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Internet finance to SMEs in Botswana

– A field study

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Abstract

Title: Internet finance to SMEs in Botswana - A field study

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Background and Problem: The Botswana government seeks to diversify its economy through encouraging entrepreneurship and aiding them in accessing finance. Furthermore, the Internet expansion in Botswana is on a rise and this creates an opportunity for online finance to expand. A larger extent of adoption of online financial services has been proven to aid SMEs in their development as well as being fruitful for the society as a whole; still the adoption of online financial services among Botswana SMEs is limited. The problem is to understand what underlying obstacles exist for SMEs in adopting Internet finance to a larger extent.

Purpose: The purpose of this thesis is to identify to what extent the Internet is used by SMEs in Botswana for adopting financial services, the underlying reasons for the current adoption rate, and what challenges that are prevalent in the development for SMEs to further use online financial services.

Methodology: The thesis is based on an embedded case study, with data having been gathered through a qualitative approach founded on interviews. For the conducting of the interviews, interview guides have been prepared, forming the base of the semi-structured interviews conducted with entrepreneurs, financial institutions and one Internet provider.

Analysis and Conclusions: There is a limited use of online financial services among SMEs in Botswana. The most widespread obstacles are the trust issue, which can be solved by focusing on technology and financial literacy, the cost and reliability of the Internet, as well as the scarce offer of convenient services for SMEs. However, problems like Internet costs and educating the population could take time to solve and pose difficulties unless handled properly from the outset. Nevertheless, there is an occurring mind shift in Botswana toward becoming more digital, and the use of Internet finance is on the rise.

Keywords: *Botswana, Development, Finance, Financial Institutions, FSA, Gaborone, ICT, Internet, SME*

Table of Abbreviations

BOCRA – Botswana Communications Regulatory Authority

BOFINET – Botswana Fibre Networks

CEDA – Citizen Entrepreneurial Development Agency

FSA – Framework for System Adoption

GNI – Gross National Income

ICT – Information and Communication Technology

ISP – Internet Service Provider

NBFIRA - Non-Bank Financial Institutions Regulatory Authority

NDB – National Development Bank

SME – Small and Medium sized Enterprises

SMME – Small, Micro and Medium sized Enterprises

TAM – Technology Acceptance Model

TOE – Technology - Organization - Environment

Exchange rate

100 Botswana Pula = 84.4 Swedish Kronor as of May 25, 2017

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Table 4: The table shows the factors that influence the rankings in ICT access, use and skills.

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1. Introduction

The introductory chapter begins by providing the background of the study and goes on by a problem discussion on previous research in this field. The main theme of the thesis is adoption of financial services online by SMEs, and examining other researchers' results in this field is therefore needed. After the discussion, the research question and purpose of the thesis are given.

1.1 Background

We were awarded the Minor Field Studies scholarship, handed out by the Swedish International Development Cooperation Agency, which allowed us to go to Botswana, a completely different setting than back home, to conduct a field study. We decided to study SMEs in Botswana, and how the Internet expansion had affected them regarding adoption of online financial services.

1.1.1 Diversification of economy

Botswana is often seen as an example of success in Africa. On a continent previously considered the economic backwater of the world, Botswana has sustained political stability and one of the highest economic growths in the world for decades. Over the last decade, the average economic growth was 5 percent, the highest of any country in the world. However, its economy is mainly based on export of diamonds and other commodities, and is therefore vulnerable to changes in the global price (World Bank, 2016).

To remedy this dependence on diamonds, economic diversification is one of the main development goals for the Botswana government. The government has therefore launched the "Economic Diversification Drive", where one of the primary objectives is to "diversify the economic and export base of the country into sectors that will continue to grow long after diamonds have run out" (Ministry of Trade and Industry, 2011: 13). To achieve this, it sets out several specific goals, one of which is:

"To develop entrepreneurship culture for business growth and enhanced citizen participation in the economy" (ibid: 14). As part of the strategy, the government offers several different services to entrepreneurs, in order for their sector to grow (ibid).

1.1.2 Small and medium sized enterprises

Small and medium sized enterprises (SMEs) play an important role in all the countries of the world when it comes to contribution of jobs and economic growth, in particular in emerging economies where they make up 45 percent of total formal employment and 33 percent of national income. However, approximately 70 percent of the SMEs lack access to credit, and when they do have access, they are less likely to receive it than bigger companies. Furthermore, many SMEs are in the informal sector, which additionally obstruct their access to financing (World Bank, 2015). In Botswana, the small, micro and medium sized enterprises (SMMEs) make up 35 percent of the gross domestic product (Mutoko, 2014).

1.1.3 Financial inclusion

Popular financial inclusion is one of the most important indicators of developed and well-functioning economies, and is becoming a priority for policy makers around the world. The financial institutions help transfer resources from investors to people with ideas in need of capital, as well as insure people against damages, help them save money for later in life, and lend money for life changing decisions, such as buying a house (CGAP, 2017).

But what does it mean to be financially included? According to FinMark Trust (2014), those who are financially included are the total adult population, 18 years and older, who has/uses financial products and/or services - formal and/or informal. The formal sector, consisting of institutions such as banks and insurance companies, is the one regulated by the authorities whereas the informal sector is not regulated and operates without recognized legal governance (FinMark Trust, 2014).

In order to establish an environment where economic activity can thrive and allow businesses to grow, it is essential that access to finance be ensured. If there are no accessibility, then there cannot be any adoption of financial services either. Nevertheless, this is not the case in many developing countries, where companies in general, especially small and medium sized enterprises, face impediments that constrain their access to the financial sector. These obstructions can consist of high costs of administration, requirements of security and lack of literacy when it comes to using the services provided (Bouri et al., 2011). However, according to several organizations, such as the World Bank (2017) and CGAP (2017), online finance is a way of facilitating the expansion of financial

inclusion among the populace and entrepreneurs. They argue that it is cheaper and easier to distribute and a way of overcoming the impediments previously mentioned.

1.1.4 Internet

According to data from the International Telecommunications Union (2017), Internet has been fast expanding in Botswana during these past years and today 27.5 percent of the population has access to it. Many SMEs in Botswana today consider the Internet to be a useful tool in their business and therefore have begun adopting it to a greater extent than before (Asare, Gopolang & Mogotlhwane, 2012).

As of today, studies on financial inclusion as well as the Internet expansion in Botswana show a positive trend (MAP, 2015; Statistics Botswana, 2014). Research conducted in Sub-Saharan Africa shows that especially the growing prevalence of mobile phones has had a positive impact on financial inclusion among the populace (Andrianaivo & Kpodar, 2011), as well as with SMEs (Chowdhury, 2006; Donner, 2006). Andrianaivo and Kpodar (2011) also argue that improved ICT in developing countries could aid in growing the financial inclusion among the population, since in these countries formal banking services are often expensive due to high costs of distance and time.

