ANALYSIS of ICT-ENABLED YOUTH EMPLOYMENT in GHANA, KENYA, and SOUTH AFRICA

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CONTENTS

EXECUTIVE SUMMARY

The Rockefeller Foundation commissioned the International Youth Foundation (IYF) to assess promising growth sectors and quality employment opportunities for youth in Kenya, South Africa, and Ghana. Informed by findings from a macro-level analysis, IYF conducted an initial labor market and youth assessment in Kenya and, through subsequent consultations with the Rockefeller Foundation, conducted assessments in South Africa and Ghana more specifically focused on information, communications, and technology (ICT)-enabled employment opportunities for youth. Key findings by country are summarized below and described in more detail in the report that follows.

Kenya

Promising growth sectors for ICT-enabled jobs

Based on IYF study findings, the ICT sector is Kenya's most promising source of quality youth employment. Within that sector, promising subsectors and opportunities include: business process outsourcing (BPO), development of mobile telephone applications, telecommunications, internet website design, network administration, electronic-procurement, mobile-based agricultural support, and market research.

Quality ICT-enabled employment, youth perspectives

Youth focus group discussion (FGD) participants defined quality employment to mean sufficient income, advancement opportunities, and interesting work. Youth viewed the ICT sector, including BPOs, as offering greater opportunities for quality employment than other sectors.

Skills gaps and training needs

Participating employers emphasized the need for critical life skills (teamwork, work ethic, and integrity) over technical skills, though many also seek candidates with strong computer skills. Both employers and youth participants cited lack of adequate training opportunities as a barrier to employment.

Promising training initiatives

Initiatives in Kenya include youth employability and entrepreneurship programs; various university or privately-sponsored technology incubators for developing mobile applications; and CISCO's networking academy training partners to prepare individuals for entry-level ICT careers. The rapid growth of ICTs and their applications in Kenya has helped bridge the 'digital divide' and open up opportunities for women to use ICTs for social good and economic strengthening.

South Africa

Promising growth sectors for ICT-enabled jobs

Key growth sectors producing the greatest number of ICT-enabled employment opportunities are BPOs and call centers, ICT services, financial services, and retail. Employers in these sectors identified a range of ICT-enabled employment opportunities, including ICT specialists, call center staff (across all sectors), human resources staff and customer and client services. Mid-level opportunities identified included ICT technical specialists and managers and team leaders with ICT skills. Both the ICT services sector and the BPO and call center sector project high future demand for ICT specialists.

Quality ICT-enabled employment, youth perspectives

Youth participants defined quality employment to include adequate salary, advancement opportunities, relevant purpose, decent hours, and enjoyable work. Within that context, they said the financial services sector offers the greatest quality employment opportunities followed by the ICT services sector and retail. Youth felt that the BPO and call center industries offer lower quality employment but are easier to access, based on the lower requirements for experience and qualifications in these industries.

Skills gaps and training needs

Employers identified lack of basic ICT skills, poor life skills, and workforce readiness as the leading barriers to hiring youth. Across all sectors, employers hiring for specialized ICT positions reported difficulty finding qualified youth, and a significant percentage of employers in each target sector do provide on-the-job training in ICT skills.

Promising training initiatives

Initiatives in South Africa include government incentives for employers to provide on-the-job training and also train unemployed youth; an extensive public Further Education Training system with over 240 campuses, many of which offer ICT-specific courses; and innovative initiatives that bring together civil society, the private sector, and government to provide job training and placement services to youth. These initiative platforms all offer opportunity for leveraging a national digital jobs initiative. Regarding vulnerable and disadvantaged youth, the Harambee Youth Accelerator and the Jumpstart Initiative, which are non-profit initiatives initiated by South African corporations, are noteworthy for addressing the skills and behavioral gaps that can block them for employment. Beyond these initiatives, employers also rely on a variety of private sector and civil society training providers to train new entrants and existing employees.

Ghana

Promising growth sectors

Employers, stakeholders, and youth identified four key growth sectors: banking and financial services; telecommunications and media; information technology (IT); and marketing and advertising.

Quality ICT-enabled employment, youth perspectives

The quality of ICT-enabled jobs was assessed based on the perspectives of both vulnerable youth and employers, looking at a set of selection criteria including adequate earning, benefits, and opportunities for advancement. The majority of working youth reported not earning sufficient income to cover basic expenses. Interestingly, self-employed youth reported better earnings. More than half of working youth reported receiving some form of benefits such as healthcare and pensions.

Skills gaps and training needs

In addition to different views on jobs availability, youth and employers expressed diverging views on skills required for entry-level jobs. Youth over-estimated the technical skills required, under-estimated the soft skills employers valued, and lacked the vocabulary to identify basic and advanced ICT skills. While employers expressed concern about a widespread lack of specialized and basic IT skills, they did not identify "gaps in skills" as a major impediment to recruiting youth. This widespread lack of exposure to ICT upon completing secondary school increases the challenges youth face in finding gainful employment.

Promising training initiatives

Promising practices in Ghana include various government initiatives to increase youth's exposure to ICT and several public/private partnerships with the nation's largest telecommunications company (RLG). The partnerships include the ICT for Accelerated Development (ICT4D) policy, the Better Ghana ICT Project, and a project with the National Youth Employment Programme (NYEP), which enabled tens of thousands of youth to be trained in ICT-enabled modules. In addition, Ghana's government has partnered with the World Bank to launch the e-Ghana initiative in an effort to stimulate economic growth and to create more ICT-enabled positions within the IT-Enabled Services-Business Process Outsourcing (ITES-BPO) industry.

