E-commerce in Sub-Saharan Africa: overcoming barriers to succeed in an online environment

A study on e-commerce SMEs in Ghana, Kenya, South Africa and Uganda

Sara Holmberg

Copenhagen Business School
Sara Holmberg
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M.Sc. Business, Language and Culture
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Supervisor: Dr. Michael J. Mol
Department of Strategic Management and Globalization

Copenhagen Business School
HANDELSHØJSKOLEN

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Abstract

In Sub-Saharan Africa, small businesses are not sufficiently supported in developing e-commerce practices. The institutional landscape creates barriers for firms to learn, understand, use and take advantage of the online environment, and most Africans are still not connected to the internet. Some firms have however overcome these barriers and built up necessary skills to conquer the e-commerce world. This paper is about those firms.

By preforming a case study on small and medium-sized e-commerce firms in Ghana, Kenya, South Africa and Uganda this paper enables for answer to how firms use internal capabilities and resources to overcome e-commerce barriers. Hence, this paper is useful for any policy maker or researcher that wants to gain an improved understanding of both e-commerce barriers and e-commerce firms' capabilities.

Identification of the main e-commerce barriers and its underlying dynamics are relevant for policy makers that want to adopt new measures and to improve the internet landscape in their location. This is one of few studies that takes a Sub-Saharan African perspective on e-commerce and particular defines the relevant barriers for SMEs in that part of the world.

Key words: *Sub-Saharan Africa; Electronic Commerce (e-commerce), SMEs, Internal Capabilities, Barriers to trade, International Trade, Internationalization of firms, Born Globals, and Information and Communication Technologies (ICT),*

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Glossary

Business to Business (B2B)	Transactions between and among organizations.
Business to Consumers (B2C)	Retail transactions of products or services from businesses to individual shoppers
CoD	Cash on Delivery
Consumer-to-business (C2B)	People that sell on products and services to individuals and organizations on the internet. Alternatively, individuals use C2B to bid on products or services
Consumer-to-consumer (C2C)	Individuals sell to or buy from other consumers on the internet
E-tailing	Online retailing, usually B2C
FDI	Foreign Direct Investments
GOE	Global Online Entrepreneurship
ICT	Information and Communications Technology
INV	International New Ventures
ITC	International Trade Centre (joint agency of the WTO and the UN)
ITU	International Telecommunications Union
Online marketplace	Also called electronic marketplace is an online website where buyers and sellers conduct can commercial transactions
RBV	Resource Based View
SME	Small and Medium sized Enterprises
Social commerce	E-commerce conducted in social networks by using social software
Social consumers	Also called digital consumers. Are members of social networks that share opinions about products or services that are available online
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

1. Introduction

In 2014, developing countries and emerging economies accounted for three-fourths of the world's economic growth, and Sub-Saharan Africa is for 2016 expected to continue this route with a growth rate of approximately 4.25 per cent. This is more than twice as much of many advanced markets (IMF 2015, UNCTAD 2014). However, most countries in the region are still considered low income or lower-middle income countries, and thus improved actions and policies are still needed to spur development. Electronic commerce (e-commerce) has proven to function as a promotor and catalyst on the domestic economy (Liu 2013) and may therefore be one ingredient for economic growth and development.

The Sub-Saharan economic growth has primarily been driven by foreign investments and a growing middle class. The internet's contribution to Africa's GDP is still low, and only 1.1 per cent of the GDP originates from internet enabled goods and services. With the right investments however, the future of internet trade can be very bright. Predictions are made that internet enabled industries could account for up to ten per cent of African GDP by 2025. Moreover, Africa's young population and the increased internet use among its youths illustrate a real growth potential for e-commerce in the region (Anthonyrajah, Cabral et al. 2013).

For companies, the application of e-commerce tools and the use of online services have clear benefits too and these benefits are by no means only limited to large multinational companies. E-commerce enables for small and medium-sized enterprises (SMEs) to take part in international trade in a whole new way, as the internet opens the door to the entire world's market in a click. Evidence also show that firms applying e-commerce tools increase sales and flexibility and reduce transactions costs as search cost for buyers or suppliers is much lower online as well as preforming online payments (Stockdale, Standing 2004).

The benefits of e-commerce for firms and countries are evident. Nonetheless, in order to be able to take advantages of these benefits, firms need to overcome the barriers that exist for integration in the online world. In the existing literature on benefits and barriers to e-commerce, few have focused on Sub-Saharan Africa, and there is also room to be filled on how e-tailors overcome or circumvent barriers.

The increased quest for learning about the e-commerce environment in developing countries, and how to improve the market capabilities to sustain economic growth

has been demonstrated on international level. Both in The United Nations Conference on Trade and Development (UNCTAD) Information Economy Report from 2015 and the World Bank's development report from January 2016 include issues related to e-commerce and digital competences in developing markets.

UNCTAD has in their report concluded that developing country governments should pay special attention to micro and small enterprises when regulating the e-commerce environment. Furthermore they argue that by identifying the main barriers and its underlying dynamics, policy makers can adopt the right measures for economic growth (UNCTAD 2015b).

This qualitative case study is an attempt to identify barriers to e-commerce in Sub-Saharan Africa, and also to fill the void on e-commerce firms' internal capabilities to overcome these existing constraints. The base to this study has been enabled by interviewing e-commerce SMEs in Ghana, Kenya, South Africa and Uganda.

1.1 Research question and delimitations

Electronic commerce is not a new field of study and its applications has during the last 20 years penetrated any business models from services and products to government administration. However, the increased use of the internet for sales and trading purposes also intensifies the need to learn and study models, ideas and strategies behind such businesses (Turban, King et al. 2015). This paper is based on the assumption that a firm's internal capabilities are helpful in overcoming barriers. Therefore, this thesis will research how micro- small and medium enterprises (SMEs) in Sub-Saharan Africa overcome barriers for online trade by asking *what are the external barriers for e-commerce facing SMEs in Sub-Saharan Africa, and how do firms overcome those constraints?*

In Africa, SMEs are insufficiently supported in developing e-commerce (International Trade Centre 2015). With the aim of giving policy recommendations to ease the life of e-businesses in Sub-Saharan Africa this paper is based on Teece's argument, "If firms are indeed the instruments of development, the study of economic development cannot take place separate from the study of the theory of the growth of the firm" (Teece 2000pg 124), which makes this research take its point of departure in a company perspective.

The International Trade Centre (ITC) has called for more attention to bring down barriers for e-commerce firms in Africa, and this is an attempt to bring further

attention to the situation of e-commerce in Sub-Saharan Africa. Through this study policy makers will also be able to learn about firm's needs and requests.

Previous studies have showcased that internet has a particular impact on agriculture, education, financial services, health, government and retail (Anthonyrajah, Cabral et al. 2013). This paper is limited to the retail industry of companies online platforms sell physical goods. The scope of this research has also been narrowed to the four Sub-Saharan countries; Ghana, Kenya, South Africa and Uganda. The selection of these cases is discussed in the methodology chapter.

Outline

This paper first gives a background on the history and concept of e-commerce and online platforms followed by a definition of small and medium-sized enterprises (SMEs). Secondly the theoretical framework on institutions in Sub-Saharan Africa and how it affects business is provided together with the theories on internal capabilities, resources and the internationalization of a firm. Thirdly, a definition and description on external e-commerce barriers in Sub-Saharan Africa is laid out in order to understand the environment in which these firms operate. There is further a division between external barriers which exist in the environment in which the firm operates, and internal ones related to the internal capabilities or skills of the enterprise. Focus of this research is on external barriers.

After a rather extensive introduction, the methodology chapter clarifies the idea behind a multiple-case study, philosophy of science and selection process of the interviewed sellers, companies and countries. The findings from the interviews are later analysed in relation to the aforementioned barriers and the stories from the selected sellers are being told. The following discussion connects the dots between theory and findings followed by a conclusion. Lastly, recommendation remarks central for policy makers that want an improved understanding of the policy changes needed to facilitate for small e-commerce firms in their respective country, as well as for businesses in Sub-Saharan Africa that want to improve or engage in e-commerce.

Certainly, there are many related sub-questions to this research, such as how firms differ in their internal capabilities, if the environment between the different studied countries has an impact and also if there are differences in the platforms that firms use. These questions will not be dealt with separately but rather embedded in the findings and conclusion of this paper.

2. Conceptual foundations, definitions and related theories

The basis for this research is found in two traditional business strategy theories including the institutional view and the resource based view (RBV). The latter specifically assists in analysing business capabilities found within the studied e-commerce SMEs and their internationalization process. The institutional view is, on the other hand, vital in understanding the e-commerce external barriers.

This chapter begins with the review of e-commerce in theory, followed by its evolution over time, what is meant by an online marketplace and lastly a definition of Small and Medium-sized Enterprises (SMEs). Then, theoretical contributions to business strategy are each given its own part in this chapter; starting with the internationalization of a firm, followed by the institutional view, RBV and how to define and distinguish between internal and external barriers to trade.

2.1 Review of e-commerce in theory and practice

Since the beginning of the internet era, applications for e-commerce and its definitions have not been left unchanged. Today, the internet is a commonly used mean for trade in various industries and popular in sectors including finance and medicine as well as education and government administration.

In its broadest sense, E-commerce includes everything from sales of goods and services, in the B2B sector, to hand made or second hand individual sales. The future growth of the e-commerce sector will not only include traditional sales of goods but also e-government, e-learning and social commerce (Turban, King et al. 2015). It is therefore vital to define what this paper defines as e-commerce and the type of businesses included in this study. In 2009, the OECDs member states agreed on a definition and description of e-commerce which stated:

> *"An e-commerce transaction is the sale or purchase of goods and services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisation*" (OECD. Publishing 2011).

This paper understands that e-commerce should generally be described in this above broadest sense, but due to the time limitations and the scope of this thesis, research will be limited to e-commerce as a mean to trade physical goods on online marketplaces.

Evolution of e-commerce

During the so called 'first era of e-commerce' in the 1980's, e-commerce was limited to electronic data interchange, a methodology of transferring documents such as invoices and orders from one computer to another, commonly referred to as 'paperless trade'. Later, the second phase began with the United States' abolishment of the ban on commercial use of the internet in the 1990's. This opened up for new opportunities for businesses and entrepreneurs in the online market. Customers began to search for product information online and company webpages developed. Subsequently firms started to use the internet for market and customer research. By 1997, online stores, banks and search engines had emerged and e-commerce could be found in core business practices (Qin, Chang et al. 2014).

E-commerce has changed the way businesses do business and the way businesses trade within and across borders. E-commerce has enabled for firms to accomplish results more quickly and efficiently, it has changed production systems and decreased operating costs. Chang et al. even argue that "e-commerce is the most significant industrial revolution since the first industrial revolution" (Qin, Chang et al. 2014), and not only that, the benefits of the internet are even predicted to have poverty alleviating effects (Goldstein, O'Connor 2000). The World Bank has found links between broadband development and GDP. For developing countries a ten percent increase in broadband penetration corresponds to approximately 1.38 percentage point increase in GDP (Qiang, Rossotto et al. 2009).

Today, e-commerce is found in a vast amount of sectors and in different parts of the value chain. Anything from research, payments, purchases, store development and sales can be conducted online. The online market has also proven to be suitable for various industries such as remote diagnostics, technical support, software and translation tools, travel or tourism services and music (Goldstein, O'Connor 2000).

Thanks to the borderless character of the internet, enterprises all over the world have the ability to buy cheaper services, access new markets, information and resources from the outside world instantly. This is important, not the least for developing countries where online connectivity has been regarded as a key issue for

integration into the global economy (Goldstein, O'Connor 2000, Meltzer 2014). Furthermore, Information and Communications Technologies (ICT) has been acknowledged as a driver for development and has proven to have a positive impact on both growth and jobs creation (Calandro, Pawlak 2014).

Moreover, the effect of distance is smaller for online sales than traditional trade. While many smaller firms traditionally have found it too costly to export, the online world seems to reduce transaction costs, and enable for as e-commerce to be conducted between companies far apart. Previous studies based on eBay data affirms that theory, 81 per cent of the smaller retailers export to at least five countries and 97 per cent of commercial sellers engage in exports (eBay 2012a). Lastly, Steinmueller suggests that ICT, and its possibilities of instant communication gives developing country firms the potential of 'leapfrogging' stages in capacity building or investment that traditionally has been required for economic growth (Steinmueller 2001)

On a similar note, Meltzer (2014) highlights that the internet as a platform for international is no longer just an internet-sector opportunity.

> *"It's an economy-wide opportunity for all sectors from manufacturing through to services. Significantly, the Internet as a platform for international trade is actually where the opportunity starts. Because the Internet is becoming globally accessible at increasingly lower costs, it's providing opportunities for small- and medium-sized enterprise, firms in developing countries—entities that have traditionally not been part of the global economy—to become international traders."* (Meltzer 2014)

There is a lack of available data measures on the value of e-commerce transactions and internet enabled trade, not the least for developing countries. We know however, is that the largest part of e-commerce transactions takes place between businesses in the B2B segment. A UN report finds that 78 per cent of global B2B online sales is accounted for by four countries; the United States (36%), United Kingdom (18%), Japan (14%) and China (10%) (UNCTAD 2015b).

The Business to Consumer (B2C) market is nevertheless suggested to be the fastest growing, and about 1.1 billion people in the world made at least one purchase from an online store in 2013. Currently, most online shoppers are found in the regions of

Asia and Oceania, but the Middle East and Africa are expected to generate the highest growth for the future (UNCTAD 2015b).

An Online Marketplace

There is no exact definition of an online marketplace. In similarity with a physical market however, an online marketplace is a place that facilitates the conduct of trade, provides a meeting space for buyers and sellers and gives support by offering services. These virtual locations tend to provide a list of services including search functions, seller reviews and payment solutions. Online marketplaces also lower customer's search time and costs and thus function as a facilitator for international trade (Wellman 2004, Turban, King et al. 2015, UNCTAD 2015b).

The world's major online market places originate from the United States and include Amazon and eBay, while the firms Alibaba from China and Rakuten from Japan have become important players in recent years (UNCTAD 2015b). Though, in certain markets, local e-commerce sites have regional dominance such Kaymu.com or Jumia in several African countries or in niche categories such as etsy.com that focus on handcraft and vintage (etsy.com 2015).

This paper only focuses on sellers using third-party online marketplaces. These are websites that allows a company to both market and sell products on the platform, and depending on the market, offering services such as payments, customer service policies, returns and delivery processing. An online platform is also a place for customers and sellers to meet and interact, and it is not uncommon for sellers to use various sites at a time. Companies interviewed for this paper primarily used eBay, Etsy and Kaymu. Detailed information about these companies is found in the methodology chapter describing the company selection process.

2.1.1 Small and Medium Sized Enterprises (SMEs)

This study further concentrates on micro, small and medium-sized enterprises (SMEs) in Sub-Saharan Africa. According to the European Union an SME is defined by its number of employees and its turnover; the table below identifies three different categories (European Commission 2014).

Table 1 SME Definition

Definition of a Small and Medium Sized Enterprise (SME)			
Company category	**Employees**	**Turnover or**	**Balance sheet total**
Medium-sized	< 250	≤ € 50 m	≤ € 43 m
Small	< 50	≤ € 10 m	≤ € 10 m
Micro	< 10	≤ € 2 m	≤ € 2 m

Source: European Commission

The objective of researching SMEs resides in the fact that the majority of companies in the world belong to this category. There is evidence that these firms are a significant contributor to the value added in developing countries and that more than 50 per cent of employees in low and middle income countries work in companies with less than 100 employees (Beck, Cull 2014, Ayyagari, Demirgüç-Kunt et al. 2012). SMEs are also increasingly involved in international trade and e-commerce as a strategy for growth (Grandón, Nasco et al. 2011).

Generally, SMEs report higher barriers and obstacles than larger companies both in terms of conducting international trade but also for operation and growth. While larger firms often possess enough resources to circumvent barriers by diversifying operations or create economies of scale, SMEs are constrained by lack of access to financial services or lack of market knowledge. Furthermore, traditional trade barriers such as high tariffs can strike harder against an SME that sells processed goods as they are burdened with higher tariff than raw material or primary products (tariff escalation) (Fliess, Busquets 2006, Beck, Cull 2014). The following of this chapter will go deeper into depth on the issues of the internal capabilities and depict the external e-commerce environment in Sub-Saharan Africa.

2.2 Theories of firm's internal capabilities and institutional environment

It is central for a good analysis to not only understand the resources and capabilities that a firm possess but also the environment in which it exists. Oxley and Yeung have previously determined that the institutional environment of a country affects its e-commerce readiness and suggests that rule of law is vital for a successful development of its e-commerce use in a country (Oxley, Yeung 2001). Similarly, Peng, Wang et al. (2008) argue that a firm's strategic choices "are not only driven by industry conditions and firm capabilities, but are also a reflection of the formal and informal constraints of a particular institutional framework that managers confront".

Furthermore, we know from the theory of the resource based view that the internal capabilities and resources of a firm are clearly linked to its performance. Stockdale and Standing affirm that SMEs need a comprehensive understanding of how to overcome the barriers of e-commerce in order to develop a successful strategy for e-commerce participation (Stockdale, Standing 2004).

Hence, we need to understand both the institutional environment and the firm capabilities in order to fully explain what SMEs need to overcome e-commerce barriers in Sub-Saharan Africa. The following text will describe the theory of the institutional view and the resource based view including how this is linked to barriers for internationalization.

2.2.1 Internationalization of e-commerce firms

Learning and understanding how a firm internationalizes is closely linked to the capabilities of a firm. Different theories and models argue that internationalization demands certain resources and knowledge and thus, this chapter briefly goes through some of the relevant literature in this field.

Traditional internationalization theories such as the Uppsala Internationalization Process Model argue that firms internationalization works in an incremental manner. As the firm slowly gain more knowledge about foreign markets it may expand gradually through a learning process, generally to markets with close geographic proximity. This means that a company incrementally progresses from being a local firm to becoming an international business (Johanson and Vahlne, 1977, 1990).

Increasingly so, companies aim at international markets and some might even be global from the very start (Madsen, Servais 1997). Internet firms and e-tailors are such examples of this so called *born global* phenomenon or which also is referred to as International New Ventures (INVs). This is defined as a business that "seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries" (McDougall, Shane et al. 1994).

Founders of this type of rapidly internationalizing business are entrepreneurs that see opportunities in establishing a business operating across countries, and who are able to combine resources such as network, knowledge and background from around the world. Secondly, the entrepreneur is able to recognize the need to form international business capabilities from the start, in order to successfully operate

on an international market. Thirdly, hybrid structures, such as strategic alliances or networks are usual means to overcome the lack of resources in the start-up phase (McDougall, Shane et al. 1994). Hence, capabilities and knowledge of the entrepreneur is combined to achieve foreign market success.

These firms have emerged as a result of both globalization and technical advances. The latter have reduced transaction costs of foreign market expansion, while globalization has resulted in an increased homogenization of buyer preferences and emergence of global value chain. Secondly, technological development in the ICT-sector have enabled for new production and transportation methods (Knight, Cavusgil 2004). Due to the seamless technology of the internet, a good sold online can be available instantly at any place, and evidence show that online firm's internationalisation process is often very fast. Decreased costs of communication, international promotion, transaction, and market research are some of the reasons behind this easiness of internationalisation (McDougall, Oviatt 2000).

E-commerce firms that have been born global can be defined as a Global Online Entrepreneurship (GOE). A GOE is "…a combination of innovative, proactive and risk-seeking behaviour that involves using e-business technologies to cross national boundaries and create value in organizations" (McDougall, Oviatt 2000). GOEs internal capabilities are often characterized by good ICT capabilities and resources including staff and management commitment, entrepreneurial capabilities and orientation, innovativeness, marketing orientation and knowledge and learning. Morgan-Thomas and Reuber (2013) further argue that resources of these firms include brand strength, reputation and international orientation and experience.

In Forsgren and Hagström's review and update of the Uppsala Model, they studied Internet-related firms which in character have been rather dissimilar to the firms on which the Uppsala model was originally based. They conclude that the internationalization process of the eight studied e-commerce firms were contrary to the Uppsala Model. These firms' internationalization process was instead fast and discontinuous, and there were also examples of firms going abroad before building up a home market. Moreover, firms entered new markets based on maturity and internet usage rather than physical distance (Forsgren, Hagström 2007).

2.2.2 The Institutional View

A firm and its resources cannot be evaluated or studied in isolation, thus, there is a need to understand the environment in which they operate. The institution-based

view studies the interaction between businesses and the specific institutional environment, and Meyer and Peng (2015) argue that "institutions are essential for the effective functioning of a market economy, and in consequence for the strategies and operations of firms (Meyer, Peng 2015)". When such institutions are not in place firms have to face institutional voids and design their business to overcome the issues related to these voids.

Institutions are categorized as either formal such as rules, laws, constitutions and regulations or informal including norms and behaviour of the people. A country's specific politics, laws, attitudes, culture and behaviour together creates a country's institutional environment (North 2003), and political institutions also help to shape the attitudes and behavior of citizens (Bratton 2007). Furthermore, ideology may also play a vital role for stability and to maintain institutions, as the understanding political institutions legitimacy can be affected by the citizen's own ideology. When ideological consensus is high opportunistic behavior is curbed and for businesses and contractual rights this can represent a substitute for the lack of formal rules (Powell, DiMaggio 2012).

