A DEMAND SIDE VIEW OF INFORMALITY AND FINANCIAL INCLUSION

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ACKNOWLEDGEMENTS
This report was made possible by the support received from Canada’s International Development Research Centre and the Swedish International Development Agency. The nationally representative ICT Access and Use Survey referenced in this report forms part of a survey of 20 countries in the Global South (nine in Africa) that canvasses barriers to access from those not connected, as well as the challenges to optimal Internet usage even where there is coverage or the individual has connectivity (see After Access 2017 http://www.researchictafrica.net.)
SMMEs make up a significant portion of African economies. More than 60 per cent of the world’s employed population is in the informal sector. A larger proportion of the employed population (85.8%) in Africa work in the informal sector. However, these businesses, particularly those with lower levels of formality, face significant challenges that inhibit their development and potential contribution to the growth of the national economy.

The 2017 After Access Informal Business Survey shows that about seven in ten of informal businesses in the nine African surveyed countries trade or sell goods and a third provide services. The majority of informal businesses (54%) are owned by women, 41% by men and the remaining 5% are a joint venture between men and women. Nigeria (59%), Mozambique (50%) and Ghana (58%) are the three countries with the largest informal businesses owned by women.

While the informal sector seems to be the main contributor of the much-needed income for marginalised women in Kenya, Ghana, Mozambique and Nigeria, women are worse off in Rwanda and Tanzania. More than 60% of informal businesses in Rwanda and Tanzania are run and owned by men – a result that shows that both the informal and formal sectors in these countries are controlled by males. South Africa shares characteristics with Rwanda and Tanzania. Ownership of the informal sector in South Africa is still controlled by men. More than half (57%) of informal businesses in South Africa are owned by men, compared to only 30% owned by women.

Despite the informal sector being a major part of the economy in most African countries and providing income and employment for those marginalised from the formal economy, the sector has been forgotten by policymakers and is often financially excluded. Lack of funding opportunities for this sector has resulted in stagnation and the sector’s inability to formalise. The 2017 After Access Informal Business Survey shows that the informal economy is a major source of employment and income-generating enterprise for the majority who would otherwise be unemployed. The majority of those working in the informal sector in South Africa (70%) and in Mozambique (56%) have a primary education certificate, while 61% in Rwanda and 60% in Tanzania have no formal education.

In most developed countries, financial institutions are increasing their outreach and providing financial services to this marginalised sector. However, in Africa, informal businesses are excluded. Most start-ups use their own savings, as well as money from family and friends, to finance their businesses. The majority of informal enterprises in the nine surveyed countries are self-funded (83%), while 11% are supported by family members and 2% obtain funding from micro financial institutions. Access to finance in the formal banking sector by informal sector is minimal and close to non-existent (0.2%). The picture is similar across all the surveyed countries, with most of informal business start-up capital financed by own savings and the banking sector providing an insignificant amount of support.

Access to formal financial services by the informal sector is hampered by lack of credit history or bad credit history by the owner, inadequate collateral, a lack of skills and the knowledge to produce financial statements, and poor business models and plans. Most informal enterprises do not separate business finances from personal finances, and do not keep financial records. More than 60% of informal enterprises in all countries do not keep financial records and more than half in all countries except Kenya do not separate personal income from business income.

Financial exclusion is more acute in developing countries where more than 70% of individuals and small enterprises are unbanked. The 2017 RIA After Access informal survey shows that 76% of informal businesses in the nine surveyed countries do not have a bank account, 18% use the owner’s bank account and only 6% have a dedicated business account (see Table 5). Only 3% of informal businesses reported having had a loan from a bank and only 4% have a credit card.

Financial technologies (fintech) have the potential to
disrupt the status quo and enhance financial inclusion in
developing countries. Fintech’s ability to reduce
information asymmetries and transactional costs, and
foster wide outreach, makes it a potent weapon for
fostering financial inclusion. Other than mobile money
services, the use of fintech platforms such as those that
allow for crowdfunding is still very low in Africa. Mobile
money has been successful in East African countries and
more specifically in Kenya, where 68% of informal
businesses use mobile money services, followed by
Rwanda (43%), Ghana (41%), and Uganda and Senegal
at 36%. Mobile money has certainly fostered financial
inclusion in these countries. The success of mobile money
in Kenya has help the country to achieve higher levels
of financial inclusion, with about seven in ten of Kenyan
informal entrepreneurs having access to financial services
either through mobile money services (68%) or banking
services (28%), followed by South Africa, with majority
using formal banking services (53%). In Ghana and
Rwanda, 55% and 54% of informal businesses
respectively are financially included. Financial inclusion
remains low in Nigeria (24%), Tanzania (22%) and
Mozambique (20%).
Access and use of ICTs, more specifically the Internet,
which provides the greater network effect, is very low in
Africa. The use of the Internet for business purposes in the
surveyed countries is as low as 7% on average. South
Africa, which has the highest individual Internet use
among the 2017 After Access countries, at 53%, also has
the highest Internet use by informal enterprises (24%),
followed by Senegal (20%). Internet use by informal
enterprises in Ghana, Mozambique and Nigeria is slightly
higher than the overall average, at 8% and 7%
respectively but far lower in Kenya (4%) and Uganda (4%).
Rwanda, one of the poorest countries among the
surveyed countries, with the lowest household and
individual Internet use, has the lowest Internet use
among informal entrepreneurs, with only 1% of them
using the Internet.
The low levels of Internet use among informal businesses
can be attributed to the lack of Internet-enabled devices.
Only 1% of informal businesses in Rwanda have fixed-line
connections and none of the surveyed businesses had a
working computer. More than 90% of informal businesses
in Ghana (96%), Kenya (96%), Mozambique (99%), Nigeria
(98%), Tanzania (97%) and Uganda (97%) do not have a
working computer. Computer ownership is only high in
South Africa, where 20% of informal businesses own a
computer. There is evidence of a lack of awareness of the
Internet potential among most African informal
entrepreneurs. A significant percentage of those who do
not use the Internet, 85% in Kenya, 79% in Senegal, 73%
in Ghana and 68% in Nigeria, gave a negative assessment
of the need for the Internet in their businesses.
More than half (56%) of those who work in the informal
sector are the youth as compared to adults (42%). The
survey also found that 2% of informal businesses are
managed by children. Senegal and Nigeria are the two
countries with the highest number of children working in
the informal economy, at 2% each, followed by Ghana at
1%. Kenya, Nigeria and Senegal have the highest num-
bers of the youth in the informal sector, while in South
Africa and Uganda, the informal economy is comprised
largely of adults.
CONTENTS

EXECUTIVE SUMMARY
LIST OF ABBREVIATIONS
1. INTRODUCTION
2. INFORMAL AND MICRO BUSINESS IN AFRICA
3. CHALLENGES FACED BY INFORMAL SECTOR IN AFRICA
4. ICT ACCESS AND USE IN THE AFRICAN INFORMAL SECTOR
5. YOUTH IN THE INFORMAL SECTOR
6. CONCLUSIONS
7. RECOMMENDATIONS
8. REFERENCES
9. APPENDIX: METHODOLOGY
LIST OF TABLES

Table 1: Characteristics of the informal sector in Africa 8
Table 2: Main reason for starting business and education level of manager 9
Table 3: Informal sector business source of start-up capital and owners’ education level 10
Table 4: Informal sector access to formal banking services 12
Table 5: Informal sector access to formal banking services 12
Table 6: Reason for not using the internet 15
Table 7: Internet use among enterprises that use the Internet 16
Table 8: Sample distribution across the surveyed countries 25
Table 9: Sample distribution across the surveyed countries 25

