









FIRMS CHARACTERISTICS AND OBSTACLES TO ICT SERVICES TRADE



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**Indicative Evidence From a Company Survey in the Ugandan ICT sector** 

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INDICATIVE EVIDENCE FROM A COMPANY SURVEY IN THE UGANDAN ICT SECTOR



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#### **EXECUTIVE SUMMARY**

The findings of this report point toward a strong outward orientation of the Ugandan ICT sector and its capacity to grow, especially, in relation to intra-African trade. 53% of the interviewed companies already export and many others envisage to provide services to foreign clients in the next two years. Most of the companies tend to focus on destination markets located within the Eastern African Community region and in Africa at large.

Figures suggest that the sector and, particularly the start-ups' segment, appear to promote the inclusion of youth and women into the Ugandan economy. 75% of responding companies are owned by a person aged 35 or younger and this share grows to 93% across start-ups. Women represent 34% of the Ugandan ICT sector workforce: a relatively high percentage when compared to the 22% average female employment encountered across companies trading agricultural and manufacturing goods. Yet, regulatory and procedural constraints in the way to reach target markets (within the EAC region and beyond) stand as roadblocks for the full achievement of the sector's potential.

Namely, 73% of the exporting companies are facing obstacles when providing services to foreign clients but 43% of them struggle also to source key inputs from abroad. In many cases, the obstacles reported went beyond infrastructural issues – such as payment systems and internet connectivity - and concerned market access requirements. Those were sometimes

imposed by destination markets (e.g. local presence, partnership requirements, and certifications), while in other cases originated from the lack of tax harmonization and import tariffs. Thus, addressing the regulatory obstacles related to IT service exports is, therefore, vital to foster regional trade integration through technology.

These findings highlight that the Ugandan ICT sector could largely benefit from the implementation of youth and gender-sensitive policies targeting specifically the enhancement of export toward the African continent and beyond.

The report also unveiled that 76% of the exporting companies engage prevalently in B2B transactions, while only 43% manage to reach directly foreign consumers (B2C). In line with these findings, it appears that clients' referrals are by far the most frequently used way to gain visibility across the border (93% of exporting companies), while e-commerce platforms are used only by a quarter of all companies (26%) to reach new clients.

The source for the information presented above is an online survey (complemented, in some cases, by phone interviews) targeting Ugandan ICT services providers, conducted by the International Trade Centre (ITC) as part of the Netherlands Trust Fund IV (NTF IV) programme. The NTF IV programme aims to provide technical assistance to selected companies and raise awareness among policymakers and

#### regulators.

The report provides an indicative example of how a large-scale survey approach could be used to strengthen the evidence base for taking trade policy action, enhance the understanding of the services sector, and support the design of appropriate policy interventions. The ITC Non-Tariff Measure (NTM)

programme conducts representative surveys that are designed to serve multiple analytical purposes and investigate a wide range of trade-related issues involving a country's backward and forward linkages to international trade.



#### **ACRONYMS**

ATIS Alliance for Trade in Information-Technology and Services

GATS General Agreement on Trade in Services

ICTAU ICT Association of Uganda

ITA Information Technology Agreement

ITC International Trade Centre

ITES Information Technology Enabled Services

MDA Ministries, Departments and Agencies

NITA-U National Information Technology Authority-Uganda

NTF Netherlands Trust Fund

NTM Non-tariff measures

WTO World Trade Organization

#### **ACKNOWLEDGMENTS**

This report was written jointly by the International Trade Centre (ITC) and the Uganda Export Promotion Board (UEPB). Yared Befecadu and Camilo Giraldo of ITC authored the report. From UEPB, Mr Elly R. Twineyo Kamugisha and Ms Brenda Opus provided substantive comments and suggestions and are to thank for the publication of this report. Michael Byamugisha at NITAU, Anne Whitehead at ICTAU and Ms. Grace Labong Achire at ATIS and Ms. Georgina N. Mugerwa at the Ministry of Trade, Industry and Cooperatives also provided useful comments to the report. Richard Okuti, ITC, contributed to liaise with local partners and provide background information for the contextualization of the results of the analysis. Special thanks to Ms Haifa Bem Salem for editing support and to Martin Labbé and Ursula Hermelink, ITC, for their guidance.

The NTF IV team at ITC managed the collection of data on which the report is based, with the help of the ITC non-tariff measures' team.

The financial contribution of the Netherlands Trust Fund – phase IV (NTF IV) is gratefully acknowledged.

ITC and UEPB express their gratitude towards all discussants that contributed to the finalization of this report.

# ABOUT THE UGANDA EXPORT PROMOTION BOARD (UEPB)

The Uganda Export Promotion Board (UEPB) is a government agency enacted by the Act of Parliament in 1996. UEPB is mandated to support the development and promotion of Uganda's products and service exports. As a focal government agency promoting exports, UEPB works with different MDAs, and development partners to carry out this mandate, including:

- Providing trade and market information, including export procedures and documentation requirements
- Promoting the development of exports, including the provision of hands-on technical advice in production and post-harvest handling of exports and also test marketing new export products and services.
- Providing trade promotional services, including organizing trade missions to target markets, participation in relevant regional and international trade fairs, and buyer missions.
- Offering customized advisory services in various areas including basic business skills, details on export distribution channels, details of preferences given to Uganda products by country and technical evaluation of companies' readiness to export.
- Yerrmulating recommendations for the Government concerning export plans, policies and strategies designated to provide efficient, adequate and coordinated measures for the promotion of Uganda exports.

# ABOUT THE INTERNATIONAL TRADE CENTRE (ITC)

The International Trade Centre is the joint agency of the United Nations and the World Trade Organization. Established in 1964, ITC is fully dedicated to supporting the internationalization of small and medium-sized enterprises (SMEs) which are proven to be major job creators and engines of inclusive growth.

ITC works with developing countries and economies in transition to achieve 'trade impact for good'. It provides knowledge such as trade and market intelligence, technical support and practical capacity building to policymakers, the private sector and trade and investment support organizations as well as linkages to markets.

ITC's mission is to foster inclusive and sustainable economic development in developing countries and transition economies, and contribute to achieving the United Nations Global Goals for Sustainable Development. It achieves this by making businesses in developing countries more competitive in regional and global markets and connecting them to the global trading system.

ITC prioritizes support to least developed, landlocked developing countries, small island developing states, sub-

Saharan Africa, post-conflict countries and small, vulnerable economies. Economic empowerment of women, young entrepreneurs and support of poor communities as well as fostering sustainable and green trade are priorities.

**The Netherlands Trust Fund IV (NTF IV)** Export Sector Competitiveness Programme is based on a partnership agreement with the Dutch Centre for the Promotion of Imports from developing countries (CBI) affiliated to the Ministry of Foreign Affairs of the Netherlands and ITC.

Namely, the NTF IV Uganda project aims at strengthening SMEs, and seeks to influence policymakers and regulators, Trade and Investment Support Institutions and private trade/busi-ness support providers, as well as international private sector market partners, in creating a supportive environment for enterprises in Information Technology (IT) and IT Enabled Services (ITES).