Cross-Cutting Themes

Vulnerable youth

In a number of ways, ICTs can be a powerful catalyst when it comes to addressing the needs of vulnerable youth, especially in terms of socioeconomic development. By building the capacities of youth through training in computer literacy, youth can gain access to ICT-based economic activities and employment in areas such as database management, customer care, hardware maintenance and repair, and network management. Technical and life skills can be solutions to challenges disadvantaged youth face in entering the workforce. There is a need to identify those sectors and ICT-enabled occupations most accessible to youth (e.g., BPO and retail), and support youth to access those opportunities and develop transferable skill sets. Civil society and the public sector both have an important role to play in reaching, training, and placing vulnerable youth into employment. Public Technical Vocational Education Training (TVET) systems have the opportunity to reach vulnerable youth at much greater scale and in more diverse locations, but often have major institutional challenges.

Women in ICT

New technologies have a vast potential for empowerment which needs to be fully exploited. The use of ICTs can transform the lives of women globally by increasing their access to education and health while strengthening their voice in the political sphere. However, women are still at a disadvantage when it comes to access of ICTs due to a series of factors, including low literacy and education, language barriers, time, cost of access, geographical location of ICT facilities, and social-cultural norms. These factors, as well as other gender issues, should be taken into account when designing and implementing employability programs for young people. Employers in Ghana recognized the lack of female workers in ICT positions, and frequently stated that women were just less interested in ICT positions. Another explanation was social conditions in Ghana such that males had fewer domestic duties and were able to work the long hours required by competitive ICT positions. Both explanations highlight a need to build awareness amongst women on opportunities in the ICT sector and amongst employers on women who have the skills.

Career pathways

In each country, youth weighted their definitions of quality employment heavily towards advancement opportunities, second only to sufficient salary. To attract willing young employees and reduce turnover, employers will need to clarify advancement opportunities within their companies and market the development of transferable skills for advancement outside the company.

Work readiness, life skills

Employers in all three countries referenced young people's lack of life skills, including teamwork, problem-solving, communications, and work ethic. Generally, youth did not identify the life skills they lacked. Vulnerable youth may be at a particular disadvantage in terms of these skills, highlighting a need to make life skills training more widely available.

Self-employment versus employment

In many economies around the world, especially in Sub-Saharan Africa (SSA), self-employment is the most viable option for young people as employment in the formal sector is limited and highly competitive. In this study, the majority of youth reported the preference for self-employment, as it is perceived to allow workers more independence and control over professional decisions, such as hours worked. In South Africa, we looked at the formal employment sector specifically, given its dominance in the national economy, which is a unique feature in comparison to most other countries on the continent. Still, entrepreneurship remains important to South Africa. Across all three countries, the governments of Kenya, South Africa, and Ghana are increasingly supporting initiatives that promote entrepreneurship, with the recognition that the formal sector is not creating enough employment for youth.

The future of BPOs and call centers

To varying degrees, BPO and call centers are promising sources for future entry-level youth employment in Kenya, South Africa, and Ghana. Both South Africa and Kenya have developed strategy documents suggesting BPOs have the potential to create 100,000 and 80,000 jobs respectively by 2014 (Rockefeller Foundation, 2011). While BPO is a promising industry in Ghana, key informants and youth reported its growth is deterred by infrastructure challenges. Drawing from findings in South Africa, the BPO and call center sector in other countries should: position itself as a provider of key, entry-level ICT-enabled job experience to youth; clarify the availability of advancement opportunities; and support youth to develop skill sets, and understand that marketability of these skills sets will help them access additional opportunities in the BPO industry or other sectors requiring ICT skills. Countries with infrastructure challenges similar to Ghana's should factor those challenges into their BPO development strategies and investments.

INTRODUCTION AND BACKGROUND

In November 2012, the Rockefeller Foundation commissioned the International Youth Foundation (IYF) to assess promising growth sectors and quality employment opportunities for youth in Kenya, South Africa, and Ghana. Designed to inform the Rockefeller Foundation's strategies for reducing youth unemployment in Africa, the study sought to answer:

- How do youth define quality employment or "decent work"?
- Which growth sectors offer the greatest future opportunities for quality youth employment?
- What skills and education do youth need to seize these opportunities, both at the entry and mid-level?
- What training resources are needed to prepare youth for current and emerging opportunities?

To that end, IYF researchers developed a working, baseline definition of quality employment based on the International Labor Organization's framework; analyzed macro-level trends affecting youth labor markets in SSA; and informed by those trends, conducted targeted labor market and youth assessments in Kenya, South Africa, and Ghana.

Refining the study goals at the Rockefeller Foundation's request after the first assessment in Kenya, IYF assessments in South Africa and Ghana focused on digital jobs opportunities. Based on the foundation's objective to identify opportunities at-scale, IYF broadly defined digital jobs to encompass ICT-enabled jobs—that is, jobs across all sectors requiring some level of ICT skills and offering growth opportunities.

> ### Sub-Saharan Africa: A Youth Snapshot
>
> - Youth (age 15-29) will represent more than 50 percent of the working population through 2020.
>
> - 2.1 million youth will enter the labor market annually between 2011 and 2015.
>
> - 12 percent youth unemployment rate
>
> *Source:* SSA Macro Trends Paper, produced by IYF for the Rockefeller Foundation, citing World Bank and International Labor Organization databases, 2013.

Macro-Trends Analysis of Sub-Saharan Africa

To guide its later country-specific assessments, IYF's macro-trends analysis of SSA explored general economic conditions and trends in SSA and identified high-growth sectors offering the greatest potential for quality youth employment.

Identifying Current Conditions and General Trends

According to the International Monetary Fund, Sub-Saharan economies are expected to grow 5.7 percent annually from 2012-2017. With over three-quarters (77.2 percent) of all workers employed in vulnerable employment, and with youth unemployment static at about 12 percent in SSA, the region's youth are more challenged by poor quality employment than unemployment (ILO KILM database, 2013). In the near future, the majority of employment opportunities for SSA's vulnerable youth will continue to be in the informal sector. With 2.1 million youth expected to enter the labor market annually between 2011 and 2015 – and conditions varying widely between countries, specific national strategies will be needed to improve their prospects for quality employment.