1.2 Discussion of problem

Although Internet has expanded a lot since 2010 in Botswana (ITU data, 2017), statistics show that it is only used for financial services to a limited extent (Statistics Botswana, 2014). As an example, as of 2014, only 42,308 people namely 8.6 percent of Internet users in Botswana used it for online banking. Statistics also show that people who are self-employed, ergo small business owners, are among the people who use Internet the most in Botswana today. However, those who are self-employed, either with or without employees, only make up 6,250 of the 42,308 people who use Internet banking in Botswana today (ibid). This means that there is unused potential for their further tapping into the online financial sector. There has been a reluctance from banks to give finance to SMEs in Sub-Saharan Africa. The reasons for this are many, but essentially it all comes down to risk. Providing finance to SMEs is riskier than giving it to larger firms, and therefore many banks are hesitant toward lending to SMEs (Sacerdoti, 2005). In Botswana, there is evidence showing that SMEs are

underperforming, often derived from a lack of readiness to adopt online services (Mutula & van Brakel, 2006).

Evidence shows that some of the advantages with Internet banking are the facilitation in opening an account, that more people do transactions, and that the financial institutions can reach more customers, both potential and existing (World Bank, 2017). The traditional branch banking is expensive for the banks, and currently there is not much room for expansion in this field in Botswana (MAP, 2015). With SMEs having trouble accessing finance (Sacerdoti, 2005), they might be helped by the expansion of Internet. Adopting Internet could possibly lead to easier access for SMEs in Botswana and better opportunities to take part of financial services. Since traditional financial institutions now face another market online we would like to see what impact the Internet has had on SMEs' capacity to adopt Internet finance. With financial inclusion being of importance for the economy of a society to grow (Cull, Ehrbeck & Holle, 2014), this problem is essential for Botswana to overcome.

The problem is to understand what underlying obstacles exist for SMEs not adopting Internet finance to a larger extent, since this would be positive for both the SMEs (CGAP, 2017) and the country as a whole (Cull, Ehrbeck & Holle, 2014). By understanding the problems and the extent to which SMEs have adopted online financial services, we can comprehend why the development of Internet finance is at its current stage. This awareness is key to further drive the development forward. This could aid in overcoming the problems that exist, but that the society might not be aware of being an obstacle for the development. By identifying where the SMEs in Botswana are in terms of adoption of financial services through Internet and how they can move forward, the financial industry of the country could expand as well as the SME sector.

Nevertheless, there are many obstacles to overcome in order for SMEs to adopt Internet services. In a comparative study between Botswana and Ghana on the use of B2B and B2C e-commerce published in the International Journal of Commerce and Management Asare, Gopolang & Mogotlhwane (2012) demonstrate that high costs of ICT services, high costs of ICT usage and power shortages make SMEs worried when it comes to adopting and using ICT services. Another factor brought forward in the article is the lack of know-how

concerning usage of ICT. Considering the importance of SMEs for the economy, it is vital they get the necessary tools to gain the financial aid needed for their further expansion.

1.3 Purpose

The purpose of this thesis is to identify to what extent the Internet is used by SMEs in Botswana to adopt financial services, the underlying reasons for the current adoption rate, and what challenges that are prevalent in the development for SMEs to further use online financial services.

1.4 Research question

The research question for this study is: *To what extent has Internet finance been adopted among SMEs in Botswana, and what are the reasons for this current adoption rate?*

Extent is defined as how much Internet finance is used among the SMEs as well as how advanced the usage of financial services online is among SMEs in Botswana, e.g. what kind of financial services they use online. This includes the possibility of not using online financial services at all.

The research question will be analyzed by carrying out interviews with entrepreneurs and financial institutions in Botswana, and then, though our framework, analyze what impact the Internet has had on the adoption of financial services for SMEs.

1.5 Delimitations

This study is not without its limitations and they are discussed here. The thesis has been established via an embedded case study conducted in Botswana, which means that we have more than one point of view in our evidence base and analysis (Tietje & Scholz, 2002) (in our case entrepreneurs and financial institutions). The reason for this is to be able to triangulate our findings i.e. get more than one perspective of the situation. However, due to the scope of our study we have only been able to interview a handful from each focal group and these have been restricted to the Gaborone area. Moreover, most of the entrepreneurs were contacted through Internet, which means that our results might have been skewed in favor of entrepreneurs who are more Internet literate (know how to use the Internet) than the average. Therefore, their opinions might not be in line with official statistics and numbers.

Furthermore, our main point of view is that of SMEs, but most of the SMEs interviewed in the study were entrepreneurs and not medium sized enterprises. Getting a larger perspective from bigger companies rather than one-man-shows would further have widened the scope and data gathered.

Since this is a case study, the results might not be applicable in other countries and settings, and should therefore not be generalized. However, we do use theories to support our conclusions and the results might possibly provide some help in certain, similar cases. Nevertheless, the scope of the thesis never included the vastness needed for generalized results.

1.6 Structure of Thesis

In this chapter, the structure of the thesis is presented with its chapters being introduced in their subsequent order of appearance.

Introduction: Background to the country specific conditions concerning Internet, financial inclusion and relevant data are presented and discussed. Furthermore, the research question and purpose of the study are presented.

Theoretical framework: Previous research and frameworks are introduced and discussed, and finally the framework created by the authors, which is used in the analysis, is demonstrated and examined.

Methodology: This chapter introduces and discusses the research approach used to obtain the data. Moreover, the research process is presented and examined.

Empirical data: The collected empirical data is displayed. First the data from secondary sources, e.g. other research, is presented and then our primary data is introduced. The primary data has been collected through interviews with Botswana entrepreneurs and financial institutions as well as with a representative of an Internet provider.

Analysis: The analysis chapter discusses the empirical data through the lens of our theoretical framework. References to other research is presented when suitable.

Conclusions: The conclusions drawn from the analysis chapter are introduced as well as implications for practice and implications for research.

2. Theoretical Framework

In this chapter the theoretical framework for adoption of ICT through which the empirical data will be analyzed is presented. The chapter starts off by introducing previous research in this area to demonstrate how the other frameworks have been used. Further on, the different frameworks are displayed and examined. Lastly, the framework specifically designed for this study is presented and argued for as to why being the most suitable one for this thesis.

