Digital Gaps & Opportunities Assessment of MSMEs in Kenya and Uganda

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Abbreviations

B2B	= Business to Business
B2C	= Business to Commerce
eCommerce	= Electronic commerce (i.e. conducted online)
GDP	= Growth Domestic Product
ICT	= Information and Communication Technologies
ITC	= International Trade Centre
KSh	= Kenyan Shilling
mCommerce	= Mobile commerce (i.e. conducted on mobile phones)
MD	= Managing Director
MSME	= Micro, Small and Medium sized Enterprise
SITA	= Supporting Indian Trade and Investment for Africa
SME	= Small and Medium sized Enterprises
T&A	= Textile and Apparel
TCA	= Textile, Clothing, and Apparel
USh	= Ugandan Shilling

1. Context

1.1 The economic importance of MSMEs in Kenya and Uganda

In Kenya and Uganda different stakeholders tend to use different definitions of micro, small, and medium sized enterprises (MSME). For the sake of consistency across this study, we borrow from the EU and World Bank and define MSMEs as firms that meet the following criteria:

- Have an annual turnover below KSh 100m for Kenyan firms and below USh 50m for Ugandan firms;
- Have an asset base of at least KSh 4m for Kenyan firms and USh 5m for Ugandan firms;
- Have less than 250 employees (Micro enterprises have less than 10 employees, small enterprises have between 10 and 50 emloyees, and medium enterprises have between 50 and 250 employees.

While many small and almost all medium enterprises are formalized, micro enterprises are usually constituted by both formal and informal/unregistered enterprises.

Kenya

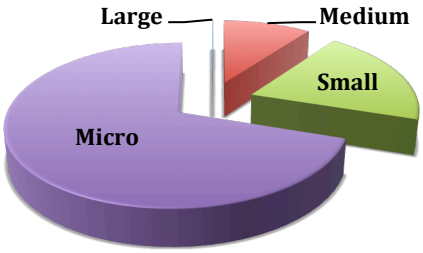
Kenya's MSMEs sector is divided into a manufacturing and a trade sub-sector. Together they account for more than 74% of the total employment and contributes 18.4% to the Kenya's GDP. Over 80% of these MSMEs operate in agro-based activities, which directly affects a larger population in the society (Cuts, 2103).

Given the importance of MSMEs for the country, the Kenyan Government and its partners consider these businesses major drivers of economic and social development and the country's competitiveness. With a rather developed support ecosystem for small businesses that offers a variety of financial and non-financial services, Kenya leads the East African region in provision of MSME development support and is recognized as the leading entrepreneurship and innovation hub of the region.

Uganda

The country's MSME sector, as stated in the Uganda SME policy, comprises about 1.1 million enterprises, employing about 2.5 million people and contributing about 75% of the country's total GDP. However, only 458,106 formally registered enterprises exist, which highlights the considerable size of the informal business sector. Of the formally registered businesses, the majority are micro enterprises.

Illustration 1: Distribution of businesses in Uganda



Source: The Census of Business Establishments (UBOS 2010-11)

The food-processing sector accounts for 18% of total manufacturing business (about 5,966 MSME's) and generates up to 60% of total manufacturing activity. Other manufacturing businesses, including textile and apparel, account for 81%, i.e. 25,791, of all businesses (UBOS 2010-11).

1.2 The state of ICTs in Kenya and Uganda

For the large majority of small businesses in East Africa, the mobile phone is the primary ICT used for business purposes. Due to their high prices and the poor support infrastructure, other ICTs such as computer, land-line telephone, or fax-machine have been far more widely used by medium and large companies than by small or micro enterprises.

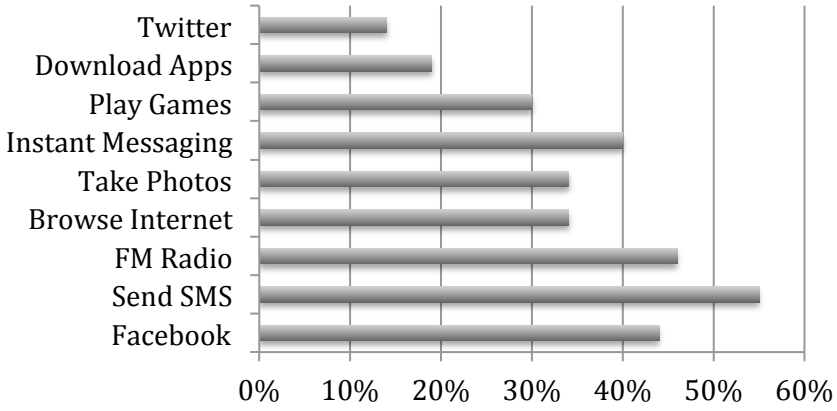
Yet, similar to how Africa's first mobile revolution (from 0 to mobile-phone), the current second mobile revolution (from mobile-phone to smartphone) opens up new opportunities for smaller firms to do business and grow with the help of ICTs.

Kenya

Since 2010, Kenya has seen a sharp rise in competition in its mobile market that led to lower tariffs and better consumer uptake. In addition, the country's bandwidth increased significantly following its recent access to new undersea cables and the implementation of the National Optic Fibre Backbone Infrastructure (NOFBI).

In 2014, 15% of all Kenyans owned a smartphone. Significant discrepancies between rural and urban areas, between different income classes, and education exist and continue growing. 28% of all Kenyan smartphone users have a secondary education or more, while only 5% of less-educated Kenyans possess such a device.

Illustration 2: Most common phone activity in Kenya (2014)

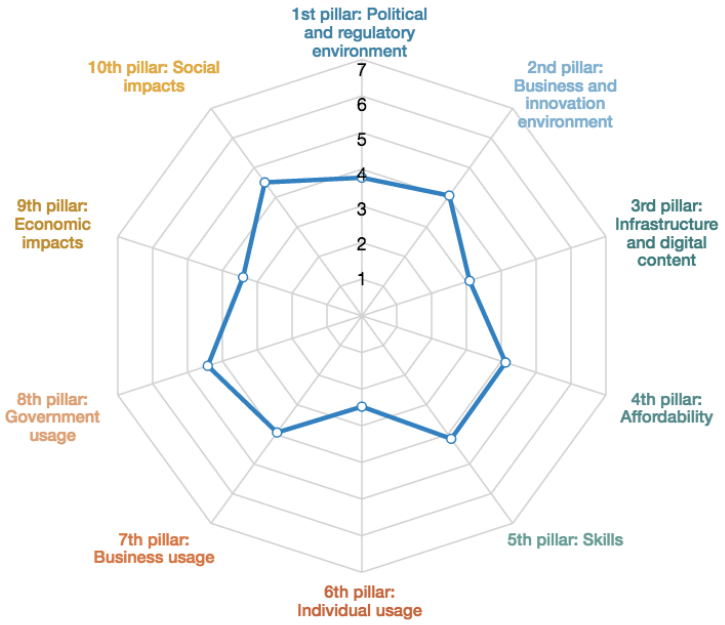


Source: Mobile Africa study (2015)

With 58% Kenya tops the globe with the highest number of adults holding a mobile money account (compared to 35% in Uganda and 32% in Tanzania). The six main mobile-money operators are Safaricom's M-Pesa, Airtel Money, yuCash, Orange Money, MobiKash and Tangaza Pesa. These operators together run a network of more than 127,000 agents (Central Bank of Kenya, 2014).