Identifying Promising Growth Sectors

Based on the macro trend analysis, nine high growth sectors in SSA offer the greatest potential for quality youth employment: manufacturing, agriculture, retail and hospitality, construction, finance and business services, transportation, government and social services, transportation, and ICT. Growth possibilities exist for ICT-related jobs throughout the value chains of each of these sectors. However and specific to ICT as an independent sector, five subsectors offer significant potential for youth employment and entrepreneurship:

- BPO;

- Development of mobile telephones;

- Telecommunication;

- Internet website design; and

- Network administration.

IYF researchers utilized ILO standards to define quality employment
or "decent work" as offering:

- Adequate earnings and productive work

- Adequate unemployment, health, and pension insurance.

- Stability (employment contract of at least 1 year)

- Advancement opportunities

- Decent hours (neither excessive nor insufficient)

- Safe work environment where there is equal opportunity, treatment, and access

METHODOLOGY: COUNTRY-LEVEL ASSESSMENTS

Informed by the macro trends analysis, IYF structured its study methodology to focus on growth sectors in Kenya, South Africa, and Ghana. To assess country-specific growth sectors and youth and employer perceptions of opportunities in those sectors, IYF researchers and research partners utilized a variety of research methods, including secondary data research; targeted labor market surveys; FGDs with unemployed, employed, and self-employed youth between the ages 16 to 29 (see Figure 1); and interviews with employers, training providers, and government ministries.

## TABLE 1: STUDY PARTICIPANTS BY COUNTRY

	Kenya	South Africa	Ghana
Youth Focus Group Participants	77	48	384
Employers	20	21	36
Key Informants (training providers, government officials)	13	4	13

Study Challenges

While conducting the assessments, IYF researchers addressed the following challenges worth noting for future studies:

- Employer apprehensions regarding the study's purpose. (Kenya, South Africa)

- Sociopolitical tensions and public safety issues that deterred youth participation and skewed the gender balance of the study. (Ghana)

- Study timing that conflicted with elections and summer holiday schedules. (Kenya and Ghana, respectively)

- Difficulty identifying appropriate employer representatives. (South Africa)

- Difficulty recruiting youth participants due to lack of incentives (South Africa, Ghana) and limited time granted by employers. (Kenya)

FIGURE 1: EMPLOYMENT STATUS OF YOUTH SURVEYED (AGGREGATE)

Legend:
- Self-employed
- Full-time
- Part-time
- Casual
- Unemployed
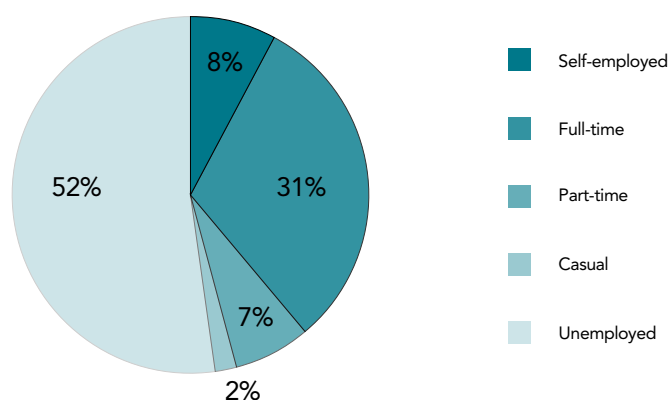
KEY FINDINGS: LABOR MARKET AND YOUTH ASSESSMENTS

This section summarizes key findings from the country-level assessments. Detailed findings may be found in the individual study reports:

- *Identification and Assessment of Economic Sectors with Potential for Youth Employment in Kenya: Analytical Report*
- *Analysis of Growth Sectors for ICT-enabled Youth Employment in South Africa*
- *Analysis of Growth Sectors for ICT-Enabled Youth Employment in Ghana*

Defining ICT-Enabled Employment and Quality Employment

The Rockefeller Foundation uses the term digital jobs to describe employment "created through the application of ICT to a new or existing activity or process, [which] generally include performing information-based tasks that build the individual's capacity for future work" (Harji, et al, 2012). Specifically, the foundation distinguishes the digital job "from other jobs such as manufacturing because the core product produced by a digital jobs worker is information or knowledge, as opposed to physical objects or services."

Based on the Rockefeller Foundation's objective to identify youth employment opportunities at-scale, this study broadens the definition of digital jobs to encompass **ICT-enabled jobs**—that is, those jobs that employers and youth perceive to require ICT-related skills and offer quality ICT employment opportunities. To that end, IYF focus group discussions, surveys, and interviews allowed participants to define the term—casting a broader net for emerging opportunities, training needs, and "mismatches" between perceptions, projections, and employer/labor market needs.

Using the ILO's criteria for decent work as a baseline, IYF youth assessments were structured to allow youth to prioritize the conditions that define quality employment. While the resulting responses were not inconsistent with the ILO framework, young people's weighting of those criteria offer valuable insights into their current conditions and future hopes. In that context, this section presents key findings by country and sector.

Identifying Growth Sectors for ICT-Enabled Youth Employment

Kenya

As reported in IYF's macro trends analysis of SSA, Kenya is a transition economy with rapidly growing service sectors. Its economy is characterized by high labor costs in specialized fields, a mismatch between labor force capacity and employment demand, and poor dissemination of labor market information. Eighty percent of its youth are employed in the informal sector.