LIST OF FIGURES

Figure 1: Informal sector 6
Figure 2: Informal sector ownership by gender 7
Figure 3: Informal sector start-up capital financing 11
Figure 4: Informal sector financial inclusion 11
Figure 5: Internet use overlaid on GNI per capita 14
Figure 6: Mobile phone adoption and use among informal business managers 15
Figure 7: Youth in the informal sector 17
Figure 8: Youth employment in the surveyed countries 18
Figure 9: Youth in the informal sector and education 18
Figure 10: Youth in the informal sector and education 18
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<td>EAS</td>
<td>Enumerator Areas</td>
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<td>EU</td>
<td>European Union</td>
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<td>ILO</td>
<td>International Labour Organisation</td>
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<td>IoT</td>
<td>Internet of Things</td>
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<td>ICT</td>
<td>Information Communication Technology</td>
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<td>PPS</td>
<td>Probability Proportional to Size</td>
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<td>RIA</td>
<td>Research ICT Africa</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>WIEGO</td>
<td>Women in Informal Employment Globalising and Organising</td>
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<td>WEF</td>
<td>World Economic Forum</td>
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Technological innovation, mostly driven by the Internet, continues to provide business with an array of tools that open doors to efficiencies, advantages and new ways of thinking about business processes. From the power of the cloud, allowing flexibility and scalability to both small and big business, to the Internet of Things (IoT), effortlessly merging the digital world, technologies have become the main driver of business processes. In this modern economy, predominantly driven by information and communication technology (ICT), commonly referred to as the knowledge economy, businesses that adopt these new technologies have the capacity to deliver innovative forms of work that raise product and service productivity. This technological revolution potentially provides micro businesses with opportunities to access world markets, low-cost entry into new markets, the ability to gain efficiencies in business processes, scalability and new innovative business opportunities (Essays UK, 2018). Yet little is known about the extent or nature of adoption by such business, particularly in the informal sector, where most of them reside in Africa.

**Formality and Informality**
Informality has long been presented in dominant modernisation approaches as a continuum along which informal entities can progress towards formality. Viewed from this perspective, it is seen as an evolutionary process that would produce economic growth, and which could be hastened with the correct interventions. Governments and multilateral agencies have focused on how the informal sector could be formalised by being brought into the banking, employment and tax regimes of a particular jurisdiction.

However, even with the considerable economic growth witnessed by many African economies over the last decade and a half, the informal sector remains a significant portion of such economies and there is increasing empirical evidence to suggest that there is no desire by significant numbers of enterprises and individuals in this sector to move into the formal economy.

This has spawned a wide body of diversely conceptualised literature on informality that has confounded rather than assisted those seeking more inclusive growth strategies. In an attempt to bring conceptual clarity to this issue, and to understand the interplay between informality, growth and inclusiveness, the IDRC commissioned James Heintz (2012) to prepare a paper on this subject and, further, to identify knowledge gaps and develop an analytical framework for organising further research on informality.

Heintz (2012) identifies the following four knowledge gaps:
- The relationship between economic growth, economic development and informality
- The barriers to mobility that individuals and enterprises face
- An understanding of formal and informal linkages
- Public goods, informality and the quality of employment.

Policymakers have traditionally tried to curb informality. While informal firms are considered an anathema to development because of their small size and inefficiency – this, together with their tax avoidance, hinders provision of the public good and therefore also makes them invisible to governments. From a public policy perspective, the lack of formal contracts means that they are not covered by labour regulations and therefore have no benefits such as social security.

The desire to have informal firms formalised related to five empirical factors identified by Goldberg (2019). The first is that informality or self-employment is negatively correlated with development. Informality or self-employment has been stable over time despite global economic growth, and despite improvements in the regulatory environment. Goldberg (2019) points out that, in countries such as India, despite an average growth rate of 7% over past five years, informality has remained at about 90%, with informality driving
manufacturing growth. The number of informal firms in developing countries has grown, but they remain small and also do not formalise (or they die). Informal firms face higher water and power shortages. Water shortages are more of a problem than power outages. And, finally, women are significantly over-represented in informal firms.

Goldberg (2019) shows that while enforcing formalisation in developing countries may increase productivity and economic growth, there are few employment or other welfare gains. And while economists have emphasised the role of large firms in development at the same time, the political economy of developing countries has dictated support for SMEs. However, Goldberg (2019) points out that informality may provide more flexibility that is particularly valuable when the economy faces adverse shocks.

TAXATION
Digitisation may lead to elimination of tax evasion. Goldberg (2019) argues that technology may offer a new solution, as digitisation makes everything visible (banking, procurement), which may require a re-assessment of the traditional view of ‘informality’. This is because:
• digital technologies allow firms to scale up or down quickly, changing firm boundaries
• new business models – digital platform firms – are evolving from local start-ups, often with few employees or tangible assets
• individuals and firms need only a broadband connection to trade goods and services online
• this ‘scale without mass’ may bring economic opportunity to millions of people who do not live in industrialised countries or even industrial areas.

CHANGING NATURE OF WORK
Digital technologies allow firms to scale up or down quickly. The digitisation of work enables job seekers in developing nations to enter labour markets in more economically developed countries. The new digital platform business models allow the large majority of unemployed individuals in developing countries to open their own start-ups and become self-employed. The online labour platforms facilitate the unbundling of work into smaller tasks that employers can contract out to self-employed freelance workers around the world (Mothobi, Schoentgen & Gillwald, 2018). However, this new industrial organisation poses policy questions in the areas of privacy, job security, social protection and taxation.

The rise of platform markets, which the World Bank argues will have the opportunity to reach more people than before (World Bank, 2019), has the potential to amplify inequalities, more specifically in developing countries where the majority do not have access to broadband connections. This new economy combines the efficiency advantage of large firms with the flexibility afforded by short-term work arrangements. Flexibility can be advantageous to both firms and workers, although these arrangements can also mirror and amplify existing patterns of exploitation (Mothobi, Schoentgen & Gillwald, 2018).

Goldberg (2019) argues that there is a convergence between developing and developed countries on the issue of informality as a result of the gig economy blurring the lines between formality and informality. Challenges faced by workers participating in the gig economy in advanced countries are similar to those faced by informal workers in developing countries. With increased flexibility, there also is increased uncertainty, no job security and no social protection.

Goldberg asks whether developing countries may have a comparative advantage in this new economy as they have always grappled with the challenges of a large informal sector. The new policy challenges that this raise are social protection, taxation and competition or the market power of large platforms.

JOB CREATION AND DECENT WORK
A prediction by Sir William Arthur Lewis (1950) suggests that the unlimited supply of labour in developing countries would eventually be drawn into the formal economy (Deen-Swarray, Moyo & Stork, 2013). In drawing predictions, Lewis’s model depended heavily on the expansion of the industrial sector and failed to account for other factors including education, economic and population growth patterns.

Evidence from recent economic growth patterns shows that the economy is not generating enough jobs to cater for the expanding number of people entering the labour market. The International Labour Organisation (ILO)
estimates that the total number of unemployed will grow by 1.3 million in 2019 from the 192 million estimate in 2018 (United Nations, 2018). Economic growth in developing countries has failed to provide decent working conditions for the expanding labour force. About 114 million (40% of the total labour force) of workers in developing countries live in extreme poverty (United Nations, 2018). The youth in Africa experience greater unemployment than the older generation, accounting for more than 60% of unemployed workers in Africa.

The underperformance of the formal sector and high rates of unemployment have resulted in an expanding informal sector with little incentive to formalise. The ILO describes the informal sector as household enterprises that are not incorporated and do not keep full sets of accounts nor constitute legal entities distinct from the household(s) upon which they depend (Walter, 2012). This definition includes unregistered micro and small activities that generate employment and wealth. Other approaches emphasise the lack of taxation and failure to meet decent working conditions when defining the informal sector.

In this study, informal enterprises are defined as enterprises with or without employees (paid or unpaid) that are not incorporated or registered for taxation. Generally, informal businesses are characterised by entrepreneurs who engage in activities meant to generate income for day-to-day consumption rather than engaging in business activities and processes that ensure scalability and growth. In contrast to the formal sector, the informal sector is competitive in nature, with few barriers to entry, but lack funding opportunities. The informal sector, however, plays a critical role in many countries by providing an alternative source of employment and economic diversification. In 2016, ILO estimates indicated that the average size of the informal sector as a percentage of gross national product in sub-Saharan Africa was 41%, under 30% in South Africa and 60% in Nigeria, Tanzania and Zimbabwe. In Africa, the informal sector is the largest employer, representing about three-quarters of non-agricultural employment and about 72% of total employment in sub-Saharan Africa (Jackson, 2016). Recent estimates by the ILO suggest that more than two-thirds of total employment in sub-Saharan Africa were generated by the informal sector (Jackson, 2016). Another study by the World Resource Institute (WRI) in collaboration with Women in Informal Employment Globalising and Organising (WIEGO) indicates that informal enterprises generate 25% to 50% of value added outside of agricultural activities. This study further states that most of the urban workforce in the Global South is informal, ranging from 52% in developing Asia to approximately 76% in Africa (Sow, 2018).