Another angle of institutions' effect on society is found in the institutional theory in organizational analysis which discusses how institutional elements affect organizational structures (Scott 1987). Institutionalization of organizations is a state-dependent process as nations impose restrictions and limitations of the organizational structure. This can be explained by external factors in the environment that may enforce structural forms and practices into firms and organizations, such law changes imposing new requirements from firms or when a firm acquires a subsidiary and thus needs to reorganize (Scott 1987, Powell, DiMaggio 2012).

According to both Peng's institutional view and institutional theory related to organizations, institutions reduce uncertainty as it establish rules and norms on how to interact and behave, and provides a reliable and trustworthy framework for economic exchange (Powell, DiMaggio 2012, Peng, Wang et al. 2008). Nonetheless, instable regulatory institutions can also be a cause of uncertainty. Moreover, institutions may also change over time which affects the way businesses and people interact, and when the rules of the game frequently change - firms have improve their capabilities in order to respond to such changes (North 2003, North 1989, Meyer, Peng 2015).

If formal institutions are weak, informal ones play a more significant role in shaping the market, business and political environment, and emerging economies often see frequent changes in institutions which makes them volatile and uncertain (Casson, Della Giusta et al. 2010, Meyer, Tran 2004). Entrepreneurs in a changing institutional landscape or with institutional voids may therefore lead to use more informal practices (Meyer, Peng 2015)

In conclusion, all organizations exist in an institutional environment which in turn defines their possibilities and reality, and institutions should therefore not be ignored. The following section identifies and broadly describes the institutional and political environment in Sub-Saharan Africa, with focus on the four studied countries: Ghana, Kenya, South Africa and Uganda.

2.2.2.1 Institutional environment in Sub-Saharan Africa

The 47 countries* in Sub-Saharan Africa are all different. The region consists of everything from small islands, to large inland landlocked territories, from least developed economies to emerging markets. Nonetheless, African nations seem to have one thing in common; it is increasingly being seen as the land of opportunities. As a proof of this, in 2010 McKinsey titled a publication about Africa as 'Lions on the Move' and e foreign firms are gradually investing in the continent (Dews 2014).

The economic environment, the investment climate and the ease of doing business in Africa has improved and the GDP continues to grow on levels around five per cent. Despite this positive outlook many challenges remain for African development to take off (African Economic Outlook 2015, Alatovik, Atkins et al. 2010). Bratton for example, confirms that African political institutions often are characterised by informality such as corruption, clientelism and "Big Man" presidentialism (Bratton 2007).

* Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic (CAR), Chad, Comoros, Congo Rep, Cote d'Ivore, Democratic Republic of Congo (DRC), Eritrea, Ethiopia, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mali, Mauretania, Mauritius, Mozambique, Madagascar, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Swaziland, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe

Demography

Sub-Saharan Africa is in a unique demographic situation with almost half of its population under 25 years, and its workforce will increase by 830 million from 2010 to 2050 (United Nations 2014). That means 11 million young citizens entering Africa's labour market every year for the next ten years. A majority of them will work with the continent's largest employer: namely in the informal sector. Youth unemployment however is low at only three per cent in both low and lower-middle-income countries (Filmer, Fox 2014).

Most Africans live in the countryside, with averagely 40 per cent in urban areas. But with the world's fastest growing urbanization taking place in in African and Asian medium-sized towns, theis now changing (United Nations 2014, World Economic Forum 2015). Urbanization can be an important driver for growth and development as cities drive much of economic activity, commerce, transportation and provide links between rural areas and other cities. Urban areas also tend have better infrastructure and network coverage as well as higher levels of education, literacy and income – factors that also might have a positive impact on internet penetration (Dutta, Geiger et al. 2015, United Nations 2014).

Government and politics

When it comes to the political environment, changing and weak institutions has characterised large parts of the African continent. Fragility and the lack of basic government functions remains a problem in many Sub-Saharan African nations and together with issues such as food insecurity, inequality and environmental degradation many countries are still in need of foreign aid and parts of the population are suffering from poverty (UNCTAD 2014).

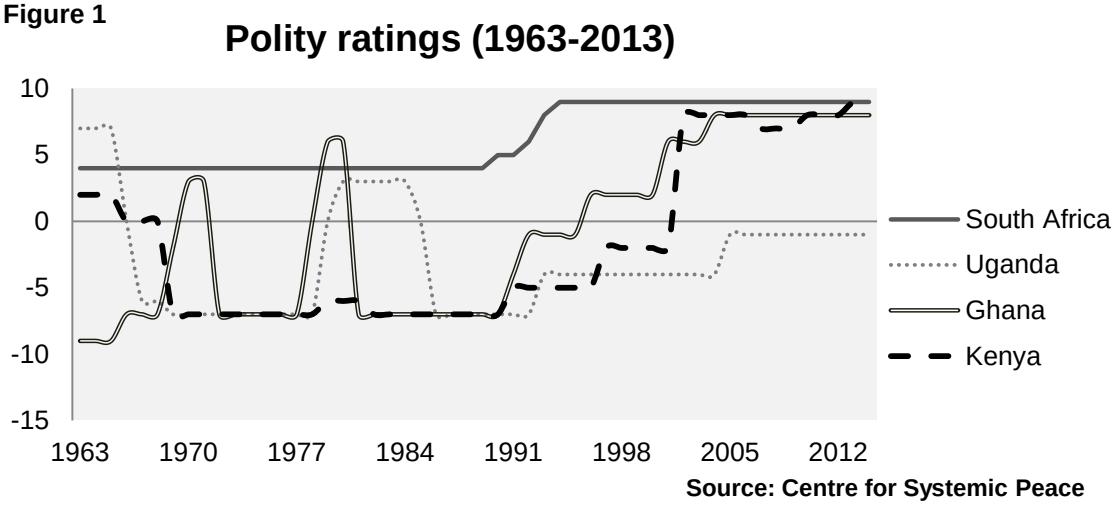
Several countries have also fallen under the category of a 'fragile states' which means that they are associated with lack of basic services and institutions, unstable and weak governance, poverty and conflict and war (Jones 2013, Bertocchi, Andrea 2011). The Fragile State index for 2015 categorizes four Sub-Saharan countries in the lowest status as 'very high alert', followed by six 'high alert' and 13 'alert'. Mauritius is the most stable nation labelled 'very stable' followed by South Africa and Botswana under the category 'low warning' (The Fund for Peace 2015).

On the contrary, political stability and the share of regimes in Africa defined as partial democracies or democracies have actually increased since the decolonisation

period. In 2013, 24 African countries were defined as democracies, compared to only four in 1972 (African Economic Outlook 2015). The *polity data* is an established tool to rate countries on a scale from -10, meaning fully institutionalized autocracy to +10 which equals a fully institutionalized democracy. Of the four studied countries; Ghana, Kenya and South Africa are classified as almost full democracies and score between 8 and 9, while Uganda currently has a rate of -1.

The graph below illustrates the political instability in the four countries since 1963. Especially Ghana and Uganda have had periods of short democratic regimes in between more autocratic ones (Cole, Marshall 2014)

Figure 1



Source: Centre for Systemic Peace

While fragile states have slow economic improvement, democratic regimes are more likely to honour international treaties, respect civil liberties, rule of law and property rights. Moreover, democratic states have higher levels of trade between each other (Morrow, Siverson et al. 1998, Diamond 1992).

Six of the ten most corrupted countries in the world are located in sub-Saharan Africa. Corruption is a costly practice that results in states and businesses losing billions of dollars to political graft and bribes. Firms are particularly affected by corruptive customs procedures but it also destroys citizen's trust in politics and institutions (Kommerskollegium 2012, Hanson 2009).

From Transparency International's corruption perceptions index (2014) it is becomes clear that there are great variations between the countries. On a scale from 0 to 100, where 0 stands for 'highly corrupt' and 100 for 'very clean', Botswana

is the least corrupt country scoring 68, compared to the most corrupted nation, Somalia that only scores 8. The studied countries in this report also contrast, Ghana is the least corrupted among the four with a 48, followed by South Africa (44), Uganda (26) and Kenya (25) (Transparency International 2014).

Economy and Trade

Developing countries are increasingly participating in the global flow of goods, both as exporters and importers, and emerging economies account for 40 per cent of all goods flows (Bughin, Jauch et al. 2014). A long side, there are greater opportunities for making business in Africa with positive developments in the consumer industry, demand for resources, an expanding labour market with better capital flows. This positive environment led McKinsey to draw the conclusion that this "immense potential cannot be ignored" (Alatovik, Atkins et al. 2010).

Nonetheless Africa's level of trade is still below its potential and the continent has not yet been fully integrated into the global economy. Most African countries are still agrarian and constitute of a large informal sector and Intra-African trade is also much less compared to other regions. Between 2007 and 2011 only 11 per cent of total merchandise exports were within Africa, compared to 70 per cent in Europe or 50 per cent in developing Asia (UNCTAD 2015a, UNCTAD 2013, World Economic Forum 2015, Bughin, Jauch et al. 2014).

Furthermore, 15 out of the 20 least competitive countries in the world are located in Africa, and most African economies are still driven by natural resources or low-skilled labour. Estimations show that the informal sector contributes with 55 per cent of Sub-Saharan Africa's GDP and 80 per cent of the labour force is active in this segment. A weak institutional environment in areas such as higher taxation, complicated regulation and lack of private property rights tend to prevent the informal sector from formalizing its activities (African Development Bank 2013).

Rankings such as the World Bank's Doing Business Index (DBI) that list countries on their ease of doing business, from 1–189, and the Logistic Performance Index (LPI) that measures issues such as quality of logistics service and infrastructure such as ports, railroads, roads and information technology illustrate that the Sub-Saharan African countries tend to be found in the lower end.

The highest ranked countries in the region of doing business are Mauritius (rank 32), Rwanda (62) and Botswana (72), and the lowest ones are Eritrea (189), South

Sudan (187) and Central African Republic (185). In the Logistic Performance Index (from 2010), South Africa tops the list (28), followed by Senegal (58) Uganda (66).

Table 2 Rankings of the studied countries

Country	DBI (2014)	LPI (2010)
Ghana	114	117
Kenya	108	99
South Africa	73	28
Uganda	122	66

Source; World Bank

Cape Verde, Namibia, South Africa, Swaziland, Mauritius and the Seychelles are the only Sub-Saharan African nations defined as efficiency-driven economies. This means that they have fulfilled the requirements of stable institutions, sufficient infrastructure and sound macro-economic policy, together with labour market efficiency, higher education and training among its citizens and the ability to use new technological developments (World Economic Forum 2015).

Moreover, access to finance and capital has by top-executives been regarded as the most problematic issue for doing business in Africa, including other main problems such as corruption, inadequate supply of infrastructure and inefficient government bureaucracy, followed by inadequately educated workforce, poor work ethic in national labour force, restrictive labour regulations, policy instability and inflation (World Economic Forum 2015).

Even though the Sub-Saharan African countries are all different, there are some common characteristics such as the high level of informality and low levels of development with its business facilitating institutions. For more detailed information, Annex A, B and C provides statistics on economical and ICT issues.

2.2.3 Resources and Capabilities

The internet boom has generated entrepreneurs with ideas of new businesses either from existing practices or by creating new ventures. While some have succeeded others have not. This chapter focus on the theories arguing that internal resources and capabilities are vital for a company to succeed in the business environment or on the online market, or on the contrary, the lack of internal resources and capabilities can hamper engagement and success.

The theory of the Resource Based View (RBV) argues that it is the valuable, rare, imperfectly imitable, and non-substitutable resources and capabilities of a firm that gives it a competitive advantage. Generally, resources can be divided into tangible and intangible assets. Tangible ones are physical capital resources including the access and ownership of material, technology, and geographical location, while intangible assets can be divided into human capital (skills and knowledge of managers and employees) and organizational capital (processes, reporting routines and controlling systems) (Barney, Wright et al. 2001, Barney 1991).

Born Globals often lack many of the traditionally needed tangible resources such as financial capital, human resources, experience, equipment, and other physical resources. In contrast, Born Globals leverage on their own intangible resources including knowledge of foreign markets early in their development (Knight, Cavusgil 2004).

On a similar note, Teece (1994) argues that the winners on the global market are firms that prove to have dynamic capabilities. By dynamic capabilities he suggest that a company has the internal resources to be flexible and responsive to market demands, a long side management capabilities to coordinate, reorganise, integrate and adapt internal and external competences, skills and resources towards a changing environment (Teece, Pisano 1994). In other words, this means that the firm possesses a substantive capability which is the ability to solve a problem. But in the presence of rapidly changing problems in the environment, they must also hold the ability to change the way to solve problems, which in turn can be described as a dynamic capability (Koryak, Mole et al. 2015).

Zahra et al. further argues that firms that internationalize early have deeply imprinted its dynamic capabilities to explore opportunities abroad. Born Global firms are therefore also born with adaptability to new and uncertain environments as they have always existed in a changing environment. This forces the business organization to continuously learn and adapt to new problems in order to survive and grow (Zahra, A. Sapienza et al. 2006).

Case studies made by Knight and Cavagusil (2004) show that resources possessed by Born Globals are global technological competence, unique products development, quality focus, and leveraging of foreign distributor competences (Knight, Cavusgil 2004). Moreover, studies on Global Online Entrepreneurship

(GOE) demonstrate that both tangible and intangible resources have been keys to success. ICT-capabilities and resources, entrepreneurial capabilities and orientation, innovativeness, marketing orientation, brand strength, reputation and trust are some of the named resources (Morgan-Thomas, Reuber 2013). Lastly, marketing capabilities have been highlighted by Ripolle´s and Blesa to play a major role for the internationalization of new ventures (Ripollés, Blesa 2012) .

Large and small, young and old firms also seem to possess different capabilities. Studies show that smaller firms often are less bureaucratic than larger firms, and therefore have the capabilities to be more flexible and encouraging of innovations. Moreover, young firms with an innovation culture also tend to internationalize earlier than the ones that do not possess such a culture. The so called Born Globals tend to have the characteristic of innovative firms whose capabilities and knowledge enables for early internationalization and success in foreign markets (Knight, Cavusgil 2004).

The ground for analysis of the firm's capabilities are in both the resource based view and the idea about firm's dynamic capabilities, which is found in the discussion chapter.

2.2.4 Barriers to trade

Broadly speaking barriers to international trade and internationalization can be separated into internal and external barriers. Internal ones are linked to the business' organizational resources and capabilities and thus related to the resource based theory, while external barriers come from the environment in which the firm operates (Leonidou 2004) and thus derives from to the institutional environment. Focus here, is as stated in the research question on the external barriers.

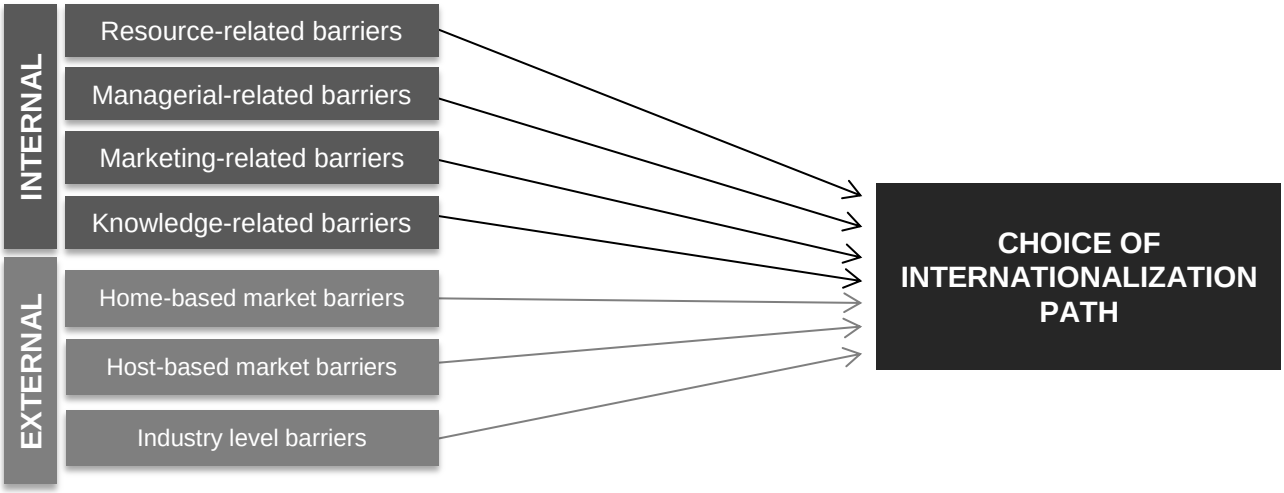
Internal barriers often stem from resource-, managerial-, marketing-, and knowledge-related constraints. Resource barriers are issues such as problems with productive capacity, labour shortage or lack of labour skills, costs or limitations in financing. Managerial-related barriers include lack of focus, ambition and commitment towards internationalization.

Thirdly, marketing-related encompass issues such as the capability of identifying foreign business opportunities, generating new sales leads or obtaining representation abroad in order to access distribution channels or the ability to modify products to users preferences. Lastly, knowledge-related barriers are those

constraints associated the right knowledge of export procedures, how to document and the practices of businesses abroad (Kahiya 2013).

In the reverse case, possessing these aforementioned skills should be seen in the light of the resource based view as vital capabilities in the internationalization process.

Figure 2: Internal and external trade barriers



External barriers are divided into three categories: home-based, host-based and industry level barriers to internationalization. The first one relates to lack of functioning institutions in the home market such as lack of local banks, insufficient international expertise, lack of tax or export incentives, inflation or an isolated geographic location. Host-based market barriers are the unfavourable operating conditions in a foreign location such as bureaucracy, corruption or political instability. This type of barrier also includes restrictions and regulations that hampering investments such standards, tariff barriers, non-tariff barriers (NTBs), import permits or other type of documentation.

Lastly, industry-level barriers can include obstacles such as an unfavourable industry-wide regulation, low or falling market prices, limited technology or lack of recognizable brands, but it can also encompass competition. Competition-driven barriers often come from strong foreign competition or challenge by a large multinational enterprise (MNE) (Kahiya 2013).

Kahirya (2013) suggest that export barriers influence firm's choice and path of internationalization. However, internet-enabled internationalization, that is

exporting e-commerce firms are less likely to come across routine obstacles in the same way.

2.2.5 Summary

In conclusion, this paper uses some of the frameworks from international business theories and trade barriers to research how small and medium enterprises (SMEs) in Sub-Saharan Africa overcome barriers for online trade.

To frame this study, **theories on internationalization** of developing country firms can serve to explain enterprises' strategies and capabilities. Evidence suggests that the Uppsala model with sequencing internationalization is not the main form of globalizing for e-commerce SMEs. Instead, the internet enables for fast and broad internationalization to many markets and is thus more linked to phenomena such as Born Globals or INVs.

As firms cannot be studied outside of their environment, and because the environment is of particular interest when studying external barriers, the **institutional view** is given specific attention. It is evident that informal institutions still play an important role in Sub-Saharan Africa and that formal institutions and stability still needs to develop.

Lastly, the **RBV** and the theory on **dynamic capabilities** serve as the fundament in the analysis of e-commerce SMEs. There is evidence that firms that internationalize in a rapid pace, or even Born Globals have dynamic capabilities to deal with the constantly changing and insecure environment.

3. E-commerce and its barriers in Sub-Saharan Africa

There is great optimism about the e-commerce market in Africa and it is evident that the internet and the ICT industry can bring positive change and development. But still, as mentioned in the previous chapter, businesses face a row of barriers and having the knowledge of what possibilities, functions and opportunities of the internet can bring is not always recognised.

The opportunities are present. With a growing middle class Sub-Saharan Africa has become a new destination for investments, and the rising disposable income comes an increased demand for consumer products and possibilities to use internet (Dutta, Geiger et al. 2015). By 2018, the African e-commerce market is estimated to grow with approximately US$ 50 billion from just US$ 8 billion in 2013, and by 2025, e-commerce is predicted to account for 10 per cent of retail sales in Africa's largest economies (UNCTAD 2015b). Hence, foreign companies and local entrepreneurs have increasingly started to target the e-commerce sector in Africa (International Trade Centre 2015).

Listing general e-commerce barriers has been done by researchers in the past and it is not the purpose of this paper. This chapter rather focuses on outlining the external specific barriers for e-commerce SMEs in Africa south of Sahara and some of the capabilities needed to overcome constraints. External barriers are as mentioned earlier, related to the society and its institutions and functions and secondary data will here be used to depict the e-commerce landscape.

Previous research has shown that several barriers hinder firms from adopting e-commerce into their business models and Meltzer (2014) and the International Trade Centre, ITC (2015) are examples of scholars who have listed e-commerce barriers in their research. While Meltzer has a broad focus related to international trade the ITC publication specifically addresses e-commerce barriers for Africa.