2.1 Previous research

The two most popular frameworks among researchers when it comes to IT-adoption in organizations are the Technology-Organization-Environment-framework (TOE) and the Diffusion of Innovations-framework (DOI) (Oliveira & Martins, 2011). The DOI-framework mostly focuses on the internal characteristics of the firm (ibid), and has been used in several studies on the Internet in firms (Beatty et al., 2001; Li, 2008; Zhu et al., 2006, Hsu et al., 2006). However, none of these focused on Internet financing and did not have a particular focus on SMEs. The TOE-framework, on the other hand, has been used widely when looking at the case of SMEs adopting a new technology. Ramdani, Chevers and Williams (2013) looked at how SMEs adopt enterprise applications, Wen and Chen (2010) researched the E-business value creation in SMEs, and Alshamaila, Papagiannidis and Li (2013) analyzed cloud computing adoption by SMEs. The TOE-framework has also been helpful in studies regarding Internet banking. Alawneh and Hattab (2009) did research on the E-business value creation in the Jordanian banking services sector with the TOE-framework, and Kurnia, Peng and Liu (2010) used the framework to analyze the adoption of electronic banking in China. From the look of previous research, the TOE-framework seems to be a useful analyzing tool, both when it comes to SMEs and the financial sector, and therefore we will be using elements from this framework and not the DOI.

Another widely used model is the Technology Acceptance Model (TAM). TAM was created to help understand how a new technology is accepted. This model has been used widely to understand the adoption of online banking, but in these cases the model has often

been extended, since in its original form it does not consider the special characteristics of the Internet, such as trust issues. Examples of studies on online banking that have been done with an extended model of TAM are those in Saudi Arabia (Al-Somali, Ghomali & Clegg, 2008), Finland (Pikkarainen et. al., 2004) and Hong Kong (Cheng, Lam & Yeung, 2006). Accepting a new technology through the Internet is therefore somewhat particular and many researchers have decided to extend and adapt the TAM in order to take the Internet dimension into account. Some of these models, such as TAM and TOE, have been used in studies on the usage of ICT in SMEs, but not from a financial perspective; they were used for research on E-commerce (Awa, Ukoha & Emecheta, 2012).

Lee (2004) conducted a study on the adoption of different Internet technologies in small and medium sized businesses, in which he designed his own framework for the adoption of these technologies, after having done a literature review on the subject. He based his framework on previous studies, after having examined what factors had played a part in their findings. This framework, called the *Model of Antecedents in Internet Adoption in Small Business* is mostly derived from TOE and TAM, but since his study was considerably larger than ours it contains elements that do not fit the scope of this study. His findings are of interest to us, even though Lee acknowledges that an even bigger study should be conducted in order to be able to generalize his results.

2.2 Frameworks for ICT adoption

To get a good understanding of the responses we get from the interviewees, we need a framework that helps us analyze the answers and put them into a broad context. There are several elements from the models Technology-Organization-Environment (TOE), and Technology Acceptance Model (TAM) that can help us with this. However, since neither of these frameworks fully gives us the tools necessary to analyze our three most important factors, SMEs, the Internet, and financial services, in depth, we have decided to create an adapted framework for our research question with elements from both of them. The framework that we use to analyze our findings is therefore our own, Framework of System Adoption (FSA). It contains the most important and suitable parts from each of the other models in order to get a framework specifically adapted for our own research. Studies in similar fields as ours have used combinations of the models mentioned above with a customization to fit their research question. Riyadh, Akter and Islam (2009) did research on

the adoption of e-banking in Bangladesh with a focus on SMEs. To do this they used the TOE-framework and TAM to create their own framework with the aim to understand their research question with the characteristics of being in a developing country and regarding SMEs. Lin, Wu, and Tran (2015) used a similar approach for their study on Internet banking adoption in Vietnam. They used TAM and other theories to create their own framework, since TAM itself do not cover all the factors regarding actual use of Internet products. As seen from these previous, similar, research the frameworks used in studies such as ours need to be specially adapted to suit the research's specific attributes.

Below we will give a short review of the characteristics of TOE and TAM to give an understanding of how we have created the framework that we use to analyze our research. We also describe the different elements of our framework, FSA, and argue for why these are the most suitable ones for analyzing our empirical data.

2.2.1 Technology - Organization - Environment - TOE

The TOE-framework, which was developed in 1990 by Tornatzky and Fleischer, describes how an enterprise's decision whether or not to implement a technological innovation is influenced by three different factors. These factors are the technology that is available for the company and its characteristics, the organization's structure, and the external environment that affects the enterprise. By examining these factors, a greater understanding of why a company does, or does not, adopt a new technology could appear (Oliveira & Martins, 2011; Zhu, Kraemer & Dedrick, 2014). Even though the original model (which can be seen in Figure 1, on page 17) was meant to focus on technological innovation decision making, it has been broadly used as a model to understand technology adoption as well (Oliveira & Martins, 2011). The extensive use of this model as a means to understand technology adoption legitimizes its use in a study such as ours.

The technology factor regards both the technology that the enterprise already possesses, as well as the technology that is available for the company but which it has not obtained so far. These technologies include practices and equipment, relevant to the firm (ibid). Erind Hoti (2015) compiled data from research on the TOE-framework used on information systems adoption for SMEs. Hoti wanted to find out what factors influenced SMEs when deciding whether to adopt a new system or not. These studies were conducted between 2004 and 2014, and by analyzing them, Hoti identified the most important variables of the TOE-

framework considered significant by the other researchers. According to Hoti (2015), there are several key elements of the technology factor, including *relative advantage*, which is the perceived improvement an innovation creates compared to the previous one being used. If the innovation is not any better than the previous one, it will not be adopted. *Compatibility* introduces the extent to which an innovation is regarded to be in line with existing values and how much competence the user already needs for using it. *Complexity* encompasses the recognized difficulty in understanding and using the technology. Due to the scope of our study, it is difficult to examine all the different parts of the technology factor of the TOE framework. Therefore, the only one of these that arguably is part of our framework is "relative advantage" which is partly equivalent to "perceived usefulness" of the TAM framework.

The organizational factor is the characteristics of an enterprise regarding e.g. size, managerial structure, communication processes, and slack within the company. These characteristics are important factors when a firm is determining whether to implement a new technological innovation or not (Oliveira & Martins, 2011). Hoti (2015) identifies four main elements of the organizational factor. *Top management support* is the backing of the information system from the administration. *Organizational readiness* incorporates the resources at the firm's disposal and knowledge of the personnel for implementing and using an information system. *Information intensity and product characteristics* adds the extent to which information exists in the product or service provided by the company manifests its information intensity. *Managerial time* involves the time needed to actualize the new information system. The organizational factors of the TOE framework are partly included in the factor called "organizational readiness" in the FSA. However, this factor is not equivalent to the sub-category "organizational readiness" in the TOE framework. Nevertheless, the name is the most suitable one for the category in our framework.

The environmental factor is the elements of the field where the company is doing business. These factors are its competitors, industry, dealings with the government and access to resources supplied by others, as well as the supporting infrastructure (Oliveira & Martins, 2011). According to Hoti (2015), the environmental factor is made up of three elements. *Industry pressure* means that strong competition from rival firms intensifies the need to adapt to new innovations in order to secure competitive advantages over rivals. *Government pressure or support* includes governmental policies aimed at aiding SMEs in embracing

information systems. *Consumer readiness* is the readiness of the clients, which affects the enactment pace of information system. Since we aim to study adoption of Internet finance among SMEs in Botswana through a qualitative study via interview guides, the part of environmental factors most compatible with our approach to examine is "government support or pressure" since we thus can ask the entrepreneurs about this issue. The conditions of the technological infrastructure are part of governmental support and plays an important role in the interview guides and our study in general.