Despite the informal sector providing crucial livelihoods and income to millions of vulnerable unemployed workers and being an important component of the economy, it has largely been overlooked by policymakers and economic analysts. The sector continues to be characterised by low productivity, low wages and non-exportable goods and services, mainly due to poor policies, which in some cases focus on punitive and regulatory measures to enforce formalisation or evict vendors. For instance, in 2005, the government of Zimbabwe embarked on a notorious policy called Operation Murambatsvina (‘get rid of trash’), which evicted informal businesses in the city. In cases where policymakers focus on unleashing the untapped entrepreneurial potential of the informal sector, policies are formulated on no evidence due to scarcity of data on informal businesses, which results in the failure of these policies to resource and unleash the sector potential. At best, policymakers have tried to pull the informal sector into the formal economy – a policy that has also largely failed in most countries. While a number of policymakers argue that the informal sector pays low wages and avoids paying tax, it is also true that many governments are unaware of the potential and contribution of this marginalised sector, in particular, to vulnerable groups.

**APPROACH AND METHODOLOGY**

Nevertheless, as a measure to rectify the missed opportunity, more specifically with regard to the role of the informal sector, in inclusive growth and poverty reduction, Research ICT Africa (RIA) continues to gather the necessary data for policy guidance and formulation across Africa. Building on its 2008 and 2011 surveys, RIA surveyed the informal sector across nine African countries – Ghana, Kenya, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania and Uganda – as part of the 2017 After Access Survey. The survey is piggybacked
on the national representative household and individual survey. The RIA 2017 Informal Sector Survey intends to evaluate the potential of the informal sector for employment creation and the sector’s readiness to benefit from the digital dividends arising from the use of digital technologies. While it is not representative of the informal sector in each country, the data drawn from across the countries, is indicative of digital developments within the informal sector in the different countries. This first part of the report describes the informal sectors in the nine African countries surveyed, the challenges they face to survive particularly with regard to accessing capital, financial services and ICT, as well as ICTs and the use of them within their enterprises. The second part of the paper seeks to close some of the knowledge gaps identified by Heinz. The knowledge gap that exists about the relationship between economic growth, economic development and informality can be addressed using the existing data set from the 2018 surveys. This data enables the calculation of inclusive economic growth facilitated by ICTs, the contribution of the informal sector to GDP and the labour force at a nationally representative level. Informal sector contribution is then expressed as a share of the national figure produced by national statistical offices. This also sets a baseline to understand developments through subsequent surveys. Deriving reliable conclusions entails following three interlinked steps:

Step 1: Determine the informal sector contribution to national economies and explain the size of the informal sector by socio-economic characteristics of the countries covered.

Step 2: On a micro level, link ICT access and use to productivity. This can then be aggregated to national level to understand the impact of ICT access and usage on the GDP contribution of the informal sector, i.e., x% GDP growth for y% more penetration for a certain ICT.

Step 3: Establishing the impact of ICT access and usage on GDP contribution, employment and productivity over time.

INFORMAL SECTOR CONTRIBUTION TO NATIONAL ECONOMIES

The first mode of investigation to determine the GDP contribution of the informal sector and linking it to the development status of nine African countries is cross-sectional, by comparing the informal sector contributions among the sampled countries in relation to other macroeconomic variables and recent developments. Ghana, Kenya, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania and Uganda can be compared by linking the RIA data to other sources of information including:

• national accounts
• labour force survey
• doing business in 2012, 2013 (World Economic Forum)
• world economic indicators (UNESCO educational data).

This allows one to understand the size of the informal sector in relation to socio-economic characteristics, such as, size of the primary sector in relation to the rest of the economy, the unemployment rate, the average number of days to enforce a contract, and so on. Countries that are endowed with rich natural resources such as South Africa, for example, are likely to have a smaller informal economy compared to a country like Mozambique, all other things being equal. The size and competitiveness of the informal sector in each country will therefore be explored in great detail. This research includes the use of secondary data, with the survey data serving as a primary source.

LINKING ICTS TO PRODUCTIVITY

The way RIA assesses the GDP contribution of the informal sector is by adding net profit and salary payments of the businesses sampled and aggregating the results to national level. As part of the financials of informal businesses, RIA also collects the expenditure on ICTs. The impact of ICT access and use can thus be modelled on a micro level and aggregated to macro level.

BARRIERS TO MOBILITY FACING INDIVIDUALS AND ENTERPRISES

Heintz (2012) describes barriers to mobility as ‘constraints that prevent individuals from taking advantage of opportunities when they become available’. These include:

• access to finance
• skills and education
• access to markets
• complex procedures and laws
• gender-based constraints and mobility.
ACCESS TO FINANCE – MOBILE MONEY AS FACILITATOR FOR MOBILITY

Tweaking the existing banking system will not achieve a breakthrough in financial service provision to the informal sector and/or the poor. A paradigm shift needs to occur in order for the poor to be brought into the banking sector profitably. Mobile money represents such a shift and has the potential to provide an urgently needed breakthrough. This research area studies how:

• formal financial services, such as credit histories, could be provided based on mobile money transaction histories
• informal businesses can use mobile money to deepen their procurement channel
• the use of mobile money can help informal businesses to establish business plans, inventory control and accounting systems.

Mobile money today is still a highly underdeveloped service. Linking mobile money transfers to business processes promises to deliver productivity gains and the ability to tap formal financial services. A key research area is to investigate how these links can be established for various business models.

The integration between mobile phones and banking is the most promising mechanism to date to bring development and economic growth to those that need it most – the poor and/or informal sector.

The challenge to policymakers and regulators is twofold – firstly, to encourage banks and mobile operators to develop solutions that are not proprietary, and secondly, to allow access to potential new entrants that can disrupt the lucrative business models of the banks and mobile operators. Just as convergence forced the integration of broadcasting and telecommunications, so mobile money is forcing the convergence of the financial and telecommunications sectors. Policymakers and regulators need to ensure that evolving systems serve the broader objectives of economic growth and development, as well as protect consumer interests, while creating an environment that encourages and rewards innovation.

SKILLS AND EDUCATION

The RIA data set can shed light on this critical barrier to mobility and inclusion in the economy. The construction of the questionnaire allows us to link the highest level of education of owners and managers of informal business to productivity and ICT access and usage. Qualitative research would investigate ICT-based skills development through peer learning and adult education.

ACCESS TO MARKET

Considerable evidence now exists on how access to markets and market information has been increased through ICT access and usage. Procurement and distribution costs can be significantly reduced through mobile use and knowing when and where to sell can increase profitability. The RIA data set enables the analysis of the distribution and procurement channels of informal businesses and the role ICTs play in extending those. This would be supplemented by qualitative research such as focus groups.

UNDERSTANDING FORMAL AND INFORMAL LINKAGES

RIA uses an index from 0 to 5.5, which includes 12 values in total, to categorise businesses into informal, semi-formal and formal. This is done to analyse businesses in distinct groups. In reality, the differences from business to business are much finer and the so-called informal and formal sectors overlap. Formal and informal employment may take place within the same company and formal businesses buy from, and sell to, informal businesses. ICTs facilitate this interplay by reducing the significance of distance and facilitating smaller farmers coming together to meet the required quantities of formal businesses. The RIA data can be used to investigate this aspect further, complemented by qualitative research.

SKILLS AND EDUCATION PUBLIC GOODS, INFORMALITY, AND QUALITY OF EMPLOYMENT

RIA research in this field would be limited to which ICT policies and developments would make the biggest difference to large groups of informal workers and enterprises and, from a policy point of view, whether access to broadband as a general purpose technology from a public policy point of view should be treated and provisioned as a public good to reduce the input costs for the informal sector.
As discussed above, more than 60% of the world’s employed population is in the informal sector. A larger proportion of the employed population (85.8%) in Africa work in the informal sector. In Asia and the Pacific, the proportion is 68.2%, and it is 68.6% in the Arab States, 40% in the Americas, and 25.1% in Europe and Central Asia (ILO, 2018).