Meltzer has listed nine major barriers internet enabled trade which are, limited internet access, barriers to cross-border data flows, market access restrictions, lack of balanced IP framework, different consumer protection laws across jurisdictions, inadequate dispute settlement options, access to international payment systems, trade logistics and lack of trust in online vendors (Meltzer 2014).

While the ITC on the other hand, identifies the challenges to international e-commerce in Africa to be SME readiness, connectivity, financial barriers (including

international payments, financial regulation, consumer trust and legal and fiscal requirements of import markets), infrastructural barriers such as broadband and international logistics, the digital divide and access to ICTs and lastly socio-political barriers such as government commitment (International Trade Centre 2015).

The table below identifies the jointly identified barriers of the researches above. Not all of the above mentioned barriers will be dealt with in this paper as they are related to larger industries and not to small businesses on e-marketplaces such as data flows restrictions. This paper will mainly focus on 1) International export and trade barriers 2) Lack of internet access and use 3) The delivery infrastructure 4) Payment systems and 5) Trust in e-commerce.

Table 3 E-commerce Barriers

Meltzer	ITC	This paper (Holmberg, 2016)
Market Access Restrictions and Trade Logistics	Legal and fiscal requirements of import markets, and government commitment	**International export and trade barriers**
Limited Internet Access	The digital divide , connectivity and access to ICT	**Lack of internet access and use**
Trade Logistics	Infrastructural Barriers and international logistics	**The delivery infrastructure**
Access to International Payment Systems	Financial Barriers	**Payment systems**
Lack of trust in online vendors and Dispute Settlement	Consumer Trust	**Trust in e-commerce**

The borderless nature of the internet creates similar barriers for e-commerce firms across the world, however, developing countries, and Sub-Saharan Africa in particular, might face additional difficulties because of its unfavourable institutional environment. Therefore, it is interesting to dig deeper into the capabilities of the e-commerce firms that have overcome barriers.

Ekewe (2015) argues that the leaders on Africa need to focus on removing African e-commerce barriers and improving the e-commerce landscape for entrepreneurs to become successful online and to improve e-tailors profitability in Africa. He continues by specifying that improving literacy rates, facilitation for better integration between African economies, ensuring that investments in vital

infrastructures such as postal system, broadband, and transportation networks are in place and lastly improve business trust in the internet, are important areas for e-commerce success in the African continent (Ekekwe 2015).

3.1 International export and trade barriers

There is an increased demand among micro, small and medium sized firms to use e-commerce both for imports and exports, and SMEs are increasingly engaging in international trade. Evidence also shows that online sales are not as affected by geographical distances as traditional trade, and that using international online marketplaces gives an instant reach a world market. For example, the average eBay trader generally exports to 19 different countries (eBay 2014).

SMEs are traditionally more vulnerable to trade barriers than larger firms and all international businesses generally have to face some sort of export barriers. Export barriers are defined as "all those constraints that hinder the firm's ability to initiate, to develop, or to sustain business operations in overseas markets" (Leonidou 2004), and often relates to international trade regulations and requirements including customs procedures, product labelling, tariffs and other foreign market regulations (Kommerskollegium 2012).

Even though the following trade barriers are by no means only barriers to e-commerce companies, some of them can be particularly burdensome for small firms targeting foreign online markets, and custom processes and regulations have often not been adapted to the e-commerce environment. As e-tailors often export to various markets without an established presence, sales often constitute of many small shipments, and therefore, custom procedures may become even more complicated and burdensome. (eBay 2014, UPU 2015, Kommerskollegium 2012)

Tariffs and taxes are among the most recognized barriers for international trade. The WTO has established a working group to reduce trade barriers in e-commerce, and agreed on not imposing custom duties on electronic transmissions. This moratorium does not include the delivery of physical goods, and tariffs are thus applied for exported goods sold on online platforms just as any other good being sent (Turban, King et al. 2015, Meltzer 2014).

Moreover, product labelling can be problematic by e-commerce firms conducting cross-border trade. Different countries have different standards and regulations on how and what information that needs to be disclosed on products.

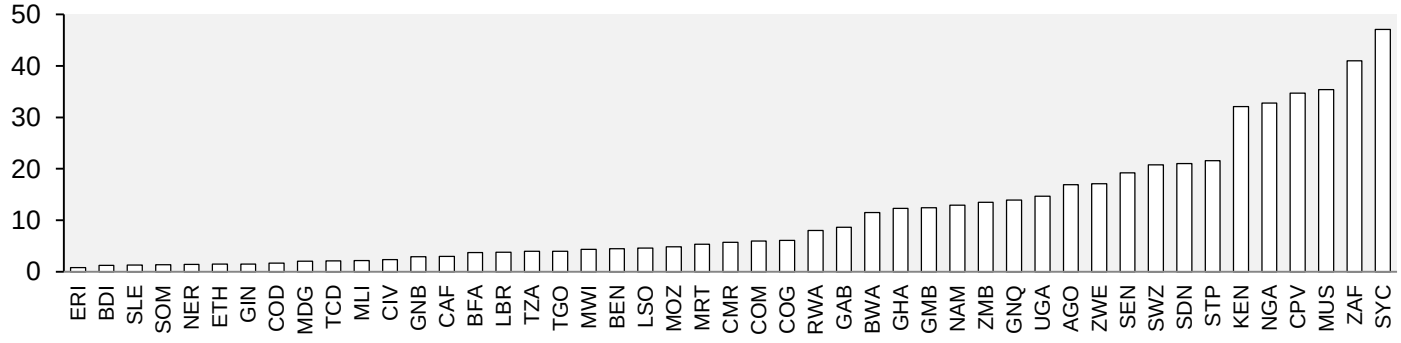
(Kommerskollegium 2012). Countries also tend to have different contract laws and national consumer protection laws across jurisdictions (Meltzer 2014).

Thus, e-commerce SMEs need information and understanding about laws, regulation, institutions and consumer trends in different markets to succeed. Without these capabilities, it is far more complicated to navigate through the regulations and requirements for exporting. As smaller firms tend to have less operational capabilities than larger ones, and lack the internal organization to deal with the challenges of exporting, they need to allocate significant resources to understand markets and regulations in order to overcome trade barriers. According to the ITC inexperienced SMEs in Africa often make the mistake to not account for sales tax or import duties when selling and exporting through e-commerce (UPU 2015, Fliess, Busquets 2006, Meltzer 2015, International Trade Centre 2015).

3.2 Internet access and use

Many Africans residing south of Sahara don't have access to internet nor the devices required for online connection. Previous studies have shown that developing country online citizens use social media to a higher degree than they conduct e-commerce shopping, but there is a lack of statistics and information about the current situation of the e-commerce market in many Sub-Saharan African nations (UNCTAD 2015b, Mirani 2015).

Figure 3 **Individuals using the internet % (2013) in Sub-Saharan Africa**



Source: World Bank

The Seychelles, South Africa, Mauritius, Cap Verde, Nigeria and Kenya are the only Sub-Saharan African countries with internet penetration above 30 per cent. As the graph above shows, the majority of countries have very low levels of internet penetration and in 28 nations less than 10 per cent of the citizens use the internet. This is a low number especially compared to more developed parts of the world

such as the EU average of 73%, a number clearly above all the Sub-Saharan African countries (World Bank 2014). With these low numbers and scarce supply, access to internet becomes an important tangible resource of a firm.

It should be mentioned that the actual internet penetration might not be accurately reflected in these numbers. In Sub-Saharan Africa, it is common to share one internet subscription and studies have revealed that more people in developing countries respond to be using social media than the number of people that say that they are using the internet (Akue-Kpakpo 2013, Mirani 2015). This would be an indication of a slightly higher internet penetration.

Lastly, Sub-Saharan Africa suffers from a digital divide. The term is used to describe the differences in ICT penetration of and internet access between and within countries. Albeit the increased use of cheaper mobile devices has helped to connect poorer communities, there is still a difference between well-connected urban locations and rural areas. Chinn and Fairlie found that income per capita, communications infrastructure, access to electricity, regulatory environment and demography are factors that can explain these differences (Chinn, Fairlie 2006).

The barriers to internet penetration are dealt with below. With focus on internet infrastructure, pricing, electricity rates and literacy this chapter describes the problems for e-commerce SMEs accessing the internet.

3.2.1 Internet Infrastructure

The evolution of e-commerce in a country is clearly related to the development of ICT infrastructure and the build out of high-speed broadband, and pricing and connectivity are seen as vital indicators for a country's e-commerce readiness.

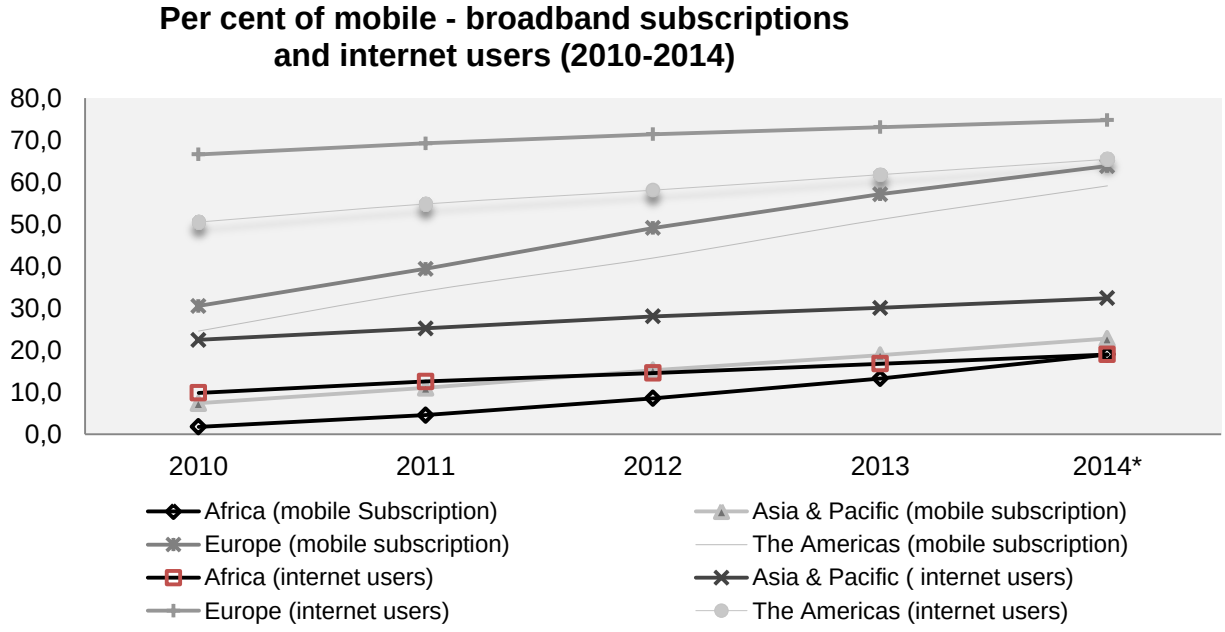
Broadband connection is a pivotal ingredient for any company that wants to tap into a value chain of a multinational company (U.S. International Trade Commission 2013), and for any enterprise that wants make full use of internet as a trading platform (UNCTAD 2015b). Internet first came to the region of Sub-Saharan Africa in the beginning of the 1990's, with Kenya, Uganda, Nigeria and Togo being among the first countries to enjoy the technology. Submarine cables supplies the African continent with wired broadband, which means that landlocked countries need to connect through these countries (Akue-Kpakpo 2013).

In Africa, only 0.4 per cent of the population have a fixed broadband subscription, but thanks to mobile and 3G technologies around 19 per cent have access to the

internet (International Telecommunications Union 2014). Mobile and 3G infrastructure has especially proven suitable for rural areas and increasingly, mobile devices have become the most important tool to access the web in developing countries (Meltzer 2014). But there is still a long way for Africa to reach the connectivity rates of the other continents (International Telecommunications Union 2014)

The graph below demonstrates that the 19 per cent internet users in Africa are generally using mobile broadband subscriptions for internet access, while in other parts of the world, internet users are divided between mobile and broadband (OECD 2013, Akue-Kpakpo 2013).

Figure 4



Source: ITU

Another factor explaining the low internet penetration is costs. Internet connection in Sub-Saharan Africa is among the most expensive in the world; the cheapest price for wired broadband in Sub-Saharan Africa is in South Africa, where the price is 26.31 USD while Burkina Faso's cheapest broadband connection costs 1000 USD (International Telecommunications Union 2014). According to a paper by the ICT-company Ericsson, 47 per cent of users in Sub-Saharan Africa also believe that the price for mobile data is too expensive (Ericsson AB 2014).

The lack of competition and infrastructure is often seen as the explanation to the high costs. For the user, the cost for internet connection is both the cost of the

equipment, such as computer, phone and/or modem and the monthly connectivity fee (Akue-Kpakpo 2013). The trend of increased mobile use for internet access can be traced to the innovation of low-cost smartphones and tablets in the market, and the use of mobile is predicted to continue to grow as new devices under 50 USD become available (Ericsson AB 2014, Anthonyrajah, Cabral et al. 2013).

Technological readiness, measured as a country's competitiveness by the World Economic Forum is much lower in Africa than elsewhere, mainly because of the lack in internet infrastructure but also because of low-skills and lack of education on how to use ICT products (World Economic Forum 2015). Similar numbers are shown in the network readiness index (Included in Annex C) where most Sub-Saharan countries are found on the bottom end. The Network Readiness Index measures business and regulatory environment, ICT-readiness including affordability, infrastructure and skills and lastly it the use and impact of ICT.

The performance of Sub-Saharan African countries is poor with 30 out of the 31 included countries in the lower half of the index (Dutta, Geiger et al. 2015). Moreover, there is a correlation between scores on the networked readiness index and income, both on a global level and regionally for Sub-Saharan Africa and this indicates that countries with higher incomes tend to have created a better position for its citizens to use the internet.

Lack of connectivity is a clear obstacle for businesses and consumers, which in turn has led internet and tech companies to engage in improving internet access in Sub-Saharan Africa. This includes the Alliance for Affordable Internet and the Facebook led organization internet.org that offers free basic internet services of their platforms through mobile connections in so called 'zero-ratings' (Russel 2015).

3.2.2 Electricity

Access to electrical power is essential for businesses to work, and particularly so for e-commerce firms. Electricity does not only run the machines of a factory and the lights of the room it is also crucial to charge a computer or mobile phone and to access to the internet. Tony Blair, former Prime Minister to the United Kingdom argues that access to electricity is the 'single most important factor for a country's success' (Blair 2015) and it is commonly seen as an essential component in economic growth, and countries with low electrification rates (less than 80 % of the population) have lower GDP per capita (Castellano, Kendall et al. 2015).

For many people in Sub-Saharan Africa power shortages or no access to electricity is a harsh reality. Two in every three, or about 600 million Sub-Saharan Africans lack access to electricity, and in comparison the consumption of electricity in Spain is larger than the total of Sub-Saharan Africa. Estimations further show that the number of people that will lack access to electricity is growing and in 15 years, another 45 million Sub-Saharan Africans will live without power supply. In the current pace, this means that it will take until 2080, for Sub-Saharan Africa to achieve universal access to electricity (Africa Progress Panel 2015). However, improvements are under way and estimates show that the grid-connected electrification rate for Sub-Saharan Africa will be 71 per cent by 2040, which is a great improvement from today's 34 per cent (Castellano, Kendall et al. 2015).

The African Progress Panel concludes that unreliable and expensive electricity is among the top barriers for manufacturers in almost all Sub-Saharan countries (Africa Progress Panel 2015), and evidence from Tanzania shows that the combination of a lack of electrical supply and a low of purchasing power has led to lower internet usage in the rural areas (Kshetri 2008). Hence, it becomes evident that the unreliable or non-existent power supply is one of the main external barriers for e-commerce firms to run their business and to access the internet.

Lastly, the insufficient infrastructure of electrical systems leads people and businesses to search for new ways to run their business and to use expensive diesel generators. Moreover, the cost for electricity is three to six times more than what grid consumers pay in the rest of the world (Castellano, Kendall et al. 2015).

3.2.3 Literacy

Using the internet as a tool for information or e-commerce presumes that the user know how to read and write, and the knowledge of another language, usually English is a great advantage (Goldstein, O'Connor 2000). Developing countries tend nonetheless to have lower levels of socioeconomic development and among other things, low literacy levels becomes a problem for accessing the internet or lack of English skills an issue for firms wanting to engage in exports.

The table below demonstrates that English is by far the most common language on the internet, even though the majority of its users are not native English speakers. New translation tools have made it easier for non-English speakers to use the net but many sites and tools are still based on the English language.

Table 4 Languages spoken and on the internet

Language	% of Internet users by language	% of content on the Internet
English	27	56
Chinese	25	4
Spanish	8	4
Portuguese	4	2
German	4	6
Arabic	3	1
French	3	4
Russian	3	6

Source: Language by content statistic by W3Techs 13 September 2013 and data for Internet users from World Internet Users Statistics 30 June 2012 (International Trade Centre 2015)

For e-commerce to flourish it seems to be important to have sites adapted to the local language and a recent study found that 72 per cent of consumers are more likely to purchase a good if there is an available description in their native language, and even more so than price (Turban, King et al. 2015). In all the studied countries, English is just one of the used languages and many countries in Sub-Saharan Africa have several spoken languages, including smaller tribal ones. There is also a lack of data on how many proficient English-speakers there are in the region, but with some statistics and estimations one can still give a picture of the spoken languages in each country.

In Ghana, a majority (67.1%) can read and write in English, while just over 20 per cent only can read and write in the English language, and 53.7 percent of Ghanaians can read and write in at least one Ghanaian language such as Asante (16%), Ewe(14%) or Fante (11.6%) (Ghana Statistical Service 2012, CIA 2014).

In Kenya, English is together with Kiswahili (Swahili) official languages but the country is also home to approximately 60 different tribal languages. South Africa has 11 official languages and the most common ones are IsiZulu (23%) and IsiXosa (16%), 9% of the population have English as their native language (Statistics South Africa 2012). Even though the language is the most used for business, finance, government and education among other things most South Africans are not proficient in English (The Economist 2011).

In Uganda, English is an official language, but estimates from 2003 show that it is only primarily used by about a tenth of the population (Crystal 2012). Common Ugandan languages are Luganda, Niger-Congo languages, Nilo-Saharan languages, Swahili and Arabic (CIA 2014).

In conclusion, the lack of internet access and infrastructure is hampering online business and is a major barrier for the conduct of e-commerce. Various reasons including low literacy, lack of power supply, and costly internet services have been described to explain this issue.

3.3 The delivery infrastructure

A reliable physical infrastructure for shipping goods needs to be in place for e-commerce to flourish (Goldstein, O'Connor 2000), and Metlzer (2014) argues that access to low-cost transportation services is vital for the development of a functioning e-commerce market. Especially so because e-commerce in international trade is often low value and high volume products which makes low cost and timely delivery important for internet-enabled international trade (Meltzer 2015).

The inadequate infrastructure in Sub-Saharan Africa has hampered its possibilities to faster economic growth. It is not only, as described above electricity and communication networks that are insufficient, also land transport, roads and ports are in need of improvement. Transport infrastructure affects the competitiveness of intraregional and domestic e-commerce and improvements in this area would not only help companies to better access markets and to become part of global value chains (World Economic Forum 2015), but it would also improve for delivery of goods ordered online.

A study from Asia confirms the importance of good delivery services. Almost 50% of Singaporeans argue that delivery is the main reason why they do not purchase goods or services online (AT Kearney 2015). Likewise, 50% of EU companies answered that the most important obstacle to online cross-border sales were that "Delivery costs are too high" while 40% stated that "Guarantees and returns are too expensive". The EU commission has estimated that a reduction of delivery prices could increase profitability of EU e-commerce firms engaging in cross-border commerce by 7.5% (European Commission 2015).

Across African cities and villages, the lack of correct street names and signage hampers the delivery, and are in need for better addresses (International Trade Centre 2015). It is also common that the postal system in developing countries is not functioning well enough (Ekekwe 2015). That being said, e-commerce firms all over the world have invested delivery solutions of their own to circumvent the problem with slow or unreliable delivery (UPU 2015, Turban, King et al. 2015).

It is evident that delivery functions needs to improve in Africa. Data and previous research clearly show that there is both at lack in traditional infrastructure and the development of a secure and reliable postal service.

3.4 Payment systems

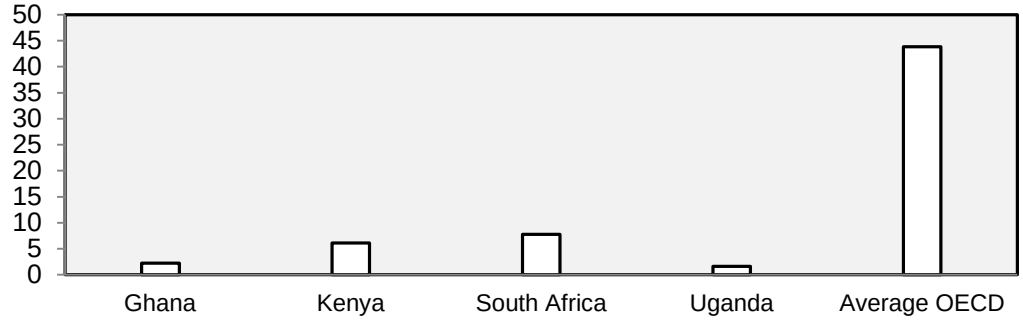
African companies often have to front two types of financial or payment barriers. First, domestic regulations, low credit card use and local banking costs are impediments for the use of local payment platforms. Secondly, there is an issue African to be rejected to use international third-party payment providers (International Trade Centre 2015).