Hoti (2015) considers the TOE-framework to be helpful when conducting studies on technology adoption. However, he mentions that most research using the TOE-framework has been concentrating on such technologies as E-commerce, E-business, etc., and not on financial inclusion. Therefore, we cannot assume that the TOE-framework will suit our research entirely. Although the TOE-framework covers many of the aspects we want to analyze, it still does not give us the whole picture. Therefore, we need to look further in order to find a framework that suits our needs.

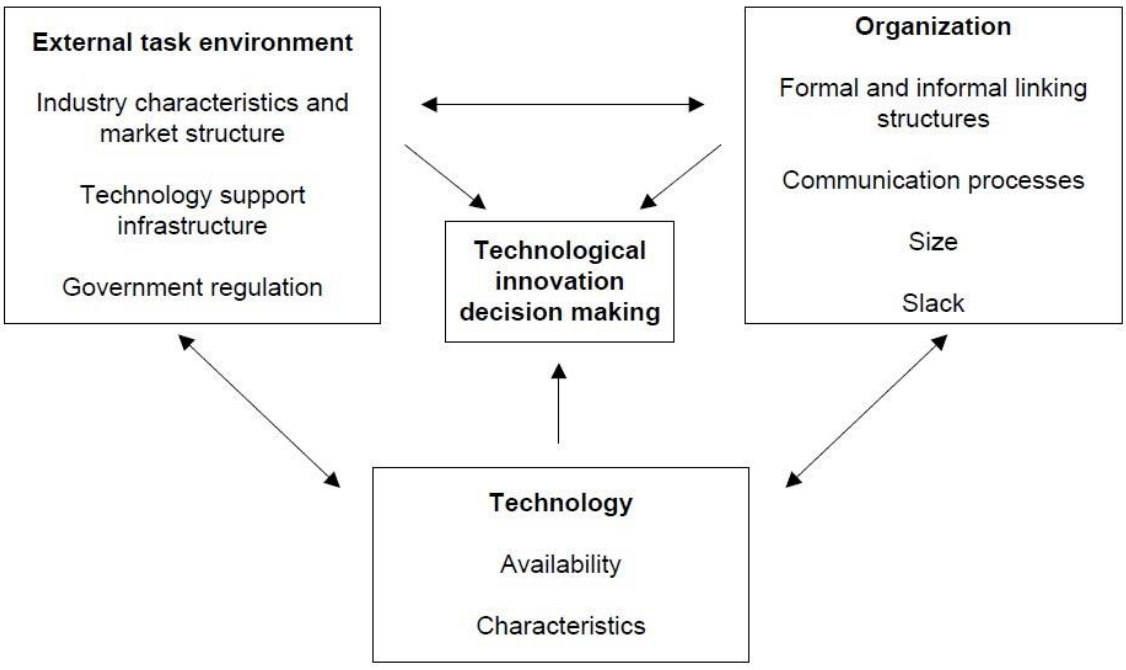

Figure 1. Source (Oliveira & Martins, 2011: 112)

2.2.3 Technology Acceptance Model - TAM

In 1986, Fred Davis introduced the TAM-framework in order to give a better understanding of the intention to use new technology. This framework can be used on both individuals and organizations and is one of the most popular theoretical frameworks when it comes to the

behavior toward technology (Lin, Wu & Tran, 2015; Wang et al., 2003; Chong et al., 2010). From Davis' original TAM-model, the factors deciding if the new system or technology should be taken into use are *perceived usefulness* and *perceived ease of use*. These two factors are what decides if a company eventually will start to use the new system or not. *Perceived usefulness* measures whether the use of a new technology will lead to an improved and simplified working if implemented. *Perceived ease of use* describes that the new technology should be simple to use, without any major effort (Davis, Bagozzi & Warshaw, 1989; Lin, Wu & Tran, 2015; Wang et al., 2003; Chong et. al., 2010). As can be seen in Figure 2, the original TAM-model, external variables influence the perceived usefulness and the perceived ease of use. Furthermore, the perceived ease of use affects the perceived usefulness and together they create an attitude toward using the new technology. If the attitude toward using the new technology is strong enough, a behavioral intention to use occurs which in turn will lead to an actual system use (Davis, Bagozzi & Warshaw, 1989; Lin, Wu & Tran, 2015).

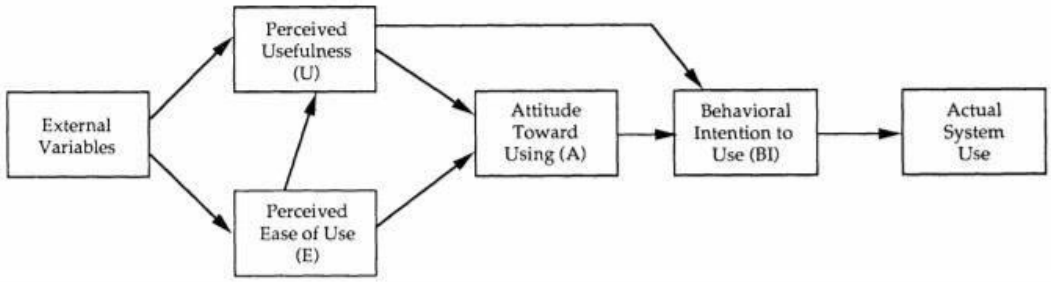

Figure 2. Source (Davis, Bagozzi & Warshaw, 1989: 985)

With the further development of technology, other researchers have expanded and adapted the original TAM-model to suit their research (Chong et al., 2010). Wang et al. (2003) proclaimed that future research must address more variables than just perceived usefulness and perceived ease of use, and Chong et al. (2010) stated that TAM is a base model that should be developed to fit the subject of research. Wang et al. (2003) researched the determinants of user acceptance of Internet banking and found that trust had become a more important factor in accepting new technology. The issue of trust could not be included within perceived usefulness nor perceived ease of use and therefore a third factor, "perceived credibility", was added. With the development of the Internet, perceived credibility had become relevant. It regarded the safety and privacy when using Internet banking. Lack of perceived credibility, i.e. that people do not trust that their money is safe

on the Internet, led to fewer people using Internet banking (Wang et al., 2003). This third factor of perceived credibility has been used in other research since then, e.g. the research made by Chong et al. (2010) on online banking adoption, where this factor is simply called "trust". Since our study focuses on online finance, it would be suitable to include the factor "trust" in our own framework. Trust is, as has been shown by previous research e.g. Wang et al. (2003), important to consider when studying new technology, especially when it comes to handling people's money.