The ITC Non-Tariff Measures (NTMs) Programme, launched in 2010, incorporates large-scale company surveys on NTMs, procedural obstacles and trade-related business environment inefficiencies. The ITC NTM Surveys evaluate all major export sectors and all major importing partners. The ITC NTM Survey allows companies to report their most burdensome NTMs and how they impact their businesses. Exporters and importers face NTMs and other obstacles every day. Because they know the challenges they face, a business perspective on NTMs is indispensable. At the government level, understanding companies' key concerns regarding NTMs, procedural obstacles and trade-related business environments can help define national strategies to overcome obstacles to trade. The ITC NTM Programme is currently expanding its analysis to cover the services sector, including the provision of ICT services.





#### A. INTRO

The Ugandan economy is largely based on agriculture with the sector employing about two-thirds of the workforce in the country and representing the main export earner. However, with an increasing number of educated youth - 700,000 graduating every year (but only a fraction in IT) – the ICT sector is becoming a promising area to foster the potential for gainful employment thanks to existing opportunities in the domestic and export markets for IT and IT Enabled Services (ITES).

Mainly due to the expansion of the telecommunications segment, the ICT sector growth is estimated at 20% annually: mobile subscriptions now stand at 22.4 million active subscribers and customers of mobile money services are 23 million, generating a total amount of 340.6 million transactions valued at 18.13 trillion Ugandan Schillings<sup>1</sup>. By 2014, the mobile operator MTN Uganda was positioned as the top taxpayer closely followed by Airtel (third). But the IT sector, in particular, is much smaller: few Ugandan IT and BPO companies are exporting and Uganda is not listed by any of the major related rankings established by AT Kearney, Gartner and Tholons<sup>2</sup>. A recent report from Tholons<sup>2</sup> does not mention Uganda as an outsourcing destination among their top 100 locations. Nevertheless, Uganda appears to be one of the top 10 low-income countries with the highest share of services exports deriving from the ICT sector<sup>3</sup>.

"IT products and services, as well as IT Enabled Services, form an important part of Uganda's export diversification effort. We can make more revenues out of services exports. Services as web or mobile apps, can easily be exported without incurring too many logistics costs. Software can be sold and delivered online.

Uganda's educated population is able to take advantage of the opportunities offered by the IT and the IT enables services market within Africa, namely across English speaking countries, as well as in the EU, the UK and the US among others.

The Uganda Export Promotion Board, working closely with other Ministries, Departments and Agencies (MDAs), local stakeholders, and the International Trade Centre through the NTF IV Project, is already promoting IT services exports."

Elly R. Twineyo Kamugisha
Executive Director Uganda Export Promotion
Board.

The sector is on the Government's priority list and support to it is increasing: according to the Ministerial Policy Statement for the Ministry of ICT and National Guidance for the fiscal year 2018/19, the sector is covered by the Second National Development Plan (NDPII) 2015/16 – 2019/20 and the Sector Investment Plan. In line with these plans, the ministry has already made significant strides towards Uganda's Digital Vision, aligning policies to improve the country's ICT rankings and attract investments. Through the National ICT Innovation Support Programme (NIISP), the

 $<sup>1\ \</sup> Information\ retrieved\ from\ the\ Ministerial\ Policy\ Statement-FY\ 2018-19,\ November\ 9,\ 2018.\ Available\ at:\ https://ict.\ go.ug/2018/11/09/1617/$ 

<sup>2</sup> The report is available at: http://www.tholons.com/digital-innovation/

<sup>3</sup> Lemma, Alberto. F, 2017, E-Commerce: The Implications Of Current WTO Negotiations For Economic Transformation In Developing Countries, ODI

Ministry is supporting innovators to develop products and services that are viable for the market. These initiatives are targeted at creating employment for an extremely large young population<sup>4</sup>.

"The IT sector in Uganda is still negligible in terms of size but it has the potential to absorb the unemployed but educated youth. There is a need for policy intervention to support the sector and build the required economies of scale for it to become internationally competitive.

This demands in the first place to proceed with the identification of the IT products that would allow to position the country's sector in the international market. Uganda could draw from the experience of regional partners like Rwanda, where the robotics sector has been developed as the IT flagship export.

Finally, it is important to ensure that women are not left out from the forthcoming developments in this sector. There is a need for gender disaggregated data in order to identify and implement inclusive policies to increase women participation in the sector."

Grace Labong Achire
CEO Vantage Communications Group and ATIS
Vice Chairperson.

There is already a relatively well-structured ecosystem in place for the ICT sector to expand in the country. Government, related organisations such as NITA-U (National Information Technology Authority-Uganda), UIA (Uganda Investment Authority) and UEPB (Uganda Export Promotion Board) are working with private sector organisations such as PSFU (Private Sector Foundation Uganda), Makerere University, industry

associations, ICTAU (ICT Association of Uganda) and ATIS (Alliance for Trade in Information-Technology and Services), as well as incubators, like Innovation Village, Hive Colab, Outbox and others, to support IT and ITES service providers.

"This work offers a useful overview of Uganda's ICT sector, providing interesting data such as the presence of young leaders, the number of exporting companies and the obstacles faced when providing services to foreign clients.

It is helpful to identify the top challenges pointed out by participating companies, including: difficulty in establishing a local presence in external markets; the need for better understanding and a more nurturing environment when it comes to taxation; as well as demand for improved financial record keeping capacity to prepare businesses to comply with foreign certification processes, among others.

The information provided in this report provides valuable guidance to the ICT Association of Uganda (ICTAU), our members and other industry stakeholders, which we can apply to support the development of an effective capacity-building agenda. Through collaboration with our members and industry partners, any interventions resulting from this report could help build a stronger, more organized, inclusive and thriving ICT sector in Uganda."

Anne Whitehead Director/Head of Communications, ICTAU

SMEs in Uganda currently employ over 2.5 million people, which represents 90% of the entire private sector and contribute to 80% of the output from manufacturing. When looking at the IT and ITES

<sup>4</sup> Uganda has the world's youngest population with over 78 % of its population below the age of 30. With just under eight million youth aged 15-30, the country also has one of the highest youth unemployment rates in Sub-Saharan Africa. More information at: http://www.youthpolicy.org/factsheets/country/uganda/

employment records and revenue contributions from an SME perspective, it is difficult to determine specific figures as there are no baseline data available for monitoring purposes. The NITA-U initiative to register and certify all companies in the sector has so far led to the certification of 207 companies. 90% of them are SMEs that contribute to less than 15% in terms of revenue creation. Approximately, 10% of the companies with the highest revenue include hardware suppliers and computer networking firms.

B. OBJECTIVE OF THE REPORT

The report at hand is based on the Ugandan ICT sector descriptive statistics collected as part of the implementation of the ITC NTF IV Uganda project. The objective of the following analysis is to provide a preliminary overview of the ICT companies' characteristics in Uganda, focusing specifically on those which already export, in order to gain a better understanding of the opportunities and challenges posed by international trade in ICT services. The report aims also to explore the type of information that can be collected through the interview approach developed

by the ITC's Non-Tariff Measure programme and identify the benefits that could derive from the fully fledged application of this methodology to a large scale survey of the sector.

"This report puts together the much needed but unavailable information for Uganda ICT sector. A survey will go a long way in promoting relevant planning, interventions and support for the development of the ICT sector and global trade in ICT services in particular."