The 2017 After Access Informal Business Survey shows that the majority (66%) of informal businesses in the nine African surveyed countries trade or sell goods (sell motor parts, furniture, groceries and vegetables). More than a third (38%) provide services such as tailoring, welding and fitting, laundry, shoe repair, mobile money services, starter packs and airtime vouchers, and only 7% of the informal business are involved in agricultural production. Similar to the findings of the ILO that women are more often found in the most vulnerable situations in low-income countries, the survey shows that the majority of informal businesses (54%) are owned by women, 41% by men and the remaining 5% are a joint venture between men and women. Nigeria (59%), Mozambique (50%) and Ghana (58%) are the three countries with the largest informal businesses owned by women (see Figure 2). The high percentage of female participation in the informal sector can be attributed to the patriarchal prejudices that women face, which pushes women into low-income activities in society. Despite women constituting a significant proportion of most economies, their efforts to contribute significantly are often not recognised or supported. This is evidenced by disparities in the rates of access to education, employment and funding opportunities, which are all determinants of digital participation (Deen-Swarray, et al, 2012).

While the informal sector seems to be the main contributor of much-needed income for marginalised women in Kenya, Ghana, Mozambique and Nigeria, women are worse off in Rwanda and Tanzania. More than 60% of informal businesses in Rwanda and Tanzania are

![Figure 1: The informal sector](Source: RIA After Access Informal Business Survey data, 2017)
run and owned by men, a result that shows that both the informal and formal sectors in these countries are controlled by males. Cultural and religious norms and values in most African countries tend to consider women incapable of carrying out entrepreneurial activities (despite lived experience to the contrary) and only expect women to do domestic activities such as raising children and looking after domestic animals and food production. Even though South Africa is one of the most economically developed countries on the African continent, with a GDP per capita of around USD6 374 in 2018\(^1\), South Africa shares characteristics of poor countries.

A 2018 ‘How do women fare in the South African labour market’ Report by Stats SA (2018), indicates that there are more women than men in the informal sector; with the informal sector contributing 17% of total employment (16.53 million) and providing much-needed employment to those who cannot find formal jobs. The 2017 After Access Informal Sector Survey shows that ownership of the informal sector in South Africa is still controlled by men. More than half (57%) of informal businesses in South Africa are owned by men, compared to only 30% owned by women (see Figure 2). Informal employment in South Africa, however, is much lower than other developing countries. In India and Ethiopia, about 50% of those people with jobs are employed in the informal sector, while in Ghana the figures are as high as 90%.

![Figure 2: Informal sector ownership by gender](image)

*Source: RIA After Access Survey data, 2017*

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Despite the informal sector being a major part of the economy in most African countries and providing income and employment for those marginalised from the formal economy, the sector has been forgotten by policymakers and is often financially excluded. Lack of funding opportunities for this sector has resulted in stagnation and the sector’s inability to formalise. Of all surveyed informal businesses in the nine African countries, three quarters are not registered with local or municipal authorities, 39% pay tax and only 11% are registered for value-added tax. The 2017 After Access Informal Business Survey shows that the informal economy is a major source of employment and income-generating enterprise for the

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<th>KENYA</th>
<th>MOZAMBIQUE</th>
<th>NIGERIA</th>
<th>RWANDA</th>
<th>SENEGAL</th>
<th>SOUTH AFRICA</th>
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<tr>
<td>BUSINESS (PTY LIMITED, LIMITED LIABILITY)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>DOES YOUR BUSINESS STRICTLY SEPARATE BUSINESS FINANCE FROM PERSONAL FINANCE?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>59%</td>
<td>41%</td>
<td>73%</td>
<td>71%</td>
<td>85%</td>
<td>61%</td>
<td>55%</td>
<td>54%</td>
<td>69%</td>
</tr>
<tr>
<td>YES</td>
<td>41%</td>
<td>51%</td>
<td>27%</td>
<td>29%</td>
<td>15%</td>
<td>39%</td>
<td>45%</td>
<td>46%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>DOES YOUR BUSINESS KEEP FINANCIAL RECORDS?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>62%</td>
<td>43%</td>
<td>57%</td>
<td>79%</td>
<td>81%</td>
<td>0.5%</td>
<td>48%</td>
<td>60%</td>
<td>71%</td>
</tr>
<tr>
<td>YES</td>
<td>37.9%</td>
<td>56.8%</td>
<td>42.9%</td>
<td>20.9%</td>
<td>18.7%</td>
<td>98%</td>
<td>46.7%</td>
<td>39.9%</td>
<td>28.6%</td>
</tr>
<tr>
<td><strong>AUDIT ANNUAL FINANCIAL STATEMENTS</strong></td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.3%</td>
<td>1.5%</td>
<td>6.3%</td>
<td>0.1%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>
Due to the global economic slowdown, unemployment is no longer a phenomenon that only affects the uneducated – it is now also affecting the educated youth. Facing these challenges and mostly being rejected by the labour market due to lack of demand, work seekers have resorted to forming informal enterprises for their survival. The survey shows that more than 40% of those who run informal enterprises started their business to create employment for themselves, except in Kenya (22%) and Ghana (9%). The majority in Ghana (52%) run informal businesses to make additional income (see Table 2). More than 90% of the surveyed informal enterprises are sole proprietors in all surveyed countries except in South Africa, where only 82% of informal business are sole proprietors and 11% of the informal sector are owned by more than one partner. The majority of informal business owners in Rwanda (85%), Mozambique (73%) and Nigeria (71%) do not separate their enterprise income from household income (See Table 1).

Government and multilateral agencies have focused on how the informal sector could be formalised by being brought into the banking, employment and tax regimes. Literature, however, argues that the interventions should not be punitive and act as a deterrent, but should rather take place at a local level. This includes the formation of local advisory agencies to provide information, loans, advice and support services to informal entrepreneurs on how they can formalise (Williams, 2005). The desire to formalise is related to Goldberg’s findings that informality is negatively correlated with development. Digital platforms provide some of the channels through which the informal sector can be formalised. Digital platforms have the potential to make the informal sector visible. Digitally collected data, including e-commerce and mobile transaction histories can complement or substitute for traditional

<table>
<thead>
<tr>
<th>INDEX COMPONENT</th>
<th>GHANA</th>
<th>KENYA</th>
<th>MOZAMBIQUE</th>
<th>NIGERIA</th>
<th>RWANDA</th>
<th>SENEGAL</th>
<th>SOUTH AFRICA</th>
<th>TANZANIA</th>
<th>UGANDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS PAYS MORE</td>
<td>10%</td>
<td>52%</td>
<td>5%</td>
<td>36%</td>
<td>33%</td>
<td>39%</td>
<td>23%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>TO MAKE ADDITIONAL INCOME</td>
<td>52%</td>
<td>17%</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>5%</td>
<td>11%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>OTHERWISE I WOULD BE UNEMPLOYED</td>
<td>9%</td>
<td>22%</td>
<td>68%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>49%</td>
<td>68%</td>
<td>66%</td>
</tr>
<tr>
<td>OTHER</td>
<td>35%</td>
<td>9%</td>
<td>19%</td>
<td>13%</td>
<td>15%</td>
<td>12%</td>
<td>17%</td>
<td>4%</td>
<td>7%</td>
</tr>
</tbody>
</table>

