OPCDE

ANNUAL
REPORT

DECEMBER 2019 // OPERATION COMMUNITY DEVELOPMENT & EMPOWERMENT

WHAT MOTIVATES US

Back in 2010, The Economist reported that digital technology was vital to any serious attempt at tackling global poverty. António Guterres, Secretary-General of the United Nations, has described the digital divide as a situation in which "more than half the world has limited or no access to the Internet."

Yet as recently as September 2019, Mukhisa Kituyi, Secretary-General of the United Nations Conference on Trade and Development (UNCTAD), expressed his concern that the global digital divide continues to grow, and unless this trend is reversed, this gap will "leave developing countries, and especially least developed countries, even further behind."

Introduction

Indeed, by mid-2019, access to the internet was only available to **less than 40%** of the population in Africa—the lowest rate of any region in the world—and this disparity is even sharper in certain countries: only 23.3% of Kenyans and 9.6% of Somalis have internet access. While the Middle East as a region boasts a higher level of internet access relative to many African nations, certain countries and zones in this high conflict region suffer from unique constraints: the Gaza Strip in Palestine is one of these.

At the same time, these countries all suffer from high unemployment, and what's more, their young people (which the World Bank defines as aged 15–24) are three times as likely as the older population to be unemployed. In 2019, the youth unemployment rate in Kenya was 18.34%, in Somalia 24.89%, and in Palestine a staggering 40.4%. That is, nearly one in five young Kenyans, one in four young Somalis, and four out of every 10 young Palestinians, are jobless.

Youth unemployment rates

The consequences of youth unemployment are serious and long lasting. On the national level, youth unemployment contributes to **higher poverty rates, lower GDP,** increases in **crime and social unrest**, and **brain drain**; at the level of the individual and the family, they impact financial self-sufficiency, food (in)security, and psychological and physiological wellbeing, to name a few.

The following section provides a glimpse into conditions pertaining to the youth and their **access to digital technology** in three of the countries in which OPCDE currently has programs up and running.

Where We Are
TODAY

KENYA

In spite of Kenya's key challenges including poverty, inequality, climate change, continued weak private sector investment, and economic vulnerability, the country has made a significant leap in sustaining economic growth and social development over the past decade. In accordance with the UN's Agenda 2030 for Sustainable Development in Kenya, the Kenyan government has identified information and communications technology (ICT) as one of the key sectors to facilitate job creation and growth in Kenya. Indeed, the digital economy has been growing at an impressive rate.

In fact, the value of the ICT sector expanded from USD $3.4 billion in 2017 to USD $3.85 billion in 2018. This growth was driven primarily by the private sector, where major transnational corporations and micro-enterprises alike have played critical roles in digital development. Furthermore, the government has made a serious commitment to fast-track Kenya's technological advancement by investing in modern ICT infrastructures in order to establish an environment conducive to sustained growth.

SOMALIA

Somalia has been in a state of civil war since 1991. A new internationally-backed government was installed in 2012, bringing some incremental steps toward stability; however, sporadic fighting still occurs among warlords funded by various outside interests, including terrorist groups such as Al-Shabab and Al-Qa'eda, and civilians are the main casualties of the frequent bombings and other armed attacks. Somali civilians have been suffering from the insecurity caused by the ongoing armed conflict and lack of state protection, as well as from the resulting recurring humanitarian crises. The decades-long war has created not just widespread chaos and death, but also the displacement of a large proportion of the population; the number of internally displaced had reached 2.7 million as of 2018.

Despite the grim situation, Somalia has been making modest economic gains: the economy grew by 2.8 percent in 2018, and is expected to record a similar rate of expansion in 2019. As with Kenya, ICT development has been led by the private sector.

In the introduction to this report, the penetration rate for internet access in Somalia was reported as being less than 10%; however, the World Bank and the Somali government assert that Somalia has been ahead of many of its neighbors in digital access. This apparent discrepancy can be explained by the fact that while broadband infrastructure and access is very limited and uneven around the country, access via mobile data networks is much more widespread. Most of the healthy ICT infrastructures are found in the urban areas of the country, especially in Mogadishu. Nevertheless, the Somali government has stated its commitment to increasing access, not only to digital connectivity, but to ICT education as well.