Michael Newman Byamugisha Coordinator – IT Enabled Services, NITAU

#### C. METHODOLOGY AND DATA SOURCES

The analysis presented in the following brief originates from the implementation of the NTF IV Uganda project by ITC, in cooperation with the Centre for the Promotion of Imports from developing countries (CBI) and key partners in the local ICT sector, namely: the National Information Technology Authority-Uganda (NITA-U) <sup>5</sup>, the ICT Association of Uganda (ICTAU) <sup>6</sup> and the Alliance for Trade in Information-Technology and

<sup>5</sup> The National Information Technology Authority-Uganda (NITA-U) is an autonomous statutory body established under the NITA-U Act 2009, to coordinate and regulate Information Technology services in Uganda. NITA-U is under the general supervision of the Ministry of ICT and National Guidance, and aims at transforming Uganda into a knowledge-based society by leveraging IT as a strategic resource to enhance government services, enrich businesses and empower citizens. More information available at::www.nita.go.ug

<sup>6</sup> ICT Association of Uganda works with the vision to contribute to Uganda's Technological development by bringing organizations and key ICT Stakeholders under one body capable of supporting ICT research and advocacy for projects and policies concerning adoption and usage of ICTs by the underserved and unreached in Uganda. It aims at creating an effective network between all practitioners, researchers, policy makers, government and industry to facilitate cross-disciplinary collaboration in development informatics in Uganda. More information available at: www.ictau.ug/

Services (ATIS) 7.

The NTF IV team made use of an online call for application to identify companies that were suitable to participate in the project and to gather adequate firmlevel data to undergo a selection process. The online questionnaire was conveyed by ICTAU and ATIS to their members and promoted across the country through social media posts and other communication channels from 22/12/2017 to 12/01/2018. Extensive coverage of the Uganda ICT sector was also ensured with the support of NITA-U and reliance on the network of business contacts established by ITC during the implementation of the previous NTF III programme. Participation was open to all IT and BPO companies in the country with special encouragement to youth and women led companies.

The form contained a number of questions on company characteristics as well as on business operations and

obstacles encountered in the provision of services to foreign clients (designed in collaboration between ITC's NTF IV and NTM programme).

**Out of an estimated 300 companies** in the Ugandan ICT sector, 57 have completed to the online expression and provided the data analysed hereafter.

The specific circumstances in which the data used by this report was collected does not fully allow to extend its findings to the entire Ugandan ICT sector. Some of the requirements set by the expression of interest that was circulated across companies online might have caused a self-selection bias. In addition to that, the interviews that were conducted afterwards did not involve any face-to-face communication with the companies (which might have discouraged them from providing further details on the obstacle faced) and in several cases, it was not possible to address the questions to the staff dedicated specifically to exporting and/or importing procedures.

<sup>7</sup> The Alliance for Trade in Information Technology and Services is a Trade & Investment Support Institution based in Uganda and focuses on the non-traditional services development and export. The current coverage includes Information Technology products and services as well as all other IT Enabled Services. With a vision to make Uganda among the top 3 outsourcing destinations in the world, ATIS engages to give their members access to international and public sector markets through information, capacity building, partnership and trade. More information available at: www.atis.ug

#### D. PRELIMINARY FINDINGS

#### D.I. Overview of Ugandan ICT companies covered

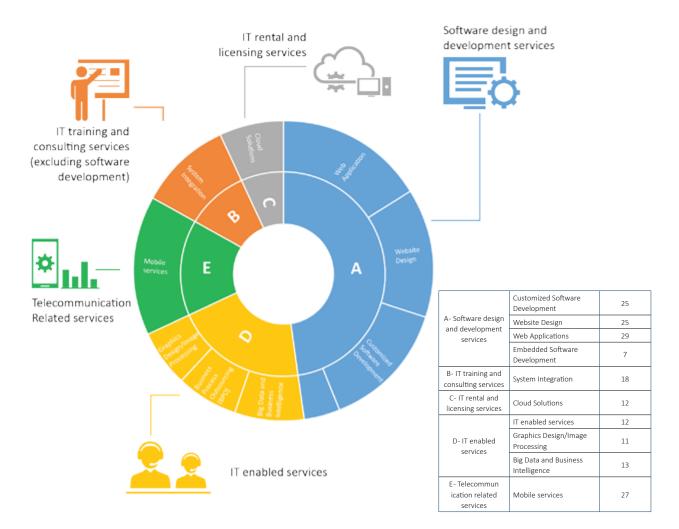
Most responding companies (91%) are micro and small companies with less than 50 employees. 30 out of the 57 responding companies (53%) are already exporting.



Figure.1. Source: NTF IV Uganda (online survey). Note: based on 57 companies

Most of the companies focus on the **development of software that require specific IT programming skills**. Only a few companies are exclusively dedicated to Business Process Outsourcing (BPO) activities, while many handle a variety of activities that do not allow to confine them to a specific company profile.

The **provision of software design and development services is a core activity** within the Ugandan ICT sector. The development of web applications and websites is important within this category but some companies also engage in the development of software that is customized to the specific needs of their clients (as health management software) or embedded in dedicated devices (including mobile app or fleet tracking software integrated in trucks and other vehicles). IT enabled services (including the outsourcing of back office services or the provision of data processing services) comes as the second largest segment, followed by specific activities meant to add value on the existing telecommunication network (including mobile services sometimes referred to as Over the Top services). Some IT companies also provide technical consultancy services addressing system integration solutions. Fewer companies declared to deliver lower value added services such as cloud hosting.



Types of services provided by Ugandan ICT companies

Figure. 2. Source: ITC NTF IV Uganda (Online survey). Note: based on 57 companies

**Number of years in operation:** there is a mix of very experienced and less experienced companies among the respondents. 11 companies (19%) have been existing for less than 2 years, 34 (60%) between 2 and 10 years, and 12 (21%) more than ten years.

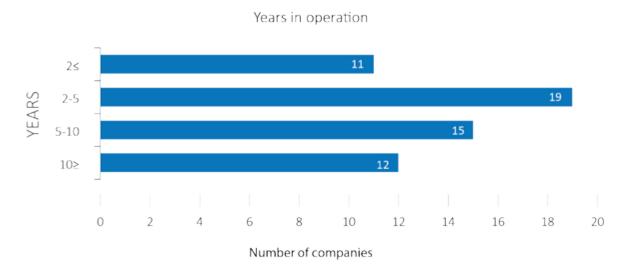


Figure.3. Source: ITC NTF IV Uganda (Online survey). Note: based on 57 companies

**Documented expertise in backbone services sectors and public sector requirements:** The ICT services provided by the responding **companies largely contribute to backbone sectors** such as finance, insurance, education and telecommunications. On average, companies report to have experience in 3 sectors (at most 11 and at least 1). There appears to be a strong reliance on contracts from the international and national public sector (i.e. non-profit and government clients).

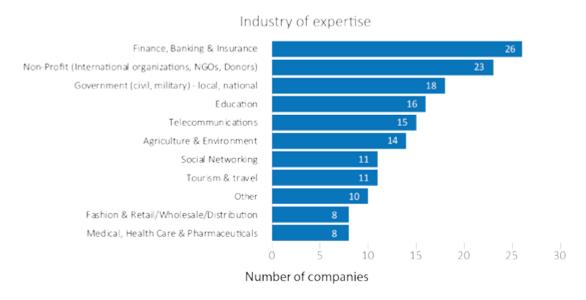


Figure.4. Source: ITC NTF IV Uganda (Online survey). Note: based on 57 companies.