| NONE | 20% | 5% | 11% | 39% | 61% | 53% | 10% | 60% | 0 |
| PRIMARY | 42% | 26% | 56% | 15% | 29% | 23% | 70% | 30% | 43% |
| SECONDARY | 30% | 46% | 33% | 33% | 5% | 4% | 17% | 1% | 28% |
| TERTIARY | 8% | 23% | 0 | 8% | 10% | 0 | 3% | 9% | 31% |
methods of client identification and credit risk assessment (World Bank Group, n.d.). Provision of financial services to the informal sector is a critical channel that can be exploited by African governments to promote growth and taxation of informal enterprises. Products and businesses provided by financial institutions, including banks, credit unions and micro finance institutions, often help the informal sector to have bank accounts. By offering the informal sector a payment platform, informal businesses can upgrade their processes, of which some include formalisation of employee payrolls and payments to suppliers. Other ways in which access to financial services could lead to formalisation is through the graduation lending scheme, where eligibility conditions are related to enterprise status (ILO, 2019). While financial institutions in most developed countries are increasing their outreach and providing financial services to this marginalised sector, in Africa informal businesses are excluded. Most start-ups use their own savings, money from family and friends to finance their businesses. The majority of the informal enterprises in the nine surveyed countries are self-funded (83%), 11% are supported by family members and 2% obtain funding from micro financial institutions. Access to finance in the formal banking sector by the informal sector is minimal and close to non-existent (0.2%) (see Table 3). The picture is similar across all the surveyed countries, with most of informal business start-up capital financed by own savings and with the banking sector providing insignificant support (see Figure 3). Despite South Africa having a well-developed financial market that provides a number of lending instruments and 57% of individuals accessing formal banking services, only 2% of informal businesses access formal financing. South Africa’s performance in informal business financial inclusion is very low despite South Africa hosting one of the most developed financial markets among all the surveyed countries. Similarly, in Senegal, only 2% of informal entrepreneurs have access to formal banking loans followed by Ghana, Kenya, Rwanda and Tanzania at 1%. A study by FinFind (2018), which analysed 11 033 small business funding requests in 2017, estimated a funding gap in the range of ZAR86 billion and ZAR346 billion among small enterprises per annum. FinFind (2018) estimates that only 1% of SMMEs in South Africa have access to formal financing and that 87% are self-funded. These estimates are similar to the RIA survey findings, which shows that 2% of South African small entrepreneurs are financially included and 89% are not banked in anyway or are self-financing. Micro financing is common in the informal sector in Rwanda, while a significant proportion of start-ups rely on relatives and friends for financing. Access to formal financial services by the informal sector is hampered by a lack of credit history or bad credit history by the owner, inadequate collateral, the lack of skills and knowledge to produce financial statements, and poor business models and plans. As shown in Table 1, the majority of informal enterprises do not separate business and personal finances and do not keep financial records. More than 60% of informal enterprises in all countries do not keep financial records.

| TABLE 3: INFORMAL SECTOR BUSINESS SOURCE OF START-UP CAPITAL AND OWNERS’ EDUCATION LEVEL |
|---------------------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|
| START-UP CAPITAL                                              | PERCENTAGES                     | BUSINESS OWNER EDUCATION LEVEL  | PERCENTAGES                     |
| OWN SAVINGS                                                   | 83%                             | NONE                            | 34%                             |
| LOAN FROM FRIENDS/ RELATIVES                                 | 11%                             | PRIMARY                         | 18%                             |
| MICRO FINANCE                                                 | 2%                              | SECONDARY                       | 34%                             |
| BANK                                                          | 0,2%                            | TERTIARY                        | 14%                             |
| OTHER                                                         | 3%                              |                                 |                                 |
and more than half in all countries except Kenya do not separate personal income from business income.

The informal sector is an important alternative to the scarce opportunities available in the formal sector. With the formal paying sector and, more specifically in countries dependent on natural resources the mining sector, shedding jobs due to the economic slowdown in developed countries and a low demand for minerals, the importance of the informal sector cannot be over-emphasised. The informal sector provides a survivalist strategy through which people can generate an income.

A significant proportion (86%) of informal businesses in the African countries surveyed are owned by individuals with less than tertiary education – 34% are owned by those with no education, 18% are owned by primary certificate holders and another 34% are owned by secondary school certificate holders. This is another reason why the majority of the informal sector businesses are unable to keep financial records. Financial access is crucial to the survival and expansion of the informal sector and policymakers should develop strategies to financially include this sector. Research shows that the ‘one-size-fits-all’ model used by banks,
which requires collateral, financial records and credit history, is exclusionary. The lack of regulation of SME credit record data and no standard means of data collection for SMEs makes it difficult for SMEs to access credit from banks. Even in South Africa, a country with comprehensive levels of consumer data that are organised and regulated, there are few or no SME credit records for businesses in the informal sector.

A well-functioning and competitive financial system is critical to the achievement of inclusive economic growth and to fight poverty. Principles of financial inclusion include access, affordability, usage, consumer financial education, innovation and diversification, and simplicity. More importantly, information is a catalyst for financial inclusion, as banks and other financial institutions depend on credit records and history to determine the authenticity of their clients. Financial inclusion allows start-ups to have access to a wide range of financial products such as saving wallets, investments, and credit, payment and risk management services. Financial exclusion is more acute in developing countries, where more than 70% of individuals (Gillwald & Mothobi, 2019) and small enterprises are unbanked (see Table 4). The 2017 RIA After Access informal survey shows that 76% of informal businesses in the nine countries surveyed do not have a bank account, 18% use the owner’s bank account and only 6% have a dedicated business account (see Table 4). Only 3% of informal businesses reported having had a loan from a bank and only 4% have a credit card.

**FINTECH**

Financial technologies (fintech) have the potential to disrupt the status quo and enhance financial inclusion in developing countries. Fintech’s ability to reduce information asymmetries and transactional costs and foster wide outreach makes it a potent weapon for

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**TABLE 4: INFORMAL SECTOR ACCESS TO FORMAL BANKING SERVICES**

<table>
<thead>
<tr>
<th>START-UP CAPITAL</th>
<th>NO</th>
<th>USE OWNER’S ACCOUNT</th>
<th>DEDICATED BUSINESS ACCOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL</td>
<td>76%</td>
<td>18%</td>
<td>6%</td>
</tr>
<tr>
<td>GHANA</td>
<td>67%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>KENYA</td>
<td>72%</td>
<td>9%</td>
<td>19%</td>
</tr>
<tr>
<td>MOZAMBIQUE</td>
<td>93%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>NIGERIA</td>
<td>79%</td>
<td>20%</td>
<td>5%</td>
</tr>
</tbody>
</table>

---

**TABLE 5: INFORMAL SECTOR ACCESS TO FORMAL BANKING SERVICES**

<table>
<thead>
<tr>
<th>START-UP CAPITAL</th>
<th>NO</th>
<th>USE OWNER’S ACCOUNT</th>
<th>DEDICATED BUSINESS ACCOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWANDA</td>
<td>67%</td>
<td>0%</td>
<td>32%</td>
</tr>
<tr>
<td>SENEGAL</td>
<td>85%</td>
<td>5%</td>
<td>11%</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>47%</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>TANZANIA</td>
<td>91%</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>UGANDA</td>
<td>89%</td>
<td>7%</td>
<td>40%</td>
</tr>
</tbody>
</table>
fostering financial inclusion. Two fintech products that have readily fostered financial inclusion include mobile money and online crowdfunding. While the formal banking sector has, for years, shied away from serving low-income individuals and micro businesses due to the costs of setting up physical branches and the risk associated with low-income people and micro businesses, digital technologies are able to reduce these costs and provide online smart infrastructure to serve the poor. Informal businesses often lack collateral and credit histories, but the development of mobile financial services and other digital financial services generate data that can be used to assess credit worthiness.

Fintech applications have managed to deal with information asymmetry issues and have opened up opportunities for lenders to give credit to people and small enterprises who otherwise would not qualify due to their lack of collateral or credit history (Murthy et al, 2019).

Greater geographical reach, low cost and speed also contribute to expansion of financial services. Financial technologies are able to generate digital ecosystems that map, expand and monetise digital footprints. Financial service providers are able to use customers behavioural patterns with predictive algorithms to accelerate access to financial products and monitor customer engagement with finances, as well as to allow for profiling of the formerly unserved sectors into generators of financial assets (World Bank Group, n.d.).

Other than mobile money services, the use of other platforms such as those that allow for crowdfunding is still very low in Africa. Mobile money has been successful in East African countries and more specifically in Kenya. Evidence from the RIA After Access 2017 Individual Sector Survey shows that the regulatory environment in Nigeria had a negative effect in the adoption of mobile money, while in South Africa competition from existing financial services did not allow for growth of mobile money. As per the findings of the individual survey, mobile money services are common in Kenya, where 68% of informal businesses use them, followed by Rwanda (43%), Ghana (41%), and Uganda and Senegal at 36%.