In general, the financial service market is underdeveloped for most Sub-Saharan countries and according to a 2011 Gallup study on 11 Sub-Saharan African countries, South Africa and Kenya have the most developed financial services markets. Even so, they are still dominated by informal cash payments (Godoy, Tortora et al. 2012).

As credit cards are used as the main form of payment in many developed countries, popular online payment systems developed in Europe or the US are designed for the use of cards. Credit card ownership remains low in developing countries and both customers and sellers thus become excluded from the use of these online payment systems. The graph below shows the percentage of individuals that own a credit card compared to the average of the OECD countries.

The OECD country with the lowest number is Mexico where 13 per cent of the population have a credit card, still much higher than South Africa (7,8%) which has the highest use of cads out of the four studied countries (UNCTAD 2015b).

Figure 5 **Share of individuals with a credit card (%) in 2011**



Source: UNCTAD

The limited access to international payment systems is a clear obstacle for developing country firms that want to engage in cross-border e-commerce, and some African countries even have domestic restrictions on the amount of money that is allowed to be transferred across national borders (UNCTAD 2015b, International Trade Centre 2015).

However, new technologies on mobile solutions have changed the possibilities for payments, both in the traditional and e-commerce sector. Currently, the world's seven billion citizens have six billion mobile phones while there are only two billion bank accounts. Mobile payments have created opportunities for unbanked customers and moreover, mobile money transfers tend to have a more evenly distributed use by both rich and poor. Yet, there is still no single major player or standard in the market which makes it a scattered market numerous systems, and regulations in the financial market also tend to be country-specific. Nonetheless, mobile money transfers have become a popular payment mode in Sub-Saharan Africa and some of the most popular examples will be described below (Godoy, Tortora et al. 2012, Gupta 2013).

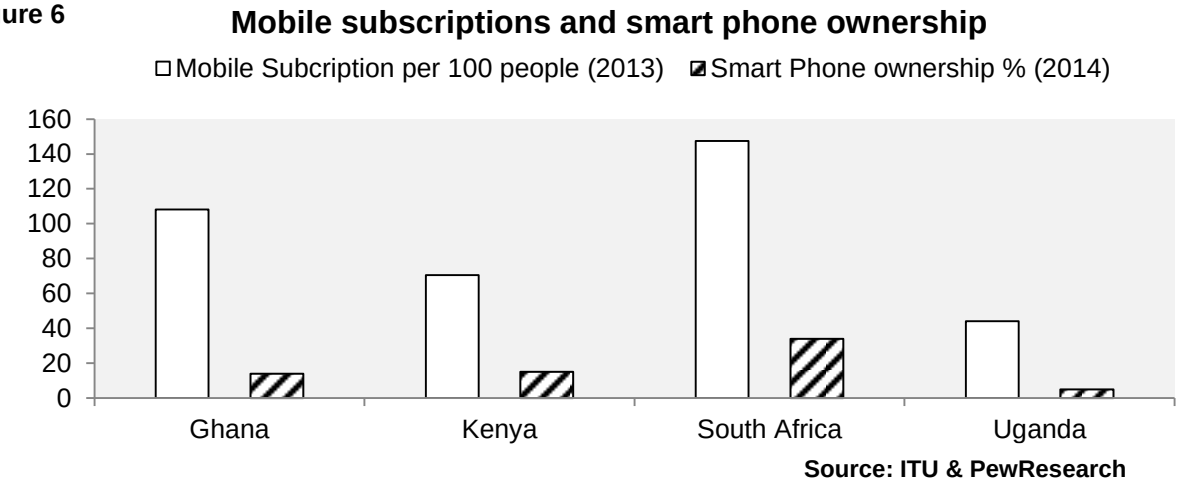
The fact that mobile network operators own the wireless networks and have an established relationship with its customers laid the ground for the mobile payment solutions. First out was the Kenyan mobile payment solution M-Pesa, initiated by the telecom provider Safaricom in 2007. Its SMS-based money transfer system is used by more than 15 million people and has enabled for unbanked individuals to deposit, send and withdraw funds using their phone (Mims 2013, Jack, Suri 2011, Blair 2015, Gupta 2013). In other African nations, similar solutions are found such as MTN mobile money and Airtel money, founded by the two telecom operators with the same name. In many ways, Africa has taken the lead in the use of mobile banking services before more technologically advanced countries (O'Brien 2015, MTN 2015, Airtel 2015).

A mobile money transfer only requires the ownership of a cell phone or access to one. A study on Kenyan cell phone use reveal that 58 per cent of the ones that do not own a phone share with someone else, and 21 per cent of cell phone owners shared their phone. Moreover, a study from Pew Research on Ghana, Kenya, Nigeria, Senegal, South Africa, Tanzania and Uganda show that 30 per cent of cell phone owners use their cell phone to make or receive payments. In Kenya this

number was 61 per cent compared to South Africa (15%), Ghana (15%) and Uganda (42%) (Pew Research Center 2015).

The introduction of smart phones with new applications also facilitates for purchases of goods over the internet. The graph below indicates that South Africans and Ghanaians on average have more than one subscription while less than half of the Ugandan population a mobile phone subscription. The smartphone trend also seems to follow the general mobile penetration, in South Africa 34 per cent of the population owns a smartphone compared to only 5 per cent in Uganda (International Telecommunications Union 2014, Pew Research Center 2015).

Figure 6



Another online payment method that has gained ground in the recent years is the innovation of e-wallets or intermediary payment systems such as such as PayPal, Alipay or Google. Globally, intermediary payments have become the fastest growing payment mode (Meltzer 2014, WorldPay 2014), but the use in Sub-Saharan Africa is not as widespread (UNCTAD 2015b).

The American company PayPal (formerly part of eBay) is dominating the market of e-wallets and with its 165 million active customers, available in 203 markets. Alipay, part of the Chinese conglomerate Alibaba, is on the other hand the most popular one in China with 30% of its market share (WorldPay 2014, PayPal 2015b). These services often have a limited range of currencies available for its customers, for example, PayPal supports 28 currencies, Google Wallet 42 and Alibaba's Alipay 12 currencies (UNCTAD 2015b, Alipay).

PayPal's largest market in Africa is South Africa, followed by Nigeria and Kenya. There are three different levels of accounts available: personal, premier and business accounts. Business accounts allows SME have an account in which it can receive payments, but these forms are only available in 13 African countries, including South Africa and Kenya, while personal account is the only available option in Uganda. PayPal does however not offer any of its services in Ghana (UNCTAD 2015b, PayPal 2015a, Nsehe 2015). Therefore, the use of PayPal and similar e-wallets has its constraints to e-commerce SMEs in Sub-Saharan Africa.

Lastly, cash on delivery (COD) is the preferred way when making e-commerce purchases in Africa and the Middle East; 48 per cent of all e-commerce payments in 2012 used this method. Essentially the consumer pays in cash when he/she receives the good purchased online, and this payment service is often offered by several express courier companies (Mangiaracina, Perego 2009, WorldPay 2014).

In conclusion, a World Pay survey on the most popular payment methods for e-commerce on three of the countries in this research found some interesting results. In Kenya, Ghana and South Africa the 'other' segments makes up the majority of the payments which includes COD. In South Africa and Kenya 37.5 per cent and 29.4 per cent respectively of the payments were made by card, a relatively high number looking at the low credit card penetration. While mobile payments and cards are of equally frequent use in Ghana. Bank transfers, direct debits and e-wallets do not hold big shares of the market in any of the mentioned countries (WorldPay 2014).

Table 5 E-commerce payments

Country	Card	Bank Transfer	Direct Debits	e-wallets	Mobile	Other incl. COD
Ghana	11.2%	0.6%	0.2%	5.1%	12.2%	70.7%
Kenya	29.4%	0.8%	0.3%	2.5%	19.0%	48.0%
South Africa	37.5%	5.2%	0.5%	3.9%	13.3 %	39.6%
Uganda	No statistics available					

Source: WorldPay

As described, there are various forms of payment methods available for e-commerce firms. While credit card is the most common method in Europe and the US, Cash on Delivery (COD) is the preferred way of paying for delivered goods in Sub-

Saharan Africa. This is due to the fact that most people do not possess a credit card and a large number of the population remains unbanked.

Moreover, firms are sometimes restricted to receive money from so called e-wallet systems and this might be a burden for internationalizing firms that need to accept credit cards from foreign buyers. Lastly, mobile payments have evolved as a popular way for all sorts of payments in some African nations, but the lack of standardization in this area makes it a local method.

3.5 Trust in e-commerce

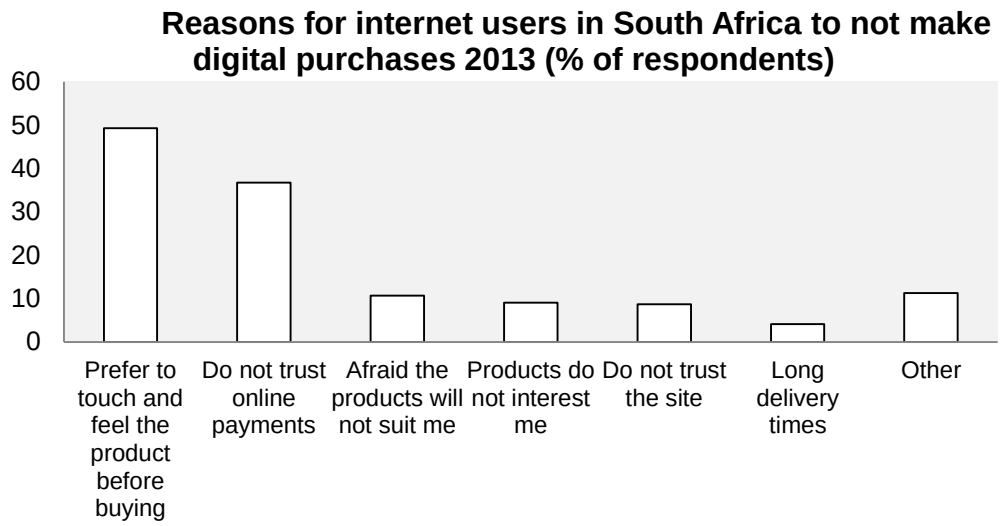
Trust in new technology and internet enabled trade is a key ingredient for e-commerce to truly gain ground. Gaining customer trust becomes especially important in the online environment where reputation relies to a great extent on opinion and perception, and the consumers need to trust the vendor even thought they might not have seen or felt the product (Meltzer 2014, International Trade Centre 2015).

As trust therefore needs to be generated through the online experience, previous factors as speed and cost of delivery, secure and known payment services and local language, but also quality of the good and after sales services become increasingly important (Meltzer 2014, UNCTAD 2015b). eBay has in their report on Commerce 3.0 concluded that if a consumer perceives that there is a risk of something going wrong, he or she will not complete the transactions (eBay 2012b).

As the customer is unable to inspect the good before purchase, many often want to option of returning the article it if it did not fit the customer's expectations. The rules and regulations for returns and customer protection are different in all markets and can therefore become difficult to deal with from a firm perspective.

The graph below indicates that trust also is vital for internet users in South Africa. A majority of the respondents answered that they preferred to touch the product before making a purchase while 36 per cent said that they did not trust the online payments, eight per cent did not trust the site (UNCTAD 2015b).

Figure 7



African companies often lack access to electronic trust tools such as digital signatures or certain security standards which can hamper trust from foreign buyers. Thus, developing country e-commerce firms face a challenge in gaining the trust of consumers in other countries (Meltzer 2014, International Trade Centre 2015). Therefore, online marketplaces often provide trust tools to facilitate for both buyers and sellers.

These tools can take the form of the seller and buyer giving feedback to later rank the sellers as trustworthy and reliable, as well as sellers commenting on social media platforms. Social influence is increasingly affecting consumer choice and shoppers do not only purchase goods and services on the internet, but are also using social communities online to share opinions about the goods and sellers (Turban, King et al. 2015).

eBay has furthermore found that trust tools help sellers in their choice. The higher ranked a seller's status is, the less buyers tend to care about geographic distance. Hence, trust tools could be vital for Sub-Sahara African firms to gain trust in a foreign market. Moreover, trust to use internet services is also related to factors such as online surveillance, privacy and freedom of expression (Dutton, Law et al. 2014).

It is evident that trust is vital to succeed in the online market. With digital tools trust can be gained through reviews, but also lost immediately as a bad review or comment on social media can make a buyer lose all its trust.

Summary

In summary, the list below include the of barriers portrayed above

International Export and Trade Barriers such as custom procedures and differences in regulations can hamper internationalization

Low Internet Access as a result of costly services, poor of broadband and electricity infrastructure, and low levels of English and computer literacy affects the evolution of e-commerce in Sub-Saharan Africa. But also hinders the e-commerce firms to evolve

Infrastructural Barriers in form of lacking roads, ports and insufficient postal service affects the delivery of bought e-commerce goods in the market, and also slows down the export

Barriers to payment system often lay in the lack of integration between methods or the nation's underdeveloped financial system.

Trust is a key ingredient for success in e-commerce and online trust tools can help overcome the trust barrier for online firms.

4. Methodology

In trade policy, contrary to the international business field, studies rarely adopt a firm-level perspective to its analysis. Trade policy is also by nature defined at an aggregate level and Cernat argues that one cannot adapt rules for firm specific needs. Nevertheless, firm-level data is becoming increasingly important for policy makers in order to understand trade barriers and to facilitate for firms international expansion (Cernat 2014). This creates an interest to increase the understanding of the needs and the role of firms in international trade. Hence, this study takes its point of departure in qualitative firm-level data, gathered by interviews with e-commerce sellers in Sub-Saharan Africa.

4.1 Philosophy of Science

The pragmatic view, which this analysis is based on, is often seen as combination or compromised position between internal realism and relativism. Hence, this view of the world and the truth does not accept that people can create their own truths out of nothing, nor are there pre-determined theories that form knowledge. Rather, for a pragmatic researcher, knowledge is being both constructed and based on reality of the world as we experience it (Easterby-Smith, Thorpe et al. 2012, Johnson, Onwuegbuzie 2004).

Human inquiry, that is, the day-to-day life of humans and the interaction with others and the environment, is according to the pragmatic view as equivalent to experimental and scientific inquiry. Thus, pragmatism is well suited with qualitative analysis and observation and interviews with individuals (Johnson, Onwuegbuzie 2004). Moreover, this study is rooted in each country's specific context, and the pragmatic view also claims that research "always occurs in social, historical, political, and other contexts" (Creswell 2013).

The approach to this research has furthermore been an abductive reasoning, which is generally explained as a combination of an inductive and deductive scientific method. According to Pierce, (1931–1958, Vol. 5, p. 90) "abduction consists in studying the facts and devising a theory to explain them" (Haig 2008). An abductive method begins with a general research of the subject, and by studying and learning about facts it creates a theory to explain it. The start of this research was thus made by studying the facts on the e-commerce environment and traditional e-commerce barriers but without having a particular theory in mind.

Nonetheless, in order to explain the found facts and data a theory is needed, and theories on businesses internal capacities and country specific institutions were added to frame this research. This is a typical abductive method where theory is motivated to explain facts found it the study. While induction on the other hand seeks for facts, abduction seeks for a theory (Rodrigues 2011).

4.2 Case study design

Secondary empirical data and statistics from international organization and private firm surveys provide a background and give indications of what barriers that are affecting e-commerce SMEs. Still, the lack of information for Sub-Saharan Africa increases the risk of misinterpretations of the firms' necessities and hence the risk of misguided recommendations.

Therefore, gathering first-hand data enables for a firm perspective and qualitative analysis in order to better understand the problems and the capabilities of firms. With this qualitative approach, this study aims at exploring the strategies, barriers and opportunities from a company perspective by interviewing businessmen in a multiple-case study with four units of analysis, namely Ghana, Kenya, South Africa and Uganda. Each country represents a *mini case* in this multiple-case study. A case study is the in-depth understanding of a particular case in a predefined area (Darke, Shanks et al. 1998) or as stated by Yin "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin 2013). Hence, a multiple-case study is a research that involves more than two cases. These definitions clearly fit with the research of this paper. E-commerce is a contemporary phenomenon that is investigated in the context of a pre-defined area, in this case within the boundary of each of the four countries. However, the seamless cross-border structure of the internet, boundaries of what is a country context barrier and what other constraints are may not always be evident.

By studying multiple countries in the same region, there is also consent for more generalisations compared to a single case study. One of the main critiques to qualitative studies is the lack of generalizability, and this small multiple case study, may not draw conclusions of all of Sub-Saharan Africa. Rather, this method is a robust way of analytic generalization that allows expanding from theories, which should not be confused with statistical generalization (Yin 2013).

Traditionally case studies have been criticized for not being rigorous enough and the inability to do randomized experiments. However a quantitative study with anonymous surveys would not in the same way be able to respond and explain how the context affects enterprises in the same way. Moroever, Yin argues that case studies enable to answer how-questions (Yin 2013), which is in line with the research question of how the studied SMEs overcome trade barriers and constraints.

4.3 Company and Country Selection Method

Given the focus of this paper, the aim was to find SMEs using online marketplaces in Sub-Saharan Africa. The first task was to identify the case study countries and thus develop a certain criteria, but also that they were supposed to be different in their character. Studying different countries would allow for a better understanding of the region, instead of only looking at very similar nations.

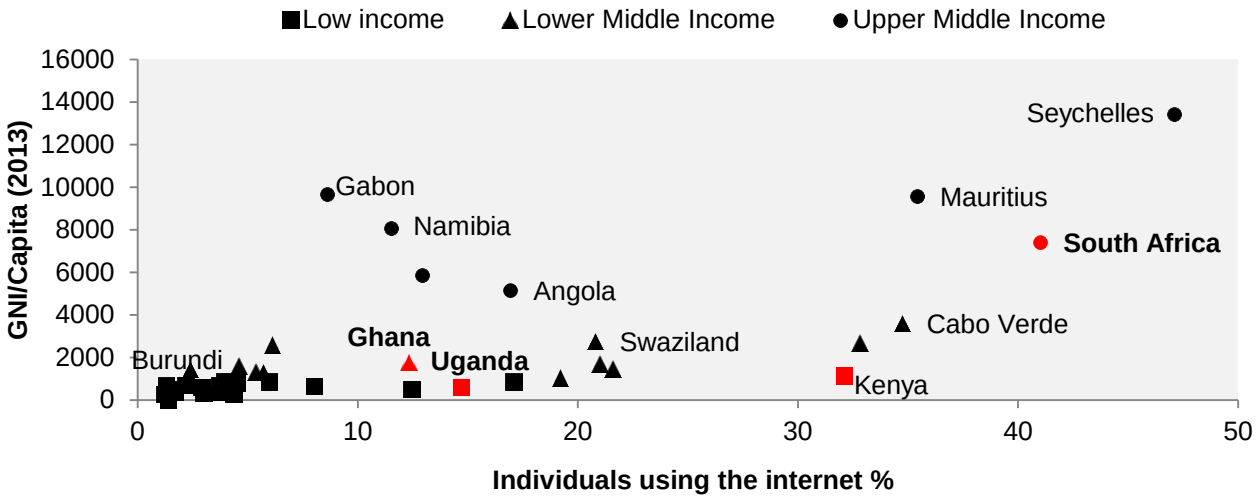
First, having a decent internet penetration was vital in order to be able to find active e-commerce firms, and the threshold was set to minimum 10% of the population. Secondly, income was used to differentiate between the nations.

The World Bank classifies countries on their respective income level[†] as low income, lower middle income, middle income and high income.

In Sub-Saharan Africa, the vast majority (26 countries) fall under the low income category, 14 are defined as lower middle income, 6 as higher middle income and only one (Equatorial Guinea) as high income (World Bank 2015). Thus, the decision was to study two low income countries, as they make the majority of the region, one lower middle income and one middle income country. Lastly, only countries of a certain size where included as too small economies risked not generating any results.

[†] For 2015 fiscal year: low-income economies have a GNI per capita of $1,045 or less in 2013; lower middle income between $1,046 and $4,125, Upper-middle income countries $4,126 to $12,745 and high-income economies are those with a GNI per capita of $12,746 or more.

Figure 8 **Income and Internet Penetration in Sub-Saharan Africa**



Ghana, Uganda, Kenya and South Africa were therefore chosen as representative countries of the region with higher internet penetration. Ghana is a low income country, Uganda and Kenya are lower middle income countries and South Africa is a middle income country. They all have internet penetration rates above 10%, Ghana (12,3%), Uganda (14,7%), Kenya (32,1%) and South Africa (41%.).

All the studied countries also have a relevant GDP and size of their economy. Smallest is Uganda with a 24,703 million USD in GDP (2014), followed by Ghana (48,137 million USD), Kenya (55,243 million USD) and the by far largest economy is South Africa with a GDP of 366,057 million USD.