#### D.II. Management and employment characteristics

Strong presence of women leaders: 26 out of 57 companies (46%) are owned and/or managed by women. This

figure is higher than the average percentage of women leaders in the goods sector<sup>8</sup>.

**Female employment represents 34% of the workforce** employed by the responding companies. This represents a relatively high percentage when compared to the 22% average female employment encountered across companies trading agricultural and manufacture goods. In addition to that, **women-owned and/or managed companies present a higher share of female employees** than the companies owned and managed by men (37% vs 31%).

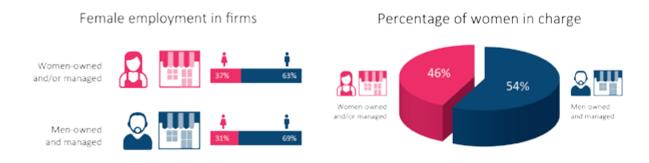


Figure.5. Source: ITC NTF IV Uganda (Online survey). Note: based on 57 companies

Figure.6. Source: ITC NTF IV Uganda (Online survey). Note: based on 57 companies

Strong presence of young leaders: 75% of responding companies are owned by a person aged 35 or younger.

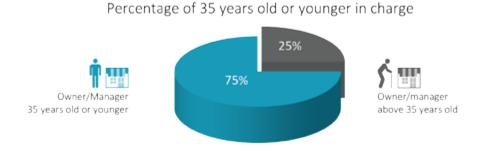


Figure.7. Source: NTF IV (online survey). Note: Based on 57 companies.

#### D.III. International business operations

**Large presence of newcomers in international trade:** 53% of responding companies are involved in export activities (30 out of 57) but 70% of them have less than 5 years of international trade experience.

<sup>8</sup> These are the results of a large-scale business survey conducted in Uganda as part of the ITC NTM programme focusing on obstacles to goods trade. More information available at: www.ntmsurvey.intracen.org/Uganda.

#### Number of years in export operations

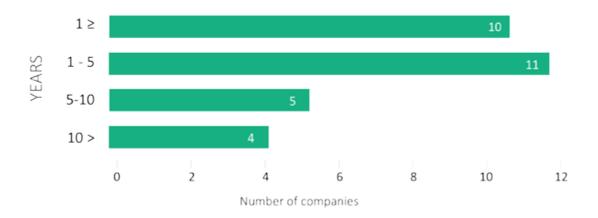


Figure.8. Source: NTF IV (online survey). Note: Based on 30 companies.

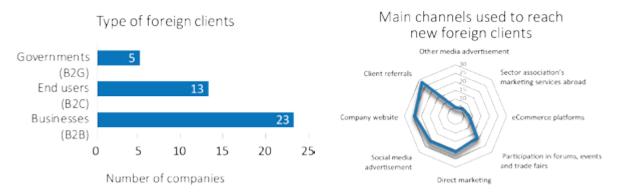


Figure.9. Source: NTF IV (online survey). Note: Based on 30 companies

Figure.10. Source: NTF IV (online survey). Note: Based on 30 companies.

**Focus on B2B and importance of word of mouth:** Most exporting companies provide services to other businesses (B2B). Clients' referral is the most frequently used way to gain visibility across the border followed by the usage of the company website. eCommerce platforms are used only by few companies to reach new clients.

**Importance of intra-regional trade:** Among the respondents that provided specific information on actual or envisaged partner countries, Kenya and Rwanda are the most frequent frequently mentioned. There is large interest in the Tanzanian market. Main destinations outside Africa are the United States and the UK.

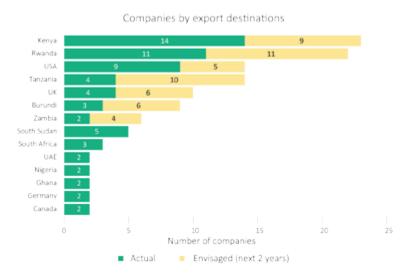


Figure.11. Source: NTF IV (online survey). Note: Based on 57 companies.

**Prevalence of cross border trade**<sup>9</sup>: The General Agreement on Trade in Services (GATS) establishes four modalities (or modes of supply) through which services, including ICT services, can be traded. The most dominant mode of supply among responding ICT companies is cross border trade (GATS Mode 1). Other modes are used less

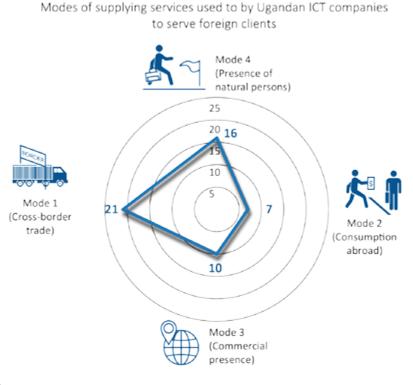


Figure.12. Source: NTF IV (online survey). Note: Based on 30 companies.

<sup>9</sup> More information on the GATS agreement is available at the following page https://www.wto.org/english/tratop\_e/serv\_e/gatsintr\_e.htm.

frequently but are also present. Some companies rely more on the direct contact with their clients through the movement of their staff abroad in order to deliver consultancy services or trainings at the premises of their clients (GATS Mode 4). Some other have branches abroad, prevalently in African countries and the United States (GATS Mode 3). On average, companies tend to provide their services using 2 different modes of supply.

Foreign imports are crucial for ICT companies and especially for exporters: 44 out of 57 companies (77%) declared to purchase inputs of foreign origin on a frequent basis<sup>10</sup>. Exporting companies rely on foreign inputs more than local providers do. For most of the companies, foreign inputs (of both goods and services) represent 6% to 50% of their total costs.

Sourcing of foreign inputs on a frequent basis



Figure.13. Source: NTF IV (online survey). Note: Based on 57 companies.

#### D.IV. Obstacles to trade faced by exporting companies

**Most companies are affected by trade obstacles:** 3 out of 4 exporting companies (73%) face problems when accessing international markets while 43% when sourcing intermediary inputs from abroad.

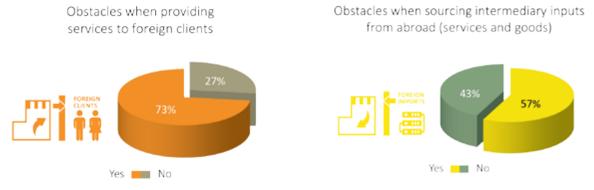


Figure.14. Source: NTF IV (online survey). Note: Based on 30 companies

Figure.15. Source: NTF IV (online survey). Note: Based on 30 companies

More than 60% of the companies in each size category face obstacles to trade: The incidence is even higher across small companies (6 to 50 employees): more than 3 out of 4 exporting companies faced obstacles when providing their services to foreign clients or procuring inputs from foreign suppliers. When looking at the obstacles in terms of the trade process affected, while obstacles to exports were reported for all company sizes, micro companies (5 employees or less) did not report obstacles faced when importing.