Based on IYF's broader initial assessment in Kenya, the country's high growth sectors are: transportation, ICT, agriculture, and hospitality. Based on secondary research on these sectors, the ICT sector offers the greatest potential

> ### Quality Employment: A Youth-Weighted Definition
>
> Quality employment: Employment offering sufficient income for current needs, opportunities for future advancement, and basic benefits or conditions that include:
>
> - Interesting work, good working relationships and conditions, job security, and social benefits. (Kenya)
>
> - Serving a purpose, having a work-life balance, and enjoying one's work. (South Africa)
>
> - Simply being paid on a reliable basis. (Ghana)

with opportunities for employment and entrepreneurial growth in these subsectors or specializations: BPO, development of mobile telephone applications, telecommunications, Internet website design, network administration, electronic-procurement, mobile-based agricultural support, and market research.

South Africa

As a diversified economy with growing business and financial services sectors, South Africa's service sector offers the single highest growth potential for youth employment and potential to reduce the country's 49 percent youth unemployment rate. Based on secondary research and employer and stakeholder interviews, four subsectors offer the greatest potential for ICT-enabled youth employment.

- **Financial services and retail:** Between 1995 and 2009, financial services and retail accounted for 2.3 million of the country's 3.4 million new jobs (Bhorat, 2012). The retail industry is the largest youth employer, accounting for 27 percent of total youth employment in the country (Statistics South Africa, 2012). A recognized leader in electronic banking services, the financial services sector is already the third largest employer of youth in South Africa (MICT SETA, 2013). Within the sector, 51 percent of its employees use computers as an integral part of their daily jobs (HSRC, 2008).

- **ICT services:** Within the broader ICT industry, the ICT services sector is the largest employer, comprising 53 percent of its workforce. As the 20th largest consumer of IT products and services in the world, South Africa is already home to subsidiaries of multi-national firms that include Dell, IBM, Intel, Microsoft, Novell, Samsung, and Unisys. Between 2008 and 2012, overall employment in the ICT services subsector grew by 5.1 percent per annum (MICT SETA, 2013).

- **BPO/Call Centers:** This industry continues to grow rapidly, having already increased from 185 call centers in 1997 to 653 centers between 1997 and 2004 alone (Pandy and Rogerson, 2012). Full-time employment (FTE) is projected to increase from 10,000 in 2010 to 40,000 in 2015. The government is explicitly focused on building this sector to maximize social impact and increase youth employment.

Ghana

As reported in IYF's macro trends analysis of SSA, Ghana's is a transition economy with rapidly growing service sectors. Those sectors contribute almost half of the nation's strong GDP annual growth rate of over 7 percent. Its expanding economy is fueled by oil exports, increasing direct foreign investments, and a growing agricultural sector. Of the eight growth sectors identified through secondary research, the consensus of discussions and interviews with employers, stakeholders, and youth identify four as key growth sectors:

- Banking/Financial Services;

- Telecommunications;

- IT;

- Media, Marketing, and Advertising.

While the World Bank identifies BPO as a promising industry in Ghana, key informants reported its growth is deterred by infrastructure challenges that include a lack of a cost-effective and stable power supply; limited financial support available for local companies attempting to enter the sector; and internet connectivity issues in terms of speed and strength of radio, satellite, and cable signals.

ICT-Enabled Occupations by Sector: Employer and Youth Perspectives on Quality Employment

Based on a combination of secondary research, employer surveys, and stakeholder interviews, a range of entry-level and mid-level jobs will be in demand over the next several years. Youth FGDs and employer interviews shed light on perceptions of the quality of those jobs in terms of pay and job security, among other factors (see Figures 2 and 3).

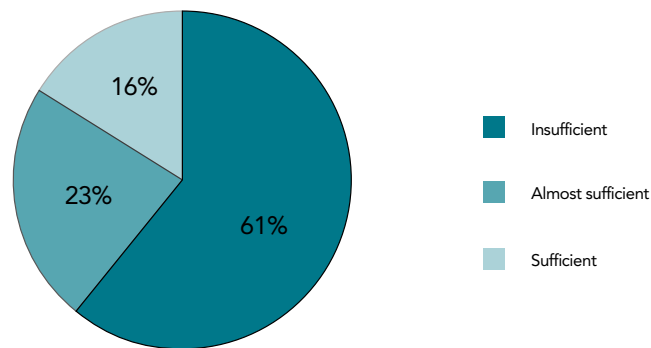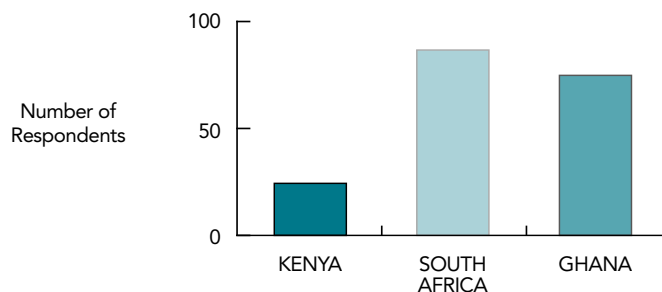**FIGURE 2: IS PAY ENOUGH TO COVER ONGOING EXPENSES? (AGGREGATE)**

- Insufficient — 61%
- Almost sufficient — 23%
- Sufficient — 16%

FIGURE 3: PERCENTAGE OF RESPONDENTS WITH A MINIMUM ONE-YEAR EMPLOYMENT CONTRACT

Number of Respondents

KENYA   SOUTH AFRICA   GHANA

Kenya

Due to the initially broader focus of the Kenya assessment, employers identified overall job opportunities rather than specific ICT-enabled entry and mid-level job opportunities. However, the multi-sector approach in Kenya did show that many ICT-enabled jobs were in demand in all of the fields. Based on employer responses and drawing from IYF's Equip3 Youth ICT Kenya Assessment (2011) and other secondary research ICT-enabled jobs currently include: customer care agents, data entry clerks, transcribers, and online researchers, computer maintenance and repair, support services (printing, scanning, copying), web design, software development, and networking.

From employer surveys and youth FGDs, the study captured the following employer perspectives and youth perceptions regarding the quality of positions in these sectors.