As these countries are different one can expect the outcome such as barriers for each country to vary as well, which fits with the logic of a multiple-case study where each case should be selected to predict contrasting results (Yin 2013). Due to the proximity of the countries and the similarities of e-commerce barriers traditionally found across countries, we might also find parallel issues in all of them.

For the company selection process, the decision was also to look for different marketplaces as that would generate a diversity of businesses selling different products. Hence the idea was to find a variation between sectors and strategies with firms of different characteristics. As the platforms are different they attract various types of companies and sellers, and the hope was to find both international and local sellers. This study tried therefore target sellers from four different e-commerce platforms.

The selection of sellers from each platform was made in unique ways. As the all four marketplaces are different so was the selection process. However, the intention was to make it as randomly as possible.

First, **eBay** is the world's third largest e-commerce site in turn of gross merchandise value where its auction site allows for individuals and companies to buy and sell new and used goods. eBay is a global community for both large and small sellers that can list their item either as a bid for an auction or offer a Buy Now option which in turn allows for fixed price (eBay 2015).

As eBay was partnering with the making of this paper, the company helped to send out emails to sellers in respective country as there is no way of selecting sellers' location on the webpage. This resulted in two responses and two interviews.

For the following platforms the strategy was to set up a user's account in order to search and select sellers to contact. A template letter found in appendix E was sent out to a selected number of sellers on each platform with very various response rates.

Secondly, **Alibaba** is a Chinese company established in 1999. It is often described as the world's largest online marketplace with online sites for both retail and wholesale, and the transactions on Alibaba's ten different online sites corresponded to 248 billion USD in 2013 (Lajoie, Sherman). The contacted sellers were found on Alibaba.com which was the first of its established marketplaces. It has sellers across the world with a majority of its 300 million users in Asia (alibabagroup.com 2013, alibabagroup.com , Loeb 2014).

On Alibaba, there is no search function for sellers from a specific country; instead the search was done on the country name which also might have resulted in products from that origin without necessary being sold from the country in question. The response rate from Alibaba was very low and only one person answered to the email, who unfortunately did not want to participate.

Thirdly, **Etsy** is a Brooklyn (New York, USA) based company founded in 2005. It offers a niche online market platform for artist, crafters, handmade items, vintage goods and craft supplies. Today, the site has more than 1.4 million small businesses registered selling for more than 1.9 billion USD (etsy.com 2015, etsy.com 2014).

On Etsy, there is a possibility to search for sellers' location and thus, nine sellers from each country were contacted. They were selected randomly by counting every fourth seller on the results list. In contrast, all registered sellers in Uganda were contacted as the number of sellers only amounted to five. The response rate from Etsy was high with 16 out of 32 responses, and 11 who finally participated.

Lastly, the locally based marketplace studied is **Kaymu**. Kaymu is a subsidiary of Africa Internet Holding and offers a model similar to eBay's. The platform describes itself as the number one platform in emerging markets which is shown by its market establishment; the platform is available in 15 African markets, 8 in Asia and the Middle East and Albania in Europe (Kaymu.com 2015).

For Kaymu the process was slightly different. Kaymu have specific sites for each country, but does not have a South African establishment. Hence, on Kaymu the selection was first based on countries Ghana, Uganda and Kenya and on each site 13 sellers were contacted. Five out of each group of thirteen were rated premium sellers (silver, gold or diamond seller) and they were intentionally contacted as it would yield interesting results in talking to both more and less successful sellers. The eight were selected from each product different product categories including fashion, health and beauty, sporting goods, computers, electronics, home and living, books and media and food and beverages in order to get a variety of companies Kaymu users were contacted from different product categories. 11 out of the total 39 sellers responded to the message sent on the website but only four resulted in actual interviews.

The difference of these platforms is quite evident. Kaymu have local domains for Ghana, Kenya and Uganda and intends to sell locally on each market, while eBay, Etsy and Alibaba users are left to use the international site with a .com domain. As mentioned in the previous section, no Alibaba users responded

All interviewed sellers, their location and company name can be found in annex D

4.4 The interviews

In case studies, interviews are a popular method to gather data, and are often the most important source of evidence. For case study interviews, the structure is seen as a guided conversation, rather than a sub set of exact questions that needs to be answered (Yin 2013). Hence, for this papers interviews were semi-structured and

in-depth with open-ended questions that where posed in similar ways but not necessarily in the same manner or order.

The interviews were furthermore organised around a pre-determined set of questions that can be found in Appendix E. During the course of the interviews, more information was added and knowledge was also gained, and thus questions where adopted and altered to better answer the research question. The first interviews were more basic than the latter ones which became more detailed. Hence, some questions from the first interviews are therefore not answered.

According to Yin (2013), questions for case study interviews should be defined at two levels. Level one inquiries are non-threatening and friendly questions that should be integrated with level two questions that posed with the goal to answer the research questions. This was also intended by letting the sellers tell their own story about how their business started and what they thought about it, before asking more barrier specific questions.

The questions are based on the literature and previously identified barriers, but also aimed at answering the research question without being too academic. By asking questions about investments, exports, delivery and payments and in what they would wish for to increase their sales and improve their business, you do not only learn about the format of the firm but also their external barriers and what they have done to overcome constraints. Moreover, the interviewees were also asked if they thought that they had a specific skill or why they had succeeded with their online shop. This allowed for the businessmen to define him or herself what he or she thought was the most important capability.

As a researcher, I have assumed to take an independent role in which I also seek to avoid influencing in any way possible. The subjects were allowed to speak freely on the matter and the aim was to make it less of a "formal" setting.

In total, 17 interviews were conducted with sellers in Ghana, Kenya, South Africa and Uganda, from the e-commerce platforms eBay, Etsy and Kaymu. Due to time limitations, and the distance between the author of this paper and Sub-Saharan Africa the interviews were conducted virtually and orally. The choice of communication was decided by the interviewee in order to use a method that they felt most comfortable using. The interviews were facilitated by internet and mobile communication technologies such as Skype, WhatsApp, Google Hangouts and

Facebook calls. Nonetheless, in a few cases, internet was too slow and traditional phone calls had to be made.

There are clear benefits of doing online qualitative research; it is not only practical and inexpensive, but also facilitating for people far apart to communicate as it overcomes the obstacles of time-zones and geography. Further, Crichton and Kinash (2003) argue that conducting online interviews can honour the environment in which the subject is working which fits well into this research on e-commerce companies. Nonetheless, online communication limited the possibility to interpret facial expressions and appearance including loudness and other actions of the interviewee (Crichton, Kinash 2003), and under optimal conditions a field study to the researched countries might have been preferable.

Approximately 30 to 40 minutes were spent on each interview, even though some were longer or shorter. Because all interviews were recorded (except from a few cases when the recording device failed to store the file) transcriptions were made possible. This format of interviewing allowed for follow-up questions and for clarification. This was sometimes needed due to the difficulties such as language barriers and bad connections. It should be mentioned that on a few occasions, it was hard to hear the interviewee and the differences in accents and levels of spoken English may pose a threats to the interpretation of the interviewee. In order to avoid such risk, the same question was often in asked in a different manner in order to clarify the right understanding.

Before conducting any interview, policy managers at each company were contacted in the search for collaboration between the author of this study and the companies. There was however no answer with a positive response of locating sellers for this study from Kaymu or Etsy, and no response were received from Alibaba. eBay, on the other hand, has been one of the collaborators of this paper and company representatives were helpful in sending out emails to sellers in the four studied countries.

5. Findings

The findings of this case study will be outlined by first describe some of the basic characteristics with the interviewed firms, followed by their reasons for being online and the benefits of conducting electronic commerce. Most interviewees said that they had engaged in e-commerce in order to reach a broader market.

Moreover, findings of identified barriers are however more diverse both between countries and firms, even though there of course also were many related cases. The structure of findings somewhat follows the literature's identification of e-commerce barriers. Many examples will be described using the sellers own words as it is vital to understand the firm's own viewpoint of the situation.

The 17 interviewed e-commerce firms all had different stories to tell, yet, many of the issues and concerns were of similar character. Even though the firms were contacted through a specific site, most of the interviewees used more than one marketplace, and also mixed between local and international ones. In total, 12 used Etsy, four eBay, four Kaymu, three Amazon, two Alibaba and the local sites TonaTon, OLX and Bonanza by two respectively three and one. A couple of businesses also mentioned that they use Facebook, Instagram, Twitter and Pinterest to market products but also connect to buyers.

All interviewed companies can be categorized as either micro or small firms and none were in the medium-size category. Most common was to be an individual seller but there are also examples with up to 13 employees. Two of the firms have more of a non-profit structure and those have 20 and 22 women engaged in doing crafts that they sell. Two tables with information on all the interviewed firms are found here below, as well as in Annex D.

The interviewees were in all cases the founder and the owner of the company except for the two that were organizations rather than firms. The interviewee at the Enkiito Maasai Jewelry is their financial officer who also is in charge of shipments and the coordinator and responsible for the web shop was interviewed at Hope Foundation.

Most companies were based in the capital of their country except for in South Africa were no of the interviewed companies had their business in Pretoria and were instead found in Cape Town, Hermanus and Oudtshoorn. Five Ghanaian companies had their base in Accra and one in Sunyani, four firms in Kampala,

Uganda and lastly three Kenyan firms in Nairobi and one in rural village Enkiito. Moreover, all of the firms sell products that they either make themselves, or that they buy at the local market or import from China or Dubai. On Etsy, all the interviewed firms' trade own produced goods such as handicraft or design, or that they locally manufacture or buy in the country. While the Kaymu sellers on the other hand import goods from China (normally Guangzhou) to resell them in their home market.

In general, the ones that buy local products or have own productions are international firms exporting their goods, while the importing firms tend to focus on the national market. This distinction is also found between online marketplaces. All Etsy, eBay and Amazon businesses engage in export while there the Kaymu firms are generally local. In total, 13 of the interviewed companies were exporting firms.

Furthermore, all interviewed firms in South African are exporting while two firms in Uganda, one in Kenya and one in Ghana only sell locally. Nine of the companies also had physical presence where they sold their goods from agents, in a local store or on markets. Lastly, all the firms were retailers but eight of them were also engaged in wholesale.

The tables 5 and 6 below show the detailed data of the interviewed firms.

Table 6: interviewed e-commerce firms (A)

Company	Location	Products	Started (founded/went online)	Employees	Wholesale/Retail	Store	Platforms
African Artique	Nairobi, Kenya	Maasai Shuka, Kikoy, towels, beads in colours and beaded sandals	March 2012	13 employees	Retain and wholesale	Only online	Etsy, eBay, Alibaba, Fotsi.com and own website
African Promoters	Nairobi, Kenya	Maasai crafts	nov-12	0 employees	Retail and few cases of wholesale	only online	Etsy, Amazon, eBay, Bonanza and Facebook
Afro Style Check	Sunyani, Ghana	Handmade Notebooks and braided items	2013	0 employees	Retail	Only Online	Etsy
Annie Hamman	Hermanus, South Africa	Paintings	March 2013	0 employees	Retail	both online and physical store	Etsy, Facebook and own website
Anonymous company	Accra, Ghana	Mainly women's watches but also shoes and parfumes	2014	2 employees	Retail	only online	Kaymu (used TonaTon and OLX before)
Anthony's Fashion and Style	Nairobi, Kenya	shoes, clothing and man accessories	2010	6 employees	Retail	Both online and physical store	Facebook, Instagram, Google plus, Pinterest and Kaymu
Cheesecake and Pi	Cape Town, South Africa	Digital art, graphics, posters	March 2014	0 employees	Retail	only online	Etsy
Diva Fashion Star	Kampala, Uganda	Ladies clothes	17th of April 2014	3 employees	Retail and wholesale	Both online and physical store	Kaymu & OLX
EJ African Products	Accra, Ghana	African beads, African fabric, shoes, handbags and necklaces	2014	3 employees	Retail and wholesale	Both online and physical store	eBay and Etsy
Enkiito Maasai Jewlery	Enkiito, Kenya	Maasai jewlery	January 2013	(20 engaged women)	Retail and few cases of wholesale (for charity events)	Only online	Etsy
Hope Foundation	Kampala, Uganda	Handbags, necklaces, earrings, bracelets and purses	2014	22 women in the network	Retail	Online and in local neighborhoods (no store)	Etsy
Laptech IT solutions	Accra, Ghana	sales, maintenance and repair of laptops in Ghana and sells Laptop accessories on eBay	2010 / 2013	3 student trainees	Retail	Both online and physical store	ebay, Tonaton and OLX
Moshel Beads	Accra, Ghana	Beads, necklaces and key chains (made from the beads)	2012 / 2013.	2 employees	Retail online wholesale to agents	Only Online (and agents that sell products in their stores)	Etsy
Namuli	Kampala, Uganda	Banana leaf bags	2005 / 2013	1 employee	Retail and wholesale	Both online and physical store	Etsy, Amazon, Alibaba Google and own website
Rizzofied Studio	Oudtshoorn, South Africa	Digital prints (to download or printed)	2014	0 employees	Retail and wholesale	Only Online	Etsy and Threadless
Victor's Enterprise	Kampala, Uganda	Watches	2010 / 2013	1 employee	Retail	Both online and physical store	Kaymu
Zoherous	Accra, Ghana	clothes (shorts, shirts, trousers)	2012 August	2 part time assistants	retail and few cases of wholesale	Only Online	eBay and Etsy

Table 7: interviewed e-commerce firms (B)

Company	Customer base	Acquiring products	Devices	Payment	Delivery	Part-time/Full time
African Artique	US and Europe	Produce them themselves	Phone and Computer	PayPal	-	Full time
African Promoters	US (80%), EU (15%) and other (5%) (no African countries)	buy the products from Maasai women	-	PayPal and MasterCard	Postal Service of Kenya	Part time
Afro Style Check	US, Canada, New Zealand and South Africa	Buys the books and makes the covers herself. Locally sourced materials	Her sister's or friend's computer in school. Otherwise phone and Etsy app	PayPal and Payoneer	National Postal Service	Student, part-time business
Annie Hamman	Nationally (South Africans) in Store Online US and Europe.	Makes products herself	computer and phone	PayPal	Postal Service	Part time
Anonymous company	Locally (Ghana), but had 1 customer in the US.	Import goods from China via AliExpress, and on the local market.	Computer, Tablet and Phone	COD (western Union for the one export)	Kaymu's own delivery, own delivery service. National postal service for export.	Part time
Anthony's Fashion and Style	National (Kenya)	Imports from China by people who go there	-	COD and M-Pesa	Personal rider, outside of Nairobi: bus couriers (Mash and Wells Fargo)	-
Cheesecake and Pi	US and Europe	Makes products herself	Computer	PayPal	Postal service	Part time
Diva Fashion Star	Uganda and Kenya	Imports from China by his own travels and from people who go there	Phone	COD and Mobile Money	Kaymu delivery and own delivery	Full time
EJ African Products	Local customers at the physical Store in Accra. Online customers from the US, Netherlands and the UK	-	Computer	-	National Postal Service	Full time
Enkiito Maasai Jewlery	USA, EU, Japan, Australia, China	20 women who make all of the jewelry	Computer in England, only Smartphone in the village	PayPal, Wester Union & M-Pesa	Postal Service	Part time (non-profit)
Hope Foundation	Canada (only 1 item sold online)	Makes products herself	Computer	PayPal	Postal Service	Full time
Laptech IT solutions	Physical store, Tonaton and OLX are local customers. eBay are abroad mostly in the US.	Buys second hand and new products from the US and China.	Laptop	PayPal	FedEx and DHL	Full time
Moshel Beads	Online customers in US	Make beads from locally-sourced materials from artisans in the community.	Computer	PayPal	National Postal Service	Part time
Namuli	Nationally (Uganda) in store and EU, USA, Australia online	produce themselves	Computer	Amazon credit card service or bank transfers	UPS within Uganda and Postal Service abroad	Part time
Rizzofied Studio	US, Australia and Europe	Makes products herself	Computer	PayPal	Postal Service	Part time
Victor's Enterprise	Nationally (Uganda)	Imports from China and Dubai by his own travels	Phone and tablet	COD and Mobile Money	Kaymu delivery	Full time
Zoherous	Canada, South Africa, England, USA and EU	Make clothes herself by fabric bought in local market	Computer, Smartphone and camera	PayPal and Payoneer	-	-

5.1 Benefits of e-commerce

All of the interviewed firms mentioned that online markets allow the business to reach a larger audience and a bigger market, and thus generate larger sales. The owner of the store African Artique in Nairobi explains that "*The main advantage is that you are open 24/7. And you are open to the whole world, not just a satellite in the world*".

The Ghanaian firm Zoherus further highlights that online stores are cheaper to set-up than a brick-and-mortar stores and two Kenyan firms have mentioned that the traditional price bargaining on the local markets does not happen online which makes them increase their sales (Interview African Promoters and African Artique). Two sellers also mention the fact that e-commerce sellers pay less tax, or simply may avoid it.

A couple of firms also mentioned the freedom and availability of working from home and working with something that they were passionate about. While others such as Annie Hamman in South Africa and Afro Style Check in Ghana mentioned the interaction with online customers that also can become friends as a particular positive experience.

Lastly, one of the interviewees representing Enkiito Maasai Jewelry explains that the village Enkiito is located in a very rural area. It consists of the ethnic group Maasai who do not have much possibilities of generating income. But the women in the village make traditional jewellery, which has become a source of income as they have started to sell online. The interviewee, Robyn, who is based in England and who together with the village initiated the Etsy shop explains that because of the village's location they have no tourist to sell the goods to, and setting up a stall somewhere also means a lot of competition. Online on the other hand, there are few people selling authentic Maasai jewellery made by Maasai people (Interview Enkiito Maasai Jewlery).

In conclusion, benefits of e-commerce have been identified as cost-efficient, more profitable, a broader market reach, freedom for the seller that they don't need a fixed location and the online conversations and the making of friends.

5.2 External Barriers

This part of the findings follows the structure of the literature review on external barriers to e-commerce but with the goal to integrate the findings with each country. This is important in order to be able to compare the findings and thus the institutional environment and barriers for each country in question.

5.2.1 International Trade

Only two firms mentioned issues related to international trade barriers in the interviews. First, the owner of the Etsy store Cheesecake and Pi mentions that how to deal with taxes and to declare foreign income from e-commerce is not clear. She states that "*It is difficult to find accounting advice, cause again it's a new field, and my accountants had never done that and so they had to do research. Had to figure out the VAT involved, how to file income earned overseas, royalties, is it VAT is it not VAT?"* (Interview Cheesecake and Pi, 2015).

Moreover, she reports that the 2015 new legislation on EU e-commerce VAT has been burdensome for her business. The law was established to simplify for small e-commerce sellers but for Cheesecake and Pi it has instead created more administrative burden. She had to close a shop on another online platform as she became responsible for collecting VAT and paying it to the appropriate EU country. "*That was just a nightmare for me*" she says. Afro Style Check in Ghana also notes tax issues. While the payment is set in dollars, tax has to be paid in Ghana Citi which according to the seller might result in an overcharge because of the currency rates.

From Uganda, the Namuli owner that produces banana leaf handbags and purses explains that there are problems with foreign regulations for exporting. "*It is very hard to have some products approved and the security checks are very strict even when the products pose no serious danger*" he states.

Hence, firms in Ghana, South Africa and Uganda have reported issues related to international trade barriers. Interesting is also that none of the interviewed sellers had ever experienced problems with customs, which is of the main barriers from previous studies.

5.2.2 Internet Access and Costs

While the anonymous company in Ghana believes that internet is expensive, other sellers describe it as ok, fast, convenient and to a manageable price. Observations

from trying to connect via Skype to the sellers make evident that it is not always functioning to 100%.

In Kenya, three of the interviewees uses wireless dongles or a mobile connection to access the internet, while one of the sellers had installed fibre broadband both at home and at his store. He complained about the fact that broadband was expensive "*internet is expensive here in Kenya that is a challenge*" he says (Interview Anthony's Fashion, 2015).

In Uganda, Victor's Enterprise describes the problem with internet access "*… it is a problem with the internet coverage that does not go all over the country"* and this picture is also confirmed by the owner of Namuli and Diva's Fashion Star whom explains that the connection is so slow that it can take hours to see what customers have ordered, and that is also very expensive (Interview Victor's Enterprise and Diva's Fashion Star, 2015). Lastly, all of the interviewed South Africans had Wi-Fi and did not complain about access or costs.

In summary Uganda was the only country where lack of internet access was mentioned, while complaints about internet being too expensive were found in Uganda, Kenya and Ghana.

5.2.3 Electricity

As the IMF has specified, that load shedding and electricity shortages are particularly problematic in Ghana and South Africa (IMF 2015). This has also been confirmed by this study where four of the Ghanaian and one of the South African firms stated that electricity affects their business in a negative way.