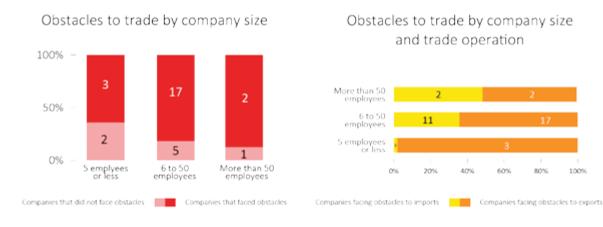


Figure.16. Source: NTF IV (online survey). Note: Based on 30 companies

Figure.17. Source: NTF IV (online survey). Note: Based on 30 companies

Women-led export companies appear to be more likely to face obstacles when exporting and importing foreign inputs. Respectively, 83% of women led exporting companies faced obstacles when exporting (against 67% among man owned and managed companies) and 50% when importing (against 39%).

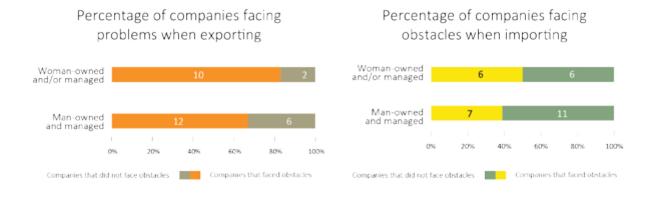


Figure.18. Source: NTF IV (online survey). Note: Based on 30 companies

Figure.19. Source: NTF IV (online survey). Note: Based on 30 companies

#### D.V. Indicative evidence from company interviews

Among the 22 exporting companies that claimed to face obstacles related to their international trade operations, 16 agreed to participate in phone interviews conducted by ITC staff between June and August 2018. The interviews provided a unique opportunity for the companies to elaborate in details their concerns in relation to each specific trade partner. This allowed to increase clarity over the regulatory and procedural constraints as well as on the state of the business environment faced in their country and abroad. 88% of the companies interviewed on the phone reported obstacles related to mandatory

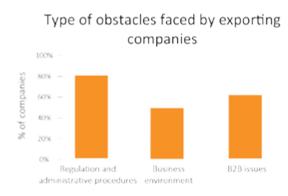


Figure.20. Source: NTF IV (phone interviews). Note: Based on 16 companies

requirement and related procedures imposed by national authorities (either in Uganda or in partner or transit countries). Slightly more than half of the companies also referred to obstacles originating from the state of the business environment, e.g. lack of regulations on IPR, poor network infrastructures; and limited available skills in a country. For almost 70% of the companies, challenges were posed by private disputes and misunderstandings with their own clients or suppliers abroad (B2B issues).

The main findings are presented below:



Local presence is required by several key markets in Africa in order to provide services. This represents a huge constraint to cross border trade as the cost of opening a foreign affiliate or identifying counterparts in the target market with whom to start partnership agreements is sometimes higher that the entire revenues that a company could make in a year time. In some cases, locals presence requirements come with strings attached. This is the case of Rwanda, one of the main export destinations, which also imposes strict requirements on the nationality of the foreign affiliate employees. Other market destinations in which Ugandan companies mentioned difficulties to comply with local presence, ownership share, and nationality requirements for employees included South Sudan, Ethiopia, Tanzania and Nigeria. In some cases, not only the cost of the operation represented a burden but also the time required to open a local bank account (e.g. Ethiopia, Nigeria). These constraints are poised to discourage exports to neighbouring countries and compromise the potential for the expansion of intra-African trade.



**Taxation** represented another major source of concern among Ugandan ICT companies. Companies complained about withholding taxes on international payments (ranging from 6% to 15% of the

transaction) that affect both export revenues and import of licences required to develop original software. The lack of Double Taxation Agreements with key regional partners in the ICT sector as Kenya do not allow to net this cost off when submitting the tax returns. Sometimes the possibility to avoid the payment of these taxes incentivised the company to operate through foreign offices. A recent tax on the use of social media (including WhatsApp, Facebook and Twitter) is sparking the attention of ICT companies that are worried about its impact on the promotion of their services abroad. In general, lack of transparency on taxation and import duties (on the sourcing of foreign intermediary inputs), attributed in some cases to arbitrary customs evaluation procedures, was an issue mentioned by different respondents.



Certifications, primarily, ISO certifications on quality management (ISO 9001:2015), information security (ISO 27001:2015) and societal security (ISO 22301:2012), are highly in demand by destination markets outside Africa. It emerges that certifications required by clients (as it appears to be the case in Canada) are not less problematic than the ones that are required by law (as it is the case for enhanced standards on information security imposed by the General Data Protection Regulation across EU countries). The cost of these certifications might span from \$25.000 up to \$60.000, entailing yearly audits and licence renewals (which put additional pressure on the companies' budget). The certification process might take several months, especially if the company is not well equipped to undergo the audit. The more the companies are focusing on specific niches (such as the health sector) the more certifications become relevant. Cases were reported of clients in India requiring up to 15 certifications. Lack of prior knowledge on the foreign partners' requirements, as well as the lack of harmonization of the Ugandan regulatory framework with international standards, are often perceived as the reasons behind the problems reported by companies in relation to certifications.



Difficulties with the management of international payments (both in Uganda and regional partners) curb the capacity of companies to handle transactions with foreign clients and suppliers. In some cases, the high cost of bank transfers (applied, for instance, by Ugandan banks) and delays caused by excessive controls from central banks (for instance, in Zimbabwe) are at the origin of the problem. The gravity of this issue is exacerbated by the lack of alternative options available for Ugandan companies, as broad channels such as PayPal have been (temporarily) discontinued. In others cases, foreign clients' requests to make payments in local currency (for instance, in South Sudan). Overall, exchange rate unpredictability affects both export and import operations.



In terms of the **local business environment**, problems related to internet connectivity are among the main infrastructural challenges reported.



Overall, **lack of information** represented a serious issue when accessing foreign markets. Often companies are largely **unprepared on the way contracts should be stipulated and enforced**. In some cases, they felt over confident about their relations with clients and underestimated the risks of operating outside of a regulated framework. On another occasions, they had to take decisions under pressure. In general, they do not seem to have easy access to the legal information that could allow them to secure their work. According to the respondents, the possibility to allocate more resources on **market research to better scope the potential export destination** would have spared them from foreseeable risks.



In relation to **gender-specific challenges in the Ugandan ICT sector**, companies' opinions were mixed. While some companies indicated poor institutional support to women and a male oriented business culture as constraints for women to contribute to the sector expansion, others did not observe any particular form of discrimination. It has to be borne in mind that only one of the respondents to the phone interviews was a woman.

#### WHAT DO COMPANIES SAY?

"We were asked to have either local presence through a registration process (license) or through a partnership agreement. We decided to get a partnership agreement, but the process is time-consuming (3-4 months) and cost-demanding." Company exporting Software as a Service (SaaS) and web-based application development to Nigeria

"We are facing a problem related to the local presence in Tanzania: a foreign branch needs to be owned at 50% by Tanzanian nationals in order to be allowed to sell in that market." Company exporting Software design and development services to Tanzania

"All transactions are subject to 15% withholding tax, imposed by the Uganda Revenue Authority. This tax should to be deducted from the payment, but this is not always possible." Small-sized IT company on imports of advertising and market research services from Congo (Dem. Rep.)