As such it is no surprise that Kenya tops the list of African countries with ease of access to financial services - thanks to its high uptake of mobile money - placing the country ahead of economic giants such as South Africa, Nigeria and Ghana (World Bank, 2015).

Illustration 3: ICT Network Readiness Kenya



Source: Network Readiness Index Kenya (WEF, 2015)

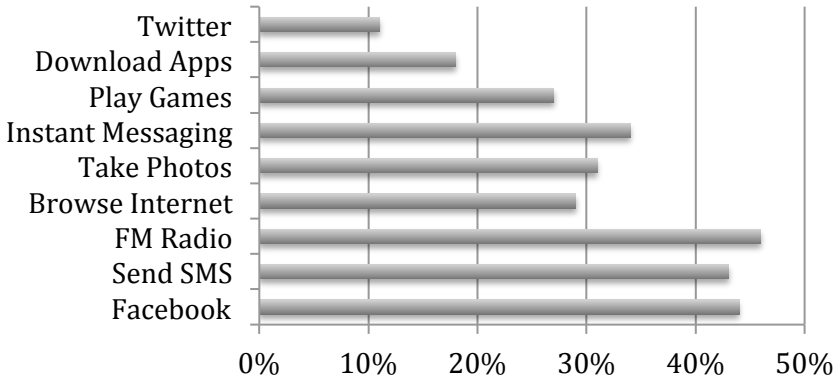
Kenya was placed in rank 86 in the 2015 WEF Networked Readiness Index (NRI). This places the country only slightly behind the regional leader Rwanda but clearly ahead of Uganda and Tanzania (WEF, 2015).

Uganda

Uganda's ICT sector has continued to grow over the last years, driven especially by demand for both mobile voice and mobile Internet services. Mobile devices are the gateway for Ugandans to the Internet. This is illustrated by the fact that 71,8% of Internet users in Uganda used the Internet for the first time on a mobile device (RIA, 2012).

In 2014, 5% of all Ugandans owned a smartphone. Nevertheless, this figure jumps to 20% when Ugandans without a secondary education are taken out of the picture. As in Kenya, Radio, SMS messaging, Facebook, and Instant Messaging (esp. WhatsApp) are the most common use cases for users in Uganda.

Illustration 4: Most common phone activity in Uganda (2014)

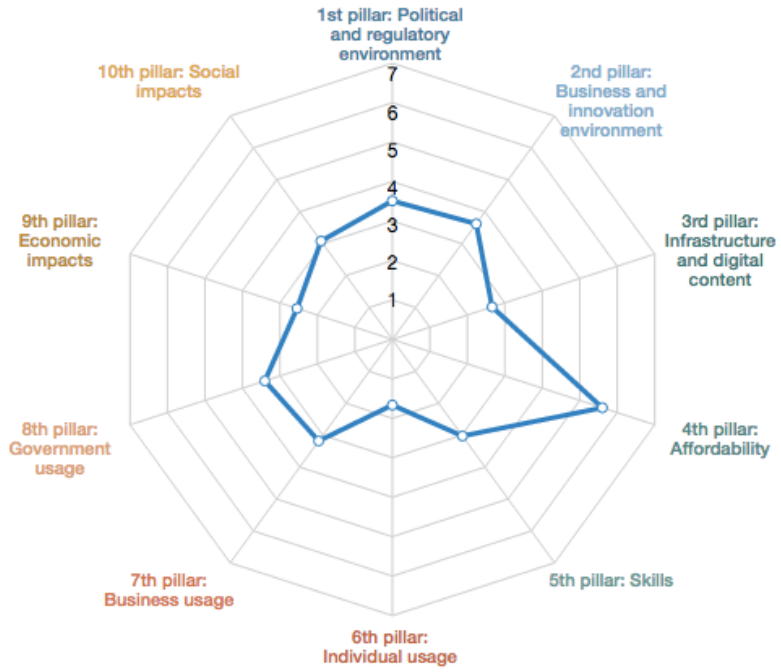


Source: Mobile Africa study (2015)

Mobile money has found its way into the every day of Ugandans and local business. 35% of Ugandans hold a mobile money account. The main mobile-money operators are MTN, Airtel, Uganda Telecom, Orange, MobiCash and Eeezy Money — with a total subscriber base of more than 18 million.

The country's ICT enabling environment however continues to face significant challenges. Uganda only scored the 116th in the WEF Networked Readiness Index (NRI). This places the country clearly behind its regional neighbours Rwanda and Kenya, which ranked 83 and 86 respectively, yet in front of Tanzania, which ranked 123 (WEF, 2015).

Illustration 5: ICT Network Readiness in Uganda



Source: Network Readiness Index Uganda (WEF, 2015)

The 2015 National Small Business Survey (NSBS) Uganda provides interesting insights into the use of ICTs by MSMEs in the country. It found that countrywide only 37% of businesses have access to the Internet. The analysis shows that Internet penetration is very much tied to the size of business. While under around a third of micro-sized businesses have access to Internet, close to half of small businesses do, and nearly two thirds of the medium sized businesses.

Variations can also been seen geographically. About half of all businesses in Kampala have access to the Internet while in the Central region only just over a quarter have access (NSBS, 2015).

2. Research Methodology

In order to give a wide picture of the current gaps and opportunities faced by MSMEs in the pulses sector in Kenya, in the sunflower-oil sector in Uganda, and in the textile & apparel sectors in both Kenya and Uganda, a two-folded methodology was carried out.

1) Quantitative research: Conducted as part of a wider baseline study by ITC's SITA project. A total of 227 managers and CEOs of MSMEs were interviewed face-to face by trained enumerators in Kenya and Uganda;
2) Qualitative research: A deeper assessment was conducted for five micro and small enterprises operating in the T&A sectors in Kampala, Uganda. Of those firms, two handloom-weaving firms and one leather and fashion business are further highlighted in the case studies in section 3.2.