GAZA

Since 2007, the ongoing economic blockade, restriction of the free movement of people, and consecutive military aggressions have devastated socio-economic conditions in Gaza. These conditions have continued to deteriorate further as the unrelenting siege has significantly limited access to clean water, interrupted electricity supply, vast unemployment, substandard housing, and widespread food insecurity, culminating in a humanitarian crisis. As a matter of fact, a recent report by the UN Conference on Trade and Development warned that the dire situation will deem the small strip of land uninhabitable by 2020. As a result, Gaza's contribution to Palestine's national economy has fallen considerably in the past 12 years, weakening overall economic conditions in Palestine.

In addition to the severe restrictions on the movement of goods and people, a recent report has documented "Israeli control over the Palestinian ICT infrastructure in the West Bank and Gaza and its impact on the digital rights of the Palestinian people," calling this situation a "digital occupation of the Palestinian telecommunications sector." According to a 2018 report published by the World Bank, the tech start-up ecosystem in the West Bank and Gaza is at its early stage and still maturing. Although its ranks of start-up founders tend to be highly educated and include a comparatively high ratio of female entrepreneurs, founders are still young and have little managerial experience. Along with limited skills and experience, lack of supporting infrastructure significantly hinders the growth and survivability of tech start-ups.

OPeration:
Community Development & Empowerment

Given the statistics and conditions described above, achieving technological development, overcoming the digital divide, and reducing unemployment and poverty among the youth in these regions are obstacles that seem insurmountable. Instead of looking at these young and burgeoning populations as liabilities, however, their strengths and potentials should be recognized and fostered. When provided with opportunity, many of the youth have shown great talents in technology-related fields such as coding, and harnessing the power of the internet in innovative and proactive ways. When developed to the fullest, these potentials can affect a dramatic and positive change in the lives of these young people, in their communities, and in their respective national economies. A relatively young labor force provides a country's economy with a host of advantages in both the public and private sectors, because young people bring new energy and perspectives, are open to on-the-job training and development, are adaptable and agile in a fast-changing environment, and are early adopters and quick to advance in the use of new technology. All these factors contribute to a country's faster growth and stronger competitive advantages in the global marketplace. This is the thinking behind Operation Community Development and Empowerment (OPCDE).

Who Are

WE

In spite of their challenging circumstances, the youths from the three mentioned low-income countries were observed to be highly motivated, compassionate, and full of talent. But in order to achieve their highest potentials, they need support, knowledge enrichment, and collaboration from other stakeholders. Hence, OPCDE was formed as the result of its founder's intention to bridge the gaps hindering these young people from living up to their fullest abilities. This initiative will not only enhance the business and technology skills among the youth but will also engender positive change in the role of young people in their own communities.

So, in April 2019, the founder formally introduced and presented Operation Community Development and Empowerment at a prestigious conference in Singapore: The Security Analyst Summit, hosted by Kaspersky Labs. The main goal of the organization is to empower local communities by providing mentorship, knowledge transfer, and general support in technology-related fields.

The strategy is to engage locally situated partners from industry, education, and nongovernmental organizations (NGOs) to bring their resources to the table in this concerted effort.

Our founder, Matt Suiche, presenting about the humble beginnings of OPCDE.

Our Community
PARTNERS

Our work is built on a wider collective of local mentors and teams, and is only possible because of their expertise, networks and talent. We feel privileged to work alongside these amazing teams to benefit youth and communities around the world.