Belinda the owner of Zoherus that sells clothes from Accra in Ghana states that "*It is terrible, it is terrible! It means that in a week I have 3 days of electricity, it makes work hard. I was even thinking of getting some sort of generator, or solar panels or something. Cause the major problem is the electricity and it is the whole nation*". Ezikiel at Laptech IT Solutions in Ghana agrees and argues that buying a generator would be too costly. Interesting is, that one Ghanaian salesperson mention that electricity has never been an issue, and that he never thought of it as he uses power banks and have several devices to keep his business running (Interview Anonymous Company, 2015).

In South Africa, the power cuts come in 2.5 hour intervals explains Melissa at The Rizzofield Studio. This means that she can use her computer during the cuts, but is not however, able to check orders and which does affect her business very much.

Lastly, sellers in Uganda confirms that they occasionally also have power shortages, but that the situation has improved. For Kenya, one seller mentions power cuts is negative for the business and usually happens during the rainy seasons, while the other ones states that they had never had those problems. For the Maasai tribe in Enkiito there were originally no power but with installed solar panel they now have access to electricity (Interviews Anthony's Fashion, African Promoters, Namuli, and Enkiito Maasai Jewelry, 2015)

Thus, lack of electricity is an identified problem by sellers in all studied countries, even though the issue seem to be most burdensome in Ghana and South Africa.

5.2.4 Literacy and Skills

All of the interviewed sellers spoke English which naturally was a prerequisite to go through with the interview. This means that they have already overcome one obstacle. For the Maasai village Enkiito in Kenya, the situation is quite different. Robyn who represents the organization explains that her business partner Jackson is the only one in the village that speaks English, and is therefore needed for the business to run.

Moreover, Victor's at Victor's enterprise in Uganda argues that people are not aware of how to use the internet and that they need more education on how to make use of it. The low awareness and skills of online tools in the country is also the Anonymous Company in Ghana and by Victor's Enterprise who both would like more people to get to know about and how to use the internet.

Trust

As mentioned in the literature review, the capability to create trust is important for consumers to buy online. But the trust in e-commerce cannot be automatically linked to the country specific environment. Rather, there is a connection to the capability of the firm.

Two sellers, Anthony's Fashion in Kenya and Victor's enterprise in Uganda specifically mentioned trust issues and Victor stated that "*We need to build more trust between the seller and the buyer*", and how these firms worked with creating trust will be explained in the discussion chapter.

All the studied online marketplaces have developed a ranking system in order to differentiate firms on the platform. On Kaymu, sellers with more than two orders completed in last 30 days are Bronze seller, followed by silver (15 orders), Gold, (75 orders) and Diamond orders with more than 150 completed orders. This is shown on the sellers page as well as a five star rating where customers can leave comments about the firms and their experience (Kaymu.com 2016). Two of the interviewed firms were diamond sellers and two gold. They all had star rankings above 3.7.

Etsy has a similar system where byers get to review the sellers based on a five stars, one star being the lowest score and five the highest. A comment from the byer can also be added to the rating (etsy.com 2016). The interviewed Etsy firms were everything from firms without ratings to Liza Glanz with over 319 reviews.

Lastly, on eBay, byers can give feedback about sellers in form of a positive, neutral or negative rating. For each positive feedback, the seller gets one point which later accumulates into stars of different value. The highest star is obtained by firms that have received at least one million points, and the lowest consist of firms with 10-49 points. There are totally 12 different ranking categories (ebay.com 2016).

Marketing

Lastly, four companies mentioned that they did not know or that they wanted to improve their marketing skills. Annie Hamman wishes that she would have had those skills before she started the business as she thinks that it is difficult to market oneself on Etsy (Interview Annie Hamman, 2015)

Namuli in Uganda argues that they have the capacity to produce more products, but that they do not reach enough customers. "*We need knowledge in marketing, but that requires a big budget and that is a challenge we have right now*" (Interview, Namuli, 2015). EJ African Products in Ghana similar tells: *"… how to market on social media. That is something I want to learn, and I want to employ someone that can help me market my shop on Facebook and Twitter"* he says.

However, marketing skills are just like trust capabilities not directly associated with country specific environment and will therefore not be concluded as an external e-commerce barrier.

These findings indicate that there is still little knowledge about the internet and how to use online commercial tools. Moreover, there is a lack of how to promote

oneself on the internet among some of the interviewed sellers. How the firms themselves learned about online sales and became computer literate will be dealt with under the capabilities section.

5.2.5 Payments

PayPal is the most preferred payment method among the interviewed sellers and a total of eleven sellers report that they use it to sell their goods. If one has access to a credit card, setting up an account will be easy and African Promoters argue that it is easier and with better customer service than a Kenyan Bank (Interview African Promoters, 2015). Other popular methods are Cash on Delivery (COD) either by Kaymu's delivery service or by their own, but this option is only available for national sales. Lastly mobile payments such as M-pesa are also offered by four of the interviewed firms.

In total, six companies specifically mentioned that payment systems are a barrier to their business. In Ghana, the situation is particularly burdensome as PayPal is not available in the country and sellers have to be innovative and circumvent the blocking. The owner of Afro Style Check in Accra argues that having access to PayPal would cut down a lot of stress for her.

Nonetheless, PayPal is a private company and have chosen to do partnerships with banks for direct withdrawal. In South Africa, only First National Bank offers that service, and both Cheesecake and Pi and the Rizzofield Studios express that they were fortunate to have that service before they started their business (Interview Cheesecake and Pi and the Rizzofield Studios, 2015).

In Kenya, Robyn at Enkiito Maasai Jewlery explains that they have difficulties with sending money to the village for a similar reason. The Maasai people only have access to the mobile money system M-pesa and their problem is that M-pesa is not synced with PayPal. Hence, in order to receive their money, Robyn who is based in England access the money through PayPal, then withdraws it and send the money through Western Union to M-Pesa as Western Union and M-Pesa are interoperable systems (Interview Enkiito Masaii Jewlery, 2015). Lastly, two Ugandan sellers also mention payment issues, referring to the lack of credit cards which limits their use of receiving payments from international buyers (Interview Namuli and Hope Foundation, 2015).

In conclusion, Ghana, Uganda and Kenya experience problem with payments. Notable is that this is only for exporting firms as national firms use the COD.

5.2.6 Delivery

The delivery options generally vary depending on if the firm is an exporting company or not. Most of the exporting firms used the national post service of the country with a tracking number in order to follow the delivery. Three of the local selling firms in Uganda, Kenya and Ghana had developed their own delivery service in response to what they called slow or unreliable delivery (Interview Anonymous Company, Anthony's Fashion and Diva Fashion Star, 2015).

Ten of the interviewed companies have mentioned that delivery is a problematic issue. In Ghana, sellers have raised the issue of tracking post through the postal service. According to EJ African Products, there is an option of tracking the parcel using Ghana Post, however the system does not allow for online tracking. Moreover, when sending goods to the US, there is a lack of integration between the tracking services of Ghana Post and United States Postal Service (USPS).

African Promoters in Kenya and Namuli in Uganda are two examples of firms that raise the issue of slow, inefficient and costly postal service in their respective country. Exporting takes several weeks and they both report longer times for shipments to the US than to EU (Interview African Promoters and Namuli, 2015).

South African sellers also complain about lacking postal services. A four month strike in the beginning of 2015 resulted in undelivered, lost and rerouted packages, and when it works - it is too slow. According to Cheesecake and Pi it takes six to eight weeks for a parcel to reach the US and she also claims that steals have occurred. Moreover, Rizzofield Studies think that shipping costs are too expensive. There are also cases when goods have got lost in the mail, and Robyn from Enkiito Maasai Jewlery has experienced that US customers informing her that an envelope has arrived but ripped open and without the ordered jewellery.

Moreover, Kaymu offer service to the firms on its platform, which is or has been used by all the interviewed Kaymu sellers. Victor from Victor's Enterprise in Kampala, Uganda explains the process: "*When someone makes an order, I receive a message. Then I call up that person, to inform that I have that item in stock. Then I ask them if they want a delivery or pick-up, they have two alternatives. If they want delivery, Kaymu does the delivery. After that, I confirm the order, and then Kaymu*

sends a person to pick it up from my shop, and take it to the house. They give me a receipt and then after delivery they bring back the cash" (Interview Victor's Enterprise, 2015).

While this process works for Victor, others such as an Anonymous seller in Ghana and Diva Fashion Star in Uganda think that it takes too long before the item is delivered to the buyer, who then risk of losing interest. Therefore, these two firms have initiated their own delivery service.

To conclude, there is evidence that delivery is an issue in all studied countries, and both for exporting and nationally based firms.

5.2.7 Access to Capital

Access to capital has not been listed as an e-commerce barrier in the barriers to e-commerce chapter. However, when describing African institutions access to capital was mentioned as problematic for doing business, and Born Globals are also often lacking financial capital (Knight, Cavusgil 2004, World Economic Forum 2015)

This issue was also brought to the light by three companies in Ghana, Kenya and Ghana who mentioned that start-up capital was a problem. Anthony's Fashion in Nairobi is one firm that started out with nothing. He used to work at a bank and only had small savings, which he invested all in shoes to sell online. Other firms have borrowed money from friends in order to start their business (Interview Anonymous Company, 2015).

5.2.8 Summary

This case study found similar barriers in all countries, and as predicted there are also differences between the countries. There is a clear difference between South Africa and other three countries where firms have indicated more barriers. Uganda is the one country were all the previously identified barriers were found, followed by Ghana with seven out of eight barriers and Kenya with five. In South Africa, sellers only raised the issues of international trade, electricity and delivery. The latter barrier is together with lack of electricity, barriers that have been indicated by sellers in all studied countries. The table below illustrates these findings.

Table 8: Summary of Barriers

Barrier	Ghana	Kenya	South Africa	Uganda
International trade	☑		☑	☑
Internet Access				☑
Internet Cost	☑	☑		☑
Electricity	☑	☑	☑	☑
Low literacy and skills	☑	☑		☑
Payments	☑	☑		☑
Delivery	☑	☑	☑	☑
Start-up Capital	☑	☑		☑

6. Discussion

Previous literature has described that when formal institutions are weak, informal ones play a more significant role in shaping the market, business and political environment - an observation that also can also be found in this study. When the formal way of setting up a business is too complicated, sellers have sought for new innovative and less formal ways of doing so. When traditional delivery services does not work effectively enough, informal ones such as the creation of own delivery services make appearance. When the banking system is inefficient and when citizens lack access to credit cards they turn to new payment models such as mobile banking and e-wallets.

The institutional environment thus creates barriers that must be overcome for e-commerce to gain ground, and Zahra et.al. (2006) have argued that rapidly internationalizing firms have dynamic capabilities to change their behaviour and problem solving methods. Due to the fact that they exist in a continuously changing environment they have to learn and adapt to the institutions of its environment. Correspondingly, all interviewed firms confirm that e-commerce has been a learning process and thus some of the capabilities to overcome barriers have evolved over time.

This chapter will analyse some of the capabilities and resources found within the studied firms and how those have been used to overcome barriers in their respective location.

6.1 E-commerce barriers from an institutional perspective

According to Kahiya (2013), external barriers to trade can be divided into 1) home-based, 2) host-based and 3) industry level barriers to internationalization. This framework also fits with these identified barriers to e-commerce SMEs. Some of the previously identified barriers fit in to more than one category such as internet access that is both a home based-barrier and an industry level barrier, but in general e-commerce barriers can be categorized into the following.

First, **Home-based barriers** include delivery issues and lack of physical infrastructure, as well as lack of start-up capital, low skills and poor of internet access.

Secondly, **host-based barriers** are related to the international trade barriers and how to deal with foreign regulations, lack of tacking integration between postal services and taxes in foreign markets. But also that payments systems formed by foreign country platforms not available in the home market.

Lastly, **industry-level** barriers are in this case related to the digital divide and the low internet accessibility, but also to the limited use of internet in all the studied countries.

Although the reported barriers were of similar character across the studied nations, there is from this research also an indication that there are differences in the amount of e-commerce barriers between middle income countries on the one hand and low income countries on the other (as demonstrated in Table 7).

It is however more likely that South Africa stands out as more favourable because of a better and more stable institutional environment for e-commerce firms, as found in other examples such as its rank on the World Bank Doing Business Index (no.73). The similarities in barriers between the other three countries are however not totally reflected in their institutions. In the above mentioned Doing Business Index, Kenya ranks as number 105, followed by Ghana on place 114 and Uganda with number 122. On the contrary, following the internet penetration rates, differences in barriers between Kenya (32% internet penetration) and Uganda's (14,5%) and Ghana (12%) should be larger. Similarly, Uganda ranks higher than both Kenya and Ghana on the Logistic Performance Index.

Even though the institutional environment matters, some barriers might be related to other factors such as intra-country location or the choice of online platform. Therefore, future research could favourably look into this aspect to explore new indicators of e-commerce barriers. However, countries are the unit of analysis for this paper, and the following discussion will follow those lines.

6.2 E-commerce firms are Born Globals

As mentioned, 13 of the 17 firms engaged in exports. While some had clear strategies of targeting foreign customers, others were surprised over how many countries they sold to. In general, businesses sold to US and Europe, but also to Canada, Australia, New Zealand and South Africa (for non-South African firms). There were very few cases of intra-African trade.

African Promoters in Kenya is one of the firms with a clear exporting strategy. With the knowledge that that tourists like to buy Maasai items in Kenya she wanted to make those goods available for people who cannot afford to travel. That said, internationalization was also chosen to avoid price bargaining.

Interesting is also that the majority of the firms that target local customers have internationally sourced their products, and Guangzhou in China seems to be the preferred choice. Sellers explain this by the diversity in goods that can be bought from there but also because of the preferential price. Three of the importers have either travelled to China themselves or sent someone for them, and two of the importer buys their goods online through marketplaces such as AliExpress.

The studied firms have exported to, or imported from countries with different cultures, beliefs, institutions, far away from their home market. Consequently, this paper will pursue the argument that these international firms are so called Born Globals, defined as firms that "seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries" (McDougall, Shane et al. 1994). Moreover, the internationalization process of the studied firms has been fast and seven of them do not even have a local presence, but instead went straight online and have been exporting from day one.

The majority have not pursued a specific strategy to sell their goods to a particular region but rather used international online marketplaces with customers all over the world. According to an International Trade Centre (2015) report on e-commerce in Africa, online marketplaces can be an equalizing force between large and small companies and enable for African firms to reach international markets. For some firms it was the low start-up cost that stimulated them to go online rather than to establish a physical store.

One may thus reject that the interviewed firms have adapted the Uppsala Internationalization Model. This is also in line with Forsgren and Hagström's review of the model where they found that internet firms entered new markets based on maturity and internet usage rather than physical distance. The exporting firms studied in this paper are accordingly also exporting to countries with a higher internet penetration as demonstrated by the map in Annex E.

To conclude, all the interviewed firms had international engagement either from export or import activities. The firms either had an established physical presence

before going online where they only sold items locally or started out as an online business.

6.3 Capabilities to Establish Online Presence

To establish an online business, one first of all has to have knowledge of its existence. Secondly, some level of literacy and ICT capabilities are needed for set-up and management of the store. Morgan-Thomas and Reuber (2013) have argued that the internal capability with successful Global Online Entrepreneurs (GOEs) generally include ICT capabilities, entrepreneurial capabilities and orientation, innovativeness, marketing orientation and knowledge and learning.

Naturally, all the interviewees were English speakers and had an established an online presence which means that they possessed ICT knowledge. Yet, their stories reveal that this had not always been the case and this chapter therefore focuses on how to gain capabilities needed to set up an online shop.

6.3.1 Tangible resources

Tangible resources such a computer, tablet or phone are important factors to start up an online business. The majority of the interviewed sellers own a computer to run their business. However, not all of them had a computer to start with and before being able to afford one, the owner of Anthony's Fashion in Kenya used to run his business from a cyber café. Four of the sellers managed their business from a smartphone.

Moreover, having access to the internet is another, yet extremely necessary tangible resource. The option is between broadband and GSM/3G, and only one of the interviewed sellers, established in Nairobi had fibre broadband access. However, high cost and low coverage of internet has been mentioned by sellers in Ghana, Kenya and Uganda as problematic for e-commerce in their country. To make sure that they always have internet access, firms revealed that they had to upgrade their contract to get more data or bought a second device.

6.3.2 Intangible resources

Intangible resources are capabilities such as skills and knowledge. All interviewed firms had gone through learnings as a continuous process of their business, and interestingly many firms argued that they looked for answers on the internet. Belinda at Zoherus in Ghana states that "*most things I have learned online*", while Julius at EJ African Products confirms that "*Google helps me"*. Thus, many firms

that sought after more online marketing knowledge also went online to observe others or to browse for answers and guides.

One example of online learning is the Etsy handbook that the Rizzofield Studio used to set up her shop. "*The seller's handbook really gives you inside to what entails having an Etsy shop. It really is more than having a product and putting it on, it teaches you about SEO (search engine optimization) and having full descriptions , having a presentable shop and having more than a few products and on and on*" says Melissa, owner and founder.

Hope foundation in Uganda also explains that they look at other sellers on Etsy to get inspired and learn how they make things and market their products. The owner of Namuli further states that they use online forums with likeminded people to ask questions and learn from others. In comparison, Kaymu helps sellers to do marketing. The owner of Anthony's fashion explains that Kaymu helps out, using online social media. "*They promote it, maybe on Facebook or on Google and they do promotions on the items to make sure that they drive a lot of sales to me*."

Going back, sellers first needed the knowledge of how to set up an online store. While several of the interviewed sellers got inspired by other online sellers in their country, from having bought goods online or from looking at YouTube videos, Hezron at The African Artique in Kenya who always wanted to work online, started out by creating a webpage as a hobby.

For the Kaymu sellers, the start-up story tends to be different. Kaymu representatives contact shops on their location or on other online marketplaces to convince them to try Kaymu. Victor from Victor's Enterprise explains: "*The Kaymu people gave me the basics. I didn't know who they were and I had never heard about online business. An agent from them came to my shop he told me "you can sell your things online" … … they explained to me and I decided to give it a chance. Not knowing that it would take me this far, I just tried*".

Hope foundation in Uganda and Enkiito Maasai Jewlery in Kenya also got help from a third party person to set up their online store, in this case foreign volunteers. "*We started in a small way by making our purses that we sell to our neighbours, going in trade shops, but eventually we got a friend who told us about Etsy. That is a friend is called Anthony and he is from Canada. We opened it*

together with him and he taught how to use Etsy" says Grace who coordinates at Hope Foundation.

6.3.3 Summary: capabilities to establish online presence

The interviews indicate that capabilities needed to set up an online business relates to both the tangible and intangible resources found in the literature. Tangible resources including computers or other ICT devices and internet access and intangible resources such as ICT-knowledge are prerequisites to start an online business and to create sales. This knowledge may come from school as many of the interviewees have learnt to use computers there, from an interest in new technologies or by a third party person that introduces the technology.

In addition, marketing skills is another intangible and vital resource. The interviewees of the firms had not gone to business school to learn about marketing; instead they often searched on the internet to look for information on how to improve their sales or for other tips and recommendations. For Kaymu sellers however, marketing is handled by professionals at Kaymu. This guidance provided by both Etsy (handbook) and Kaymu fits well with the definition of online marketplaces that are supposed to facilitate for trade to take place.

In conclusion, that the tangible and intangible capabilities are somewhat interlinked for e-commerce firms. Tangible resources such as a computer, cell phone or tablet together with broadband or 3G are basic requirements for online access. While intangible resources such as ICT knowledge and skills are prerequisites for using the tangible resources.

6.4 Capabilities to overcome Infrastructural Barriers

Infrastructural barriers to e-commerce have been identified as internet infrastructure, electricity and deliveries, closely linked to the institutional environment of the countries. As mentioned above, infrastructural barriers of this type are identified as home-market barriers and this chapter will explore how some firms used their internal capabilities to overcome such barriers. Access to internet was described in the previous chapter as a tangible resource and will therefore not be illustrated further.

6.4.1 Electricity

As described in the literature review, electricity is one of the main concerns for businesses in Sub-Saharan Africa. Data from the Word Bank illustrate that this

barrier constitute of three problems: low access and insufficient capacity, poor reliability and high costs - factors that also were brought up by many of the interviewed firms.

Access to electricity is a tangible resource that allows for e-commerce firms to connect online (when using broadband) or to charge their ICT devices. However, many of the interviewed firms lack this tangible resource, and Diva Fashion Star in Uganda argues that having a laptop would be better than only having a phone as he believes that its battery would last him longer when the power goes off.

In Ghana, two firms suggested that investments in diesel generators would be the best solution to overcome this barrier; however, none of them could afford such an investment. Another interesting fact comes from the anonymous Ghanaian seller who argued that absence of electricity was not an issue for him. The best explanation to this is that he had already overcome that barrier without noticing, as he mentions the use of several different devices and power banks to charge during the power breaks. Lastly, Enkiito, the little village in Kenya, have overcome the total lack of electricity by installing their own solar panels.

In conclusion, interviewed firms who claimed that power cuts were problematic for their business had not taken any specific measures to improve their situation, while others had invested in tangible resources to decrease the effect of power cuts. It seems however; that all the countries are in more or less need of improving their infrastructure for electricity, which according to Blair (2015) will require governments to create a good environment and stable institutions for private investments in this area.