Definition of sectors covered in the quantitative survey[1]

- The T&A sector comprises companies that work in the processing and trading of cotton yarn, textiles, and derivative products;
- The Pulses sector comprises companies trading pulses. Pulses are part of the legume family. Dried peas, edible beans, cowpeas, pigeon peas, and chickpeas are the most common varieties in the region;
- The Sunflower sector comprises firms that process and/or trade sunflower products; i.e. sunflower oil of different grades as well as sunflower-cake. Farms as original sunflower producers were excluded from sample.

2.1 Sample size and characteristics of firms surveyed in Kenya

T&A

In total the survey comprises 49 T&A companies, of which 12 firms are classified as large, three as medium, 11 as small, and 23 as micro enterprises. The country's T&A sector has a total of 37,758 full time jobs– a figure that covers of about 13% of all officially registered manufacturing jobs in the country.[2] This survey identified 26.097 jobs, which show the high coverage of the sample framework.

[1] For more details on the methodology as well as company samples please refer to Section 2.2, 3.2 and 3.3 of SITA Baseline Reports Uganda and Kenya (2016)

[2] Kenyan statistical office reports total number jobs in manufacturing to be 287.500 in 2014; Kenya National Bureau of Statistics; Economic Survey 2015.

In terms of sales USD 332 million3 in 2014 were recorded according to the data from the Government of Kenya. The survey covered 12 firms that have an estimated annual turnover over half a million dollars (with seven very large firms earning a figure above 5million USD). The small and medium firms covered in the survey have a turnover of below half a million dollars. With that the survey covers a significant part of the total sector in terms of sales figures. All steps of the T&A value chain are covered in the survey, i.e. from spinning to finishing, thus a wide range of different companies and products have been surveyed. The bulk of companies (in total 29) are in printing and garmenting.

Pulses

In total the survey comprises 47 pulses companies, of which – according to the previously outlined definition - four were medium firms, eight were small firms, and 35 were micro firms.

In terms of production volume, the total country production for pulses was estimated at 960,075 million tons4 in 2012. The firms surveyed account for about 48,750 million tons representing 105million USD reported as annual pulses export. All steps of the pulses value chain are covered in the survey, i.e. from aggregation to full processing and exporting. Thirteen companies are involved in some processing while a vast majority are just aggregating and trading. Those processing are mainly splitting, peeling, grading, colour sorting and cleaning of the pulses.

2.2 Sample size and characteristics of firms surveyed in Uganda

T&A

In total the survey comprised 77 companies of which two were large, nine medium, 26 small, and 40 micro enterprises.

All steps of the T&A value chain are covered in the survey, i.e. from ginning to finishing, thus a wide range of different companies and products has been surveyed. The export share of total sale is 36%, which is only performed by 31% of the companies – the majority of companies supply sales to domestic markets. In total the companies surveyed provide full-time employment to 2,099 as well as temporarily employment to 2,085 people.

[3] Ministry of Industrialization Kenya Apparels & Textile Diagnosis, Strategy and Action Plan

[4] Kenya food security report Ministry of Agriculture March 2013 and Economic review of agriculture 2011 & 2013

Sunflower

In total the survey comprises in the sunflower are 54 of which four are medium-sized, 34 are small, and 16 are micro enterprises.

In total 443 full time jobs have been identified, a figure that covers 35% of the total employment in the survey companies. In terms of annual sales more than 55% of the companies earn less than USD 30 thousand. Sunflower cake accounts for the bulk of sales in the sector. Still 46% of the companies realize 25% to 50% of their sales with sunflower oil. Domestic sales prevail, and there are only six exporting companies with an average export share of 23%.

All steps of the sunflower value chain are covered in the survey, i.e. from seed trade to oil processing. There are also companies growing sunflower as a side activity. The most common steps in the value chain by the survey companies in descending order include oil processing (47 companies), cake trading (36 companies), and oil trading (28 companies).

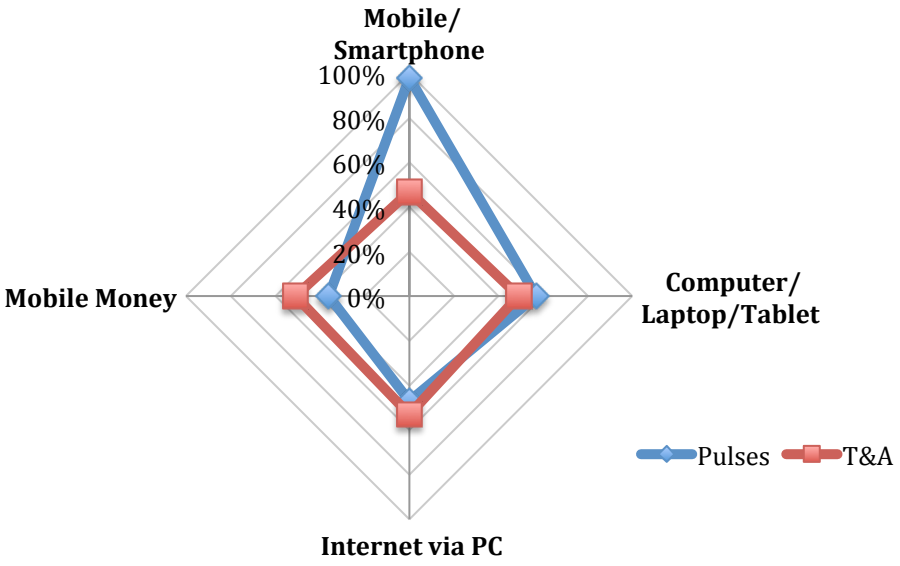
3. The use of digital technologies by MSMEs in Kenya & Uganda

3.1 Findings: Quantitative Survey in Kenya and Uganda

In the following sections the key findings of the quantitative survey are presented.