2.3 Framework for System Adoption - FSA

When Lee (2004) studied the technology adoption behavior of small businesses he created his own framework based on previous literature on the subject. In the same manner, we have created our own framework, based on a literature review in order to find elements that fit the purpose and research question of the study. FSA is a framework designed by us to understand why and when an SME adopts a new system or service through the Internet. By combining elements from the two models above, a framework for understanding the information gathered from the interviews with entrepreneurs and financial institutions can be created. It is a framework that will further our understanding of the answers and help us put it into a broad context to comprehend how and why the current situation is as it is in Botswana. By dividing factors that affect companies into five different parts, it aids us in pinpointing the problems that might exist and come up with solutions to these problems.

The framework consists of five main themes explaining why a company adopts a new technology system. Only when a company is without problems in these five themes, the new system, or parts of it, will be adopted. The themes are "Trust and control", "Perceived usefulness", "Perceived ease of use", "External factors", and "Organizational readiness".

Trust and control is derived from TAM. Research made with an extended TAM often added the factor of trust and control when doing research regarding the Internet. If an entrepreneur feels as if they can trust the new system and if they are in control of what happens when it is used, the likelihood of adopting it increases. If an entrepreneur feels as if they lose control when implementing the new system, they will not adopt it. Trust toward a third party is therefore essential. Since Internet is an essential theme in our research, trust and control is an important aspect for us to consider as mentioned by

previous research (Wang et al., 2003; Chong et al., 2010). In FSA, trust and control regards the issues that an SME faces when adopting a new technology that requires the SME to trust a third party to handle some of their operations, and their readiness to let go of some of their control. In the case of adoption of online financial service this mostly expresses itself in the form of trusting a third party to handle their money and financial operations. Only if there is enough trust and enough willingness to let go of some of the control of their money, an SME will adopt a new financial service. Therefore, trust and control is an important aspect to consider when looking at adoption of online financial services, as described by Chong et al. (2010) among others. Furthermore, Morgan and Hunt (1994) argue that trust is key when talking about relationships. They also state that there is trust between two parties when there is confidence in the reliability and integrity of the other. Due to the vast number of scholars emphasizing the importance of trust in relationships of all kind, we argue that it needs to be included in the framework for system adoption, since relationships are an important part of convincing people to adopt Internet finance, as mentioned as perceived credibility or trust in studies on online finance.

Perceived usefulness is derived from TAM and is mentioned as one of the aspects that decide whether to adopt a new technology or not. If the system is deemed useful for the business, it will more likely be used by the company. It could be deemed useful through several ways, e.g. through saving time, through saving money or through saving effort. This aspect is considered important since it is one of the two central themes of TAM and explains what is required by a system for it to be adopted by the person in question. Studies have shown that when the owner of a small firm finds that an innovation possesses an advantage to the system it would replace, it is more likely that it will be adopted by the firm (Cragg & King, 1993; Thong, 1999). This is affected by the second central theme of TAM, *perceived ease of use*, which shows a different aspect of a system's characteristics for it to be embraced by a person. If the system is easy to learn and use, it is more attractive and will have a bigger chance of being used in the business. If a lot of effort is required for implementing the new system, it will most likely be viewed negatively by many, which is stated by the TAM model. This is supported by the study conducted by Igbaria (1997), which studied the factors impacting the acceptance of personal computers in SMEs. Together, these two establish an attitude toward a new technology, which determines whether it will be implemented or not (Davis, Bagozzi & Warshaw, 1989; Lin, Wu & Tran, 2015).

The TOE and TAM frameworks mention *external factors* as one of the main things to look at when it comes to adopting new technologies (Oliveria & Martins, 2011; Davis, Bagozzi & Warshaw, 1989). Factors outside of the business' control may affect the system's efficiency and usefulness, both directly and indirectly. This could be government regulations, technological infrastructure, the cost of Internet etc. These factors may have negative as well as positive effects. Both TOE and TAM acknowledge external environment as a factor that affects the adoption of new technologies, and we consider it important to our research since the conditions in Botswana, being a developing country as well as large and scarcely populated, undoubtedly impact the opportunities for technology adoption in the country.

Organizational readiness is mentioned by Hoti (2015) as one of the elements constituting the organizational factors in the TOE-framework. Important aspects mentioned here by Hoti (2015) are the knowledge and resources at the firm's disposal. Since our research focuses on organizations, and not individuals, the readiness of the organization is an aspect that must be considered. However, our definition of organizational readiness should not be considered equivalent to Hoti's (2015) definition. Organizational readiness in FSA considers the knowledge and resources at the firm's disposal as mentioned by Hoti, but also comprises factors like how well it fits in the company's plan for development as well as their current business model. According to Lee (2004), the capacity of a firm to conceive innovative structural designs and techniques furthers its capability to take advantage of new chances within the firm, such as development of technology, as well as from the external environment, e.g. new market opportunities. Lee (2004) goes on and argues that a new technology's rapport with the organization is specified as the extent to which it is coherent with the practice, principles, and requirements of the possible adopter. He argues that managers of SMEs will more likely embrace an Internet technology when it is recognized as appropriate with regard to their ongoing condition of the firm.

Since an important part of our observations concentrates on how our respondents embrace new technology, we argue that it is important to include these factors in our framework. The factor of external variables in the TAM model, is not included as a separate factor in the FSA model, but is rather a part of the external factors. In the TAM model the external variables affect the perceived usefulness and the perceived ease of use. Looking at

perceived usefulness and perceived ease of use, they are affected by many different factors e.g. value, internal readiness and external variables like technology advancements. The fact that different factors affect the perceived usefulness and ease of use is obvious and a further clarification of what could impact the perception of the company in the model is not deemed as necessary by us. In the FSA, external factors influence the other four factors which in turn influence each other. These factors create an adoption of a new system when positive for the enterprise. This could be described by an example of a change in external factors through, e.g, a change in price. If the new technology becomes cheaper, this could lead to the company being more ready to utilize the new technology, in the event that money otherwise is a problem, fulfilling the organizational readiness criterion of FSA. This could also fulfill the perceived usefulness since the company now feels as if they get value for their money. On the other hand, it could lead to a drop in trust, since the company might not trust their finances with a cheap option, feeling as if it does not have the quality it claims. Since FSA has external factors as one of the variables, like TAM, we consider it acceptable to disconnect external variables from perceived usefulness and perceived ease of use when presenting the FSA, unlike TAM. This is due to the fact that the external factors affect all variables, and not exclusively perceived usefulness and perceived ease of use. The same can be said of the two other factors of the TAM regarding the attitude towards using and the behavioral intention to use. Since these two factors can be covered by the scope of organizational readiness and its psychological attributes these two factors are not needed to be separate factors in FSA.