- **Agriculture:** While social benefits are provided for these formal employment opportunities within the agriculture sector, youth reported limited opportunities for advancement, an expectation to work more hours than paid for, and insufficient salary to meet ongoing expenses.

- **Transportation:** Youth employed in the transportation sector reported earning a sufficient salary more so than youth employed in the other target sectors. Also 63 percent reported receiving social benefits such as paid time off and meals/transportation allowances. However, youth reported harsh working conditions including long hours and lack of job security.

- **Retail/Hospitality:** Employers reported quality entry-level opportunities for youth in this sector. Youth respondents in this sector reported poor working conditions, especially for young women, and in-sufficient pay. Jobs are often unstable and based on company revenues.

- **ICT:** Employment in ICT offers the greatest opportunities for quality employment in terms of receiving social benefits. Youth respondents employed in the ICT sector were more likely to be satisfied with their jobs; however, all felt their take-home pay was insufficient.

South Africa

During interviews, key human resource stakeholders across the targeted sectors identified ICT-enabled positions expected to be in-demand in the near future. Those positions are shown by sector in Table 2 below.

TABLE 2: IN-DEMAND ICT-ENABLED JOBS BY SECTOR, SOUTH AFRICA

High-Growth Sectors	Examples of Entry-Level ICT Jobs	Examples of Mid-Level ICT Jobs
Financial Services	Data Analyst, Software Developer, Trainee Charted Accountant, Personal Assistant, Field Agent, Call Centre staff	Qualified Chartered Accountants, Call Center staff, Sales and Customer Service, Senior Business Manager, Project Manager, Team Leader, Division Manager
BPO/Call Centers	Desktop Engineer, IT setup, IT Hardware support, Systems Developer, Business Analyst, Call Center staff	Human Resources staff, Internal Compliance, Operations Manager, Call Center Manager, Training Developer, Assistant Manager, Supervisor
ICT Services	Technician, Desktop Engineer, Entry-level Engineer, Technical Specialist, Network Technician, CCT Technician, Software Developer, Help desk	Server and Network Specialist, Systems Architect, Customer IT Engineer, Applications Developer, Receptionist, Personal Assistant, Sales, Strategist, Security Manager
Retail	Data capture, Merchandise control, HR staff, Administrative staff, Finance Clerk, Customer care, Service desk, Marketing Assistant, Buyer's Assistant	Desktop Support, Network Engineer, Finance staff, HR staff, Buyer, Section Head, Garment techno-logistics, Business Intelligence Specialist, Store Manager, Division Manager, Training Manager, Assistant Manager

From employer surveys and youth FGDs, the study captured the following employer perspectives and youth perceptions regarding the quality of positions in these sectors.

- **Financial services:** Employers in this sector reported offering the highest average level of earnings, benefits, and employment stability along with opportunities for advancement. However, this sector also requires the highest level of experience and educational qualifications for entry-level positions. Youth employees in this sector reported high levels of job satisfaction.

- **BPOs/Call Centers:** While employers in this sector reported amongst the lowest level of salaries and benefits

for entry-level ICT-enabled positions, the sector is amongst the easiest for youth to access. Youth employed in the sector reported few perceived opportunities for advancement, though that perception does not correspond with the rapidly growing need for managers and team leaders in the sector.

- **ICT services:** Employers in this sector offered relatively lower benefits than financial services and retail, attributed to the smaller size of businesses in this sector, most of which are SMEs. Youth in the sector reported the highest levels of job satisfaction which seemed to be linked to confidence in future career opportunities.

- **Retail**: Employers reported relatively lower entry-level salary and benefits, though the sector is also relatively more accessible to youth. Youth in the sector perceived opportunities for advancement, leading to high levels of job satisfaction.

Ghana

Through surveys, employers identified a range of entry-level and mid-level ICT-enabled positions, compiled in Table 3.

TABLE 3: IN-DEMAND ICT-ENABLED JOBS BY SECTOR, GHANA

High-Growth Sectors	Examples of Entry-Level ICT Jobs	Examples of Mid-Level ICT Jobs
Banking and Financial Services	Office Worker/Secretary, Teller, Basic IT Support, Simple Database Administration	Networking, Database Administration, Server Configuration and Maintenance, IT Security, Advanced IT Support
Telecommunications	Support Services, Office Worker/Secretary	Hardware, Networking
Information Technology	Office Worker/Secretary, Basic IT Support	Networking, Programming/Software, Hardware Installation and Maintenance, Server Configuration
Education and Training	Teacher, Office Secretary, Database Administration	Advanced ICT Teacher
Media, Marketing & Advertising	Office Worker/Secretary, Website Design, Basic Audio-Visual Support	Graphic Design, Audio-visual Support, Installation and Maintenance, Networking
Oil and Gas	Office Worker/Secretary, Accountant, Basic Database Administration	Networking, Hardware Installation and Maintenance, Advanced Accounting, Advanced Database Administration
Hospitality & Tourism	Office Worker/Secretary, Basic IT Support	Networking, Advanced IT Support
Healthcare Services	Office Worker/Secretary, Basic Database Administration, Basic IT Support	Networking, Database Administration, IT Security

From employer surveys and youth FGDs, the study captured the following employer perspectives and youth perceptions regarding the quality of these positions in these sectors.

- **ICT services:** Both employers and youth felt the quality of jobs in this sector improves as an employee progresses in a company. Employers and youth cited mid-career jobs in networking, database administration, and hardware as quality employment. However, overall youth felt only a limited number of ICT-enabled jobs could be considered quality positions and felt few jobs on the market required specialized skills.

- **IT:** Self-employed youth with a good reputation for IT support, network, and hardware installation are able to consistently find work.

- **Education and Training:** Youth in this sector, at the entry-level, reported the lowest level of income sufficiency with 84 percent dissatisfied with their income.