A. How MSMEs are connected

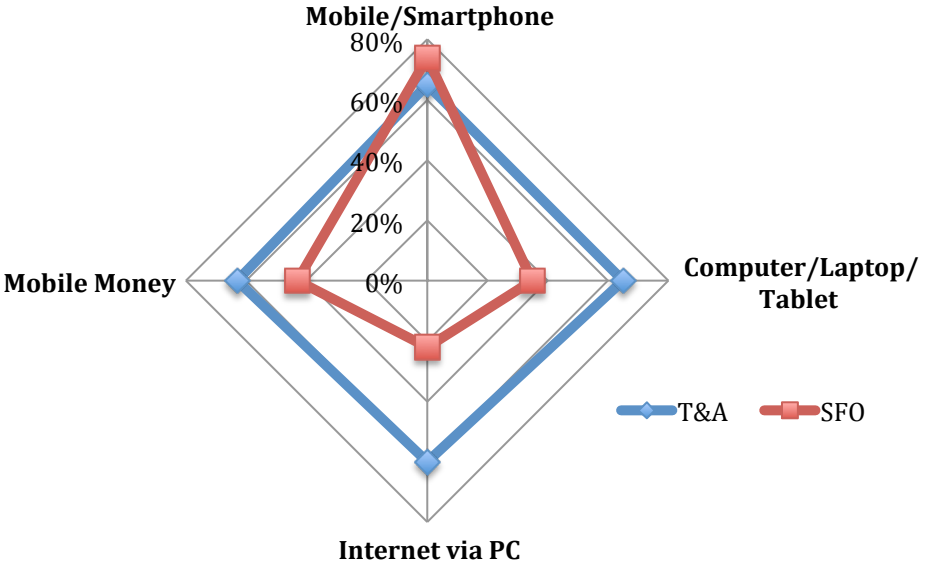
*Illustration 6: Use of digital services among **Kenyan** MSMEs (in %)*



Number of firm responses: Pulses 47 / T&A 49

Interestingly, the use of mobile money services among small pulses firms is significantly higher among small firms than among medium and larger firms (62% vs. 16%). This difference does not hold up for T&A firms.

*Illustration 7: Use of digital services among **Ugandan** MSMEs (in %)*

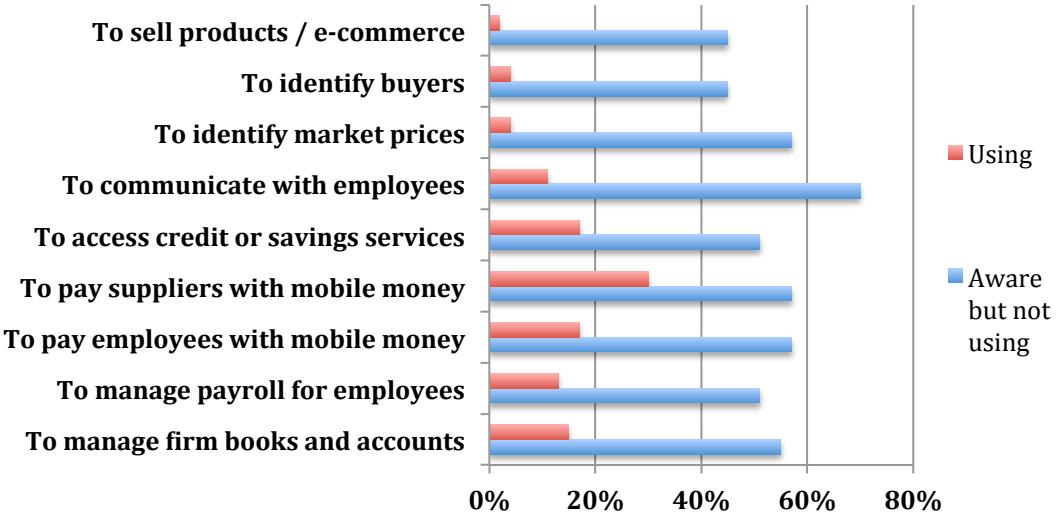


Number of firm responses: T&A 57 / Sunflower 54

In Uganda, surveyed firms from the T&A sector show different levels of connectivity when compared to firms processing or trading sunflower seeds. While MSMEs across both sectors enjoy a relatively high use of mobile devices, sunflower firms lack behind T&A firms in the use of mobile money and even more so in the use of personal computers.

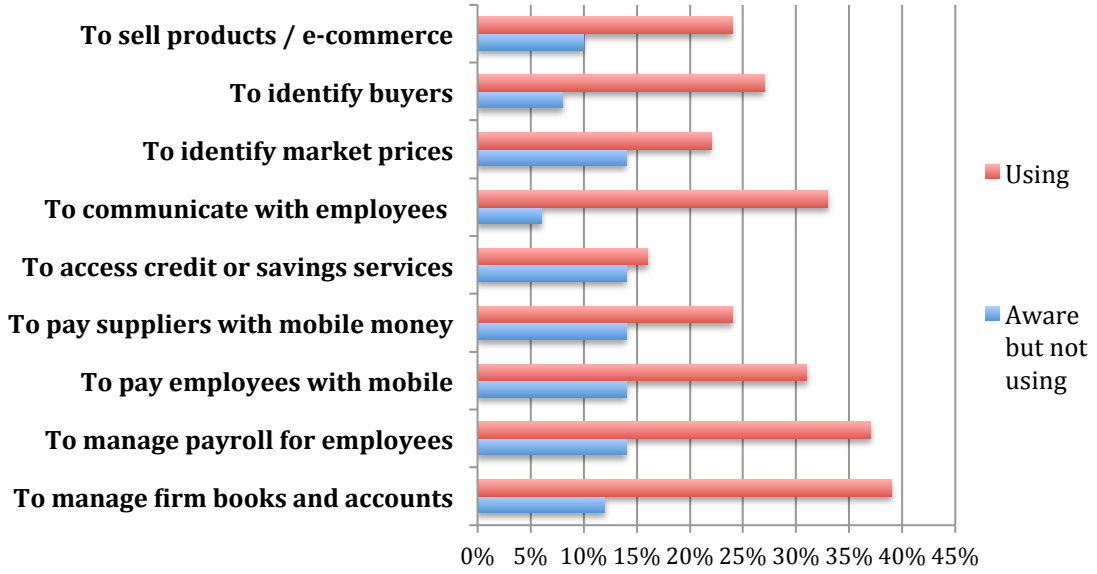
B. The use of digital solutions by MSME

*Illustration 8: The use and awareness of digital solutions and software programmes by **Kenyan Pulses** MSMEs (in %)*