Bilan Codes
Striving for gender parity in technology

iRise
Mogadishu Innovation Hub

AH AFRICAHACKON

SHEHACKS KE

Gaza Sky Geeks

SUPPORTERS

Microsoft

codecademy

AFRICAHACKON

Kenya

AfricaHackOn, based in Nairobi, is a conference held annually which brings together individuals with talents, training, and/or experience in cybersecurity. Through these events, the brightest professionals in the region and from around the globe have the chance to share their insights and skills through live presentations, engaging discussions, and hands-on training demonstrations. Besides organizing this yearly event,

AfricaHackOn mentors also provide spaces and a comfortable environment where youths and other interested individuals can learn technical skills. Moreover, they also run "Capture the Flag," a competition where participants are challenged with programming puzzles they need to solve in a timed competition. Winners are then awarded and recognized for their exemplary performance in solving the puzzles. AfricaHackOn has held coding bootcamps at universities since 2014.

@AfricaHackOn

SHEHACKS

Kenya

SheHacks in Kenya is a community of **over 200 women** involved in cybersecurity from various backgrounds, from all across Kenya. Its leaders and participants are women who aim to bridge the skills and gender gaps in the Information Security field. The organization conducts regular monthly bootcamps and bi-weekly group discussions online. They provide mentorship in the field of cyber security to university students through these bootcamps. In addition to the campus outreach program, they have also fostered cybersecurity learning communities across Kenya, and in urban hubs like Nairobi, and Mombasa.

Moreover, SheHacks organizes an annual HackFest. In this event, participants are given the opportunity to showcase their technology-related skills and are given relevant supplemental knowledge to enrich and enhance their capacity.

Thanks to generous support from **Microsoft**, SheHacks managed to conduct:

9	6	1	&	several
Bootcamps	Campus Trainings	Conference		Webinar series

🐦 *@SheHacks_Ke*

iRISE

Somalia

iRise Mogadishu Innovation Hub is the very first tech community in Somalia whose primary goal is to build and empower young entrepreneurs. iRise provides resources so startups can implement and realize their innovative and creative ideas. Moreover, by providing a coworking space equipped with complete facilities, young people with potential and talent can have the chance to meet and collaborate with other people, sharing a diverse skillset and thereby enhancing their own skills in business and technology. An important aspect of iRise is to enable young tech entrepreneurs to widen their networks so they can connect with their future investors.

@iRiseHub

BILANCODES

Somalia

A non-profit that aims to empower youth and especially women and girls to build technical skills, such as coding and programming, in various technology sectors. The organization strives to **decrease the gender divide** and encourage a wider **female participation** in the workforce.

The organization hosts bootcamps and training workshops to all skill levels and ages.

@BilanCodes

GAZA SKY GEEKS

Palestine

GazaSkyGeeks (GSG) was founded by Google in partnership with Mercy Corps. GSG provides a haven and comfortable coworking space specifically designed to nurture innovation and entrepreneurship in young people and other self-motivated individuals with great potential in technology and business. As mentioned earlier, the severity of the ongoing economic blockade coupled with frequent escalations of armed conflict has restricted the free movement of goods and people, which in turn has decimated the Gazan economy. GSG believes that by providing access to high-speed internet, highly trained and educated youth can bypass material restrictions and "move" freely in cyberspace. In addition to providing coworking space, GSG runs a startup accelerator program (GeeXelerator) and a freelance academy (Al-Khalil) to train young people skilled in areas such as web development, graphic design, translation, social media, mobile development, and front-end development.

Gaza Sky Geeks also provides a technology education hub through its full-stack coding academy—the first in Palestine. GSG was founded in 2011 and has since successfully helped hundreds of youths to hone their skills and prepare them to secure high-quality jobs in various companies and/or to launch and sustain their own self-directed businesses.

@GazaSkyGeeks

Our Activities

Our programs and activities are growing! We run programs across two continents.

We operate based on straightforward ethos of:

Gathering: meet-ups, workshops, conferences.
Participating in international and regional conferences.
Building local communities of experts.
Mentoring and supporting the youth.
Enabling opportunities.
Providing more visibility to local projects and initiatives.