Based on our research question, we argue that these factors are the most important aspects to analyze. Therefore, some questions might arise considering whether the selection of these factors is arbitrary. Some important factors that would help us in analyzing our findings might have been left out, but we argue that these five factors are the most important in understanding the adoption of a new system and are enough to provide us with a clear picture of the situation. A great number of factors could make the framework too comprehensive and make some factors inessential and overlapping. Therefore, a delimitation has been made to get a framework that analyzes the most important factors, without overlapping or having excessive factors being part of it. After having reviewed several studies, we argue that these are the factors that come up most frequently while at the same time covering the subject of the thesis and fitting the scope of the study.

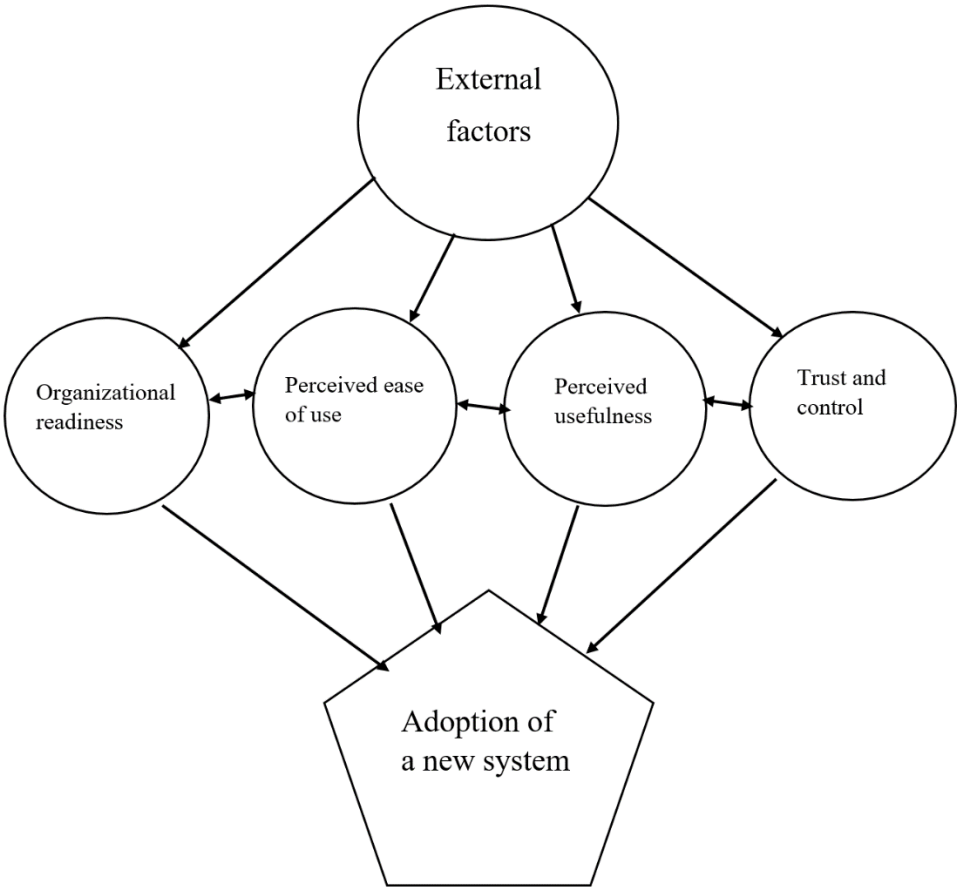

Figure 3. Own compilation.

3. Methodology

This section lays out the methodology used for this thesis. Firstly, the method choices are displayed and discussed. This includes the research approach and arguments for the selected approach. Secondly, the selection criteria for our focal groups are presented and definitions for certain aspects are laid out. Further on, the research process is explained and the interview guides are displayed. Lastly, the quality of study is discussed thoroughly.

3.1 Method Choices

3.1.1 Choice of qualitative study

As our research focuses on small and medium sized enterprises' adoption of online financial services, we started off by deciding to do a qualitative approach through semi-structured interviews in gathering and analyzing information. This allows us to judge more precisely whether our sources are reliable or not, since we know who our respondents are (Bryman & Bell, 2011). By being present at the gathering of information, validating the identity and

position in the company of the respondents, we can conclude whether the respondents are reliable or not. For our research, we find that this approach is the supreme method in order to come to an informed conclusion on our topic, since the other option, a quantitative approach, would focus more on numerical data and having a big sample group. Through a qualitative approach we can get the interviewee's perception of the situation. By doing so, the focus is on what the interviewees consider important, instead of the researcher's own interests. With the qualitative approach, we can get more detailed answers on the issue, due to the interviewees' freedom to answer however they like during the semi-structured interviews (ibid). Furthermore, due to the scope of our study, the qualitative approach is the most suitable one. We only had eight weeks to conduct the study, and thus did not have the time or resources to do a study with a big enough sample to deduce answers that can be used for our thesis. Moreover, we interviewed people with different interests, backgrounds and information, which can be difficult to quantify into numerical data.

Although the qualitative approach gives us freedom in analyzing our findings, it comes with a demand of higher knowledge of the subject and a need of being more critical toward the gathered data. Generalization of the findings and unconscious biases are some of the problems that might arise with a qualitative approach (Diefenbach, 2009; Bryman & Bell, 2011). To combat these problems, we have consciously chosen candidates from different sectors, as well as tried to get as many respondents as possible, thereby diversifying our focal group as much as possible and trying to triangulate the findings. We have carefully chosen our questions not to be leading, but letting the respondents answer in their own fashion, thus trying to minimizing the risk of bias. By being aware of the problems of unconscious bias, we analyze our collected data with consideration, in hope of minimizing the generalization and bias.

3.1.2 Research approach

There are several research approaches available for this study. The three elementary forms of approaches are *deductive, inductive* and *abductive* (Mantere & Ketokivi, 2013). The *deductive* approach states a hypothesis on a specific subject. Through empirical examination the hypothesis can then either be confirmed or rejected. The deductive approach is supposed to only make a particular observation and its results are not supposed to be generalized. The opposite is done in the *inductive* approach where the purpose is to give an answer that can be generalized, by taking its stance in theory. The *abductive* approach is a combination of these

two approaches where the purpose is to give an explanation and theorize about a certain problem (ibid).

Since the aim of our study is not to generalize our findings, nor reject or confirm a certain hypothesis, neither the deductive or inductive approach suits us. Our study seeks to highlight and discuss the underlying determinants for the current situation, and therefore the abductive approach is the most suitable for this research. Though the interview guides hint at a deductive approach, our planning of using logical inferences as explanations for the facts via our framework supports the idea of using an abductive approach for this thesis.

According to Saunders, Lewis and Thornhill (2009), there are three main purposes of a research. These are *exploratory, descriptive* and *explanatory*. An exploratory study seeks to discern what is going on; gain new insight on a subject and evaluate phenomena in new ways through analyzing literature and interviewing experts and focal groups (ibid). Since the thesis is based on interviews with our focal group and other experts alike, as well as literature reviews, in order to gain new insight in the field of Internet finance, it fits the framework of an exploratory study.