Number of firm responses: 47

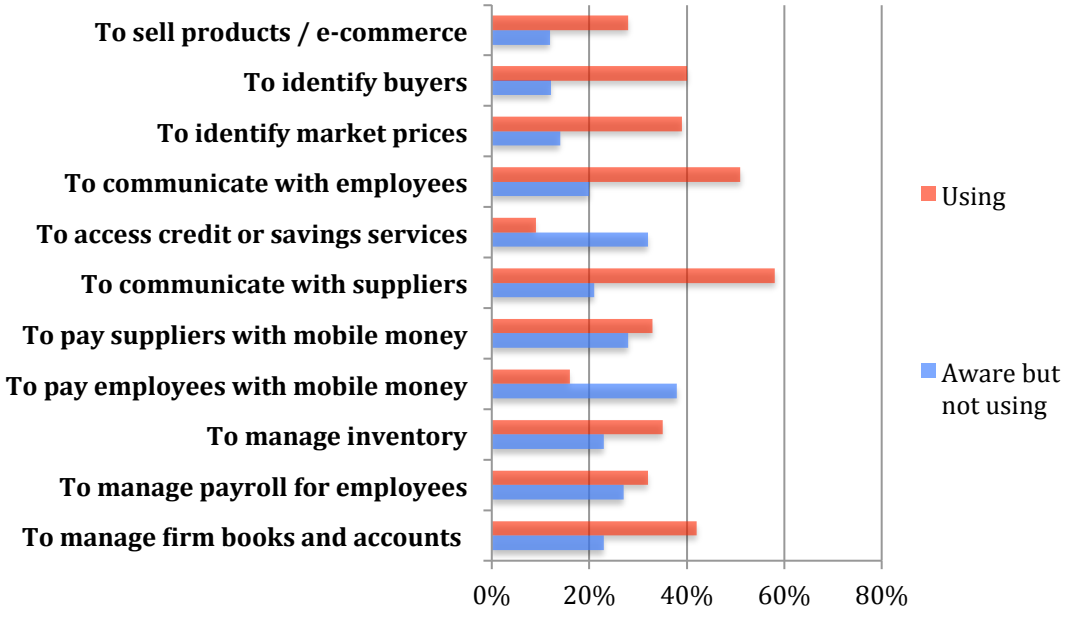
*Illustration 9: The use and awareness of digital solutions and software programmes by **Kenyan T&A** MSMEs (in %)*



Number of firm responses: 49

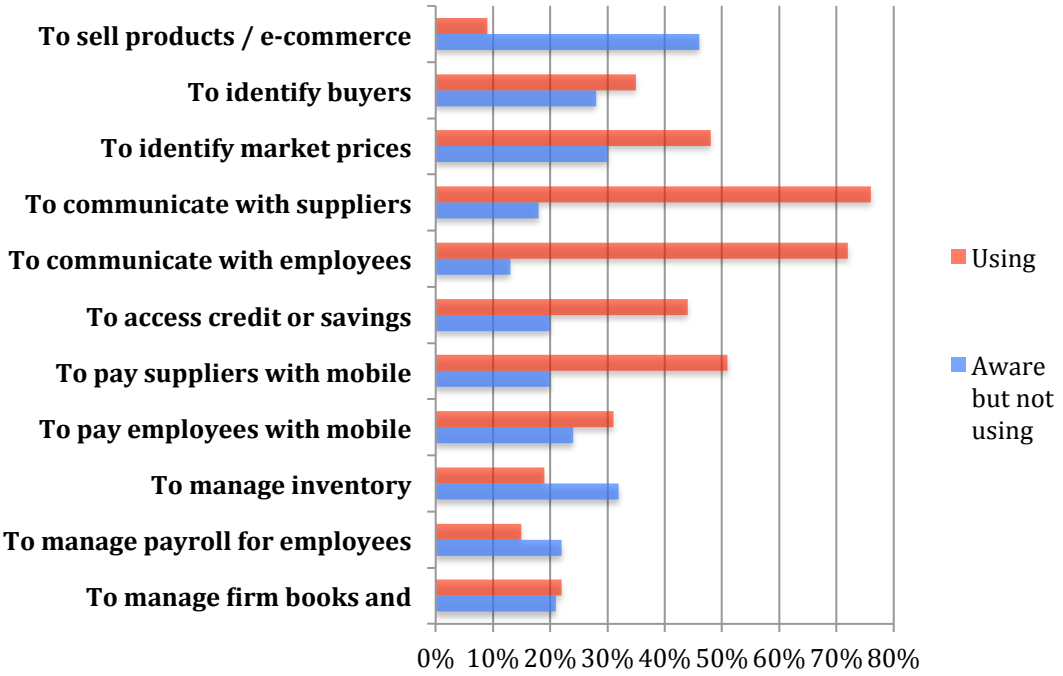
In Kenya clear differences between firms from the T&A sector and firms from the pulses sector can be observed with the former displaying significantly higher adaption levels of all uses of digital solutions in their firm operations. This holds to be true for every single use case observed. Nevertheless, most pulses firms seem to be aware of existing digital solutions.

*Illustration 10: The use and awareness of digital solutions and software programmes by **Ugandan T&A** MSMEs (in %)*



Number of firm responses: 57

*Illustration 11: The use and awareness of digital solutions and software programmes by **Ugandan Sunflower** MSMEs (in %)*

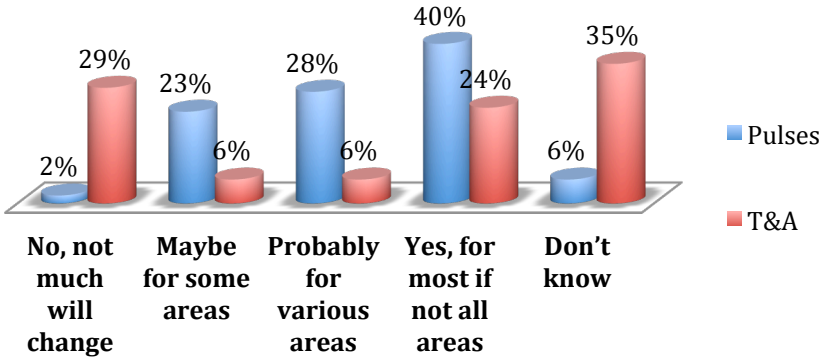


Number of firm responses: 54

Ugandan MSMEs from the T&A and sunflower sector use using digital services more than Kenyan T&A and pulses firms. This discrepancy is particularly strong firms in the agricultural sector. The most common use cases for digital services in Uganda include communicating with suppliers or employees, paying with mobile money, and identifying market prices and buyers.