Interestingly, self-employed youth were more likely to be satisfied with their employment status because they tended to earn more. Other stakeholders suggested that self-employment and entrepreneurship is sometimes more promising than going through the employment track of having to look for one of the few existing ICT-enabled positions.

Skills Gaps and Training Needs: Youth and Employer Perspectives

As a baseline for discussing training needs in each country, Table 4 below summarizes the most common requirements for entry-level employees according to participating employers.

TABLE 4: MOST COMMON EMPLOYER JOB REQUIREMENTS FOR ENTRY-LEVEL EMPLOYEES

	Kenya	South Africa	Ghana
Education	University	Grade 12 (Matric)	University
Experience	1-2 years	0-2 years	None
Technical Skills (top 3)	1. IT Skills 2. Customer Service 3. Sales & Marketing	1. Basic IT Skills 2. Customer Service 3. Sales & Marketing	1. Basic IT Skills 2. Specialized IT Skills 3. Customer Service
Life skills (top 3)	1. Team Work 2. Integrity 3. Strong Work Ethics	1. Communication Skills 2. Problem Solving 3. Team Work	1. Communication Skills 2. Integrity 3. Team Work

It should be noted that many Kenyan employers said that O-level (9th grade equivalent) was their minimum requirement for entry-level positions, but no employer identified primary school as a minimum requirement. While most employers required less than two years experience for entry-level positions, at least 10 percent required a minimum of three years experience. Nineteen percent of South African employers required at least three years of working experience, perhaps contributing to the common perception among young people that employers are only considering experienced employees (see Figure 4). Employers also identified key life skills required to succeed at work, e.g., communication skills and team work (see Figure 5).

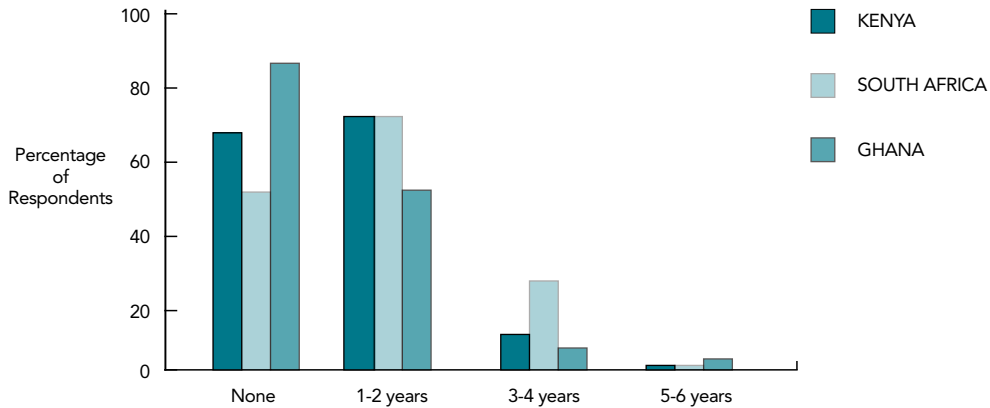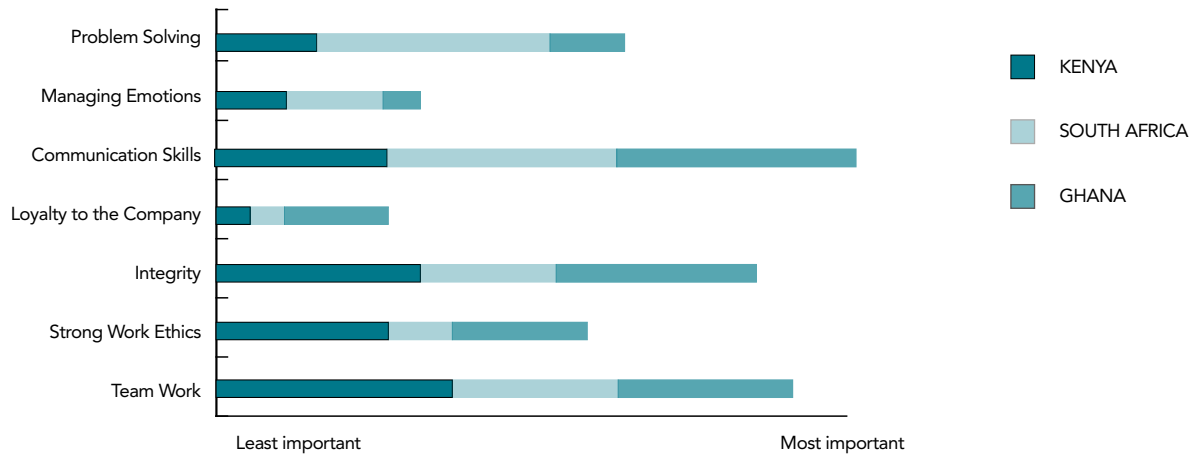## FIGURE 4: YEARS OF EXPERIENCE REQUIRED FOR ENTRY-LEVEL POSITIONS

FIGURE 5: MOST IMPORTANT SOFT SKILLS, RANKED BY EMPLOYERS

Kenya

Across all sectors, a large proportion of employers identified computer skills as critical to entry-level positions. Employers reported that the main barriers to hiring qualified youth include high turnover (47 percent) and lack of relevant technical skills (58 percent). Lack of life skills (26 percent) and gaps in basic skills (26 percent) are also barriers.

Participating employers emphasized the need for critical life skills (communication, teamwork, and integrity) over technical skills though many also seek candidates with strong computer skills. Both employers and youth FGD participants cited lack of adequate training opportunities as a barrier. The majority (70 percent) of youth felt prepared to find work based on their educational background.

South Africa

Ninety percent of employers in the study noted challenges in hiring youth for ICT-enabled employment. Key trends in their responses include:

- **Cross-cutting barriers:** Employers across all sectors noted these barriers: high turnover, lack of basic ICT skills, lack of soft skills, and literacy and numeracy gaps.