Furthermore, the research can be described as an *embedded case study*, since we conduct empirical research through interviews in the actual setting of the phenomenon, with different point of views being taken into account in our gathering of information and analysis (Tietje & Scholz, 2002).

3.2 Selection process

Our focal group has been small and medium sized enterprises and financial institutions in Botswana. The reason why we focus on both groups is that we want to get as clear a view of the situation as possible. We want to be sure to get the whole picture, not only one point of view, since both parties are important to the subject, ergo we want to triangulate our findings. We have made sure that they followed our criteria before conducting interviews with them.

3.2.1 SMEs

The only criterion for the respondents representing SMEs was that they would be the owner or managing director of a small or medium sized enterprise in Botswana. Some of them used other titles, but we made sure that their position represented our criterion by questioning them on it. We wanted to make sure that the interviewees were really SMEs, so they have mostly been found on the Facebook page called "Small Business in Botswana", which is a forum for small companies in Botswana, as well as through contacts that we got in Botswana. The selection of respondents through the Facebook group is therefore a "convenience sample". This means that the research uses respondents that are easily available for the researcher (Bryman & Bell, 2011). As mentioned, we also got respondents from other contacts that we made in Botswana; this selection process is known as "snowball sampling" (ibid). The majority of the entrepreneurs were found through their Facebook pages when they advertised their services on "Small Business in Botswana", and, when possible, we took their business card to verify their identity.

3.2.2 Definition of SME

The definition of an SME is different around the world. The most established one is the definition made by the European Union (OECD, 2005). The European Union defines an SME as an enterprise with a maximum staff of 250 people and a limit of maximum 50 million euros in turnover or 43 million euros in balance sheet total (European Commission, n.d.). Although this definition is widely in practice throughout Europe, it is not a functioning definition for every nation. For example, USA has an upper limit of 500 employees and China has an upper limit of 3000 employees to be regarded as a SME (OECD, 2005; World Bank, 2010). To get a fair definition of an SME in Botswana we cannot just assume that the European definition is applicable. Instead we will use the definition of a Botswana SME that was stated in 1998 and is accepted and still used by the Botswana government. This definition declares that a Botswana SME can have a maximum of 100 employees and a turnover of maximum five million Botswana pula (Nkwe, 2012).

3.2.3 Financial institutions

For financial institutions, the criterion was that the respondent would be a representative for a financial institution in Botswana. This lead to a variation in the depth of their responses, due to their different positions and knowledge on the topic, but allowed us to get more people to interview. We found the financial institutions on the Internet; the banks we found

on Bank of Botswana's homepage's "Bank" section. We then got in contact with them either by contacting them directly through e-mail and Facebook, or through contacts in Botswana. Sometimes we did walk-ins where we simply showed up and asked for an interview.

We found the insurance companies in different ways. One of them we found on Facebook, whereas we contacted the other one after having seen their advertisement at the airport in Gaborone.

After having read about CEDA on the webpage of "Making Finance Work 4 Africa" (MFW4A, n.d.), we managed to contact them on Facebook and thus set up an interview. In order to get in contact with the National Development Bank, on the other hand, we went directly to their head office at Main Mall in Gaborone and asked for an interview.

3.3 Research process

After selecting the research area, we searched for literature on the specific subject both in physical and digital form to find relevant theories to the problem. The literature helped us identify some of the different factors that affect the adoption of online financial services by SMEs.

The choice was then made to use a qualitative approach to gather as much useful information as possible and through the information gathered, an interview guide was created. The interviews were held in Botswana with people living in the country. During the course of time when the interviews were done, more secondary data was retrieved.

When all of the interviews were completed, the primary data from the interviews were analyzed in accordance with FSA. The most important findings from the analysis of the primary data, in collaboration with the secondary data, is brought forward in the conclusions.

3.4 Data Collection

3.4.1 Primary data collection

The semi structured interviews have been carried out in public places and interviewees' offices in Gaborone. We interviewed 14 SMEs, eleven representatives for financial

institutions, one Internet provider as well as one Internet regulator. The reason the number of interviews is not higher is due to the limited amount of time we had to conduct our research. Still, through our interviews we could find patterns that helped us analyze our research question.

The length of the interviews was between nine and thirty minutes. All the interviews were recorded, something which the interviewees in all cases had accepted. One of the respondents, who was a representative for a financial institution, wished to remain anonymous because he/she did not want his/her answers to reflect the financial institution's views.

Most information gathering and compilation have occurred during our stay in Botswana through the interviews, due to its being the main information that laid the foundation of the conclusions we came to while researching. Apart from being the capital of the country, Gaborone is also the most technologically advanced region of the country, which means that it is the best place for us to find entrepreneurs experienced in the usage of the Internet as well as financial institutions.

Interview guides

To gather the information, we designed interview guides aimed at our target groups; the first one directed at the entrepreneurs and the second one directed at the financial institutions. We also made one aimed at the regulator, to which we received written responses. The questions in our interview guides were chosen based on the Framework of System Adoption. The framework, in turn, was based on our research question and literature review, and specifically designed for the setting in which we were put. Due to this, the questions from the interview guide to the entrepreneurs had to be of a simpler kind, since we could not presume that their enterprises would be as developed on this front as in the industrialized world. The questions to the financial institutions focused on the systems they used and planned to use, as well as the preconditions that exist in the Botswana setting.

Furthermore, since the questions were based on our framework, they were designed in a manner which encompasses all the factors included in FSA. The questions aimed at the entrepreneurs discuss all the different factors, *perceived usefulness, perceived ease of use, trust and control, external factors* and *organizational readiness*. However, since our

analysis has the point of view of the entrepreneurs, the questions aimed at the financial institutions can be perceived as falling under the category of *external factors*, since everything affecting the financial institutions is *external* to the entrepreneurs. Nevertheless, from a financial institutions' perspective, the questions could fall under different categories such as *organizational readiness* and *trust and control*.

These interview guides helped us conduct semi-structured interviews, which in turn helped us analyze the data in different themes. These themes are as seen in our own framework, FSA. Semi-structured interviews allowed us the flexibility needed to ask follow up questions to our subjects' responses and get better qualitative data as compared to a structured interview where a strict following of the interview guide is needed (Bryman & Bell, 2011). The purpose of the interviews was to ascertain to what extent SMEs in Botswana had adopted online finance, the reason behind this and what needs to be done in order for their further adopting them. The reason for a special interview guide for financial institutions was to get the full picture of the situation and better understand in what way these institutions are working for promoting online finance to SMEs, and thereby triangulate our findings from the entrepreneurs. Moreover, the purpose of interviewing the Internet provider and the regulator was also to triangulate our findings and get a broader picture. However, the interview with the provider was not planned beforehand since Internet providers were not part of our focal group, but as we got the opportunity to interview one of them, we did so since it could provide us with further understanding on the issue. We had not had the time to prepare an interview guide for this interview.