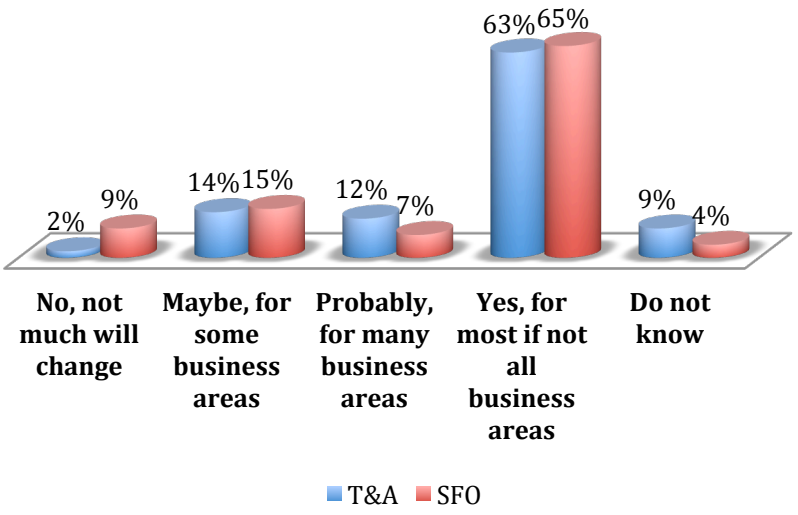
C. The importance of online services to MSME managers

*Illustration 12: **Kenyan** MSMEs' believe in the importance of online services for their business in the near future? (in %)*



Number of firm responses: Pulses 47 / C&A 49

Illustration 13: ***Ugandan*** *MSMEs' believe in the importance of online services for their business in the near future? (in %)*

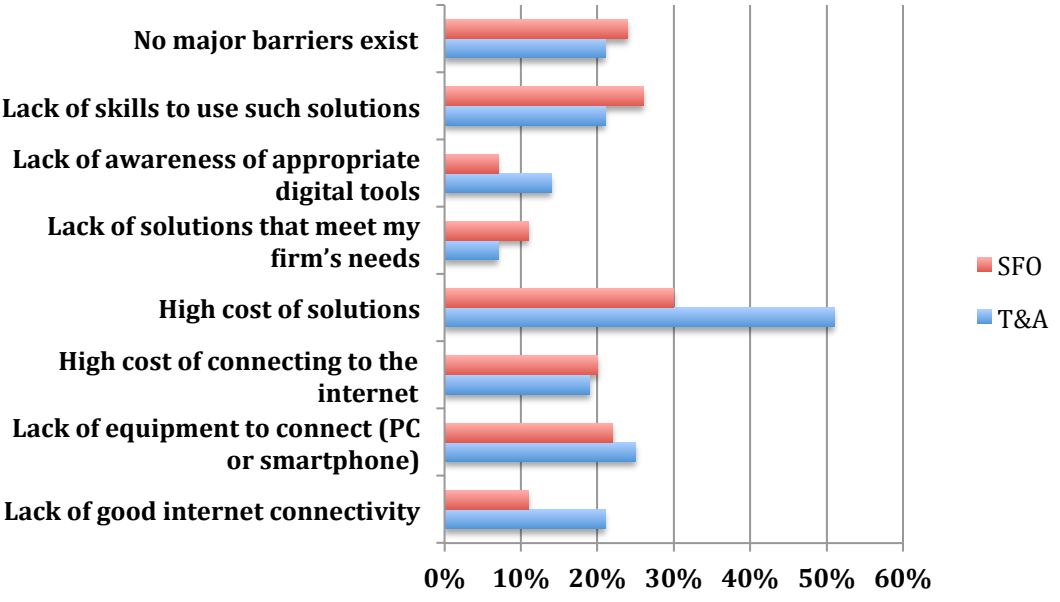


Number of firm responses: C&A 57 / SFO 54

The vast majority of Ugandan firms expect digital services to become much more important to their businesses in the near future. The Kenyan counterparts are more sceptical, particularly in the T&A sector.

D. Barriers to higher adoption

Illustration 14: Main barriers to adopting digital solutions among **Ugandan** firms *(in %)*

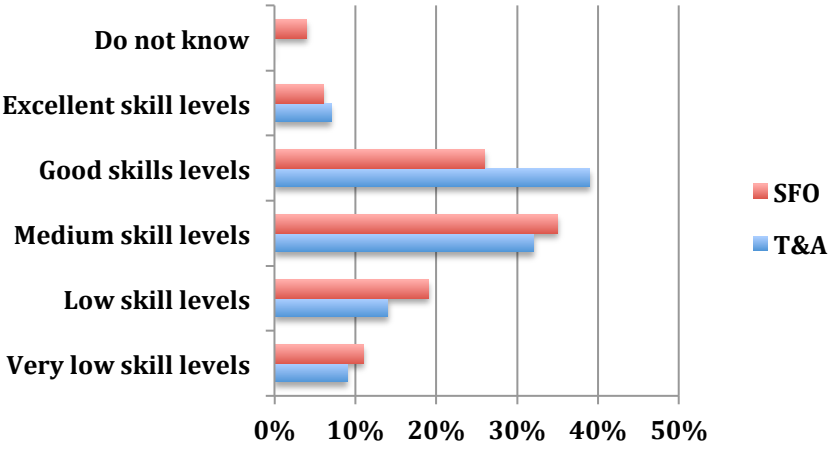


Number of firm responses: SFO 54 / C&A 57

In Uganda, the biggest barriers to adoption of digital solutions are the high cost of such solutions, the cost of Internet connectivity, as well as low skill levels. The cost of solutions appears to be particularly burdensome for the many smaller T&A firms.

E. Digital skill levels by MSME managers

*Illustration 15: Digital skill levels of MSME mangers in **Uganda** (in %)*



Number of firm responses: SFO 54 / C&A 57

The majority of Ugandan MSME managers rate their own digital skills as medium or good. The skill levels in the T&A sector seem slightly higher than in the sunflower sector. This discrepancy can be partly explained through the better connectivity and more widespread use of smartphones and computers in urban environments like Kampala, where most of the surveyed T&A firms are located.

3.2 Findings: Qualitative assessments of small T&A companies in Uganda

To better understand the underlying dynamics of the use of digital solutions by small businesses, an in-depth qualitative assessment was carried out with five T&A firms in Kampala, Uganda. The firms included three handloom-weaving firms, one small leather and fashion business, and one textile trader. In following, three of these firms are inspected in further detail.

3.2.1 Case Study: TEXDA

Firm Profile

The Textile Development Agency (TEXDA) based in the Bukoto neighbourhood of Kampala manufactures the high quality hand-woven fabrics, garments and interior designs. TEXDA has 15 temporary workers, of which ten are under 34 years and five are female, and two permanent staff. One of them is Ms Grace Kirabo who overlooks TEXDA's production, buying, and selling activities.