- **Financial services & ICT services sectors:** A large percentage of employers in both these sectors noted specialized ICT skills as a predominant recruitment gap. While fewer specialized ICT positions seem to be available in comparison to occupations that require less specialized ICT skills, employers seem to face particular difficulties filling the specialist positions that do exist.

- **BPO/Call Center sector:** In addition to the cross-cutting barriers noted above, 60 percent of employers noted 'other' barriers, which primarily included language and communication barriers, key skills necessary for successful employment in this industry.

Youth employed in ICT services seemed most interested in acquiring advanced ICT skills through academic programs, while those in financial services and retail felt they could develop additional ICT skills on-the-job.

Youth in the BPO/call center sector reported receiving sufficient technical training to perform their jobs, but complained that training did not result in transferable skills. As a result, they emphasized the importance of external training programs that could prepare them for more advanced careers within their industry or work in other sectors.

Ghana

In Ghana, over 30 percent of participating employers said youth lack the specialized IT skills required for jobs and just fewer than 20 percent said youth lack the required basic IT skills. While employers did not identify "gaps in skills" as a major barrier to employing youth, they did express concern over this widespread lack of specialized and basic IT skills. Although only 22 percent of surveyed employers provide on-the-job training, more than half of employers interviewed (52 percent) expressed a willingness to pay for training. Generally, there is a high demand for ICT programs that deliver practical training at a low cost to youth.

Based on youth FGDs, youth misunderstand what employers mean by basic ICT skills. Youth interpret it to mean basic computer use; employers expect more depth, including using Microsoft Office applications. Vulnerable youth feel especially disadvantaged by lack of early exposure to ICT resources. Contributing to the skills gap, many youth said lack of affordable internet access is a significant challenge to developing IT skills on their own.

In the following sections, IYF researchers describe country-specific training initiatives that suggest promising paths forward for empowering youth to address these challenges and realize their aspirations.

Youth Perspectives, Challenges, and Aspirations

As reported in previous sections, youth in Kenya, South Africa, and Ghana weighted their definitions of quality employment somewhat differently, but were consistent in their hopes for decent incomes and advancement opportunities. In Ghana, most working youth found their incomes insufficient for their daily needs. In Kenya, 77 percent of working youth were seeking extra work or new jobs, suggesting income insufficiency. In both Ghana and Kenya, self-employed youth perceived their incomes and benefits to be better than those of employed youth. Interestingly, among South African youth with clearly mapped career paths, advancement opportunity appeared more important than salary.

In Kenya and South Africa, youth recognized the promise of ICT-enabled jobs, but were leery of the quality that some of those jobs offer (notably in BPOs). In fact, unemployed South African youth showed little interest in BPOs/call centers and retail due to their perception of those sectors' low pay, long hours, and long commutes. In Ghana, many did not even recognize the availability of such jobs or have a clear understanding of the skills required. Given employers' view that there are many ICT-enabled employment opportunities, this misperception represents a huge information gap.

In terms of skills and training, it appears youth in all three countries may underestimate the importance of the life skills that employers value. In Kenya, youth felt a lack of information on training opportunities hindered development of technical skills. Unemployed youth in South Africa were unable to articulate the training they need for ICT-enabled jobs.

In Kenya, youth seeking work felt thwarted by their lack of experience, widespread nepotism and corruption, and fierce competition in a crowded labor market. In Ghana as well, youth felt frustrated at needing to know "someone who can get you a job." They felt deterred by lack of early or continued exposure to ICT and the high cost of internet service; many did not know how to type. Again, youth in Ghana felt there simply were no jobs. To varying degrees, youth in all three countries have misperceptions about the minimum requirements for ICT-enabled jobs and may be unnecessarily deterred from seeking those jobs.

As to their commonly-held aspirations, youth in Kenya, South Africa, and Ghana want work that provides income sufficient for their needs today and opportunities to advance tomorrow. They hope for and need more training and better information about jobs and career advancement.

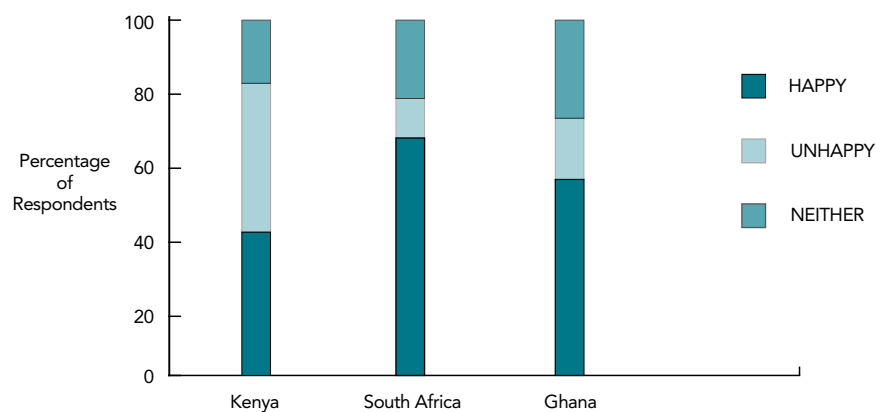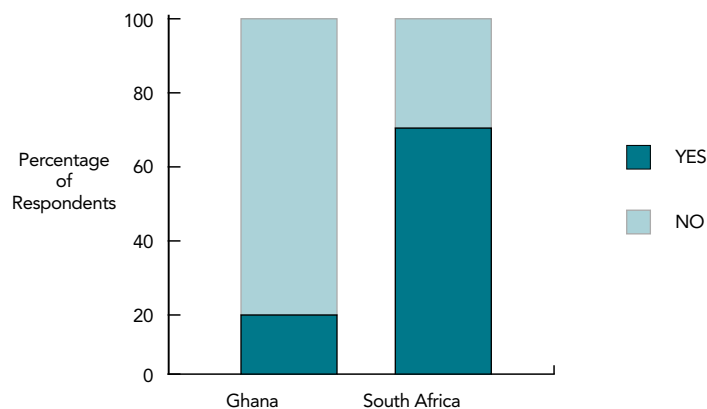FIGURE 6: PERCENT OF YOUTH HAPPY WITH CURRENT WORK

FIGURE 7: PERCENT OF YOUTH RECEIVING ICT TRAINING FROM EMPLOYER

PROMISING TRAINING INITIATIVES AND RESOURCES

In the course of conducting key informant and employer interviews, complemented by secondary research, IYF researchers identified several promising training policies, initiatives, and resources.