"We need to pay 200 shillings as a tax on the use of social media, resulting in problems to promote our services because we cannot market and/or contact new clients" IT company exporting software design services to Nigeria.

"There are still high payment charges applied when the payment from the client is received through bank transfer. These charges amount to over 200,000 Shillings." Company exporting website development services to the UAE

"The company is facing very high rates applied by Ugandan banks. In order to invest, we need to pay 29% lending fee to the bank. In addition, the banks feels uncomfortable to lend money to invest abroad" Company exporting software design and development services to Kenya.

"We are required to have [...], ISO 9001:2015. Getting this certificate can take up to 4 months and can have a duration of 3 years. Its total cost is around \$50,000, with a yearly audit that costs \$2,500- \$3,000 and a risk of waiting for 3 more months if losing the audit." About data protection certifications required by a company exporting IT training and consulting services to Germany

"In order to have a license valid for 1 year, the communication commission of Kenya is asking for an expensive fee (around 2.500 dollars)" Company exporting software design and development services to Kenya.

"There are some constraints related to gender and trade, especially in services: it is not very common to find technical-skilled women. In general, women face poor training and limited support." Company on gender related challenges in the Ugandan ICT sector

"When importing goods needed for our operation, Ugandan authorities request a pre-shipment inspection for dumping prevention reasons; even if it is a useful measure, it can be costly (USD 60 for every shipment above USD 2000) and time-consuming." Company importing tracking devices from the UK

"There is uncertainty regarding the exchange rate. The Nigerian currency suffers from sudden and repetitive fluctuations, deriving from the Nigerian Central Bank policy on international transactions and international markets pressure. This makes it hard for the company to collect and trade in either dollars or Nairas." Company exporting company software design and development services to Nigeria.

#### E. PRELIMINARY RECOMMENDATIONS

Some preliminary recommendations, which could lead to further analysis and technical assistance interventions, have been identified:

- 1. Facilitating a regional dialogue that could ease the requirements imposed on local presence and open opportunities to cross border trade, when possible, is key. The African CFTA negotiations would represent a unique platform to discuss about harmonization and the reduction of regulatory burden on services trade in the continent. ICT services are part of the 5 priority sectors adopted by the AU assembly in July 2018 <sup>11</sup>. This particular situation demands for an increasing body of research that can enable African leaders to engage into a more data-driven dialogue.
- 2. Harmonization of taxation systems and reciprocal recognition of licenses and certifications could also help to ease the burden faced by companies. Governmental sources, consulted during the preparation of the current report, mentioned that Uganda is in the process of harmonizing internal taxes with other partner states under the aegis of the East African Community Common Market Protocol as an EAC Draft Policy has already been prepared. EAC members' efforts to speed up the adoption process will therefore be beneficial for the ICT sector. Focus should be also devoted on the ratification of the EAC Double Taxation Agreement. Ugandan authorities can leverage on the experience of the double taxation agreements that have been already successfully concluded with India, South Africa, Denmark, Mauritius, Netherlands, Norway and the UK. The above policy actions should be coupled by a renovated effort to identify news ways to strengthen the public-private dialogue within the country and among EAC partners.
- 3. Overall, negotiating cross border trade with partners is important but other modes of supply can be complementary. From the survey it appears that Ugandan ICT services make use of all modes of supply as defined by the WTO General Agreement on Trade in Services. Multiple modes are sometimes nested in each other within a single contract with a foreign client. Seemingly, regulatory ease in the access to one mode could unlock the potential to trade services through other modalities (for example, reduction of business visa charges among bordering countries and, thus, facilitation of the movement of professionals abroad Mode 4 could create incentives for the signature of contracts that involve the provision of cross border trade Mode 1). As a consequence, regulatory focus on commitments on the four modes of supply should be taken into account when addressing regional or international agreements on services trade. This could allow addressing specific constrains in relation to the movement of services providers and capital that could

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ASSEMBLY OF THE UNION, Thirty-First Ordinary Session, 1 - 2 July 2018, Nouakchott, Mauritania. Available at: https://au.int/sites/default/files/decisions/34634-assembly\_au\_dec\_690\_-\_712\_xxxi\_e.pdf

.......

enhance the ICT sector within the EAC  $^{12}$  and provide stimulus for the expansion of intra-African trade in the medium-long term.

- 4. Roll out of a large-scale representative survey to strengthen evidence base for taking policy action. Some of the limitations of the current analysis are presented in section D. Methodology and data sources. A more structured approach toward the company sampling methodology, the modalities to conduct the interviews and the involvement of line agencies in the whole survey process can allow to generate a valuable source of information in the hands of policy makers and sectoral associations. This approach has been already adopted by ITC in Uganda for the analysis of exporters' concerns in the agriculture and manufacturing sectors. The resulting report already highlighted some of the difficulties encountered also by ICT companies when dealing with customs procedures (for instance, while importing intermediary goods).
- 5. There is momentum for the production of technical cost-benefit analysis focusing on Uganda's and EAC members' opportunity to cut down import tariffs in ICT products. ICT companies in Uganda claimed to rely heavily on foreign intermediary inputs and to face obstacles related to the importation of these goods (see Annex I for an indicative list of imported inputs). Lower revenues deriving from a decrease of import tariffs could, however, be offset by the export potential generated for ICT companies. Existing international frameworks as the WTO Information Technology Agreement (ITA)<sup>13</sup> could represent an opportunity for Uganda (and its EAC partners) to revise its tariff schedules on Information Technology related products for the greater benefit of its ICT sector. An expanded version of the same agreement (covering 201 high-tech products such as new-generation multi-component integrated circuits, touchscreens, GPS navigation equipment or medical equipment) has been concluded at the Nairobi Ministerial Conference in December 2015.
- 6. Enhance transparency on import duties for ICT goods and related customs procedures across the private and public sector. Uganda uses the EAC Common External Tariff (EAC CET) that specifies duty treatment of
- The EAC, which consists of Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania, in 1accordance with the Protocol on the Establishment of the East African Community Common Market ratified in July 2010, aims at developing the free movement of services within the region along with the free movement of goods, labour and capital. More information available at: http://unctad.org/en/PublicationsLibrary/ditctncd2013d12\_en.pdf
- The Information Technology Agreement (ITA) was concluded during the Ministerial Declaration on Trade in Information Technology Products in 1996, and entered into force 1 July 1997. Since 1997 a formal Committee under the WTO supervises the implementation of the Declaration. The Information Technology Agreement commits participants to completely eliminate tariffs on information technology products covered by the Agreement. Currently 82 WTO members participate in the ITA, representing 97 per cent of world trade in ITA products. The ITA is not only about eliminating duties and expanding trade, it is also about stimulating innovation and spreading new technologies. As said by WTO Director-General, Roberto Azevedo "By lowering costs for IT products, the Agreement has contributed to the adoption and diffusion of computers and mobile phones, thereby helping more people to become connected." WTO (2017): 20 Years of the Information Technology Agreement Boosting trade, innovation and digital connectivity.

all imports based on the Harmonised System (HS) nomenclature of the World Customs Organization. The import duty on ICT products are thus clearly spelt out in the EAC CET. Tailored trainings for ICT products' importers and customs officials (including on the HS usage and interpretation) might allow to enhance the level of transparency on import procedures and prevent misunderstandings at the customs.