TEXDA production building, Nov 2015 (credit: Tobias Schiedermair)

TEXDA exports slightly more than it supplies to the local markets. It was able to secure some bigger international buyers such as TJX and its TK Maxx stores in the United States.

How TEXDA's MD Ms Grace Kirabo uses digital solutions:

- Grace uses the company laptop and her smartphone for business purposes;

- Grace communicates with various local suppliers via WhatsApp (incl. pictures of goods pre-purchase);
- Grace uses Email to communicate with international buyers;
- Grace conducts regular research on Google on trends (e.g. colours);
- Grace currently uses Excel for TEXDA accounting but had previously used the more specialised software SAGE with which she had good experience.

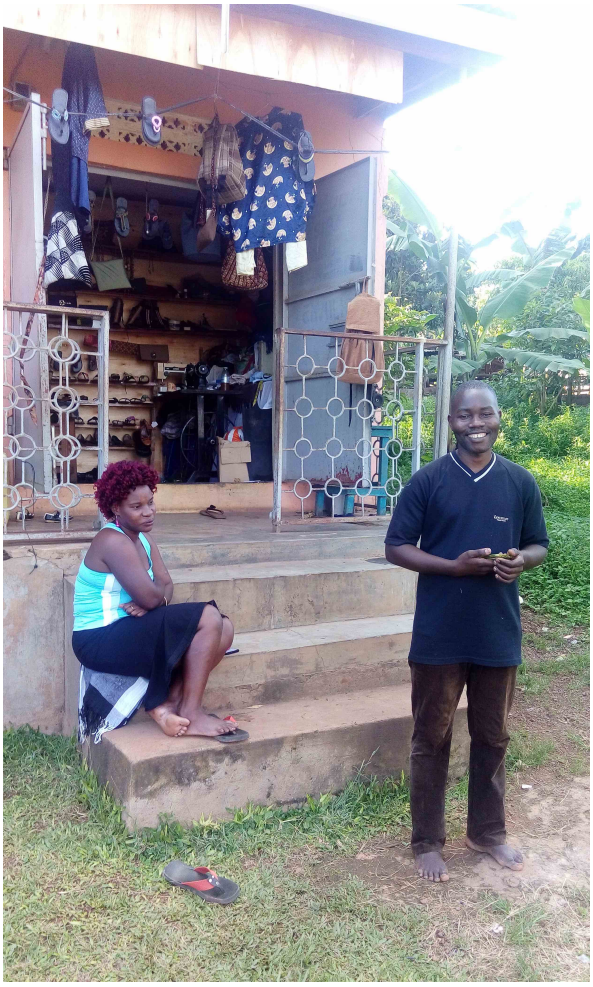
Ms Grace Kirabo, MD of TEXDA, Nov 2015 (credit: Tobias Schiedermair)

<u>The key challenges Grace sees for better adoption of digital solutions:</u>

- Grace wonders if that the lack of an attractive online presence might be hurting the business. At the time of writing the company website was not accessible and the company's Facebook page was not in use;
- Grace is very interested in eCommerce but lacks the knowledge on how to best go about it. She would like to learn more about it.
- Grace likes the simplicity of mobile money yet laments that its integration with accounting systems is cumbersome;
- Grace would like to see more collaboration among handloom-weavers and T&A firms in Kampala so as to be able to fulfil more international orders.

3.2.2 Case Study: Charly & Val Co

Charly & Val, Nov 2015 (credit: Tobias Schiedermair)



Firm Profile

Charly & Val, based a few kilometres North of Kampala, sells leather products and fashion items. His main products are leather sandals, handbags, and selected clothing, most of which he produces himself.

Charly, the Founder and CEO of the company works together with two colleagues, which take care of sales and distribution. When demand increases, Charly reaches out to other processors that he has longstanding relationships with.

How Charly uses digital solutions:

- Charly uses the company laptop and her smartphone for business purposes;
- Charly searches for designs via Google and website to inspire his designs;
- Charly shares and discusses product pictures with his team on WhatsApp;
- Charly sometimes uses email for business communication but he prefers WhatsApp;
- Charly regularly receives pictures of products clients would like him to do via WhatsApp;
- Charly currently uses Excel for accounting.
- Charly uses mobile money to receive payments from clients, usually for those not located in Kampala (approx.. 25% of all payments are mobile).

Charly & Val, Nov 2015 (credit: Tobias Schiedermair)

The key challenges Charly sees for better adoption of digital solutions:

- Charly would like to know more about digital solutions that can connect his business to clients;

- Charly sees prospects in improving his online presence so as to better attract customers and better display his style and products to them;

- Charly readily accepts mobile-money payments if clients wish so, but he usually prefers cash given that mobile-money service providers charge a small commission for each transactions. Charly suppliers usually also expect to be paid in cash.

3.2.2 Case Study: Africot

Firm Profile

Managed by Ms. Asha Famao and her daughter Fatima, Africot is located in a busy Kampala neighbourhood produces hand-made fabrics of different sorts based on pure cotton. This includes apparels, floor rags, table mats, and scarfs. Two part time employees support Asha and Fatima when the demand is high. Africot sells 80% of its products on to local traders while only 20% are sold directly to customers in Kampala.

Africot, Nov 2015 (credit: Tobias Schiedermair)

How Asha uses digital solutions:

- Asha uses the company laptop and her smartphone for business purposes;
- Asha has recently created a company blog/website which displays some of the designs that Africot makes and provides visitors with a phone contact.
- Asha uses WhatsApp for different business purposes, including communicating to suppliers (approx. ten times a month).
- Asha also uses WhatsApp to communicate with AFRICOT employees;
- Asha uses Email to communicate with international buyers;
- Asha uses Excel for AFRICOT accounting purposes on their laptop. She registers all transactions and inventory changes once a week;
- Asha uses mobile payments quite regularly to pay suppliers (40% of time);
- Asha sometimes uses mobile money to also pay her employees.

Africot, Nov 2015 (credit: Tobias Schiedermair)

The key challenges Asha sees for better adoption of digital solutions:

- Asha would like to learn more about digital solutions that can connect his business to clients. She would also like her daughter to get exposed and learn more around such topics, as she believes they will become ever more important in the years to come;

- Asha has tried to identify buyers through the Internet but would like more guidance on how to best go about this. Although she believes that their Facebook presence has helped she is also well aware that the vast majority of business is still referred to her by word of mouth;

- Asha prefers to see clients face-to-face at some stage of the transaction as it is only like this that important details can be discussed and prices negotiated. After the initial meeting, she prefers to use WhatsApp to continue talking with the suppliers until the transaction is completed. She has also had negative experiences with moto-taxi (boda-boda) drivers delivering cash to suppliers – one of the reasons why she believes mobile money can help their business succeed.