Kenya

Promising initiatives in Kenya include:

- **Youth employability and entrepreneurship programs:** The Informal Business Sector Institute, African Centre for Women in ICT, and Nairobits offer training on life skills, entrepreneurship, and ICT skills ranging from computer basics to web development and networking.

- **Privately-sponsored and university-sponsored technology incubators:** Strathmore University operates an incubator for youth developing mobile applications and telecommunications skills. iHUB, an IT venture in Nairobi, operates a tech incubator with a focus on young entrepreneurs and web and mobile programming.

- **Training innovations:** CISCO Academy runs a global education program that teaches students how to design, build, troubleshoot, and secure computer networks. The academy provides online resources to prepare individuals for ICT and networking carriers.

South Africa

The South African government has developed an extensive public policy and institutional framework to support innovate public-private partnerships for youth employment. The framework includes both incentives for the private sector to train employed and unemployed youth, and grant-making mechanisms to support innovative training initiatives led by civil society, the private sector, and the public sector. Existing types of training platforms that could be leveraged for a national digital jobs initiative include:

- **ICT services training:** Over 100 public-sector FET College campuses in Gauteng, KwaZulu-Natal, and Western Cape provinces alone offer ICT-specific qualifications and/or call center, finance, business, human resource, and administrative qualifications that integrate ICT training. FET training in the South African context refers to vocational and occupational-focused education, including for youth that have only completed up to Grade 9. CISCO's Networking Academy initiative is currently partnering with the FET college system to improve ICT qualifications. The South African government and Microsoft are also partnering to provide youth with further training and work experience in the ICT services sector, through Microsoft's Student to Business Initiative.

- **Disadvantaged youth training:** The Harambee Youth Accelerator transitions disadvantaged, unemployed youth into entry-level jobs where there is a high demand for labor, both by understanding the recruitment needs of employers and developing tailored training that increases the success of placed youth. The Jump Start Initiative works with a national network of non-profit organizations to train unemployed youth for opportunities in the retail sector. Both Harambee and the Jump Start initiative are implemented in close partnership with the private sector, with support from the South African government's Jobs Fund. The national Monyetla Work-Readiness Program, funded by the South African government and implemented in partnership with the private sector and civil society, is working to accelerate training and placement of disadvantaged youth into entry-level BPO positions.

Ghana

Ghana's employers identified relatively fewer training initiatives and providers than those in Kenya and South Africa, perhaps because they expect new hires to have the required skills and few (22 percent) offer on-the-job training. However, of those identified, the following are worth noting for past lessons and future potential:

- The National Youth Employment Programme's (NYEP) partnership with the nation's largest telecommunications company, RLG, has to-date provided training in ICT-enabled modules to thousands of youth and plans to engage 100,000 unemployed youth.

- The government's ICT for Accelerated Development (ICT4D) policy in collaboration with RLG aims to incorporate basic ICT-related skills into the education system.

- The e-Ghana Initiative, a partnership between the government and the World Bank, aims to stimulate economic growth, create more ICT-enabled positions, and encourage the establishment international of BPOs in Ghana.

- The Better Ghana ICT project, a partnership between RLG and the Ministry of Environment, Science, and Technology, distributed free laptops to students and schools but its reputation has been marred by perceptions of corruption.

With more than half (52 percent) of employers expressing a willingness to pay for training, it appears there are resources that can be leveraged to improve youth training options.

RECOMMENDATIONS AND CONCLUSIONS

Drawing from its research across Kenya, South Africa, and Ghana, IYF offers the following broad recommendations to guide future digital jobs initiatives in Sub-Saharan Africa. To maximize impact on youth employment, stakeholders developing jobs initiatives should consider:

- Broadening the reach of their programs to encompass ICT-enabled employment across all sectors, casting a wider-net for emerging ICT job opportunities and training needs.

- Positioning BPOs/call centers as stepping-stones for transferable skills development and future career advancement.

- Improving dissemination of information to youth on available jobs, training, and labor market needs.

- Incorporating or supporting programs that develop critical soft skills, especially for vulnerable youth and young women.

- Developing more programs to increase youth's early exposure to and awareness of ICT.

- Forging more public/private partnerships to leverage available training resources and ensure training programs are oriented toward labor market demands.

- Supporting or developing career guidance programs for youth to help them develop career pathways better aligned to their needs and labor market realities. Career guidance programs would be integrated into a larger package of soft skills and ICT training.

CONCLUSION

In high-growth sectors across Kenya, South Africa, and Ghana, doors are being opened to a wide range of ICT-enabled occupations. Getting youth through those doors requires country-specific, digital jobs initiatives that: recognize the cross-cutting nature of ICT skills; close the gaps between labor market needs and young people's skills; address the work-readiness issues facing vulnerable youth; and offer youth the career guidance to plan meaningful careers.

By providing a snapshot of ICT-enabled employment opportunities and the challenges youth face accessing those opportunities, IYF hopes to help shape more effective digital jobs initiatives in the future. By detailing country-specific findings and recommendations in the companion reports to this document, IYF hopes to provide key stakeholders with practical information needed for those initiatives.