- 7. Supporting companies identifying business partners in neighbouring countries is key. This could help them complying, for instance, with the conditions imposed by foreign regulations on local presence. The organization of regional fairs would provide companies with the opportunity to meet potential partners in target markets, get a better understanding of the foreign market, and showcase their ICT services without incurring expensive business journeys without the certainty of signing contracts. ITC could work in close collaboration with the Uganda Export Promotion Board (UEPB) and NITA-U to design tailored market intelligence trainings targeting Ugandan TISIs. The focus of these trainings would be to enable SMEs in the ICT sector collecting relevant information on destination markets and packaging adequately their services offer to meet foreign clients' requirements. In addition to that, ITC can assist in the development of a B2B methodology for Ugandan ICT companies targeting foreign markets and facilitate the planning of inbound and outbound scoping missions.
- 8. **Trainings on international standards in the ICT sector are required**, specifically in relation to the main target markets spotted by the companies. Companies are often motivated to undergo the certification process but there is room to support them by lowering the risk of failing the audits (which imply significant additional costs and delays). The analysis of best practices on how to improve support schemes for companies that are seeking certifications would also be beneficial. Support and technical trainings are also in high demand among ICT companies in relation to the design and enforcement of contracts with foreign clients as well as in the analysis of opportunities in foreign markets. ITC is equipped to deliver trainings on main ICT standards and certifications required to comply with international clients' requests.
- 9. Gain a better understanding of the constraints to gender and youth inclusion within the ICT sector in order to identify effective measures to overcome them. The promotion of ICT companies in Uganda and, particularly start-ups, could represent an engine for the enhancement of women and youth inclusion into the Ugandan economy. In addition to that, the Ugandan ICT sector appears to be strongly outward oriented and capable to grow in relation to intra-African trade. Some specific constraints related to women inclusion in the sector might be rooted in the education system and would require the implementation of more effective incentives schemes in the labour market.

#### WHAT DO COMPANIES SUGGEST?

"There would be a great gain for the African economy if governments start to regulate as a block and not just as a country. The examples and experiences from others can create a stock of knowledge useful for all"

"We are implementing an internal policy called "the 60-40" policy, where 60% of the staff are women and 40% are men"

"Certification is only granted by a foreign company. In order to reduce costs and delivery times, it would be better to have a local company with the necessary skills to grant these kinds of certificates."

"Business should be more prepared about the use of data. Confidentiality and data storage are major concerns that should be taken better into account by ICT companies."

## ANNEX I: ADDITIONAL STATISTICS FROM COMPANY INTERVIEWS

The following statistics provide an example of the granularity of the information that can be obtained through survey data. The results should be interpreted with caution as they refer to a limited number of companies facing trade obstacles (16) that could be interviewed on the phone.

For each of the companies interviewed it was possible to identify its export markets and whether or not obstacles where faced in a specific destination.

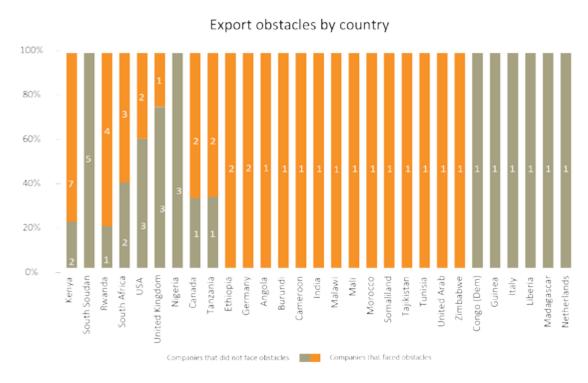
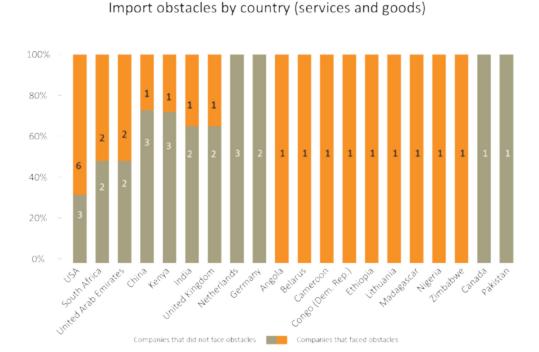


Figure.21. Source: NTF IV (phone interviews). Note: Based on 16 companies

The same type of information presented above for export operations was also collected in relation to the import operations that the interviewed companies undertook in order to procure inputs (both services and goods) that were key for the delivery of their services to foreign clients



#### Figure.22. Source: NTF IV (phone interviews). Note: Based on 16 companies

The services that companies imported the most are IT training, licensing & consulting services and software design and development services. On the goods side, computers and automatic data machines are the top import product.

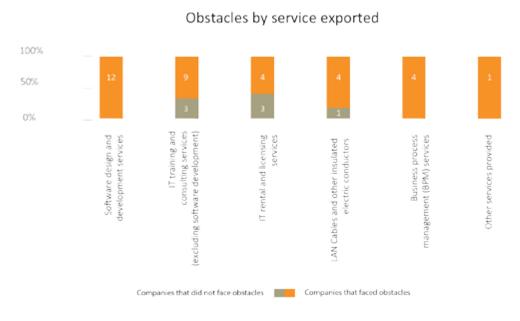


Figure.23. Source: NTF IV (phone interviews). Note: Based on 16 companies.Other services provided: Market research

Overall, 10 of the interviewed companies imported goods and 12 imported services as key inputs for the delivery of their services to foreign clients.

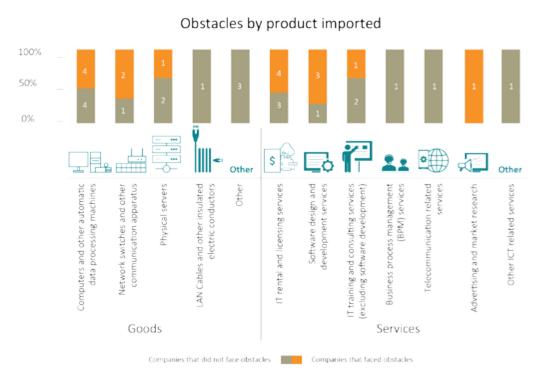


Figure.24. Source: NTF IV (phone interviews). Note: Based on 16 companies. Goods - Other: Regulators and transformers - Batteries Tracking devices - security cameras - Mobile phones - GPS - Cameras. Services - Other ICT related services: Cloud services

The main reasons why companies decided to procure Reasons for Ugandan ICT companies to import these items abroad is that whether they were not available in Uganda or the domestic price for them was too high.