6.4.2 Delivery

Delivery infrastructure has been an identified barrier by both exporting and non-exporting firms in all the studied countries. For exporting firms, slow delivery, postal service strikes and lack of integration between national and foreign postal service tracking system have been identified issues. For national firms on the other hand, poor transport systems and too slow delivery by third party firms (Kaymu's delivery service in this case) are declared issues.

For exporting firms, the option of using private couriers exist, but several firms stated that regular postal service is already too expensive so sending though other ways would be impossible. Therefore, to fasten and simplify the delivery, Rizzofield

studios that make digital illustrations and prints mainly sell the digital files rather than printed products, to avoid high prices and long delivery times.

For firms whose market is national, the development of one's own delivery service seems to be a tangible resource developed by enterprises that want to improve their business capabilities. In total, three firms had initiated this service after learning about customer's needs and desires to receive the good as soon as possible.

Hence, one can argue that as formal delivery systems often do not fulfil the e-commerce requirements by being unreliable and unstable, firms turn to more informal and new methods of delivery. For example, the Anonymous Company in Ghana have invested in a motorbike to be able to do the deliveries himself, while Anthony's Fashion has a personal rider to deliver goods around Nairobi.

To summarize, capabilities to overcome infrastructural barriers tend to be related to the acquiring of tangible resources, such as employing someone to do the delivery or setting up one's own electricity supply. For exporting firms, sending a digital good is another way of overcoming delivery barriers. At the same time, most exporting firms sold a physical good which is why they are left to await better, cheaper and more efficient international transport and delivery systems.

6.5 Capabilities to overcome Payment Barriers

PayPal was the most preferred method for receiving payments by the interviewed firms; however, this is only the case for exporting firms, as all the national customers pay by Cash on Delivery (COD) or mobile money. For the sellers in Ghana, the unavailability to receive payments on PayPal is particularly burdensome. According to the International Trade Centre (2015), this restriction is not the result of government policy or company weakness but has rather been decided by the private owners of the service who determine transaction risks.

Interestingly, is however that all the Ghanaian firms that engage in exports still used a PayPal for their transactions, and were able to do so by circumventing the regulations. One seller had a sister in the US who was able to set up the account for her, while another one had studied in the US before and fortunately set up account while she lived there. Others have connected to friends that help them create a PayPal account from abroad.

What most of them have in common is that in order to receive the money, they also need to connect to the cross-border payments platform Payoneer. Payoneer issues prepaid MasterCards which allows for the seller to transfer the money from PayPal to his or her Payoneer account and thus withdraw the money in the local currency at home. The owner of Afro Style Check confirms that "*When I get the money, I have to go to my PayPal account, wait 3-5 days to transfer (to Payoneer) and then I have to withdraw. It would be much easier if PayPal was in Ghana.*"

PayPal seems to be an appreciated payment method by all of its users. It is referred to as a trusted and effective method to use, and the ability and knowledge to use e-wallets can also be seen as a way to overcome barriers in the banking institutions. Nonetheless, for Ghanaians it requires substantial knowledge, research and contacts in a foreign country to circumvent the PayPal restrictions.

Two of the Ugandan firms mention that they do not have credit cards, which is why they cannot set up a PayPal account. Hence, the firm Namuli tend to work more on Amazon for international customers as they "*accept payments on your behalf through protected credit card payments and then they send you the money through another service. That is a big help for us, and that is not available on Etsy*".

Lastly, most firms that sell their goods locally adhere to the COD method and Anthony from the Kenyan store Anthony's Fashion mention that customers prefer it as they get to see the item before they have to make a payment. But he also mentions that *M-pesa is also working quite well cause almost everyone here has it.*

With the low credit card penetration and the high level of unbanked people in the region, it comes as no surprise that traditional banking institutions and transfers were not used for receiving payments online by any of the interviewed sellers. Instead firms have adhered to more informal ways of receiving payments such as COD and mobile payments.

6.6 Learning outcomes and Dynamic Capabilities

Dynamic capabilities refer to a firm's ability to adapt competences to a changing environment and to have the internal capabilities to respond to new market demands. Born Global firms have to possess these skills in order to grow and survive on a broad international and dynamic market (Teece, Pisano 1994, Zahra, A. Sapienza et al. 2006). In many ways, dynamic capabilities seem to be closely linked to the idea about firms continuous learning and developing.

Julius with EJ African Products in Ghana explains that "*I have come to understand that we need to put in more professionalism in making the quality better to improve them (the products), which we have done already. Because you know, we are now dealing with the whole world. We needed more quality in our content in order to be able to compete in the world stage. So we have improved our quality and our professionality, and so we employed two more people*" (Interview EJ African Products, 2015).

Learnings can also be related to the creation of trust, which was a skill mentioned by many of the firms when asking them about learning outcomes. Possessing the right skills and capabilities to create trust between the firm and its buyers can be defined as an intangible resource of particular importance. As previously mentioned, gaining customer trust is especially important in the online environment where reputation relies to a great extent on opinion and perception (Meltzer 2014, International Trade Centre 2015).

Creating trust can be done in different ways. Victor's Enterprise and EJ African Products both argue that throughout the process, they have learned that it is important to be reliable and to thoroughly describe the listed item. In that way customers will become more satisfied with the product as they know what they have ordered.

An anonymous seller in Ghana further believes that trust is related to ratings. Ratings can also inspire people that never have bought products online to do so, and he states that he encourages buyers to give both good and bad reviews on his shop in order to inform other buyers. His reasoning is in line with eBay's (2012b) finding of the higher the ranks, the less buyers care about geographic distance.

Learning how to get good ratings, to create trust and adapt the product to customer needs is a capability related to both learnings and the ability to solve problems as they occur. Therefore, the argument that firms need to have dynamic capabilities to succeed in the online environment seems to fit with the studied firms.

Moreover, one can argue that the entire learning process of the e-commerce firms from set- up to marketing, sales and delivery is enabled by the firm's dynamic capabilities. Their ability to change and adapt to the local environment in terms of finding new ways to receive payments, adapting the quality to foreign customer

needs or developing an internal delivery service are capabilities that have evolved as an answer to a problem.

6.7 The role of an online marketplace

Lastly, gaining knowledge and learning about which platform to use can develop over time. Different online marketplaces provide different type of services and the interviewed sellers that had tested various platforms often had critique to either one of them.

For example, Etsy was promoted by the Rizzofield Studios for having a good interface and for only charging a small fee. While the Anonymous Company in Ghana criticizes one of his previous platform (TonaTon) where he in comparison to Kaymu, had to pay even if there were no sales. For Kaymu there is no listing fee, but in contrast Anthony from Kenya argues that Kaymu's ten percent commission is too high. Likewise, African Promoters diversified from only using eBay to open accounts at Etsy, Amazon and Bonanza as she believed that the commission for selling products was too expensive on eBay.

On the other hand, without these platforms, small firms would probably not have had the same ability to succeed. Online marketplaces seem to play an extremely important role as a facilitator and enabler for these small e-commerce firms.

First of all, online marketplaces allows for instant internationalization and for Sub-Saharan African firms to become part of international trade. The engagement with foreign firms and individuals have enabled for greater income but also transferring of knowledge as is forces the companies to improve in order to compete at the world market. Even for firms that do not export, a national online marketplace opens up to a nationwide market, which would not have been obtainable in a physical store.

Secondly, online marketplaces facilitate the marketing of products. Creating a website and to generate traffic to a site requires more advanced computer skills than to set up a store on an online marketplace. Once a product is listed on a site, it becomes searchable for customers in a whole new way, and as mentioned before some firms also specializes in marketing the products on social media.

Thirdly, by providing ratings and feedback to sellers, online marketplaces help to overcome trust issues. Again, an ordinary but unknown website would probably find it more difficult to create trust and appear as a reliable partner.

Forth, online marketplaces provide a solution for payments. Even though there are also barriers related to this issue, well-known third-party payment solutions and credit card systems are connected with online markets, which in turn create recognition and trust from buyers. Some online services also enables for COD.

Fifth, taxes are automatically calculated and dealt with on (at least some) online marketplaces. This facilitates for the seller who does not have to take the responsibility and knowledge about different countries' VAT regulations.

Finally, some of the studied marketplaces also offer delivery. With such an integrated system of services the firm reduces the hustle of working with several partners and dealing with lost or delayed goods as the marketplace has an increased responsibility towards the seller.

6.8 Analytic Summary

The interviewed firms all have international characteristics either from importing or exporting. The observation that none had followed traditional internationalization routes but rather were instant Born Globals with presence on international online marketplaces is interesting as it proves of the internet's capability of integrating firms into the international trade system.

Tangible and intangible resources play an important role for firms to overcome trade barriers and to succeed in the online environment, as well as having the capability to alter and change responses over time, so called dynamic capabilities. In this chapter, data from the interviews point to a few specific tangible and intangible resources that are good or necessary to have in order to overcome e-commerce barriers. These capabilities may also vary between exporting and non-exporting firms.

First, tangible resources such as access to electricity, access to ICT devices and internet are needed for all e-commerce firms. Few firms had however responded to the electricity barrier and thus lacked the resources to overcome this constraint.. Secondly, a firm's ability to create its own delivery service may also be important for local firms.

Regarding the intangible resources, these are often also linked to the aforementioned theory about dynamic capabilities. Such resources have primarily been identified as marketing and ICT skills which have been gained over time. This is knowledge that either can be obtained by learning from others or by outsourcing marketing to a third-party service, no seller report to have taken any specific course in the matter.

Moreover, credit card ownership, or access to PayPal is sought after by many firms as a tangible resource that it opens up a new world of receiving payments. In the absence of such access, firms have developed dynamic capabilities to bypass regulation to still enter into the system.

Lastly, third-party online marketplaces also seem to play an important role in transferring knowledge and facilitating for firm's online success. By providing a range of services, businesses

6.8.1 Future research

As mentioned earlier in this paper, differences between firms perception of the barriers may not always be explained by countries institutional environment and it is therefore encouraged to develop firm capabilities further by also analysing intra-country differences and comparing the use of different online platforms.

Moreover, this paper has only analysed e-commerce sales of physical goods. But it would be equally interesting to observe service firms and to compare barriers and capabilities between products and services.

Lastly, another interesting feature would be to analyse firms in countries with extremely low internet access to see how firms are able to emerge, survive and cope in such an unfavourable e-commerce environment.

7. Conclusion

With Africa's young population, increasing middle class and growing internet use, there is clear potential for growth in the e-commerce sector. The internet and online marketplaces serve as facilitators for SMEs to internationalise and bring growth to their respective economy.

In Sub-Saharan Africa however, SMEs businesses are not sufficiently supported in developing e-commerce practices and many firms may not even make it to the internet because of the low accessibility and knowledge about online opportunities.

This paper has intended to explore both internal capabilities of firms and e-commerce barriers in Sub-Saharan Africa in order answer the research question of *what are the external barriers for e-commerce facing SMEs in Sub-Saharan Africa, and how do firms overcome those constraints?*

Even though it is not possible to generalize to all e-commerce SMEs in Sub-Saharan Africa from this study, the findings from this paper's analysis should not be neglected. In total this paper has been able to detect eight e-commerce barriers related to the intuitional environment. These are identified as 1) International Trade Barriers, 2) Lack of Internet Access 3) High Internet Cost 4) Lack of Electricity 5) Low Literacy and Skills 6) Payment Barriers 7) Insufficient Delivery Services and 8) Barriers to access Start-up Capital.

Small and Medium-sized Enterprises then use their internal capabilities to overcome these constraints. Some of the capabilities are related to physical assets such as electrical power while others are intangible knowledge related skills such as overcoming payment barriers by adopting new methods, and sometime innovative ways to receive money.

Lastly, using online marketplaces' services are common ways to overcome barriers, and the facilitating force of these intermediaries cannot be overstated. As these third-party e-commerce sites have incorporated foreign tax rates, marketing platforms, and delivery services into their offer, one can conclude that they provide an important role in helping firms overcoming barriers to e-commerce.

This thesis has revealed that online firms tend to be so called Born Globals as immediately gain global presence by being on the internet. Hence their internationalization process is rapid and enabled by online marketplaces.

Gaining the necessary skills and competences to set up an e-commerce firm often come from a friend, a similar business or by online marketplaces themselves. A couple of businessmen mentioned that they had learned how to use computers in school but a part from that, government or state-led initiatives seem to have been absent for the interviewed firms. Rather, information from businesses such as online material, guidebooks and personal meetings have encouraged and raised capabilities of the studied firms.

There thus seems to be an open space for governments that want to help e-commerce SMEs to increase their knowledge and understanding of e-commerce. The following chapter will give four particular recommendations in this area.

8. Recommendations

Some important elements of this thesis were recently highlighted UNCTADs 2015 Information Economy Report. It concludes that developing country governments should pay special attention to micro and small enterprises when regulating the e-commerce environment for two reasons: these firms are among those who are likely to benefit the most out of policies and legislations that facilitates for e-commerce, and they are also the ones often lagging behind in adopting online sales instruments. Lastly, UNCTAD also concludes that the identification of main barriers and its underlying dynamics are essential to help policy makers adopt the right measures (UNCTAD 2015b).

Therefore, this paper has given a voice to e-commerce SMEs, and studied both their barriers and needs for an improved environment. I will give four recommendations to policy makers based on the information received from the interviewees. Even though a case study based on information from 17 firms' wishes and concerns cannot generalize across an entire country, it still gives an indication of the problems perceived and actions that could improve for e-commerce SMEs.

First, **electricity access needs to be improved**. Africa has a huge potential in building out renewable power sources such as solar panels and should take advantage of this in electrifying larger parts of society.

Decrease the digital divide: enable for more people to learn about the possibilities of e-commerce by including computer literacy and ICT related skills such as online marketing through education, as well as decrease tax on ICT products. Evidence from Colombia that removed all VAT on personal computers (PC) saw a 110 % increase in PC sales, and 83 % rise in tax revenue benefits from ICT related technologies (Dutta, Geiger et al. 2015).

Simplify the tax system. One seller even suggests that she wants the government to give out a handbook on how to deal with income from foreign sales. For e-commerce to truly flourish, sound regulations needs to be taken on this matter so that taxes will not lay a second burden in forms of higher levels.

Improve delivery services: increased coordination between countries' national postal services would facilitate for tracking parcels across borders. Within nations, improvements in road and infrastructure would also improve for already existing delivery services

Moreover, the issue of **payments** should not be forgotten. Here however, online marketing platforms targeting markets with low credit card penetration need to make sure that they offer other forms payment methods such as mobile payments to increase the chance of expansion in the country. Moreover, synchronizing existing payment methods with mobile money options could also become profitable in the longer run.

Lastly, as this paper is based on a firm-level analysis, I also intend to give recommendations to SMEs in the studied countries that want to engage in or improve their e-commerce activities. The decision on which online marketplace to use is vital. If the products are aimed at foreign customers a firm should try an international platform with a broad user base, compared to locally based e-commerce sites that would rather give national customers.

If one targets fellow citizens online, there is still a chance of grasping first-mover advantages, while larger international platforms probably have a higher degree of competition. It therefore becomes ever more important to create trust so that buyers with no or little knowledge about the firm and its location can complete a purchase.

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10. Interviews

- Annie at **Annie Hamman** in Hermanus South Africa. Interviewed by Sara Holmberg *on March 16th, 2015*
- Belinda at **Zoherous** in Accra, Ghana. Interviewed by Sara Holmberg on *April 17th, 2015*
- Derrek at Diva Fashion Star in Kampala, Uganda. Interviewed by Sara Holmberg *on July 7th, 2015*
- Ezekiel at **Laptech IT** solutions in Accra, Ghana. Interviewed by Sara Holmberg on *April 23rd, 2015*
- Seller at **Anonymous Business** in Accra, Ghana. Interviewed by Sara Holmberg on *July 1st 2015*
- Grace at **Hope foundation** in Kampala, Uganda. Interviewed by Sara Holmberg on *March 13th, 2015*
- Herzon at the **African Artique** in Nairobi, Kenya, Interviewed by Sara Holmberg on *March 13th, 2015*
- Jackie at **African Promoters** in Nairobi, Kenya. Interviewed by Sara Holmberg on *April 22nd, 2015*
- Julius at **EJ African Products** in Accra, Ghana. Interviewed by Sara Holmberg on *March 16th, 2015*
- Liza at **Cheescake and Pi** in South Africa. Interviewed by Sara Holmberg on *April 15th, 2015*
- Lubowa at **Namuli** in Kampala, Uganda. Interviewed by Sara Holmberg on *March 30th, 2015*
- Melissa at the **Rizzofield** in South Africa. Interviewed by Sara Holmberg on *April 16th, 2015*
- Rebecca at **Moshel Beeds** in Accra Ghana. Interviewed by Sara Holmberg on *March 16th, 2015*
- Robyn at **Enkiito Maasai Jewelry** in Inkito, Kenya (Robin based in England) Interviewed by Sara Holmberg on *March 13th, 2015*
- Theresa at **Afro Style Check** in Sunyani, Ghana. Interviewed by Sara Holmberg on *March 16th, 2015*
- Victor at **Victor's Enterprise** in Kampala, Uganda. Interviewed by Sara Holmberg on *July 1st, 2015*

11. Appendices

A. Country Factsheets

Ghana

Economy	
GDP current prices in millions of USD (2013)	48,137 USD
GDP growth (2013)	7.6%
GDP/capita (2013)	1858,242598 USD
PPP gross national income (GNI)/ capita USD (2013)	3,9 USD
Net ODA received / capita in current USD (2013)	51 USD

Trade	
Total merchandise trade export in USD (2014)	12548 USD
Export of goods and services as percent of GDP (2014)	51,9%
ICT goods exports % of total goods exports (2013)	0,2%
ICT goods imports % total goods imports (2013)	3,8%

Demography	
Population (2013)	25.9 million
Poverty headcount ratio at $2 a day (PPP) (% of population) (2005)	51,8%
Adult literacy rate (% of people 15 years and above) (2010)	71%

Finance and Banking	
FDI net inflow in USD (2013)	3,227,000,000
Share of individuals with credit card (15 years and older) (2011)	2,2

ICT access and use	
Mobile subscriptions / 100 habitants (2013)	108,2
% of individuals using the internet (2013)	12,3%
Average fixed-broadband prices as a % of household consumption expenditure (2013)	No data

Kenya

Economy	
GDP current prices in millions of USD	55,243
Real GDP growth (2014)	5,7%
GDP/capita USD (2013)	1245,512041
PPP gross national income / capita USD (2013)	2,78
Net ODA received / capita in current USD (2013)	73

Trade	
Total merchandise trade export in USD (2014)	6133
export of goods and services as percent of GDP (2014)	17,3%
ICT goods exports % of total goods exports (2010)	1,4%
ICT goods imports % total goods imports (2010)	7,2%

Demography	
Population million (2013)	44.4
Poverty headcount ratio at $2 a day (PPP) (% of population) (2005)	67,2
Adult literacy rate (% of people 15 years and above) (2007)	72%

Finance and Banking	
FDI net inflow in USD (2013)	514,387,425
Share of individuals with credit card (15 years and older) (2011)	6,1

ICT access and use	
Mobile subscriptions / 100 habitants (2013)	70,6%
% of individuals using the internet (2013)	32,10%
Average fixed-broadband prices as a % of household consumption expenditure (2013)	No data

South Africa

Economy	
GDP current prices in millions of USD (2013)	366,057
Real GDP growth	2,2%
GDP/capita	6617,911609
PPP gross national income / capita USD (2013)	12,53
Net ODA received /capita in current USD (2013)	24

Trade	
Total merchandise trade export in USD (2014)	91047
export of goods and services as percent of GDP (2014)	31%
ICT goods exports % of total goods exports (2013)	1,2%
ICT goods imports % total goods imports (2013)	8,2%

Demography	
Population million (2013)	53,2
Poverty headcount ratio at $2 a day (PPP) (% of population) (2011)	26,2
Adult literacy rate (% of people 15years and above) (2012)	93,7%

Finance and Banking	
FDI net inflow in USD (2013)	8,118,153,643
Share of individuals with credit card (15 years and older) (2011)	7,8

ICT access and use	
Mobile subscriptions / 100 habitants (2013)	147,5
% of individuals using the internet (2013)	41%
Average fixed-broadband prices as a % of household consumption expenditure (2013)	3,4%

Uganda

Economy	
GDP current prices in millions of USD (2013)	24,703
Real GDP growth	3.3%
GDP/capita	571,9600416
PPP gross national income / capita USD (2013)	1,63
Net ODA received per capita in current USD (2013)	45

Trade	
Total merchandise trade export in US dollars (2014)	2270
export of goods and services as percent of GDP (2014)	21,2
ICT goods exports % of total goods exports (2013)	2,3%
ICT goods imports % total goods imports	5,4%

Demography	
Population million (2013)	37.6
Poverty headcount ratio at $2 a day (PPP) (% of population) (2012)	62,9
Adult literacy rate (% of people 15 years and above) (2010)	73%

Finance and Banking	
FDI net inflow in USD (2013)	1,194,398,346
Share of individuals with credit card (15 years and older) (2011)	1,6