Over **$50**k

Worth of Programs

CodeAcademy Pro Accounts

Conferences & workshops

Students sponsorships

OPCDE KENYA 2018

Nairobi, Kenya

In partnership with AfricaHackOn, OPCDE Kenya took place at Strathmore Business School in Nairobi, Kenya in June 2018. The theme was "Are you ready for Cyber Warfare?". Featured speakers from top-tier Silicon Valley companies such as **Microsoft**, as well as global cybersecurity firms including **Trend Micro, Winsiderss**, and **Comae Technologies**, focused on technical defensive innovative security approaches from various perspectives. Participants tackled various relevant topics and demonstrations pertaining to cyber warfare, such as: Turing-complete programs (aka smart contracts) in relation to blockchain; fraud and ways to mitigate it, and how to identify fraud using forensic audits; using "just in time optimization" to uncover search engine vulnerabilities; and much more.

AFRICAHACKON 2019

Nairobi, Kenya

AfricaHackOn's sixth annual conference, held at United States International University— Africa in August 2019, marked another milestone for technology development in the country. Speakers representing enterprises large and small, from Kenya and other African countries as well as from Europe, addressed the impact of cybersecurity in consonance with the Kenyan's government's strategy: enhancing manufacturing, food security and nutrition, universal health coverage, and affordable housing.

Moreover, the conference provided a platform for youths to showcase their tech-related skills and talents to the public. To support the parallel goals of OPCDE and AfricaHackOn, OPCDE had sponsored **two students** to take part in the five-day conference.

#HACKFEST2019

Nairobi, Kenya

With over 400 participants, the SheHacks community successfully conducted their first conference at Strathmore University in Nairobi. With the support of Microsoft, HackFest 2019 provided a valuable platform to further develop competency in the area of cyber threats amidst an ever-evolving technology ecosystem.

The event generally aimed to prepare women to thrive in the technology industry, and in particular in the burgeoning cybersecurity field.

Moreover, according to featured speaker Hayden Hainsworth, General Manager and Partner: CxE Cybersecurity Engineering at Microsoft,

SheHacks 2019 provided a great opportunity to empower more young people with cybersecurity skills in order to accelerate digital success in Kenya.
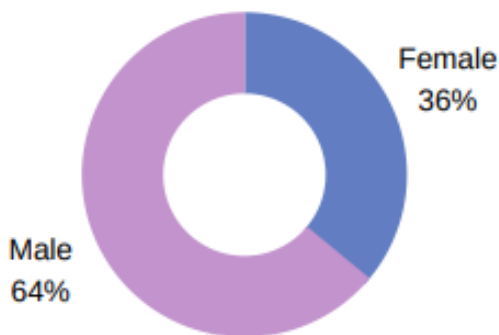
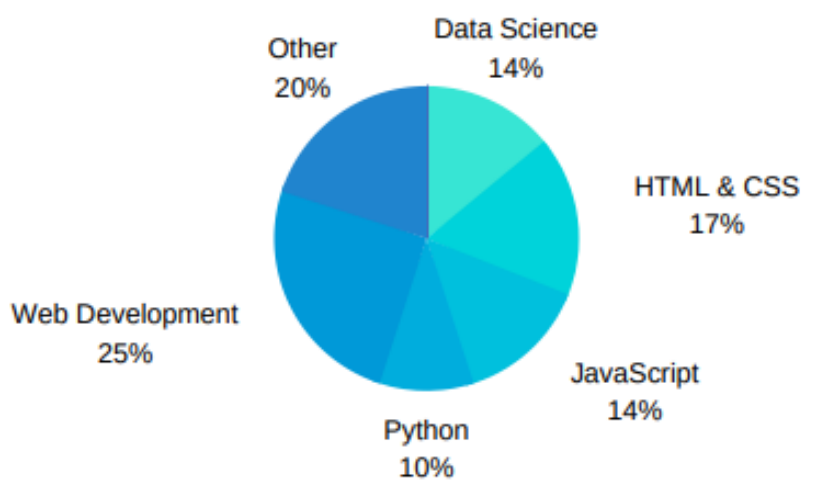# code|cademy