The obstacles reported by the companies during the interviews originated from the challenges posed by the regulatory and business environment in Uganda as well as across its partner countries (whether they were the countries of destinations for companies' exports or the countries of origin of their inputs). The indicative results collected show that Ugandan ICT companies seemed to face relatively more challenges in relation to the partners' regulatory environment. However, in terms of the business environment (e.g. infrastructure; overall state of affairs) challenges were almost equally faced in both Uganda and the partner countries.

intermediate inputs of goods and services from abroad

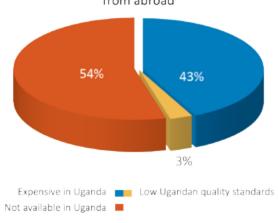


Figure.25. Source:NTFIV(phoneinterviews). Note:Basedon16companies. A question was asked every time the respondent confirmed to import a specific product of service. The graph is the result of the aggregation of these responses.

# UGANDA PARTNER COUNTRY Challenge related to the regulatory environment Challenge related to the business environment 8 6

Domestic vs external obstacles

Figure.26. Source: NTF IV (phone interviews). Note: Based on 16 companies.

The following table summarizes the type of obstacles reported by the interviewed companies in relation to export (services) and import (both services and goods) operations. The obstacles labelled as REG originate from regulations and related administrative procedures. BE refers to obstacles that originate from the business environment (and, thus, not from a set of mandatory requirements). Finally, B2B obstacles are those that derive uniquely from the relation of the company with its clients and suppliers.

Number of companies

.....

|   | Country were the obstacle originated | Type of obstacle (REG: Regulatory / BE: Business environment / B2B: Private dispute)  |
|---|--------------------------------------|---|
| Obstacles related to services exports             | Domestic                             | (REG) Double taxation (BE) Limited access to finance (high lending rates from local banks and unavailability of PayPal) (B2B) Limited capacity to respond to the client's necessity   |
|   | Kenya                                | (REG) Double taxation<br>(REG) Difficulty to obtain USSD gateway license<br>(B2B) Difficulties to identify potential partners   |
|   | South Soudan                         | (REG) Requirement of local ownership (REG) Local presence requirement for cross border access (REG) Technology requirements (ISO certifications) (REG) Visa and work permit requirements (BE) Infrastructural problems related to the lack of security (BE) Constraining exchange rate policy |
|   | Rwanda                               | (REG) Local presence requirement for cross border access (REG) Data transfer and data storage constraints (information security) (REG) Conditions on workers nationality (B2B) Language barriers  |
|   | South Africa                         | (BE) Limited internet connectivity (BE) Limited access to finance   |
|   | USA                                  | (REG) Lack of info on required standards (REG) Consumer protection requirements (DUNS number <sup>14</sup> ) (REG) Difficult and costly quality standards (B2B) Difficulties to find a local support company  |
| Obstacles related to imports (services and goods) | Domestic                             | (REG) Double taxation (REG) Lack of transparency on tax measures (BE) Constraining exchange rate policy (BE) Information on regulations and procedures is not adequately published or disseminated  |
|   | USA                                  | (B2B) Expensive IT licenses and hosting space services (B2B) Delays on shipments (B2B) Costly trainings   |
|   | Kenya                                | (REG) Double taxation   |

Table 1. Source: NTF IV (phone interviews). Note: Based on 16 companies. REG: Regulatory obstacle; BE: Business environment obstacle; B2B: Business to business obstacle.

The DUNS number is a nine-digit number assigned to each business in the "Dun & Bradstreet" database. The DUNS might be formally requested by US authorities in order to easily identify suppliers of specific products and services. The online procedure to obtain the DUNS could take to foreign companies up to 30 days.

### ANNEX II: PROFILE OF START-UPS IN THE UGANDAN ICT SECTOR

A separate call for applications has been also disseminated across Ugandan ICT companies that qualified as startups. Out of 73 companies 15 were selected after the compilation and analysis of their expression of interests to participate to the NTFIV program. In the context of this initiative, start-ups were defined by the following criteria:

- ➤ The start-up has to use technology as a core enabling factor
- The start-up must have built a minimum viable product<sup>15</sup>, which has ideally generated some sales, even if only a limited amount
- Yes tart-up has to be for profit and can also have a social purpose
- ➤ The start-up must have been ideally launched within the last 2 years

As more mature companies, Ugandan ICT start-ups appear to rely strongly on contracts from the national public sector and international public sector (non-profit, government, international organizations). In contrast, documented expertise in the agriculture and environment sector seems to rank higher among the preferences of these companies, which appear relatively less involved in the provision of services to Finance, banking and insurance organisations (which are likely to demand for longer expertise).

While a slightly lower percentage of women led companies is observed among start-ups when compared to more mature SMEs (37% against 45%), women represent a relatively larger share of the workforce (54% against 34%, which represent a significant difference of 20 percentage points). Both men and female owned/managed companies employ more women, but, among start-ups, the proportion of female employees is slightly larger within men owned and/or managed companies. This might signals that start-ups are probably more open toward female empowerment and receptive to gender sensitive policies. But the challenges that are posed by the establishment of a new and innovative ICT business, might prevent women from holding more management positions. ICT business start-ups are also incubators for the development of young leaders. 93% of the start-ups are owned by a person aged 35 or younger.

# Percentage of women in charge Female Employment In firms Women-owned and/or managed Women-owned and/or managed Men-owned and managed Men-owned and managed

Figure.27. Source: NTF IV (online survey). Note: Based on 73 companies

Figure.28. Source: NTF IV (online survey). Note: Based on 73 companies

Despite their short experience in the sector and relatively smaller size, **start-ups are strongly outward oriented**. While 41% of the companies interviewed are already exporting, most of the others declared that they envisage providing services to foreign clients in the near future (84%).

#### Exporting companies and willingness to internationalize

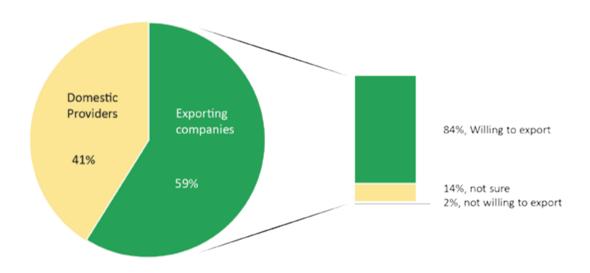


Figure.29. Source: NTF IV (online survey). Note: Based on 73 companies

Another distinctive element of start-ups in the Ugandan ICT sector is that they provide their services prevalently to end consumers. While this type of transactions are present also among more mature SMEs, their weight appear to be significantly higher across start-ups, pointing to a possible new trend in the way Ugandan companies are going to export to other countries.

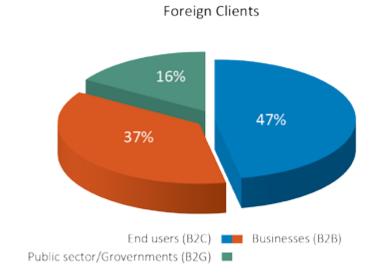
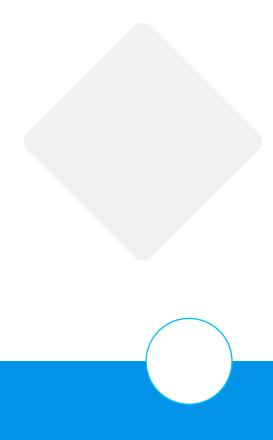


Figure.30. Source: ITC NTFIV (online survey) Note: Based on 29 exporting companies. The B2G category includes also transactions with NGOs. Only 2 cases have been encountered.



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