ICT access and use	
Mobile subscriptions / 100 habitants	44,1
% of individuals using the internet	14,69%
Average fixed-broadband prices as a % of household consumption expenditure (2013)	15,11 %

B. Sub-Saharan Africa: Economy

Country	Income Group	Population in million (2013	GDP/Capita USD (2013)	Export of goods and services % of GDP (2014)	GDP growth % (2013)	GNI/capita USD (2013)	Global Competitive-ness Index	Doing Business Index
Angola	UMI	21.5	5783,36676	48,2	6.8	5170	3.04	41,85
Benin	LI	10.3	804,6924986	16,3	5.6	790	..	51,1
Botswana	UMI	2.0	7315,019289	50,9	5.8	8080	4.15	64,87
Burkina Faso	LI	16.9	683,9484018	…	6.6	660	3.21	48,36
Burundi	LI	10.2	267,11	8,3	4.6	260	3.09	51,07
Cabo Verde	LMI	0.5	3767,115364	48,5	0.5	3590	3.68	57,94
Cameroon	LMI	22.3	1328,640205	27,1	5.6	1290	3.66	49,58
Central African Republic	LI	4.6	333,1968806	14	-36.0	320	..	34,47
Chad	LI	12.8	1053,662501	36,6	4.0	1000	2.85	37,25
Comoros	LI	0.7	814,9571488	15,5	3.5	840	..	49,56
Congo, Dem. Rep.	LI	67.5	484,2114713	41	8.5	400	..	40,6
Congo, Rep.	LMI	4.4	3167,045322	77	3.4	2590	..	43,29
Côte d'Ivoire	LMI	20.3	1528,937539	38,6	8.7	1450	3.67	52,26
Equatorial Guinea	HI	0.8	20581,60594	83,3	-4.8	14320	..	49,01
Eritrea	LI	6.3	543,8219083	17	1.3	490	..	33,16
Ethiopia	LI	94.1	505,0457458	13,8	10.5	470	3.60	56,31
Gabon	UMI	1.7	11571,08292	47,9	5.9	9670	3.74	53,43
Gambia	LI	1.8	488,5655946	23	4.8	500	3.53	54,81
Ghana	LMI	25.9	1858,242598	51,9	7.6	1770	3.71	65,24
Guinea	LI	11.7	523,1190322	21	2.3	460	2.76	47,42
Guinea-Bissau	LI	1.7	563,7527714	18,8	0.3	590	..	43,21
Kenya	LI	44.4	1245,512041	17,3	5.7	1160	3.39	54,98
Lesotho	LMI	2.1	1125,586427	40,6	5.5	1590	3.73	56,64
Liberia	LI	4.3	454,3374834	34,1	11.3	390	..	46,61
Madagascar	LI	22.9	462,9689428	33	2.4	440	3.41	49,25
Malawi	LI	16.4	226,4551027	35	5.0	270	3.25	49,2

LI= Low Income, LMI= Lower Middle Income UMI = Upper Middle Income, HI = High Income
Global Competitiveness Index score (lowest) 1-7 (best competitiveness)

Mali	LI	15.3	715,133813	23	2.1	690	3.43	52,59
Mauritania	LMI	3.9	1068,974597	..	6.7	1320	3.00	44,21
Mauritius	UMI	1.3	9202,517324	52,7	3.2	9570	4.52	74,81
Mozambique	LI	25.8	605,0341744	39,1	7.4	610	3.24	56,92
Namibia	UMI	2.3	5693,129154	42,2	5.1	5850	3.96	62,81
Niger	LI	17.8	415,4173218	21,3	4.1	410	..	47,63
Nigeria	LMI	173.6	3005,513796	14,9	5.4	2690	3.44	47,33
Rwanda	LI	11.8	638,6657954	15,5	4.7	630	4.24	70,47
São Tomé and Principe	LMI	0.2	1609,823339	9,3	4.0	1470	..	50,75
Senegal	LMI	14.1	1046,586426	28,1	2.8	1050	3.70	49,37
Seychelles	UMI	0.1	37,2670517	77	5.3	13430	3.93	63,16
Sierra Leone	LI	6.1	678,9609045	42,7	5.5	680	3.10	54,58
Somalia	LI	10.5	..	..	..	..	..	
South Africa	UMI	53.2	6617,911609	31	2.2	7410	4.35	71,08
South Sudan	LMI	11.3	1044,991678	53,3	13.1	940	..	35,72
Sudan	LMI	38.0	1753,38091	..	-6.0	1690	..	49,55
Swaziland	LMI	1.2	3034,223184	51,7	2.8	2760	3.55	59,77
Tanzania	LI	49.3	694,7711797	26,1	7.3	840	3.57	56,38
Togo	LI	6.8	636,43645	44,9	5.1	530	..	51,29
Uganda	LI	37.6	571,9600416	21,2	3.3	600	3.56	51,11
Zambia	LMI	14.5	1844,799139	46,4	6.7	1780	3.86	59,65
Zimbabwe	LI	14.1	953,3806071	30,9	4.5	860	3.54	46,95

C. Sub-Saharan Africa: e-commerce indicators

Country	Individuals using the internet (2013)	Mobile cellular subscription /100 habitants (2013)	Fixed (wired) broadband subscription /100 habitants (2013)	UNCTAD e-commerce Index Value	Network Readiness Index	PayPal Available	Online Freedom Index
Angola	16,94	61,8732971	0,1	23.9	2.5	yes	Partly Free
Benin	4,50	93,2578219	0,05	12.5	..	yes	..
Botswana	11,50	160,641053	1,07	19.6	3.4	yes	..
Burkina Faso	3,73	66,3772829	0,08	10.1	2.8	yes	..
Burundi	1,22	24,9625881	0	7.7	2.4	yes	..
Cabo Verde	34,74	100,112448	4,25	..	3.8	yes	..
Cameroon	5,70	70.4	0,22	13.0	3.0	yes	..
Central African Republic	3,00	29,4665755	0	7.1	..	yes	..
Chad	2,10	35,5643768	0,11	..	2.4	yes	..
Comoros	5,98	47,2842511	0,18	13.0	..	yes	..
Congo, Dem. Rep.	1,68		0	8.0	..	yes	..
Congo, Rep.	6,11	104,769504	0,01	..	..	yes	..
Côte d'Ivoire	2,38	95.4	0,28	..	3.2	yes	..
Equatorial Guinea	13,94	67,4733889	0,46	..	..	no	..
Eritrea	0,80	5,60297546	0	..	..	yes	..
Ethiopia	1,48	27,2546854	0,25	..	2.9	yes	Not Free
Gabon	8,62	214,750038	0,53	16.7	3	no	..
Gambia	12,45	99,9766937	0,02	..	3.3	yes	Not Free
Ghana	12,30	108,191148	0,27	21.1	3.5	no	..
Guinea	1,49	63,315039	0,01	6.4	2.4	yes	..
Guinea-Bissau	2,89	74,0910251	0	..	..	yes	..
Kenya	32,10	70,5894285	0,13	15.6	3.8	yes	Free
Lesotho	4,59	86,3015283	0,11	10.1	3	yes	..
Liberia	3,79	59,5097852	0	12.0	..	no	..

Madagascar	2,05	36,1336961	0,06	28.9	2.7	yes	..
Malawi	4,35	32,3301594	0,03	10.8	2.8	yes	Partly Free
Mali	2,17	129,066937	0,02	27.6	3	yes	..
Mauritania	5,37	102,527456	0,19	..	4.5	yes	..
Mauritius	35,42	123,239819	12,54	57.0	4.5	yes	..
Mozambique	4,85	48,0042156	0,07	21.1	2.9	yes	..
Namibia	12,94	110,214365	1,47	..	3.5	yes	..
Niger	1,41	39,2922097	0,04	7.4	..	yes	..
Nigeria	32,80	73,2919616	0,01	27.5	3.2	yes	Partly Free
Rwanda	8,02	56,800794	0,02	13.9	3.9	yes	Partly Free
São Tomé and Principe	21,57	64,939661	0,51	..	..	yes	..
Senegal	19,20	92,9279827	0,76	17.1	3.3	yes	..
Seychelles	47,08	147,342683	12,94	..	4.0	yes	..
Sierra Leone	1,30	44,1343877		33.5	..	yes	..
Somalia	1,38	49,3826784	0,56	..	..	yes	..
South Africa	41,00	147,464517	3,06	48.5	4.0	yes	Free
South Sudan		25,2583596	0	..	..	no	..
Sudan	21,00	72,8523129	0,12	11.9	..	no	Not Free
Swaziland	20,78	71,4677867	0,34	22.2	3.0	yes	..
Tanzania	3,95	55,7179315	0,11	11.4	3.0	yes	..
Togo	4,00	62,5349018	0,1	12.9	..	yes	..
Uganda	14,69	44,0906907	0,11	13.7	3.2	yes	Partly Free
Zambia	13,47	71,5046318	0,09	30.6	3.2	yes	Partly Free
Zimbabwe	17,09	96,3498668	0,73	28.8	3.1	yes	Partly Free

D. List of Interviewed Firms

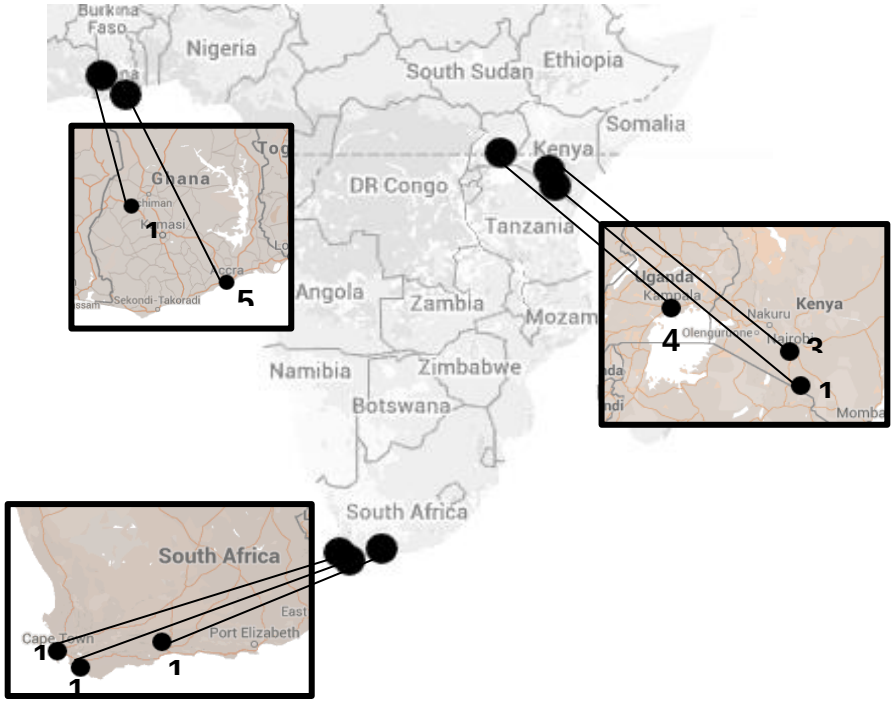
Company	Location	Products	Started (founded/ went online)	Employees	Wholesale /retail?	Store	Platforms
African Artique	Nairobi, Kenya	Maasai Shuka, Kikoy, towels, beads in colours and beaded sandals	March 2012	13 employees	Retain and wholesale	Only online	Etsy, eBay, Alibaba, Fotsi.com and own website
African Promoters	Nairobi, Kenya	Maasai crafts	November 2012	0 employees	Retail and few cases of wholesale	Only online	Etsy, Amazon, eBay, Bonanza and Facebook
Afro Style Check	Sunyani, Ghana	Handmade Notebooks and braided items	2013	0 employees	Retail	Only Online	Etsy
Annie Hamman	Hermanus, South Africa	Paintings	March 2013	0 employees	Retail	Both online and physical store	Etsy, Facebook and own website
Anonymous company	Accra, Ghana	Mainly women's watches but also shoes and perfumes	2014	2 employees	Retail	Only online	Kaymu (used TonaTon and OLX before)
Anthony's Fashion and Style	Nairobi, Kenya	shoes, clothing and man accessories	2010	6 employees	Retail	Both online and physical store	Facebook, Instagram, Google plus, Pinterest and Kaymu
Cheesecake and Pi	Cape Town, South Africa	Digital art, graphics, posters	March 2014	0 employees	Retail	Only online	Etsy
Diva Fashion Star	Kampala, Uganda	Ladies clothes	17th of April 2014	3 employees	Retail and wholesale	Both online and physical store	Kaymu & OLX
EJ African Products	Accra, Ghana	African beads, African fabric, shoes, handbags and necklaces	2014	3 employees	Retail and wholesale	Both online and physical store	eBay and Etsy
Enkiito Maasai Jewlery	Enkiito, Kenya	Maasai jewlery	January 2013	(20 engaged women)	Retail and few cases of wholesale (for charity events)	Only online	Etsy
Hope Foundation	Kampala, Uganda	Handbags, necklaces, earrings, bracelets and purses	2014	22 women in the network	Retail	Online and in local neighborhoods (no store)	Etsy
Laptech IT solutions	Accra, Ghana	sales, maintenance and repair of laptops in Ghana and sells Laptop accessories on eBay	2010 / 2013	3 student trainees	Retail	Both online and physical store	ebay, Tonaton and OLX
Moshel Beads	Accra, Ghana	Beads, necklaces and key chains (made from the beads)	2012 / 2013.	2 employees	Retail online wholesale to agents	Only Online (and agents that sell products in their	Etsy

						stores)	
Namuli	Kampala, Uganda	Banana leaf bags	2005 / 2013	1 employee	Retail and wholesale	both online and physical store	Etsy, Amazon, Alibaba Google and own website
Rizzofied Studio	Oudtshoorn, South Africa	Digital prints (to download or printed)	2014	0 employees	Retail and wholesale	Only online	Etsy and Threadless
Victor's Enterprise	Kampala, Uganda	Watches	2010 / 2013	1 employee	Retail	both online and physical store	Kaymu
Zoherous	Accra, Ghana	clothes (shorts, shirts, trousers)	2012 August	2 part time assistants	retail and few cases of wholesale	Only Online	eBay and Etsy

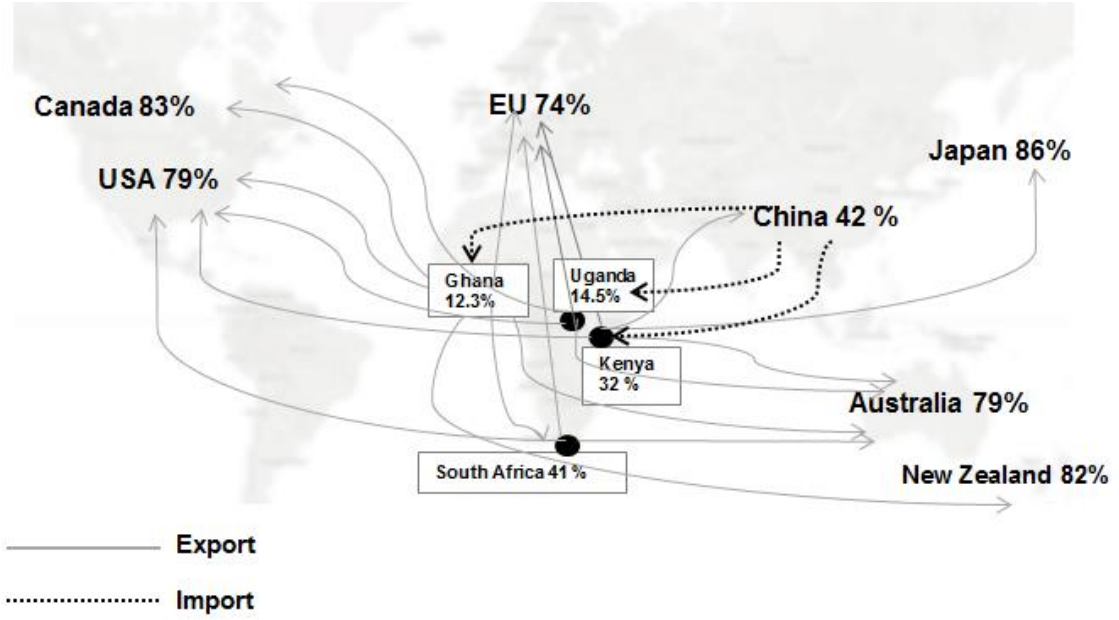
Company	Customer base	Acquiring products	Devices	Payments	Delivery	part/full time
African Artique	US and Europe	Produce them themselves	Phone and Computer	PayPal	-	Full time
African Promoters	US (80%), EU (15%) and other (5%) (no African countries)	buy the products from Maasai women	-	PayPal and MasterCard	Postal Service of Kenya	Part time
Afro Style Check	US, Canada, New Zealand and South Africa	Buys the books and makes the covers herself. Locally sourced materials	Her sister's or friend's computer in school. Otherwise phone and Etsy app	PayPal and Payoneer	National Postal Service	Student, part-time business
Annie Hamman	Nationally (South Africans) in Store Online US and Europe.	Makes products herself	computer and phone	PayPal	Postal Service	Part time
Anonymous company	Locally (Ghana), but had 1 customer in the US.	Import goods from China via AliExpress, and on the local market.	Computer, Tablet and Phone	COD (western Union for the one export)	Kaymu's own delivery, own delivery service. National postal service for export.	Part time
Anthony's Fashion and Style	National (Kenya)	Imports from China by people who go there	-	COD and M-Pesa	Personal rider, outside of Nairobi: bus couriers (Mash and Wells Fargo)	-
Cheesecake and Pi	US and Europe	Makes products herself	Computer	PayPal	Postal service	Part time
Diva Fashion Star	Uganda and Kenya	Imports from China by his own travels and from people who go there	Phone	COD and Mobile Money	Kaymu delivery and own delivery	Full time
EJ African Products	Local customers at the physical Store in Accra. Online customers from the US, Netherlands and the UK	-	Computer	-	National Postal Service	Full time
Enkiito Maasai Jewlery	USA, EU, Japan, Australia, China	20 women who make all of the jewelry	Computer in England, only Smartphone in the village	PayPal, Wester Union & M-Pesa	Postal Service	Part time (non-profit)
Hope Foundation	Canada (only 1 item sold online)	Makes products herself	Computer	PayPal	Postal Service	Full time
Laptech IT solutions	Physical store, Tonaton and OLX are local customers. eBay are abroad mostly in the US.	Buys second hand and new products from the US and China.	Laptop	PayPal	FedEx and DHL	Full time
Moshel Beads	Online customers in US	Make beads from locally-sourced materials from artisans in the community.	Computer	PayPal	National Postal Service	Part time
Namuli	Nationally (Uganda) in store and EU, USA, Australia online	produce themselves	Computer	Amazon credit card service or bank transfers	UPS within Uganda and Postal Service abroad	Part time
Rizzofied Studio	US, Australia and Europe	Makes products herself	Computer	PayPal	Postal Service	Part time
Victor's Enterprise	Nationally (Uganda)	Imports from China and Dubai by his own travels	Phone and tablet	COD and Mobile Money	Kaymu delivery	Full time
Zoherous	Canada, South Africa, England, USA and EU	Make clothes herself by fabric bought in local market	Computer, Smartphone and camera	PayPal and Payoneer	-	-

E. Maps of location and trade flows

Map of the firms' location



Map of exports and imports as well as internet penetration



F. Questions for sellers

Background

Name and country (location) of Business (anonymous or not):
Main product(s):
Your role in the company:
Number of employees:
Wholesale/Retail:
Income or revenue:
Registered business:

- Tell me the story of how your business started?
- When did you start to use the online platform, which sites do you use?
- What was the reason behind using the online platform? And behind going online?

Internal capabilities

- What did you need in order to start with e-commerce? Eg. Equipment, internet server, language skills, other skills?
- Did you need to learn anything specific before going online? Or did you already possess all the necessary skills? (how did you learn about the platform, to use a computer etc.?)
- Was there anything you realized that you didn't have after setting up your online business?
- Are there any specific skills that you think that you possess that have allowed you to succeed? (Also question trust issues, the persons possible ranking on the platform etc)

External Barriers

- Where is your customer base? Domestic or International? (what continent if international?)
- What has been the main advantages of going online, eg. Have you reached new customers? Have you earned more money?
- What was the first problems you encounter when selling goods online?
- What payment solutions do you use? How does this work?
- How did you respond to this problem?
- What would you need for your business to work better?
- What did you need to set up the payment system? What problems did you encounter? How did you solve it?
- Are there any other problems or issues that you'd like to tell me about?

Any questions for me?

G. Template Letter to contact sellers

Dear Sir/ Madame

My name is Sara Holmberg and I am a student from Copenhagen Business School in Denmark.

I am contacting you as I am currently doing research on e-commerce in INSERT COUNTRY, and therefore I would very much like to get in contact with you.

My research intends to make it easier for e-commerce sellers, just like you, to sell your products online and for researchers and policy makers to better understand how e-commerce businesses work. Therefore, I am looking for candidates that would be interested in helping me with this and to talk to me for about 30 minutes about their business.

Please let me know if you would like to help me and participate in this project. I would highly appreciate it.

Best Regards,

Sara Holmberg