Pro Accounts Sponsorship

CodeAcademy is an interactive online platform which develops and enhances technical skills. It offers coding classes in 12 various programming languages, including Python, JavaScript, SQL, C++, as well as markup languages HTML and CSS. Although free classes are available, those accounts have limited scope. Thus, to give young coders a greater opportunity to enhance their skills to the fullest extent through the platform, with generous support from CodeAcademy, OPCDE has distributed 80 Pro accounts,. These full-access accounts were awarded to youths from Kenya, Somalia, and Palestine
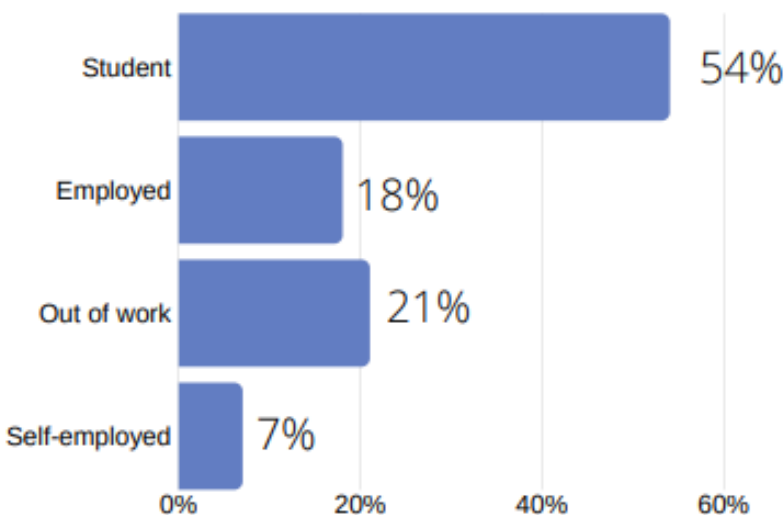
A recent assessment with the recipients showed:

Survey Respondents

Female 36%
Male 64%

Modules Practiced

Other 20%
Data Science 14%
HTML & CSS 17%
JavaScript 14%
Python 10%
Web Development 25%

Respondent Occupation

Student 54%
Employed 18%
Out of work 21%
Self-employed 7%

0%   20%   40%   60%

47% *of the respondents practice their technical skills to look for better job opportunities.*

"An amazing experience"

"It is exactly what I needed"

"Thank you for the opportunity to learn skills of the future"

THREAT CON 2018

Kathmandu, Nepal

Our founder, Matt Suiche, represented OPCDE at THREAT CON, which hosts and manages a series of annual international cybersecurity conferences for developers, security practitioners, IT administrators, and even interested novices from all over the world. It aims to facilitate a gateway to standard practices and to foster new developments and solutions in the field of cybersecurity. The first annual THREAT CON cybersecurity conference was held in Nepal in November 2018. THREAT CON is managed by ThreatNix, a cybersecurity startup based in Kathmandu.

BLACKHAT 2019

Las Vegas, USA

Black Hat USA brings together the elite community of influential security experts, practitioners, researchers, and business developers who as the result of their work and achievements have made international headlines. over 200 speakers with more than 19,000 cybersecurity stakeholders attending from all around the globe. OPCDE believes that such a platform could be a great opportunity for youths with impressive tech-related skills. For this reason, OPCDE awarded tickets for two lucky and well-deserved participants ($2,500 each) to attend the prestigious Black Hat 2019 event.

LET'S JOIN FORCES

To learn more about OPCDE, or if you would like to collaborate on a project together, feel free to reach out to our community manager at **sima@opcde.com.**

You can follow our updates on social media:

  @OPCDE

WWW: www.opcde.com

Make sure to check out our **short documentary** that follows OPCDE in Nairobi!

https://www.youtube.com/watch?v=epTDX9fjwM4

Since its rise, interconnectivity has reflected the ethos of the hacker community. OPCDE connects with some of Kenya's most prominent raw talents to bring together a youth-driven community event.

This short documentary, which is available in six different languages, follows the inception story of OPCDEx: OPeration Community Development & Empowerment, which started in Nairobi and has since witnessed a ripple effect across many other communities.

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