Mobile money has definitely fostered financial inclusion in Kenya, where 71% of informal entrepreneurs have access to financial services either through mobile money services (68%) or banking services (28%), followed by South Africa, with the majority using formal banking services (53%). In Ghana and Rwanda, 55% and 54% of informal businesses respectively are financially included. Financial inclusion remains low in Nigeria (24%), Tanzania (22%) and Mozambique (20%).
It is now widely accepted that ICTs are having a major impact on economic development. ICTs, and more specifically the Internet, are the major drivers in the globalisation of capital, labour and markets. ICTs are critical ingredients to facilitating the escape from poverty of the millions of informal entrepreneurs in developing countries. The access and use of ICTs can enable socio-economic development in the informal sector through facilitation of market integration and enhanced access to social capital through easy access to information. These technologies are also critical tools for the formalisation of informal enterprises and their use can significantly improve the productivity of firms in the informal sector and thus dissolve the formal–informal divide in the economy (Bhattacharya, 2019). ICTs provide informal enterprises with easy access to local and global markets, increase productivity by cutting travel costs, increase profitability and the potential for scalability, and allow informal business agents to make informed business decisions from readily available information provided by these technologies (Bhattacharya, 2019).

Despite this, the access and use of ICTs, and more specifically the Internet, which provides the greater network effect, is very low in Africa. The use of the Internet for businesses purpose in the surveyed countries is as low as 7% on average. South Africa, which has the highest individual Internet use among the 2017 After Access countries, at 53% (see the RIA Comparative Report, 2019), has the highest Internet use by informal enterprises, at 24%, followed by Senegal (20%). Internet use by informal enterprises in Ghana, Mozambique and Nigeria is slightly higher than the overall average, at 8% and 7% respectively, but much lower in Kenya (4%) and Uganda (4%). Rwanda, one of the poorest countries among the surveyed countries, with the lowest household and individual Internet use (see RIA After Access 2017), has the lowest Internet use among informal entrepreneurs, with only 1% of them using the Internet (see Figure 4).

The low levels of Internet use among informal businesses can be attributed to lack of Internet-enabled devices. Only 1% of informal businesses in Rwanda have fixed-line connections and none of the businesses surveyed had a working computer. More than 90% of informal businesses in Ghana (96%), Kenya (96%), Mozambique (99%), Nigeria (98%), Tanzania (97%) and Uganda (97%) do not have a working computer. Computer ownership is high only

**Figure 5:** Internet use overlaid on GNI per capita

*Source: RIA After Access informal business survey data, 2017*
in South Africa, where 20% of informal businesses own a computer. There is evidence of a lack of awareness among the majority of African informal entrepreneurs about the potential offered by the Internet. A significant percentage of those who do not use the Internet, 85% in Kenya, 79% in Senegal, 73% in Ghana and 68% in Nigeria, gave a negative assessment of the need for Internet use in their businesses, while 69% in Rwanda, 53% in Kenya and 52% in Senegal said that the Internet is too expensive (see Table 5). Internet access (coverage) is also a problem in some countries. More than a third of businesses in Kenya (37%) and Senegal (34%) stated that the Internet is not available in their area.

Mobile phone ownership is high among informal sector entrepreneurs. South Africa, at 93%, has the highest adoption rates among all the surveyed countries, followed by Senegal (91%) and Kenya (82%). Surprisingly, Nigeria (58%) has the lowest mobile phone adoption among informal sector workers. The survey results, however, show that despite these high penetration rates, the use of mobile phones for business purposes is very low overall. Only 8% of informal businesses in South Africa have a mobile phone that is used strictly for business and less than 5% in all other surveyed countries use mobile phone devices to conduct their business processes. Tanzania at 79% has the highest mobile phone adoption among informal sector managers, followed by South Africa (75%) and Uganda (75%). Rwanda (22%) has the lowest adoption rate among informal businesses managers, but has the highest rate (53%), of businesses that use a mobile phone only for business activities. Senegal has the highest proportion of informal business managers who use their mobile phones for both business and personal activities (see Figure 5).

The low levels of ICT use suggest that the African informal sector is not taking advantage of global markets and is still characterised by low productivity levels that prevent it from competing globally. This also implies that the informal sector has not even started transitioning towards easy channels of formalising their businesses activities. Low ICT adoption levels by the informal sector are a significant welfare loss to the sector, as ICTs have the potential to amplify the sector’s dividends.

The survey shows that even though smartphones provide a cheaper alternative to accessing the Internet compared to expensive fixed-line services and computers, Internet 

![Table 6: Reason for Not Using the Internet](image)

### Figure 6: Mobile phone adoption and use among informal business managers

*Source: RIA After Access Informal Business Survey data, 2017*
access among micro entrepreneurs remains below the necessary threshold required to enjoy network benefits. The majority (71%) of the 7% that use the Internet in their business activities access the Internet via mobile broadband services, 23% access it through public Wi-Fi and 6% use fixed broadband services.

Almost half of the micro businesses that access the Internet use it to send or receive emails, and 32% make voice calls over the Internet. In most African countries, the government is the largest source of business through provision of tenders. The tender calls are generally made public through social media platforms and websites. The survey, however, shows that there is minimal business between government and the informal sector, with only 15% of businesses that use the Internet using it to get information from the government. Clearly, there is evidence that those who access the Internet are benefiting, as 65% use the Internet to get information about goods and services online, and 43% do online banking.

Digital technologies have the potential to link the informal sector to formal opportunities and widen the informal sector market. They also generate ample opportunities for informal sector to scale-up and formalise. Some platforms that give the informal sector opportunities to trade with other businesses worldwide are the e-commerce platforms. Not only does e-commerce create platforms for matching buyers and sellers, but it allows the informal sector to take on formality in small, accessible and low-costs steps that match enterprises’ needs. Most importantly, digital platforms can assist in increasing the visibility of informal entrepreneurs. Evidence from the survey shows that among the reasons for the informal sector in Africa being unable to grow and formalise is its lack of awareness about the importance of digital marketing and services. Among the 7% that use the Internet, only 10% (representing 1% of the informal sector in the surveyed African countries) use the Internet for selling products and services online, and 23% use the Internet to look for suppliers online. South Africa and Ghana are the only countries with more than 1% of the informal sector using e-commerce platforms, at 3% and 2% respectively. Digital platforms also provide informal businesses with ample opportunities to improve their educational and business capabilities with information on how to set prices and training on how to handle customers. The 2017 RIA Informal Business Survey shows that only 4% of these informal enterprises use online learning services. Among the group of informal businesses that use the Internet more than half in Rwanda (86%), Mozambique (75%), South Africa (72%) and Uganda (51%) have e-mail addresses while only 47% in Nigeria, 45% in Ghana and 33% in Senegal own an e-mail address. Tanzania, at 25%, has the least proportion of enterprises that own an e-mail address. As it has already mentioned, the Internet provides an opportunity for small enterprises to reach global markets. However, even among enterprises that has access and uses the Internet less than a quarter sell their products online except in Ghana where about 30% of micro enterprises participate in e-commerce by selling their products and services online. Of those that use e-commerce platforms to sell products, on average they receive about 16 online orders per month. The use of Internet to get information about goods and services online, however, is very high. About 97% of informal