Conducting the interviews

All the interviews, except for two, have been conducted in English. The other two, one with an entrepreneur and the other with the representative for the Internet provider, have been done in Swedish but later translated and transcribed into English. The interviews have been done in and around Gaborone, the capital of Botswana. The reason behind this is that it is the most technologically advanced region in Botswana, and the economic center of the country. Therefore, it is the principal location where entrepreneurs who have taken part of the recent surge in the Internet usage might be found, as well as it is the center of financial institutions.

The five commercial banks interviewed in this survey were BancABC, Bank Gaborone, Barclays Bank, Stanbic Bank and Standard Chartered. Of these, the biggest ones in terms of numbers of business locations are Barclays Bank (38), Stanbic Bank (11) and Standard Chartered (19), (Bank of Botswana, 2015). One of the representatives for the banks chose to be anonymous and is from now on referred to as "Anon". The two insurance companies are Botswana Insurance Company and Old Mutual. Interviews have also been conducted with CEDA and National Development Bank. The full table of respondents now follows.

Entrepreneur	**Company**	**Position**	**Place of meeting**	**Duration of interview**	**Date of interview**
Aobakwe Sentle	BluStreak Consulting	Director and Founder	Main Deck	23:33	05/04/2017
Boineelo Masina	Signature Platters	CEO	Bordergate Mall	11:20	04/04/2017
Edward Orny Obolokile	BrainCode Pty Ltd	Managing Director	KFC Broadhurst Mall	19:35	29/03/2017
Gao Mosweu	Maze Meadows Consulting	CEO	Gao's place	16:01	01/04/2017
Godwell and Mpho Khumalo	Crux Business Services Pty Ltd	Director and Chairperson, Managing Director	Crux's offices	18:28	30/03/2017

Ketumile Ngwamotsoko	Mens Sana Technologies	Founder	Mens Sana Technologies' Offices	16:40	11/04/2017
Mula	MB Gadgets	Director	MB Gadget's Offices	13:21	30/03/2017
Otis Motlhgodi	ESES Computer Gurus	CEO	ESES Computer Gurus' Offices	08:55	10/04/2017
Quincy Moloi	Camcom Botswana	General Manager	Restaurant Europa	16:09	27/03/2017
Swift Mpoloka	The Logistics Man	CEO	First Bontleng Futsal Park	20:18	05/04/2017
Thapelo Selaelo	Composed Holdings Pty Ltd	Founder and Managing Director	Restaurant Europa	21:29	31/03/2017
Thebe	BluBrackets Group	Business Development Manager	Thebe's House	12:42	14/04/2017
Tlotlo Cecil Bats	TC Bats Consultants	CEO	Windys at Game City	25:05	29/03/2017

Ulf Nermark	WaFaBo	Managing Director	Café Dijo	23:27	07/04/2017

Table 1

Representative	**Financial Institution**	**Position**	**Place of meeting**	**Duration of interview**	**Date of interview**
Anonymous	One of the leading commercial banks	Confidential	The Bank's Head Offices	16:04	27/03/2017
Grace Pule	Bank Gaborone	SMME Department	Bank Gaborone	19:34	11/04/2017
John Matalapeng, Zenzile Sedie, Brenda Moruti, Chazha Masikara	National Development Bank	Product Development Officer, Relationship Manager, Research and Product Development Manager, Retail and Commerce Sales Executive	National Development Bank's Offices	25:18	25/04/2017

Kagiso Moloi	BancABC	Senior Relationship Manager in the Corporate Space	Prevailing Securities' Head Office	13:50	31/03/2017
Komissa Burzlaff	Botswana Insurance Company	Marketing and Strategy Development Manager	Botswana Insurance Company's Head Office	22:21	29/03/2017
Neo Tumelo	CEDA	Marketing and Branding Executive	CEDA Head Office	21:46	03/04/2017
Oaipetla Fantan	Standard Chartered Bank Botswana	Head of digital banking	Standard Chartered Head Office	22:52	04/05/2017
Onkabetse Morapedi	Stanbic Bank in Botswana	Head of Enterprise Banking	Stanbic Head Offices	26:53	27/04/2017
Rapula M. Leepile	Barclays Bank of Botswana	Regional Manager SME Banking	Barclay's Head Offices	21:50	19/04/2017
Raymond Kuhlman	BancABC	Relationship Manager SME Banking	BancABC SME Department	12:30	27/03/2017

Roy Punungwe	Old Mutual	Group CEO Old Mutual Botswana	Old Mutual Head Office Botswana	12:23	03/05/2017

Table 2

Representative	**Internet Provider**	**Position**	**Place of meeting**	**Duration of interview**	**Date of interview**
Anders Sandström	Mascom	Head of Strategy and Business Analysis	Mascom Head Office	18:32	03/04/2017

Table 3

As can be observed in the list of respondents, certain interviews were substantially longer than others. The difference in time depends on a number of factors. During certain interviews, not all questions were discussed since some interviewees already answered several questions while discussing a single one. Furthermore, certain interviewees had elaborate answers to a few questions while at the same time not being able to answer others. Therefore, some interviews put emphasis on merely a few aspects of our interview guides while others were only brief walkthroughs of all of our questions, depending on the ability of the respondent to answer. Moreover, during some interviews follow up questions that were not included in the interviews were asked. The possibility of asking follow up questions was one of the reasons for our choosing of semi-structured interviews instead of structured ones where every question of the interview guide needs to be discussed.

The Internet providers and regulators

In order to get a view on the regulatory framework of the Internet, we contacted the Botswana Communications Regulatory Authority, BOCRA, via Facebook. After several messages without replies we decided to go directly to BOCRA to ask them for an interview. After being told that they would get back to us with a date for the interview, they instead sent us written replies to our interview questions.

The contact details of Anders Sandström at Mascom, the Internet provider we interviewed, were given to us by another Swedish person in Gaborone. Since we got the chance to meet

him, we decided to ask him for an interview on the current situation for the Internet providers in Botswana, in order to triangulate our findings. However, since the Internet providers are not part of our focal group, we decided not to contact any more of them.

3.4.2 Secondary data

Our main source of information is the interviews conducted with Botswana entrepreneurs to discover in what way they have used the Internet as an appliance for their financial operations, as well as officials working in the financial institutions to find out in what way they have benefited from the Internet in developing their services directed at small and medium sized companies in Botswana. However, to get a broad assessment of the reality, our study is also based on relevant secondary data and statistics from scientific reports on the subject, articles and the webpages of national and international institutions. This data complements the interviews in order for us to understand the current situation regarding our research question. We have had a critical view on all the figures and as well as possible double checked them with other sources to certify their reliability. The data has only been received from credible statistics institutions, such as "Statistics Botswana" and "World Bank", or scientific reports found on credible databases, such as Google Scholar and Supersök, the library database of the University of Gothenburg. The report "Botswana - