publication and use of open data	10	76.47
2.3.3 Government promotion of investment in emerging tech	21	66.62
2.3.4 R&D expenditure by governments and higher education	17	65.52

Indicator	Rank	Score
C. Governance pillar	4	89.60
1st sub-pillar: Trust	3	91.92
3.1.1 Secure Internet servers	3	94.37 ●
3.1.2 Cybersecurity	22	97.00
3.1.3 Online access to financial account	5	89.01 ●
3.1.4 Internet shopping	7	87.28 ●
2nd sub-pillar: Regulation	5	90.28
3.2.1 Regulatory quality	8	87.73
3.2.2 ICT regulatory environment	20	93.53
3.2.3 Regulation of emerging technologies	11	81.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	12	88.81
3rd sub-pillar: Inclusion	4	86.60
3.3.1 E-Participation	9	96.30
3.3.2 Socioeconomic gap in use of digital payments	18	96.46
3.3.3 Availability of local online content	3	97.12 ●
3.3.4 Gender gap in Internet use	71	67.29 ○
3.3.5 Rural gap in use of digital payments	21	75.85
D. Impact pillar	4	80.77
1st sub-pillar: Economy	5	67.25
4.1.1 High-tech and medium-high-tech manufacturing	12	65.77
4.1.2 High-tech exports	12	68.02
4.1.3 PCT patent applications	9	67.62
4.1.4 Domestic market size	26	68.40
4.1.5 Prevalence of gig economy	3	90.12 ●
4.1.6 ICT services exports	28	43.59
2nd sub-pillar: Quality of Life	11	87.26
4.2.1 Happiness	9	91.45
4.2.2 Freedom to make life choices	40	81.58
4.2.3 Income inequality	17	84.92
4.2.4 Healthy life expectancy at birth	14	91.09
3rd sub-pillar: SDG Contribution	9	87.79
4.3.1 SDG 3: Good Health and Well-Being	9	94.99
4.3.2 SDG 4: Quality Education	15	69.87
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	35	85.55
4.3.5 SDG 11: Sustainable Cities and Communities	17	92.05

NOTE: ● Indicates a strength and ○ a weakness.

New Zealand

Rank
(Out of 131) Score

Network Readiness Index 19 70.32

Pillar/sub-pillar	Rank	Score
A. Technology pillar	16	65.43
1st sub-pillar: Access	5	85.23
2nd sub-pillar: Content	16	66.59
3rd sub-pillar: Future Technologies	35	44.47
B. People pillar	26	59.17
1st sub-pillar: Individuals	88	42.15
2nd sub-pillar: Businesses	25	63.46
3rd sub-pillar: Governments	17	71.91
C. Governance pillar	11	84.78
1st sub-pillar: Trust	10	84.60
2nd sub-pillar: Regulation	17	83.87
3rd sub-pillar: Inclusion	6	85.86
D. Impact pillar	23	71.89
1st sub-pillar: Economy	41	41.13
2nd sub-pillar: Quality of Life	6	88.69
3rd sub-pillar: SDG Contribution	16	85.84



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	16	65.43
1st sub-pillar: Access	5	85.23
1.1.1 Mobile tariffs	30	77.40
1.1.2 Handset prices	7	94.06
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	71	99.43
1.1.5 International Internet bandwidth	71	70.03
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	16	66.59
1.2.1 GitHub commits	20	49.56
1.2.2 Internet domain registrations	18	49.27
1.2.3 Mobile apps development	24	94.90
1.2.4 AI scientific publications	24	72.61
3rd sub-pillar: Future Technologies	35	44.47
1.3.1 Adoption of emerging technologies	18	77.97
1.3.2 Investment in emerging technologies	19	68.50
1.3.3 Robot density	31	8.14
1.3.4 Computer software spending	51	23.29
B. People pillar	26	59.17
1st sub-pillar: Individuals	88	42.15
2.1.1 Mobile broadband internet traffic within the country	84	4.04
2.1.2 ICT skills in the education system	39	62.13
2.1.3 Use of virtual social networks	14	83.64
2.1.4 Tertiary enrollment	20	53.53
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	35	7.41
2nd sub-pillar: Businesses	25	63.46
2.2.1 Firms with website	15	84.64
2.2.2 GERD financed by business enterprise	30	61.76
2.2.3 Knowledge intensive employment	26	66.25
2.2.4 Annual investment in telecommunication services	33	82.57
2.2.5 GERD performed by business enterprise	29	22.09
3rd sub-pillar: Governments	17	71.91
2.3.1 Government online services	10	92.73
2.3.2 Publication and use of open data	7	88.24
2.3.3 Government promotion of investment in emerging tech	36	51.60
2.3.4 R&D expenditure by governments and higher education	24	55.06

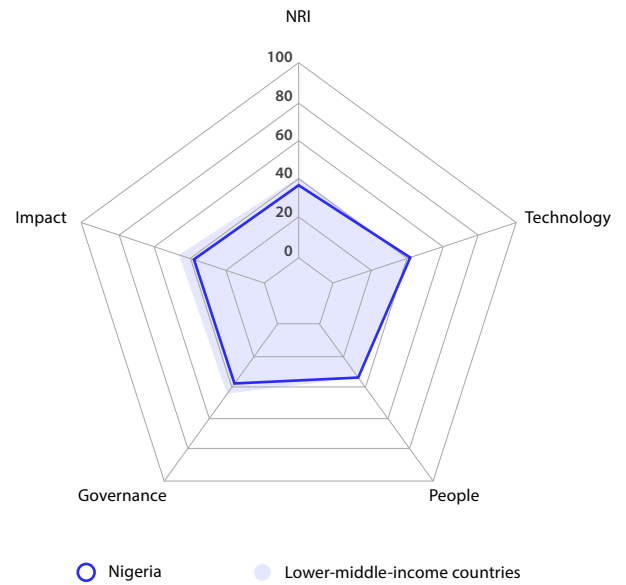
Indicator	Rank	Score
C. Governance pillar	11	84.78
1st sub-pillar: Trust	10	84.60
3.1.1 Secure Internet servers	35	79.23
3.1.2 Cybersecurity	56	83.76
3.1.3 Online access to financial account	6	86.73
3.1.4 Internet shopping	6	88.68
2nd sub-pillar: Regulation	17	83.87
3.2.1 Regulatory quality	2	91.20
3.2.2 ICT regulatory environment	39	87.65
3.2.3 Regulation of emerging technologies	19	76.05
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	65	64.46
3rd sub-pillar: Inclusion	6	85.86
3.3.1 E-Participation	4	98.77
3.3.2 Socioeconomic gap in use of digital payments	24	94.64
3.3.3 Availability of local online content	17	86.54
3.3.4 Gender gap in internet use	16	75.43
3.3.5 Rural gap in use of digital payments	33	73.94
D. Impact pillar	23	71.89
1st sub-pillar: Economy	41	41.13
4.1.1 High-tech and medium-high-tech manufacturing	68	19.99
4.1.2 High-tech exports	54	32.04
4.1.3 PCT patent applications	20	40.18
4.1.4 Domestic market size	60	53.37
4.1.5 Prevalence of gig economy	15	70.35
4.1.6 ICT services exports	60	30.84
2nd sub-pillar: Quality of Life	6	88.69
4.2.1 Happiness	10	88.29
4.2.2 Freedom to make life choices	17	90.71
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	27	87.07
3rd sub-pillar: SDG Contribution	16	85.84
4.3.1 SDG 3: Good Health and Well-Being	14	93.74
4.3.2 SDG 4: Quality Education	13	70.04
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	72	77.44
4.3.5 SDG 11: Sustainable Cities and Communities	20	91.47

NOTE: ● Indicates a strength and ○ a weakness.

Nigeria

Rank (Out of 131) Score
109 36.67

Pillar/sub-pillar	Rank	Score
A. Technology pillar	88	38.08
1st sub-pillar: Access	85	57.53
2nd sub-pillar: Content	85	31.17
3rd sub-pillar: Future Technologies	97	25.53
B. People pillar	99	33.12
1st sub-pillar: Individuals	121	18.41
2nd sub-pillar: Businesses	42	52.04
3rd sub-pillar: Governments	101	28.92
C. Governance pillar	115	37.88
1st sub-pillar: Trust	83	35.61
2nd sub-pillar: Regulation	113	47.40
3rd sub-pillar: Inclusion	126	30.63
D. Impact pillar	118	37.59
1st sub-pillar: Economy	98	22.67
2nd sub-pillar: Quality of Life	108	51.13
3rd sub-pillar: SDG Contribution	128	38.96



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	88	38.08
1st sub-pillar: Access	85	57.53
1.1.1 Mobile tariffs	76	51.33 ●
1.1.2 Handset prices	67	51.25 ●
1.1.3 FTTH/building Internet subscriptions	72	19.18
1.1.4 Population covered by at least a 3G mobile network	115	94.38
1.1.5 International Internet bandwidth	60	71.53 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	85	31.17
1.2.1 GitHub commits	99	1.72
1.2.2 Internet domain registrations	111	0.36
1.2.3 Mobile apps development	109	57.73
1.2.4 AI scientific publications	34	64.85 ●
3rd sub-pillar: Future Technologies	97	25.53
1.3.1 Adoption of emerging technologies	74	43.17
1.3.2 Investment in emerging technologies	114	22.75
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	84	10.67
B. People pillar	99	33.12
1st sub-pillar: Individuals	121	18.41
2.1.1 Mobile broadband internet traffic within the country	79	5.22
2.1.2 ICT skills in the education system	118	16.86
2.1.3 Use of virtual social networks	114	11.78
2.1.4 Tertiary enrollment	105	7.07
2.1.5 Adult literacy rate	96	51.12
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	42	52.04
2.2.1 Firms with website	111	14.79
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	35	58.45 ●
2.2.4 Annual investment in telecommunication services	31	82.88 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	101	28.92
2.3.1 Government online services	99	50.30
2.3.2 Publication and use of open data	73	19.12
2.3.3 Government promotion of investment in emerging tech	110	17.34
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	115	37.88
1st sub-pillar: Trust	83	35.61
3.1.1 Secure Internet servers	105	34.34
3.1.2 Cybersecurity	55	84.49 ●
3.1.3 Online access to financial account	78	19.70
3.1.4 Internet shopping	102	3.92
2nd sub-pillar: Regulation	113	47.40
3.2.1 Regulatory quality	122	15.47 ○
3.2.2 ICT regulatory environment	57	85.09 ●
3.2.3 Regulation of emerging technologies	105	17.63
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	91	52.16
3rd sub-pillar: Inclusion	126	30.63
3.3.1 E-Participation	101	46.91
3.3.2 Socioeconomic gap in use of digital payments	120	33.24 ○
3.3.3 Availability of local online content	116	27.40
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	120	14.97 ○
D. Impact pillar	118	37.59
1st sub-pillar: Economy	98	22.67
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	92	7.41
4.1.3 PCT patent applications	97	0.18
4.1.4 Domestic market size	25	68.91 ●
4.1.5 Prevalence of gig economy	92	29.65
4.1.6 ICT services exports	113	7.18
2nd sub-pillar: Quality of Life	108	51.13
4.2.1 Happiness	105	40.97
4.2.2 Freedom to make life choices	95	59.47
4.2.3 Income inequality	54	70.10 ●
4.2.4 Healthy life expectancy at birth	122	34.00 ○
3rd sub-pillar: SDG Contribution	128	38.96
4.3.1 SDG 3: Good Health and Well-Being	119	26.65
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	116	48.25
4.3.4 SDG 7: Affordable and Clean Energy	110	57.64
4.3.5 SDG 11: Sustainable Cities and Communities	128	23.29 ○

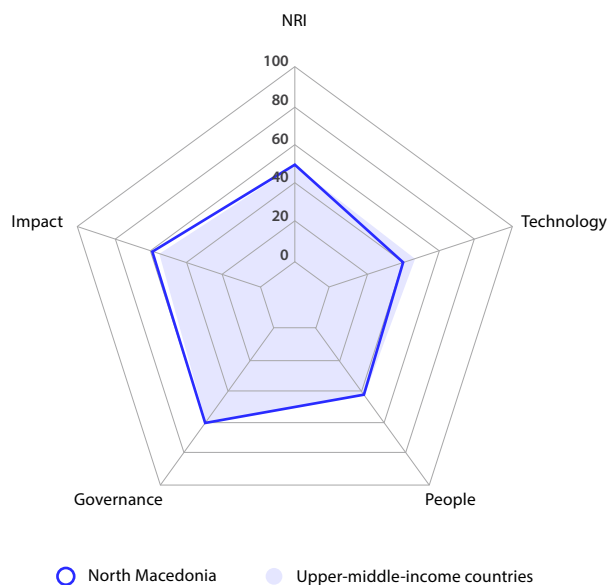
NOTE: ● Indicates a strength and ○ a weakness.

North Macedonia

Rank
(Out of 131) Score

Network Readiness Index 69 48.46

Pillar/sub-pillar	Rank	Score
A. Technology pillar	95	35.28
1st sub-pillar: Access	101	51.50
2nd sub-pillar: Content	77	33.23
3rd sub-pillar: Future Technologies	106	21.11
B. People pillar	77	41.99
1st sub-pillar: Individuals	79	44.93
2nd sub-pillar: Businesses	68	42.18
3rd sub-pillar: Governments	80	38.86
C. Governance pillar	61	58.77
1st sub-pillar: Trust	61	49.28
2nd sub-pillar: Regulation	77	61.02
3rd sub-pillar: Inclusion	64	66.03
D. Impact pillar	51	57.79
1st sub-pillar: Economy	56	36.43
2nd sub-pillar: Quality of Life	45	74.37
3rd sub-pillar: SDG Contribution	69	62.56



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	95	35.28
1st sub-pillar: Access	101	51.50
1.1.1 Mobile tariffs	99	40.32
1.1.2 Handset prices	91	42.09
1.1.3 FTTH/building Internet subscriptions	77	17.76
1.1.4 Population covered by at least a 3G mobile network	38	99.95 ●
1.1.5 International Internet bandwidth	116	57.37 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	77	33.23
1.2.1 GitHub commits	52	8.80
1.2.2 Internet domain registrations	61	4.91
1.2.3 Mobile apps development	60	81.54
1.2.4 AI scientific publications	69	37.67
3rd sub-pillar: Future Technologies	106	21.11
1.3.1 Adoption of emerging technologies	96	32.55
1.3.2 Investment in emerging technologies	123	17.50 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	79	13.28
B. People pillar	77	41.99
1st sub-pillar: Individuals	79	44.93
2.1.1 Mobile broadband internet traffic within the country	99	1.48
2.1.2 ICT skills in the education system	83	37.87
2.1.3 Use of virtual social networks	79	59.88
2.1.4 Tertiary enrollment	71	28.20
2.1.5 Adult literacy rate	31	97.20 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	68	42.18
2.2.1 Firms with website	47	62.38
2.2.2 GERD financed by business enterprise	63	29.16
2.2.3 Knowledge intensive employment	48	47.09 ●
2.2.4 Annual investment in telecommunication services	103	69.65 ○
2.2.5 GERD performed by business enterprise	62	2.62
3rd sub-pillar: Governments	80	38.86
2.3.1 Government online services	57	73.34
2.3.2 Publication and use of open data	49	33.82
2.3.3 Government promotion of investment in emerging tech	96	27.10
2.3.4 R&D expenditure by governments and higher education	70	21.16

Indicator	Rank	Score
C. Governance pillar	61	58.77
1st sub-pillar: Trust	61	49.28
3.1.1 Secure Internet servers	63	55.30
3.1.2 Cybersecurity	46	89.74 ●
3.1.3 Online access to financial account	87	16.85
3.1.4 Internet shopping	52	35.21
2nd sub-pillar: Regulation	77	61.02
3.2.1 Regulatory quality	46	54.67 ●
3.2.2 ICT regulatory environment	45	87.06 ●
3.2.3 Regulation of emerging technologies	88	29.74
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	62	66.96
3rd sub-pillar: Inclusion	64	66.03
3.3.1 E-Participation	38	82.71 ●
3.3.2 Socioeconomic gap in use of digital payments	69	69.91
3.3.3 Availability of local online content	80	52.40
3.3.4 Gender gap in internet use	73	65.60
3.3.5 Rural gap in use of digital payments	72	59.52
D. Impact pillar	51	57.79
1st sub-pillar: Economy	56	36.43
4.1.1 High-tech and medium-high-tech manufacturing	16	61.87 ●
4.1.2 High-tech exports	48	35.11
4.1.3 PCT patent applications	56	6.09
4.1.4 Domestic market size	113	34.71 ○
4.1.5 Prevalence of gig economy	68	38.37
4.1.6 ICT services exports	31	42.45 ●
2nd sub-pillar: Quality of Life	45	74.37
4.2.1 Happiness	NA	NA
4.2.2 Freedom to make life choices	NA	NA
4.2.3 Income inequality	39	75.38 ●
4.2.4 Healthy life expectancy at birth	64	73.37
3rd sub-pillar: SDG Contribution	69	62.56
4.3.1 SDG 3: Good Health and Well-Being	77	65.76
4.3.2 SDG 4: Quality Education	66	29.57
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	51	82.71
4.3.5 SDG 11: Sustainable Cities and Communities	80	55.82

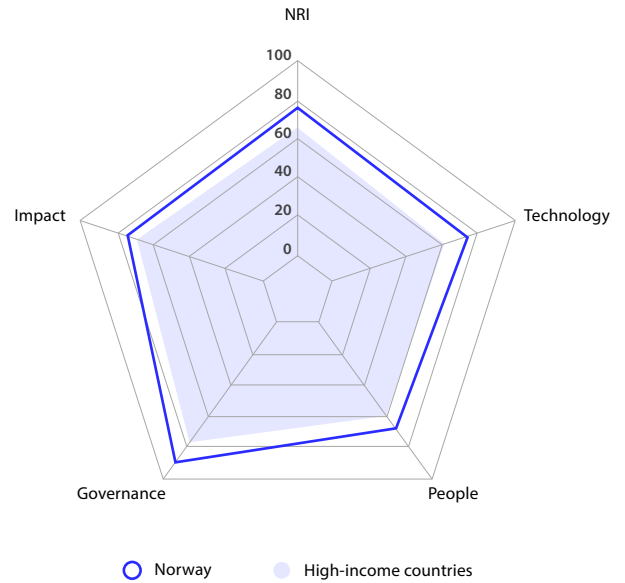
NOTE: ● Indicates a strength and ○ a weakness.

Norway

Rank
(Out of 131) Score

Network Readiness Index 10 75.68

Pillar/sub-pillar	Rank	Score
A. Technology pillar	12	69.69
1st sub-pillar: Access	2	87.80
2nd sub-pillar: Content	9	75.98
3rd sub-pillar: Future Technologies	31	45.28
B. People pillar	12	67.31
1st sub-pillar: Individuals	60	50.11
2nd sub-pillar: Businesses	19	67.36
3rd sub-pillar: Governments	3	84.47
C. Governance pillar	1	91.00
1st sub-pillar: Trust	2	95.30
2nd sub-pillar: Regulation	2	93.32
3rd sub-pillar: Inclusion	15	84.37
D. Impact pillar	14	74.72
1st sub-pillar: Economy	32	44.50
2nd sub-pillar: Quality of Life	5	91.74
3rd sub-pillar: SDG Contribution	8	87.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	12	69.69
1st sub-pillar: Access	2	87.80
1.1.1 Mobile tariffs	4	92.11 ●
1.1.2 Handset prices	21	77.03
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	74	69.89 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	9	75.98
1.2.1 GitHub commits	5	78.90 ●
1.2.2 Internet domain registrations	14	52.63
1.2.3 Mobile apps development	16	96.58
1.2.4 AI scientific publications	17	75.79
3rd sub-pillar: Future Technologies	31	45.28
1.3.1 Adoption of emerging technologies	NA	NA
1.3.2 Investment in emerging technologies	16	73.50
1.3.3 Robot density	24	13.03 ○
1.3.4 Computer software spending	15	49.31
B. People pillar	12	67.31
1st sub-pillar: Individuals	60	50.11
2.1.1 Mobile broadband internet traffic within the country	73	6.93 ○
2.1.2 ICT skills in the education system	13	79.59
2.1.3 Use of virtual social networks	19	81.01
2.1.4 Tertiary enrollment	17	55.52
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	14	27.49
2nd sub-pillar: Businesses	19	67.36
2.2.1 Firms with website	10	85.44
2.2.2 GERD financed by business enterprise	37	53.45
2.2.3 Knowledge intensive employment	4	81.98 ●
2.2.4 Annual investment in telecommunication services	27	83.42
2.2.5 GERD performed by business enterprise	18	32.50
3rd sub-pillar: Governments	3	84.47
2.3.1 Government online services	19	87.28
2.3.2 Publication and use of open data	11	73.53
2.3.3 Government promotion of investment in emerging tech	NA	NA
2.3.4 R&D expenditure by governments and higher education	2	92.60 ●

Indicator	Rank	Score
C. Governance pillar	1	91.00
1st sub-pillar: Trust	2	95.30
3.1.1 Secure Internet servers	19	84.36
3.1.2 Cybersecurity	23	96.84
3.1.3 Online access to financial account	1	100.00 ●
3.1.4 Internet shopping	1	100.00 ●
2nd sub-pillar: Regulation	2	93.32
3.2.1 Regulatory quality	9	86.40
3.2.2 ICT regulatory environment	11	94.71
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	7	92.16 ●
3rd sub-pillar: Inclusion	15	84.37
3.3.1 E-Participation	18	90.13
3.3.2 Socioeconomic gap in use of digital payments	12	97.56
3.3.3 Availability of local online content	27	84.13
3.3.4 Gender gap in Internet use	31	73.53
3.3.5 Rural gap in use of digital payments	16	76.50
D. Impact pillar	14	74.72
1st sub-pillar: Economy	32	44.50
4.1.1 High-tech and medium-high-tech manufacturing	33	48.29
4.1.2 High-tech exports	46	38.41
4.1.3 PCT patent applications	17	45.36
4.1.4 Domestic market size	49	58.09
4.1.5 Prevalence of gig economy	NA	NA
4.1.6 ICT services exports	57	32.34 ○
2nd sub-pillar: Quality of Life	5	91.74
4.2.1 Happiness	7	92.29 ●
4.2.2 Freedom to make life choices	6	95.14 ●
4.2.3 Income inequality	11	88.69
4.2.4 Healthy life expectancy at birth	15	90.85
3rd sub-pillar: SDG Contribution	8	87.91
4.3.1 SDG 3: Good Health and Well-Being	12	93.86
4.3.2 SDG 4: Quality Education	22	67.70
4.3.3 SDG 5: Women's economic opportunity	20	95.61
4.3.4 SDG 7: Affordable and Clean Energy	45	83.21
4.3.5 SDG 11: Sustainable Cities and Communities	2	99.19 ●

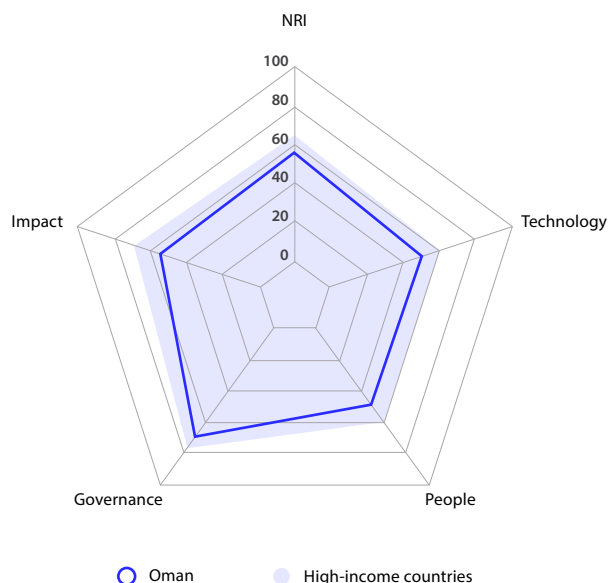
NOTE: ● Indicates a strength and ○ a weakness.

Oman

Rank
(Out of 131) Score

Network Readiness Index 53 54.72

Pillar/sub-pillar	Rank	Score
A. Technology pillar	58	46.61
1st sub-pillar: Access	53	68.94
2nd sub-pillar: Content	76	33.48
3rd sub-pillar: Future Technologies	50	37.41
B. People pillar	51	48.77
1st sub-pillar: Individuals	35	55.51
2nd sub-pillar: Businesses	75	37.89
3rd sub-pillar: Governments	40	52.92
C. Governance pillar	45	68.81
1st sub-pillar: Trust	34	69.73
2nd sub-pillar: Regulation	90	58.27
3rd sub-pillar: Inclusion	34	78.42
D. Impact pillar	64	54.69
1st sub-pillar: Economy	72	29.57
2nd sub-pillar: Quality of Life	24	81.14
3rd sub-pillar: SDG Contribution	102	53.37



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	58	46.61
1st sub-pillar: Access	53	68.94
1.1.1 Mobile tariffs	65	59.85
1.1.2 Handset prices	49	63.90
1.1.3 FTTH/building Internet subscriptions	76	17.77
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	56	72.10
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	76	33.48
1.2.1 GitHub commits	105	1.33 ○
1.2.2 Internet domain registrations	88	1.39
1.2.3 Mobile apps development	61	81.09
1.2.4 AI scientific publications	54	50.13
3rd sub-pillar: Future Technologies	50	37.41
1.3.1 Adoption of emerging technologies	44	57.47
1.3.2 Investment in emerging technologies	42	50.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	98	4.75
B. People pillar	51	48.77
1st sub-pillar: Individuals	35	55.51
2.1.1 Mobile broadband internet traffic within the country	82	4.20
2.1.2 ICT skills in the education system	22	71.30 ●
2.1.3 Use of virtual social networks	30	77.80 ●
2.1.4 Tertiary enrollment	69	29.81
2.1.5 Adult literacy rate	44	94.43
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	75	37.89
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	54	39.30
2.2.3 Knowledge intensive employment	73	31.11
2.2.4 Annual investment in telecommunication services	52	79.35
2.2.5 GERD performed by business enterprise	65	1.79
3rd sub-pillar: Governments	40	52.92
2.3.1 Government online services	24	84.84 ●
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	24	61.97
2.3.4 R&D expenditure by governments and higher education	86	11.95

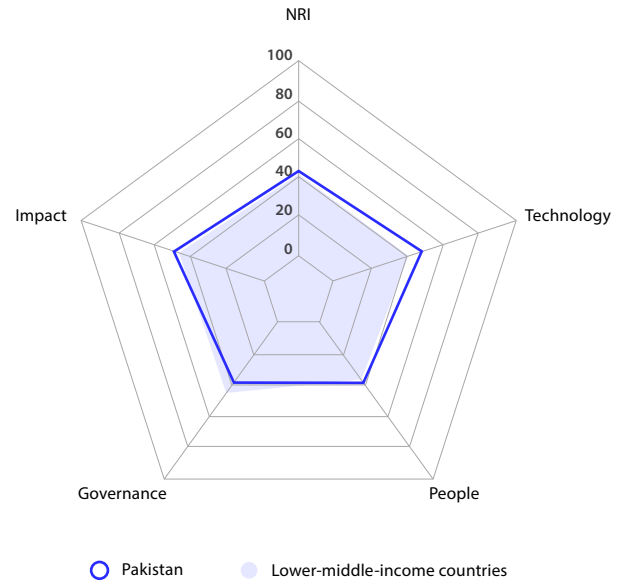
Indicator	Rank	Score
C. Governance pillar	45	68.81
1st sub-pillar: Trust	34	69.73
3.1.1 Secure Internet servers	87	43.50
3.1.2 Cybersecurity	28	95.97 ●
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	90	58.27
3.2.1 Regulatory quality	49	53.33
3.2.2 ICT regulatory environment	61	83.92
3.2.3 Regulation of emerging technologies	46	55.53
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	119	31.89 ○
3rd sub-pillar: Inclusion	34	78.42
3.3.1 E-Participation	38	82.71
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	42	74.52
3.3.4 Gender gap in internet use	8	78.03 ●
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	64	54.69
1st sub-pillar: Economy	72	29.57
4.1.1 High-tech and medium-high-tech manufacturing	67	20.56
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	67	3.18
4.1.4 Domestic market size	72	48.76
4.1.5 Prevalence of gig economy	30	61.92
4.1.6 ICT services exports	93	13.43
2nd sub-pillar: Quality of Life	24	81.14
4.2.1 Happiness	17	83.24 ●
4.2.2 Freedom to make life choices	14	91.74 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	79	68.45
3rd sub-pillar: SDG Contribution	102	53.37
4.3.1 SDG 3: Good Health and Well-Being	76	66.17
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	128	9.65 ○
4.3.4 SDG 7: Affordable and Clean Energy	116	50.63 ○
4.3.5 SDG 11: Sustainable Cities and Communities	27	87.04 ●

NOTE: ● Indicates a strength and ○ a weakness.

Pakistan

Network Readiness Index **89** **42.70**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	59	46.47
1st sub-pillar: Access	67	63.42
2nd sub-pillar: Content	71	35.61
3rd sub-pillar: Future Technologies	42	40.37
B. People pillar	87	37.72
1st sub-pillar: Individuals	99	34.69
2nd sub-pillar: Businesses	56	46.57
3rd sub-pillar: Governments	94	31.91
C. Governance pillar	116	37.85
1st sub-pillar: Trust	103	27.71
2nd sub-pillar: Regulation	114	47.35
3rd sub-pillar: Inclusion	117	38.50
D. Impact pillar	90	48.78
1st sub-pillar: Economy	42	41.03
2nd sub-pillar: Quality of Life	94	58.31
3rd sub-pillar: SDG Contribution	115	46.99



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	59	46.47
1st sub-pillar: Access	67	63.42
1.1.1 Mobile tariffs	56	66.99
1.1.2 Handset prices	112	34.46
1.1.3 FTTH/building Internet subscriptions	21	43.79 ●
1.1.4 Population covered by at least a 3G mobile network	120	91.46
1.1.5 International Internet bandwidth	24	80.39 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	71	35.61
1.2.1 GitHub commits	104	1.35
1.2.2 Internet domain registrations	110	0.40
1.2.3 Mobile apps development	95	66.09
1.2.4 AI scientific publications	21	74.62 ●
3rd sub-pillar: Future Technologies	42	40.37
1.3.1 Adoption of emerging technologies	68	45.59
1.3.2 Investment in emerging technologies	48	48.25 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	37	27.28 ●
B. People pillar	87	37.72
1st sub-pillar: Individuals	99	34.69
2.1.1 Mobile broadband internet traffic within the country	15	40.50 ●
2.1.2 ICT skills in the education system	52	52.37
2.1.3 Use of virtual social networks	104	27.46
2.1.4 Tertiary enrollment	104	7.15
2.1.5 Adult literacy rate	98	45.95
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	56	46.57
2.2.1 Firms with website	75	43.21
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	103	15.46
2.2.4 Annual investment in telecommunication services	40	81.04 ●
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	94	31.91
2.3.1 Government online services	79	61.82
2.3.2 Publication and use of open data	100	2.94 ○
2.3.3 Government promotion of investment in emerging tech	53	42.82
2.3.4 R&D expenditure by governments and higher education	72	20.07

Indicator	Rank	Score
C. Governance pillar	116	37.85
1st sub-pillar: Trust	103	27.71
3.1.1 Secure Internet servers	105	34.34
3.1.2 Cybersecurity	85	64.26
3.1.3 Online access to financial account	102	11.51
3.1.4 Internet shopping	113	0.71 ○
2nd sub-pillar: Regulation	114	47.35
3.2.1 Regulatory quality	113	21.87
3.2.2 ICT regulatory environment	58	84.71
3.2.3 Regulation of emerging technologies	50	51.58
3.2.4 E-commerce legislation	118	33.33 ○
3.2.5 Privacy protection by law content	108	45.26
3rd sub-pillar: Inclusion	117	38.50
3.3.1 E-Participation	94	50.62
3.3.2 Socioeconomic gap in use of digital payments	67	72.53
3.3.3 Availability of local online content	83	51.44
3.3.4 Gender gap in Internet use	101	12.66 ○
3.3.5 Rural gap in use of digital payments	122	5.25 ○
D. Impact pillar	90	48.78
1st sub-pillar: Economy	42	41.03
4.1.1 High-tech and medium-high-tech manufacturing	58	26.18
4.1.2 High-tech exports	73	16.40
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	23	69.09 ●
4.1.5 Prevalence of gig economy	53	45.35
4.1.6 ICT services exports	21	48.11 ●
2nd sub-pillar: Quality of Life	94	58.31
4.2.1 Happiness	104	41.10
4.2.2 Freedom to make life choices	85	65.95
4.2.3 Income inequality	19	83.92 ●
4.2.4 Healthy life expectancy at birth	111	42.29
3rd sub-pillar: SDG Contribution	115	46.99
4.3.1 SDG 3: Good Health and Well-Being	118	27.44
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	120	37.72
4.3.4 SDG 7: Affordable and Clean Energy	87	72.68
4.3.5 SDG 11: Sustainable Cities and Communities	90	50.12

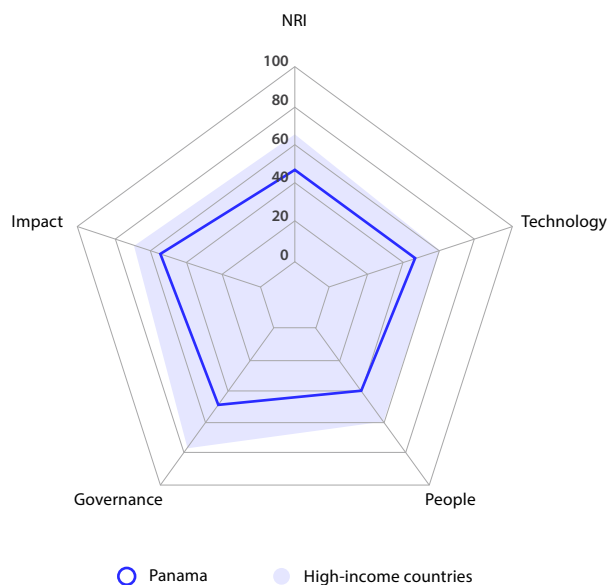
NOTE: ● Indicates a strength and ○ a weakness.

Panama

Rank
(Out of 131) Score

Network Readiness Index **83 45.72**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	79	41.74
1st sub-pillar: Access	95	54.64
2nd sub-pillar: Content	70	35.64
3rd sub-pillar: Future Technologies	56	34.94
B. People pillar	82	39.28
1st sub-pillar: Individuals	25	56.45
2nd sub-pillar: Businesses	103	30.00
3rd sub-pillar: Governments	95	31.39
C. Governance pillar	93	48.64
1st sub-pillar: Trust	99	30.06
2nd sub-pillar: Regulation	78	60.96
3rd sub-pillar: Inclusion	88	54.92
D. Impact pillar	73	53.24
1st sub-pillar: Economy	95	23.75
2nd sub-pillar: Quality of Life	74	66.70
3rd sub-pillar: SDG Contribution	55	69.28



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	79	41.74
1st sub-pillar: Access	95	54.64
1.1.1 Mobile tariffs	80	49.59
1.1.2 Handset prices	47	65.76 ●
1.1.3 FTTH/building Internet subscriptions	99	3.21 ○
1.1.4 Population covered by at least a 3G mobile network	89	98.33
1.1.5 International Internet bandwidth	92	64.74
1.1.6 Internet access in schools	51	46.20
2nd sub-pillar: Content	70	35.64
1.2.1 GitHub commits	90	2.68
1.2.2 Internet domain registrations	31	23.32 ●
1.2.3 Mobile apps development	65	79.06
1.2.4 AI scientific publications	71	37.48
3rd sub-pillar: Future Technologies	56	34.94
1.3.1 Adoption of emerging technologies	66	47.02
1.3.2 Investment in emerging technologies	64	40.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	70	17.54
B. People pillar	82	39.28
1st sub-pillar: Individuals	25	56.45
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	107	26.92
2.1.3 Use of virtual social networks	52	72.93 ●
2.1.4 Tertiary enrollment	66	31.39
2.1.5 Adult literacy rate	43	94.54 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	103	30.00
2.2.1 Firms with website	87	35.81
2.2.2 GERD financed by business enterprise	94	1.85
2.2.3 Knowledge intensive employment	65	35.21
2.2.4 Annual investment in telecommunication services	61	77.09
2.2.5 GERD performed by business enterprise	94	0.02 ○
3rd sub-pillar: Governments	95	31.39
2.3.1 Government online services	80	61.21
2.3.2 Publication and use of open data	55	32.35
2.3.3 Government promotion of investment in emerging tech	93	28.82
2.3.4 R&D expenditure by governments and higher education	105	3.16 ○

Indicator	Rank	Score
C. Governance pillar	93	48.64
1st sub-pillar: Trust	99	30.06
3.1.1 Secure Internet servers	60	58.23
3.1.2 Cybersecurity	103	32.95
3.1.3 Online access to financial account	98	13.18
3.1.4 Internet shopping	73	15.86
2nd sub-pillar: Regulation	78	60.96
3.2.1 Regulatory quality	55	49.60
3.2.2 ICT regulatory environment	75	77.06
3.2.3 Regulation of emerging technologies	64	43.42
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	59	68.04
3rd sub-pillar: Inclusion	88	54.92
3.3.1 E-Participation	87	56.79
3.3.2 Socioeconomic gap in use of digital payments	103	44.45
3.3.3 Availability of local online content	74	56.01
3.3.4 Gender gap in internet use	26	74.45 ●
3.3.5 Rural gap in use of digital payments	99	42.90
D. Impact pillar	73	53.24
1st sub-pillar: Economy	95	23.75
4.1.1 High-tech and medium-high-tech manufacturing	90	7.45
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	65	3.50
4.1.4 Domestic market size	74	47.78
4.1.5 Prevalence of gig economy	89	31.98
4.1.6 ICT services exports	70	28.07
2nd sub-pillar: Quality of Life	74	66.70
4.2.1 Happiness	26	77.89 ●
4.2.2 Freedom to make life choices	66	73.85
4.2.3 Income inequality	108	33.17 ○
4.2.4 Healthy life expectancy at birth	37	81.88 ●
3rd sub-pillar: SDG Contribution	55	69.28
4.3.1 SDG 3: Good Health and Well-Being	42	80.25 ●
4.3.2 SDG 4: Quality Education	75	15.70 ○
4.3.3 SDG 5: Women's economic opportunity	79	71.05
4.3.4 SDG 7: Affordable and Clean Energy	4	98.16 ●
4.3.5 SDG 11: Sustainable Cities and Communities	33	81.21 ●

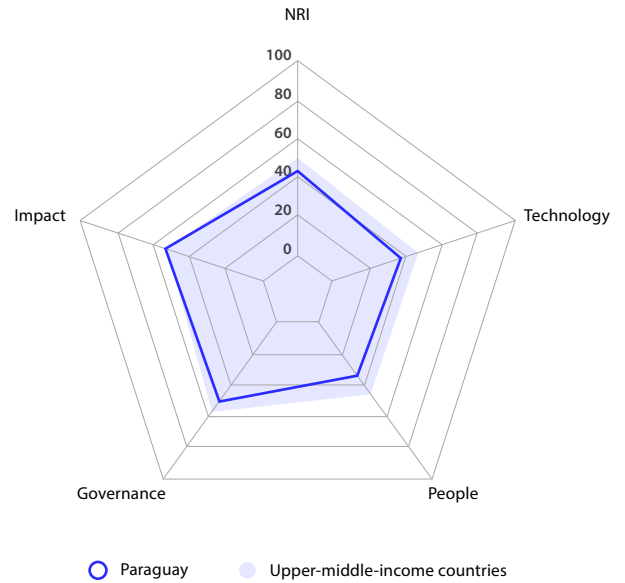
NOTE: ● Indicates a strength and ○ a weakness.

Paraguay

Rank
(Out of 131) Score

Network Readiness Index **93 41.86**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	109	31.18
1st sub-pillar: Access	106	48.17
2nd sub-pillar: Content	95	27.97
3rd sub-pillar: Future Technologies	120	17.38
B. People pillar	97	33.79
1st sub-pillar: Individuals	73	46.40
2nd sub-pillar: Businesses	116	24.35
3rd sub-pillar: Governments	97	30.62
C. Governance pillar	86	50.28
1st sub-pillar: Trust	97	30.84
2nd sub-pillar: Regulation	91	57.74
3rd sub-pillar: Inclusion	72	62.24
D. Impact pillar	76	52.21
1st sub-pillar: Economy	112	16.25
2nd sub-pillar: Quality of Life	69	67.16
3rd sub-pillar: SDG Contribution	44	73.21



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	109	31.18
1st sub-pillar: Access	106	48.17
1.1.1 Mobile tariffs	81	49.52
1.1.2 Handset prices	75	47.95
1.1.3 FTTH/building Internet subscriptions	55	27.84
1.1.4 Population covered by at least a 3G mobile network	88	98.40
1.1.5 International Internet bandwidth	110	59.92
1.1.6 Internet access in schools	74	5.41
2nd sub-pillar: Content	95	27.97
1.2.1 GitHub commits	93	2.02
1.2.2 Internet domain registrations	89	1.34
1.2.3 Mobile apps development	72	75.57
1.2.4 AI scientific publications	78	32.95
3rd sub-pillar: Future Technologies	120	17.38
1.3.1 Adoption of emerging technologies	103	28.79
1.3.2 Investment in emerging technologies	121	19.00
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	101	4.36
B. People pillar	97	33.79
1st sub-pillar: Individuals	73	46.40
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	123	12.43
2.1.3 Use of virtual social networks	84	57.74
2.1.4 Tertiary enrollment	80	22.41
2.1.5 Adult literacy rate	51	93.01 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	116	24.35
2.2.1 Firms with website	33	71.74 ●
2.2.2 GERD financed by business enterprise	101	0.24 ○
2.2.3 Knowledge intensive employment	85	25.40
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	96	0.00 ○
3rd sub-pillar: Governments	97	30.62
2.3.1 Government online services	64	69.70
2.3.2 Publication and use of open data	41	38.24 ●
2.3.3 Government promotion of investment in emerging tech	122	6.69
2.3.4 R&D expenditure by governments and higher education	92	7.84

Indicator	Rank	Score
C. Governance pillar	86	50.28
1st sub-pillar: Trust	97	30.84
3.1.1 Secure Internet servers	70	49.18
3.1.2 Cybersecurity	89	56.33
3.1.3 Online access to financial account	106	10.29
3.1.4 Internet shopping	90	7.57
2nd sub-pillar: Regulation	91	57.74
3.2.1 Regulatory quality	87	35.73
3.2.2 ICT regulatory environment	117	58.62
3.2.3 Regulation of emerging technologies	107	16.05
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	36	78.30 ●
3rd sub-pillar: Inclusion	72	62.24
3.3.1 E-Participation	56	74.07 ●
3.3.2 Socioeconomic gap in use of digital payments	61	76.27 ●
3.3.3 Availability of local online content	106	37.26
3.3.4 Gender gap in Internet use	11	77.81 ●
3.3.5 Rural gap in use of digital payments	96	45.81
D. Impact pillar	76	52.21
1st sub-pillar: Economy	112	16.25
4.1.1 High-tech and medium-high-tech manufacturing	74	17.68
4.1.2 High-tech exports	86	10.10
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	85	44.93
4.1.5 Prevalence of gig economy	123	4.94 ○
4.1.6 ICT services exports	125	3.60 ○
2nd sub-pillar: Quality of Life	69	67.16
4.2.1 Happiness	70	60.49
4.2.2 Freedom to make life choices	27	86.94 ●
4.2.3 Income inequality	93	48.99
4.2.4 Healthy life expectancy at birth	69	72.22
3rd sub-pillar: SDG Contribution	44	73.21
4.3.1 SDG 3: Good Health and Well-Being	93	54.31
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	26	92.11 ●
4.3.4 SDG 7: Affordable and Clean Energy	51	82.71 ●
4.3.5 SDG 11: Sustainable Cities and Communities	70	63.70

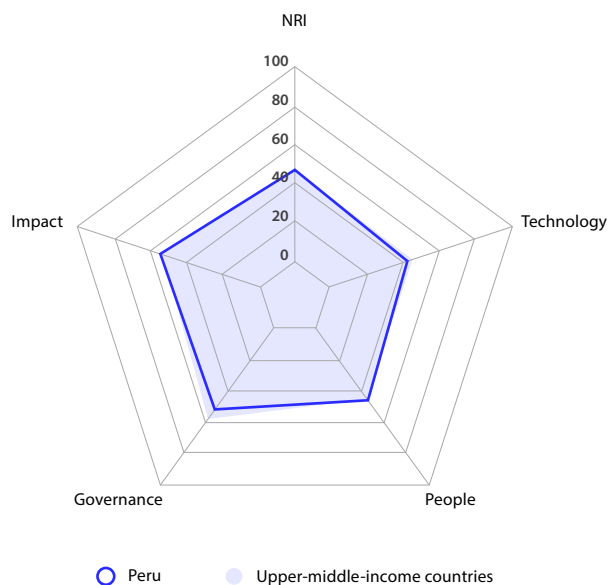
NOTE: ● Indicates a strength and ○ a weakness.

Peru

Rank
(Out of 131) Score

Network Readiness Index **78 46.71**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	86	38.92
1st sub-pillar: Access	73	61.37
2nd sub-pillar: Content	74	34.08
3rd sub-pillar: Future Technologies	105	21.32
B. People pillar	69	44.35
1st sub-pillar: Individuals	39	53.95
2nd sub-pillar: Businesses	61	44.13
3rd sub-pillar: Governments	90	34.96
C. Governance pillar	85	50.63
1st sub-pillar: Trust	94	33.21
2nd sub-pillar: Regulation	72	62.35
3rd sub-pillar: Inclusion	83	56.34
D. Impact pillar	74	52.95
1st sub-pillar: Economy	102	18.65
2nd sub-pillar: Quality of Life	67	67.37
3rd sub-pillar: SDG Contribution	46	72.83



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	86	38.92
1st sub-pillar: Access	73	61.37
1.1.1 Mobile tariffs	79	49.67
1.1.2 Handset prices	71	49.35
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	108	95.21
1.1.5 International Internet bandwidth	69	70.26
1.1.6 Internet access in schools	52	42.38
2nd sub-pillar: Content	74	34.08
1.2.1 GitHub commits	67	5.34
1.2.2 Internet domain registrations	68	3.70
1.2.3 Mobile apps development	73	75.49
1.2.4 AI scientific publications	49	51.78
3rd sub-pillar: Future Technologies	105	21.32
1.3.1 Adoption of emerging technologies	83	38.64
1.3.2 Investment in emerging technologies	108	25.25
1.3.3 Robot density	56	0.00 ○
1.3.4 Computer software spending	58	21.40
B. People pillar	69	44.35
1st sub-pillar: Individuals	39	53.95
2.1.1 Mobile broadband internet traffic within the country	30	25.97 ●
2.1.2 ICT skills in the education system	110	25.44 ○
2.1.3 Use of virtual social networks	28	78.38 ●
2.1.4 Tertiary enrollment	31	47.01 ●
2.1.5 Adult literacy rate	53	92.95
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	61	44.13
2.2.1 Firms with website	39	68.97 ●
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	94	19.29
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	90	34.96
2.3.1 Government online services	51	74.54
2.3.2 Publication and use of open data	47	35.29
2.3.3 Government promotion of investment in emerging tech	100	25.24
2.3.4 R&D expenditure by governments and higher education	99	4.76 ○

Indicator	Rank	Score
C. Governance pillar	85	50.63
1st sub-pillar: Trust	94	33.21
3.1.1 Secure Internet servers	71	48.85
3.1.2 Cybersecurity	90	54.89
3.1.3 Online access to financial account	107	10.13 ○
3.1.4 Internet shopping	65	18.96
2nd sub-pillar: Regulation	72	62.35
3.2.1 Regulatory quality	44	55.20 ●
3.2.2 ICT regulatory environment	64	83.53
3.2.3 Regulation of emerging technologies	98	23.42
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	100	49.58
3rd sub-pillar: Inclusion	83	56.34
3.3.1 E-Participation	54	75.31
3.3.2 Socioeconomic gap in use of digital payments	81	58.83
3.3.3 Availability of local online content	100	40.38
3.3.4 Gender gap in Internet use	80	61.16
3.3.5 Rural gap in use of digital payments	94	46.01
D. Impact pillar	74	52.95
1st sub-pillar: Economy	102	18.65
4.1.1 High-tech and medium-high-tech manufacturing	77	14.51
4.1.2 High-tech exports	90	8.43
4.1.3 PCT patent applications	66	3.28
4.1.4 Domestic market size	47	59.88 ●
4.1.5 Prevalence of gig economy	114	18.02 ○
4.1.6 ICT services exports	109	7.81
2nd sub-pillar: Quality of Life	67	67.37
4.2.1 Happiness	67	62.60
4.2.2 Freedom to make life choices	65	74.04
4.2.3 Income inequality	97	48.24
4.2.4 Healthy life expectancy at birth	32	84.60 ●
3rd sub-pillar: SDG Contribution	46	72.83
4.3.1 SDG 3: Good Health and Well-Being	36	81.99 ●
4.3.2 SDG 4: Quality Education	65	30.15
4.3.3 SDG 5: Women's economic opportunity	25	92.98 ●
4.3.4 SDG 7: Affordable and Clean Energy	21	89.31 ●
4.3.5 SDG 11: Sustainable Cities and Communities	55	69.72

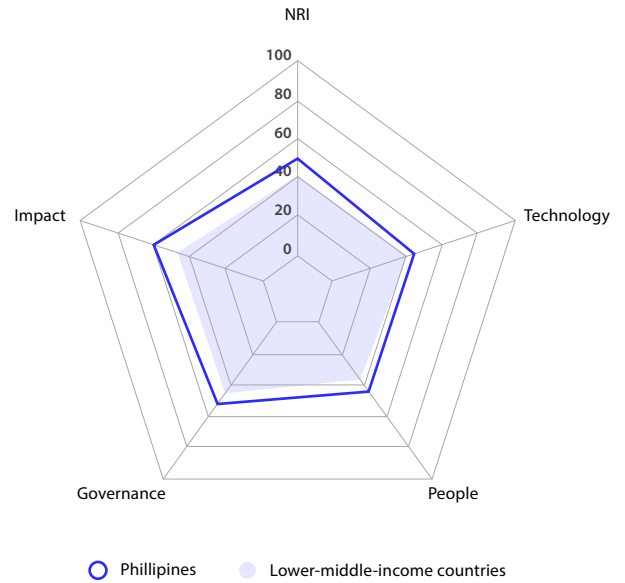
NOTE: ● Indicates a strength and ○ a weakness.

Philippines

Rank
(Out of 131) Score

Network Readiness Index **71 48.06**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	85	40.02
1st sub-pillar: Access	90	55.40
2nd sub-pillar: Content	86	31.09
3rd sub-pillar: Future Technologies	62	33.57
B. People pillar	73	42.87
1st sub-pillar: Individuals	34	55.53
2nd sub-pillar: Businesses	99	31.08
3rd sub-pillar: Governments	70	41.99
C. Governance pillar	82	51.07
1st sub-pillar: Trust	71	42.34
2nd sub-pillar: Regulation	83	60.08
3rd sub-pillar: Inclusion	99	50.78
D. Impact pillar	50	58.28
1st sub-pillar: Economy	17	55.03
2nd sub-pillar: Quality of Life	68	67.20
3rd sub-pillar: SDG Contribution	105	52.61



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	85	40.02
1st sub-pillar: Access	90	55.40
1.1.1 Mobile tariffs	109	35.79
1.1.2 Handset prices	104	36.97
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	82	98.67
1.1.5 International Internet bandwidth	44	74.47
1.1.6 Internet access in schools	59	31.08
2nd sub-pillar: Content	86	31.09
1.2.1 GitHub commits	86	2.96
1.2.2 Internet domain registrations	97	0.90
1.2.3 Mobile apps development	102	62.26
1.2.4 AI scientific publications	42	58.24
3rd sub-pillar: Future Technologies	62	33.57
1.3.1 Adoption of emerging technologies	52	51.83
1.3.2 Investment in emerging technologies	31	61.00
1.3.3 Robot density	50	0.85
1.3.4 Computer software spending	62	20.59
B. People pillar	73	42.87
1st sub-pillar: Individuals	34	55.53
2.1.1 Mobile broadband internet traffic within the country	16	38.57
2.1.2 ICT skills in the education system	70	43.79
2.1.3 Use of virtual social networks	32	77.02
2.1.4 Tertiary enrollment	78	23.02
2.1.5 Adult literacy rate	39	95.24
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	99	31.08
2.2.1 Firms with website	64	49.56
2.2.2 GERD financed by business enterprise	45	46.93
2.2.3 Knowledge intensive employment	80	26.33
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	69	1.51
3rd sub-pillar: Governments	70	41.99
2.3.1 Government online services	59	72.12
2.3.2 Publication and use of open data	27	50.00
2.3.3 Government promotion of investment in emerging tech	59	39.19
2.3.4 R&D expenditure by governments and higher education	94	6.66

Indicator	Rank	Score
C. Governance pillar	82	51.07
1st sub-pillar: Trust	71	42.34
3.1.1 Secure Internet servers	99	37.79
3.1.2 Cybersecurity	69	76.60
3.1.3 Online access to financial account	97	13.55
3.1.4 Internet shopping	46	41.44
2nd sub-pillar: Regulation	83	60.08
3.2.1 Regulatory quality	71	41.87
3.2.2 ICT regulatory environment	90	71.18
3.2.3 Regulation of emerging technologies	94	25.53
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	73	61.81
3rd sub-pillar: Inclusion	99	50.78
3.3.1 E-Participation	56	74.07
3.3.2 Socioeconomic gap in use of digital payments	111	39.89
3.3.3 Availability of local online content	50	67.55
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	115	21.61
D. Impact pillar	50	58.28
1st sub-pillar: Economy	17	55.03
4.1.1 High-tech and medium-high-tech manufacturing	28	50.38
4.1.2 High-tech exports	2	95.76
4.1.3 PCT patent applications	75	2.02
4.1.4 Domestic market size	28	67.49
4.1.5 Prevalence of gig economy	36	57.85
4.1.6 ICT services exports	13	56.66
2nd sub-pillar: Quality of Life	68	67.20
4.2.1 Happiness	58	67.42
4.2.2 Freedom to make life choices	19	89.87
4.2.3 Income inequality	88	52.01
4.2.4 Healthy life expectancy at birth	95	59.48
3rd sub-pillar: SDG Contribution	105	52.61
4.3.1 SDG 3: Good Health and Well-Being	101	44.44
4.3.2 SDG 4: Quality Education	77	9.77
4.3.3 SDG 5: Women's economic opportunity	81	70.18
4.3.4 SDG 7: Affordable and Clean Energy	26	88.64
4.3.5 SDG 11: Sustainable Cities and Communities	91	50.03

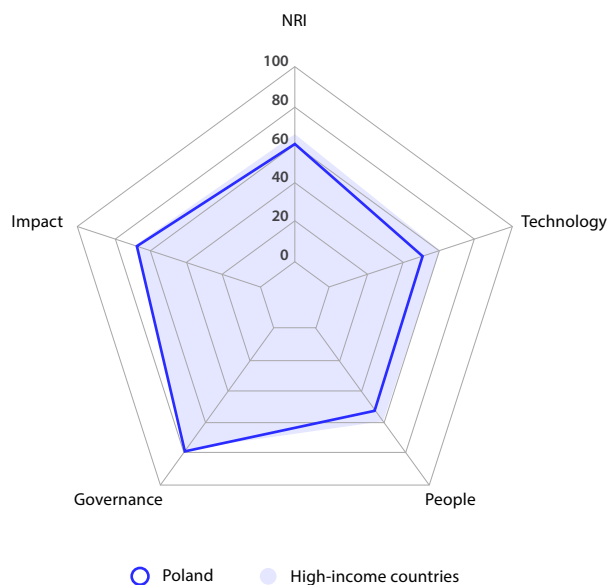
NOTE: ● Indicates a strength and ○ a weakness.

Poland

Rank
(Out of 131) Score

Network Readiness Index **34 61.16**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	44	50.61
1st sub-pillar: Access	20	76.09
2nd sub-pillar: Content	38	45.82
3rd sub-pillar: Future Technologies	74	29.93
B. People pillar	43	51.35
1st sub-pillar: Individuals	80	43.75
2nd sub-pillar: Businesses	30	61.20
3rd sub-pillar: Governments	48	49.10
C. Governance pillar	28	77.32
1st sub-pillar: Trust	16	80.80
2nd sub-pillar: Regulation	46	71.05
3rd sub-pillar: Inclusion	26	80.09
D. Impact pillar	33	65.34
1st sub-pillar: Economy	30	44.76
2nd sub-pillar: Quality of Life	51	73.09
3rd sub-pillar: SDG Contribution	32	78.18



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	44	50.61
1st sub-pillar: Access	20	76.09
1.1.1 Mobile tariffs	37	73.14
1.1.2 Handset prices	37	69.58
1.1.3 FTTH/building Internet subscriptions	23	41.91
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	57	71.90
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	38	45.82
1.2.1 GitHub commits	32	28.67
1.2.2 Internet domain registrations	32	21.87
1.2.3 Mobile apps development	40	86.92
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	74	29.93
1.3.1 Adoption of emerging technologies	61	48.92
1.3.2 Investment in emerging technologies	73	37.25 ○
1.3.3 Robot density	30	9.31
1.3.4 Computer software spending	47	24.24
B. People pillar	43	51.35
1st sub-pillar: Individuals	80	43.75
2.1.1 Mobile broadband internet traffic within the country	19	36.50 ●
2.1.2 ICT skills in the education system	60	49.11
2.1.3 Use of virtual social networks	65	66.89
2.1.4 Tertiary enrollment	34	45.95
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	21	20.27
2nd sub-pillar: Businesses	30	61.20
2.2.1 Firms with website	35	71.52
2.2.2 GERD financed by business enterprise	28	62.70
2.2.3 Knowledge intensive employment	30	63.73
2.2.4 Annual investment in telecommunication services	22	84.93 ●
2.2.5 GERD performed by business enterprise	27	23.11
3rd sub-pillar: Governments	48	49.10
2.3.1 Government online services	22	85.45 ●
2.3.2 Publication and use of open data	45	36.76
2.3.3 Government promotion of investment in emerging tech	65	37.89
2.3.4 R&D expenditure by governments and higher education	52	36.30

Indicator	Rank	Score
C. Governance pillar	28	77.32
1st sub-pillar: Trust	16	80.80
3.1.1 Secure Internet servers	26	80.86
3.1.2 Cybersecurity	37	93.75
3.1.3 Online access to financial account	15	70.34 ●
3.1.4 Internet shopping	16	78.26 ●
2nd sub-pillar: Regulation	46	71.05
3.2.1 Regulatory quality	35	64.80
3.2.2 ICT regulatory environment	39	87.65
3.2.3 Regulation of emerging technologies	74	40.26 ○
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	71	62.56 ○
3rd sub-pillar: Inclusion	26	80.09
3.3.1 E-Participation	9	96.30 ●
3.3.2 Socioeconomic gap in use of digital payments	35	90.29
3.3.3 Availability of local online content	52	67.07
3.3.4 Gender gap in internet use	35	73.02
3.3.5 Rural gap in use of digital payments	36	73.79
D. Impact pillar	33	65.34
1st sub-pillar: Economy	30	44.76
4.1.1 High-tech and medium-high-tech manufacturing	39	44.07
4.1.2 High-tech exports	31	51.46
4.1.3 PCT patent applications	42	9.93
4.1.4 Domestic market size	19	71.05 ●
4.1.5 Prevalence of gig economy	47	52.62
4.1.6 ICT services exports	41	39.42
2nd sub-pillar: Quality of Life	51	73.09
4.2.1 Happiness	57	67.66
4.2.2 Freedom to make life choices	91	60.50 ○
4.2.3 Income inequality	22	82.41 ●
4.2.4 Healthy life expectancy at birth	38	81.81
3rd sub-pillar: SDG Contribution	32	78.18
4.3.1 SDG 3: Good Health and Well-Being	52	74.86
4.3.2 SDG 4: Quality Education	9	73.96 ●
4.3.3 SDG 5: Women's economic opportunity	27	91.23
4.3.4 SDG 7: Affordable and Clean Energy	55	82.46
4.3.5 SDG 11: Sustainable Cities and Communities	59	68.39

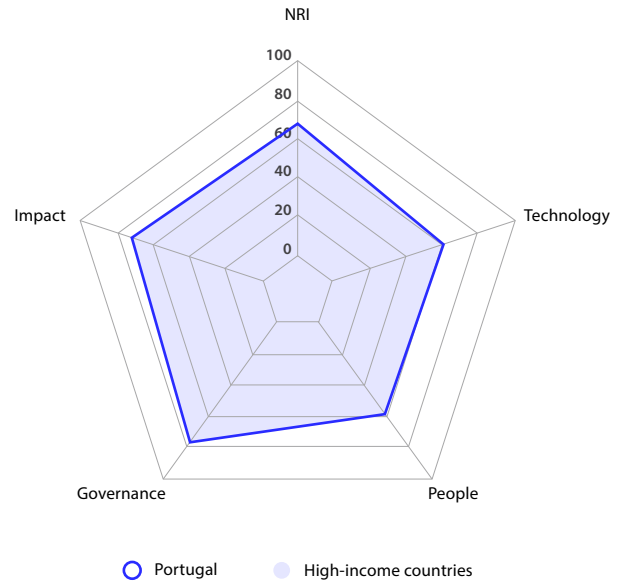
NOTE: ● Indicates a strength and ○ a weakness.

Portugal

Rank
(Out of 131) Score

Network Readiness Index 29 65.63

Pillar/sub-pillar	Rank	Score
A. Technology pillar	27	59.34
1st sub-pillar: Access	29	74.74
2nd sub-pillar: Content	27	55.37
3rd sub-pillar: Future Technologies	26	47.92
B. People pillar	32	56.79
1st sub-pillar: Individuals	52	51.46
2nd sub-pillar: Businesses	34	59.21
3rd sub-pillar: Governments	28	59.71
C. Governance pillar	31	76.14
1st sub-pillar: Trust	43	64.77
2nd sub-pillar: Regulation	14	86.20
3rd sub-pillar: Inclusion	38	77.45
D. Impact pillar	27	70.26
1st sub-pillar: Economy	37	42.66
2nd sub-pillar: Quality of Life	25	81.08
3rd sub-pillar: SDG Contribution	11	87.04



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	27	59.34
1st sub-pillar: Access	29	74.74
1.1.1 Mobile tariffs	63	60.99 ○
1.1.2 Handset prices	31	72.58
1.1.3 FTTH/building Internet subscriptions	24	41.49
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	50	73.41
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	27	55.37
1.2.1 GitHub commits	33	27.33
1.2.2 Internet domain registrations	19	49.15 ●
1.2.3 Mobile apps development	34	89.62
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	26	47.92
1.3.1 Adoption of emerging technologies	27	70.91
1.3.2 Investment in emerging technologies	39	52.75
1.3.3 Robot density	25	12.07
1.3.4 Computer software spending	6	55.95 ●
B. People pillar	32	56.79
1st sub-pillar: Individuals	52	51.46
2.1.1 Mobile broadband internet traffic within the country	61	8.60 ○
2.1.2 ICT skills in the education system	25	69.82
2.1.3 Use of virtual social networks	29	78.29
2.1.4 Tertiary enrollment	38	45.10
2.1.5 Adult literacy rate	40	95.06
2.1.6 AI talent concentration	33	11.89 ○
2nd sub-pillar: Businesses	34	59.21
2.2.1 Firms with website	53	60.69
2.2.2 GERD financed by business enterprise	26	64.55
2.2.3 Knowledge intensive employment	27	65.90
2.2.4 Annual investment in telecommunication services	42	80.69
2.2.5 GERD performed by business enterprise	24	24.19
3rd sub-pillar: Governments	28	59.71
2.3.1 Government online services	35	83.03
2.3.2 Publication and use of open data	36	42.65
2.3.3 Government promotion of investment in emerging tech	30	54.44
2.3.4 R&D expenditure by governments and higher education	20	58.73

Indicator	Rank	Score
C. Governance pillar	31	76.14
1st sub-pillar: Trust	43	64.77
3.1.1 Secure Internet servers	31	79.85
3.1.2 Cybersecurity	20	97.27 ●
3.1.3 Online access to financial account	52	34.56
3.1.4 Internet shopping	42	47.38
2nd sub-pillar: Regulation	14	86.20
3.2.1 Regulatory quality	37	63.20
3.2.2 ICT regulatory environment	14	94.12 ●
3.2.3 Regulation of emerging technologies	23	73.68
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	1	100.00 ●
3rd sub-pillar: Inclusion	38	77.45
3.3.1 E-Participation	41	81.48
3.3.2 Socioeconomic gap in use of digital payments	48	84.24
3.3.3 Availability of local online content	37	77.64
3.3.4 Gender gap in Internet use	63	68.05 ○
3.3.5 Rural gap in use of digital payments	22	75.82 ●
D. Impact pillar	27	70.26
1st sub-pillar: Economy	37	42.66
4.1.1 High-tech and medium-high-tech manufacturing	42	39.21
4.1.2 High-tech exports	43	40.67
4.1.3 PCT patent applications	30	21.20
4.1.4 Domestic market size	50	58.03
4.1.5 Prevalence of gig economy	36	57.85
4.1.6 ICT services exports	43	39.03
2nd sub-pillar: Quality of Life	25	81.08
4.2.1 Happiness	46	71.31
4.2.2 Freedom to make life choices	25	87.64
4.2.3 Income inequality	36	75.88
4.2.4 Healthy life expectancy at birth	20	89.50 ●
3rd sub-pillar: SDG Contribution	11	87.04
4.3.1 SDG 3: Good Health and Well-Being	18	91.85 ●
4.3.2 SDG 4: Quality Education	26	65.75
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	19	89.81 ●
4.3.5 SDG 11: Sustainable Cities and Communities	24	87.79

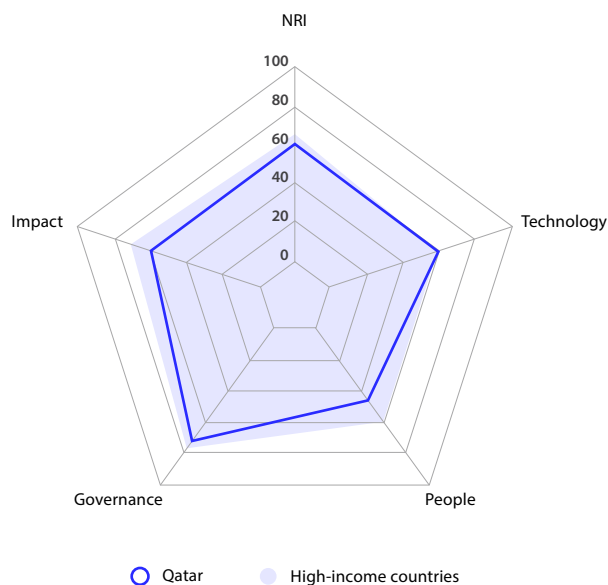
NOTE: ● Indicates a strength and ○ a weakness.

Qatar

Rank
(Out of 131) Score

Network Readiness Index **42 57.87**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	31	56.02
1st sub-pillar: Access	21	76.02
2nd sub-pillar: Content	61	37.73
3rd sub-pillar: Future Technologies	18	54.32
B. People pillar	63	45.75
1st sub-pillar: Individuals	24	57.93
2nd sub-pillar: Businesses	101	30.80
3rd sub-pillar: Governments	49	48.54
C. Governance pillar	36	71.94
1st sub-pillar: Trust	29	71.42
2nd sub-pillar: Regulation	43	71.52
3rd sub-pillar: Inclusion	49	72.89
D. Impact pillar	53	57.75
1st sub-pillar: Economy	47	39.76
2nd sub-pillar: Quality of Life	23	81.42
3rd sub-pillar: SDG Contribution	108	52.06



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	31	56.02
1st sub-pillar: Access	21	76.02
1.1.1 Mobile tariffs	33	76.53
1.1.2 Handset prices	6	95.60 ●
1.1.3 FTTH/building Internet subscriptions	83	13.12 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	66	70.85
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	61	37.73
1.2.1 GitHub commits	89	2.71
1.2.2 Internet domain registrations	75	2.83
1.2.3 Mobile apps development	46	84.75
1.2.4 AI scientific publications	38	60.61
3rd sub-pillar: Future Technologies	18	54.32
1.3.1 Adoption of emerging technologies	35	62.68
1.3.2 Investment in emerging technologies	17	71.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	33	29.26
B. People pillar	63	45.75
1st sub-pillar: Individuals	24	57.93
2.1.1 Mobile broadband internet traffic within the country	66	7.92
2.1.2 ICT skills in the education system	8	83.14 ●
2.1.3 Use of virtual social networks	4	93.96 ●
2.1.4 Tertiary enrollment	96	12.99 ○
2.1.5 Adult literacy rate	58	91.62
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	101	30.80
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	77	11.40
2.2.3 Knowledge intensive employment	70	31.92
2.2.4 Annual investment in telecommunication services	56	78.25
2.2.5 GERD performed by business enterprise	68	1.62
3rd sub-pillar: Governments	49	48.54
2.3.1 Government online services	74	64.85
2.3.2 Publication and use of open data	73	19.12
2.3.3 Government promotion of investment in emerging tech	19	70.01
2.3.4 R&D expenditure by governments and higher education	48	40.18

Indicator	Rank	Score
C. Governance pillar	36	71.94
1st sub-pillar: Trust	29	71.42
3.1.1 Secure Internet servers	73	48.44
3.1.2 Cybersecurity	34	94.40
3.1.3 Online access to financial account	NA	NA
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	43	71.52
3.2.1 Regulatory quality	36	63.73
3.2.2 ICT regulatory environment	101	66.67 ○
3.2.3 Regulation of emerging technologies	25	73.16 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	90	54.05
3rd sub-pillar: Inclusion	49	72.89
3.3.1 E-Participation	75	64.20
3.3.2 Socioeconomic gap in use of digital payments	NA	NA
3.3.3 Availability of local online content	30	81.97
3.3.4 Gender gap in internet use	37	72.48
3.3.5 Rural gap in use of digital payments	NA	NA
D. Impact pillar	53	57.75
1st sub-pillar: Economy	47	39.76
4.1.1 High-tech and medium-high-tech manufacturing	31	49.05
4.1.2 High-tech exports	69	17.40
4.1.3 PCT patent applications	63	3.83
4.1.4 Domestic market size	58	54.89
4.1.5 Prevalence of gig economy	14	71.22 ●
4.1.6 ICT services exports	32	42.18
2nd sub-pillar: Quality of Life	23	81.42
4.2.1 Happiness	37	74.72
4.2.2 Freedom to make life choices	11	93.10 ●
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	51	76.44
3rd sub-pillar: SDG Contribution	108	52.06
4.3.1 SDG 3: Good Health and Well-Being	51	75.55
4.3.2 SDG 4: Quality Education	59	34.86
4.3.3 SDG 5: Women's economic opportunity	130	0.88 ○
4.3.4 SDG 7: Affordable and Clean Energy	111	54.30 ○
4.3.5 SDG 11: Sustainable Cities and Communities	12	94.70 ●

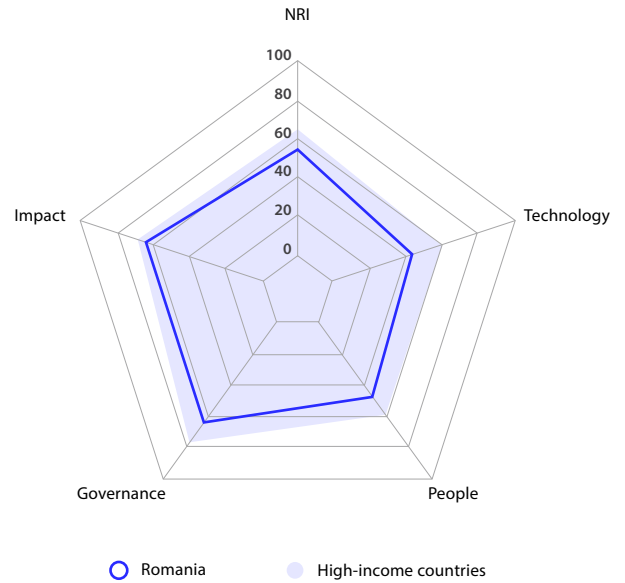
NOTE: ● Indicates a strength and ○ a weakness.

Romania

Rank
(Out of 131) Score

Network Readiness Index 52 54.89

Pillar/sub-pillar	Rank	Score
A. Technology pillar	66	44.45
1st sub-pillar: Access	57	68.28
2nd sub-pillar: Content	64	37.00
3rd sub-pillar: Future Technologies	84	28.06
B. People pillar	58	47.38
1st sub-pillar: Individuals	45	52.97
2nd sub-pillar: Businesses	52	48.92
3rd sub-pillar: Governments	76	40.27
C. Governance pillar	53	64.31
1st sub-pillar: Trust	51	55.51
2nd sub-pillar: Regulation	44	71.35
3rd sub-pillar: Inclusion	63	66.08
D. Impact pillar	37	63.41
1st sub-pillar: Economy	29	45.33
2nd sub-pillar: Quality of Life	36	77.12
3rd sub-pillar: SDG Contribution	58	67.79



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	66	44.45
1st sub-pillar: Access	57	68.28
1.1.1 Mobile tariffs	44	70.87
1.1.2 Handset prices	66	51.69
1.1.3 FTTH/building Internet subscriptions	16	47.60 ●
1.1.4 Population covered by at least a 3G mobile network	24	99.99 ●
1.1.5 International Internet bandwidth	64	71.27
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	64	37.00
1.2.1 GitHub commits	44	14.15
1.2.2 Internet domain registrations	43	11.10
1.2.3 Mobile apps development	43	85.75
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	84	28.06
1.3.1 Adoption of emerging technologies	50	52.70
1.3.2 Investment in emerging technologies	92	31.25 ○
1.3.3 Robot density	38	4.79
1.3.4 Computer software spending	49	23.50
B. People pillar	58	47.38
1st sub-pillar: Individuals	45	52.97
2.1.1 Mobile broadband internet traffic within the country	42	16.34
2.1.2 ICT skills in the education system	56	51.48
2.1.3 Use of virtual social networks	71	64.65
2.1.4 Tertiary enrollment	62	33.81
2.1.5 Adult literacy rate	21	98.55 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	52	48.92
2.2.1 Firms with website	65	49.45
2.2.2 GERD financed by business enterprise	21	67.52 ●
2.2.3 Knowledge intensive employment	54	40.58
2.2.4 Annual investment in telecommunication services	46	79.77
2.2.5 GERD performed by business enterprise	48	7.26
3rd sub-pillar: Governments	76	40.27
2.3.1 Government online services	60	71.51
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	81	32.45
2.3.4 R&D expenditure by governments and higher education	79	16.85 ○

Indicator	Rank	Score
C. Governance pillar	53	64.31
1st sub-pillar: Trust	51	55.51
3.1.1 Secure Internet servers	33	79.56
3.1.2 Cybersecurity	70	75.87
3.1.3 Online access to financial account	73	23.59
3.1.4 Internet shopping	45	43.03
2nd sub-pillar: Regulation	44	71.35
3.2.1 Regulatory quality	54	51.20
3.2.2 ICT regulatory environment	30	90.59 ●
3.2.3 Regulation of emerging technologies	54	48.16
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	63	66.81
3rd sub-pillar: Inclusion	63	66.08
3.3.1 E-Participation	46	80.24
3.3.2 Socioeconomic gap in use of digital payments	79	61.43
3.3.3 Availability of local online content	45	71.88
3.3.4 Gender gap in Internet use	72	67.11 ○
3.3.5 Rural gap in use of digital payments	91	49.73 ○
D. Impact pillar	37	63.41
1st sub-pillar: Economy	29	45.33
4.1.1 High-tech and medium-high-tech manufacturing	23	57.02 ●
4.1.2 High-tech exports	26	53.83 ●
4.1.3 PCT patent applications	78	1.71
4.1.4 Domestic market size	35	63.48
4.1.5 Prevalence of gig economy	76	36.34
4.1.6 ICT services exports	10	59.61 ●
2nd sub-pillar: Quality of Life	36	77.12
4.2.1 Happiness	27	77.82 ●
4.2.2 Freedom to make life choices	33	84.06
4.2.3 Income inequality	51	70.85
4.2.4 Healthy life expectancy at birth	56	75.73
3rd sub-pillar: SDG Contribution	58	67.79
4.3.1 SDG 3: Good Health and Well-Being	63	70.74
4.3.2 SDG 4: Quality Education	48	40.49
4.3.3 SDG 5: Women's economic opportunity	35	86.84
4.3.4 SDG 7: Affordable and Clean Energy	14	91.14 ●
4.3.5 SDG 11: Sustainable Cities and Communities	92	49.71 ○

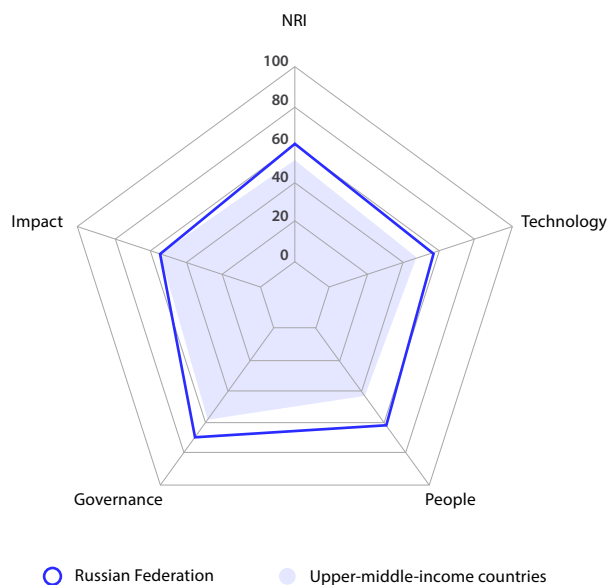
NOTE: ● Indicates a strength and ○ a weakness.

Russian Federation

Rank
(Out of 131) Score

Network Readiness Index 40 59.54

Pillar/sub-pillar	Rank	Score
A. Technology pillar	35	54.22
1st sub-pillar: Access	11	80.68
2nd sub-pillar: Content	34	48.15
3rd sub-pillar: Future Technologies	61	33.83
B. People pillar	23	60.99
1st sub-pillar: Individuals	4	70.24
2nd sub-pillar: Businesses	41	53.80
3rd sub-pillar: Governments	31	58.92
C. Governance pillar	43	69.02
1st sub-pillar: Trust	27	74.81
2nd sub-pillar: Regulation	103	52.90
3rd sub-pillar: Inclusion	29	79.35
D. Impact pillar	69	53.96
1st sub-pillar: Economy	46	39.92
2nd sub-pillar: Quality of Life	88	60.78
3rd sub-pillar: SDG Contribution	75	61.16



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	35	54.22
1st sub-pillar: Access	11	80.68
1.1.1 Mobile tariffs	26	78.33
1.1.2 Handset prices	26	73.53
1.1.3 FTTH/building Internet subscriptions	6	67.59 ●
1.1.4 Population covered by at least a 3G mobile network	80	98.74
1.1.5 International Internet bandwidth	13	85.19 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	34	48.15
1.2.1 GitHub commits	41	15.63
1.2.2 Internet domain registrations	42	11.45
1.2.3 Mobile apps development	41	86.72
1.2.4 AI scientific publications	14	78.78 ●
3rd sub-pillar: Future Technologies	61	33.83
1.3.1 Adoption of emerging technologies	42	58.81
1.3.2 Investment in emerging technologies	47	48.75
1.3.3 Robot density	48	1.15 ○
1.3.4 Computer software spending	39	26.60
B. People pillar	23	60.99
1st sub-pillar: Individuals	4	70.24
2.1.1 Mobile broadband internet traffic within the country	4	63.24 ●
2.1.2 ICT skills in the education system	35	63.02
2.1.3 Use of virtual social networks	63	67.58
2.1.4 Tertiary enrollment	15	57.68 ●
2.1.5 Adult literacy rate	9	99.69 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	41	53.80
2.2.1 Firms with website	56	56.61
2.2.2 GERD financed by business enterprise	60	36.12
2.2.3 Knowledge intensive employment	20	71.09 ●
2.2.4 Annual investment in telecommunication services	12	88.86 ●
2.2.5 GERD performed by business enterprise	35	16.32
3rd sub-pillar: Governments	31	58.92
2.3.1 Government online services	39	81.21
2.3.2 Publication and use of open data	19	63.24
2.3.3 Government promotion of investment in emerging tech	34	52.35
2.3.4 R&D expenditure by governments and higher education	49	38.87

Indicator	Rank	Score
C. Governance pillar	43	69.02
1st sub-pillar: Trust	27	74.81
3.1.1 Secure Internet servers	39	75.80
3.1.2 Cybersecurity	8	98.03 ●
3.1.3 Online access to financial account	34	50.60
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	103	52.90
3.2.1 Regulatory quality	98	29.33
3.2.2 ICT regulatory environment	126	48.82 ○
3.2.3 Regulation of emerging technologies	52	49.47
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	117	36.86 ○
3rd sub-pillar: Inclusion	29	79.35
3.3.1 E-Participation	27	86.42
3.3.2 Socioeconomic gap in use of digital payments	38	89.13
3.3.3 Availability of local online content	39	76.68
3.3.4 Gender gap in internet use	42	71.81
3.3.5 Rural gap in use of digital payments	40	72.70
D. Impact pillar	69	53.96
1st sub-pillar: Economy	46	39.92
4.1.1 High-tech and medium-high-tech manufacturing	54	28.51
4.1.2 High-tech exports	58	27.57
4.1.3 PCT patent applications	46	9.03
4.1.4 Domestic market size	6	82.30 ●
4.1.5 Prevalence of gig economy	25	63.66
4.1.6 ICT services exports	68	28.46
2nd sub-pillar: Quality of Life	88	60.78
4.2.1 Happiness	74	58.22
4.2.2 Freedom to make life choices	112	50.17 ○
4.2.3 Income inequality	61	67.84
4.2.4 Healthy life expectancy at birth	83	66.90
3rd sub-pillar: SDG Contribution	75	61.16
4.3.1 SDG 3: Good Health and Well-Being	48	77.13
4.3.2 SDG 4: Quality Education	31	61.56
4.3.3 SDG 5: Women's economic opportunity	101	62.28
4.3.4 SDG 7: Affordable and Clean Energy	121	43.36 ○
4.3.5 SDG 11: Sustainable Cities and Communities	73	61.48

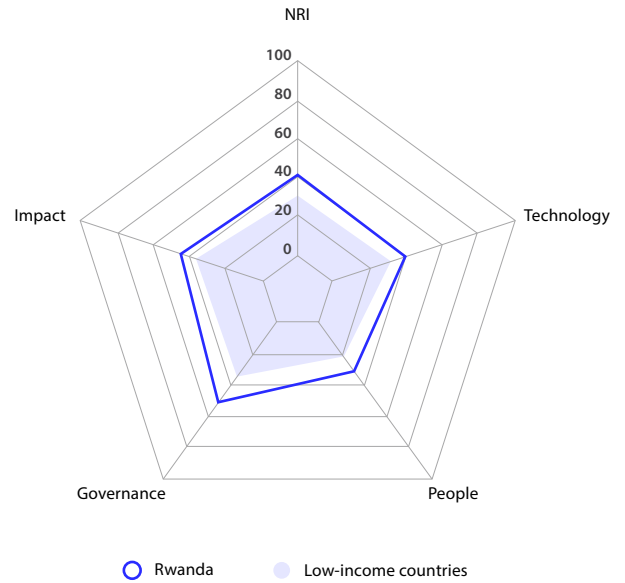
NOTE: ● Indicates a strength and ○ a weakness.

Rwanda

Rank
(Out of 131) Score

Network Readiness Index **101 39.48**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	105	32.71
1st sub-pillar: Access	118	43.00
2nd sub-pillar: Content	109	23.12
3rd sub-pillar: Future Technologies	65	32.02
B. People pillar	105	30.69
1st sub-pillar: Individuals	117	22.33
2nd sub-pillar: Businesses	117	23.70
3rd sub-pillar: Governments	60	46.03
C. Governance pillar	84	50.81
1st sub-pillar: Trust	95	32.55
2nd sub-pillar: Regulation	58	65.13
3rd sub-pillar: Inclusion	89	54.74
D. Impact pillar	104	43.72
1st sub-pillar: Economy	105	18.30
2nd sub-pillar: Quality of Life	107	51.27
3rd sub-pillar: SDG Contribution	74	61.57



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	105	32.71
1st sub-pillar: Access	118	43.00
1.1.1 Mobile tariffs	118	26.90
1.1.2 Handset prices	125	18.85 ○
1.1.3 FTTH/building Internet subscriptions	70	19.74
1.1.4 Population covered by at least a 3G mobile network	69	99.55
1.1.5 International Internet bandwidth	113	58.23
1.1.6 Internet access in schools	57	34.75
2nd sub-pillar: Content	109	23.12
1.2.1 GitHub commits	100	1.71
1.2.2 Internet domain registrations	120	0.15
1.2.3 Mobile apps development	118	50.62
1.2.4 AI scientific publications	66	39.99
3rd sub-pillar: Future Technologies	65	32.02
1.3.1 Adoption of emerging technologies	77	41.88
1.3.2 Investment in emerging technologies	42	50.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	103	4.17
B. People pillar	105	30.69
1st sub-pillar: Individuals	117	22.33
2.1.1 Mobile broadband internet traffic within the country	95	1.68
2.1.2 ICT skills in the education system	83	37.87
2.1.3 Use of virtual social networks	125	3.51 ○
2.1.4 Tertiary enrollment	119	3.07
2.1.5 Adult literacy rate	90	65.54
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	117	23.70
2.2.1 Firms with website	80	38.24
2.2.2 GERD financed by business enterprise	99	0.73
2.2.3 Knowledge intensive employment	117	7.89
2.2.4 Annual investment in telecommunication services	101	70.47
2.2.5 GERD performed by business enterprise	73	1.15
3rd sub-pillar: Governments	60	46.03
2.3.1 Government online services	82	60.60
2.3.2 Publication and use of open data	73	19.12
2.3.3 Government promotion of investment in emerging tech	32	54.07
2.3.4 R&D expenditure by governments and higher education	29	50.34 ●

Indicator	Rank	Score
C. Governance pillar	84	50.81
1st sub-pillar: Trust	95	32.55
3.1.1 Secure Internet servers	104	35.16
3.1.2 Cybersecurity	65	79.60
3.1.3 Online access to financial account	95	14.35
3.1.4 Internet shopping	112	1.11 ○
2nd sub-pillar: Regulation	58	65.13
3.2.1 Regulatory quality	64	45.33 ●
3.2.2 ICT regulatory environment	61	83.92 ●
3.2.3 Regulation of emerging technologies	57	46.05 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	96	50.33
3rd sub-pillar: Inclusion	89	54.74
3.3.1 E-Participation	80	61.73
3.3.2 Socioeconomic gap in use of digital payments	119	36.12
3.3.3 Availability of local online content	83	51.44
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	51	69.65 ●
D. Impact pillar	104	43.72
1st sub-pillar: Economy	105	18.30
4.1.1 High-tech and medium-high-tech manufacturing	92	7.22
4.1.2 High-tech exports	87	10.07
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	119	32.79
4.1.5 Prevalence of gig economy	56	44.77 ●
4.1.6 ICT services exports	91	14.98
2nd sub-pillar: Quality of Life	107	51.27
4.2.1 Happiness	124	19.40 ○
4.2.2 Freedom to make life choices	34	83.73 ●
4.2.3 Income inequality	96	48.49
4.2.4 Healthy life expectancy at birth	101	53.47
3rd sub-pillar: SDG Contribution	74	61.57
4.3.1 SDG 3: Good Health and Well-Being	104	41.78
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	63	77.19 ●
4.3.4 SDG 7: Affordable and Clean Energy	71	78.11
4.3.5 SDG 11: Sustainable Cities and Communities	93	49.19

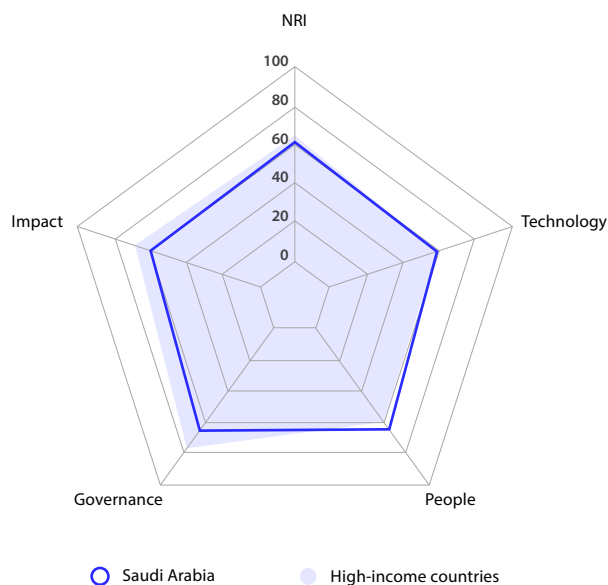
NOTE: ● Indicates a strength and ○ a weakness.

Saudi Arabia

Rank
(Out of 131) Score

Network Readiness Index 35 61.09

Pillar/sub-pillar	Rank	Score
A. Technology pillar	32	55.80
1st sub-pillar: Access	32	74.32
2nd sub-pillar: Content	54	39.39
3rd sub-pillar: Future Technologies	20	53.71
B. People pillar	18	64.57
1st sub-pillar: Individuals	3	70.66
2nd sub-pillar: Businesses	24	64.09
3rd sub-pillar: Governments	29	58.98
C. Governance pillar	50	65.43
1st sub-pillar: Trust	45	63.92
2nd sub-pillar: Regulation	97	55.15
3rd sub-pillar: Inclusion	39	77.23
D. Impact pillar	49	58.53
1st sub-pillar: Economy	38	42.06
2nd sub-pillar: Quality of Life	35	77.21
3rd sub-pillar: SDG Contribution	92	56.33



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	32	55.80
1st sub-pillar: Access	32	74.32
1.1.1 Mobile tariffs	34	74.07
1.1.2 Handset prices	90	42.15
1.1.3 FTTH/building Internet subscriptions	22	41.95
1.1.4 Population covered by at least a 3G mobile network	19	100.00
1.1.5 International Internet bandwidth	9	87.72
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	54	39.39
1.2.1 GitHub commits	95	1.86
1.2.2 Internet domain registrations	79	1.95
1.2.3 Mobile apps development	68	78.16
1.2.4 AI scientific publications	18	75.58
3rd sub-pillar: Future Technologies	20	53.71
1.3.1 Adoption of emerging technologies	23	72.31
1.3.2 Investment in emerging technologies	30	61.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	36	27.33
B. People pillar	18	64.57
1st sub-pillar: Individuals	3	70.66
2.1.1 Mobile broadband internet traffic within the country	10	50.55
2.1.2 ICT skills in the education system	10	81.95
2.1.3 Use of virtual social networks	33	76.92
2.1.4 Tertiary enrollment	33	46.94
2.1.5 Adult literacy rate	32	96.92
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	24	64.09
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	53	40.75
2.2.4 Annual investment in telecommunication services	15	87.42
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	29	58.98
2.3.1 Government online services	69	67.88
2.3.2 Publication and use of open data	65	25.00
2.3.3 Government promotion of investment in emerging tech	5	84.05
2.3.4 R&D expenditure by governments and higher education	NA	NA

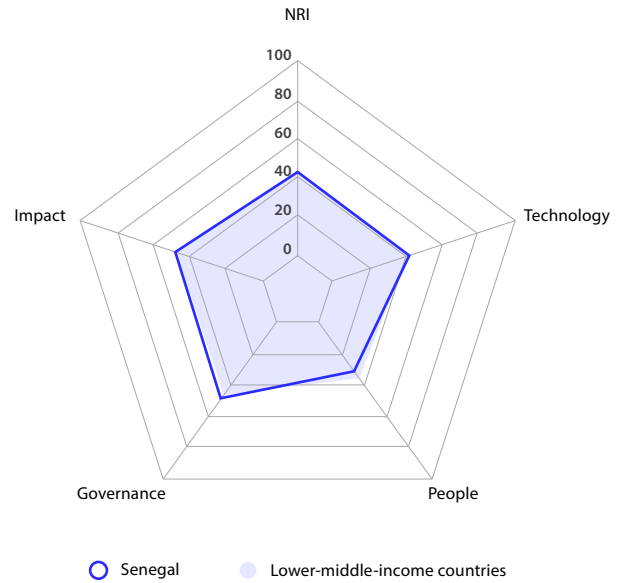
Indicator	Rank	Score
C. Governance pillar	50	65.43
1st sub-pillar: Trust	45	63.92
3.1.1 Secure Internet servers	88	43.36
3.1.2 Cybersecurity	2	99.53
3.1.3 Online access to financial account	43	40.98
3.1.4 Internet shopping	19	71.80
2nd sub-pillar: Regulation	97	55.15
3.2.1 Regulatory quality	58	48.00
3.2.2 ICT regulatory environment	14	94.12
3.2.3 Regulation of emerging technologies	18	76.84
3.2.4 E-commerce legislation	118	33.33
3.2.5 Privacy protection by law content	126	23.47
3rd sub-pillar: Inclusion	39	77.23
3.3.1 E-Participation	64	70.37
3.3.2 Socioeconomic gap in use of digital payments	57	78.24
3.3.3 Availability of local online content	11	91.11
3.3.4 Gender gap in internet use	22	74.86
3.3.5 Rural gap in use of digital payments	43	71.56
D. Impact pillar	49	58.53
1st sub-pillar: Economy	38	42.06
4.1.1 High-tech and medium-high-tech manufacturing	36	46.75
4.1.2 High-tech exports	78	14.12
4.1.3 PCT patent applications	34	16.05
4.1.4 Domestic market size	17	73.06
4.1.5 Prevalence of gig economy	5	86.05
4.1.6 ICT services exports	87	16.33
2nd sub-pillar: Quality of Life	35	77.21
4.2.1 Happiness	31	75.98
4.2.2 Freedom to make life choices	20	89.40
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	84	66.24
3rd sub-pillar: SDG Contribution	92	56.33
4.3.1 SDG 3: Good Health and Well-Being	58	73.04
4.3.2 SDG 4: Quality Education	70	24.12
4.3.3 SDG 5: Women's economic opportunity	77	71.93
4.3.4 SDG 7: Affordable and Clean Energy	104	64.41
4.3.5 SDG 11: Sustainable Cities and Communities	95	48.16

NOTE: ● Indicates a strength and ○ a weakness.

Senegal

Network Readiness Index **98** **39.62**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	92	35.97
1st sub-pillar: Access	102	50.92
2nd sub-pillar: Content	111	22.47
3rd sub-pillar: Future Technologies	58	34.53
B. People pillar	111	29.37
1st sub-pillar: Individuals	110	28.92
2nd sub-pillar: Businesses	123	22.29
3rd sub-pillar: Governments	83	36.89
C. Governance pillar	96	47.70
1st sub-pillar: Trust	105	26.25
2nd sub-pillar: Regulation	54	67.66
3rd sub-pillar: Inclusion	101	49.21
D. Impact pillar	100	45.44
1st sub-pillar: Economy	91	24.88
2nd sub-pillar: Quality of Life	100	56.69
3rd sub-pillar: SDG Contribution	95	54.74



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	92	35.97
1st sub-pillar: Access	102	50.92
1.1.1 Mobile tariffs	95	43.05
1.1.2 Handset prices	87	43.31
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	52	99.81 ●
1.1.5 International Internet bandwidth	118	54.68 ○
1.1.6 Internet access in schools	66	13.76
2nd sub-pillar: Content	111	22.47
1.2.1 GitHub commits	109	0.78
1.2.2 Internet domain registrations	103	0.70
1.2.3 Mobile apps development	115	51.83
1.2.4 AI scientific publications	72	36.55
3rd sub-pillar: Future Technologies	58	34.53
1.3.1 Adoption of emerging technologies	73	43.93
1.3.2 Investment in emerging technologies	60	41.25 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	69	18.40
B. People pillar	111	29.37
1st sub-pillar: Individuals	110	28.92
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	59	50.89 ●
2.1.3 Use of virtual social networks	109	18.31
2.1.4 Tertiary enrollment	101	8.39
2.1.5 Adult literacy rate	99	38.10 ○
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	123	22.29
2.2.1 Firms with website	97	29.00
2.2.2 GERD financed by business enterprise	91	2.53
2.2.3 Knowledge intensive employment	122	3.77 ○
2.2.4 Annual investment in telecommunication services	68	76.14
2.2.5 GERD performed by business enterprise	92	0.03 ○
3rd sub-pillar: Governments	83	36.89
2.3.1 Government online services	104	47.88
2.3.2 Publication and use of open data	91	8.82
2.3.3 Government promotion of investment in emerging tech	56	40.77
2.3.4 R&D expenditure by governments and higher education	30	50.09 ●

Indicator	Rank	Score
C. Governance pillar	96	47.70
1st sub-pillar: Trust	105	26.25
3.1.1 Secure Internet servers	119	26.00 ○
3.1.2 Cybersecurity	102	34.72
3.1.3 Online access to financial account	60	30.80
3.1.4 Internet shopping	77	13.46
2nd sub-pillar: Regulation	54	67.66
3.2.1 Regulatory quality	88	35.47
3.2.2 ICT regulatory environment	51	85.88 ●
3.2.3 Regulation of emerging technologies	44	56.05 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	79	60.88
3rd sub-pillar: Inclusion	101	49.21
3.3.1 E-Participation	107	41.98
3.3.2 Socioeconomic gap in use of digital payments	71	67.58
3.3.3 Availability of local online content	91	49.52
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	105	37.75
D. Impact pillar	100	45.44
1st sub-pillar: Economy	91	24.88
4.1.1 High-tech and medium-high-tech manufacturing	57	27.55
4.1.2 High-tech exports	110	2.46
4.1.3 PCT patent applications	76	1.87
4.1.4 Domestic market size	94	40.25
4.1.5 Prevalence of gig economy	55	45.06 ●
4.1.6 ICT services exports	58	32.08 ●
2nd sub-pillar: Quality of Life	100	56.69
4.2.1 Happiness	95	48.51
4.2.2 Freedom to make life choices	88	65.02
4.2.3 Income inequality	69	62.56
4.2.4 Healthy life expectancy at birth	103	50.66
3rd sub-pillar: SDG Contribution	95	54.74
4.3.1 SDG 3: Good Health and Well-Being	110	34.01
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	110	53.51
4.3.4 SDG 7: Affordable and Clean Energy	62	80.37 ●
4.3.5 SDG 11: Sustainable Cities and Communities	86	51.07

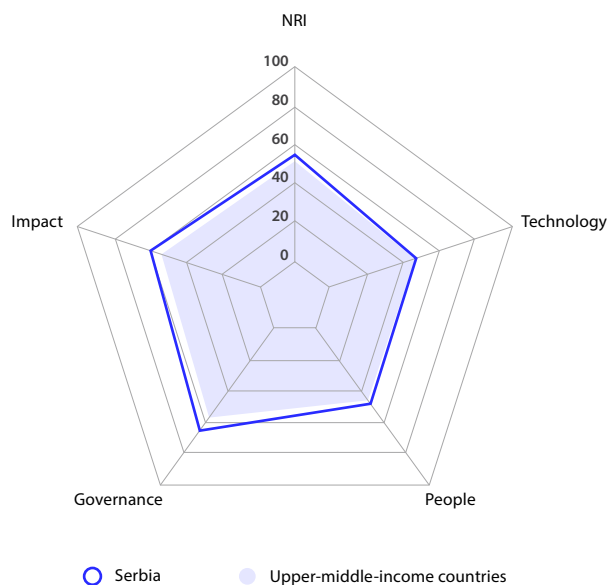
NOTE: ● Indicates a strength and ○ a weakness.

Serbia

Rank
(Out of 131) Score

Network Readiness Index 55 53.52

Pillar/sub-pillar	Rank	Score
A. Technology pillar	77	42.26
1st sub-pillar: Access	65	65.19
2nd sub-pillar: Content	46	42.46
3rd sub-pillar: Future Technologies	113	19.12
B. People pillar	57	47.42
1st sub-pillar: Individuals	53	51.45
2nd sub-pillar: Businesses	65	42.84
3rd sub-pillar: Governments	50	47.96
C. Governance pillar	49	65.85
1st sub-pillar: Trust	53	54.98
2nd sub-pillar: Regulation	48	70.70
3rd sub-pillar: Inclusion	50	71.87
D. Impact pillar	48	58.57
1st sub-pillar: Economy	59	34.62
2nd sub-pillar: Quality of Life	43	75.11
3rd sub-pillar: SDG Contribution	61	65.99



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	77	42.26
1st sub-pillar: Access	65	65.19
1.1.1 Mobile tariffs	46	70.10
1.1.2 Handset prices	58	56.16
1.1.3 FTTH/building Internet subscriptions	62	25.42
1.1.4 Population covered by at least a 3G mobile network	51	99.82
1.1.5 International Internet bandwidth	45	74.45
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	46	42.46
1.2.1 GitHub commits	46	13.17
1.2.2 Internet domain registrations	55	5.67
1.2.3 Mobile apps development	42	86.52 ●
1.2.4 AI scientific publications	35	64.48
3rd sub-pillar: Future Technologies	113	19.12
1.3.1 Adoption of emerging technologies	80	40.36
1.3.2 Investment in emerging technologies	92	31.25
1.3.3 Robot density	47	1.28 ○
1.3.4 Computer software spending	105	3.58 ○
B. People pillar	57	47.42
1st sub-pillar: Individuals	53	51.45
2.1.1 Mobile broadband internet traffic within the country	59	8.69
2.1.2 ICT skills in the education system	58	51.18
2.1.3 Use of virtual social networks	87	52.78
2.1.4 Tertiary enrollment	37	45.24 ●
2.1.5 Adult literacy rate	13	99.37 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	65	42.84
2.2.1 Firms with website	23	80.41 ●
2.2.2 GERD financed by business enterprise	90	2.55 ○
2.2.3 Knowledge intensive employment	50	42.35
2.2.4 Annual investment in telecommunication services	47	79.71
2.2.5 GERD performed by business enterprise	46	9.19
3rd sub-pillar: Governments	50	47.96
2.3.1 Government online services	42	78.79
2.3.2 Publication and use of open data	68	23.53
2.3.3 Government promotion of investment in emerging tech	61	38.59
2.3.4 R&D expenditure by governments and higher education	28	50.94 ●

Indicator	Rank	Score
C. Governance pillar	49	65.85
1st sub-pillar: Trust	53	54.98
3.1.1 Secure Internet servers	42	72.97
3.1.2 Cybersecurity	47	89.62
3.1.3 Online access to financial account	81	18.74
3.1.4 Internet shopping	48	38.61
2nd sub-pillar: Regulation	48	70.70
3.2.1 Regulatory quality	66	44.27
3.2.2 ICT regulatory environment	11	94.71 ●
3.2.3 Regulation of emerging technologies	80	33.68
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	31	80.86 ●
3rd sub-pillar: Inclusion	50	71.87
3.3.1 E-Participation	41	81.48
3.3.2 Socioeconomic gap in use of digital payments	40	88.33 ●
3.3.3 Availability of local online content	53	66.59
3.3.4 Gender gap in internet use	81	60.97 ○
3.3.5 Rural gap in use of digital payments	68	62.00
D. Impact pillar	48	58.57
1st sub-pillar: Economy	59	34.62
4.1.1 High-tech and medium-high-tech manufacturing	49	30.79
4.1.2 High-tech exports	53	32.33
4.1.3 PCT patent applications	57	5.72
4.1.4 Domestic market size	73	48.68
4.1.5 Prevalence of gig economy	81	35.17
4.1.6 ICT services exports	16	55.03 ●
2nd sub-pillar: Quality of Life	43	75.11
4.2.1 Happiness	43	72.41
4.2.2 Freedom to make life choices	43	80.57
4.2.3 Income inequality	48	71.61
4.2.4 Healthy life expectancy at birth	55	75.83
3rd sub-pillar: SDG Contribution	61	65.99
4.3.1 SDG 3: Good Health and Well-Being	65	69.51
4.3.2 SDG 4: Quality Education	43	46.29
4.3.3 SDG 5: Women's economic opportunity	27	91.23 ●
4.3.4 SDG 7: Affordable and Clean Energy	97	68.92 ○
4.3.5 SDG 11: Sustainable Cities and Communities	83	54.01

NOTE: ● Indicates a strength and ○ a weakness.

Singapore

Rank
(Out of 131) Score

Network Readiness Index 2 79.35

Pillar/sub-pillar	Rank	Score
A. Technology pillar	4	77.48
1st sub-pillar: Access	6	85.08
2nd sub-pillar: Content	10	74.76
3rd sub-pillar: Future Technologies	2	72.61
B. People pillar	4	72.03
1st sub-pillar: Individuals	6	68.25
2nd sub-pillar: Businesses	16	68.47
3rd sub-pillar: Governments	9	79.38
C. Governance pillar	10	85.68
1st sub-pillar: Trust	17	79.18
2nd sub-pillar: Regulation	9	87.74
3rd sub-pillar: Inclusion	1	90.12
D. Impact pillar	2	82.21
1st sub-pillar: Economy	3	70.90
2nd sub-pillar: Quality of Life	10	87.35
3rd sub-pillar: SDG Contribution	6	88.39



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	4	77.48
1st sub-pillar: Access	6	85.08
1.1.1 Mobile tariffs	5	90.50
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	57	27.34 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	4	92.64
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	10	74.76
1.2.1 GitHub commits	1	100.00 ●
1.2.2 Internet domain registrations	35	20.09
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	13	78.93
3rd sub-pillar: Future Technologies	2	72.61
1.3.1 Adoption of emerging technologies	8	88.54
1.3.2 Investment in emerging technologies	13	78.50
1.3.3 Robot density	1	100.00 ●
1.3.4 Computer software spending	50	23.42
B. People pillar	4	72.03
1st sub-pillar: Individuals	6	68.25
2.1.1 Mobile broadband internet traffic within the country	56	10.46
2.1.2 ICT skills in the education system	2	89.64 ●
2.1.3 Use of virtual social networks	13	83.93
2.1.4 Tertiary enrollment	10	60.87
2.1.5 Adult literacy rate	33	96.34
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	16	68.47
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	20	68.37
2.2.3 Knowledge intensive employment	2	93.91 ●
2.2.4 Annual investment in telecommunication services	39	81.37
2.2.5 GERD performed by business enterprise	21	30.25
3rd sub-pillar: Governments	9	79.38
2.3.1 Government online services	5	96.36
2.3.2 Publication and use of open data	27	50.00
2.3.3 Government promotion of investment in emerging tech	2	99.63
2.3.4 R&D expenditure by governments and higher education	12	71.51

Indicator	Rank	Score
C. Governance pillar	10	85.68
1st sub-pillar: Trust	17	79.18
3.1.1 Secure Internet servers	4	93.86
3.1.2 Cybersecurity	5	98.49
3.1.3 Online access to financial account	26	56.92
3.1.4 Internet shopping	22	67.43
2nd sub-pillar: Regulation	9	87.74
3.2.1 Regulatory quality	1	100.00 ●
3.2.2 ICT regulatory environment	20	93.53
3.2.3 Regulation of emerging technologies	3	93.68 ●
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	94	51.49 ○
3rd sub-pillar: Inclusion	1	90.12
3.3.1 E-Participation	6	97.53
3.3.2 Socioeconomic gap in use of digital payments	28	92.85
3.3.3 Availability of local online content	10	91.59
3.3.4 Gender gap in Internet use	54	69.79 ○
3.3.5 Rural gap in use of digital payments	2	98.86 ●
D. Impact pillar	2	82.21
1st sub-pillar: Economy	3	70.90
4.1.1 High-tech and medium-high-tech manufacturing	1	100.00 ●
4.1.2 High-tech exports	5	88.15
4.1.3 PCT patent applications	12	55.02
4.1.4 Domestic market size	37	62.88
4.1.5 Prevalence of gig economy	10	81.40
4.1.6 ICT services exports	44	37.93
2nd sub-pillar: Quality of Life	10	87.35
4.2.1 Happiness	24	78.49
4.2.2 Freedom to make life choices	30	85.37
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	2	98.18 ●
3rd sub-pillar: SDG Contribution	6	88.39
4.3.1 SDG 3: Good Health and Well-Being	10	94.30
4.3.2 SDG 4: Quality Education	2	91.12 ●
4.3.3 SDG 5: Women's economic opportunity	65	75.44 ○
4.3.4 SDG 7: Affordable and Clean Energy	20	89.56
4.3.5 SDG 11: Sustainable Cities and Communities	18	91.51

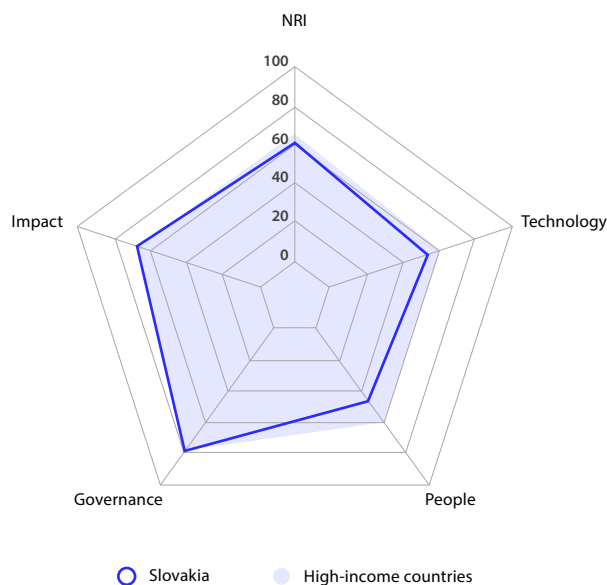
NOTE: ● Indicates a strength and ○ a weakness.

Slovakia

Rank
(Out of 131) Score

Network Readiness Index 37 60.27

Pillar/sub-pillar	Rank	Score
A. Technology pillar	37	52.52
1st sub-pillar: Access	39	72.72
2nd sub-pillar: Content	37	45.90
3rd sub-pillar: Future Technologies	46	38.94
B. People pillar	65	45.25
1st sub-pillar: Individuals	102	34.19
2nd sub-pillar: Businesses	36	56.11
3rd sub-pillar: Governments	63	45.46
C. Governance pillar	29	77.23
1st sub-pillar: Trust	22	77.42
2nd sub-pillar: Regulation	32	77.06
3rd sub-pillar: Inclusion	40	77.22
D. Impact pillar	32	66.08
1st sub-pillar: Economy	33	44.35
2nd sub-pillar: Quality of Life	29	79.76
3rd sub-pillar: SDG Contribution	43	74.12



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	37	52.52
1st sub-pillar: Access	39	72.72
1.1.1 Mobile tariffs	38	73.06
1.1.2 Handset prices	45	66.61
1.1.3 FTTH/building Internet subscriptions	50	28.97
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	83	68.31
1.1.6 Internet access in schools	29	99.70
2nd sub-pillar: Content	37	45.90
1.2.1 GitHub commits	35	21.55
1.2.2 Internet domain registrations	28	26.75
1.2.3 Mobile apps development	36	89.41
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	46	38.94
1.3.1 Adoption of emerging technologies	40	59.51
1.3.2 Investment in emerging technologies	44	49.25
1.3.3 Robot density	21	21.28
1.3.4 Computer software spending	41	25.73
B. People pillar	65	45.25
1st sub-pillar: Individuals	102	34.19
2.1.1 Mobile broadband internet traffic within the country	75	6.03
2.1.2 ICT skills in the education system	52	52.37
2.1.3 Use of virtual social networks	60	69.23
2.1.4 Tertiary enrollment	68	30.45
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	29	12.87
2nd sub-pillar: Businesses	36	56.11
2.2.1 Firms with website	29	76.53
2.2.2 GERD financed by business enterprise	35	54.03
2.2.3 Knowledge intensive employment	37	57.63
2.2.4 Annual investment in telecommunication services	51	79.43
2.2.5 GERD performed by business enterprise	40	12.93
3rd sub-pillar: Governments	63	45.46
2.3.1 Government online services	62	70.90
2.3.2 Publication and use of open data	31	47.06
2.3.3 Government promotion of investment in emerging tech	89	29.99
2.3.4 R&D expenditure by governments and higher education	54	33.90

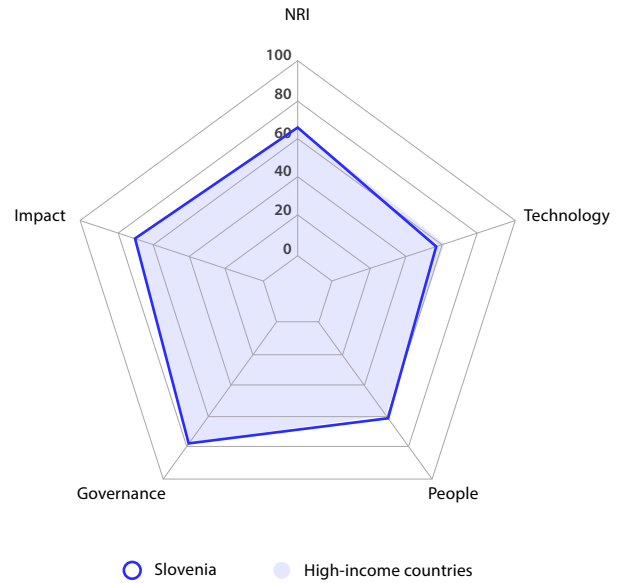
Indicator	Rank	Score
C. Governance pillar	29	77.23
1st sub-pillar: Trust	22	77.42
3.1.1 Secure Internet servers	25	81.09
3.1.2 Cybersecurity	42	92.23
3.1.3 Online access to financial account	24	58.94
3.1.4 Internet shopping	NA	NA
2nd sub-pillar: Regulation	32	77.06
3.2.1 Regulatory quality	38	61.87
3.2.2 ICT regulatory environment	44	87.26
3.2.3 Regulation of emerging technologies	48	53.68
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	27	82.47
3rd sub-pillar: Inclusion	40	77.22
3.3.1 E-Participation	68	69.14
3.3.2 Socioeconomic gap in use of digital payments	45	85.89
3.3.3 Availability of local online content	29	82.93
3.3.4 Gender gap in internet use	36	72.70
3.3.5 Rural gap in use of digital payments	24	75.42
D. Impact pillar	32	66.08
1st sub-pillar: Economy	33	44.35
4.1.1 High-tech and medium-high-tech manufacturing	3	81.80
4.1.2 High-tech exports	21	58.91
4.1.3 PCT patent applications	53	7.50
4.1.4 Domestic market size	65	51.48
4.1.5 Prevalence of gig economy	77	36.05
4.1.6 ICT services exports	63	30.40
2nd sub-pillar: Quality of Life	29	79.76
4.2.1 Happiness	35	75.50
4.2.2 Freedom to make life choices	90	62.14
4.2.3 Income inequality	1	100.00
4.2.4 Healthy life expectancy at birth	40	81.38
3rd sub-pillar: SDG Contribution	43	74.12
4.3.1 SDG 3: Good Health and Well-Being	44	79.06
4.3.2 SDG 4: Quality Education	37	56.86
4.3.3 SDG 5: Women's economic opportunity	55	78.95
4.3.4 SDG 7: Affordable and Clean Energy	73	76.69
4.3.5 SDG 11: Sustainable Cities and Communities	40	79.04

NOTE: ● Indicates a strength and ○ a weakness.

Slovenia

Rank (Out of 131) Score
27 65.67

Pillar/sub-pillar	Rank	Score
A. Technology pillar	34	55.45
1st sub-pillar: Access	41	71.85
2nd sub-pillar: Content	29	52.84
3rd sub-pillar: Future Technologies	39	41.66
B. People pillar	24	60.45
1st sub-pillar: Individuals	47	52.09
2nd sub-pillar: Businesses	14	70.72
3rd sub-pillar: Governments	32	58.53
C. Governance pillar	30	76.47
1st sub-pillar: Trust	36	69.13
2nd sub-pillar: Regulation	21	82.33
3rd sub-pillar: Inclusion	36	77.94
D. Impact pillar	26	70.31
1st sub-pillar: Economy	40	41.29
2nd sub-pillar: Quality of Life	12	87.01
3rd sub-pillar: SDG Contribution	22	82.63



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	34	55.45
1st sub-pillar: Access	41	71.85
1.1.1 Mobile tariffs	23	78.54
1.1.2 Handset prices	54	60.84
1.1.3 FTTH/building Internet subscriptions	67	20.72 ○
1.1.4 Population covered by at least a 3G mobile network	19	100.00
1.1.5 International Internet bandwidth	65	71.03
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	29	52.84
1.2.1 GitHub commits	24	40.14
1.2.2 Internet domain registrations	30	23.38
1.2.3 Mobile apps development	23	95.01
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	39	41.66
1.3.1 Adoption of emerging technologies	28	69.85
1.3.2 Investment in emerging technologies	41	51.50
1.3.3 Robot density	9	37.13 ●
1.3.4 Computer software spending	90	8.18 ○
B. People pillar	24	60.45
1st sub-pillar: Individuals	47	52.09
2.1.1 Mobile broadband internet traffic within the country	85	3.87 ○
2.1.2 ICT skills in the education system	41	60.95
2.1.3 Use of virtual social networks	56	72.25
2.1.4 Tertiary enrollment	22	51.88
2.1.5 Adult literacy rate	10	99.65 ●
2.1.6 AI talent concentration	17	23.98
2nd sub-pillar: Businesses	14	70.72
2.2.1 Firms with website	13	85.26 ●
2.2.2 GERD financed by business enterprise	13	76.07 ●
2.2.3 Knowledge intensive employment	14	73.73 ●
2.2.4 Annual investment in telecommunication services	59	77.18
2.2.5 GERD performed by business enterprise	14	41.34 ●
3rd sub-pillar: Governments	32	58.53
2.3.1 Government online services	24	84.84
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	49	45.84
2.3.4 R&D expenditure by governments and higher education	41	44.91

Indicator	Rank	Score
C. Governance pillar	30	76.47
1st sub-pillar: Trust	36	69.13
3.1.1 Secure Internet servers	13	86.19 ●
3.1.2 Cybersecurity	75	74.49
3.1.3 Online access to financial account	30	52.32
3.1.4 Internet shopping	27	63.52
2nd sub-pillar: Regulation	21	82.33
3.2.1 Regulatory quality	34	65.60
3.2.2 ICT regulatory environment	3	98.82 ●
3.2.3 Regulation of emerging technologies	32	64.21
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	25	83.00
3rd sub-pillar: Inclusion	36	77.94
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	34	90.40
3.3.3 Availability of local online content	49	68.27
3.3.4 Gender gap in Internet use	44	71.31
3.3.5 Rural gap in use of digital payments	30	74.54
D. Impact pillar	26	70.31
1st sub-pillar: Economy	40	41.29
4.1.1 High-tech and medium-high-tech manufacturing	26	54.11
4.1.2 High-tech exports	30	51.87
4.1.3 PCT patent applications	27	30.23
4.1.4 Domestic market size	86	43.88 ○
4.1.5 Prevalence of gig economy	71	37.50
4.1.6 ICT services exports	64	30.15
2nd sub-pillar: Quality of Life	12	87.01
4.2.1 Happiness	20	81.60
4.2.2 Freedom to make life choices	42	80.69
4.2.3 Income inequality	2	96.98 ●
4.2.4 Healthy life expectancy at birth	25	88.76
3rd sub-pillar: SDG Contribution	22	82.63
4.3.1 SDG 3: Good Health and Well-Being	31	84.21
4.3.2 SDG 4: Quality Education	11	70.38 ●
4.3.3 SDG 5: Women's economic opportunity	20	95.61
4.3.4 SDG 7: Affordable and Clean Energy	56	81.79
4.3.5 SDG 11: Sustainable Cities and Communities	34	81.18

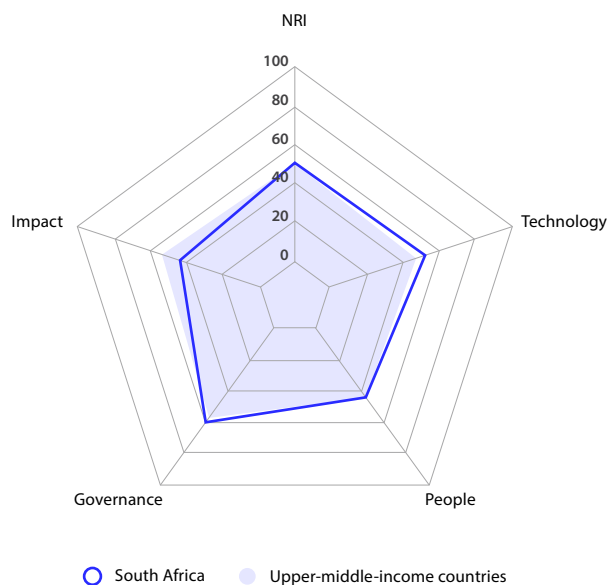
NOTE: ● Indicates a strength and ○ a weakness.

South Africa

Rank
(Out of 131) Score

Network Readiness Index 68 48.90

Pillar/sub-pillar	Rank	Score
A. Technology pillar	52	48.79
1st sub-pillar: Access	61	67.04
2nd sub-pillar: Content	52	40.84
3rd sub-pillar: Future Technologies	48	38.49
B. People pillar	72	42.96
1st sub-pillar: Individuals	109	30.37
2nd sub-pillar: Businesses	47	51.36
3rd sub-pillar: Governments	51	47.16
C. Governance pillar	59	60.13
1st sub-pillar: Trust	60	49.65
2nd sub-pillar: Regulation	61	64.65
3rd sub-pillar: Inclusion	62	66.08
D. Impact pillar	105	43.71
1st sub-pillar: Economy	71	29.71
2nd sub-pillar: Quality of Life	124	39.13
3rd sub-pillar: SDG Contribution	70	62.29



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	52	48.79
1st sub-pillar: Access	61	67.04
1.1.1 Mobile tariffs	39	72.73
1.1.2 Handset prices	76	47.86
1.1.3 FTTH/building Internet subscriptions	30	39.26
1.1.4 Population covered by at least a 3G mobile network	37	99.96
1.1.5 International Internet bandwidth	38	75.38
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	52	40.84
1.2.1 GitHub commits	73	4.13
1.2.2 Internet domain registrations	50	7.93
1.2.3 Mobile apps development	69	77.60
1.2.4 AI scientific publications	23	73.70
3rd sub-pillar: Future Technologies	48	38.49
1.3.1 Adoption of emerging technologies	33	64.29
1.3.2 Investment in emerging technologies	40	51.75
1.3.3 Robot density	34	5.97
1.3.4 Computer software spending	27	31.96
B. People pillar	72	42.96
1st sub-pillar: Individuals	109	30.37
2.1.1 Mobile broadband internet traffic within the country	37	19.82
2.1.2 ICT skills in the education system	124	9.76
2.1.3 Use of virtual social networks	98	41.97
2.1.4 Tertiary enrollment	91	15.08
2.1.5 Adult literacy rate	49	93.62
2.1.6 AI talent concentration	39	1.95
2nd sub-pillar: Businesses	47	51.36
2.2.1 Firms with website	22	80.98
2.2.2 GERD financed by business enterprise	39	51.30
2.2.3 Knowledge intensive employment	72	31.17
2.2.4 Annual investment in telecommunication services	23	84.42
2.2.5 GERD performed by business enterprise	47	8.94
3rd sub-pillar: Governments	51	47.16
2.3.1 Government online services	54	73.94
2.3.2 Publication and use of open data	38	41.18
2.3.3 Government promotion of investment in emerging tech	84	31.61
2.3.4 R&D expenditure by governments and higher education	47	41.90

Indicator	Rank	Score
C. Governance pillar	59	60.13
1st sub-pillar: Trust	60	49.65
3.1.1 Secure Internet servers	38	76.42
3.1.2 Cybersecurity	67	78.08
3.1.3 Online access to financial account	65	28.13
3.1.4 Internet shopping	72	15.99
2nd sub-pillar: Regulation	61	64.65
3.2.1 Regulatory quality	62	46.40
3.2.2 ICT regulatory environment	73	80.39
3.2.3 Regulation of emerging technologies	60	44.74
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	93	51.70
3rd sub-pillar: Inclusion	62	66.08
3.3.1 E-Participation	56	74.07
3.3.2 Socioeconomic gap in use of digital payments	65	72.97
3.3.3 Availability of local online content	90	49.76
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	53	67.52
D. Impact pillar	105	43.71
1st sub-pillar: Economy	71	29.71
4.1.1 High-tech and medium-high-tech manufacturing	60	25.91
4.1.2 High-tech exports	55	29.53
4.1.3 PCT patent applications	44	9.64
4.1.4 Domestic market size	31	66.19
4.1.5 Prevalence of gig economy	86	33.72
4.1.6 ICT services exports	95	13.24
2nd sub-pillar: Quality of Life	124	39.13
4.2.1 Happiness	69	60.90
4.2.2 Freedom to make life choices	106	55.71
4.2.3 Income inequality	117	0.00
4.2.4 Healthy life expectancy at birth	112	39.90
3rd sub-pillar: SDG Contribution	70	62.29
4.3.1 SDG 3: Good Health and Well-Being	78	64.22
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	45	83.33
4.3.4 SDG 7: Affordable and Clean Energy	120	43.94
4.3.5 SDG 11: Sustainable Cities and Communities	79	57.67

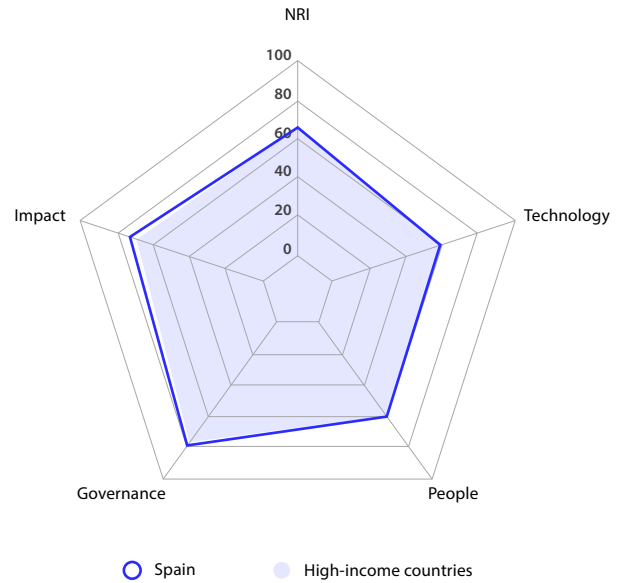
NOTE: ● Indicates a strength and ○ a weakness.

Spain

Rank
(Out of 131) Score

Network Readiness Index **26** **66.51**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	28	58.34
1st sub-pillar: Access	15	78.63
2nd sub-pillar: Content	35	47.88
3rd sub-pillar: Future Technologies	24	48.50
B. People pillar	25	59.56
1st sub-pillar: Individuals	29	56.08
2nd sub-pillar: Businesses	32	60.39
3rd sub-pillar: Governments	23	62.22
C. Governance pillar	27	77.56
1st sub-pillar: Trust	33	70.29
2nd sub-pillar: Regulation	27	78.44
3rd sub-pillar: Inclusion	16	83.96
D. Impact pillar	25	70.57
1st sub-pillar: Economy	26	47.05
2nd sub-pillar: Quality of Life	33	77.69
3rd sub-pillar: SDG Contribution	12	86.99



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	28	58.34
1st sub-pillar: Access	15	78.63
1.1.1 Mobile tariffs	59	64.49
1.1.2 Handset prices	20	77.04
1.1.3 FTTH/building Internet subscriptions	14	56.21
1.1.4 Population covered by at least a 3G mobile network	40	99.94
1.1.5 International Internet bandwidth	46	74.12
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	35	47.88
1.2.1 GitHub commits	31	30.19
1.2.2 Internet domain registrations	33	20.29
1.2.3 Mobile apps development	26	93.15
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	24	48.50
1.3.1 Adoption of emerging technologies	29	68.80
1.3.2 Investment in emerging technologies	56	43.00
1.3.3 Robot density	18	24.79
1.3.4 Computer software spending	5	57.40
B. People pillar	25	59.56
1st sub-pillar: Individuals	29	56.08
2.1.1 Mobile broadband internet traffic within the country	23	30.96
2.1.2 ICT skills in the education system	67	44.67
2.1.3 Use of virtual social networks	17	81.60
2.1.4 Tertiary enrollment	9	62.09
2.1.5 Adult literacy rate	25	98.22
2.1.6 AI talent concentration	23	18.91
2nd sub-pillar: Businesses	32	60.39
2.2.1 Firms with website	28	77.72
2.2.2 GERD financed by business enterprise	33	60.72
2.2.3 Knowledge intensive employment	43	54.18
2.2.4 Annual investment in telecommunication services	13	88.82
2.2.5 GERD performed by business enterprise	32	20.52
3rd sub-pillar: Governments	23	62.22
2.3.1 Government online services	17	88.48
2.3.2 Publication and use of open data	11	73.53
2.3.3 Government promotion of investment in emerging tech	63	38.08
2.3.4 R&D expenditure by governments and higher education	32	48.78

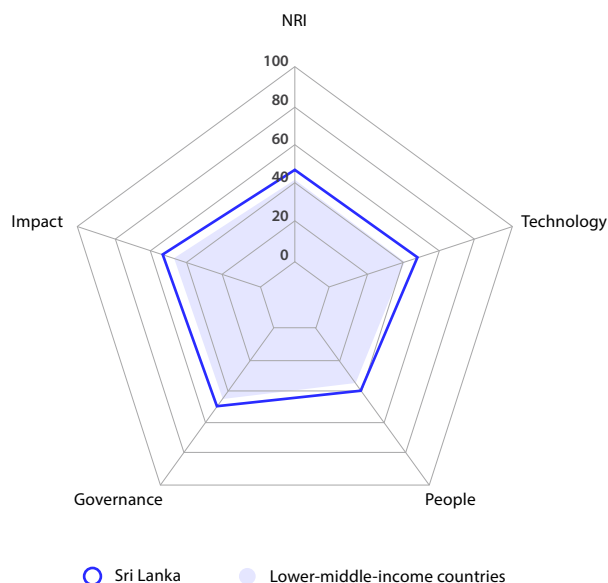
Indicator	Rank	Score
C. Governance pillar	27	77.56
1st sub-pillar: Trust	33	70.29
3.1.1 Secure Internet servers	32	79.63
3.1.2 Cybersecurity	5	98.49
3.1.3 Online access to financial account	48	36.31
3.1.4 Internet shopping	23	66.71
2nd sub-pillar: Regulation	27	78.44
3.2.1 Regulatory quality	39	61.60
3.2.2 ICT regulatory environment	71	81.18
3.2.3 Regulation of emerging technologies	30	65.00
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	21	84.42
3rd sub-pillar: Inclusion	16	83.96
3.3.1 E-Participation	36	83.95
3.3.2 Socioeconomic gap in use of digital payments	3	99.47
3.3.3 Availability of local online content	22	85.58
3.3.4 Gender gap in Internet use	34	73.45
3.3.5 Rural gap in use of digital payments	11	77.36
D. Impact pillar	25	70.57
1st sub-pillar: Economy	26	47.05
4.1.1 High-tech and medium-high-tech manufacturing	30	49.49
4.1.2 High-tech exports	39	43.41
4.1.3 PCT patent applications	29	24.37
4.1.4 Domestic market size	16	74.38
4.1.5 Prevalence of gig economy	48	51.16
4.1.6 ICT services exports	39	39.46
2nd sub-pillar: Quality of Life	33	77.69
4.2.1 Happiness	29	76.41
4.2.2 Freedom to make life choices	75	68.96
4.2.3 Income inequality	46	72.11
4.2.4 Healthy life expectancy at birth	7	93.28
3rd sub-pillar: SDG Contribution	12	86.99
4.3.1 SDG 3: Good Health and Well-Being	13	93.79
4.3.2 SDG 4: Quality Education	29	61.95
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	24	88.97
4.3.5 SDG 11: Sustainable Cities and Communities	13	93.74

NOTE: ● Indicates a strength and ○ a weakness.

Sri Lanka

Network Readiness Index **81** **46.45**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	67	44.42
1st sub-pillar: Access	93	54.93
2nd sub-pillar: Content	67	35.93
3rd sub-pillar: Future Technologies	38	42.39
B. People pillar	83	38.95
1st sub-pillar: Individuals	92	40.39
2nd sub-pillar: Businesses	87	34.90
3rd sub-pillar: Governments	73	41.55
C. Governance pillar	88	49.98
1st sub-pillar: Trust	96	31.99
2nd sub-pillar: Regulation	105	52.68
3rd sub-pillar: Inclusion	65	65.27
D. Impact pillar	75	52.45
1st sub-pillar: Economy	64	32.66
2nd sub-pillar: Quality of Life	91	59.35
3rd sub-pillar: SDG Contribution	64	65.33



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	67	44.42
1st sub-pillar: Access	93	54.93
1.1.1 Mobile tariffs	20	81.96 ●
1.1.2 Handset prices	113	33.83
1.1.3 FTTH/building Internet subscriptions	58	26.70
1.1.4 Population covered by at least a 3G mobile network	82	98.67
1.1.5 International Internet bandwidth	75	69.86
1.1.6 Internet access in schools	64	18.57
2nd sub-pillar: Content	67	35.93
1.2.1 GitHub commits	42	14.85 ●
1.2.2 Internet domain registrations	101	0.76
1.2.3 Mobile apps development	80	72.79
1.2.4 AI scientific publications	47	55.34
3rd sub-pillar: Future Technologies	38	42.39
1.3.1 Adoption of emerging technologies	45	56.01 ●
1.3.2 Investment in emerging technologies	70	38.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	25	32.92 ●
B. People pillar	83	38.95
1st sub-pillar: Individuals	92	40.39
2.1.1 Mobile broadband internet traffic within the country	41	16.68 ●
2.1.2 ICT skills in the education system	61	47.63
2.1.3 Use of virtual social networks	100	33.89
2.1.4 Tertiary enrollment	95	13.55
2.1.5 Adult literacy rate	61	90.22
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	87	34.90
2.2.1 Firms with website	116	10.51 ○
2.2.2 GERD financed by business enterprise	40	49.78 ●
2.2.3 Knowledge intensive employment	61	35.58
2.2.4 Annual investment in telecommunication services	58	77.29
2.2.5 GERD performed by business enterprise	71	1.33
3rd sub-pillar: Governments	73	41.55
2.3.1 Government online services	62	70.90
2.3.2 Publication and use of open data	NA	NA
2.3.3 Government promotion of investment in emerging tech	41	49.00
2.3.4 R&D expenditure by governments and higher education	100	4.76 ○

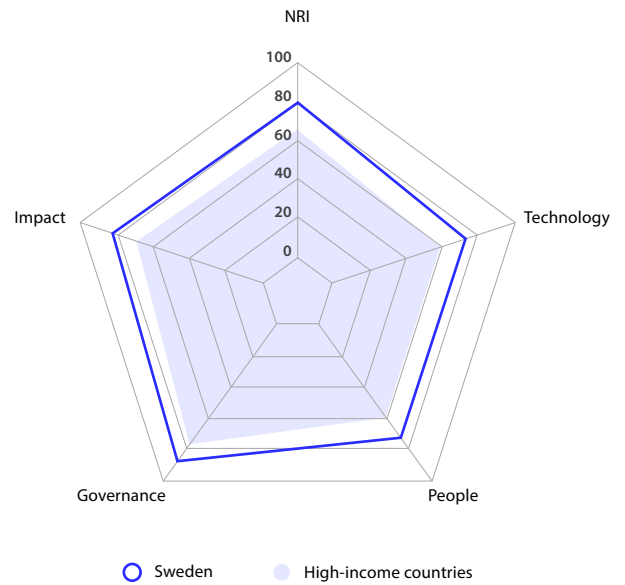
Indicator	Rank	Score
C. Governance pillar	88	49.98
1st sub-pillar: Trust	96	31.99
3.1.1 Secure Internet servers	78	47.48
3.1.2 Cybersecurity	88	57.92
3.1.3 Online access to financial account	110	9.76
3.1.4 Internet shopping	79	12.80
2nd sub-pillar: Regulation	105	52.68
3.2.1 Regulatory quality	86	36.27
3.2.2 ICT regulatory environment	121	56.86 ○
3.2.3 Regulation of emerging technologies	71	41.84
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	74	61.79
3rd sub-pillar: Inclusion	65	65.27
3.3.1 E-Participation	64	70.37
3.3.2 Socioeconomic gap in use of digital payments	58	77.51
3.3.3 Availability of local online content	94	47.12
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	58	66.10
D. Impact pillar	75	52.45
1st sub-pillar: Economy	64	32.66
4.1.1 High-tech and medium-high-tech manufacturing	91	7.37
4.1.2 High-tech exports	68	17.57
4.1.3 PCT patent applications	59	4.70
4.1.4 Domestic market size	54	56.16
4.1.5 Prevalence of gig economy	45	53.49 ●
4.1.6 ICT services exports	14	56.65 ●
2nd sub-pillar: Quality of Life	91	59.35
4.2.1 Happiness	114	34.27 ○
4.2.2 Freedom to make life choices	81	67.21
4.2.3 Income inequality	76	59.55
4.2.4 Healthy life expectancy at birth	52	76.39
3rd sub-pillar: SDG Contribution	64	65.33
4.3.1 SDG 3: Good Health and Well-Being	81	63.12
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	112	51.75
4.3.4 SDG 7: Affordable and Clean Energy	6	96.16 ●
4.3.5 SDG 11: Sustainable Cities and Communities	89	50.30

NOTE: ● Indicates a strength and ○ a weakness.

Sweden

Rank (Out of 131) Score
3 78.91

Pillar/sub-pillar	Rank	Score
A. Technology pillar	8	73.09
1st sub-pillar: Access	28	74.74
2nd sub-pillar: Content	13	73.07
3rd sub-pillar: Future Technologies	3	71.46
B. People pillar	5	72.02
1st sub-pillar: Individuals	42	53.73
2nd sub-pillar: Businesses	2	82.13
3rd sub-pillar: Governments	7	80.22
C. Governance pillar	5	87.89
1st sub-pillar: Trust	6	90.28
2nd sub-pillar: Regulation	7	88.34
3rd sub-pillar: Inclusion	12	85.04
D. Impact pillar	1	82.66
1st sub-pillar: Economy	6	67.00
2nd sub-pillar: Quality of Life	4	92.26
3rd sub-pillar: SDG Contribution	4	88.72



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	8	73.09
1st sub-pillar: Access	28	74.74
1.1.1 Mobile tariffs	6	90.39
1.1.2 Handset prices	33	71.97
1.1.3 FTTH/building Internet subscriptions	28	39.89
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	61	71.46 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	13	73.07
1.2.1 GitHub commits	8	71.28
1.2.2 Internet domain registrations	17	50.85
1.2.3 Mobile apps development	15	97.09
1.2.4 AI scientific publications	NA	NA
3rd sub-pillar: Future Technologies	3	71.46
1.3.1 Adoption of emerging technologies	5	96.31
1.3.2 Investment in emerging technologies	3	92.00 ●
1.3.3 Robot density	6	47.81
1.3.4 Computer software spending	13	49.71
B. People pillar	5	72.02
1st sub-pillar: Individuals	42	53.73
2.1.1 Mobile broadband internet traffic within the country	38	19.11
2.1.2 ICT skills in the education system	3	88.46 ●
2.1.3 Use of virtual social networks	10	85.20
2.1.4 Tertiary enrollment	24	51.50
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	16	24.37
2nd sub-pillar: Businesses	2	82.13
2.2.1 Firms with website	7	93.91
2.2.2 GERD financed by business enterprise	12	77.20
2.2.3 Knowledge intensive employment	3	88.67 ●
2.2.4 Annual investment in telecommunication services	25	83.83
2.2.5 GERD performed by business enterprise	5	67.02
3rd sub-pillar: Governments	7	80.22
2.3.1 Government online services	15	89.70
2.3.2 Publication and use of open data	14	70.59
2.3.3 Government promotion of investment in emerging tech	17	71.41
2.3.4 R&D expenditure by governments and higher education	4	89.17

Indicator	Rank	Score
C. Governance pillar	5	87.89
1st sub-pillar: Trust	6	90.28
3.1.1 Secure Internet servers	24	82.96
3.1.2 Cybersecurity	33	94.45
3.1.3 Online access to financial account	4	93.08 ●
3.1.4 Internet shopping	4	90.62 ●
2nd sub-pillar: Regulation	7	88.34
3.2.1 Regulatory quality	10	85.87
3.2.2 ICT regulatory environment	51	85.88 ○
3.2.3 Regulation of emerging technologies	15	79.21
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	9	90.74
3rd sub-pillar: Inclusion	12	85.04
3.3.1 E-Participation	41	81.48
3.3.2 Socioeconomic gap in use of digital payments	16	96.66
3.3.3 Availability of local online content	1	100.00 ●
3.3.4 Gender gap in Internet use	46	71.07 ○
3.3.5 Rural gap in use of digital payments	20	75.98
D. Impact pillar	1	82.66
1st sub-pillar: Economy	6	67.00
4.1.1 High-tech and medium-high-tech manufacturing	13	64.37
4.1.2 High-tech exports	24	55.91
4.1.3 PCT patent applications	4	91.99 ●
4.1.4 Domestic market size	38	62.79
4.1.5 Prevalence of gig economy	18	68.90
4.1.6 ICT services exports	11	58.03
2nd sub-pillar: Quality of Life	4	92.26
4.2.1 Happiness	5	93.68
4.2.2 Freedom to make life choices	3	98.02 ●
4.2.3 Income inequality	18	84.67
4.2.4 Healthy life expectancy at birth	11	92.69
3rd sub-pillar: SDG Contribution	4	88.72
4.3.1 SDG 3: Good Health and Well-Being	3	96.42 ●
4.3.2 SDG 4: Quality Education	14	69.90
4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
4.3.4 SDG 7: Affordable and Clean Energy	65	79.28 ○
4.3.5 SDG 11: Sustainable Cities and Communities	3	97.98 ●

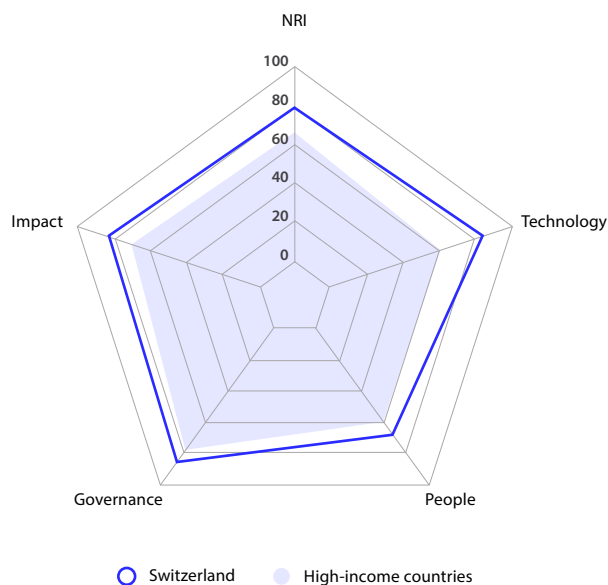
NOTE: ● Indicates a strength and ○ a weakness.

Switzerland

Rank
(Out of 131) Score

Network Readiness Index 5 78.45

Pillar/sub-pillar	Rank	Score
A. Technology pillar	2	81.02
1st sub-pillar: Access	16	78.41
2nd sub-pillar: Content	1	94.39
3rd sub-pillar: Future Technologies	4	70.25
B. People pillar	11	67.44
1st sub-pillar: Individuals	49	51.60
2nd sub-pillar: Businesses	4	79.28
3rd sub-pillar: Governments	18	71.44
C. Governance pillar	12	84.65
1st sub-pillar: Trust	25	76.18
2nd sub-pillar: Regulation	4	92.08
3rd sub-pillar: Inclusion	9	85.69
D. Impact pillar	5	80.68
1st sub-pillar: Economy	11	66.49
2nd sub-pillar: Quality of Life	8	87.97
3rd sub-pillar: SDG Contribution	10	87.60



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	2	81.02
1st sub-pillar: Access	16	78.41
1.1.1 Mobile tariffs	10	88.36
1.1.2 Handset prices	10	85.03
1.1.3 FTTH/building Internet subscriptions	60	25.67 ○
1.1.4 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.5 International Internet bandwidth	62	71.43 ○
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	1	94.39
1.2.1 GitHub commits	1	100.00 ●
1.2.2 Internet domain registrations	4	95.87 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	11	81.68
3rd sub-pillar: Future Technologies	4	70.25
1.3.1 Adoption of emerging technologies	6	93.09
1.3.2 Investment in emerging technologies	4	89.25 ●
1.3.3 Robot density	10	35.75
1.3.4 Computer software spending	2	62.91 ●
B. People pillar	11	67.44
1st sub-pillar: Individuals	49	51.60
2.1.1 Mobile broadband internet traffic within the country	43	16.18
2.1.2 ICT skills in the education system	14	78.99
2.1.3 Use of virtual social networks	22	80.72
2.1.4 Tertiary enrollment	46	41.95
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	6	40.16
2nd sub-pillar: Businesses	4	79.28
2.2.1 Firms with website	5	95.01
2.2.2 GERD financed by business enterprise	7	80.02
2.2.3 Knowledge intensive employment	7	79.34
2.2.4 Annual investment in telecommunication services	17	86.24
2.2.5 GERD performed by business enterprise	8	55.81
3rd sub-pillar: Governments	18	71.44
2.3.1 Government online services	36	82.42
2.3.2 Publication and use of open data	23	57.35
2.3.3 Government promotion of investment in emerging tech	28	57.28
2.3.4 R&D expenditure by governments and higher education	5	88.71

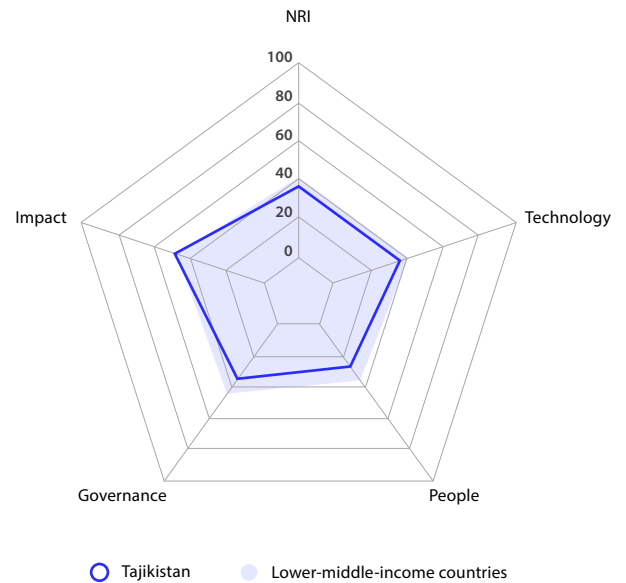
Indicator	Rank	Score
C. Governance pillar	12	84.65
1st sub-pillar: Trust	25	76.18
3.1.1 Secure Internet servers	5	93.32 ●
3.1.2 Cybersecurity	50	86.74
3.1.3 Online access to financial account	19	66.23
3.1.4 Internet shopping	35	58.42
2nd sub-pillar: Regulation	4	92.08
3.2.1 Regulatory quality	12	83.47
3.2.2 ICT regulatory environment	20	93.53
3.2.3 Regulation of emerging technologies	5	89.47
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	3	93.93 ●
3rd sub-pillar: Inclusion	9	85.69
3.3.1 E-Participation	18	90.13
3.3.2 Socioeconomic gap in use of digital payments	1	100.00 ●
3.3.3 Availability of local online content	6	95.43
3.3.4 Gender gap in Internet use	69	67.34 ○
3.3.5 Rural gap in use of digital payments	23	75.53
D. Impact pillar	5	80.68
1st sub-pillar: Economy	11	66.49
4.1.1 High-tech and medium-high-tech manufacturing	2	89.81 ●
4.1.2 High-tech exports	29	52.60
4.1.3 PCT patent applications	3	95.37 ●
4.1.4 Domestic market size	34	63.82
4.1.5 Prevalence of gig economy	28	62.79
4.1.6 ICT services exports	51	34.53
2nd sub-pillar: Quality of Life	8	87.97
4.2.1 Happiness	8	91.69
4.2.2 Freedom to make life choices	18	90.31
4.2.3 Income inequality	41	75.13
4.2.4 Healthy life expectancy at birth	4	94.74 ●
3rd sub-pillar: SDG Contribution	10	87.60
4.3.1 SDG 3: Good Health and Well-Being	5	96.38
4.3.2 SDG 4: Quality Education	21	68.18
4.3.3 SDG 5: Women's economic opportunity	53	79.82 ○
4.3.4 SDG 7: Affordable and Clean Energy	5	96.99
4.3.5 SDG 11: Sustainable Cities and Communities	6	96.62

NOTE: ● Indicates a strength and ○ a weakness.

Tajikistan

Rank (Out of 131) Score
111 34.73

Pillar/sub-pillar	Rank	Score
A. Technology pillar	114	29.41
1st sub-pillar: Access	116	43.28
2nd sub-pillar: Content	122	18.31
3rd sub-pillar: Future Technologies	91	26.65
B. People pillar	115	26.89
1st sub-pillar: Individuals	77	45.34
2nd sub-pillar: Businesses	130	15.52
3rd sub-pillar: Governments	122	19.80
C. Governance pillar	123	34.69
1st sub-pillar: Trust	120	18.14
2nd sub-pillar: Regulation	129	26.89
3rd sub-pillar: Inclusion	79	59.04
D. Impact pillar	93	47.92
1st sub-pillar: Economy	128	11.10
2nd sub-pillar: Quality of Life	77	66.30
3rd sub-pillar: SDG Contribution	60	66.38



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	114	29.41
1st sub-pillar: Access	116	43.28
1.1.1 Mobile tariffs	123	17.57
1.1.2 Handset prices	126	18.29
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	104	96.51
1.1.5 International Internet bandwidth	129	40.74 ○
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	122	18.31
1.2.1 GitHub commits	118	0.35
1.2.2 Internet domain registrations	115	0.26
1.2.3 Mobile apps development	105	58.68
1.2.4 AI scientific publications	93	13.95
3rd sub-pillar: Future Technologies	91	26.65
1.3.1 Adoption of emerging technologies	99	31.62
1.3.2 Investment in emerging technologies	58	41.75 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	94	6.58
B. People pillar	115	26.89
1st sub-pillar: Individuals	77	45.34
2.1.1 Mobile broadband internet traffic within the country	6	60.08 ●
2.1.2 ICT skills in the education system	90	35.80
2.1.3 Use of virtual social networks	116	10.91
2.1.4 Tertiary enrollment	83	20.12
2.1.5 Adult literacy rate	5	99.78 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	130	15.52
2.2.1 Firms with website	103	21.60
2.2.2 GERD financed by business enterprise	93	1.99
2.2.3 Knowledge intensive employment	89	22.97
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	122	19.80
2.3.1 Government online services	122	29.69
2.3.2 Publication and use of open data	91	8.82
2.3.3 Government promotion of investment in emerging tech	75	33.89
2.3.4 R&D expenditure by governments and higher education	93	6.79

Indicator	Rank	Score
C. Governance pillar	123	34.69
1st sub-pillar: Trust	120	18.14
3.1.1 Secure Internet servers	103	36.08
3.1.2 Cybersecurity	120	15.64
3.1.3 Online access to financial account	79	19.40
3.1.4 Internet shopping	110	1.43 ○
2nd sub-pillar: Regulation	129	26.89
3.2.1 Regulatory quality	124	13.87
3.2.2 ICT regulatory environment	131	0.00 ○
3.2.3 Regulation of emerging technologies	88	29.74
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	125	24.19
3rd sub-pillar: Inclusion	79	59.04
3.3.1 E-Participation	116	32.10
3.3.2 Socioeconomic gap in use of digital payments	27	92.97 ●
3.3.3 Availability of local online content	79	53.61 ●
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	74	57.47 ●
D. Impact pillar	93	47.92
1st sub-pillar: Economy	128	11.10
4.1.1 High-tech and medium-high-tech manufacturing	106	0.66 ○
4.1.2 High-tech exports	112	1.58
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	112	34.85
4.1.5 Prevalence of gig economy	105	23.26
4.1.6 ICT services exports	118	6.25
2nd sub-pillar: Quality of Life	77	66.30
4.2.1 Happiness	83	55.35
4.2.2 Freedom to make life choices	55	77.46 ●
4.2.3 Income inequality	44	72.86 ●
4.2.4 Healthy life expectancy at birth	94	59.51
3rd sub-pillar: SDG Contribution	60	66.38
4.3.1 SDG 3: Good Health and Well-Being	83	62.25
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	81	70.18
4.3.4 SDG 7: Affordable and Clean Energy	94	70.59
4.3.5 SDG 11: Sustainable Cities and Communities	71	62.49 ●

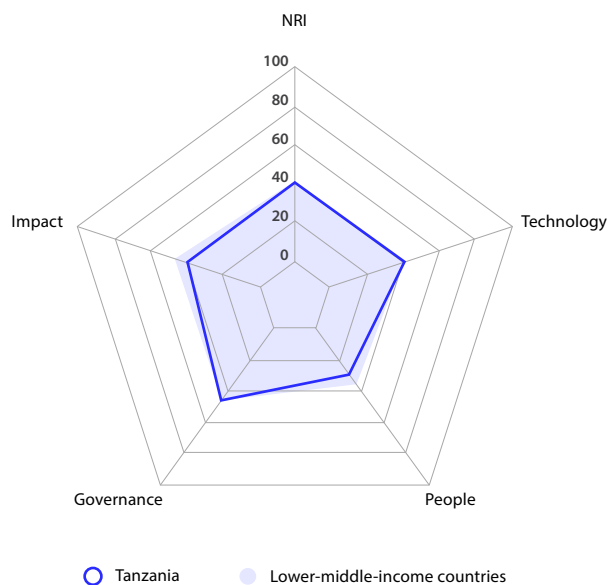
NOTE: ● Indicates a strength and ○ a weakness.

Tanzania

Rank
(Out of 131) Score

Network Readiness Index **107 37.84**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	96	34.91
1st sub-pillar: Access	98	53.48
2nd sub-pillar: Content	104	24.73
3rd sub-pillar: Future Technologies	93	26.51
B. People pillar	109	29.55
1st sub-pillar: Individuals	114	26.63
2nd sub-pillar: Businesses	121	22.72
3rd sub-pillar: Governments	79	39.31
C. Governance pillar	98	46.67
1st sub-pillar: Trust	75	40.49
2nd sub-pillar: Regulation	89	58.49
3rd sub-pillar: Inclusion	114	41.03
D. Impact pillar	113	40.22
1st sub-pillar: Economy	107	18.04
2nd sub-pillar: Quality of Life	106	51.66
3rd sub-pillar: SDG Contribution	112	50.97



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	96	34.91
1st sub-pillar: Access	98	53.48
1.1.1 Mobile tariffs	112	30.31
1.1.2 Handset prices	105	36.83
1.1.3 FTTH/building Internet subscriptions	20	43.98
1.1.4 Population covered by at least a 3G mobile network	109	94.53
1.1.5 International Internet bandwidth	107	61.73
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	104	24.73
1.2.1 GitHub commits	122	0.29
1.2.2 Internet domain registrations	121	0.14
1.2.3 Mobile apps development	112	53.59
1.2.4 AI scientific publications	59	44.91
3rd sub-pillar: Future Technologies	93	26.51
1.3.1 Adoption of emerging technologies	87	37.57
1.3.2 Investment in emerging technologies	59	41.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	121	0.46
B. People pillar	109	29.55
1st sub-pillar: Individuals	114	26.63
2.1.1 Mobile broadband internet traffic within the country	70	7.31
2.1.2 ICT skills in the education system	70	43.79
2.1.3 Use of virtual social networks	122	6.33
2.1.4 Tertiary enrollment	114	4.16
2.1.5 Adult literacy rate	81	71.56
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	121	22.72
2.2.1 Firms with website	108	15.13
2.2.2 GERD financed by business enterprise	104	0.05
2.2.3 Knowledge intensive employment	128	1.73
2.2.4 Annual investment in telecommunication services	79	73.98
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	79	39.31
2.3.1 Government online services	92	53.94
2.3.2 Publication and use of open data	69	22.06
2.3.3 Government promotion of investment in emerging tech	73	34.64
2.3.4 R&D expenditure by governments and higher education	36	46.60

Indicator	Rank	Score
C. Governance pillar	98	46.67
1st sub-pillar: Trust	75	40.49
3.1.1 Secure Internet servers	115	29.03
3.1.2 Cybersecurity	45	90.41
3.1.3 Online access to financial account	50	35.69
3.1.4 Internet shopping	91	6.82
2nd sub-pillar: Regulation	89	58.49
3.2.1 Regulatory quality	108	23.47
3.2.2 ICT regulatory environment	76	76.47
3.2.3 Regulation of emerging technologies	77	34.74
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	8	91.12
3rd sub-pillar: Inclusion	114	41.03
3.3.1 E-Participation	91	54.32
3.3.2 Socioeconomic gap in use of digital payments	95	52.28
3.3.3 Availability of local online content	96	44.71
3.3.4 Gender gap in internet use	104	0.00
3.3.5 Rural gap in use of digital payments	85	53.84
D. Impact pillar	113	40.22
1st sub-pillar: Economy	107	18.04
4.1.1 High-tech and medium-high-tech manufacturing	93	6.64
4.1.2 High-tech exports	97	5.58
4.1.3 PCT patent applications	99	0.00
4.1.4 Domestic market size	67	50.88
4.1.5 Prevalence of gig economy	70	38.08
4.1.6 ICT services exports	114	7.07
2nd sub-pillar: Quality of Life	106	51.66
4.2.1 Happiness	119	26.74
4.2.2 Freedom to make life choices	57	75.73
4.2.3 Income inequality	81	56.53
4.2.4 Healthy life expectancy at birth	104	47.63
3rd sub-pillar: SDG Contribution	112	50.97
4.3.1 SDG 3: Good Health and Well-Being	115	29.80
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	72	73.68
4.3.4 SDG 7: Affordable and Clean Energy	107	59.31
4.3.5 SDG 11: Sustainable Cities and Communities	107	41.06

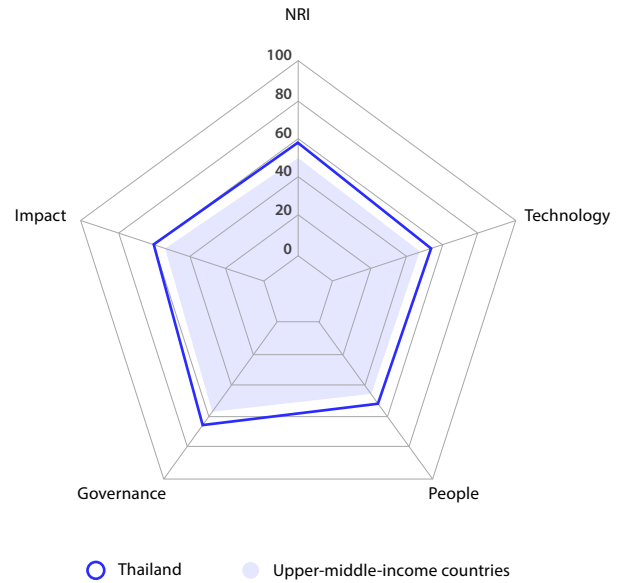
NOTE: ● Indicates a strength and ○ a weakness.

Thailand

Rank
(Out of 131) Score

Network Readiness Index **46** **56.56**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	47	49.97
1st sub-pillar: Access	26	75.04
2nd sub-pillar: Content	59	38.16
3rd sub-pillar: Future Technologies	52	36.69
B. People pillar	45	50.97
1st sub-pillar: Individuals	16	60.30
2nd sub-pillar: Businesses	59	45.87
3rd sub-pillar: Governments	58	46.76
C. Governance pillar	48	66.19
1st sub-pillar: Trust	50	56.97
2nd sub-pillar: Regulation	56	66.41
3rd sub-pillar: Inclusion	44	75.19
D. Impact pillar	46	59.12
1st sub-pillar: Economy	34	44.20
2nd sub-pillar: Quality of Life	53	72.62
3rd sub-pillar: SDG Contribution	79	60.53



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	47	49.97
1st sub-pillar: Access	26	75.04
1.1.1 Mobile tariffs	90	46.53
1.1.2 Handset prices	56	58.95
1.1.3 FTTH/building Internet subscriptions	10	59.90 ●
1.1.4 Population covered by at least a 3G mobile network	67	99.61
1.1.5 International Internet bandwidth	12	85.41 ●
1.1.6 Internet access in schools	28	99.84
2nd sub-pillar: Content	59	38.16
1.2.1 GitHub commits	81	3.27
1.2.2 Internet domain registrations	66	3.87
1.2.3 Mobile apps development	71	76.16
1.2.4 AI scientific publications	25	69.35
3rd sub-pillar: Future Technologies	52	36.69
1.3.1 Adoption of emerging technologies	39	60.58
1.3.2 Investment in emerging technologies	37	54.50
1.3.3 Robot density	28	9.51
1.3.4 Computer software spending	54	22.19
B. People pillar	45	50.97
1st sub-pillar: Individuals	16	60.30
2.1.1 Mobile broadband internet traffic within the country	8	55.95 ●
2.1.2 ICT skills in the education system	65	45.27
2.1.3 Use of virtual social networks	38	75.85
2.1.4 Tertiary enrollment	64	32.40
2.1.5 Adult literacy rate	56	92.01
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	59	45.87
2.2.1 Firms with website	77	41.59
2.2.2 GERD financed by business enterprise	1	100.00 ●
2.2.3 Knowledge intensive employment	93	20.83 ○
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	30	21.04
3rd sub-pillar: Governments	58	46.76
2.3.1 Government online services	42	78.79
2.3.2 Publication and use of open data	58	27.94
2.3.3 Government promotion of investment in emerging tech	23	64.34
2.3.4 R&D expenditure by governments and higher education	81	15.97 ○

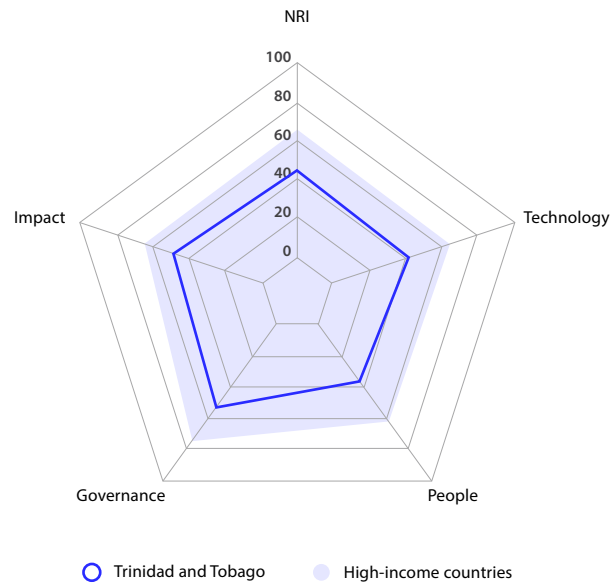
Indicator	Rank	Score
C. Governance pillar	48	66.19
1st sub-pillar: Trust	50	56.97
3.1.1 Secure Internet servers	57	60.28
3.1.2 Cybersecurity	52	86.26
3.1.3 Online access to financial account	76	22.52
3.1.4 Internet shopping	33	58.84
2nd sub-pillar: Regulation	56	66.41
3.2.1 Regulatory quality	63	45.87
3.2.2 ICT regulatory environment	70	81.76
3.2.3 Regulation of emerging technologies	66	42.89
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	75	61.54
3rd sub-pillar: Inclusion	44	75.19
3.3.1 E-Participation	50	76.54
3.3.2 Socioeconomic gap in use of digital payments	8	98.84 ●
3.3.3 Availability of local online content	60	63.94
3.3.4 Gender gap in Internet use	58	69.32
3.3.5 Rural gap in use of digital payments	54	67.30
D. Impact pillar	46	59.12
1st sub-pillar: Economy	34	44.20
4.1.1 High-tech and medium-high-tech manufacturing	22	57.76 ●
4.1.2 High-tech exports	8	76.85 ●
4.1.3 PCT patent applications	62	4.30
4.1.4 Domestic market size	21	70.46 ●
4.1.5 Prevalence of gig economy	49	50.87
4.1.6 ICT services exports	123	4.98 ○
2nd sub-pillar: Quality of Life	53	72.62
4.2.1 Happiness	68	61.60
4.2.2 Freedom to make life choices	50	78.07
4.2.3 Income inequality	52	70.35
4.2.4 Healthy life expectancy at birth	44	80.45
3rd sub-pillar: SDG Contribution	79	60.53
4.3.1 SDG 3: Good Health and Well-Being	23	89.56 ●
4.3.2 SDG 4: Quality Education	60	34.44 ○
4.3.3 SDG 5: Women's economic opportunity	86	69.30
4.3.4 SDG 7: Affordable and Clean Energy	86	73.27
4.3.5 SDG 11: Sustainable Cities and Communities	114	36.09 ○

NOTE: ● Indicates a strength and ○ a weakness.

Trinidad and Tobago

Rank (Out of 131) Score
Network Readiness Index 92 42.18

Pillar/sub-pillar	Rank	Score
A. Technology pillar	102	33.37
1st sub-pillar: Access	96	53.83
2nd sub-pillar: Content	115	21.22
3rd sub-pillar: Future Technologies	98	25.06
B. People pillar	93	35.62
1st sub-pillar: Individuals	55	51.05
2nd sub-pillar: Businesses	96	31.47
3rd sub-pillar: Governments	113	24.34
C. Governance pillar	78	52.24
1st sub-pillar: Trust	106	26.00
2nd sub-pillar: Regulation	87	59.23
3rd sub-pillar: Inclusion	51	71.49
D. Impact pillar	94	47.50
1st sub-pillar: Economy	117	15.25
2nd sub-pillar: Quality of Life	41	75.72
3rd sub-pillar: SDG Contribution	111	51.51



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	102	33.37
1st sub-pillar: Access	96	53.83
1.1.1 Mobile tariffs	115	28.23
1.1.2 Handset prices	59	56.00
1.1.3 FTTH/building Internet subscriptions	74	18.05
1.1.4 Population covered by at least a 3G mobile network	1	100.00
1.1.5 International Internet bandwidth	87	66.85
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	115	21.22
1.2.1 GitHub commits	76	3.73
1.2.2 Internet domain registrations	76	2.81
1.2.3 Mobile apps development	86	71.14
1.2.4 AI scientific publications	96	7.18
3rd sub-pillar: Future Technologies	98	25.06
1.3.1 Adoption of emerging technologies	104	27.86
1.3.2 Investment in emerging technologies	115	22.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	NA	NA
B. People pillar	93	35.62
1st sub-pillar: Individuals	55	51.05
2.1.1 Mobile broadband internet traffic within the country	96	1.64
2.1.2 ICT skills in the education system	98	31.07
2.1.3 Use of virtual social networks	50	73.13
2.1.4 Tertiary enrollment	NA	NA
2.1.5 Adult literacy rate	23	98.36
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	96	31.47
2.2.1 Firms with website	100	24.61
2.2.2 GERD financed by business enterprise	72	16.77
2.2.3 Knowledge intensive employment	49	44.91
2.2.4 Annual investment in telecommunication services	99	70.80
2.2.5 GERD performed by business enterprise	84	0.24
3rd sub-pillar: Governments	113	24.34
2.3.1 Government online services	83	60.00
2.3.2 Publication and use of open data	73	19.12
2.3.3 Government promotion of investment in emerging tech	114	13.62
2.3.4 R&D expenditure by governments and higher education	101	4.62

Indicator	Rank	Score
C. Governance pillar	78	52.24
1st sub-pillar: Trust	106	26.00
3.1.1 Secure Internet servers	80	46.51
3.1.2 Cybersecurity	114	20.81
3.1.3 Online access to financial account	83	17.67
3.1.4 Internet shopping	64	18.99
2nd sub-pillar: Regulation	87	59.23
3.2.1 Regulatory quality	81	37.33
3.2.2 ICT regulatory environment	61	83.92
3.2.3 Regulation of emerging technologies	109	11.32
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	68	63.60
3rd sub-pillar: Inclusion	51	71.49
3.3.1 E-Participation	82	60.49
3.3.2 Socioeconomic gap in use of digital payments	46	84.90
3.3.3 Availability of local online content	87	50.48
3.3.4 Gender gap in internet use	4	87.67
3.3.5 Rural gap in use of digital payments	34	73.91
D. Impact pillar	94	47.50
1st sub-pillar: Economy	117	15.25
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	NA	NA
4.1.3 PCT patent applications	73	2.21
4.1.4 Domestic market size	116	34.29
4.1.5 Prevalence of gig economy	111	19.19
4.1.6 ICT services exports	121	5.33
2nd sub-pillar: Quality of Life	41	75.72
4.2.1 Happiness	45	71.46
4.2.2 Freedom to make life choices	39	82.06
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	63	73.65
3rd sub-pillar: SDG Contribution	111	51.51
4.3.1 SDG 3: Good Health and Well-Being	55	73.80
4.3.2 SDG 4: Quality Education	52	38.62
4.3.3 SDG 5: Women's economic opportunity	95	64.91
4.3.4 SDG 7: Affordable and Clean Energy	130	0.00
4.3.5 SDG 11: Sustainable Cities and Communities	36	80.24

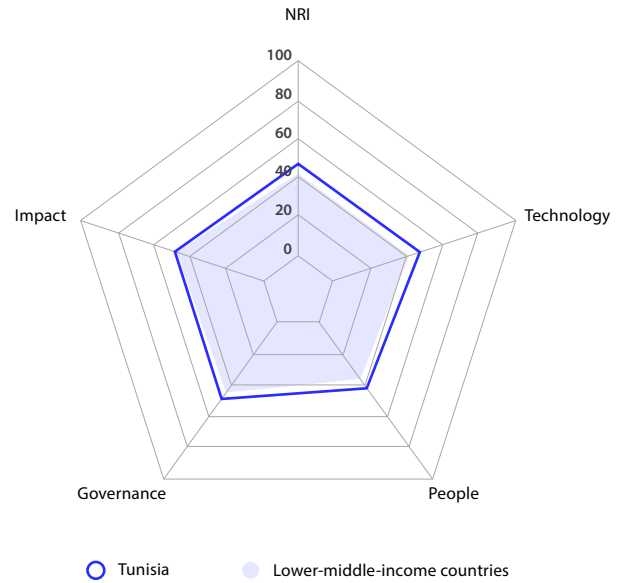
NOTE: ● Indicates a strength and ○ a weakness.

Tunisia

Rank
(Out of 131) Score

Network Readiness Index 84 45.46

Pillar/sub-pillar	Rank	Score
A. Technology pillar	73	43.04
1st sub-pillar: Access	70	63.08
2nd sub-pillar: Content	68	35.93
3rd sub-pillar: Future Technologies	72	30.10
B. People pillar	76	42.08
1st sub-pillar: Individuals	81	43.54
2nd sub-pillar: Businesses	84	35.64
3rd sub-pillar: Governments	55	47.05
C. Governance pillar	90	49.35
1st sub-pillar: Trust	74	40.50
2nd sub-pillar: Regulation	98	55.13
3rd sub-pillar: Inclusion	94	52.42
D. Impact pillar	95	47.36
1st sub-pillar: Economy	81	28.15
2nd sub-pillar: Quality of Life	98	57.44
3rd sub-pillar: SDG Contribution	91	56.49



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	73	43.04
1st sub-pillar: Access	70	63.08
1.1.1 Mobile tariffs	51	68.67 ●
1.1.2 Handset prices	38	69.24 ●
1.1.3 FTTH/building Internet subscriptions	69	19.90
1.1.4 Population covered by at least a 3G mobile network	55	99.68
1.1.5 International Internet bandwidth	55	72.35
1.1.6 Internet access in schools	50	48.66
2nd sub-pillar: Content	68	35.93
1.2.1 GitHub commits	61	6.58
1.2.2 Internet domain registrations	80	1.93
1.2.3 Mobile apps development	76	74.06
1.2.4 AI scientific publications	36	61.13 ●
3rd sub-pillar: Future Technologies	72	30.10
1.3.1 Adoption of emerging technologies	102	29.39
1.3.2 Investment in emerging technologies	80	35.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	42	25.41 ●
B. People pillar	76	42.08
1st sub-pillar: Individuals	81	43.54
2.1.1 Mobile broadband internet traffic within the country	57	9.05
2.1.2 ICT skills in the education system	56	51.48
2.1.3 Use of virtual social networks	75	63.00
2.1.4 Tertiary enrollment	82	21.14
2.1.5 Adult literacy rate	80	73.04
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	84	35.64
2.2.1 Firms with website	60	54.30
2.2.2 GERD financed by business enterprise	67	23.40
2.2.3 Knowledge intensive employment	90	22.09
2.2.4 Annual investment in telecommunication services	74	75.26
2.2.5 GERD performed by business enterprise	59	3.17
3rd sub-pillar: Governments	55	47.05
2.3.1 Government online services	80	61.21
2.3.2 Publication and use of open data	49	33.82
2.3.3 Government promotion of investment in emerging tech	51	44.77
2.3.4 R&D expenditure by governments and higher education	35	48.38 ●

Indicator	Rank	Score
C. Governance pillar	90	49.35
1st sub-pillar: Trust	74	40.50
3.1.1 Secure Internet servers	81	46.23
3.1.2 Cybersecurity	53	85.99 ●
3.1.3 Online access to financial account	105	10.37
3.1.4 Internet shopping	63	19.44
2nd sub-pillar: Regulation	98	55.13
3.2.1 Regulatory quality	93	31.47
3.2.2 ICT regulatory environment	92	70.79
3.2.3 Regulation of emerging technologies	63	43.68
3.2.4 E-commerce legislation	87	66.67 ○
3.2.5 Privacy protection by law content	70	63.04
3rd sub-pillar: Inclusion	94	52.42
3.3.1 E-Participation	71	67.90
3.3.2 Socioeconomic gap in use of digital payments	75	65.35
3.3.3 Availability of local online content	83	51.44
3.3.4 Gender gap in Internet use	93	49.35 ○
3.3.5 Rural gap in use of digital payments	111	28.07 ○
D. Impact pillar	95	47.36
1st sub-pillar: Economy	81	28.15
4.1.1 High-tech and medium-high-tech manufacturing	50	30.59
4.1.2 High-tech exports	42	41.24 ●
4.1.3 PCT patent applications	61	4.49
4.1.4 Domestic market size	75	47.39
4.1.5 Prevalence of gig economy	107	22.09
4.1.6 ICT services exports	76	23.09
2nd sub-pillar: Quality of Life	98	57.44
4.2.1 Happiness	101	41.33
4.2.2 Freedom to make life choices	120	36.69 ○
4.2.3 Income inequality	36	75.88 ●
4.2.4 Healthy life expectancy at birth	54	75.87 ●
3rd sub-pillar: SDG Contribution	91	56.49
4.3.1 SDG 3: Good Health and Well-Being	69	68.12
4.3.2 SDG 4: Quality Education	73	18.31 ○
4.3.3 SDG 5: Women's economic opportunity	113	50.00
4.3.4 SDG 7: Affordable and Clean Energy	63	79.70
4.3.5 SDG 11: Sustainable Cities and Communities	66	66.34

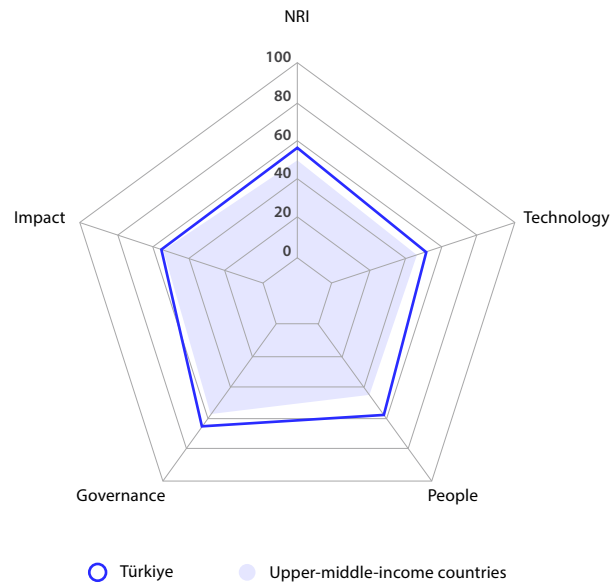
NOTE: ● Indicates a strength and ○ a weakness.

Türkiye

Rank
(Out of 131) Score

Network Readiness Index **48 55.77**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	51	49.05
1st sub-pillar: Access	42	71.82
2nd sub-pillar: Content	42	44.23
3rd sub-pillar: Future Technologies	67	31.10
B. People pillar	34	56.13
1st sub-pillar: Individuals	8	65.59
2nd sub-pillar: Businesses	48	51.19
3rd sub-pillar: Governments	43	51.61
C. Governance pillar	52	64.54
1st sub-pillar: Trust	46	61.55
2nd sub-pillar: Regulation	60	64.88
3rd sub-pillar: Inclusion	61	67.19
D. Impact pillar	72	53.37
1st sub-pillar: Economy	54	36.95
2nd sub-pillar: Quality of Life	115	46.28
3rd sub-pillar: SDG Contribution	34	76.89



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	51	49.05
1st sub-pillar: Access	42	71.82
1.1.1 Mobile tariffs	15	85.06 ●
1.1.2 Handset prices	95	40.74
1.1.3 FTTH/building Internet subscriptions	15	47.90 ●
1.1.4 Population covered by at least a 3G mobile network	66	99.61
1.1.5 International Internet bandwidth	11	85.78 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	42	44.23
1.2.1 GitHub commits	68	5.17
1.2.2 Internet domain registrations	49	8.08
1.2.3 Mobile apps development	45	85.29
1.2.4 AI scientific publications	15	78.37 ●
3rd sub-pillar: Future Technologies	67	31.10
1.3.1 Adoption of emerging technologies	58	49.37
1.3.2 Investment in emerging technologies	104	27.50 ○
1.3.3 Robot density	36	5.59
1.3.4 Computer software spending	20	41.95 ●
B. People pillar	34	56.13
1st sub-pillar: Individuals	8	65.59
2.1.1 Mobile broadband internet traffic within the country	3	81.85 ●
2.1.2 ICT skills in the education system	104	28.11
2.1.3 Use of virtual social networks	42	75.46
2.1.4 Tertiary enrollment	2	77.19 ●
2.1.5 Adult literacy rate	36	95.84
2.1.6 AI talent concentration	9	35.09
2nd sub-pillar: Businesses	48	51.19
2.2.1 Firms with website	69	46.07
2.2.2 GERD financed by business enterprise	17	70.80 ●
2.2.3 Knowledge intensive employment	64	35.45
2.2.4 Annual investment in telecommunication services	20	85.12
2.2.5 GERD performed by business enterprise	33	18.53
3rd sub-pillar: Governments	43	51.61
2.3.1 Government online services	22	85.45
2.3.2 Publication and use of open data	49	33.82
2.3.3 Government promotion of investment in emerging tech	39	50.16
2.3.4 R&D expenditure by governments and higher education	50	37.01

Indicator	Rank	Score
C. Governance pillar	52	64.54
1st sub-pillar: Trust	46	61.55
3.1.1 Secure Internet servers	46	70.37
3.1.2 Cybersecurity	16	97.45 ●
3.1.3 Online access to financial account	41	43.39
3.1.4 Internet shopping	53	35.00
2nd sub-pillar: Regulation	60	64.88
3.2.1 Regulatory quality	73	40.80
3.2.2 ICT regulatory environment	20	93.53
3.2.3 Regulation of emerging technologies	66	42.89
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	105	47.18 ○
3rd sub-pillar: Inclusion	61	67.19
3.3.1 E-Participation	23	88.89
3.3.2 Socioeconomic gap in use of digital payments	78	61.83
3.3.3 Availability of local online content	47	69.95
3.3.4 Gender gap in Internet use	90	55.48 ○
3.3.5 Rural gap in use of digital payments	71	59.78
D. Impact pillar	72	53.37
1st sub-pillar: Economy	54	36.95
4.1.1 High-tech and medium-high-tech manufacturing	40	40.55
4.1.2 High-tech exports	60	27.46
4.1.3 PCT patent applications	31	20.47
4.1.4 Domestic market size	11	78.02 ●
4.1.5 Prevalence of gig economy	66	39.83
4.1.6 ICT services exports	90	15.37
2nd sub-pillar: Quality of Life	115	46.28
4.2.1 Happiness	108	38.96 ○
4.2.2 Freedom to make life choices	125	12.19 ○
4.2.3 Income inequality	86	53.02
4.2.4 Healthy life expectancy at birth	43	80.97
3rd sub-pillar: SDG Contribution	34	76.89
4.3.1 SDG 3: Good Health and Well-Being	34	82.57
4.3.2 SDG 4: Quality Education	40	54.14
4.3.3 SDG 5: Women's economic opportunity	65	75.44
4.3.4 SDG 7: Affordable and Clean Energy	23	89.22
4.3.5 SDG 11: Sustainable Cities and Communities	32	83.07

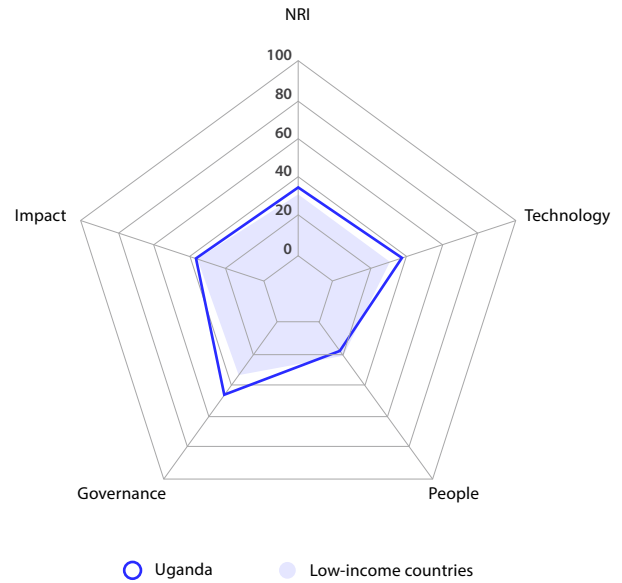
NOTE: ● Indicates a strength and ○ a weakness.

Uganda

Rank
(Out of 131) Score

Network Readiness Index **116 33.33**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	104	32.95
1st sub-pillar: Access	103	50.12
2nd sub-pillar: Content	100	26.47
3rd sub-pillar: Future Technologies	103	22.26
B. People pillar	130	17.69
1st sub-pillar: Individuals	118	20.88
2nd sub-pillar: Businesses	131	5.66
3rd sub-pillar: Governments	102	26.53
C. Governance pillar	97	46.78
1st sub-pillar: Trust	87	34.55
2nd sub-pillar: Regulation	92	57.69
3rd sub-pillar: Inclusion	104	48.11
D. Impact pillar	121	35.89
1st sub-pillar: Economy	110	17.40
2nd sub-pillar: Quality of Life	113	47.78
3rd sub-pillar: SDG Contribution	123	42.50



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	104	32.95
1st sub-pillar: Access	103	50.12
1.1.1 Mobile tariffs	105	36.87
1.1.2 Handset prices	108	36.23
1.1.3 FTTH/building Internet subscriptions	93	6.20
1.1.4 Population covered by at least a 3G mobile network	109	94.53
1.1.5 International Internet bandwidth	34	76.77 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	100	26.47
1.2.1 GitHub commits	107	0.98
1.2.2 Internet domain registrations	119	0.16
1.2.3 Mobile apps development	113	53.37
1.2.4 AI scientific publications	52	51.35 ●
3rd sub-pillar: Future Technologies	103	22.26
1.3.1 Adoption of emerging technologies	100	29.80
1.3.2 Investment in emerging technologies	77	36.00 ●
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	118	0.99 ○
B. People pillar	130	17.69
1st sub-pillar: Individuals	118	20.88
2.1.1 Mobile broadband internet traffic within the country	81	4.92
2.1.2 ICT skills in the education system	112	24.85
2.1.3 Use of virtual social networks	127	2.53 ○
2.1.4 Tertiary enrollment	122	2.27 ○
2.1.5 Adult literacy rate	86	69.81
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	131	5.66
2.2.1 Firms with website	113	11.21 ○
2.2.2 GERD financed by business enterprise	88	4.16
2.2.3 Knowledge intensive employment	120	7.11
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	87	0.16
3rd sub-pillar: Governments	102	26.53
2.3.1 Government online services	87	56.98 ●
2.3.2 Publication and use of open data	87	11.76
2.3.3 Government promotion of investment in emerging tech	97	27.06
2.3.4 R&D expenditure by governments and higher education	89	10.30

Indicator	Rank	Score
C. Governance pillar	97	46.78
1st sub-pillar: Trust	87	34.55
3.1.1 Secure Internet servers	116	28.14
3.1.2 Cybersecurity	78	69.45 ●
3.1.3 Online access to financial account	62	30.31 ●
3.1.4 Internet shopping	81	10.31
2nd sub-pillar: Regulation	92	57.69
3.2.1 Regulatory quality	97	29.60
3.2.2 ICT regulatory environment	58	84.71 ●
3.2.3 Regulation of emerging technologies	100	22.63
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	94	51.49
3rd sub-pillar: Inclusion	104	48.11
3.3.1 E-Participation	89	55.55
3.3.2 Socioeconomic gap in use of digital payments	96	51.47
3.3.3 Availability of local online content	121	23.56
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	69	61.87 ●
D. Impact pillar	121	35.89
1st sub-pillar: Economy	110	17.40
4.1.1 High-tech and medium-high-tech manufacturing	NA	NA
4.1.2 High-tech exports	103	3.85
4.1.3 PCT patent applications	81	1.38
4.1.4 Domestic market size	79	46.33 ●
4.1.5 Prevalence of gig economy	102	25.29
4.1.6 ICT services exports	102	10.16
2nd sub-pillar: Quality of Life	113	47.78
4.2.1 Happiness	112	36.43
4.2.2 Freedom to make life choices	102	56.91
4.2.3 Income inequality	92	51.01
4.2.4 Healthy life expectancy at birth	105	46.78
3rd sub-pillar: SDG Contribution	123	42.50
4.3.1 SDG 3: Good Health and Well-Being	108	36.40
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	101	62.28
4.3.4 SDG 7: Affordable and Clean Energy	125	27.65 ○
4.3.5 SDG 11: Sustainable Cities and Communities	104	43.67

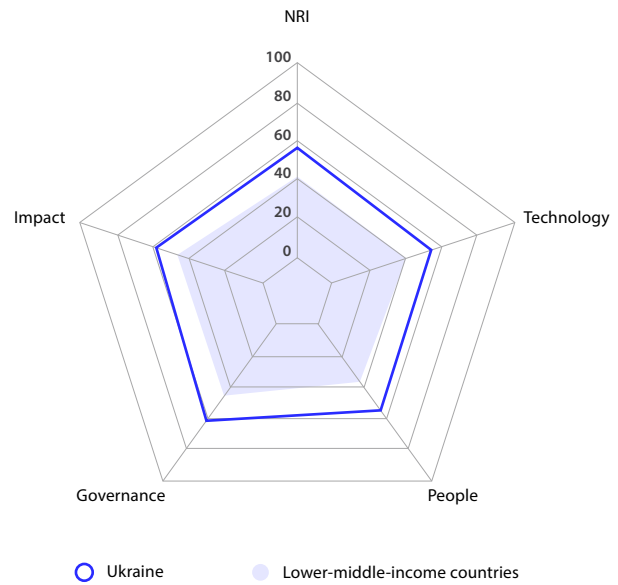
NOTE: ● Indicates a strength and ○ a weakness.

Ukraine

Rank
(Out of 131) Score

Network Readiness Index 50 55.71

Pillar/sub-pillar	Rank	Score
A. Technology pillar	45	50.52
1st sub-pillar: Access	37	73.24
2nd sub-pillar: Content	50	41.35
3rd sub-pillar: Future Technologies	51	36.97
B. People pillar	37	54.43
1st sub-pillar: Individuals	7	67.09
2nd sub-pillar: Businesses	50	49.06
3rd sub-pillar: Governments	52	47.13
C. Governance pillar	57	60.81
1st sub-pillar: Trust	54	54.70
2nd sub-pillar: Regulation	84	60.03
3rd sub-pillar: Inclusion	60	67.70
D. Impact pillar	57	57.08
1st sub-pillar: Economy	43	40.99
2nd sub-pillar: Quality of Life	57	70.98
3rd sub-pillar: SDG Contribution	83	59.28



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	45	50.52
1st sub-pillar: Access	37	73.24
1.1.1 Mobile tariffs	49	69.15
1.1.2 Handset prices	89	42.55
1.1.3 FTTH/building Internet subscriptions	9	60.16
1.1.4 Population covered by at least a 3G mobile network	100	97.11
1.1.5 International Internet bandwidth	33	77.21
1.1.6 Internet access in schools	33	93.27
2nd sub-pillar: Content	50	41.35
1.2.1 GitHub commits	36	20.56
1.2.2 Internet domain registrations	65	4.21
1.2.3 Mobile apps development	64	80.45
1.2.4 AI scientific publications	39	60.16
3rd sub-pillar: Future Technologies	51	36.97
1.3.1 Adoption of emerging technologies	49	53.00
1.3.2 Investment in emerging technologies	63	40.50
1.3.3 Robot density	53	0.26
1.3.4 Computer software spending	9	54.12
B. People pillar	37	54.43
1st sub-pillar: Individuals	7	67.09
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	48	53.55
2.1.3 Use of virtual social networks	81	59.69
2.1.4 Tertiary enrollment	18	55.14
2.1.5 Adult literacy rate	1	100.00
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	50	49.06
2.2.1 Firms with website	46	62.85
2.2.2 GERD financed by business enterprise	58	37.71
2.2.3 Knowledge intensive employment	38	57.63
2.2.4 Annual investment in telecommunication services	45	79.91
2.2.5 GERD performed by business enterprise	49	7.23
3rd sub-pillar: Governments	52	47.13
2.3.1 Government online services	70	67.28
2.3.2 Publication and use of open data	23	57.35
2.3.3 Government promotion of investment in emerging tech	45	47.70
2.3.4 R&D expenditure by governments and higher education	80	16.20

Indicator	Rank	Score
C. Governance pillar	57	60.81
1st sub-pillar: Trust	54	54.70
3.1.1 Secure Internet servers	43	72.61
3.1.2 Cybersecurity	84	65.33
3.1.3 Online access to financial account	56	32.53
3.1.4 Internet shopping	41	48.34
2nd sub-pillar: Regulation	84	60.03
3.2.1 Regulatory quality	91	33.07
3.2.2 ICT regulatory environment	82	75.29
3.2.3 Regulation of emerging technologies	80	33.68
3.2.4 E-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	84	58.09
3rd sub-pillar: Inclusion	60	67.70
3.3.1 E-Participation	46	80.24
3.3.2 Socioeconomic gap in use of digital payments	42	87.08
3.3.3 Availability of local online content	75	54.33
3.3.4 Gender gap in Internet use	78	62.87
3.3.5 Rural gap in use of digital payments	83	53.97
D. Impact pillar	57	57.08
1st sub-pillar: Economy	43	40.99
4.1.1 High-tech and medium-high-tech manufacturing	59	26.02
4.1.2 High-tech exports	61	27.45
4.1.3 PCT patent applications	49	8.30
4.1.4 Domestic market size	39	62.37
4.1.5 Prevalence of gig economy	36	57.85
4.1.6 ICT services exports	7	63.98
2nd sub-pillar: Quality of Life	57	70.98
4.2.1 Happiness	80	55.78
4.2.2 Freedom to make life choices	82	66.95
4.2.3 Income inequality	5	93.97
4.2.4 Healthy life expectancy at birth	81	67.21
3rd sub-pillar: SDG Contribution	83	59.28
4.3.1 SDG 3: Good Health and Well-Being	56	73.18
4.3.2 SDG 4: Quality Education	39	54.22
4.3.3 SDG 5: Women's economic opportunity	79	71.05
4.3.4 SDG 7: Affordable and Clean Energy	113	52.97
4.3.5 SDG 11: Sustainable Cities and Communities	102	44.97

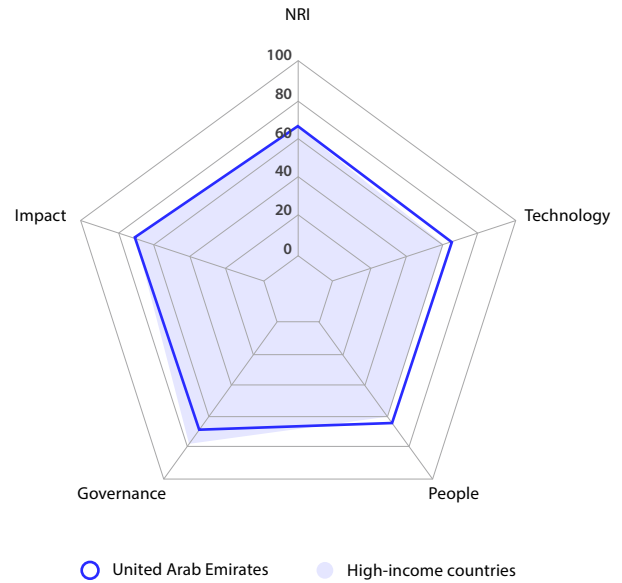
NOTE: ● Indicates a strength and ○ a weakness.

United Arab Emirates

Rank
(Out of 131) Score

Network Readiness Index 28 65.64

Pillar/sub-pillar	Rank	Score
A. Technology pillar	24	61.77
1st sub-pillar: Access	10	80.69
2nd sub-pillar: Content	43	43.70
3rd sub-pillar: Future Technologies	13	60.93
B. People pillar	20	63.71
1st sub-pillar: Individuals	9	65.33
2nd sub-pillar: Businesses	23	65.07
3rd sub-pillar: Governments	25	60.74
C. Governance pillar	46	67.63
1st sub-pillar: Trust	47	61.08
2nd sub-pillar: Regulation	71	62.42
3rd sub-pillar: Inclusion	28	79.40
D. Impact pillar	29	69.44
1st sub-pillar: Economy	25	47.43
2nd sub-pillar: Quality of Life	13	86.15
3rd sub-pillar: SDG Contribution	39	74.75



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	24	61.77
1st sub-pillar: Access	10	80.69
1.1.1 Mobile tariffs	22	79.12
1.1.2 Handset prices	12	84.14
1.1.3 FTTH/building Internet subscriptions	34	37.56
1.1.4 Population covered by at least a 3G mobile network	1	100.00
1.1.5 International Internet bandwidth	16	83.34
1.1.6 Internet access in schools	1	100.00
2nd sub-pillar: Content	43	43.70
1.2.1 GitHub commits	55	7.93
1.2.2 Internet domain registrations	47	8.65
1.2.3 Mobile apps development	29	92.19
1.2.4 AI scientific publications	32	66.00
3rd sub-pillar: Future Technologies	13	60.93
1.3.1 Adoption of emerging technologies	17	78.00
1.3.2 Investment in emerging technologies	10	79.50
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	44	25.30
B. People pillar	20	63.71
1st sub-pillar: Individuals	9	65.33
2.1.1 Mobile broadband internet traffic within the country	48	14.41
2.1.2 ICT skills in the education system	9	82.54
2.1.3 Use of virtual social networks	1	100.00
2.1.4 Tertiary enrollment	59	35.42
2.1.5 Adult literacy rate	46	94.27
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	23	65.07
2.2.1 Firms with website	NA	NA
2.2.2 GERD financed by business enterprise	5	91.89
2.2.3 Knowledge intensive employment	28	64.29
2.2.4 Annual investment in telecommunication services	28	83.31
2.2.5 GERD performed by business enterprise	31	20.79
3rd sub-pillar: Governments	25	60.74
2.3.1 Government online services	15	89.70
2.3.2 Publication and use of open data	65	25.00
2.3.3 Government promotion of investment in emerging tech	4	84.33
2.3.4 R&D expenditure by governments and higher education	43	43.94

Indicator	Rank	Score
C. Governance pillar	46	67.63
1st sub-pillar: Trust	47	61.08
3.1.1 Secure Internet servers	61	57.84
3.1.2 Cybersecurity	8	98.03
3.1.3 Online access to financial account	23	59.16
3.1.4 Internet shopping	54	29.29
2nd sub-pillar: Regulation	71	62.42
3.2.1 Regulatory quality	30	69.87
3.2.2 ICT regulatory environment	74	80.00
3.2.3 Regulation of emerging technologies	9	81.84
3.2.4 E-commerce legislation	87	66.67
3.2.5 Privacy protection by law content	128	13.70
3rd sub-pillar: Inclusion	28	79.40
3.3.1 E-Participation	16	93.83
3.3.2 Socioeconomic gap in use of digital payments	32	91.47
3.3.3 Availability of local online content	21	85.82
3.3.4 Gender gap in Internet use	31	73.53
3.3.5 Rural gap in use of digital payments	89	52.36
D. Impact pillar	29	69.44
1st sub-pillar: Economy	25	47.43
4.1.1 High-tech and medium-high-tech manufacturing	45	33.49
4.1.2 High-tech exports	16	63.93
4.1.3 PCT patent applications	55	6.58
4.1.4 Domestic market size	33	64.14
4.1.5 Prevalence of gig economy	11	79.94
4.1.6 ICT services exports	48	36.47
2nd sub-pillar: Quality of Life	13	86.15
4.2.1 Happiness	22	81.10
4.2.2 Freedom to make life choices	4	97.67
4.2.3 Income inequality	6	92.96
4.2.4 Healthy life expectancy at birth	66	72.86
3rd sub-pillar: SDG Contribution	39	74.75
4.3.1 SDG 3: Good Health and Well-Being	39	81.16
4.3.2 SDG 4: Quality Education	46	42.72
4.3.3 SDG 5: Women's economic opportunity	65	75.44
4.3.4 SDG 7: Affordable and Clean Energy	49	82.96
4.3.5 SDG 11: Sustainable Cities and Communities	19	91.50

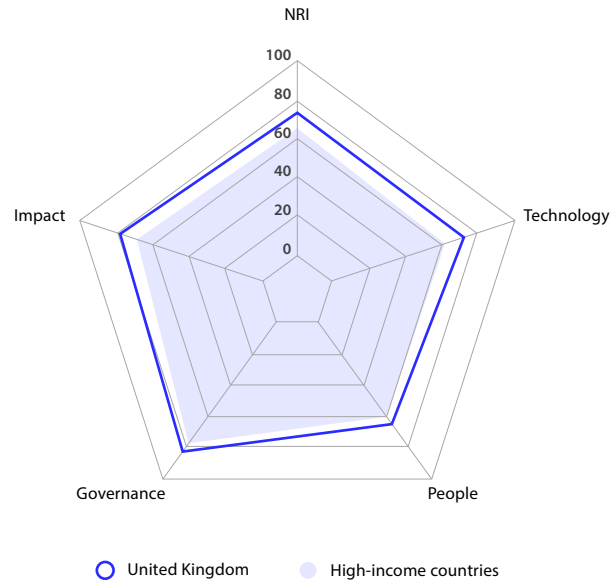
NOTE: ● Indicates a strength and ○ a weakness.

United Kingdom

Rank
(Out of 131) Score

Network Readiness Index 12 73.41

Pillar/sub-pillar	Rank	Score
A. Technology pillar	10	71.19
1st sub-pillar: Access	12	80.47
2nd sub-pillar: Content	11	74.49
3rd sub-pillar: Future Technologies	14	58.61
B. People pillar	19	64.14
1st sub-pillar: Individuals	61	50.05
2nd sub-pillar: Businesses	22	65.82
3rd sub-pillar: Governments	13	76.56
C. Governance pillar	16	81.76
1st sub-pillar: Trust	18	78.39
2nd sub-pillar: Regulation	26	79.67
3rd sub-pillar: Inclusion	2	87.21
D. Impact pillar	11	76.54
1st sub-pillar: Economy	13	61.15
2nd sub-pillar: Quality of Life	32	78.73
3rd sub-pillar: SDG Contribution	3	89.73



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	10	71.19
1st sub-pillar: Access	12	80.47
1.1.1 Mobile tariffs	16	84.16
1.1.2 Handset prices	8	93.36 ●
1.1.3 FTTH/building Internet subscriptions	43	33.37
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	6	91.48 ●
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	11	74.49
1.2.1 GitHub commits	19	50.30
1.2.2 Internet domain registrations	11	57.85
1.2.3 Mobile apps development	12	98.50
1.2.4 AI scientific publications	3	91.31 ●
3rd sub-pillar: Future Technologies	14	58.61
1.3.1 Adoption of emerging technologies	12	84.23
1.3.2 Investment in emerging technologies	8	82.25 ●
1.3.3 Robot density	23	16.55
1.3.4 Computer software spending	11	51.41
B. People pillar	19	64.14
1st sub-pillar: Individuals	61	50.05
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	40	61.54
2.1.3 Use of virtual social networks	26	78.87
2.1.4 Tertiary enrollment	42	43.63
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	27	16.18 ○
2nd sub-pillar: Businesses	22	65.82
2.2.1 Firms with website	11	85.36
2.2.2 GERD financed by business enterprise	23	66.33
2.2.3 Knowledge intensive employment	8	78.71
2.2.4 Annual investment in telecommunication services	NA	NA
2.2.5 GERD performed by business enterprise	17	32.86
3rd sub-pillar: Governments	13	76.56
2.3.1 Government online services	6	95.76 ●
2.3.2 Publication and use of open data	1	100.00 ●
2.3.3 Government promotion of investment in emerging tech	22	66.43
2.3.4 R&D expenditure by governments and higher education	42	44.05

Indicator	Rank	Score
C. Governance pillar	16	81.76
1st sub-pillar: Trust	18	78.39
3.1.1 Secure Internet servers	20	83.82
3.1.2 Cybersecurity	2	99.53 ●
3.1.3 Online access to financial account	27	55.84
3.1.4 Internet shopping	17	74.36
2nd sub-pillar: Regulation	26	79.67
3.2.1 Regulatory quality	15	80.53
3.2.2 ICT regulatory environment	8	95.88
3.2.3 Regulation of emerging technologies	29	66.32
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	86	55.60 ○
3rd sub-pillar: Inclusion	2	87.21
3.3.1 E-Participation	6	97.53
3.3.2 Socioeconomic gap in use of digital payments	5	99.42 ●
3.3.3 Availability of local online content	12	90.87
3.3.4 Gender gap in Internet use	38	72.19
3.3.5 Rural gap in use of digital payments	19	76.06
D. Impact pillar	11	76.54
1st sub-pillar: Economy	13	61.15
4.1.1 High-tech and medium-high-tech manufacturing	25	55.78
4.1.2 High-tech exports	23	56.47
4.1.3 PCT patent applications	19	43.36
4.1.4 Domestic market size	10	79.30
4.1.5 Prevalence of gig economy	4	89.24 ●
4.1.6 ICT services exports	30	42.75
2nd sub-pillar: Quality of Life	32	78.73
4.2.1 Happiness	15	83.48
4.2.2 Freedom to make life choices	64	74.60 ○
4.2.3 Income inequality	54	70.10 ○
4.2.4 Healthy life expectancy at birth	28	86.74
3rd sub-pillar: SDG Contribution	3	89.73
4.3.1 SDG 3: Good Health and Well-Being	2	97.31 ●
4.3.2 SDG 4: Quality Education	12	70.26
4.3.3 SDG 5: Women's economic opportunity	11	96.49
4.3.4 SDG 7: Affordable and Clean Energy	11	91.81
4.3.5 SDG 11: Sustainable Cities and Communities	16	92.78

NOTE: ● Indicates a strength and ○ a weakness.

United States

Rank
(Out of 131) Score

Network Readiness Index 1 80.30

Pillar/sub-pillar	Rank	Score
A. Technology pillar	1	88.18
1st sub-pillar: Access	4	85.39
2nd sub-pillar: Content	2	94.00
3rd sub-pillar: Future Technologies	1	85.16
B. People pillar	2	72.90
1st sub-pillar: Individuals	15	60.60
2nd sub-pillar: Businesses	5	79.18
3rd sub-pillar: Governments	10	78.93
C. Governance pillar	7	87.21
1st sub-pillar: Trust	4	91.32
2nd sub-pillar: Regulation	18	83.85
3rd sub-pillar: Inclusion	5	86.45
D. Impact pillar	20	72.91
1st sub-pillar: Economy	7	66.79
2nd sub-pillar: Quality of Life	55	71.78
3rd sub-pillar: SDG Contribution	29	80.14



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	1	88.18
1st sub-pillar: Access	4	85.39
1.1.1 Mobile tariffs	25	78.43
1.1.2 Handset prices	1	100.00 ●
1.1.3 FTTH/building Internet subscriptions	13	56.43
1.1.4 Population covered by at least a 3G mobile network	28	99.97
1.1.5 International Internet bandwidth	5	92.14
1.1.6 Internet access in schools	NA	NA
2nd sub-pillar: Content	2	94.00
1.2.1 GitHub commits	6	75.99
1.2.2 Internet domain registrations	1	100.00 ●
1.2.3 Mobile apps development	1	100.00 ●
1.2.4 AI scientific publications	1	100.00 ●
3rd sub-pillar: Future Technologies	1	85.16
1.3.1 Adoption of emerging technologies	2	99.75 ●
1.3.2 Investment in emerging technologies	1	100.00 ●
1.3.3 Robot density	8	40.90
1.3.4 Computer software spending	1	100.00 ●
B. People pillar	2	72.90
1st sub-pillar: Individuals	15	60.60
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	5	86.69
2.1.3 Use of virtual social networks	41	75.56
2.1.4 Tertiary enrollment	12	58.69
2.1.5 Adult literacy rate	NA	NA
2.1.6 AI talent concentration	19	21.44
2nd sub-pillar: Businesses	5	79.18
2.2.1 Firms with website	32	73.19
2.2.2 GERD financed by business enterprise	6	81.94
2.2.3 Knowledge intensive employment	18	72.53
2.2.4 Annual investment in telecommunication services	1	100.00 ●
2.2.5 GERD performed by business enterprise	3	68.25 ●
3rd sub-pillar: Governments	10	78.93
2.3.1 Government online services	7	94.55
2.3.2 Publication and use of open data	9	82.35
2.3.3 Government promotion of investment in emerging tech	8	78.57
2.3.4 R&D expenditure by governments and higher education	19	60.24

Indicator	Rank	Score
C. Governance pillar	7	87.21
1st sub-pillar: Trust	4	91.32
3.1.1 Secure Internet servers	2	94.60 ●
3.1.2 Cybersecurity	1	100.00 ●
3.1.3 Online access to financial account	7	84.40
3.1.4 Internet shopping	8	86.29
2nd sub-pillar: Regulation	18	83.85
3.2.1 Regulatory quality	21	74.13
3.2.2 ICT regulatory environment	33	90.00
3.2.3 Regulation of emerging technologies	6	88.16
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	61	66.98
3rd sub-pillar: Inclusion	5	86.45
3.3.1 E-Participation	1	100.00 ●
3.3.2 Socioeconomic gap in use of digital payments	36	89.92
3.3.3 Availability of local online content	7	93.51
3.3.4 Gender gap in Internet use	21	74.93
3.3.5 Rural gap in use of digital payments	35	73.90
D. Impact pillar	20	72.91
1st sub-pillar: Economy	7	66.79
4.1.1 High-tech and medium-high-tech manufacturing	20	58.17
4.1.2 High-tech exports	18	60.34
4.1.3 PCT patent applications	13	54.63
4.1.4 Domestic market size	2	98.38 ●
4.1.5 Prevalence of gig economy	2	95.35 ●
4.1.6 ICT services exports	52	33.90
2nd sub-pillar: Quality of Life	55	71.78
4.2.1 Happiness	13	85.13
4.2.2 Freedom to make life choices	62	74.71 ○
4.2.3 Income inequality	85	54.02 ○
4.2.4 Healthy life expectancy at birth	65	73.28 ○
3rd sub-pillar: SDG Contribution	29	80.14
4.3.1 SDG 3: Good Health and Well-Being	25	88.96
4.3.2 SDG 4: Quality Education	24	67.06
4.3.3 SDG 5: Women's economic opportunity	32	87.72
4.3.4 SDG 7: Affordable and Clean Energy	85	73.35 ○
4.3.5 SDG 11: Sustainable Cities and Communities	31	83.60

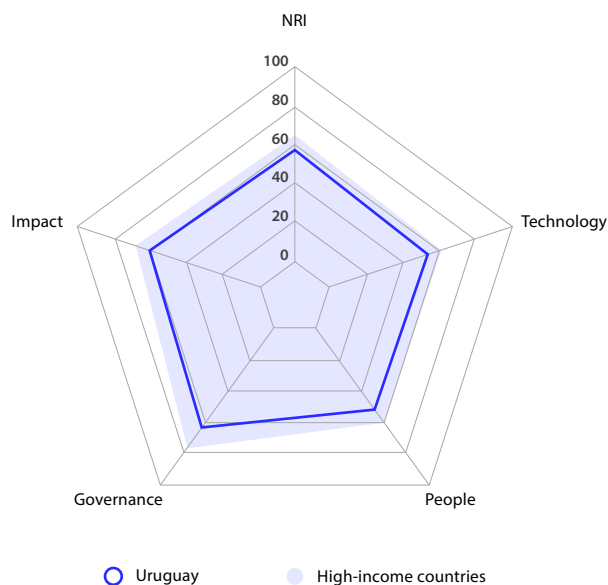
NOTE: ● Indicates a strength and ○ a weakness.

Uruguay

Rank
(Out of 131) Score

Network Readiness Index 47 56.12

Pillar/sub-pillar	Rank	Score
A. Technology pillar	54	48.63
1st sub-pillar: Access	33	74.07
2nd sub-pillar: Content	56	39.16
3rd sub-pillar: Future Technologies	63	32.66
B. People pillar	44	51.11
1st sub-pillar: Individuals	19	59.07
2nd sub-pillar: Businesses	74	37.92
3rd sub-pillar: Governments	38	56.34
C. Governance pillar	54	64.07
1st sub-pillar: Trust	58	49.87
2nd sub-pillar: Regulation	41	73.19
3rd sub-pillar: Inclusion	55	69.15
D. Impact pillar	42	60.66
1st sub-pillar: Economy	66	32.25
2nd sub-pillar: Quality of Life	42	75.24
3rd sub-pillar: SDG Contribution	41	74.48



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	54	48.63
1st sub-pillar: Access	33	74.07
1.1.1 Mobile tariffs	35	73.69
1.1.2 Handset prices	34	71.54
1.1.3 FTTH/building Internet subscriptions	40	35.71
1.1.4 Population covered by at least a 3G mobile network	98	97.51 ○
1.1.5 International Internet bandwidth	90	65.97
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	56	39.16
1.2.1 GitHub commits	43	14.45
1.2.2 Internet domain registrations	45	9.68
1.2.3 Mobile apps development	48	83.67
1.2.4 AI scientific publications	56	48.85
3rd sub-pillar: Future Technologies	63	32.66
1.3.1 Adoption of emerging technologies	54	51.47
1.3.2 Investment in emerging technologies	105	27.00 ○
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	66	19.50
B. People pillar	44	51.11
1st sub-pillar: Individuals	19	59.07
2.1.1 Mobile broadband internet traffic within the country	78	5.49
2.1.2 ICT skills in the education system	34	63.61
2.1.3 Use of virtual social networks	12	84.62 ●
2.1.4 Tertiary enrollment	44	43.21
2.1.5 Adult literacy rate	22	98.45 ●
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	74	37.92
2.2.1 Firms with website	40	68.85
2.2.2 GERD financed by business enterprise	84	5.63 ○
2.2.3 Knowledge intensive employment	63	35.53
2.2.4 Annual investment in telecommunication services	63	76.98
2.2.5 GERD performed by business enterprise	61	2.62
3rd sub-pillar: Governments	38	56.34
2.3.1 Government online services	31	83.64
2.3.2 Publication and use of open data	14	70.59 ●
2.3.3 Government promotion of investment in emerging tech	52	43.51
2.3.4 R&D expenditure by governments and higher education	60	27.63

Indicator	Rank	Score
C. Governance pillar	54	64.07
1st sub-pillar: Trust	58	49.87
3.1.1 Secure Internet servers	56	60.33
3.1.2 Cybersecurity	72	74.71
3.1.3 Online access to financial account	66	27.88
3.1.4 Internet shopping	50	36.55
2nd sub-pillar: Regulation	41	73.19
3.2.1 Regulatory quality	42	56.53
3.2.2 ICT regulatory environment	105	62.94 ○
3.2.3 Regulation of emerging technologies	30	65.00
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	28	81.46 ●
3rd sub-pillar: Inclusion	55	69.15
3.3.1 E-Participation	29	85.18
3.3.2 Socioeconomic gap in use of digital payments	70	69.00
3.3.3 Availability of local online content	62	61.78
3.3.4 Gender gap in internet use	17	75.41 ●
3.3.5 Rural gap in use of digital payments	82	54.37
D. Impact pillar	42	60.66
1st sub-pillar: Economy	66	32.25
4.1.1 High-tech and medium-high-tech manufacturing	73	17.72
4.1.2 High-tech exports	72	16.63
4.1.3 PCT patent applications	NA	NA
4.1.4 Domestic market size	87	43.15
4.1.5 Prevalence of gig economy	97	27.62 ○
4.1.6 ICT services exports	15	56.15 ●
2nd sub-pillar: Quality of Life	42	75.24
4.2.1 Happiness	28	76.98 ●
4.2.2 Freedom to make life choices	22	88.76 ●
4.2.3 Income inequality	79	57.29
4.2.4 Healthy life expectancy at birth	46	77.94
3rd sub-pillar: SDG Contribution	41	74.48
4.3.1 SDG 3: Good Health and Well-Being	32	83.62 ●
4.3.2 SDG 4: Quality Education	51	38.81
4.3.3 SDG 5: Women's economic opportunity	40	84.21
4.3.4 SDG 7: Affordable and Clean Energy	29	87.89 ●
4.3.5 SDG 11: Sustainable Cities and Communities	41	77.85

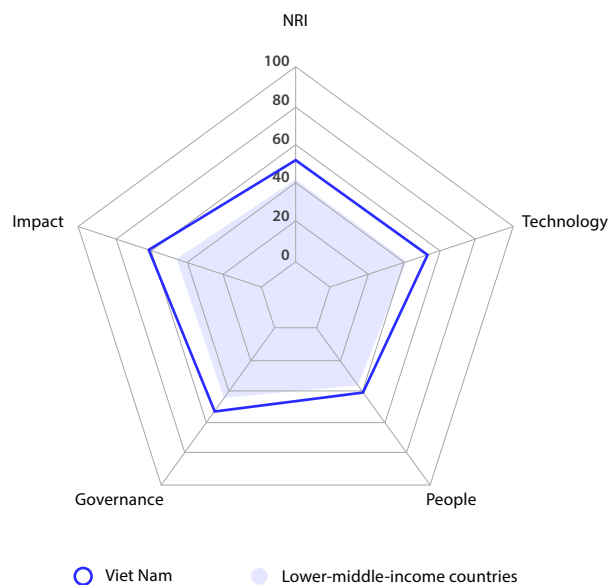
NOTE: ● Indicates a strength and ○ a weakness.

Viet Nam

Rank
(Out of 131) Score

Network Readiness Index 62 51.07

Pillar/sub-pillar	Rank	Score
A. Technology pillar	50	49.09
1st sub-pillar: Access	14	79.01
2nd sub-pillar: Content	55	39.19
3rd sub-pillar: Future Technologies	80	29.07
B. People pillar	80	40.60
1st sub-pillar: Individuals	27	56.19
2nd sub-pillar: Businesses	105	29.64
3rd sub-pillar: Governments	87	35.99
C. Governance pillar	76	53.53
1st sub-pillar: Trust	57	52.14
2nd sub-pillar: Regulation	95	56.42
3rd sub-pillar: Inclusion	95	52.04
D. Impact pillar	41	61.04
1st sub-pillar: Economy	28	45.83
2nd sub-pillar: Quality of Life	54	71.85
3rd sub-pillar: SDG Contribution	63	65.43



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	50	49.09
1st sub-pillar: Access	14	79.01
1.1.1 Mobile tariffs	31	77.16 ●
1.1.2 Handset prices	101	37.93
1.1.3 FTTH/building Internet subscriptions	3	71.33 ●
1.1.4 Population covered by at least a 3G mobile network	40	99.94
1.1.5 International Internet bandwidth	10	87.67 ●
1.1.6 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	55	39.19
1.2.1 GitHub commits	62	6.57
1.2.2 Internet domain registrations	81	1.84
1.2.3 Mobile apps development	62	80.96
1.2.4 AI scientific publications	30	67.37
3rd sub-pillar: Future Technologies	80	29.07
1.3.1 Adoption of emerging technologies	56	50.09
1.3.2 Investment in emerging technologies	68	38.50
1.3.3 Robot density	43	2.58
1.3.4 Computer software spending	45	25.09
B. People pillar	80	40.60
1st sub-pillar: Individuals	27	56.19
2.1.1 Mobile broadband internet traffic within the country	17	38.41 ●
2.1.2 ICT skills in the education system	43	56.80
2.1.3 Use of virtual social networks	53	72.83
2.1.4 Tertiary enrollment	86	18.33
2.1.5 Adult literacy rate	42	94.57
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	105	29.64
2.2.1 Firms with website	71	45.17
2.2.2 GERD financed by business enterprise	10	79.31 ●
2.2.3 Knowledge intensive employment	107	13.60 ○
2.2.4 Annual investment in telecommunication services	112	0.00 ○
2.2.5 GERD performed by business enterprise	44	10.10
3rd sub-pillar: Governments	87	35.99
2.3.1 Government online services	76	64.24
2.3.2 Publication and use of open data	80	14.71
2.3.3 Government promotion of investment in emerging tech	31	54.11
2.3.4 R&D expenditure by governments and higher education	87	10.90

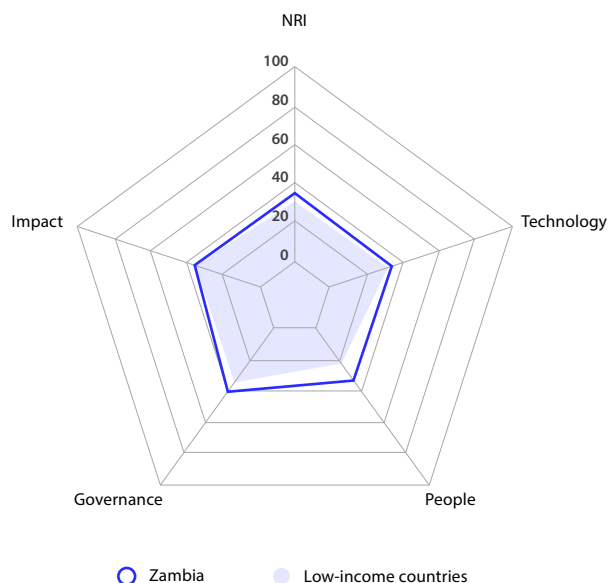
Indicator	Rank	Score
C. Governance pillar	76	53.53
1st sub-pillar: Trust	57	52.14
3.1.1 Secure Internet servers	53	64.16
3.1.2 Cybersecurity	32	94.49
3.1.3 Online access to financial account	64	28.29
3.1.4 Internet shopping	60	21.61
2nd sub-pillar: Regulation	95	56.42
3.2.1 Regulatory quality	83	37.07
3.2.2 ICT regulatory environment	103	65.49
3.2.3 Regulation of emerging technologies	49	52.63
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	121	26.91 ○
3rd sub-pillar: Inclusion	95	52.04
3.3.1 E-Participation	68	69.14
3.3.2 Socioeconomic gap in use of digital payments	123	28.41 ○
3.3.3 Availability of local online content	64	61.06
3.3.4 Gender gap in Internet use	85	59.32
3.3.5 Rural gap in use of digital payments	100	42.27
D. Impact pillar	41	61.04
1st sub-pillar: Economy	28	45.83
4.1.1 High-tech and medium-high-tech manufacturing	44	38.26
4.1.2 High-tech exports	3	94.17 ●
4.1.3 PCT patent applications	84	1.23
4.1.4 Domestic market size	24	68.95 ●
4.1.5 Prevalence of gig economy	22	65.99 ●
4.1.6 ICT services exports	117	6.37 ○
2nd sub-pillar: Quality of Life	54	71.85
4.2.1 Happiness	73	59.86
4.2.2 Freedom to make life choices	24	88.44 ●
4.2.3 Income inequality	58	68.59
4.2.4 Healthy life expectancy at birth	74	70.53
3rd sub-pillar: SDG Contribution	63	65.43
4.3.1 SDG 3: Good Health and Well-Being	72	67.61
4.3.2 SDG 4: Quality Education	16	69.68 ●
4.3.3 SDG 5: Women's economic opportunity	70	74.56
4.3.4 SDG 7: Affordable and Clean Energy	95	69.92
4.3.5 SDG 11: Sustainable Cities and Communities	100	45.39

NOTE: ● Indicates a strength and ○ a weakness.

Zambia

Network Readiness Index **113** **34.02**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	117	28.16
1st sub-pillar: Access	119	42.38
2nd sub-pillar: Content	112	22.35
3rd sub-pillar: Future Technologies	111	19.77
B. People pillar	100	32.10
1st sub-pillar: Individuals	103	33.56
2nd sub-pillar: Businesses	54	47.96
3rd sub-pillar: Governments	130	14.78
C. Governance pillar	104	40.48
1st sub-pillar: Trust	84	35.27
2nd sub-pillar: Regulation	99	54.15
3rd sub-pillar: Inclusion	123	32.03
D. Impact pillar	122	35.32
1st sub-pillar: Economy	122	13.42
2nd sub-pillar: Quality of Life	126	35.63
3rd sub-pillar: SDG Contribution	90	56.91



The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	117	28.16
1st sub-pillar: Access	119	42.38
1.1.1 Mobile tariffs	101	39.28
1.1.2 Handset prices	79	46.43 ●
1.1.3 FTTH/building Internet subscriptions	86	11.63
1.1.4 Population covered by at least a 3G mobile network	120	91.46
1.1.5 International Internet bandwidth	111	59.65
1.1.6 Internet access in schools	73	5.81
2nd sub-pillar: Content	112	22.35
1.2.1 GitHub commits	114	0.42
1.2.2 Internet domain registrations	124	0.09
1.2.3 Mobile apps development	119	50.08
1.2.4 AI scientific publications	67	38.81
3rd sub-pillar: Future Technologies	111	19.77
1.3.1 Adoption of emerging technologies	113	25.44
1.3.2 Investment in emerging technologies	92	31.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	107	2.62
B. People pillar	100	32.10
1st sub-pillar: Individuals	103	33.56
2.1.1 Mobile broadband internet traffic within the country	NA	NA
2.1.2 ICT skills in the education system	81	38.17 ●
2.1.3 Use of virtual social networks	115	11.49
2.1.4 Tertiary enrollment	124	1.63 ○
2.1.5 Adult literacy rate	72	82.97
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	54	47.96
2.2.1 Firms with website	55	57.19 ●
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	109	12.87
2.2.4 Annual investment in telecommunication services	81	73.83
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	130	14.78
2.3.1 Government online services	125	23.63
2.3.2 Publication and use of open data	100	2.94 ○
2.3.3 Government promotion of investment in emerging tech	108	17.76
2.3.4 R&D expenditure by governments and higher education	NA	NA

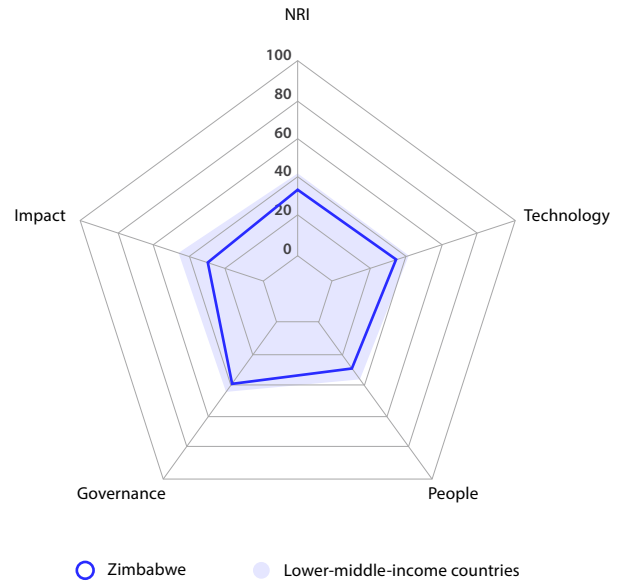
Indicator	Rank	Score
C. Governance pillar	104	40.48
1st sub-pillar: Trust	84	35.27
3.1.1 Secure Internet servers	114	29.63
3.1.2 Cybersecurity	79	68.33 ●
3.1.3 Online access to financial account	44	40.46 ●
3.1.4 Internet shopping	106	2.66
2nd sub-pillar: Regulation	99	54.15
3.2.1 Regulatory quality	105	24.53
3.2.2 ICT regulatory environment	93	70.20
3.2.3 Regulation of emerging technologies	113	6.58
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	56	69.44 ●
3rd sub-pillar: Inclusion	123	32.03
3.3.1 E-Participation	123	28.39
3.3.2 Socioeconomic gap in use of digital payments	118	36.39
3.3.3 Availability of local online content	124	21.39
3.3.4 Gender gap in internet use	91	50.16
3.3.5 Rural gap in use of digital payments	114	23.83
D. Impact pillar	122	35.32
1st sub-pillar: Economy	122	13.42
4.1.1 High-tech and medium-high-tech manufacturing	86	11.03
4.1.2 High-tech exports	105	3.54
4.1.3 PCT patent applications	99	0.00 ○
4.1.4 Domestic market size	92	40.68
4.1.5 Prevalence of gig economy	113	18.90
4.1.6 ICT services exports	116	6.39
2nd sub-pillar: Quality of Life	126	35.63
4.2.1 Happiness	126	16.09 ○
4.2.2 Freedom to make life choices	53	77.56 ●
4.2.3 Income inequality	115	14.82 ○
4.2.4 Healthy life expectancy at birth	121	34.04
3rd sub-pillar: SDG Contribution	90	56.91
4.3.1 SDG 3: Good Health and Well-Being	103	43.17
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	72	73.68 ●
4.3.4 SDG 7: Affordable and Clean Energy	115	51.80
4.3.5 SDG 11: Sustainable Cities and Communities	77	58.98 ●

NOTE: ● Indicates a strength and ○ a weakness.

Zimbabwe

Rank (Out of 131) **118** Score **31.95**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	113	30.02
1st sub-pillar: Access	115	43.50
2nd sub-pillar: Content	98	26.60
3rd sub-pillar: Future Technologies	110	19.96
B. People pillar	112	29.27
1st sub-pillar: Individuals	113	27.42
2nd sub-pillar: Businesses	71	39.33
3rd sub-pillar: Governments	118	21.07
C. Governance pillar	110	39.03
1st sub-pillar: Trust	100	29.20
2nd sub-pillar: Regulation	122	34.81
3rd sub-pillar: Inclusion	92	53.07
D. Impact pillar	128	29.48
1st sub-pillar: Economy	126	11.37
2nd sub-pillar: Quality of Life	128	32.12
3rd sub-pillar: SDG Contribution	117	44.96



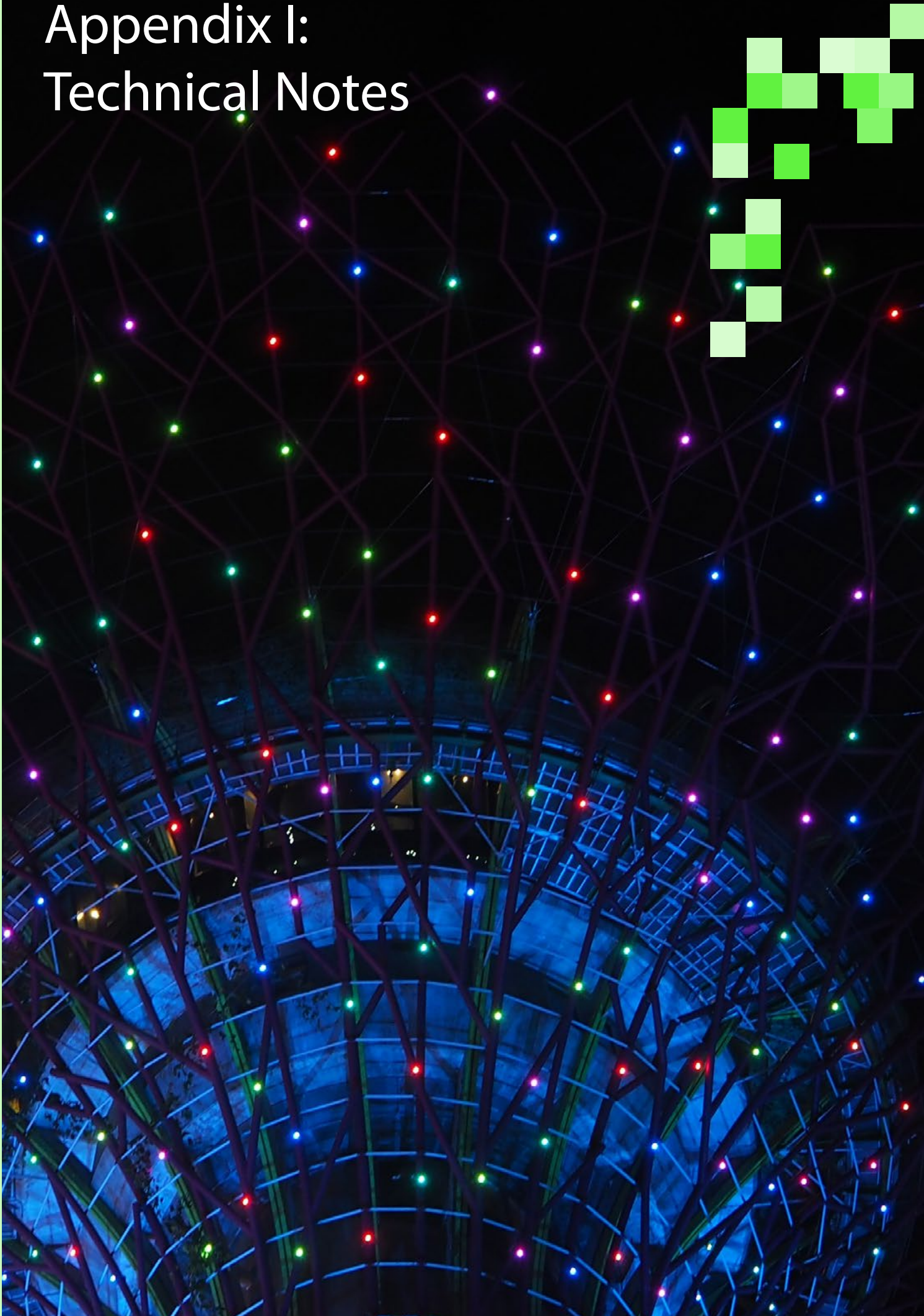
The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	113	30.02
1st sub-pillar: Access	115	43.50
1.1.1 Mobile tariffs	124	15.18
1.1.2 Handset prices	123	21.25
1.1.3 FTTH/building Internet subscriptions	NA	NA
1.1.4 Population covered by at least a 3G mobile network	117	94.24
1.1.5 International Internet bandwidth	94	64.29
1.1.6 Internet access in schools	63	22.55
2nd sub-pillar: Content	98	26.60
1.2.1 GitHub commits	112	0.52
1.2.2 Internet domain registrations	93	1.18
1.2.3 Mobile apps development	104	59.03
1.2.4 AI scientific publications	58	45.67
3rd sub-pillar: Future Technologies	110	19.96
1.3.1 Adoption of emerging technologies	110	26.03
1.3.2 Investment in emerging technologies	127	12.25
1.3.3 Robot density	NA	NA
1.3.4 Computer software spending	56	21.61
B. People pillar	112	29.27
1st sub-pillar: Individuals	113	27.42
2.1.1 Mobile broadband internet traffic within the country	97	1.58
2.1.2 ICT skills in the education system	80	38.46
2.1.3 Use of virtual social networks	119	6.72
2.1.4 Tertiary enrollment	112	4.87
2.1.5 Adult literacy rate	66	85.47
2.1.6 AI talent concentration	NA	NA
2nd sub-pillar: Businesses	71	39.33
2.2.1 Firms with website	90	33.73
2.2.2 GERD financed by business enterprise	NA	NA
2.2.3 Knowledge intensive employment	115	8.41
2.2.4 Annual investment in telecommunication services	71	75.85
2.2.5 GERD performed by business enterprise	NA	NA
3rd sub-pillar: Governments	118	21.07
2.3.1 Government online services	96	50.91
2.3.2 Publication and use of open data	103	1.47
2.3.3 Government promotion of investment in emerging tech	116	10.83
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar	110	39.03
1st sub-pillar: Trust	100	29.20
3.1.1 Secure Internet servers	105	34.34
3.1.2 Cybersecurity	101	35.37
3.1.3 Online access to financial account	37	44.27
3.1.4 Internet shopping	105	2.81
2nd sub-pillar: Regulation	122	34.81
3.2.1 Regulatory quality	129	3.20
3.2.2 ICT regulatory environment	106	62.74
3.2.3 Regulation of emerging technologies	NA	NA
3.2.4 E-commerce legislation	118	33.33
3.2.5 Privacy protection by law content	116	39.98
3rd sub-pillar: Inclusion	92	53.07
3.3.1 E-Participation	104	43.21
3.3.2 Socioeconomic gap in use of digital payments	80	60.15
3.3.3 Availability of local online content	115	27.64
3.3.4 Gender gap in Internet use	10	77.88
3.3.5 Rural gap in use of digital payments	78	56.47
D. Impact pillar	128	29.48
1st sub-pillar: Economy	126	11.37
4.1.1 High-tech and medium-high-tech manufacturing	65	21.16
4.1.2 High-tech exports	98	5.14
4.1.3 PCT patent applications	85	1.08
4.1.4 Domestic market size	114	34.69
4.1.5 Prevalence of gig economy	126	0.00
4.1.6 ICT services exports	119	6.16
2nd sub-pillar: Quality of Life	128	32.12
4.2.1 Happiness	125	17.38
4.2.2 Freedom to make life choices	114	49.63
4.2.3 Income inequality	109	31.91
4.2.4 Healthy life expectancy at birth	126	29.56
3rd sub-pillar: SDG Contribution	117	44.96
4.3.1 SDG 3: Good Health and Well-Being	102	43.46
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Women's economic opportunity	48	81.58
4.3.4 SDG 7: Affordable and Clean Energy	126	23.56
4.3.5 SDG 11: Sustainable Cities and Communities	119	31.24

NOTE: ● Indicates a strength and ○ a weakness.

Appendix I: Technical Notes



Appendix I: Technical Notes

Structure of the Network Readiness Index

Since network readiness is a multi-dimensional concept, the Network Readiness Index (NRI) is a composite index constructed with three levels. The primary level consists of four pillars that make up the fundamental dimensions of network readiness. Each of the fundamental pillars divides into additional sub-pillars that constitute the second level. Table A-I.1 shows both levels.

The third level consists of individual indicators distributed across the different sub-pillars and pillars of the primary and secondary levels. All indicators used within the NRI belong to a pillar and a sub-pillar.

For record-keeping, a three-digit code identifies each indicator. The first digit refers to the primary pillar, the second digit concerns the secondary sub-pillar, and the third denotes the indicator itself. For instance, the digital code 1.2.3 refers to an individual indicator (Mobile apps development) located within the first primary pillar (Technology) and the secondary sub-pillar (Content).

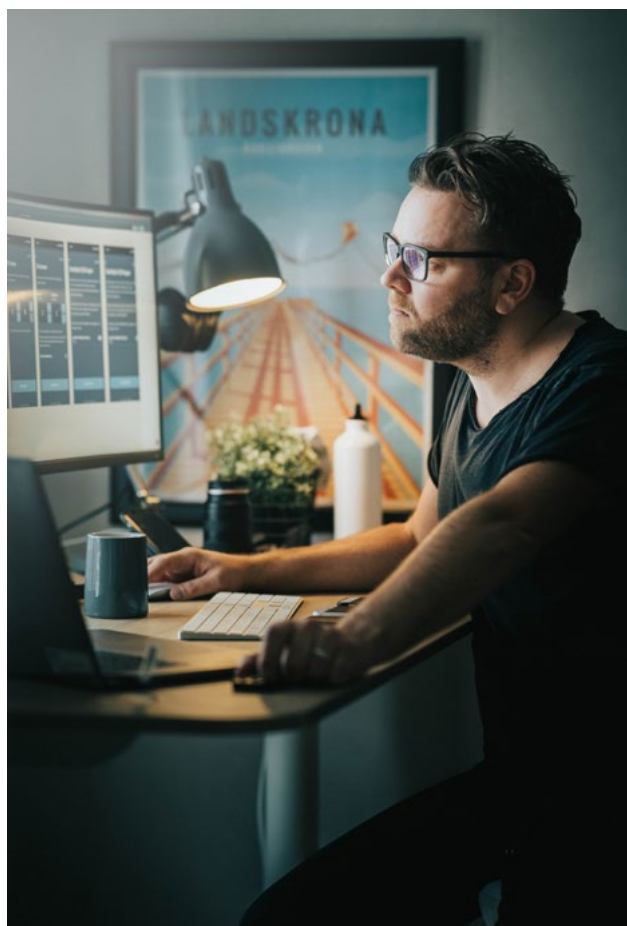
The third level of the NR1 2022 consists of 58 indicators. 35 indicators are hard/quantitative data, 12 are index/composite indicator data, and 11 are survey/qualitative data.

Table A-I.2 outlines the complete structure of the NRI with its respective pillars, sub-pillars, and indicators.

Table A-I.2: outlines the complete structure of the NRI with its respective pillars, sub-pillars, and indicators.

A schematic outline of the NRI model's primary and secondary levels is presented in Figure 1 on page 48 in this report's section: Key Results of NRI 2022.

Primary Level	Technology	People	Governance	Impact
Secondary Level	Access	Individuals	Trust	Economy
	Content	Businesses	Regulation	Quality of life
	Future technologies	Governments	Inclusion	Sustainable development goal (SDG) contributions



magnus-andersson-unsplash

Table A-I.2: Network Readiness Index 2022 pillars, sub-pillars, and indicators

A. Technology pillar	B. People pillar
1.1 Access	2.1 Individuals
1.1.1 Mobile tariffs	2.1.1 Active Mobile Broadband Subscriptions
1.1.2 Handset prices	2.1.2 ICT skills
1.1.3 FTTh/Building internet subscriptions	2.1.3 Use of virtual social networks
1.1.4 Population covered by at least a 3G mobile network	2.1.4 Tertiary enrollment
1.1.5 International Internet bandwidth	2.1.5 Adult literacy rate
1.1.6 Internet access in schools	2.1.6 AI talent concentration
1.2 Content	2.2 Businesses
1.2.1 GitHub commits	2.2.1 Firms with a website
1.2.2 Internet domain registrations	2.2.2 GERD financed by business enterprise
1.2.3 Mobile applications development	2.2.3 Knowledge intensive employment
1.2.4 AI in scientific publications	2.2.4 Annual investment in telecommunication services
1.3 Future Technologies	2.2.5 GERD performed by business enterprise
1.3.1 Adoption of emerging technologies	2.3 Governments
1.3.2 Investment in emerging technologies	2.3.1 Government online services
1.3.3 Robot density	2.3.2 Publication and use of open data
1.3.4 Computer software spending	2.3.3 Government promotion of investment in emerging technologies
	2.3.4 R&D expenditure by governments and higher education
C. Governance pillar	D. Impact pillar
3.1 Trust	4.1 Economy
3.1.1 Secure internet servers	4.1.1 High-tech and medium-high-tech manufacturing
3.1.2 Cybersecurity	4.1.2 High-tech exports
3.1.3 Online access to a financial account	4.1.3 PCT patent applications
3.1.4 Internet shopping	4.1.4 Domestic market size
3.2 Regulation	4.1.5 Prevalence of gig economy
3.2.1 Regulatory quality	4.1.6 ICT services exports
3.2.2 ICT regulatory environment	4.2 Quality of Life
3.2.3 Regulation of emerging technologies	4.2.1 Happiness
3.2.4 E-commerce legislation	4.2.2 Freedom to make life choices
3.2.5 Privacy protection by law content	4.2.3 Income inequality
3.3 Inclusion	4.2.4 Healthy life expectancy at birth
3.3.1 E-participation	4.3 SDG Contribution
3.3.2 Socioeconomic gap in use of digital payments	4.3.1 SDG 3: Good Health and Well-Being
3.3.3 Availability of local online content	4.3.2 SDG 4: Quality Education
3.3.4 Gender gap in Internet use	4.3.3 SDG 5: Women's economic opportunity
3.3.5 Rural gap in use of digital payments	4.3.4 SDG 7: Affordable and Clean Energy
	4.3.5 SDG 11: Sustainable cities and communities

Appendix I:

Technical Notes

Adjustments to the Network Readiness Index model in 2022

Table A-I.3 provides a summary of adjustments to the NRI 2022 framework. A total of 18 indicators shows adjustments this year. The methodology of three indicators was revised, one new indicator was introduced without replacing an existing one, three indicators were dropped without replacement, four indicators were introduced to replace previous indicators, one indicator changed name, and six indicators changed code.

Computation of the NRI

The computation of the NRI utilizes successive aggregations of scores from both the indicator level (i.e., the most disaggregated level) and the overall NRI score. The unweighted arithmetic mean aggregates (i) the individual indicators within each sub-pillar, (ii) the sub-pillars within each pillar, and (iii) the pillars comprising the overall index.

Computation is based on data for all indicators, including confidential data related to indicator 1.2.2 (Internet domain registrations) that ZookNIC kindly provided on the condition of confidentiality. Keeping with this request only scores are provided for this indicator this year.

Country and data coverage

The inclusion of countries and indicators relies on the double threshold approach. Only countries that could provide data for at least 70% of all indicators earned inclusion to the NRI. In addition, countries needed to pass a sub-pillar level data availability of at least 40% for coverage. With the exception of 1.3.3 Robot density and the new indicator 2.1.6 AI talent concentration introduced this year, indicators with data available for at least 50% of all countries gained inclusion to the NRI. Both of these indicators, although covering less than 50% of all economies featured in the NRI, are considered and used below this threshold due to their contextual and theoretical relevance for the NRI framework. Missing values received a "N/A" label and did not count within the computation of scores.

Table A-I.3: Adjustments to the Network Readiness Index 2022

Variable code	NRI 2021	Adjustment	New code	NRI 2022
1.1.3	Internet access	Replaced	1.1.3	FTTh/Building internet subscriptions
1.1.4	SMS sent by population 15-69	Removed		
1.1.5	Population covered by at least a 3G mobile network	Changed code	1.1.4	Population covered by at least a 3G mobile network
1.2.2	Wikipedia edits	Removed		
1.2.3	Internet domain registrations	Changed code	1.2.2	Internet domain registrations
1.2.4	Mobile applications development	Changed code	1.2.3	Mobile applications development
1.2.5	AI Publications (count)	Methodology revised /Changed Code	1.2.4	AI Publications (% of GDP)
2.1.1	Active mobile broadband subscriptions	Replaced	2.1.1	Mobile broadband internet traffic within the country
		New indicator	2.1.6	AI talent concentration
2.2.3	Professionals	Methodology revised	2.2.3	Professionals
2.2.4	Technicians and associate professionals	Removed		
2.2.5	Annual investment in telecommunication services	Changed code	2.2.4	Annual investment in telecommunication services
2.2.6	GERD performed by business enterprise	Changed code	2.2.5	GERD performed by business enterprise
3.2.3	Legal framework's adaptability to emerging technologies	Changed name	3.2.3	Regulation of emerging technologies
4.1.4	GDP per person engaged	Replaced	4.1.4	Domestic market size
4.3.3	Females employed with advanced degrees	Replaced	4.3.3	SDG 5: Women's economic opportunity
4.3.5	SDG 11: Sustainable cities and communities	Methodology revised	4.3.5	SDG 11: Sustainable cities and communities

Appendix I: Technical Notes

Treatment of series with outliers

Outliers in an indicator can affect ranking results with bias. It is prudent to detect and remove all outliers before the normalization of scores. An applied rule-of-thumb where an absolute value of skewness greater than 2 and a kurtosis greater than 3.5 indicates the presence of outliers.[i]

The treatment of outliers occurs mainly in two ways. First, indicators with no more than four outliers are winsorized, whereby the value affecting the distribution assigns to the next highest/lowest value method. The winsorization process continues until the reported skewness and/or kurtosis fall within the ranges specified above.

Second, indicators with at least five outliers are transformed by natural logarithms according to the following formula:

$$\ln \left[(max \times factor - 1) \times \frac{(value - min)}{(max - min)} + 1 \right]$$

For one case, neither winsorization nor multiplication by a given factor plus log transformation brought the series within the desired parameters.[ii] For this particular case a Box-Cox transformation was applied to the entire series with a $\lambda = -0.0566$. The formula used was:

$$y_i^{(\lambda)} = ((y_i + 1)^\lambda - 1) / \lambda$$

where $0 \leq \lambda \leq 2$; $\lambda \neq 0$; $y \geq 0$; and y_i = economy value

For the NRI 2022, outliers were detected in nineteen indicators. Eight indicators[iii] had fewer than five outliers and eleven indicators[iv] had five outliers or more.

Normalisation

To make the indicators comparable for data aggregation, they must go through a process of normalization. The NRI applies the Min-max normalization method to ensure all values fall into the [0, 100] range/. For indicators where higher values indicate higher outcomes the following normalization formula is applied:

$$100 \times \frac{(value - min)}{(max - min)}$$

For indicators where higher values imply worse outcomes the following reverse normalization formula is applied:[v]

$$100 \times \frac{(max - value)}{(max - min)}$$

Caveats on the year-to-year comparison of rankings

The NRI compares the performance of national digital readiness across countries/economies and presents the changes in country/economy rankings over time. It is important to note that scores and rankings are not directly comparable between one year and another. Each ranking reflects the relative position of a particular economy based on the conceptual framework, the data coverage and the sample of countries/economies of that specific NRI edition, and also reflects changes in the underlying indicators at source and in data availability.

A number of factors influence the year-on-year rankings of an economy:

- [the actual performance of the economy in question;](#)
- [adjustments made to the NRI framework \(changes in indicator composition and measurement revisions\);](#)
- [data updates, the treatment of outliers and missing values; and](#)
- [the inclusion or exclusion of economies in the sample.](#)

Appendix I:

Technical Notes

Additionally, the following characteristics complicate the time-series analysis based on simple NRI rankings or scores:

- **Missing values:** The NRI produces relative index scores, which means that a missing value for one economy affects the index score of other economies. Because the number of missing values decreases every year, this problem reduces over time.
- **Reference year:** The data underlying the NRI do not refer to a single year but to several years, depending on the latest available year for any given variable. In addition, the reference years for different variables are not the same for each economy, due to measures to limit the number of missing data points.
- **Normalization factor:** Most NRI variables are normalized using GDP, population, or other factor with the intention of enabling cross-economy comparability. However, this implies that year-on-year changes in individual indicators may be driven either by the variable (numerator) or by its normalization factor (denominator).
- **Consistent data collection:** Measuring the change in year-on-year performance relies on the consistent collection of data over time. Changes in the definition of variables or in the data collection process could create movements in the rankings that are unrelated to performance.

A detailed economy study based on the NRI database and the economy profile over time, along with analytical ground work that includes that of actors and decision-makers in the realm of digital transformation, yields the best results in terms of monitoring a country/economy's network readiness as well as for identifying possible improvement channels.

References

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OECD & EC JRC (2008). *Handbook on constructing composite indicators: Methodology and user guide*. Paris: OECD, available at <http://www.oecd.org/std/42495745.pdf>

[i] Adopted from Groeneveld & Meeden (1984)

[ii] 1.2.4 AI scientific publications.

[iii] 1.2.1 GitHub commits, 1.2.2 Internet domain registrations, 1.3.3 Robot density, 2.1.6 AI talent concentration, 2.2.5 GERD performed by business enterprise, 3.2.4 E-commerce legislation, 3.3.4 Gender gap in Internet use, and 4.3.4 SDG 7: Affordable and Clean Energy

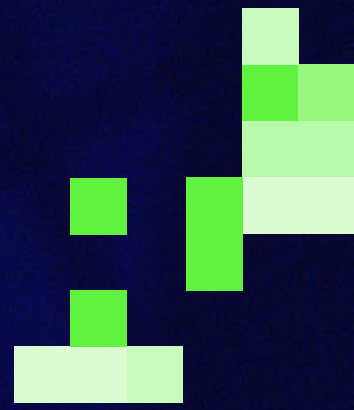
[iv] 1.1.3 FTTH/building Internet subscriptions, 1.1.4 Population covered by at least a 3G mobile network, 1.1.5 International Internet bandwidth, 2.1.1 Active Mobile Broadband Subscriptions Count, 2.2.4 Annual investment in telecommunication services, 3.1.1 Secure Internet servers, 4.1.2 High-tech exports, 4.1.3 PCT patent applications, 4.1.4 Domestic market size, and 4.1.6 ICT services exports.

[v] For the NRI 2022 reverse normalisation was needed for three indicators: 4.2.3 Income inequality, 4.3.4 SDG 7: Affordable and clean energy and 4.3.5 SDG 11: Sustainable Cities and Communities.

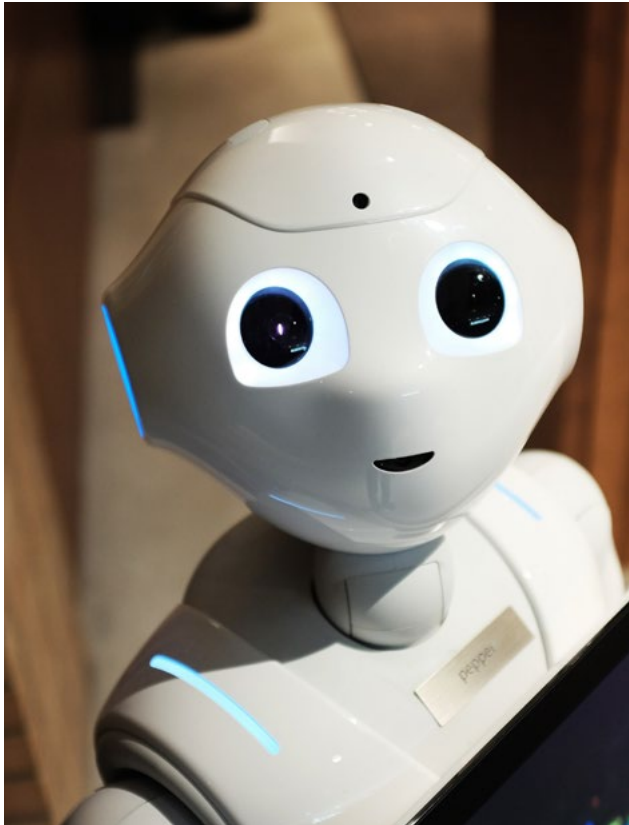


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Appendix II: Sources and Definitions



Appendix II: Sources and Definitions



1st pillar: Technology

1.1 Access

1.1.1 Mobile tariffs

Mobile tariffs sub-index | 2021

The Mobile Tariffs indicator refers to the Mobile tariffs sub-index included in the Affordability pillar of the *Mobile Connectivity Index* published by the GSM Association. The sub-index relates to the cost of three separate basket profiles that are distinguished in part by usage allowance (100 MB, 500 MB, and 1 GB per month, respectively). Tariffs are given as a percentage of monthly GDP per capita. The primary source for the data is Tarifica (<https://tarifica.com/>).

Source: GSM Association, The GSMA Mobile Connectivity Index 2021 (<http://www.mobileconnectivityindex.com>).
Data year: 2021.

1.1.2 Handset prices

Cost of cheapest Internet-enabled device (% of monthly GDP per capita) | 2021

As one of the indicators included in the Affordability pillar of the Mobile Connectivity Index published by the GSM Association, the Handset prices indicator relates to the cheapest smartphone or feature phone that allows user access to the Internet. The primary source for the data is Tarifica (<https://tarifica.com/>).

Source: GSM Association, The GSMA Mobile Connectivity Index 2021 (<http://www.mobileconnectivityindex.com>).
Data year: 2021.

1.1.3 FTTH/building Internet subscriptions

Fibre-to-the-home/building Internet subscriptions (% of GDP) | 2020

Fibre-to-the-home/building Internet subscriptions refers to the number of Internet subscriptions using fibre-to-the-home or fibre-to-the-building; at downstream speeds equal to; or greater than; 256 kbit/s. This should include subscriptions where fibre goes directly to the subscriber's premises or fibre-to-the-building subscriptions that terminate no more than 2 metres from an external wall of the building. Fibre-to-the-cabinet and fibre-to-the-node are excluded.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators database 2022 (<http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>). Data year: 2020.

Appendix II: Sources and Definitions

1.1.4 Population covered by at least a 3G mobile network

Percentage of the population covered by at least a 3G mobile network | 2021

The following indicator refers to the percentage of inhabitants within range of at least a 3G mobile-cellular signal, irrespective of whether or not they are subscribers. Values are calculated by dividing the number of inhabitants covered by at least a 3G mobile-cellular signal by the total population and multiplied by 100.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators database 2022 (<http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>). Data years: 2020-2021.

1.1.5 International Internet bandwidth

International Internet bandwidth (Mbit/s) | 2021

International Internet bandwidth refers to the total used capacity of international Internet bandwidth in megabits per second (Mbit/s). Calculations only include the total usage capacity of all Internet exchanges (locations that exchange Internet traffic) that offer international bandwidth. If capacity is asymmetric and there is more incoming (downlink) than outgoing (uplink) capacity, then the incoming (downlink) capacity is provided.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators database 2022 (<http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>). Data years: 2016-2021.

1.1.6 Internet access in schools

Proportion of primary schools with access to Internet for pedagogical purposes (%) | 2021

The Internet access in schools indicator refers to the share of primary schools with access to the Internet via fixed narrowband, fixed broadband, or mobile networks. Internet for pedagogical purposes refers to web access and communications services through various devices that enhance the teaching and learning of pupils.

Source: UNESCO Institute for Statistics, UIS.Stat (<http://data.uis.unesco.org/>). Data years: 2010-2021.

1.2 Content

1.2.1 GitHub commits

GitHub commits (per million population, 15–69 years old) | 2021

GitHub is the world's largest host of source code, and a commit is the term used for a saved change on this platform. Thus, GitHub commits refers to the number of commits on the GitHub website that are publicly available.

Source: GitHub (<https://github.com/>); and United Nations, Department of Economic and Social Affairs, Population Division, World Population Prospects 2019 (<https://population.un.org/wpp/>). Data year: 2021.

1.2.2 Internet domain registrations

Generic Top-Level Domains (gTLDs) and Country Code Top-Level Domains (ccTLDs) per person | 2021

The Internet domain registrations indicator measures the production of Internet content. It refers to two types of top-level domains: generic top-level domains and country-code top-level domains. The gTLDs cover domain names that use .com, .net, .org, .biz, .info, and .mobi. Similar to Ojanperä, Graham and Zook (2019)[ii], a small number of countries are excluded because the high volume reported from their ccTLDs is due to the specific meaning of the domain rather than any content produced in the country itself (e.g. the use of Tuvalu.tv domain by the entertainment industry).

Source: Data on Internet domain registrations kindly provided by ZookNIC. World Development Indicators provide data on population. World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Data year: 2021.

1.2.3 Mobile apps development

Number of active mobile applications developed per person | 2021

The Mobile app development indicator sources the *Mobile Connectivity Index* published by the GSM Association. As part of the Content & services primary pillar, it is one of four indicators located within the Local Relevance sub-index. All original data sourced from AppFigures (<https://appfigures.com/>).

Source: GSM Association, The GSMA Mobile Connectivity Index 2021 (<http://www.mobileconnectivityindex.com>). Data year: 2021.

Appendix II: Sources and Definitions

1.2.4 AI Publications

Total number of AI scientific publications, fractional counts (as % of GDP) | 2021

The AI scientific publications indicator measures the total number of AI publications in Elsevier per economy. Any paper with a field of study categorized as “artificial intelligence” and “machine learning” according to the Microsoft Academic Graph (MAG) taxonomy is measured. Results from other fields of study, such as “natural language processing”, “speech recognition”, and “computer vision” are included if they also belong to the “artificial intelligence” or the “machine learning” fields of study. As such, the results are likely to be conservative. Tagging occurs through a concept detection operation. The Microsoft Academic Graph (MAG) is a heterogeneous graph containing scientific publication records and citation relationships between each publication from authors, institutions, journals, conferences, and fields of study (Sinha et al., 2015; Wang et al., 2019). Reporting occurs as a percentage of an economy’s GDP.

Source: OECD.AI Policy Observatory (<https://oecd.ai>). Data year: 2021.

1.3 Future technologies

1.3.1 Adoption of emerging technologies

Average answer to survey questions concerning the extent to which companies adopt five types of emerging technology | 2019

The annual World Economic Forum’s Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The Adoption of emerging technologies indicator refers to the average answer of a similarly-worded question posed by the EOS regarding five different emerging technologies (Artificial intelligence, Robotics, App- and web-enabled markets, Big data analytics, and Cloud computing):

“In your country, to what extent are companies adopting Artificial intelligence?” (1: not at all; 7: to a great extent - on

par with the most technologically advanced economies).

Source: World Economic Forum, Executive Opinion Survey 2019 (<http://reports.weforum.org>). Data year: 2019.

1.3.2 Investment in emerging technologies

Average answer to a survey question concerning the extent that companies invest in emerging technologies. | 2017–2018

The annual World Economic Forum’s Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The Investment in emerging technologies indicator refers to the average answer of a similarly-worded question posed by the EOS regarding five different emerging technologies (Artificial intelligence, Robotics, App- and web-enabled markets, Big data analytics, and Cloud computing):

“In your country, to what extent do companies invest in emerging technologies (e.g., Internet of Things, advanced analytics and artificial intelligence, augmented virtual reality and wearables, advanced robotics, 3D printing)?” [1 = not at all; 7 = to a great extent].

Source: World Economic Forum, Executive Opinion Survey 2017–2018 (<http://reports.weforum.org>). Data years: 2017–2018.

1.3.3 Robot density

Number of robots in operation per 10,000 employees in the manufacturing industry | 2021

Robot density refers to the estimated number of multipurpose industrial robots per 10,000 persons employed in the manufacturing industry (ISIC rev.4: C). The International Federation of Robotics (IFR) collects country-level data on the operational stock of industrial robots and for certain countries computes robot densities. The annual *World Robotics* report publishes computed robot densities.

Source: Data on robot density and operational stock of industrial robots for 2019 kindly provided by the International Federation of Robotics, IFR (<https://ifr.org>). Data on employment in manufacturing in the countries for which IFR has not computed robot densities are sourced from the International Labour Organization, ILOSTAT (<https://ilostat.ilo.org>). Data year: 2021.

Appendix II: Sources and Definitions

1.3.4 Computer software spending

Total computer software spending (% of GDP) | 2021

Computer software spending refers to the total value of purchased or leased packaged software, including operating systems, database systems, programming tools, utilities, and applications. The indicator excludes expenditures for internal software development and outsourced custom software development. The data combines actual figures and estimates. Reporting occurs as a percentage of an economy's GDP.

Source: IHS Markit, Information and Communication Technology Database (<https://www.ihsmarkit.com/index.html>). Data year: 2021.



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2nd pillar: People

2.1 Individuals

2.1.1 Mobile broadband internet traffic within the country

Mobile-broadband internet traffic (within the country); in exabytes | 2021

Mobile-broadband Internet traffic (within the country) refers to broadband traffic volumes originated within the country from 3G networks or other more advanced mobile-networks; including 3G upgrades; evolutions or equivalent standards in terms of data transmission speeds. Traffic should be collected and aggregated at the country level for all 3G or more advanced mobile networks within the country. Download and upload traffic should be added up and reported together. Traffic should be measured at the end-user access point. Wholesale and walled-garden traffic should be excluded. The traffic should be reported in exabytes.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators database 2022 (<http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>). Data years: 2016-2021.

2.1.2 ICT skills in the education system

Average answer to the question: In your country, how well does the current education system meet the skills needs of a competitive economy? Digital and technology skills [1 = Not at all; 7 = To a great extent] | 2021

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

The ICT skills indicator refers to the average answer of a similarly-worded question posed by the EOS regarding the digital skills of a country:

"In your country, to what extent does the active population possess sufficient digital skills (e.g., computer skills, basic coding, digital reading)?" [1 = not at all; 7 = to a great extent].

Source: World Economic Forum, Executive Opinion Survey 2022 (<http://reports.weforum.org>). Data years: 2017-2021.

Appendix II: Sources and Definitions



2.1.3 Use of virtual social networks

Number of active social media users (% of population) | 2019

The Use of virtual social networks indicator refers to the penetration of active social media users expressed as a percentage of the total population. Original data comes from a variety of sources, including company statements and reports in reputable media.

Source: We Are Social and Hootsuite (2020) Global Digital Report 2020 (<https://wearesocial.com/digital-2020>). Data year: 2019.

2.1.4 Tertiary enrollment

Gross enrollment ratio, tertiary education (%) | 2021

Tertiary enrollment refers to the ratio of total education enrollment, regardless of age, by the population of the age group that officially corresponds to the expected level of tertiary education. Tertiary education often requires the successful completion of education at the secondary level as a minimum condition of admission. The International Standard Classification of Education (ISCED) defines the standards of the tertiary level.

Source: UNESCO Institute for Statistics, UIS.Stat (<http://data.uis.unesco.org/>). Data years: 2010-2021. Paraguay uses data from 2010.

2.1.5 Adult literacy rate

Adult literacy rate (%) | 2021

The Adult literacy rate indicator defines the percentage of the population aged 15 years and over who can read, write, and understand short, simple statements about their everyday life.

Source: UNESCO Institute for Statistics, UIS.Stat (<http://data.uis.unesco.org/>). Data years: 2010-2021. Bahrain and Trinidad and Tobago use data from 2010.

2.1.6 AI talent concentration

AI talent concentration | 2021

A LinkedIn member is considered AI talent if they have explicitly added AI skills to their profile and/or they are occupied in an AI job. The counts of AI talent are used to calculate talent concentration metrics. For example, AI talent concentration at the country level is calculated using the counts of AI talent vis-a-vis the counts of LinkedIn members in that country. As such, AI talent concentration metrics may be influenced by a country's LinkedIn coverage and should be used with caution. For example, as of 2021 1 in every 10 LinkedIn members in India is classified as AI talent, which is a result of LinkedIn's biased coverage in that country.

Since it also encompasses LinkedIn members with AI job titles – as opposed to only LinkedIn members with AI skills on their profiles – AI talent is considered to be a more comprehensive measure than AI skills.

Source: OECD.AI Policy Observatory (<https://oecd.ai>). Data year: 2021.

Appendix II: Sources and Definitions

2.2 Businesses

2.2.1 Firms with website

Firms with website (% of total) | 2021

The data for the Firms with website indicator consists of enterprise surveys conducted by the Organisation for Economic Co-operation and Development (OECD) and the World Bank. Data supplied by the OECD informs OECD countries, accession countries, or key partners, while all other country data sources the World Bank.

Source: OECD, ICT Access and Use by Businesses, OECD Telecommunications and Internet Statistics database (<https://doi.org/10.1787/9d2cb97b-en>); World Bank, Enterprise Surveys (www.enterprisesurveys.org). Data years: 2006-2021. Burkina Faso, Cabo Verde, and Mauritius use data from 2009.

2.2.2 GERD financed by business enterprise

GERD: Financed by business enterprise (% of total GERD) | 2020

The following indicator refers to the Gross expenditure on R&D (GERD) financed by a business enterprise as a percentage of total gross R&D expenditure. GERD or Intramural R&D expenditure consists of all spent funds on R&D performed within a statistical unit or sector of the economy during a specific period, regardless of the funding source.

Source: "UNESCO Institute for Statistics, UIS online database; Eurostat, Eurostat database, 2019; OECD, Main Science and Technology Indicators MSTI database, 2019 (2009-18). (<http://data.uis.unesco.org>; <https://ec.europa.eu/eurostat/data/database>; https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB). Data years: 2009-2020. Burkina Faso and Bolivia use data for 2009.

2.2.3 Knowledge intensive employment

Employment in knowledge-intensive services (% of workforce) | 2021

Sum of people in categories 1 to 3 as a percentage of total people employed, according to the International Standard Classification of Occupations (ISCO). Categories included in ISCO-08 are: 1 Managers; 2 Professionals; 3 Technicians and Associate Professionals. Where ISCO-08 data were not

available, ISCO-88 data were used. Categories included in ISCO-88 are: 1 Legislators, senior officials and managers; 2 Professionals; 3 Technicians and associate professionals.

Source: International Labour Organization (ILO), ILOSTAT Database of Labour Statistics

(<https://ilostat.ilo.org>). Data years: 2011–2021. New Zealand uses data from 2008; Tajikistan uses data from 2009.

2.2.4 Annual investment in telecommunication services

Annual investment in telecommunication services (US\$) | 2020

The Annual investment in telecommunication services indicator refers to the investments made within the financial year by entities that provide telecommunication networks and/or services (including fixed mobile and Internet services and the transmission of TV signals). Investments are considered any spent funds on the acquisition and upgrading of assets (usually referred to as CAPEX) less disinvestment owing to disposals. Fixed assets include tangible assets such as buildings and networks and intangible assets such as computer software and intellectual property.

The indicator corresponds to the gross fixed capital formation concept defined in the System of National Accounts 2008. The indicator also includes expenditures on initial installations and additions to existing installations where the usage is expected over an extended period of time. It excludes expenditures on fees for operating licenses and the use of radio spectrum. All values are notated in US\$.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators database 2022 (<http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>). Data years: 2016-2020.

2.2.5 GERD performed by business enterprise

GERD performed by business enterprise (% of GDP) | 2020

The indicator measures the gross expenditure on R&D performed by a business enterprise as a percentage of GDP. For the definition of GERD, see indicator 2.2.2.

Source: "UNESCO Institute for Statistics, UIS online database; Eurostat, Eurostat database, 2019; OECD, Main Science and Technology Indicators MSTI database, 2019 (2010–19). (<http://data.uis.unesco.org>; <https://ec.europa.eu/eurostat/data/database>; https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB). Data years: 2010-2020.

Appendix II:

Sources and Definitions

2.3 Governments

2.3.1 Government online services

Government Online Service Index | 2020

The *Government Online Service Index* (OIS) is a primary component of the *E-Government Development Index* (EGDI) that the United Nations Department of Economic and Social Affairs publishes. The OIS assesses the quality of a government's delivery of online services on a 0-to-1 (best) scale. Researchers create the assessment to evaluate "each country's national website in the native language, including the national portal, e-services portal, and e-participation portal, as well as the websites of the related ministries of education, labor, social services, health, finance, and environment, as applicable."

Source: United Nations Department of Economic and Social Affairs (UNDESA), UN E-Government Knowledgebase (<https://publicadministration.un.org/egovkb/en-us/>). Data year: 2020.

2.3.2 Publication and use of open data

Open Data Barometer | 2018

The Open Data Barometer indicator refers to the fourth edition of the *Open Data Barometer* index that provides a measure of how governments publish and use open data based on readiness (35%), implementation (35%), and impact (30%).^[iii]

[iii] Parenthesis note the weight of each dimension.

Source: World Wide Web Foundation (2018), Open Data Barometer 4th Edition – Global Report (<https://opendatabarometer.org/4thedition/>). Data years: 2016-2018

2.3.3 Government promotion of investment in emerging technologies

Average answer to survey questions concerning the extent to which government foster investment in five types of emerging technology | 2019

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The following indicator refers to the simple mean of the average answer of a similarly-worded question posed by the EOS regarding a government's ability to foster investment in five emerging technology sectors (Artificial intelligence, Robotics, App- and web-enabled markets, Big data analytics, and Cloud computing):

"In your country, to what extent does the government foster investment (public and private) in artificial intelligence and machine learning?" (1: not at all; 7: to a great extent)

Source: World Economic Forum, "Executive Opinion Survey 2018–2019." (<http://reports.weforum.org>). Data years: 2016-2019.

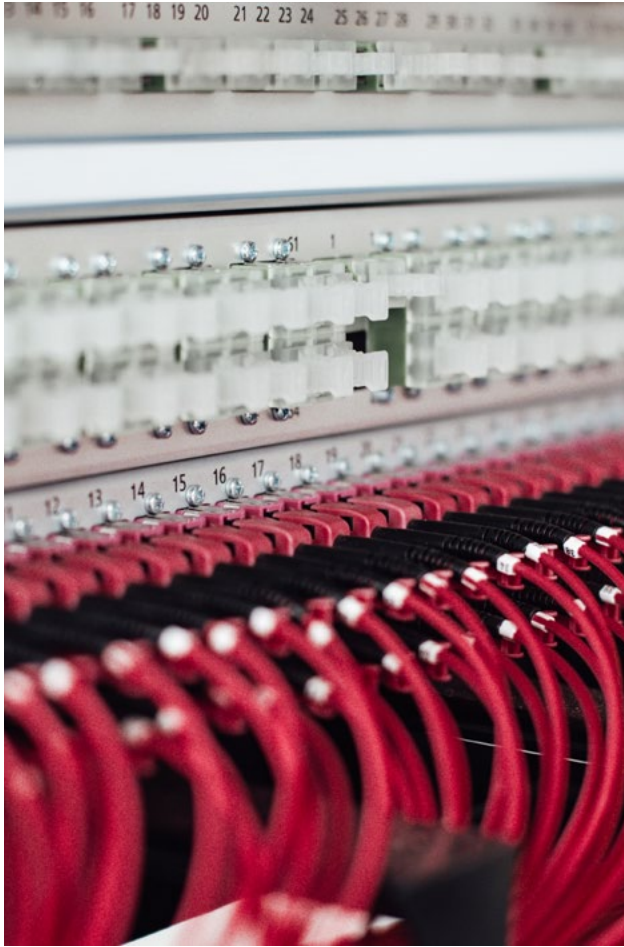
2.3.4 R&D expenditure by governments and higher education

Gross domestic expenditure on R&D performed by government and higher education institutions (% of GDP) | 2019

The following indicator refers to the combined expenditure by governments and higher education institutions on research and development (R&D) as a percentage of GDP. The government sector comprises all central, regional, and municipal government units. It excludes all public enterprises (public enterprises fall under the business enterprise category). Higher education institutions include an organization whose primary focus is on providing formal tertiary education (i.e. levels 5–8 of the International Standard Classification of Education, ISCED). The definition of R&D expenditure involves all current expenditure plus gross fixed capital expenditure for R&D performed by government and higher education institutions, no matter the source of funds.

Source: UNESCO Institute for Statistic, UIS.Stat (<http://data.uis.unesco.org/>). Data years: 2010-2019. Ghana, Kenya, and Morocco use data from 2010.

Appendix II: Sources and Definitions



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3rd pillar: Governance

3.1 Trust

3.1.1 Secure Internet servers

Secure Internet servers (per million population) | 2020

Secure Internet servers are servers that use encryption technology in Internet transactions.

Source: World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Data years: 2019-2020.

3.1.2 Cybersecurity

Global Cybersecurity Index | 2020

The *Global Cybersecurity Index* (GCI) measures the level of cybersecurity commitments made by individual countries. It is a composite index consisting of 25 indicators distributed across five main pillars: (1) Legal Measures, (2) Technical Measures, (3) Organizational Measures, (4) Capacity Building Measures, and (5) Cooperation Measures. Scores are standardized to a scale of 0–1.

Source: ITU (2021), Global Cybersecurity Index (GCI) 2020 (<https://www.itu.int/epublications/publication/global-cybersecurity-index-2020/en/>). Data year: 2020.

3.1.3 Online access to financial account

People who used a mobile phone or the internet to access a financial institution account in the past year (% with a financial institution account, age 15+) | 2017

The Online access to financial account indicator refers to the percentage of people who have a financial institution account that report using a mobile phone or the Internet to access their financial institution account within the past 12 months.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data year: 2017.

3.1.4 Internet shopping

People who used the Internet to buy something online in the past year (%) | 2021

The Internet shopping indicator refers to the percentage of respondents aged 15 years and older who have used the Internet in the past year to purchase goods and services online. The data sources a triennial survey carried out in more than 140 economies.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data years: 2017-2021.

Appendix II: Sources and Definitions

3.2 Regulation

3.2.1 Regulatory quality

Regulatory quality indicator | 2020

The regulatory quality indicator captures the perception of a government's ability to formulate and implement sound policies and regulations that permit and promote private sector development. Scores are standardized to a scale from -2.5 (worst) to 2.5 (best).

Source: World Bank, Worldwide Governance Indicators 2019 Update (www.govindicators.org). Data years: 2013-2020.

3.2.2 ICT regulatory environment

ICT Regulatory Tracker | 2020

The ICT regulatory environment indicator is based on the *ICT Regulatory Tracker* composite index that provides a measure of the existence and features of ICT legal and regulatory frameworks. The index covers 50 indicators distributed across four pillars: (1) Regulatory Authority, (2) Regulatory Mandate, (3) Regulatory Regime, and (4) Competition Framework. Scores are standardized to a scale of 0–2.

Source: International Telecommunication Union (ITU), ICT Regulatory Tracker 2019 (<https://www.itu.int/net4/itu-d/irt/>). Data year: 2020.

3.2.3 Regulation of emerging technologies

Average answer to survey questions concerning the extent to which the legal framework is adapting to five types of emerging technology | 2020

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement *The Global Competitiveness Report* in assessing issues that drive national competitiveness.

The Legal framework's adaptability to emerging technologies indicator refers to the simple mean of the average answer of a similarly-worded question posed by the EOS regarding five different emerging technologies (Artificial intelligence, Robotics, App- and web-enabled markets, Big data analytics, and Cloud computing):

"In your country, how adequately is the legal framework adapting to artificial intelligence, robotics, app- and web-enabled markets, big data analytics, and cloud computing? (1: not at all; 7: to a great extent - the legal framework is up-to-date)

Source: World Economic Forum, Executive Opinion Survey 2018-2019 and special calculation (<http://reports.weforum.org>). Data years: 2017-2018, 2020.

3.2.4 E-commerce legislation

Global Cyberlaw Tracker | 2020

The E-commerce legislation indicator refers to a country's adoption of e-commerce legislation. The *Global Cyberlaw Tracker* provides information on whether a country has adopted legislation or has a draft law pending adoption within four areas: electronic transactions, consumer protection, privacy and data protection, and cybercrime. Scores range from 0 (no legislation) to 4 (adopted legislation in all four areas).

Source: United Nations Conference on Trade and Development (UNCTAD), Global Cyberlaw Tracker (https://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Global-Legislation.aspx). Data year: 2020.

3.2.5 Privacy protection by law content

Average answer to the question: What does the legal framework to protect Internet users' privacy and their data stipulate? | 2021

The Privacy protection by law content indicator refers to responses on privacy protection given by multiple country experts on a 0–4 scale. With disagreement and measurement error taken into account, aggregated responses compute a probability distribution over country-year scores on a standardized interval scale. Point estimates are the median values of each distribution for every country-year. The scale of a measurement model variable is similar to a normal ("Z") score (e.g. typically between -5 and 5, with 0 approximately representing the mean for all country-years in the sample), though it does not necessarily follow a normal distribution. Data only includes estimates based on at least four ratings.

Source: Mechkova, Valeriya, Daniel Pemstein, Brigitte Seim, and Steven Wilson, (2020) Digital Society Project Dataset v2 (<http://digitalsocietyproject.org>). Data years: 2018-2021.

Appendix II: Sources and Definitions

3.3 Inclusion

3.3.1 E-Participation

E-Participation Index | 2020

The E-Participation Index assesses on a 0-to-1 (best) scale the quality, relevance, and usefulness of government websites. Usefulness refers to a website's ability to provide online information and participatory tools and services to citizens. Countries are benchmarked in three areas within the E-Participation Index: e-information, e-consultation, and e-decision-making. As such, the index indicates both the capacity and the willingness of the state to promote citizen participation in deliberative decision-making in public policy. It also indicates the reach of the state's own socially inclusive governance program.

Source: United Nations Department of Economic and Social Affairs (UNDESA), UN E-Government Knowledgebase (<https://publicadministration.un.org/egovkb/en-us/>). Data year: 2020.

3.3.2 Socioeconomic gap in use of digital payments

Difference between rich and poor income groups that made or received digital payments in the past year (% age 15+) | 2021

The following indicator refers to the share of the poorest 40% and the richest 60% income groups in a country that made or received digital payment within the past 12 months. Made digital payments include the use of "mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or report using the internet to pay bills or to buy something online." Received digital payments include receiving money "directly from or into a financial institution account or through a mobile money account." Final scores express the ratio of the share related to the poorest 40% over the share related to the richest 60%.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data years: 2014-2021.

3.3.3 Availability of local online content

Average answer to the question: In your country, to what extent are Internet content and services tailored to the local population (e.g. in the local language, meeting local demand)? (1 = Not at all; 7 = To a great extent) | 2018–19

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness.

Source: World Economic Forum, Executive Opinion Survey 2017–2020 (<http://reports.weforum.org>). Data years: 2017-2020.

3.3.4 Gender gap in Internet use

Difference between female and male population in using the Internet | 2021

The Gender gap in Internet use indicator refers to the share of women and men in a country that use the Internet. Scores are calculated as the ratio of the share related to the female population over the share related to the male population.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators database 2022 (<http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>). Data years: 2010-2021.

3.3.5 Rural gap in use of digital payments

Difference between the rural population and the total population that made or received digital payments in the past year (% age 15+) | 2021

The following indicator refers to the share of the rural population against a country's total population that made or received digital payments within the past 12 months. Made digital payments include the use of "mobile money, a debit or credit card, or a mobile phone to make a payment from an account, or report using the internet to pay bills or to buy something online." Received digital payments include receiving money "directly from or into a financial institution account or through a mobile money account." Final scores express as a ratio the share related to the rural population over the share related to the total population.

Source: World Bank, Global Findex Database (<https://globalfindex.worldbank.org/>). Data year: 2021.

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4th pillar: Impact

4.1 Economy

4.1.1 High-tech and medium-high-tech manufacturing

High-tech and medium-high-tech manufacturing (% of total manufacturing output) | 2019

High-technology and medium-high-technology output as a percentage of total manufacturing output, on the basis of the OECD classification of Technology Intensity

Definition (<https://www.oecd.org/sti/ind/48350231.pdf>), itself based on International

Standard Industrial Classification (ISIC) Revision 4 and Revision 3, and using data from the INDSTAT 2 and INDSTAT 4 databases of the United Nations Industrial Development Organization (UNIDO).

Source: United Nations Industrial Development Organization (UNIDO), Industrial Statistics

Database INDSTAT 2 2022 and INDSTAT 4 2022 (<https://stat.unido.org>). Data years: 2012–2020.

4.1.2 High-tech exports

High technology manufactures exports (% of total exports of manufactured goods) | 2020

High-value exports refer to high-technology manufactures (electronic, electrical, and other) calculated according to the Lall classification as an export percentage of all manufactured goods. The classification of exports is based on Lall, S. (2000), *The Technological Structure and Performance of Developing Country Manufactured Exports*, *Oxford Development Studies*, 28(3), 1985–1989

Source: World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Data years: 2019-2020.

4.1.3 PCT patent applications

Number of Patent Cooperation Treaty (PCT) applications (per billion PPP\$ GDP) | 2021

A PCT application refers to an international patent application filed through the WIPO-administered Patent Cooperation Treaty. The PCT system makes it possible to seek patent protection for an invention simultaneously in a number of countries by filing a single international patent application. The origin of PCT applications is defined by the

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residence of the first-named applicant. Data are available only for those economies which are PCT Contracting States (156 to date). Data are scaled by PPP\$ GDP (billions).

Source: World Intellectual Property Organization, Intellectual Property Statistics (<https://www.wipo.int/ipstats>); and International Monetary Fund, World Economic Outlook Database, October 2021 (<https://www.imf.org/en/Publications/WEO/weo-database/2021/October>). Data year: 2021.

4.1.4 Domestic market size

Domestic Market Size | 2021

The domestic market size is measured by GDP based on the PPP valuation of country GDP, in current international dollars (billions).

Source: International Monetary Fund, World Economic Outlook Database, October 2021 (<https://www.imf.org/en/Publications/WEO/weo-database/2021/October>). Data year: 2021.

4.1.5 Prevalence of gig economy

Average answer to the question: In your country, to what extent is the online gig economy prevalent? [1 = Not at all; 7 = To a great extent] | 2020

The annual World Economic Forum's Executive Opinion Survey (EOS) gathers information from business leaders on topics with scarce or non-existent data. It is part of the effort to supplement The Global Competitiveness Report in assessing issues that drive national competitiveness. The gig economy refers to a labor market specific to digital platforms and work arrangements focused on short-term contracts and task-based work.

Source: World Economic Forum, Executive Opinion Survey 2017–2020 (<http://reports.weforum.org>). Data years: 2017–2020.

4.1.6 ICT services exports

Telecommunications, computers, and information services exports (% of total trade) | 2020

Telecommunications, computer and information services exports as a percentage of total trade according to the Extended Balance of Payments Services Classification EBOPS 2010, coded SI: Telecommunications, computer, and information services. Values are based on the classification of the sixth (2009) edition of the International Monetary Fund's Balance of Payments and International Investment Position Manual and Balance of Payments database. For the definition of total trade, see indicator 5.3.1.

Source: World Trade Organization and United Nations Conference on Trade and Development, Trade in Commercial Services database (<https://stats.wto.org>). Data years: 2016–2020.

4.2 Quality of Life

4.2.1 Happiness

Happiness score (life ladder) | 2021

Happiness refers to the national average response to the following survey question included in the Gallup World Poll: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" The indicator is also known as the Cantril life ladder, life ladder, or subjective well-being.

Source: The Gallup World Poll (<https://www.gallup.com/analytics/232838/world-poll.aspx>), sourced from Helliwell, John F., Richard Layard, Jeffrey Sachs, and Jan-Emmanuel De Neve, eds. 2020. World Happiness Report 2020, New York: Sustainable Development Solutions Network (<https://worldhappiness.report/>). Data years: 2011–2021.

4.2.2 Freedom to make life choices

Freedom to make life choices score | 2021

Freedom to make life choices refers to the national average response to the following survey question included in the Gallup World Poll: "Are you satisfied or dissatisfied with your freedom to choose what you do with your life?"

Source: The Gallup World Poll (2005–2019) (<https://www.gallup.com/analytics/232838/world-poll.aspx>), sourced from Helliwell, John F., Richard Layard, Jeffrey Sachs, and Jan-Emmanuel De Neve, eds. 2020. World Happiness Report 2020, New York: Sustainable Development Solutions Network (<https://worldhappiness.report/>). Data years: 2011–2021.

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4.2.3 Income inequality

Gini index | 2021

The Gini index is a measure of income inequality within an individual economy. At a technical level, it is based on a Lorenz curve that “plots the cumulative percentages of total income received against the cumulative number of recipients.” The Gini index also refers to the area between the Lorenz curve and the (hypothetical) line of perfect equality. The scale of the Gini index ranges from 0 (perfect equality) to 100 (perfect inequality).

Source: World Bank, World Development Indicators (<http://data.worldbank.org/data-catalog/world-development-indicators>). Data years: 2011-2021.

4.2.4 Healthy life expectancy at birth

Healthy life expectancy at birth (years) | 2019

The Healthy life expectancy at birth indicator expresses the “average number of years that a person can expect to live in ‘full health’ by taking into account years lived in less than full health due to disease and/or injury.” The number of years lost due to ill health in a country is estimated by the disability rate per capita (adjusted for independent comorbidity) broken down by age and sex.

Source: World Health Organization, Global Health Observatory (GHO) Database (<https://www.who.int/gho>). Data year: 2019.

4.3 SDG Contribution

4.3.1 SDG 3: Good Health and Well-Being

Universal health coverage | 2019

The following indicator refers to the Universal health coverage (UHC) service coverage index and is one of the official indicators related to SDG 3: Ensure healthy lives and promote well-being for all at all ages (indicator 3.8.1). The UHC service coverage index encompasses essential health services that include reproductive, maternal, newborn and child health, infectious diseases, service capacity and access, and non-communicable diseases among the general and the most disadvantaged population. Scores report on a scale of 0–100 and compute the geometric mean of 14 tracer indicators related to health service coverage. The tracer indicators on service coverage compile into four components: (1) Reproductive, maternal, newborn and child health, (2) Infectious diseases, (3) Noncommunicable diseases (4) Service capacity and access.

Source: World Health Organization. Tracking universal health coverage: 2019 Global Monitoring Report, Geneva, WHO 2019, (http://www.who.int/healthinfo/universal_health_coverage/report/2019/en/) Sourced from United Nations, Open SDG Data Hub (<http://www.sdg.org>). Data year: 2019.

4.3.2 SDG 4: Quality Education

PISA average scores in reading, mathematics, and science | 2018

PISA is the OECD’s (Organisation for Economic Co-operation and Development) Programme for International Student Assessment. PISA measures 15-year-olds’ ability to use their reading, mathematics and science knowledge skills. Results from PISA indicate the quality and equity of learning outcomes attained around the world. The 2018 PISA survey is

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the seventh round of the triennial assessment. The indicator is built using the average of the reading, mathematics and science scores for each country. PISA scores are set in relation to the variation in results observed across all test participants in a country. There is, theoretically, no minimum or maximum score in PISA; rather, the results are scaled to fit approximately normal distributions, with means around 500 score points and standard deviations around 100 score points. The 2018 scores for China correspond to the provinces/municipalities of Beijing, Shanghai, Jiangsu and Zhejiang only. The 2018 scores for Azerbaijan correspond only to the capital Baku. The 2018 average scores for Spain are based only on the scores for mathematics and science, as the reading scores were not published by the OECD due to implausible student response behavior.

Source: OECD Programme for International Student Assessment (PISA) (<https://www.oecd.org/pisa/>). Data years: 2015–2018.

4.3.3 SDG 5: Women's economic opportunity

Women Business and the Law Index Score (scale 1-100) | 2020

Women, Business and the Law tracks progress toward legal equality between men and women in 190 economies. Data are collected with standardized questionnaires to ensure comparability across economies. Questionnaires are administered to over 2,000 respondents with expertise in family, labor, and criminal law, including lawyers, judges, academics, and members of civil society organizations working on gender issues. Respondents provide responses to the questionnaires and references to relevant laws and regulations. The Women, Business and the Law team collects the texts of these codified sources of national law - constitutions, codes, laws, statutes, rules, regulations, and procedures - and checks questionnaire responses for accuracy. Thirty-five data points are scored across eight indicators of four or five binary questions, with each indicator representing a different phase of a woman's career. Indicator-level scores are obtained by calculating the unweighted average of the questions within that indicator and scaling the result to 100. Overall scores are then calculated by taking the average of each indicator, with 100 representing the highest possible score.

Source: World Bank: Women, Business and the Law (<https://wbl.worldbank.org/>). Data year: 2020.

4.3.4 SDG 7: Affordable and Clean Energy

Energy intensity | 2019

The Affordable and Clean Energy indicator refers to the energy intensity level of primary energy (defined in megajoules per constant 2011 purchasing power parity GDP) and is an official indicator related to SDG 7: Ensure access to affordable, reliable, sustainable, and modern energy for all (indicator 7.3.1).

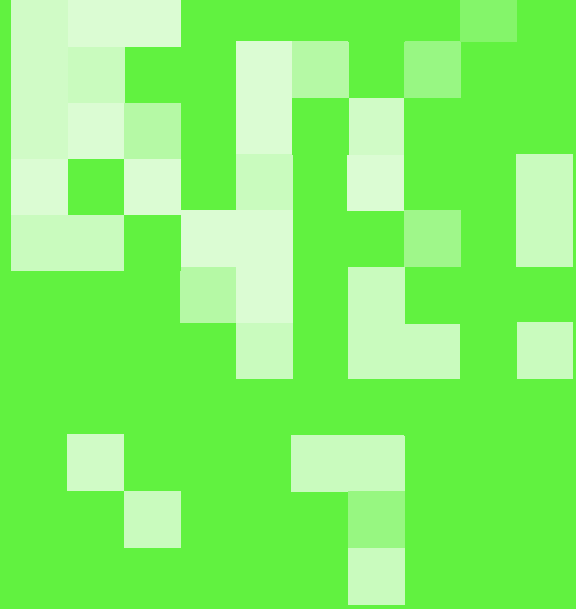
Source: Energy Balances, UN Statistics Division (2021) and IEA (2021), World Energy Balances. Sourced from United Nations, Open SDG Data Hub (<http://www.sdg.org>). Data year: 2019.

4.3.5 SDG 11: Sustainable Cities and Communities

Urban safety and sustainability | 2019

Two indicators capture the safety and sustainability of cities: urban pollution and household. Urban pollution officially relates to SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable (indicator 11.6.2) and is measured by the annual mean concentration of fine particulate matter in urban areas less than 2.5 microns in diameter. Mortality rate attributed to household and ambient air pollution is indicator 3.9.1 in the SDG and it further measures mortality attributable to the joint effects of household and ambient air pollution can be expressed as : Number of deaths Death rate Death rates are calculated by dividing the number of deaths by the total population (or indicated if a different population group is used, e.g. children under 5 years). Evidence from epidemiological studies have shown that exposure to air pollution is linked, among others, to the important diseases taken into account in this estimate: Acute respiratory infections (estimated for all ages); Cerebrovascular diseases in adults (estimated above 25 years); Ischaemic heart diseases in adults (estimated above 25 years); Chronic obstructive pulmonary disease in adults (estimated above 25 years); and Lung cancer in adults (estimated above 25 years).

Source: World Health Organization, Global Health Observatory (GHO) Database (<https://www.who.int/data/gho/data/indicators/>). Data year: 2019.



Appendix II: JRC Statistical Audit of the 2022 Network Readiness Index



Appendix III: JRC Statistical Audit of the 2022 Network Readiness Index

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3.1 Introduction

The Networked Readiness Index (NRI) was first published in 2002 by the World Economic Forum as part of the Global Information Technology Report. Over the last two decades, the NRI has provided a holistic view of how economies can deploy technology to enhance development and global competitiveness.

In addition to the analysis on how economies have dealt with and continue to fare in the face of present-day challenges, the 2022 edition of the index (NRI 2022, henceforth) focuses on the role of younger generations in leading the world into the information age. As indicated by the developers, recent trends indicate that future-readiness will largely rely on three major currencies: data, talent, and learning. On all those fronts, we are only seeing the beginning of what tomorrow will bring. The future is still very young, and we all have a role to play in shaping it into the future we want.

The NRI 2022's overall structure is conceptually in line with respect to NRI 2021. The index consists of four pillars (Technology, People, Governance, and Impact) that make up the fundamental dimensions of network readiness. Each of the fundamental pillars is divided into additional sub-pillars, further subdivided in 59 indicators. The current version of the index has been subject to several adjustments. More precisely, the methodology of some indicators was revised, one new indicator was introduced without replacing the existing one, three indicators were dropped without replacement, four indicators were introduced to replace previous indicators, and five indicators changed code. Each pillar has the same weight in the computation of the index. All pillars are composed of three sub-pillars that are weighted equally. The number of indicators making up each sub-pillar may vary. Although they are equally weighted in their respective sub-pillars, different within-pillar numerosity of the indicators into different contribution of each individual indicator in the overall index. The inclusion of countries and indicators relied on a double threshold approach (70% coverage at the pillar level, and 40% coverage at the sub-pillar level), resulting in a total of 131 countries.

The European Commission's Competence Centre on Composite Indicators and Scoreboards (COIN) at the Joint Research Centre (JRC) has been invited for the second time to audit the index. As in previous edition, the present JRC-COIN audit focuses on the statistical soundness of the multi-level structure of the index as well as on the impact of key modelling assumptions on the results. The independent statistical assessment of the NRI 2022 provided by the JRC-COIN guarantees the transparency and reliability of the index for both policymakers and other stakeholders, thus facilitating more accurate priority setting and policy formulation in the respective field.

The JRC assessment of the NRI 2022 presented here focuses on two main issues: the statistical coherence of the structure, and the impact of key modelling assumptions. The statistical analysis is based on the adequacy of aggregating indicators into pillars, and pillars into the overall index.

As in past NRI report, the JRC-COIN analysis complements the reported country rankings for the NRI index 2022 with simulated intervals, in order to better appreciate the robustness of these ranks to the modelling choices. Finally, the JRC-COIN analysis includes an assessment of the added value of the NRI 2022 and a measure of distance to the efficient frontier of innovation by using data envelopment analysis.

3.2 Conceptual framework

The definition of a clear and transparent conceptual framework is one of the most important steps in the construction of a composite indicator. The NRI 2022 is a multidimensional index comprising four pillars: *Technology*; *People*; *Government*; and *Impact*. Each pillar is further partitioned into three sub-pillars, each containing a different number of indicators (for a total of 59).

The structure of the NRI 2022 is summarized in **Table 1**. The selection of indicators was based on their conceptual relevance, literature reviews, expert opinions, and country coverage. Compared to NRI 2021, the methodology of three indicators was revised, one new indicator was introduced without replacing an existing one, three indicators were dropped without replacement, four indicators were introduced to replace previous indicators, one indicator changed name, and six indicators changed code. The last column of **Table 1** provides a summary of adjustments to the NRI 2022 framework.

Even though the aim of this statistical audit is not to address the conceptual relevance of the indicators underpinning the framework, it is worth noting that the developers have used a parsimonious approach by selecting a rather balanced number of indicators across pillars/sub-pillars.

Table 1. Framework of the NRI 2022

Pillar	Sub-pillar	Indicator	Note	
1. TECHNOLOGY	1.1 Access	1.1.1 Mobile tariffs		
		1.1.2 Handset prices		
		1.1.3 FTTH/building Internet subscriptions	Replaces "Internet access"	
		1.1.4 Population covered by at least a 3G mobile network	Changed code	
		1.1.5 International Internet bandwidth		
		1.1.6 Internet access in schools		
	1.2 Content	1.2.1 GitHub commits		
		1.2.2 Internet domain registrations	Changed code	
		1.2.3 Mobile apps development	Changed code	
		1.2.4 AI scientific publications	Methodology revised /Changed Code	
	1.3 Future Technologies	1.3.1 Adoption of emerging technologies		
		1.3.2 Investment in emerging technologies		
		1.3.3 Robot density		
		1.3.4 Computer software spending		
	2. PEOPLE	2.1 Individuals	2.1.1 Mobile broadband internet traffic within the country	Replaces "Active mobile broadband subscriptions"
			2.1.2 ICT skills in the education system	
2.1.3 Use of virtual social networks				
2.1.4 Tertiary enrollment				
2.1.5 Adult literacy rate				
2.1.6 AI talent concentration			New indicator	
2.2 Businesses		2.2.1 Firms with website		
		2.2.2 GERD financed by business enterprise		
		2.2.3 Professionals	Methodology revised	
		2.2.4 Annual investment in telecommunication services	Changed code	
		2.2.5 GERD performed by business enterprise	Changed code	
2.3 Governments		2.3.1 Government online services		
		2.3.2 Publication and use of open data		
		2.3.3 Government promotion of investment in emerging technologies		
		2.3.4 R&D expenditure by governments and higher education		
3. GOVERNANCE	3.1 Trust	3.1.1 Secure Internet servers		
		3.1.2 Cybersecurity		
		3.1.3 Online access to financial account		
		3.1.4 Internet shopping		
	3.2 Regulation	3.2.1 Regulatory quality		
		3.2.2 ICT regulatory environment		
		3.2.3 Regulation of emerging technologies	Changed name from "Legal framework's adaptability to emerging technologies."	
		3.2.4 E-commerce legislation		
		3.2.5 Privacy protection by law content		
	3.3 Inclusion	3.3.1 E-Participation		
		3.3.2 Socioeconomic gap in use of digital payments		
		3.3.3 Availability of local online content		
		3.3.4 Gender gap in Internet use		
		3.3.5 Rural gap in use of digital payments		

Pillar	Sub-pillar	Indicator	Note
4. IMPACT	4.1 Economy	4.1.1 High-tech and medium-high-tech manufacturing	
		4.1.2 High-tech exports	
		4.1.3 PCT patent applications	
		4.1.4 Domestic market size	Replaces "GDP per person engaged"
		4.1.5 Prevalence of gig economy	
		4.1.6 ICT services exports	
	4.2 Quality of Life	4.2.1 Happiness	
		4.2.2 Freedom to make life choices	
		4.2.3 Income inequality	
		4.2.4 Healthy life expectancy at birth	
	4.3 SDG Contribution	4.3.1 SDG 3: Good Health and Well-Being	
		4.3.2 SDG 4: Quality Education	
		4.3.3 SDG 5: Women's economic opportunity	Replaces "Females employed with advanced degrees"
		4.3.4 SDG 7: Affordable and Clean Energy	
		4.3.5 SDG 11: Sustainable Cities and Communities	Methodology changed

Source: Developers of the index and the European Commission's Joint Research Centre, 2022.

3.3 Data quality and availability

3.3.1 Treatment of missing data

Regarding data coverage, the general practice is to establish a threshold above which an indicator is excluded from the framework. For the NRI 2022 development, the inclusion of countries and indicators is based on the "double threshold" approach. In terms of country coverage, this means that only countries with data available for at least 70% of all indicators are included in the NRI 2022. In addition, countries need to pass a sub-pillar level data availability of at least 40%. In terms of indicator coverage, only indicators with availability of at least 50% of countries are included in the NRI 2022, with only exception, namely the new indicator "AI talent concentration" (i2.1.6) characterized by a very high incidence of missing values (69%).

Despite the absence of an absolute golden standard, in the statistical assessment of the NRI 2021 index, the JRC-COIN suggested including only indicators with a maximum of one-third of missing values (33%). However, when an indicator represents a very specific and central concept, a looser threshold of 40% missing countries could also be integrated into the structure. In this respect, the newly added indicator (i2.1.6) still generates concerns since the incidence of missing values is very high and well above the suggested exceptional lower limit of 40%. In light of this evidence (and some additional concerns that will be raised in the rest of this statistical audit), the JRC – COIN suggests considering the exclusion of this indicator from future editions of the index, if data coverage cannot be improved since its role in the composite may be unpredictable.

Moreover, the following indicators should be taken under observation as well, with the aim of improving their coverage or excluding/modifying them in future editions of the index (% of missing values in parenthesis):

- [i1.1.6 International Internet bandwidth \(38.2%\)](#);
- [i1.3.3. Robot density \(57.3%\)](#); and
- [i4.3.2. SDG4 Quality education \(39.7%\)](#).

The audit also examined the presence of outliers that could potentially bias the effect of the indicators on the aggregates. JRC-COIN recommends an approach for outlier identification based on the values of skewness and kurtosis,¹⁷ *i.e.*, when the variables simultaneously have an absolute skewness higher than 2.0 and a kurtosis higher than 3.5.

According to the developers, outliers were detected in 19 indicators, eight of which had fewer than five outliers and eleven had five or more outliers. Prior to normalisation, these were treated according to the following rule: indicators with no more than four outliers were winsorised; those with five or more outliers were transformed by natural logarithms. One indicator, namely "AI scientific publications" (i1.2.4) neither winsorisation nor multiplication by a given factor plus logarithmic transformation brought the series within the desired parameters. For this particular case, a variant of the Box-Cox transformation, defined as Yeo-Johnson, was applied.

The approach followed by developers to treat the outliers seems correct. Nevertheless, we observed some inconsistencies while examining the data. First, starting from the non-normalised data, we detect only 18 indicators with outliers. Second, after examining the normalized data, the JRC-COIN realized that there are still two indicators (i1.1.4 "Population covered by at least a 3G mobile network" and i2.2.4 "Annual investment in telecommunication services") with an absolute skewness higher than 2.0 and a kurtosis higher than 3.5 (**Table 2**). Both indicators show negative skewness, which suggests that the minimum value of the indicators is far away from the rest of the distribution.

In the statistical assessment of the NRI 2021 index, this problem has already been emphasized. At that time, it concerned four different indicators. The JRC-COIN then focused on two of them (one of which is actually the indicator i1.1.4, “Population covered by at least a 3G mobile network”) and performed a sensitivity analysis comparing the official NRI 2021 rankings and the ones that would have been obtained from the exclusion of the two variables. The difference between the two models did not seem to be particularly large. As a result, the JRC-COIN suggested considering these indicators as good candidates for further refinement of the index. Following this suggestion, we still believe it is reasonable to take this advice into account for next Network Readiness Index updates.

3.3.2 Normalisation

The indicators are rescaled to a 0-100 scale, with higher values denoting better performances. This is a common and usually desired practice in the construction of composite indicators. The normalisation is done using all of the countries for which data are available in order to reflect more closely the global situation for each indicator. The reverse normalization formula is applied to indicators where higher values imply worse outcomes. For the NRI 2022 edition of the index, reverse normalisation was needed for three indicators: i4.2.3 (“Income inequality”), i4.3.4 (“SDG 7: Affordable and clean energy”) and i4.3.5 (“SDG 11: Sustainable Cities and Communities”).

Table 2. Summary statistics of indicators comprised in the NRI 2022

Indicator	N	Missing	Mean	Min	Max	Std	Skew	Kurt
i1.1.1	131	0	56.9	0	100	23.1	-0.355	-0.605
i1.1.2	131	0	54.7	0	100	21.9	0.0549	-0.435
i1.1.3	105	19.8	30.1	0	100	19.5	0.761	0.679
i1.1.4	131	0	96.2	0	100	11.1	-6.07	46
i1.1.5	130	0.8	70.2	0	100	12.6	-1.31	6.77
i1.1.6	81	38.2	62.3	0	100	38.3	-0.381	-1.5
i1.2.1	130	0.8	18.3	0	100	25.3	1.65	1.84
i1.2.2	131	0	16	0	100	24.4	1.9	3
i1.2.3	131	0	75.1	0	100	19.7	-1.08	1.51
i1.2.4	99	24.4	51.6	0	100	23.8	-0.112	-0.79
i1.3.1	126	3.8	49.9	0	100	22.7	0.266	-0.441
i1.3.2	130	0.8	44.6	0	100	20.9	0.616	-0.24
i1.3.3	56	57.3	19.1	0	100	22.6	1.9	4.2
i1.3.4	122	6.9	22.4	0	100	18	1.14	1.83
i2.1.1	118	9.9	17.3	0	100	20	1.82	3.58
i2.1.2	131	0	47.2	0	100	22.5	0.0491	-0.65
i2.1.3	131	0	56.5	0	100	27.7	-0.783	-0.706
i2.1.4	127	3.1	31.6	0	100	20.9	0.299	-0.442
i2.1.5	106	19.1	82.6	0	100	21.8	-1.76	2.81
i2.1.6	41	68.7	27.6	0	100	25.7	1.87	3.05
i2.2.1	121	7.6	52.5	0	100	25.9	-0.0839	-1.07
i2.2.2	105	19.8	39.4	0	100	29.1	0.155	-1.16
i2.2.3	130	0.8	38.7	0	100	25.1	0.359	-0.965
i2.2.4	112	14.5	77.9	0	100	10.5	-3.54	26.1
i2.2.5	96	26.7	17.3	0	100	22.3	1.74	2.92
i2.3.1	130	0.8	65.6	0	100	21.5	-0.65	-0.124
i2.3.2	105	19.8	37.2	0	100	26.1	0.731	-0.271
i2.3.3	126	3.8	41.7	0	100	22	0.5	-0.179
i2.3.4	111	15.3	35.3	0	100	25.5	0.549	-0.553
i3.1.1	131	0	56.3	0	100	23.5	-0.0512	-1.04
i3.1.2	130	0.8	67.6	0	100	30.7	-0.748	-0.867
i3.1.3	123	6.1	35.4	0	100	24.9	0.806	-0.25
i3.1.4	114	13	36	0	100	29.9	0.518	-1.12

Indicator	N	Missing	Mean	Min	Max	Std	Skew	Kurt
i3.2.1	131	0	47.3	0	100	23.6	0.236	-0.843
i3.2.2	131	0	77.7	0	100	17	-1.59	3.94
i3.2.3	118	9.9	47.6	0	100	24.4	0.0518	-0.821
i3.2.4	130	0.8	84.1	0	100	26	-1.72	2.48
i3.2.5	131	0	62.9	0	100	20.8	-0.631	0.0653
i3.3.1	130	0.8	66.3	0	100	23.1	-0.518	-0.572
i3.3.2	127	3.1	69.7	0	100	23.8	-0.545	-0.554
i3.3.3	131	0	59.4	0	100	23.7	-0.284	-0.771
i3.3.4	106	19.1	64.3	0	100	19.4	-1.97	4
i3.3.5	123	6.1	59.1	0	100	19.8	-0.888	0.381
i4.1.1	107	18.3	33.6	0	100	24.3	0.543	-0.622
i4.1.2	122	6.9	31.1	0	100	26.3	0.711	-0.415
i4.1.3	116	11.5	17.3	0	100	25.4	1.75	2.2
i4.1.4	131	0	52.4	0	100	17.8	0.0637	0.127
i4.1.5	126	3.8	44.6	0	100	22.2	0.279	-0.453
i4.1.6	130	0.8	29.9	0	100	20.1	0.723	0.443
i4.2.1	127	3.1	61.2	0	100	20.5	-0.43	-0.286
i4.2.2	127	3.1	70.7	0	100	19	-1.1	1.71
i4.2.3	117	10.7	64.4	0	100	20.3	-0.746	0.349
i4.2.4	130	0.8	68.3	0	100	20.6	-0.801	0.0223
i4.3.1	130	0.8	65	0	100	24	-0.648	-0.502
i4.3.2	79	39.7	50	0	100	21.5	-0.204	-0.666
i4.3.3	131	0	72.5	0	100	22.1	-1.21	1.57
i4.3.4	131	0	73.5	0	100	20	-1.69	3.14
i4.3.5	130	0.8	63.8	0	100	22.7	-0.306	-0.732

Note: The cells with the percentage of missing values exceeding 33%, as well as those with the values of skewness and kurtosis simultaneously exceeding the threshold are written in light red.

3.4 Statistical coherence

The assessment of statistical coherence consists of a multi-level analysis of the correlations of indicators, and a comparison of NRI 2022 rankings with their constituent goals.¹⁸

3.4.1 Correlation analysis

The statistical coherence of an index should be considered a necessary but not sufficient condition for a sound index. Given that the statistical analysis is mostly based on correlations, the correspondence of every index to a real-world phenomenon needs to be critically addressed by developers and experts, because “correlations do not necessarily represent the real influence of the individual indicators on the phenomenon being measured” (OECD and JRC, 2008).¹⁹ This influence relies on the interplay between both conceptual and statistical soundness. The degree of coherence between the conceptual framework and the statistical structure of the data is an important factor for the reliability of an index.

Correlation analysis is used to assess the extent to which the observed data supports the conceptual framework. Within each level of the index, there should ideally be positive significant correlations. The JRC-COIN recommends a correlation threshold of 0.3 above which the correlation is considered high enough to say that two elements share a significant amount of their variability. The framework should avoid redundancy, which can be identified by very high correlations (≥ 0.92). This is due to the fact that if two indicators are collinear, and it may result in double counting (and thus over-weighting) of the same phenomenon.

In what follows, we report the correlations between indicators in the same pillar, between indicators and their aggregates (sub-pillar, pillars, and NRI 2022), and finally between sub-pillars, pillars and the NRI 2022 index.

Correlation analysis between indicators and aggregates

Figure 1 shows the correlation coefficients between indicators within the same pillar. Boxes within each pillar identify indicators grouped into respective sub-pillars. The correlations within the “Technology pillar” (i1), as well as in the respective sub-pillars, are mostly positive and significant, and above the threshold level (0.30), with the exception of the “Content” (i1.1) sub-pillar, where the correlation of i.1.1.3 (“FTTH/building Internet subscriptions”) is significantly different from zero only with the indicators i1.1.1 (“Mobile tariffs”) and 1.1.5 (“International Internet bandwidth”). This evidence may suggest that the i1.1.3 indicator does not fully cooperate with the others, which could reduce the impact of the aggregate to which it belongs in the following aggregation steps. Indeed, as emerges from **Figure 2**, the correlation between i.1.1.3 and its corresponding pillar and NRI 2022 is lower than the other (around 0.30).

As for the “People pillar” (i2), the correlation structure for two indicators within the “Individuals” sub-pillar (i2.1) is weak and often not significantly different from zero. Moreover, the indicator i2.1.6 (“AI talent concentration”) negatively correlates with i2.1.5 (“Adult literacy rate”) and does not significantly differ from zero for the other indicators, with the exception of i.2.1.1 (“Mobile broadband internet traffic within the country”), where it is positive and statistically significant.

A strong negative correlation between the two aforementioned indicators suggests that they are related to each other but in a conflicting way. Furthermore, statistically insignificant correlations suggest that i2.1.6

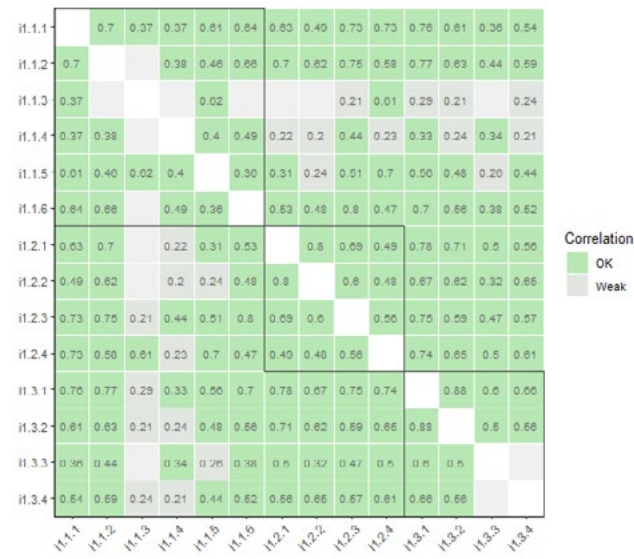
does not entirely cooperate with the other indicators in the respective sub-pillar. However, when looking at the correlations between the indicators and their aggregates (**Figure 2**), the performance of i2.1.6 is generally good at the sub-pillar and pillar level, while it does not seem to contribute to the overall index. Indeed, the correlation between i2.1.6 and NRI 2022 is not statistically different from zero. It is worth noting, however, that the interpretation of this result should be taken with caution since the share of missing values associated to this indicator is extremely high (68.7%).

The relationship between indicators within the remaining two pillars is generally satisfactory. Most of the correlations are above 0.30 and below 0.92, and no indicator is negatively correlated with the other elements of the respective sub-pillar, which suggests that most of the sub-pillars in the “Governance” (i3) and “Impact” (i4) pillars are statistically consistent. The only exception is the sub-pillar “SDG Contribution” (i4.3), where the indicator i4.3.4 (“SDG 7: Affordable and Clean Energy”) weakly correlates with the other indicators, but not in a critical way.

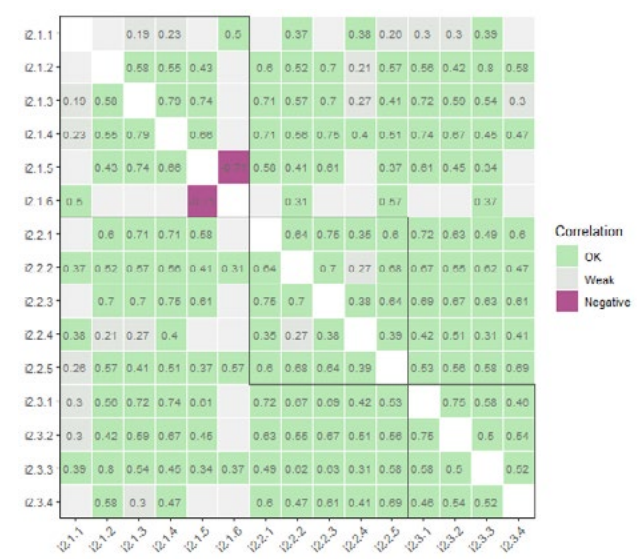
A general suggestion would be to continue monitoring the indicators with very low and statistically insignificant correlations and their position in the framework for future index editions in order to check their behaviour and, if necessary, modify or substitute them. Particular attention is suggested to the “People pillar” (i2) and the indicator i2.1.6 showing a negative and non-significant correlation. We would particularly suggest its substitution with another indicator that would fit conceptually into the pillar, unless a better data coverage is available and it determines an improved association with the other indicators.

Figure 1. Correlation between indicators in the same pillar

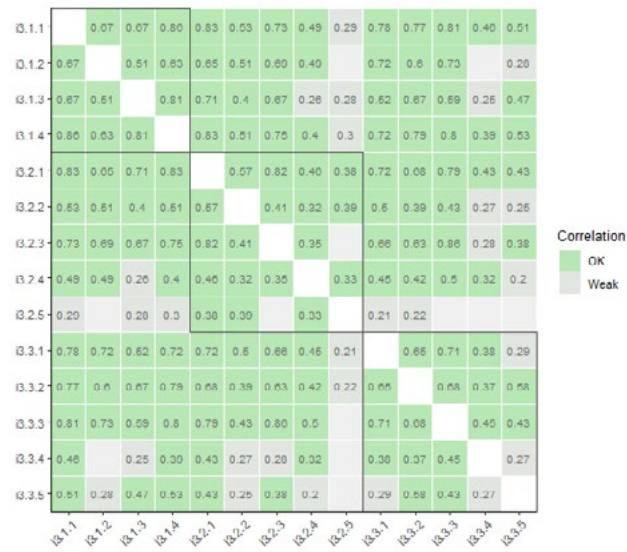
Technology pillar (i1)



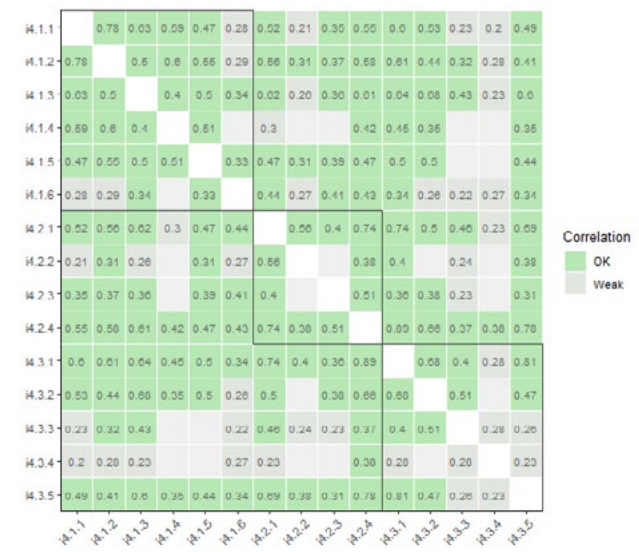
People pillar (i2)



Governance pillar (i3)



Impact pillar (i4)

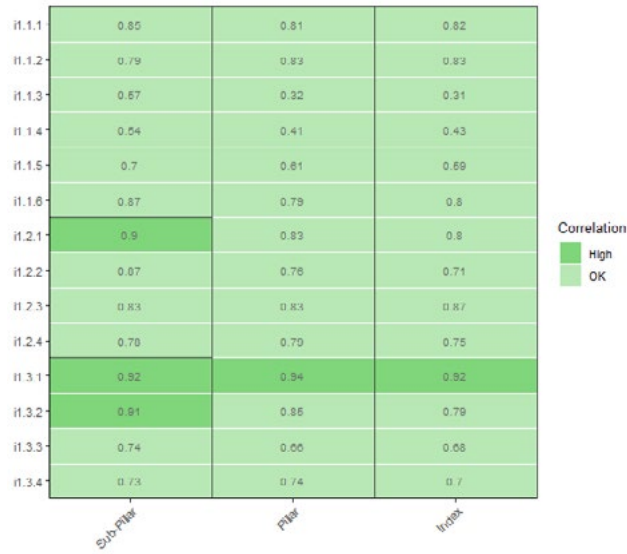


Source: European Commission's Joint Research Centre, 2022.

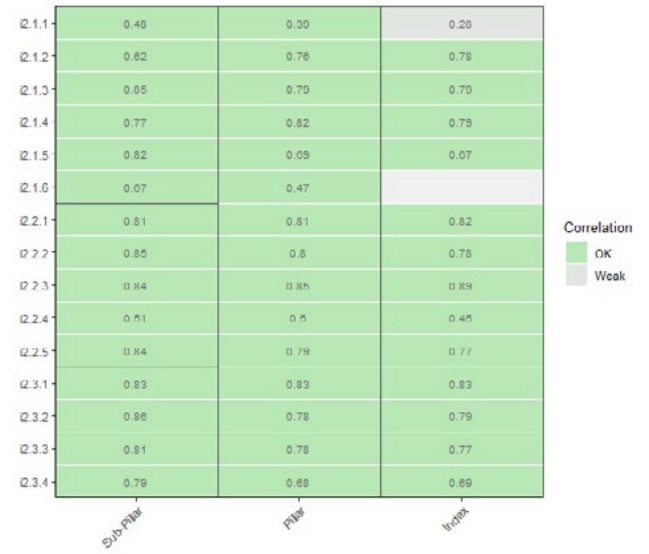
Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green. Weak correlations (lower or equal than 0.30) are written in grey. Statistically insignificant correlations are those with the Pearson correlation coefficients lower than 0.17 and are displayed as empty cells.

Figure 2. Correlations between indicators and their aggregates (sub-pillars, pillars and index)

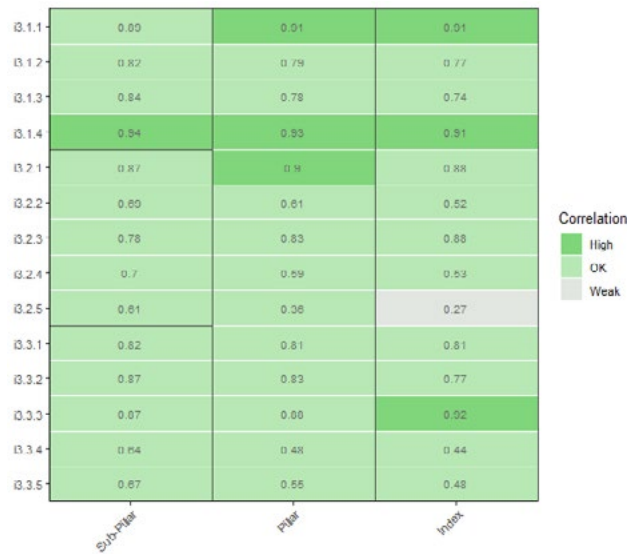
Technology pillar (i1)



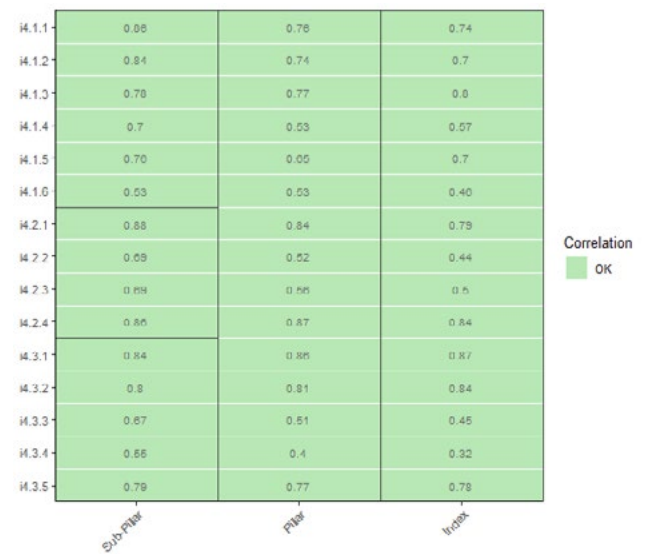
People pillar (i2)



Governance pillar (i3)



Impact pillar (i4)



Source: European Commission's Joint Research Centre, 2022.

Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green. Weak correlations (lower or equal than 0.30) are written in grey.

Correlations between sub-pillars, pillars and NRI 2022

The correlation between the aggregates represents the most important element of the analysis of statistical coherence as it reflects the relations between the defined concepts. The evidence from **Figure 3**, **Figure 4** and **Figure 5** suggests that all pillars appear consistent, with the sub-pillars being well correlated with each other. The NRI 2022, therefore, has a generally satisfactory correlation structure, as evidenced by strong correlations between the sub-pillars, pillars, and the index.

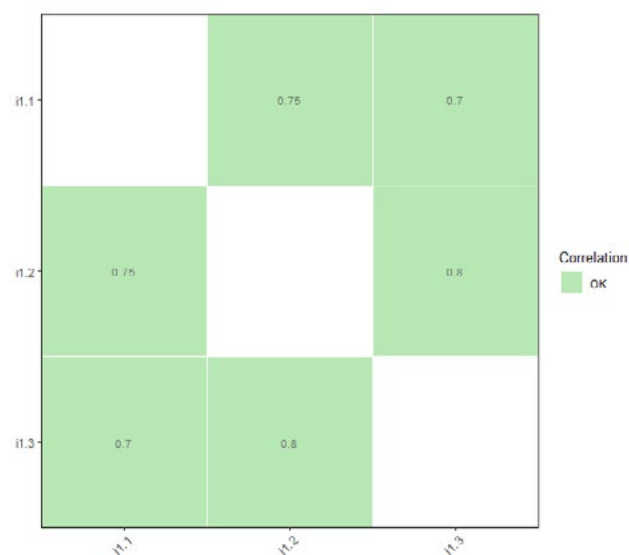
Nevertheless, a note of caution is necessary. Some sub-pillars tend to be extremely correlated with their respective pillars. More precisely, the sub-pillars “Content” (i1.2), “Governments” (i2.3), “Trust” (i3.1) and “Inclusion” (i3.3) are highly correlated with their pillars (correlations exceeding 0.92), suggesting

that there may be a risk of redundancy at the pillar level. This is partly mitigated at the index level (**Figure 4**), where two pillars, namely i1.2 and i3.3 show good positive correlations that do not exceed the 0.92 set threshold.

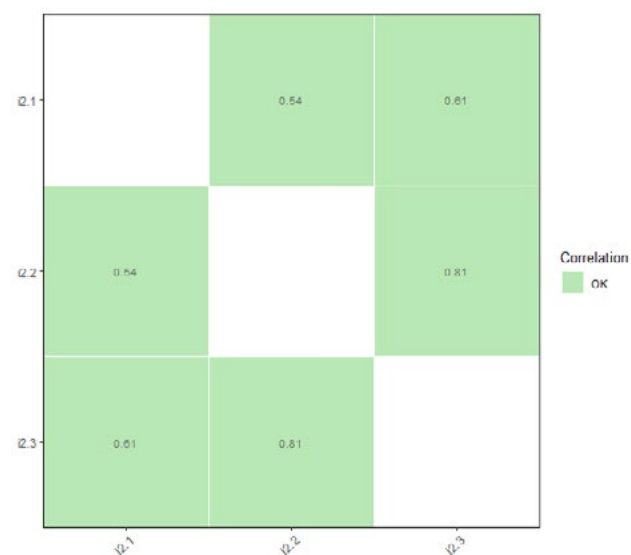
The highest aggregation steps, between pillars and from pillars to NRI, also display very high correlations, all above 0.9. High statistical reliability among the main components can be the result of redundancy of information. Overall, NRI indicators, pillars, and sub-pillars seem to be measuring similar phenomena. The exclusion of some elements from the framework will probably have a small effect on the final result. Keeping in mind the importance of parsimony, the reduction in the number of indicators could be an interesting option that the JRC-COIN suggests to consider for future editions.

Figure 3. Correlations between sub-pillars in the same pillar

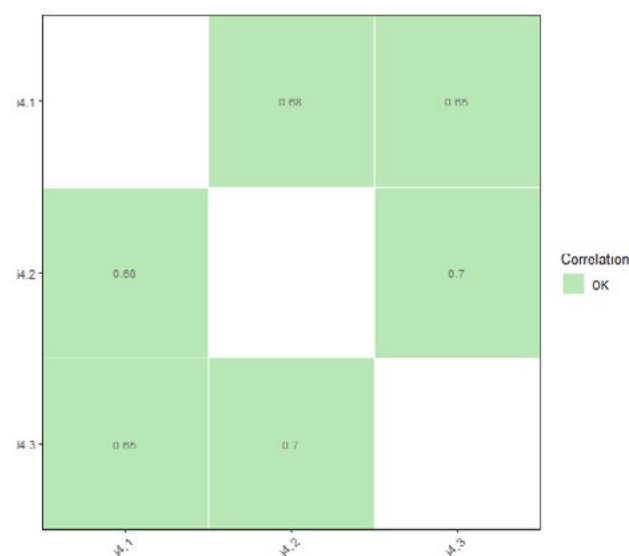
Technology pillar (i1)



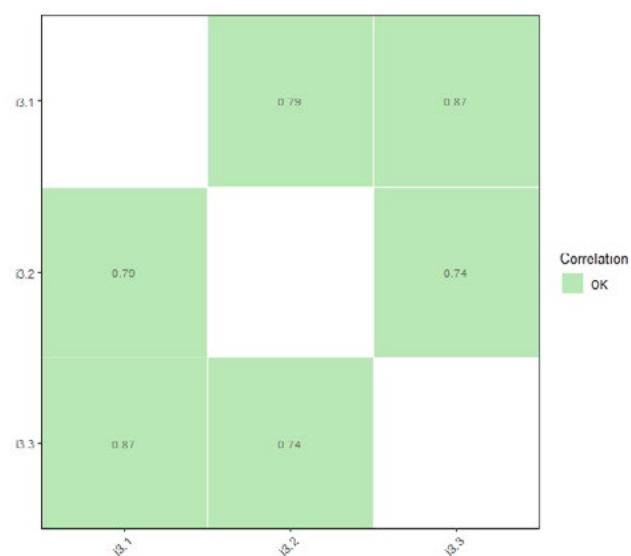
People pillar (i2)



Governance pillar (i3)



Impact pillar (i4)

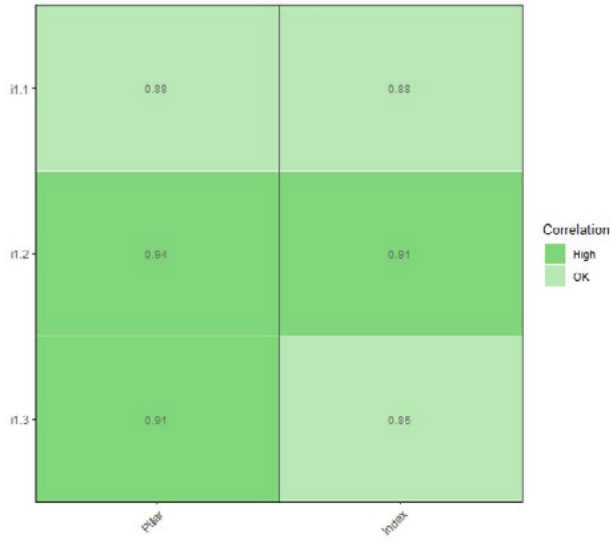


Source: European Commission's Joint Research Centre, 2022.

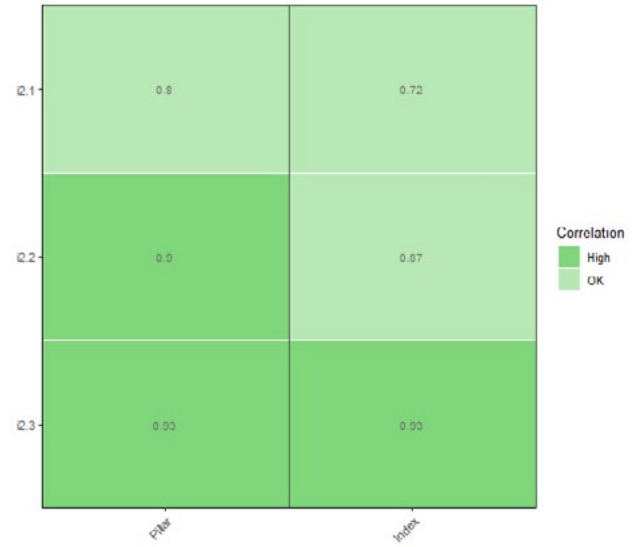
Note: Numbers represent the Pearson correlation coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green.

Figure 4. Correlations between sub-pillars, pillars and NRI 2022

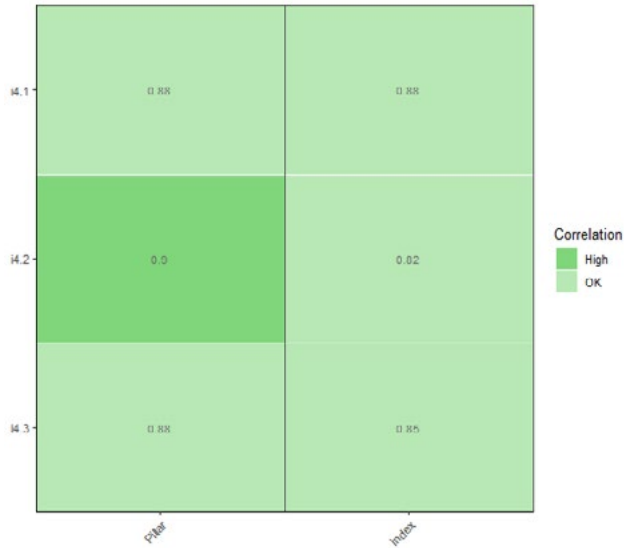
Technology pillar (i1)



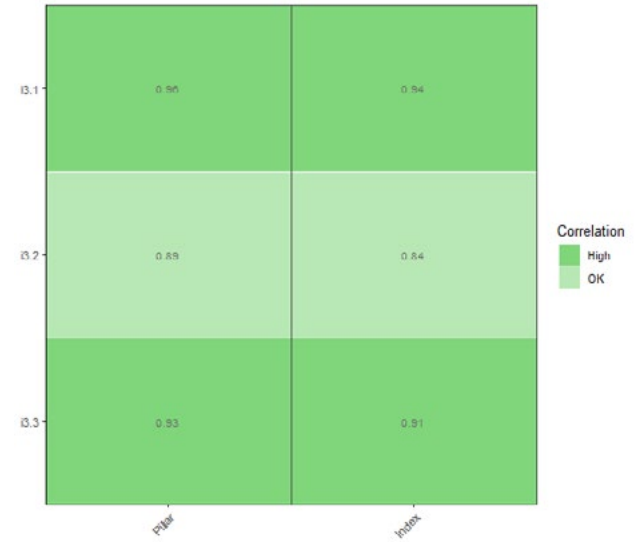
People pillar (i2)



Governance pillar (i3)



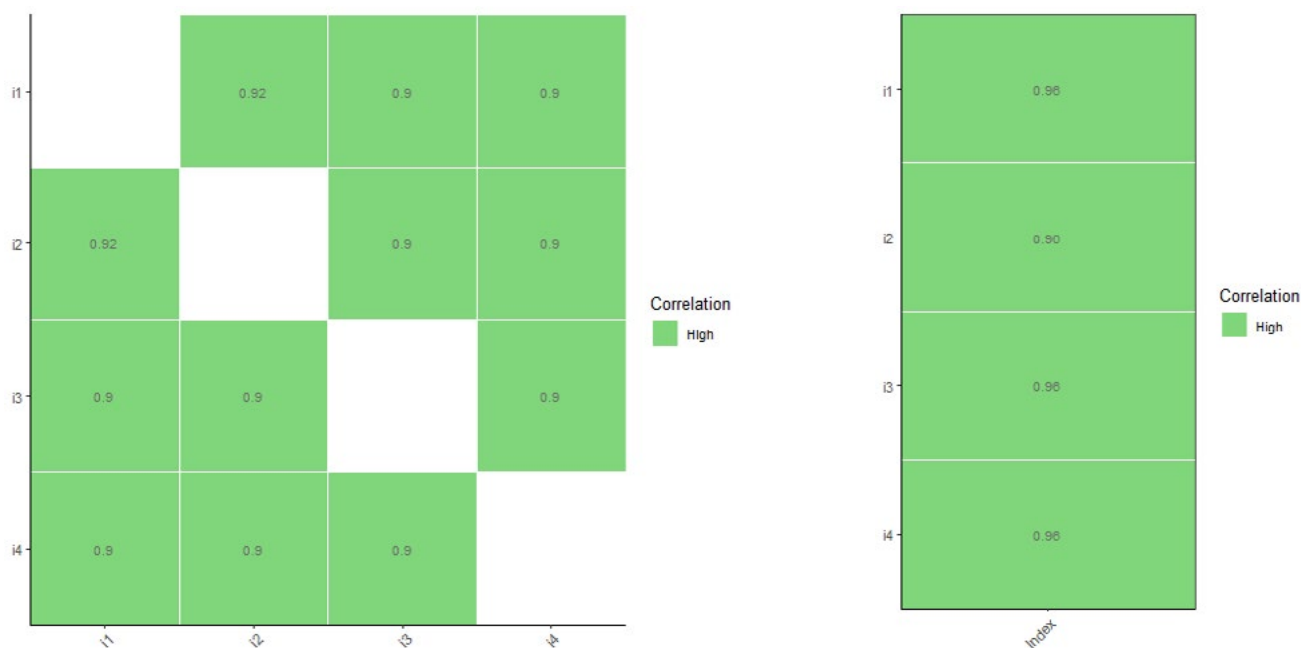
Impact pillar (i4)



Source: European Commission's Joint Research Centre, 2022.

Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green.

Figure 5. Correlations between pillars, and between pillars and NRI 2022



Source: European Commission's Joint Research Centre, 2022.

Note: Numbers represent the Pearson correlations coefficients. Good correlations (i.e., Pearson correlation coefficients between 0.30 and 0.92) are highlighted in green.

Figure 5 shows the correlation between the pillars and between the pillars and NRI 2022. This is the most important level of aggregation because it represents the consistency of the overall concept. All correlations are significant and positive (> 0.30). “Technology” (i1) and “People” (i2) pillars are highly correlated (0.92), suggesting that there may be a risk of redundancy at the pillar level. This issue does not appear to be alleviated at the index level, where correlations are even higher (0.96), and exceeding the redundancy threshold (set at 0.92). Also, the remaining pillars show very high correlations with the index. This is not surprising evidence given the high correlations between sub-pillars, pillars, and index reported in **Figure 4**. Although not a critical issue for the reliability of the NRI, this should be taken into account in the Index’s upcoming revisions.

3.4.2 Principal components analysis of the NRI 2022

As a further step in the analysis of statistical coherence, we perform a principal component analysis (PCA). The aim of principal component analysis is to assess to what extent the conceptual framework is confirmed by statistical approaches. The objective is to observe only one principal component with an eigenvalue greater than 1, or able to explain more than 70% of the total variance. The achievement of these thresholds suggests the presence of a common, unidimensional phenomenon underlying the pillars.

The four pillars share a single statistical dimension that summarizes 92.6% of the total variance (**Table 3**). Moreover, the four loadings (correlation coefficients) of these pillars

are almost equal (0.96). This similarity suggests that the four pillars make roughly equal contributions to the variation of the NRI 2022. The second principal component is much less influential since it accounts for only 2.85% of the total variance.

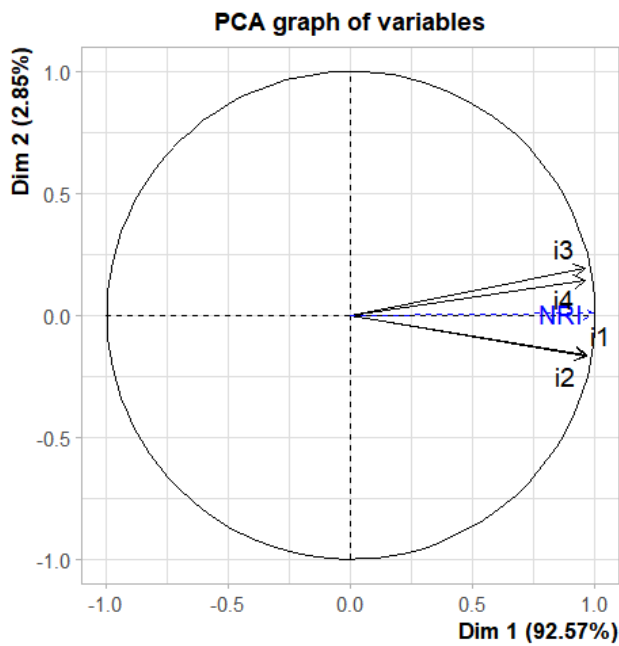
Table 3. Eigenvalues and explained variance for the first ten principal components

PC	Eigenvalue	% of variance	Cumulative % of variance
PC1	3.70	92.57	92.57
PC2	0.11	2.85	95.42
PC3	0.10	2.59	98.00
PC4	0.08	1.99	100

Source: European Commission's Joint Research Centre, 2022.

Figure 6 illustrates the projections of the pillars onto the plane spanned by the first two principal components in a “factor map”. The correlation between each pillar and the principal component is given by the projection of the NRI 2022 vector onto the component axis. The trajectories of pillars i1 and i2 overlap, while the remaining two pillars are very close to each other, suggesting that there may be a risk of redundancy at the index level, which offers a significant room for simplification. This is not a surprising evidence and is in line with the results obtained in the correlation analysis.

Figure 6. Factor map of the four pillars and comparison with the overall NRI 2022



Source: European Commission's Joint Research Centre, 2022.

Moreover, PCA results also confirm the presence of a single latent dimension in each of the four pillars (one component with an eigenvalue greater than 1) that captures between close to 77% (“People pillar”) up to 87% (“Governance pillar”) of the total variance in the three underlying sub-pillars.

3.4.3 Added value of the NRI 2022

High statistical reliability among the main components of an index can be the result of redundancy of information. The main objective of this exercise is to test whether the NRI 2022 rankings highlight aspects of countries’ network readiness that do not emerge by looking into the three pillars separately. In other words, NRI 2022 should tell us more about the underlying concept than each of the four pillars alone.

The results in **Table 3** suggest that the percentage of countries where the NRI 2022 rankings differ by 15 or more positions with respect to the pillars ranges from 11.5% in the case of i3 (“Governance”) to 19.10% in the case of i4 (“Impact”). In other words, NRI 2022 rankings depict aspects of countries’ network readiness that do not emerge from each of the four single pillars for less than 20% of the countries considered. **Figure 7** represents graphically the relationship between the NRI 2022 and its constituent elements. In line with the evidence in **Table 3** and the correlation coefficients reported in **Figure 5**, the four pillars appear linearly associated with the index.

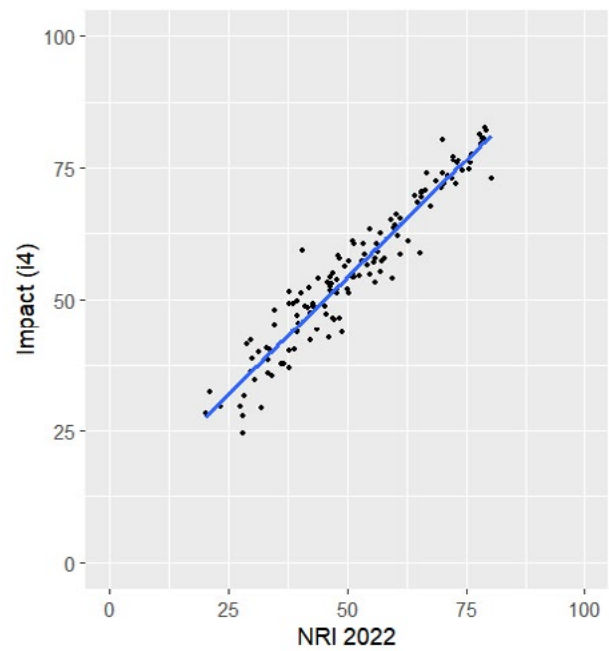
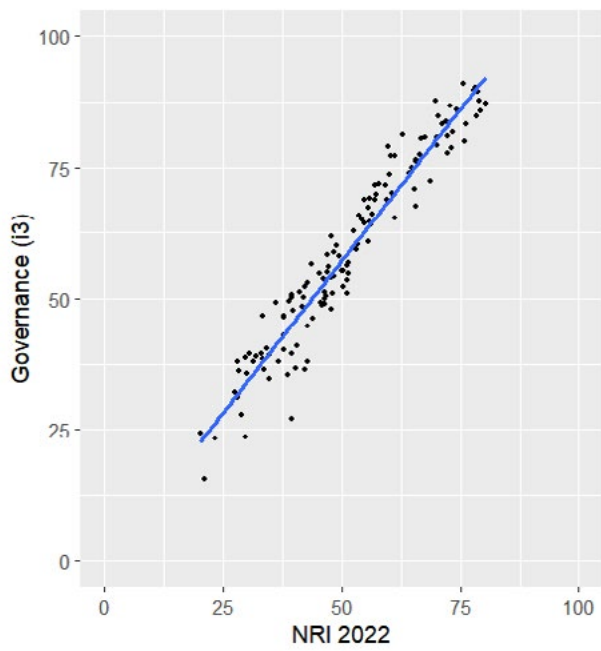
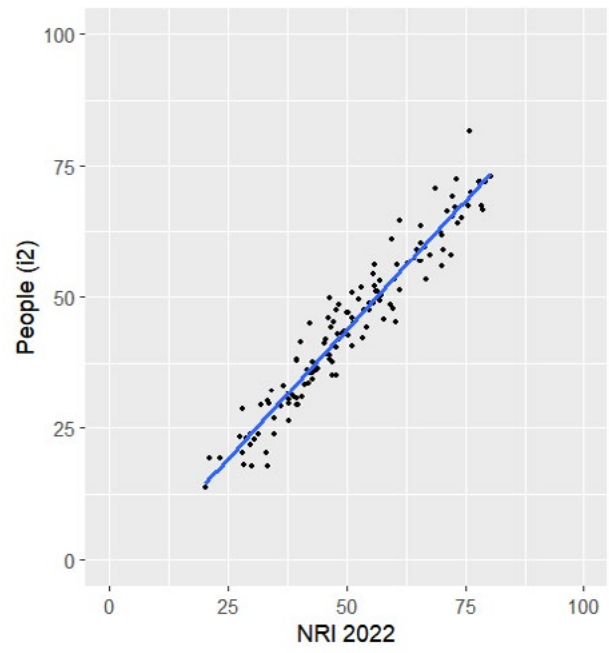
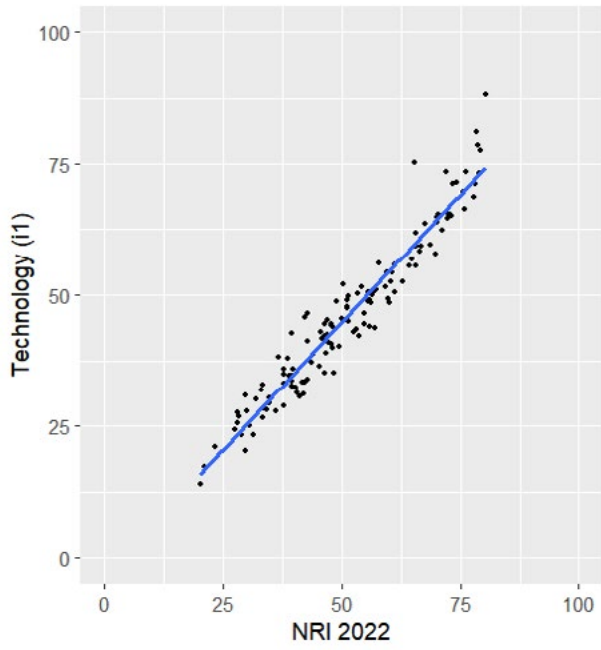
Even though the presence of a strong concordance among the aggregates does not represent a problem “per se”, it offers a room for simplification. Therefore, in order to improve readability, the developers may consider excluding some elements of the index without jeopardising the integrity of the pillars or the overall index.

Table 4. Distribution of differences between pillars and NRI 2022 rankings

Shift respect to NRI	Technology	People	Governance	Impact
More than 30 positions	0.80%	0.80%	0.00%	1.50%
16 to 30 positions	11.50%	13.00%	11.50%	17.60%
More than 15 positions	12.30%	13.80%	11.50%	19.10%
6 to 15 positions	34.40%	37.40%	45.80%	34.40%
Up to 5 positions	45.00%	44.30%	39.70%	40.50%
0 positions	8.40%	4.60%	3.10%	6.10%

Source: European Commission's Joint Research Centre, 2022.

Figure 7. Relationship between the pillars and the NRI 2022



Source: European Commission's Joint Research Centre, 2022.

3.5 Impact of modelling assumptions on the NRI 2022 results

3.5.1 Uncertainty analysis

A fundamental step in the statistical analysis of a composite indicator is to assess the effect of different modelling assumptions on the country rankings. Despite the efforts in the development process, there is an unavoidable subjectivity (or uncertainty) in the resulting choices. This subjectivity can be explored by comparing the results obtained under different alternative assumptions. The literature on this topic²⁰ suggests assessing the robustness of the index by means of a *Monte Carlo simulation* and by applying a multi-modelling approach. This also assumes “error-free” data as possible errors have already been corrected in the preliminary stage of the index construction before the audit.

This Index analysed in this document, like most composite indicators, is the outcome of several choices. Among other things, these choices usually include: (i) the underlying theoretical framework; (ii) the indicators selected; (iii) the imputation of missing values; (iv) the weights assigned; and (v) the aggregation method. Some of these choices may be based on expert opinion or other consideration driven by statistical analysis or the need to ease communication or draw attention to specific issues.

This section aims to test the impact of varying some of these assumptions within a range of plausible alternatives in an uncertainty analysis. The objective is therefore to try to quantify the uncertainty in the ranks of NRI 2022, which can demonstrate the extent to which countries can be differentiated by their scores and ranks. The modelling issues considered in the robustness assessment of the NRI 2022 are:

- [the aggregation formula; and](#)
- [the pillars’ weights.](#)

The following paragraphs deal with each of these in turn.

Aggregation formula

The developers of the NRI 2022 opted for the arithmetic mean with equal weight for the four pillars, which implies a strong compensability allowing for an outstanding performance in some aspects to balance the weaknesses in others and vice-versa. In other words, arithmetic averaging treats countries with outstanding high and low results in the same way as it treats a more “balanced” countries showing average results.

To assess the impact of this compensability issue, the JRC-COIN relaxed the strong perfect substitutability assumption inherent in the arithmetic average and considered instead the geometric average, which is a partially compensatory approach that rewards economies with balanced profiles and motivates economies to improve in the NRI pillars in which they perform poorly, and not just in any NRI pillar. The comparison of the two aggregation approaches, hence, should be able to highlight countries with unbalanced profiles.

Weights

Weights. Monte Carlo simulation comprised 1 000 runs of different sets of weights for the four pillars. The weights are the result of a random extraction based on uniform continuous distributions centred in the reference values (0.25) plus or minus 20% of these values.

As summarised in **Table 5**, four models were tested comparing the different aggregation formulas, the different imputation methods and applying the 1,000 runs of different sets of weights resulting in a total of 2,000 runs of simulations.

The main results obtained from the robustness analysis are shown in **Figure 8**, with median ranks and 90% intervals computed across the 2,000 Monte Carlo simulations. Countries are ordered from best to worst according to their NRI 2022 rank, where the blue dots represent the median rank among the simulations. For each country, the error bars represent the 90% interval across all simulations, that is, from the 5th to the 95th percentile of the country’s rank among all the simulations.

The NRI 2022 ranks are shown to be representative of a plurality of scenarios and extremely robust to changes in the assumptions. Considering the median rank across the simulated scenarios as being representative of these scenarios, the fact that the NRI 2022 rank is close to the median rank (less than three positions away) for 100% of the countries suggests that NRI 2022 is a suitable and stable summary measure. Furthermore, the majority of the countries’ ranks (124 out of 131) hardly vary across simulations (5 positions or less). Only Croatia, Mauritius, Jamaica, Kenya, Albania, Lebanon, and Laos are showing a simulated interval larger than 5 positions but still smaller than 10. This result is a direct effect of the correlation structure among pillars and the index. It makes the NRI 2022 rankings very stable for all countries.

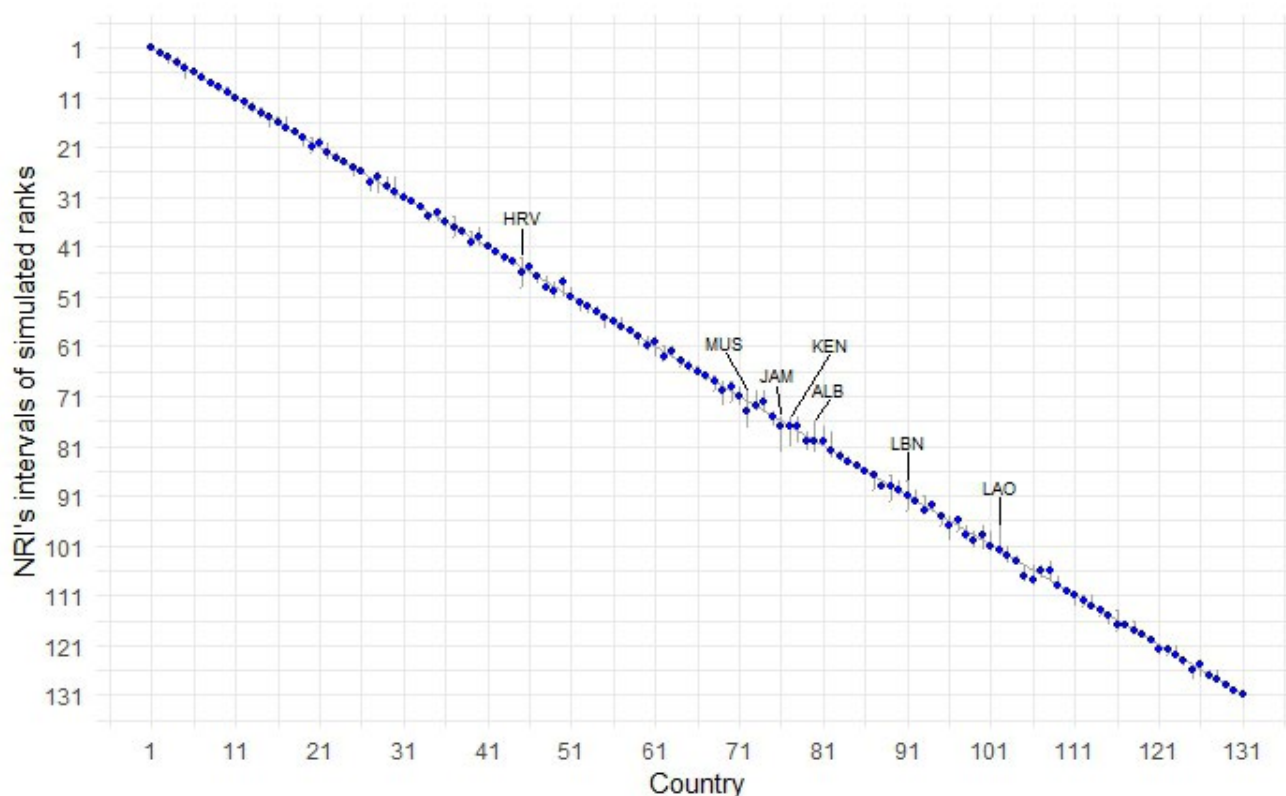
Finally, **Table 6** reports the NRI 2022 country ranks along with the simulated intervals (the central 90 percentiles observed among the 2,000 scenarios) for full transparency and information, in order to better appreciate the robustness of these ranks to the computation methodology and to facilitate analysis of the behaviour of specific countries in response to perturbations.

Table 5. Alternative assumptions considered in the analysis

	Reference	Alternative
I. Aggregation formula	Arithmetic average	Geometric average
II. Weighting system	Equal weights	Varying
Technology	0,25	U [0.2; 0.3]
People	0,25	U [0.2; 0.3]
Governance	0,25	U [0.2; 0.3]
Impact	0,25	U [0.2; 0.3]

Source: European Commission's Joint Research Centre, 2022.

Figure 8. Robustness analysis: NRI 2022 rank vs median rank and 90% intervals.



Source: European Commission's Joint Research Centre, 2022.

Table 6. NRI 2022 ranks and 90 percent confidence intervals

ISO	Index	interval	ISO	Index	interval	ISO	Index	interval
USA	1	[1-1]	HRV	45	[43-49]	PAK	89	[87-92]
SGP	2	[2-2]	THA	46	[45-46]	BIH	90	[88-91]
SWE	3	[3-4]	URY	47	[46-48]	LBN	91	[88-94]
NLD	4	[3-5]	TUR	48	[47-50]	TTO	92	[90-92]
CHE	5	[4-7]	GRC	49	[48-51]	PRY	93	[91-94]
DNK	6	[5-6]	UKR	50	[47-51]	CPV	94	[93-94]
FIN	7	[6-7]	BGR	51	[49-51]	KGZ	95	[95-97]
DEU	8	[8-9]	ROU	52	[52-54]	SLV	96	[95-100]
KOR	9	[8-10]	OMN	53	[52-54]	BOL	97	[95-98]
NOR	10	[9-10]	BHR	54	[53-54]	SEN	98	[97-100]
CAN	11	[11-11]	SRB	55	[55-57]	CIV	99	[98-101]
GBR	12	[12-13]	CRI	56	[55-57]	DZA	100	[97-102]
JPN	13	[12-14]	ARG	57	[55-57]	RWA	101	[98-102]
AUS	14	[13-15]	KAZ	58	[58-58]	LAO	102	[97-103]
ISR	15	[14-17]	IDN	59	[59-61]	GHA	103	[101-104]
FRA	16	[15-16]	MEX	60	[59-62]	KHM	104	[103-105]
LUX	17	[15-18]	IND	61	[59-63]	HND	105	[105-108]
AUT	18	[17-18]	VNM	62	[61-64]	GTM	106	[105-109]
NZL	19	[19-21]	KWT	63	[61-63]	TZA	107	[105-107]
IRL	20	[19-22]	ARM	64	[63-65]	BWA	108	[104-108]
BEL	21	[19-21]	MNE	65	[64-66]	NGA	109	[107-109]
EST	22	[20-23]	COL	66	[65-66]	BEN	110	[110-110]
CHN	23	[22-23]	MDA	67	[67-68]	TJK	111	[111-113]
ISL	24	[24-24]	ZAF	68	[67-70]	NPL	112	[111-113]
CZE	25	[25-27]	MKD	69	[68-73]	ZMB	113	[111-114]
ESP	26	[25-26]	JOR	70	[68-72]	CMR	114	[113-115]
SVN	27	[27-30]	PHL	71	[69-73]	NAM	115	[115-117]
ARE	28	[26-30]	MUS	72	[70-77]	UGA	116	[114-118]
PRT	29	[27-30]	EGY	73	[70-74]	GMB	117	[116-117]
HKG	30	[27-31]	AZE	74	[70-74]	ZWE	118	[116-118]
MLT	31	[30-31]	GEO	75	[74-77]	MWI	119	[119-119]
ITA	32	[32-32]	JAM	76	[75-82]	MDG	120	[120-120]
LTU	33	[33-33]	KEN	77	[75-81]	MLI	121	[121-123]
POL	34	[34-36]	PER	78	[75-80]	BFA	122	[121-123]
SAU	35	[34-36]	MAR	79	[78-82]	ETH	123	[121-123]
MYS	36	[35-37]	ALB	80	[76-82]	GIN	124	[124-125]
SVK	37	[35-39]	LKA	81	[77-81]	MOZ	125	[125-128]
CYP	38	[37-39]	IRN	82	[78-83]	SWZ	126	[124-127]
LVA	39	[38-41]	PAN	83	[82-84]	LSO	127	[126-128]
RUS	40	[37-41]	TUN	84	[83-85]	AGO	128	[126-128]
HUN	41	[40-41]	DOM	85	[84-85]	COD	129	[129-129]
QAT	42	[42-42]	ECU	86	[86-87]	BDI	130	[130-130]
CHL	43	[43-44]	MNG	87	[86-90]	TCD	131	[131-131]
BRA	44	[43-45]	BGD	88	[88-90]			

Source: European Commission's Joint Research Centre, 2022.

3.5.2 Sensitivity analysis

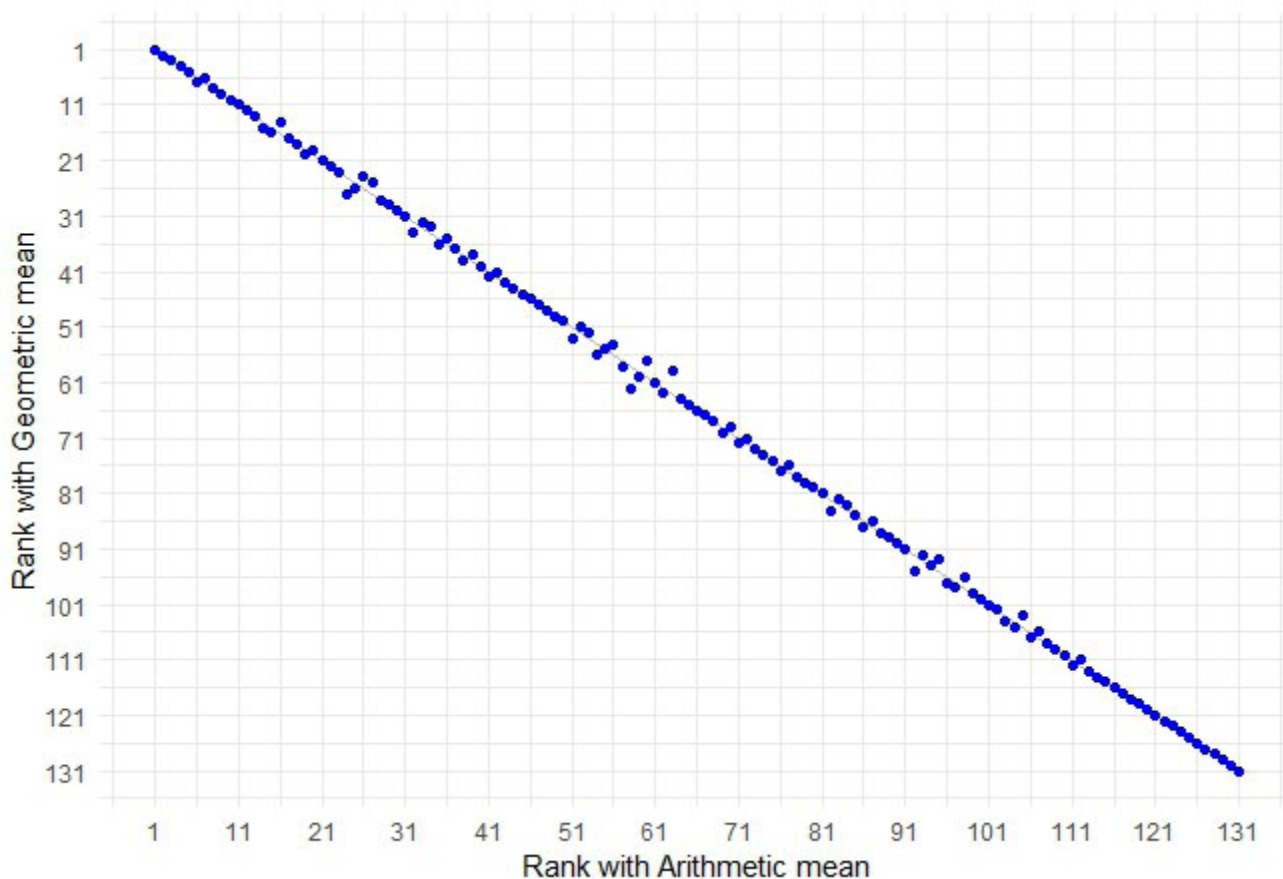
Complementary to the uncertainty analysis, sensitivity analysis has been used to identify which of the modelling assumptions have the highest impact on certain country ranks.

Figure 9 compares the ranks derived from NRI 2022 with those that would have been obtained by changing the aggregation procedure from arithmetic to geometric mean. This comparison allows us to inquire whether the variability in the rank intervals is originating from the modelling assumptions underlying the aggregation procedure or by the weights' perturbation. When countries are placed under the

main diagonal their values are worse in rank positions when computed with the geometric mean. This is probably the case of countries penalised by the geometric mean because of their unbalanced profiles.

In any case, the aggregation formula does not significantly affect the NRI 2022 ranks. This result is a direct consequence of the very strong correlation structure described in Section 4. Basically, when the pillars are strongly correlated it is difficult to have countries with unbalanced values, hence the result obtained from the arithmetic and geometric means do not differ much.

Figure 9. Sensitivity Analysis: Comparison of ranks according to arithmetic and geometric mean.



Source: European Commission's Joint Research Centre, 2022.

3.6 Efficiency frontier in the NRI by data envelopment analysis

Is there a way to benchmark economies' multidimensional performance on network readiness without imposing a fixed and common set of weights to the four pillars of the NRI - Technology, People, Governance, Impact - that may not be fair to a particular country/economy?

Several network readiness-related policy issues at the national level entail an intricate balance between global priorities and economy-specific strategies. Comparing the multidimensional performance on network readiness by subjecting all 131 economies included in the NRI to a fixed and common set of weights of the four NRI pillars may prevent acceptance of the index on the grounds that a given weighting scheme might not be fair to a particular economy. An appealing feature of the data envelopment analysis (DEA) applied in real decision-making settings is the determination of endogenous weights that maximize the overall score of each country in a given dataset.

In this type of analysis, the assumption of fixed pillar weights common to all 131 economies is relaxed, whereby country-specific weights that maximize a country's network readiness score are determined endogenously by DEA.²¹ In theory, each country/economy is free to decide on the relative contribution of each network readiness pillar to its score, so as to achieve the best possible score in a computation that reflects its strategy for network readiness. In practice, the DEA method assigns a higher (or lower) contribution to those pillars in which a country/economy is relatively strong (or weak). Reasonable constraints are applied to the weights to preclude the possibility of an economy achieving a perfect

score by assigning a zero weight to weak pillars: for each economy, the share of each pillar score (i.e., the pillar score multiplied by the DEA weight over the total score) has upper and lower bounds of 10 percent and 40 percent, respectively. The DEA score is then measured as the weighted average of all four network readiness pillar scores, where the weights are the economy-specific DEA weights, compared to the best performance among all other economies with those same weights. The DEA scores, ranging between 0 (lowest) and 1 (highest) can be interpreted as a measure of the "distance to the efficiency frontier."

Table 7 presents the pillar shares and DEA scores for the top 25 economies in the NRI 2022, next to the NRI 2022 ranks. All pillar shares are in accordance with the starting point of granting leeway to each economy when assigning shares, while not violating the upper and lower bounds (10 percent and 40 percent). The pillar shares are quite diverse, reflecting the different national strategies for network readiness. These pillar shares can also be seen to reflect different economies' comparative advantage in certain NRI pillars vis-à-vis all other economies and all pillars. For example, seven countries – the United States of America, Singapore, Sweden, the Netherlands, Switzerland, Denmark, and Finland - obtain a perfect DEA score of 1.00 and hence they are all on the frontier of efficiency when it comes to network readiness. In the case of the United States, this is achieved by assigning 36-37 percent of its DEA score to the Technology and People pillars, while 14 percent of the USA's DEA score comes from the Governance and Impact pillars. Having different strengths, Singapore has assigned 32 percent and 40 percent of its DEA score to the People and Impact pillars, while just 11 percent and 16 percent of its DEA score comes from the Technology and Governance pillars. The top seven countries are closely followed by the Rep. of Korea (0.99) and Norway (0.97) in terms of efficiency. **Figure 10** shows how close the DEA scores and the NRI 2022 scores are for all 131 economies (Pearson correlation of 0.999).

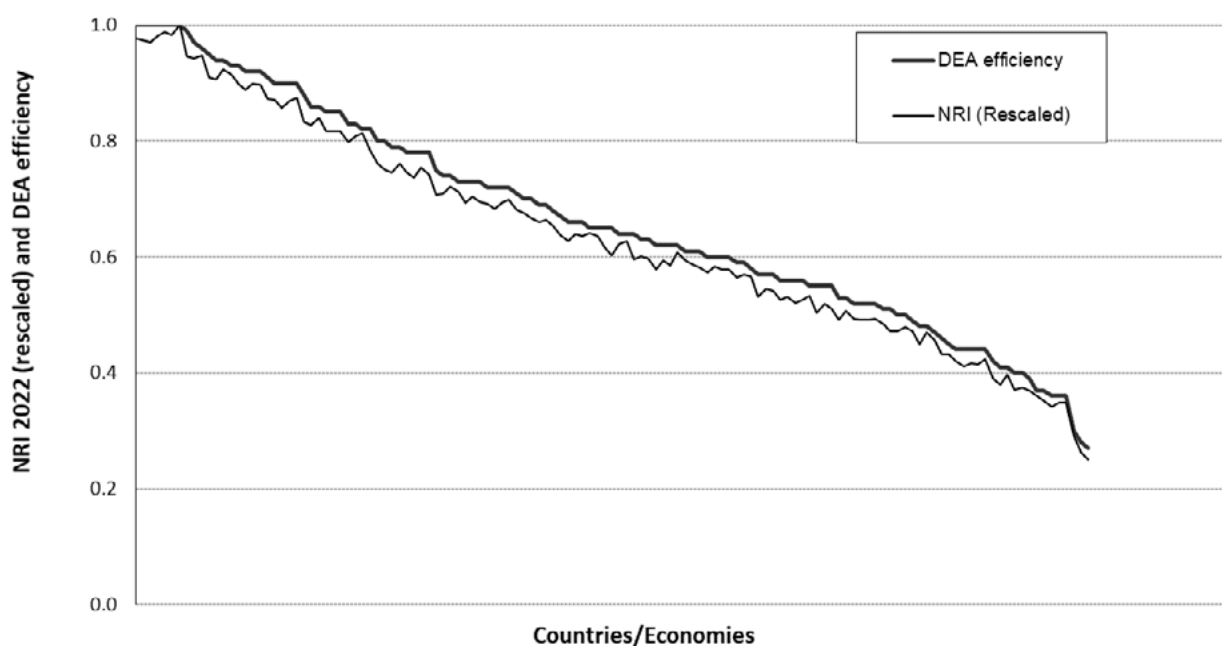
Table 7. Pillar shares and efficiency scores for the top 25 economies in the NRI 2022

	Technology	People	Governance	Impact	Efficient frontier score (DEA)	Efficient frontier rank (DEA)	NRI rank	Difference from NRI rank
United States	0.37	0.36	0.14	0.14	1.00	1	1	0
Singapore	0.11	0.32	0.16	0.40	1.00	1	2	1
Sweden	0.10	0.23	0.27	0.40	1.00	1	3	2
Netherlands	0.17	0.10	0.34	0.39	1.00	1	4	3
Switzerland	0.31	0.10	0.19	0.40	1.00	1	5	4
Denmark	0.10	0.32	0.40	0.18	1.00	1	6	5
Finland	0.10	0.30	0.40	0.20	1.00	1	7	6
Korea, Rep.	0.10	0.40	0.17	0.33	0.99	8	9	1
Norway	0.10	0.32	0.40	0.18	0.97	9	10	1
Germany	0.13	0.40	0.24	0.23	0.96	10	8	-2
Japan	0.10	0.40	0.10	0.40	0.95	11	13	2
Canada	0.17	0.16	0.40	0.27	0.94	12	11	-1
Australia	0.10	0.32	0.40	0.18	0.94	12	14	2
United Kingdom	0.17	0.11	0.31	0.40	0.93	14	12	-2
Israel	0.10	0.40	0.10	0.40	0.93	14	15	1
France	0.10	0.10	0.40	0.40	0.92	16	16	0
Luxembourg	0.23	0.10	0.40	0.27	0.92	16	17	1
Austria	0.10	0.31	0.40	0.19	0.92	16	18	2
Ireland	0.10	0.10	0.40	0.40	0.91	19	20	1
New Zealand	0.13	0.10	0.40	0.37	0.90	20	19	-1
Belgium	0.10	0.10	0.40	0.40	0.90	20	21	1
Estonia	0.10	0.30	0.40	0.20	0.90	20	22	2
China	0.10	0.40	0.10	0.40	0.90	20	23	3
Czechia	0.10	0.10	0.40	0.40	0.88	24	25	1
Iceland	0.17	0.16	0.40	0.27	0.86	25	24	-1
Spain	0.10	0.10	0.40	0.40	0.86	25	26	1

Source: European Commission's Joint Research Centre, 2022.

Note: The results are based on Data Envelopment Analysis. Pillar shares are expressed in percentages, bounded by 0.10 and 0.40 for all four pillars of network readiness - Technology, People, Governance, Impact. Instead, in the NRI 2022, the four pillars each have a fixed weight of 0.25. Darker colors represent a higher contribution of those pillars to the overall DEA score as a result of an economy's stronger performance in those pillars, which may help to provide evidence for economy-specific strategies. Economies are ordered by their Efficient Frontier score.

Figure 10. NRI 2022 scores and DEA "distance to the efficiency frontier" scores



Source: European Commission's Joint Research Centre, 2022.

Note: For comparison purposes, the NRI scores were rescaled by dividing them by the result of the best performer in the overall NRI 2022 (the United States).

3.7 Conclusions

The JRC statistical audit delves into the extensive work carried out by the developers of the NRI 2022 to suggest improvements in terms of data characteristics, structure and methods used. The analysis aims to ensure the transparency of the index methodology and the reliability of the results.

The NRI 2022 represents a sound index in terms of conceptual and statistical consistency. It shows that ICT deployment is a multifaceted phenomenon where technology, users, and several aspects of ICT regulation go hand in hand. The data coverage of the framework is generally satisfactory. Most indicators contain an acceptable level of missing values. Nevertheless, four indicators are characterized by the remarkable presence of missing values, two of which are well above the suggested exceptional limit of 40%. The statistical audit of the previous edition of the NRI contains additional analysis on the role of missing data in the framework. The developers decided not to impute them. This is common practice in relevant contexts and justified on grounds of transparency and replicability. However, JRC-COIN suggests to pay particular attention to the aforementioned indicators in future editions of the index.

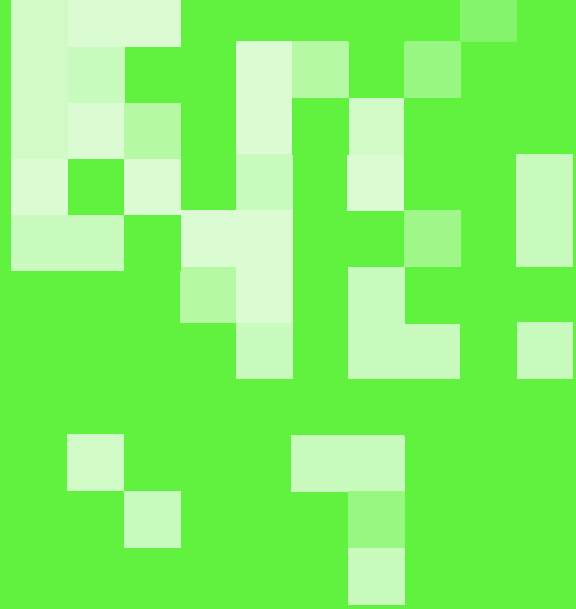
The index is statistically well balanced with respect to its indicators, sub-pillars, and pillars. Correlations between each pillar and the respective sub-pillar are mostly significant and positive. Most of the indicators are meaningfully correlated with the index and relative pillars. The very strong correlations between some NRI 2022 components and between the four pillars and the index may be a sign of redundancy of information in the NRI 2022. This possibility is further confirmed by the analysis of added value of the NRI 2022 rankings. The suggestion is to use the index's very stable and correlated structure to explore and open up to the simplification of the framework or to some even more specific aspects of the network economy.

Finally, JRC-COIN analysed the robustness of the index respect to the selected weights and aggregation formula at pillars level. The results of the uncertainty analysis show that NRI 2022 is a robust summary measure.

All things considered, the present JRC-COIN audit findings confirm that the NRI 2022 is a reliable tool with a statistically coherent framework and acknowledge the important efforts made by the developers' team.

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About Portulans Institute



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"The Portulans Institute aims to provide them with the best available data and analysis, and the directions that they need. This is why our logo combines a compass and pi, which is not only a powerful number found in geometry, algebra, physics, and arts, but also an infinite series of digits, with no pre-written rule telling us what the next one might be."

Co-founded in 2019 by Soumitra Dutta and Bruno Lanvin, the Portulans Institute (PI) is an independent nonprofit, nonpartisan research and educational institute based in Washington DC.

Our mission

Portulans Institute's areas of expertise include technology competitiveness, innovation readiness, and people and global talent. Our mission includes:

- [To develop cross-community knowledge and dialogue on how people, technology, and innovation contribute to sustainable and inclusive growth.](#)
- [To inform policymakers by producing independent, data-based research.](#)
- [To collaborate with private sector leaders in driving a business agenda that invests in people, technology and innovation.](#)
- [To host and co-organize events and conferences on the above issues affecting human-centric sustainable economic prosperity.](#)

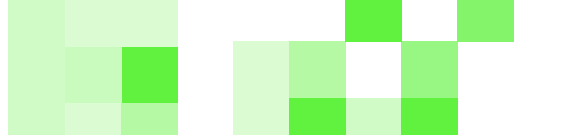
Where our name and logo come from

Portulans (or portolans) are ancient nautical maps, first made in the 13th century in the Mediterranean basin and later expanded to include other regions. The word portolan comes from the Italian portulano, meaning "related to ports or harbors," and which since at least the 17th century designates "a collection of sailing directions." In these maps, only a few harbors were visible, and much of the coastlines were hypothetical.

This is how we see our mission: In an uncertain world, much is yet to be explored, and many opportunities have yet to be identified. Like the navigators of the 16th century, modern leaders have to make decisions on the basis of imperfect information and incomplete maps.

The Portulans Institute aims to provide them with the best available data and analysis, and the directions that they need. This is why our logo combines a compass and pi, which is not only a powerful number found in geometry, algebra, physics, and arts, but also an infinite series of digits, with no pre-written rule telling us what the next one might be.

Learn more at: www.portulansinstitute.org and www.networkreadinessindex.org



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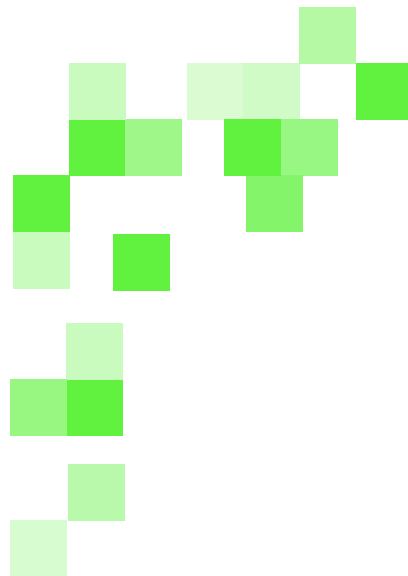
About Saïd Business School, University of Oxford

"We educate people for successful business careers and, as a community, we seek to harness our collective expertise and knowledge to help solve pressing global issues such as demographic change, natural resource scarcity and technological challenges."

Saïd Business School at the University of Oxford blends the best of new and old. We are a vibrant and innovative business school, but deeply embedded in a 900-year-old world-class university. We create programmes and ideas that have global impact. We educate people for successful business careers, and as a community seek to tackle world-scale problems. We deliver cutting-edge programmes and ground-breaking research that transform individuals, organisations, business practice, and society. We are a world-class business school community, embedded in a world-class University, tackling world-scale problems. www.sbs.ox.ac.uk.



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About malomatia

"Based in Doha, Qatar, malomatia is committed to creating, deploying, managing, and sustaining local IT skills and expertise. malomatia is also dedicated to boosting the adoption of IT in critical economic sectors and increasing the contribution of IT to the country's GDP."



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Malomatia was established in June 2008, as a 100% Qatari Shareholding Company with a vision to enable government and businesses to excel by being a leading provider of professional information technology services and solutions.

Motivated by Qatar's National Vision 2030 of economic transformation, malomatia recognizes the importance of Qatar's need to become a knowledge-based society. To meet the IT requirements of Qatar, malomatia was incorporated to support national objectives in delivering integrated IT services and solutions in several sectors, including: Public, Healthcare, Energy, Education, Transportation and BFSI.

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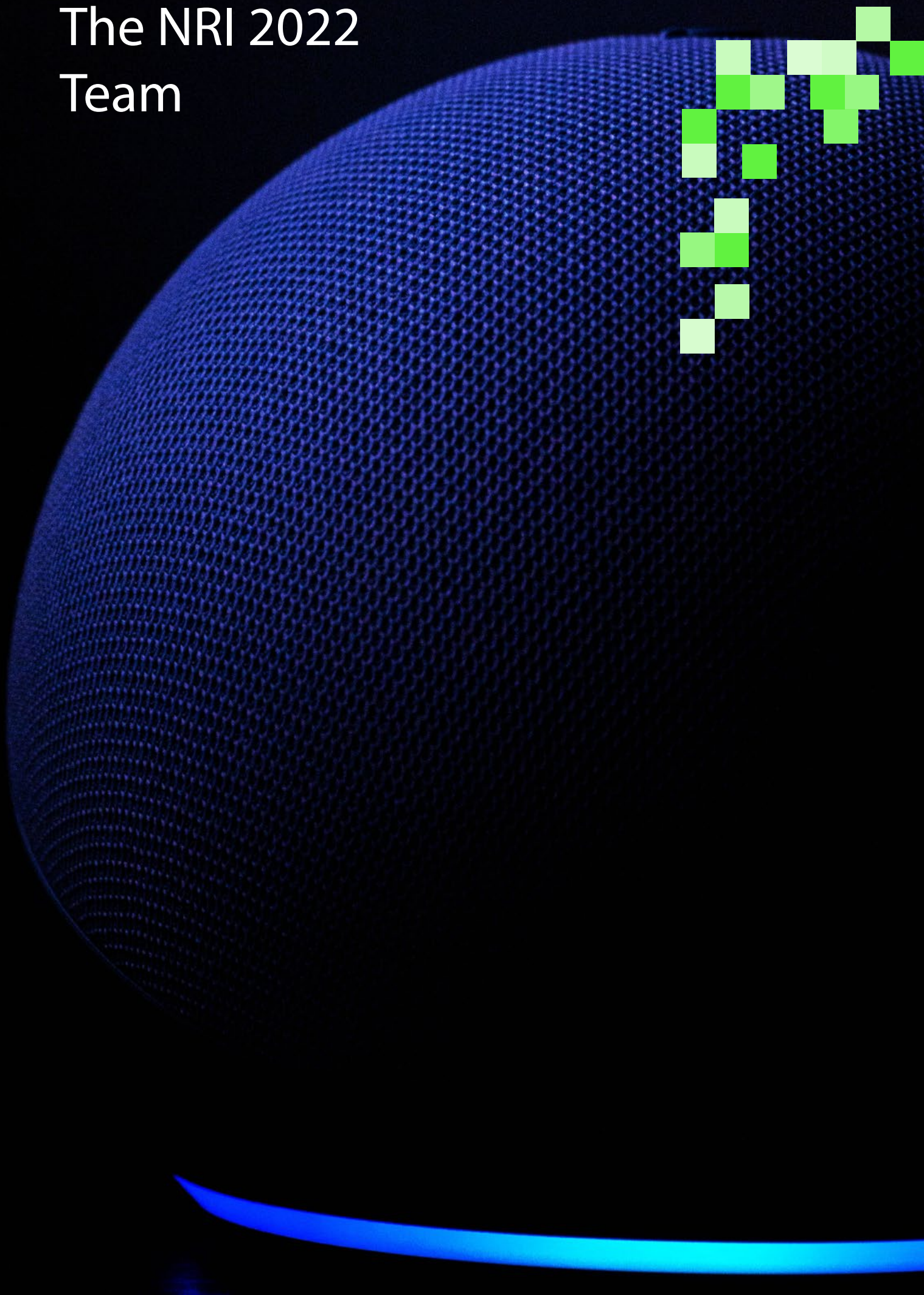
malomatia enjoys trust of 50+ entities including leaders in sectors such as the Public Sector, Energy, Healthcare, Education, Transportation, Utilities, Commerce & Trade, Banking and Technology.

malomatia has grown to be an organization with a wide spectrum of services ranging from Cybersecurity, Contact Center services, Digitization, Data & AI, IoT, Cloud, Business Apps to Business Process Outsourcing.

malomatia bets on its Human Capital as the genuine assets of malomatia, for that it devoted its strategic vision to develop and provide them the necessary support. From less than 10 employees malomatia now has reached more than 1100, when it is looking forward to being the natural home of the digital talent.

Also, malomatia expanded its operations by establishing regional offices in India, working around the clock to support the company's operations in Qatar and meet the Qatari market's needs.

The NRI 2022 Team



The NRI Team

Prof. Soumitra Dutta *Co-editor and Co-author*



Soumitra Dutta is co-founder and President of Portulans Institute. He is also the founder and co-editor of the Global Innovation Index (GII) published in partnership with the World Intellectual Property Organization - WIPO. Since 1 June, 2022 Soumitra is the dean of Saïd Business School at the University of Oxford.

Previously, he was a Professor of Management and the former founding dean of the Cornell SC Johnson College of Business. Prior to joining Cornell in 2012, he was on the faculty and leadership team of INSEAD. Prof. Dutta is an authority on technology and innovation policy, and has engaged in a number of multi-stakeholder initiatives to shape global, regional, and industry agendas.

He is the co-editor and author of The Global Information Technology Report, published by the World Economic Forum. Mr. Dutta is on the global boards of Sodexo and Dassault Systèmes, and is a member of the Shareholder Council of Chicago-based ZS Associates. He serves on the advisory boards of several business schools, including HEC, Montreal; ESADE, Barcelona; and ESCP, Paris. He has co-founded two firms, including Fisheye Analytics, which WPP group acquired. He is currently Chair of the Board of Directors of the Global Business School Network.

Prof. Bruno Lanvin *Co-editor and Co-author*



Bruno Lanvin is a co-founder and director of Portulans Institute. He is also co-editor of the Global Innovation Index (GII) published in partnership with the World Intellectual Property Organization - WIPO. Bruno is a Distinguished Fellow at INSEAD and the President of IMD's Smart City Observatory.

Initially a mathematician and a specialist of international trade, his research and publications have focused on information technology, innovation and talent strategies. He has over forty years of experience in advising governments and large corporations, including twenty years at the United Nations and ten at the World Bank.

Since 2001, Dr Lanvin has been co-authoring The Global Information Technology Report (NRI), the Global Innovation Index Report (GII), and the Global Talent Competitiveness Index (GTCI), the Smart City Index Report, and of the award-winning book 'Sixteen Shades of Smart'. His latest book 'The Future is Young' was published in July 2022.

A frequent speaker at high-level meetings, he has been a member of numerous boards for many years, including those of ICANN, IDA-Infocomm, GovTech, IP-Watch, AAID, Kazakhstan's Presidential Board on ICT Strategy, and the Bin Rashid Foundation for Government Innovation.

Rafael Escalona Reynoso *Portulans Institute, CEO*



Rafael Escalona Reynoso has been Senior Research Associate and Data Scientist for Portulans Institute since 2020. Before joining the Portulans Team he was the Lead Researcher at The Global Innovation Index (GII) from 2013 to 2020.

His previous professional experience was as a member of the Trade and Foreign Investment Advisory Board at the office of the President of Mexico and as Economic, Science and Technology Policy Advisor to the Senate of Mexico (LVIII Legislature). As part of the congressional advisory group he led research on the economic effects of international biosafety regulations on Mexico's basic research, industry, and trade and directed comparative analyses on international food and drug safety policies and regulations.

His research experience at Cornell University includes comparative studies between Mexico and Spain's National Systems of Innovation and regulatory aspects of modern biotechnology and the biosafety of genetically modified organisms (GMOs), and on the reach and scope of intellectual property rights (IPRs) in the information technologies era. He holds a PhD in Regional Planning with concentrations on Science and Technology Studies and Risk Analysis, Communication, and Policy and a Master of Public Administration with a concentration in Science, Technology, and Infrastructure Policy from Cornell University. He also holds a Bachelor of Arts in Economics from Universidad Panamericana in Mexico.

Mariam Chaduneli

Project Manager



Mariam is a Senior Policy Associate who has worked extensively on research and policy analysis in the area of cybercrime and emerging threats, technology policy, and digital rights. She is an advocate for user-centered technologies and is passionate about observing the practical implementation of the framework of 'privacy by design and default'.

She is in charge of monitoring relevant national and international policy developments and producing research content relating to digital readiness, innovation policy, and digital transformation. She is also responsible for supporting long-term research projects, communications, and administrative work across key focus areas for PI.

Mariam has a master's degree in Innovation, Technology, and the Law from the University of Edinburgh focusing on the interplay of law, technology, and digital rights. Prior to obtaining the UK Government's Chevening Scholarship for her master's studies, she was a Chief Project Management Specialist in the Ministry of Internal Affairs of Georgia where she gained hands-on experience initiating and managing international projects with public and private sector organizations operating on a national, regional and international level.

Sylvie Antal

Digital Strategy Manager



Sylvie is a Policy Research and Communications Associate with prior experience in digital privacy issues relating to minors and vulnerable populations, as well as in consumer education and technology for international development. She is an advocate for ethical, inclusive, and innovative solutions and policies that make digital experiences safer and more effective for all populations.

At PI, she is responsible for monitoring relevant policy developments, assisting with research, developing communication strategy and content, and coordinating the Fellowship program. Sylvie holds a bachelor's degree in Information Science from the University of Michigan's School of Information, where she was a member of Tech for Social Good, and a masters degree in Human-Computer Interaction. Prior to joining Portulans, she interned at the US Federal Communications Commission, and the Family Online Safety Institute in Washington DC.

Abdellah Bouhamidi

Data Scientist



Analytics consultant, founder of Science Data Value Ltd., a consulting practice focused on providing expertise in data management, aggregation and analytics, and on developing, delivering and integrating solutions to capture data and produce actionable insights in relation to growth and markets; organizational excellence and engagement; risk analysis and management; and sustainable impact.

With a background in Operations Research, an MBA from Cornell University, and more than eight years of hands-on experience in digital transformation, analytics and big data, Abdellah has helped 25 organizations across 12 industries find and activate levers for growth and sustainable ROI.

Jessica Sumner

Research Assistant



Jess holds a Master's degree from Sciences Po Paris School of International Affairs in International Development and is currently completing a Master's of Research at UCL in Urban Spatial Science.

Jess has previous experience on issues of innovation, urbanization, economic policy, and foreign relations in Europe and more specifically, the Caucasus region. Having previously worked at NATO's Joint Analysis Lessons Learned Centre, the U.S. Embassy in Tbilisi, Georgia, and the International Rescue Committee, she has worked on a number of issues regarding the nexus between innovation and development. She speaks English, Russian, French, and Portuguese and enjoys using linguistics to gather more information.

She is currently a think tank member at the International Development Research Network researching the effects of smart city transformations and multilateral innovation policy strategies."

Our Technical Advisory Board (2022)

Chris Ferguson



Since 2021, Chris Ferguson has been the Managing Director of Scott Logic, a consultancy that tackles some of the hardest problems in the world's largest organisations across a range of industries including Energy, the Public Sector and Finance.

Prior to this, Chris was a Senior Civil Servant in the original senior management team that built the UK's Government Digital Service in the UK's Cabinet Office. From 2015, Chris was the GDS Director responsible for the UK Government domain [GOV.UK](https://www.gov.uk) and all cross-government platform development. In 2017, after the UK was named the #1 digital government by the UN's Digital Government Index, Chris established the National, International & Research Group within GDS to focus GDS engagement and collaboration on the UK's wider public sector, devolved administrations, and partner organizations worldwide like the UN and OECD. While in government, Chris was also the chair of the cross-government Digital Leaders Network, Head of the Digital Profession within HM Government and led the Digital, Data and Technology elements of the Cabinet Office's response to the global pandemic.

Prior to 2011, Chris's career mainly focused on national security and diplomacy roles in the UK and overseas working with the UK's Home Office, Foreign Office and Ministry of Defence.

John Garrity

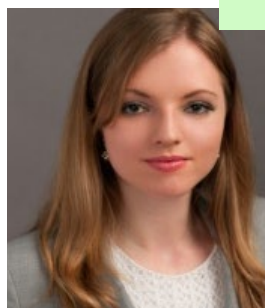


John Garrity is Chief of Party for USAID/Philippines' Better Access and Connectivity (BEACON) activity, a USD 33m USAID program to improve digital connectivity infrastructure, the ICT enabling environment, and cybersecurity capacity in the Philippines. His background is as an economist, policy advisor and

project manager with twenty years of experience working on economic development issues in the public sector at the state, federal and international levels, and in the private sector. His focus is on digital inclusion programs, universal access policy and last-mile connectivity deployments to foster effective universal Internet adoption for inclusive growth and poverty alleviation.

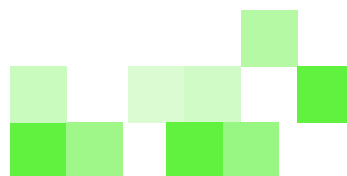
Previously, he was an independent consultant to public sector and private sector organizations on digital infrastructure development, including the Asian Development Bank, UNDP Philippines, the UN Broadband Commission, the UN ITU, UNICEF, UNESCAP, among others. He was Senior Connectivity Advisor in the US Global Development Lab at USAID and before that spent ten years at Cisco, in emerging market strategy and global technology policy/government affairs based in Washington, D.C. He began his career at the World Bank and also worked at the US Federal Trade Commission. He serves as a technical advisor to the Network Readiness Index, on the advisory council of the Connect Humanity Fund, has co-authored several reports on technology and development and presented around the world on efforts to close the digital divide.

Elena Kvochko

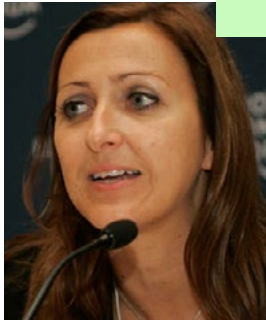


Elena Kvochko is Chief Trust Officer working in the field of cybersecurity and started with SAP in 2020. She is a former COO of cybersecurity technologies at Bank of America, CISSP, CEH. She also served as a technology, cybersecurity, and business operations executive. Kvochko

is a Certified Information Security Professional (CISSP) and Certified Ethical Hacker (CEH). She was named one of the Top 100 CIOs and is a member of the Wall Street Journal CIO Council. Kvochko was named one of Fortune magazine's Most Powerful Women International, one of the "Leading CIOs Who Happen to Be Female" by CIO Magazine, and Business Role Model of the Year by Women in IT. She is also a published author and an inventor with patents pending in security, privacy, and digital payments technology.



Irene Mia



Dr Mia is an experienced professional (economist by training) with a successful 20 year track-record in economic and policy research and on engaging with policy-makers and senior corporate leaders. Dr Mia has expertise in managing large teams with proven strategic, financial, planning and team building skills. Dr Mia holds a PHD in International

Economic and Trade Law from L. Bocconi University and MA in Latin American studies from the Institute for Latin American Studies, London University. Before her recent appointment as Senior Fellow for Latin America at the International Institute for Strategic Studies (IISS), Dr Mia was the Global Editorial Director for Thought Leadership at Economist Group, Economist Intelligence Unit.

Andrew Puddephatt



Andrew is the founder and director of Cedar Partners, a network of individuals working to improve life for all, and the founder and director of Adapt, a new startup helping companies manage user data ethically. Andrew also is the chair of the Internet Watch Foundation, which helps prevent child sex abuse online, board chair of the Board of Global Partners

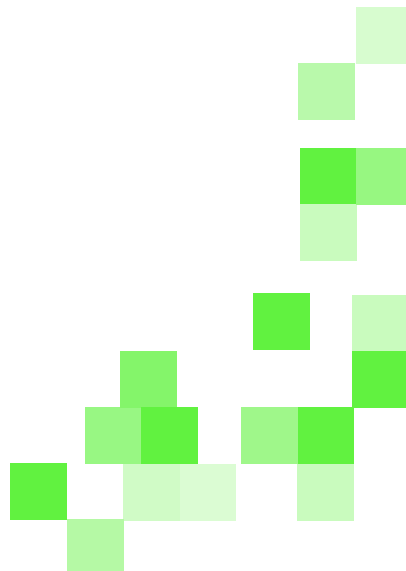
Digital, focusing on human rights implications of Internet policy, and deputy chair of the Sigrid Rausing Trust and management committee member of European Council of Foreign Relations.

Michaela Saisana



Michaela Saisana is the head of the Monitoring, Indicators and Impact Evaluation Unit, and she also leads the European Commission's Competence Centre on Composite Indicators and Scoreboards (COIN) at the Joint Research Centre in Italy. She has been working in the JRC since 1998, where she was awarded "best young scientist of the year"

in 2004 and, along with her team, the "JRC policy impact award" for the Social Scoreboard of the European Pillar of Social Rights in 2018. As a scientist and engineer specializing in process optimization and spatial statistics, she collaborates, by auditing performance indices, with over 150 international organizations and world-class universities, including the United Nations, Transparency International, Oxfam, the World Economic Forum, INSEAD and WIPO. She is the author of about 30 articles in academic journals, 100 working papers, and a co-author of two books: 2008 OECD/JRC Handbook on Composite Indicators and 2008 Global Sensitivity Analysis-The Primer (Wiley).



NRI's Advisory Board (2022)

Dr. Hessa Al-Jaber



Dr. Hessa Al-Jaber is the chairperson of Trio Investment, a technology investment company that invests in innovative technology that addresses some of the most pressing health problems in the MENA region. As an expert in technology, media, and telecom practice, her focus is the impact of a digital economy in productivity and competitiveness. Dr. Hessa

was the former and the first-ever Minister of Information and Communication Technology in Qatar. Prior to becoming a minister, Dr. Hessa held the position of Secretary General of the Supreme Council of Information and Communication Technology since its inception in 2005. Dr. Al Jaber was a member of United Nations ITU Broadband Commission for Sustainable development and a member at the Network of Global Agenda Councils of the World Economic Forum (WEF). Dr. Al Jaber is currently the Chairperson of Qatar Satellite Company, and Malomatia, in addition to being a member of several boards including Volkswagen (AG) Supervisory Board in Germany, Qatar University's Board of Regents, Qatar Museums Authority's Board. Dr. Hessa holds a Bachelor of Science in Engineering from Kuwait University, and a Master's Degree and Ph.D in Computer Science from George Washington University, Washington, DC.

Dr. Tawfik Jelassi



Dr. Tawfik Jelassi was appointed UNESCO Assistant Director-General for Communication and Information on 1st July 2021. In this position, he is responsible for the Organization's programmes on building inclusive knowledge societies, leading digital transformation, strategizing the role of ICT in education, and fostering freedom of expression.

Dr. Jelassi holds a Ph.D. doctorate in information systems from New York University (USA) and postgraduate diplomas from the University of Paris Dauphine (France). Dr. Jelassi has extensive experience in higher education, scientific research, and information & communication technologies. He held academic, corporate and government leadership positions in Europe, the USA, and Tunisia.

Among others, he was Programme Director and Professor of Strategy and Technology Management at IMD Business School in Lausanne (Switzerland, 2015 – June 2021). Prior to that, he served as Minister of Higher education, Scientific

Research and Information & Communication Technologies in the democratic transition government of Tunisia (2014 – 2015). Prior appointments included being Chairman of the Board of Directors of Ooredoo Telecom in Tunisia, Dean at Ecole Nationale des Ponts et Chaussées (Paris), and Professor & Chairman of the Technology Management Department at INSEAD (Fontainebleau).

Diego Molano



Diego Molano is an international consultant on digital transformation of companies and governments. He was the minister of information and communication technologies (ICT) of Colombia from 2010 to 2015. He transformed his country with his policy plan "Vive Digital," which aims to reduce poverty and create jobs using technology.

Mr. Molano has a long career in the technology industry and has had responsibilities in more than 20 countries. He has been a board member of international organizations and corporations in the telecommunications, TV, radio, and postal services sectors. He is currently senior advisor to the Inter-American Development Bank, senior advisor to McKinsey & Co. in Washington DC. Mr. Molano is an electronics engineer and economist from Xavier University in Colombia and holds an MBA from IMD in Switzerland.

Osman Sultan



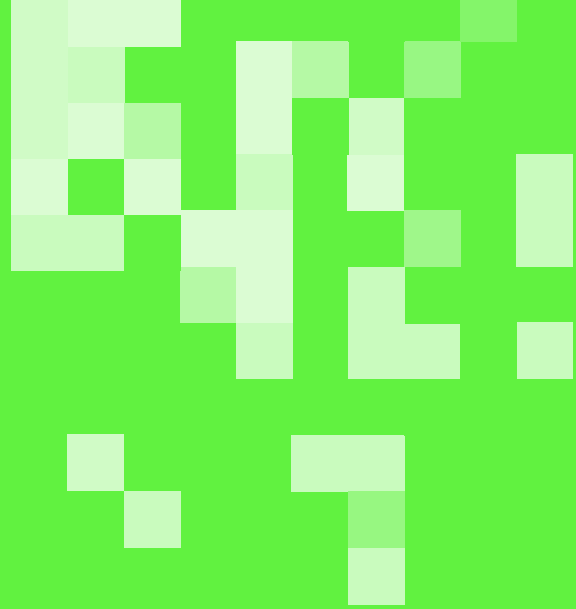
Osman Sultan brings 35 years of leadership, rich with achievements in the telecom sector. His vast knowledge and expertise in the field as early as the pre-Internet period placed him as one of the pioneers in Europe, the US, Japan, and the entire MENA region. His distinguished achievements ranked him as one of the most powerful executives in the

worldwide telecom industry twice on the "GTBPower100 List" in both 2010 and 2011.

Sultan has developed several strategies that helped produce the profound transformations that the telecom and information sectors have been creating in our lives. Sultan has been a board member for various institutions in the telecom industry, technology space, and academic world. incl. the advisory board of the Mohammed bin Rashid School of Communications (MBRSC), the Global Blockchain Advisory Council of the WEF, the Board of Endeavor UAE, and many others. His latest book 'The Future is Young' was published in July 2022.

Endnotes

- 1 The share of total population under 18 is % in China, 20 % in Brazil, 25% in India, and 43 % in Nigeria, for example, as opposed to 16 % on average in OECD countries. (Source : UNFPA, www.unfpa.org)
- 2 The share of total population under 18 is % in China, 20 % in Brazil, 25% in India, and 43 % in Nigeria, for example, as opposed to 16 % on average in OECD countries. (Source : UNFPA, www.unfpa.org)
- 3 IDC, 2020. *Worldwide Global DataSphere Forecast, 2021–2025: The World Keeps Creating More Data — Now, What Do We Do with It All?*.
- 4 Kemp, S., 2022. More than 5 billion people now use the internet. *TNW*, [online] Available at: <<https://thenextweb.com/news/more-than-5-billion-people-now-use-the-internet>> [Accessed 5 September 2022].
- 5 IDC, 2020. *Worldwide Global DataSphere Forecast, 2021–2025: The World Keeps Creating More Data — Now, What Do We Do with It All?*.
- 6 Forbes, 2022. 175 Zettabytes By 2025. [online] Available at: <<https://www.forbes.com/sites/tomcoughlin/2018/11/27/175-zettabytes-by-2025/?sh=758dfff05459>> [Accessed 5 September 2022].
- 7 IDC, 2021. *Worldwide Global StorageSphere Forecast, 2021–2025: To Save or Not to Save Data, That Is the Question*.
- 8 UNESCO National Commission, 2022. *Higher Education Report: Malaysia*.
- 9 The Economist, 2022. What Gen-Z graduates want from their employers. [online] Available at: <The Economist, 2022. What Gen-Z graduates want from their employers. [online] Available at: <<https://www.economist.com/business/2022/07/21/what-gen-z-graduates-want-from-their-employers>> [Accessed 5 September 2022].> [Accessed 5 September 2022].
- 10 Upwork, 2022. *Freelance Forward Economist Report*. [online] Available at: <<https://www.upwork.com/research/freelance-forward-2021>> [Accessed 5 September 2022].
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- 12 The World Bank, 2022. COVID-19 (Coronavirus) Drives Sub-Saharan Africa Toward First Recession in 25 Years. [online] Available at: <<https://www.worldbank.org/en/news/press-release/2020/04/09/covid-19-coronavirus-drives-sub-saharan-africa-toward-first-recession-in-25-years>> [Accessed 5 September 2022].
- 13 UNESCO, 2020. *Startling digital divides in distance learning emerge*. [online] Available at: <<https://en.unesco.org/news/startling-digital-divides-distance-learning-emerge>> [Accessed 5 September 2022].
- 14 Countries are grouped according to the World Bank Income Classifications. Economies are divided based on their 2019 gross national income (GNI) per capita, calculated using the World Bank Atlas method
- 15 The full list of non-high-income economies identified as displaying levels of network readiness beyond expectations are: China (23rd), Brazil (44th), Ukraine (50th), India (61st), Viet Nam (62nd), Philippines (71st), Kenya (77th), Morocco (79th), Pakistan (89th), Senegal (98th), Rwanda (101st), United Republic of Tanzania (107th), and Malawi (119)
- 16 The four main structural categories of the NRI comprise each of its pillars: technology, people, governance, and impact.
- 17 Groeneveld, R. A. and Meeden, G., 'Measuring Skewness and Kurtosis', *Journal of the Royal Statistical Society, Series D*, vol. 33, pp. 391–399, 1984.
- 18 The statistical analysis in this audit has been performed with the COINr tool. For more details, see: Becker et al., (2022). COINr: An R package for developing composite indicators. *Journal of Open Source Software*, 7(78), 4567.
- 19 OECD/EC JRC (Organisation for Economic Co-operation and Development/European Commission, Joint Research Centre). 2008. *Handbook on Constructing Composite Indicators: Methodology and User Guide*. Paris: OECD.
- 20 Saisana, M., B. D'Hombres, and A. Saltelli. 2011. 'Rickety Numbers: Volatility of University Rankings and Policy Implications'. *Research Policy*, 40: pp. 165–177. Saisana, M., A. Saltelli, and S. Tarantola. 2005. 'Uncertainty and Sensitivity Analysis Techniques as Tools for the Analysis and Validation of Composite Indicators', *Journal of the Royal Statistical Society A* 168 (2): pp. 307–323.
- 21 Charnes and Cooper, 1985; Cherchye et al., 2008; Melyn and Moesen, 1991; Van Puyenbroeck et al., 2021.



About the Network Readiness Index

The 2022 NRI is the fourth edition of a renewed NRI model, and it ranks a total of 131 economies based on their performance across 58 variables. This year's theme, Stepping into the new digital era: How and why digital natives will shape the world, attempts to examine the role of young people in the process of digital transformation. Although it is early to predict how digital transformation will unfold to impact our society and economy at large, the report provides a first glance at some of its key trends and patterns.

Recognizing the pervasiveness of digital technologies in today's networked world, the index is grounded in four fundamental dimensions: Technology, People, Governance, and Impact. This holistic approach means that the NRI covers issues ranging from future technologies such as AI and the Internet of Things to the role of the digital economy in reaching the Sustainable Development Goals (SDGs).

Origins: The Network Readiness Index (NRI) was first published in 2002 and provided a holistic framework for assessing the multi-faceted impact of ICT on society and the development of nations. Until 2016, the NRI was part of the Global Information Technology Report (GITR) published by the World Economic Forum (WEF), Cornell University, and INSEAD. The NRI anticipated various aspects that would become critical in the following years.

Early on, it identified three essential stakeholders for ICT: individuals/society, businesses, and governments, and it included elements of ICT application that were novel for the time.

At a time when the primary concerns in ICT revolved around infrastructure issues, the NRI provided a forward-looking and holistic perspective on the application of ICT within national economies. The NRI rapidly developed into a global benchmark for the application and utilization of ICT. Many economies utilized the NRI to design their ICT strategies, and the NRI was used and frequently quoted by leaders from the public and private sectors.

In a major redesign of the NRI framework in 2019, current topical concerns of trust, governance, inclusivity and impact on SDG goals were included into the model. The NRI framework provides a simple yet holistic view of how economies can leverage the power of digital technologies while building sustainable and inclusive futures.

This year, the renewed and revised NRI covers 131 nations across over 58 indicators and is a publication of the Portulans Institute, whose co-founders—Bruno Lanvin and Soumitra Dutta—have also been the co-editors of the The Global Information Technology Report (GITR) in previous years.

All editions of the NRI are available at www.networkreadinessindex.org

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