<table>
<thead>
<tr>
<th>START-UP CAPITAL</th>
<th>E-MAIL</th>
<th>INFORMATION ABOUT GOODS/SERVICES</th>
<th>E-COMMERCE</th>
<th>GOVERNMENT TENDERS</th>
<th>ONLINE BANKING</th>
<th>SUPPLIERS ONLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHANA</td>
<td>45%</td>
<td>58%</td>
<td>30%</td>
<td>26%</td>
<td>34%</td>
<td>29%</td>
</tr>
<tr>
<td>KENYA</td>
<td>53%</td>
<td>67%</td>
<td>14%</td>
<td>8%</td>
<td>34%</td>
<td>47%</td>
</tr>
<tr>
<td>MOZAMBIQUE</td>
<td>75%</td>
<td>39%</td>
<td>6%</td>
<td>29%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>NIGERIA</td>
<td>47%</td>
<td>64%</td>
<td>8%</td>
<td>15%</td>
<td>47%</td>
<td>19%</td>
</tr>
<tr>
<td>RWANDA</td>
<td>86%</td>
<td>97%</td>
<td>15%</td>
<td>58%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>SENEGAL</td>
<td>33%</td>
<td>66%</td>
<td>40%</td>
<td>15%</td>
<td>21%</td>
<td>29%</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>72%</td>
<td>69%</td>
<td>13%</td>
<td>18%</td>
<td>41%</td>
<td>46%</td>
</tr>
<tr>
<td>TANZANIA</td>
<td>25%</td>
<td>94%</td>
<td>8%</td>
<td>14%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>UGANDA</td>
<td>51%</td>
<td>81%</td>
<td>19%</td>
<td>33%</td>
<td>4%</td>
<td>18%</td>
</tr>
</tbody>
</table>
businesses that use the Internet search for information about goods and services online and 94% and 81% in Tanzania and Uganda respectively also use the Internet to gather information about goods and services. The use of e-government platforms is very minimal among small businesses except in Rwanda where about 58% of micro enterprises use the internet to get information about government tenders. Evidence from the survey also shows that small business still prefers the traditional way of buying and selling products. More than half of surveyed enterprises have not yet taken advantage of the Internet to interact with their suppliers. Among the enterprises that have interacted with suppliers online, on average, they make seven orders a month.

The survey shows that there are many stages of disparities. While some micro enterprises cannot access the Internet, there are some which are included but have similar characteristics as the excluded. For instance, the survey shows that about 92% of small enterprises in Tanzania and 94% in Mozambique do not use e-commerce platforms despite being connected to the Internet. Similarly, 96% of small enterprises that use the Internet in Uganda do not use online banking facilities while 85% in Nigeria and 86% in Tanzania do not use the Internet to source information about government tenders and services. These micro enterprises though connected and have the capacity to use the Internet have not yet taken advantage of the global resource that the Internet provides and exhibit similar characteristics as those that are offline.

It is also evident from the survey that the Internet does not only provide an opportunity for larger markets but also provides platforms for small entrepreneurs to recruit new staff. Furthermore, the Internet provides avenues for entrepreneurs to access training material for development of their business skills and knowledge. For instance, about 27% of micro enterprises in Kenya stated that they use the Internet to recruit staff, 19% in Ghana and 16% in Rwanda. However, the proportion of those who reported using the Internet for skills development is very low, less than 10% except in Ghana (28%) (see Table 5).

As shown in Table 5, small enterprises do not only use the Internet to host their website but access a host of platforms via the Internet, which helps them to scale and widen their geographical reach in terms of consumer base and supplier network. Small businesses use the Internet to get information about new ideas for doing business and also to scope and compare their competitors. About 78% of surveyed micro enterprises stated that through the use of the Internet, they were able to develop new ideas on how to improve their services. Helping them to innovate and match their consumer demand and expectations. About two thirds (64%) stated that the Internet provides them with avenues to connect with their consumers and get a better understanding of consumer needs while at the same time, helping these enterprises to improve their sales (65%). Furthermore, the Internet helps small businesses to widen their geographical reach in terms of consumer and supplier networks (48%). About half of the enterprises that use the Internet stated that the Internet helps in improving staff skills (see Figure 6). A quarter of the businesses that use the Internet stated that the Internet exposes their businesses to fraud while 8% stated that it poses reputational challenges to their operations.
One of the biggest challenges facing most developing countries today is lack of jobs among the youth. As the older members of the population continue to hold onto decent jobs and shun the early retirement policy due to poor performance in the financial market, youth unemployment has ballooned. The lack of global economies to generate enough employment for both youth and adults has resulted in the youth, who are new to the labour market, being three times more likely than adults to be unemployed. Globally, three out of four employed young women and men are in the informal economy. However, this ratio is higher in developing countries where 19 out of 20 young women and men are in an informal setting. This implies both a lack of decent jobs as well as fair remuneration for the youth. In 2018, it was estimated that 160.8 million youth in developing countries live in extreme poverty on less than USD3.10 a day (European Union, 2018).

The youth are generally understood as referring to those transitioning from the dependence of childhood on their parents to becoming independent. In most cases, age is used to define this group. Different definitions of the youth are used, depending on the context. According to the United Nations, which is used most for statistical consistency across regions, the youth are defined as being between the ages of 15 and 24 years. The definition in the African Youth Charter classifies the youth as every person between the ages 15 and 35 years. RIA uses the latter definition.

Results from the 2017 After Access Informal Survey are consistent with the European Union (EU) findings, which show that the majority of people employed in the informal sector are the youth. The survey shows that 56% of those who work in the informal sector are the youth, compared to adults (42%). The survey also finds that 2% of informal businesses are managed by children. Senegal and Nigeria are the two countries that have the highest number of children working in the informal sector.

**Figure 8: Youth in the informal sector**
*Source: RIA After Access informal business survey data, 2017*
*Notes: Rwanda is excluded as this question was not asked.*

**Figure 9: Youth employment in the surveyed countries**
*Source: RIA After Access Informal Business Survey data, 2017*
Evidence from the survey shows that informality is highly explained by level of education. The majority of the youth in the informal sector are those with no formal education or those with entry-level qualifications (primary level certificates). The survey shows that youth participation in the informal sector declines as education increases. However, the results show the opposite for adults. A significant proportion of adults who work in the informal economy are those with tertiary education, followed by those with secondary education. This result might indicate that the majority of adults in the informal economy are retired citizens (see Figure 8).
The informal sector plays a critical role in the economies of many African countries. It provides alternative sources of employment and it is a survival hub for the poor and uneducated. In sub-Saharan Africa, the informal sector is the largest employer, generating about two-thirds of total employment in the region. Despite the sector generating much-needed employment and income for marginalised societies, the sector has failed to gain traction from policymakers and remains undeveloped. It continues to be characterised by low productivity, a lack of infrastructure, low wages and poor working conditions. Critically, there is lack of information and up-to-date statistics for evidence policy formulation. To bridge this gap, in 2017, Research ICT Africa conducted an informal business survey in nine African countries. The survey collected information on business ownership, type of business, ICT access and use, level of formalisation and access to finance.

Most informal businesses in the surveyed countries are in the business of trading or selling goods and services. This includes selling motor parts, furniture, retail products and vegetables. More than one third (38%) provide services such as tailoring, welding and fitting, laundry, shoe repair and the selling of starter packs and airtime vouchers. Generally, in most developing countries, women find it difficult to find formal employment and are often pushed to partake in the most vulnerable, low-income businesses. A significant proportion of informal businesses in the surveyed countries is owned by women (54%), 41% by men and 5% percent a joint venture between men and women. The high female ownership of informal business, along with the formal economy favouring men and pushing women to the informal sector, is a clear indicator of the disparities between men and women in the formal sector. Women’s ownership of informal businesses is higher in Nigeria (59%), Mozambique (50%) and Ghana (58%). Evidence has shown that informality is an outcome of a lack of education, which in most cases applies to girl children who are denied the right to education and results in the high number of women participating in the informal sector. The majority of those who work in the informal sectors in South Africa (70%) and Mozambique (56%) have primary education, while 61% in Rwanda and 60% in Tanzania have no form of education. However, ownership of the informal sector in Rwanda, South Africa and Tanzania is still controlled by men. This could be attributed to a number of issues including cultural and religious norms, which bar women from entrepreneurial activities. Therefore, despite a large proportion of workers in South African informal businesses being women, the businesses are still largely owned by men. The informal sector faces an array of challenges, which includes lack of infrastructure, lack of electricity and, most importantly, a lack of funding opportunities. Most informal business (83%) in the survey countries self-funded their start-up capital, while 11% are supported by family members and 2% obtained funding from micro financial institutions. The lack of funding opportunities is a major stumbling block to growth and formalisation of the sector. Access to formal financial services by the informal sector is mostly hampered by a lack of skills and knowledge to produce financial records, a lack of credit history and inadequate collateral. The majority of informal businesses reported that they do not separate business income from personal finances and do not keep financial records. Financial exclusion is more acute in developing countries. The survey findings show that 76% of informal businesses in the surveyed countries do not have a bank account, 18% share the account with the owner and 6% have a dedicated business account. Only 3% reported having had a loan from a bank, while just 4% have a credit card.