4 Gaps & opportunities

The following gaps and opportunities presented in this section are based on the results from the quantitative survey, the results of the qualitative assessment, as well as background research conducted online.

Gaps

When compared to many other parts of the world, East African MSMEs still face fundamental challenges in using digital technologies to their advantage. These challenges cover different areas, including:

a) Low skill levels

- Low adaption and education levels of online shoppers;
- Low skills by managers of smaller businesses to effectively deploy digital service for B2B and B2C purposes.

b) Limited online marketing

- MSMEs typically do not provide buyers with online product catalogues;
- MSME owners lack the skills & technology to trade on traditional e-commerce sites;
- Buyers need to personally visit many shops in order to compare quality, prices, and availability of products, which is very time-consuming.

c) Inefficient buyer-seller communication

- Low trust in the online trading make in-person meetings necessary to agree on product & service specifications and to negotiate prices;
- No written record of order specifications as verbal agreement is common;
- MSMEs lack channel to inform multiple buyers on stock availability & promotions.

d) High transaction costs

- Self-organized delivery or pick-up is time-consuming and costly;
- Retailers and traders need high inventories due to inconsistent supply;
- Lack of product quality assurance mechanism to safeguard buyers' needs;
- Limited ability to pay with mobile money even when it is the preferred option;

While struggling with those challenges, Kenyan and Ugandan MSMEs also find themselves under increasing pressures from big e-commerce giants like Rocket Internet backed Kaymu and Jumia that over recent years have invested heavily in

East Africa. Such e-commerce giants, similar to Amazon in Europe and the US, cut smaller traders and retailers out of the value chains. The sectors of FMCGs, textile & clothing, agricultural inputs, household goods, beauty products, and electronics are starting to be particularly affected by this trend.

At present, local businesses are ill-equipped to survive the huge discount battles fought by such e-commerce giants without adapting to better technology. Thus far, MSMEs generally promote their contact information and tell customers to contact them through phone or Whatsapp while often lacking online presence or better way of communicating with prospective buyers.

Opportunities

While most commerce conducted by MSMEs in Kenya and Uganda is done with no or only limited involvement of digital technologies, it is also clear that both Kenya and Uganda stand at the brink of a huge opportunity that could make mobile technologies a key enabler for MSME growth. In following some of the reasons for such optimism:

a) Enabling environment & increasing investments

- Kenya and Uganda are connected through sub-sea fibre-optic cables which makes super-fast broadband internet and 4G/LTE mobile possible;
- Both Governments have made digital empowerment and the support of technology startup one of its top policy priorities;
- Investment into African mobile technology startups has skyrocketed in recent years with investment mounting to USD 185m in 2015 (Disrupt Africa, 2016);
- The average capital secured per venture in Uganda increased to USD 152,430. For Kenya the figure stands at USD 249, 568 (VC4A, 2015).

b) Technological opportunities

- Mobile money is now widely used by MSMEs and consumers and the services of key providers, such as MTN and Airtel, can be easily incorporated into mobile Apps;
- Almost all Kenyan and Ugandan MSME owner use Android smartphones, hence there is little need to cater for other tech-platforms such as IOS, Mac, or Windows PC;
- The cost of cheap Android smartphones has fallen to below USD 60.

c) Strong appetite for better solutions by MSMEs

- Over 90% of MSME owners expressed the wish to participate in online trading;

- Even those few MSMEs that have an online presence (mostly Facebook or simple website) get low online traffic - yet other more appropriate tools are missing;
- Due to the lack of alternatives, most MSME owners have started using Whatsapp to ease B2B & B2C communication.

Globally, m-commerce growth has outpaced traditional e-commerce growth by 200% over the past few years. And while e-commerce for Kenyan and Ugandan Ms has certainly gained traction over recent years, the vast majority of commerce is still offline. This presents a large business opportunity for MSMEs to explore further.

Kenya and Uganda are among only six Sub-Saharan African countries with a middle-class above 1m people[5], makes provides a promising foundation for the use of m-commerce for MSMEs.

5 Conclusion

MSMEs in Kenya and Uganda find themselves operating in a very interesting time. Improved data infrastructures and the emergence of locally relevant mobile technologies are opening up opportunities for small firms to better manage their operations and access buying and selling markets.

The study's results indicate a strong role of mobile Internet on local business practices. As highlighted in the case studies in *Section 3.2* and Facebook as well as WhatsApp have become integral parts of doing business for many small firms across industries. However, smartphones are only starting to reach the growing middle-class consumers, mostly in urban areas.

In light of the challenges faced by the firms observed, focusing on digital skill development and enabling environment might be the most effective way international development partners to help MSMEs to take better advantage of digital solutions in their business. Facilitating investment as well as technology and knowledge transfer between promising startups from East Africa and other developing regions. Given the focus of the SITA on Indian-African linkages and the country's advanced technology startup community, India seems a particular promising partner in this regard.

The current hype and appetite by venture capital around digital business models in East Africa is counter-balanced by the limited availability of skilled computer science graduates and young entrepreneurs that can build and market meaningful solutions to local users and businesses. Such demand and appreciation of East African technology business and innovation should provide

[5] KPMG (2015)

a massive incentive to strengthen applied and higher education programmes in computer science, graphic design, entrepreneurship, and other relevant areas.

Bibliography

FSD Africa: National Small Business Survey Uganda, 2015. *http://www.fsdafrica.org/wp-content/uploads/2015/04/15-04-13-National-Small-Business-Survey-Uganda.pdf?noredirect=1*

GeoPoll and World Wide Worx: Mobile Africa 2015 Study, 2015.
http://www.itnewsafrica.com/2015/04/study-reveals-african-mobile-phone-usage-stats/

Jumia, Whitepaper: The Growth of the Smartphone Market in Kenya, 2015.
https://www.jumia.co.ke/blog/whitepaper-the-growth-of-the-smartphone-market-in-kenya/

PEW Research Centre: Global Attitudes survey, 2014.
http://www.pewglobal.org/

RIA – Research ICT Africa: ICT access & usage survey 2011/12: methodology and first round high level descriptive findings. 2013.
http://www.researchictafrica.net/home_archive_reader.php?aid=55

World Bank: Global Findex Database, 2014.
http://www.worldbank.org/en/programs/globalfindex

World Economic Forum: Network Readiness Index, 2015. *http://reports.weforum.org/global-information-technology-report-2015/network-readiness-index/*