Financial technologies have the potential to enhance financial inclusion in developing countries. Their ability to reduce information asymmetry and generate much-needed transactional information or data can foster access to a wide reach of financial services by the informal sector and also bring some form of formality to the sector. Electronic commerce (e-commerce), which includes a set of commercial transactions taking place
remotely through electronic and digital interfaces, is essential today as a major sales channel, especially in developing countries where much of the trade takes place in the informal economy. E-commerce plays a critical role in the informal sector, where the majority have no bank accounts. Despite most of these enterprises not being connected to the Internet, a significant proportion of business leaders or managers own mobile phones, which they can use to access the Internet and perform digital transactions either through mobile application platforms or Internet-facilitated transactions. Other than mobile money, the use of other financial technologies is still very low. The mobile money platforms have been very successful in East African countries. Kenya is the leading country in the use of mobile money platforms, where 68% of informal businesses use mobile money, followed by Rwanda (43%), Ghana (41%), and Senegal and Uganda at 36% each. When taking mobile money platforms into account, informal sector financial inclusion in the surveyed countries increases to 30%. Mobile money services have had a significant impact in Kenya, where 71% of informal entrepreneurs are financially included, followed by South Africa (53%). Mobile money in South Africa, however, is not common and most entrepreneurs prefer using formal financial banking instruments. Financial inclusion remains very low in Nigeria (24%), Tanzania (22%) and Mozambique (20%).

The use of the Internet by the informal sector is very low, 7% on average. South Africa, which has the highest Internet use among individuals at 53%, has the highest use by the informal sector at 24%. Despite Senegal being one of the poorest countries among the surveyed countries, it has the second highest Internet use at 20% – performing better than Ghana (8%) and Nigeria (7%). Rwanda, which also has the lowest Internet penetration among individuals (9%), continues to perform badly in this measure, with only 1% of informal businesses in Rwanda using the Internet. At 4%, Uganda performs better than Tanzania. Low levels of Internet use among the informal sector is due to lack of Internet-enabled devices. Computer ownership is only high in South Africa, where 20% of informal businesses have a working computer, while more than 90% in all other surveyed countries reported not having a computer. A significant proportion (more than 70%) of those who do not use the Internet in Kenya, Senegal and Ghana gave a negative assessment of the need for the Internet, while 69% in Rwanda, 53% in Kenya and 52% in Senegal stated that the Internet is too expensive. Mobile phone adoption is high among informal sector entrepreneurs. South Africa has the highest mobile phone adoption at 93%, followed by Senegal and Kenya. Mobile phone adoption, however, is low in Nigeria (58%). Despite the high mobile phone penetration among entrepreneurs, ownership by businesses is very low. Only 8% of informal businesses in South Africa and less than 5% in all other surveyed countries have a mobile phone for business. The low levels of ICT and Internet application use in the African informal sector implies that the sector is missing all of the business potentials that comes with being connected. The survey shows that 56% of those who work in the informal sector are the youth compared to 42% of adults. The survey also finds that 2% of informal businesses are managed by children. Senegal and Nigeria are the two countries with the highest number of children working in the informal economy, at 2% each, followed by Ghana at 1%. Kenya, Nigeria and Senegal have the highest numbers of youth in the informal sector, while in South Africa and Uganda, the informal economy is comprised largely of adults.

Evidence from the survey shows that informality is highly explained by level of education, even among the youth. The majority of the youth in the informal sector are those with no education or entry level qualifications (primary level certificate). The survey shows that youth participation in the informal sector declines as education increases. However, the results show the opposite for the adults. A significant proportion of adults who work in the informal economy are those with tertiary education, followed by those with secondary education. This result might indicate that most adults in the informal economy are retired citizens.
African economies need to formulate policies to remove barriers that prevent full engagement in the digital economy and optimise the benefit. The policies must target enhancing participation of African residents or businesses in digital platforms such as e-commerce and crowdfunding to boost Africa’s long-term competitiveness. Africa needs to develop initiatives towards attaining financial inclusion among informal business. This could be achieved by the use of digital platforms such as mobile money and other Internet-based platforms. These platforms can be used to generate much-needed information including, credit histories and financial statements, which can be used to assess entrepreneurs’ credit worthiness and bring some form of formalisation to the sector.

Africa needs to focus on developing fintech applications that are able to deal with information asymmetry issues and open up opportunities for lenders to give credit to people and small enterprises who would otherwise not qualify due to their lack of collateral or credit history. Greater geographical reach, low cost and speed also contribute to expansion of financial services. These technologies will generate digital ecosystems that map, expand and monetise digital footprints and allow providers to analyse behavioural patterns with predictive algorithms and profile the formerly unserved sectors. There is a need for African countries to develop a well-regulated database, profiling small enterprises and their credit history, the number of people employed and the business type. With rising indebtedness, some transparency and coordination of multiple loans and proper assessment of payments through shared data services need some form of regulation, while still safeguarding the privacy of users.
REFERENCES


The 2017 After Access Survey, which builds on the surveys conducted in 2008 and 2011, uses the same methodology as these previous surveys. This allows for some level of longitudinal comparison. Using a random sampling technique, in the first stage, the national census sample frames are split into urban and rural enumerator areas (EAs). Secondly, EAs are sampled for each stratum using probability proportional to size (PPS). Two listings were compiled for each EA – one for households and one for businesses. The listings serve as sample frames for simple random sampling. A target of 24 households and businesses are sampled for each stratum using random samples for each selected EA. From the listed households, members, 15 years and older, or visitors staying the night were randomly selected based on simple random sampling techniques.  

Using the above-mentioned process, in 2017, a total of 13,644 households and individuals were selected. Having applied weights to adjust the sample for non-responses and over- or under-representation of urban or rural residents, the survey shows that the populations in the surveyed countries have predominantly more women (52%) than men (48%). Generally, the percentage difference between males and females is minimal in all countries except Lesotho.

According to the United Nations, about half (55%) of the world’s population lives in urban areas. As of 2018, the most urbanised region is Northern America, with 82% of its population living in urban areas. Latin America and the Caribbean come second, with each having 81% of their populations living in urban areas, followed by Europe (74%) and Oceania (68%). In Asia, half of the population lives in rural areas. Despite rapid urbanisation in Africa, in terms of infrastructure development, Africa remains predominantly rural, with 43% of its population living in urban areas. The 2017 After Access Survey finds similar statistics to the United Nations estimates. The survey shows that six out of ten Africans reside in rural areas. Despite Nigeria being classified as the biggest economy ahead of Lesotho, South Africa and Ghana, the country is mostly rural, with about 60% of its population (15 years and older) living in rural areas. Nigeria, however, is ahead of Mozambique, Kenya, Rwanda, Tanzania and Uganda in terms of urbanisation.

By continental standards, South Africa is highly urbanised, with close to seven out of ten South Africans living in urban areas, followed by Ghana with 55% of its population living in urban areas (see Table 6).

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2 https://www.researchictafrica.net/docs/Survey%20Methodology%202011:12.pdf
### TABLE 8: SAMPLE DISTRIBUTION ACROSS THE SURVEYED COUNTRIES

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique</td>
<td>44%</td>
<td>56%</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>50%</td>
<td>50%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>47%</td>
<td>53%</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>Senegal</td>
<td>53%</td>
<td>47%</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>South Africa</td>
<td>46%</td>
<td>55%</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>47%</td>
<td>53%</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>Uganda</td>
<td>49%</td>
<td>51%</td>
<td>24%</td>
<td>76%</td>
</tr>
</tbody>
</table>

### TABLE 9: SAMPLE DISTRIBUTION ACROSS THE SURVEYED COUNTRIES

<table>
<thead>
<tr>
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<th>Female</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
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<td>52%</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Kenya</td>
<td>45%</td>
<td>55%</td>
<td>28%</td>
<td>74%</td>
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<tr>
<td>Lesotho</td>
<td>27%</td>
<td>73%</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td>I Don’t Know How To Use It</td>
<td>41%</td>
<td>35%</td>
<td>14%</td>
<td>61%</td>
</tr>
</tbody>
</table>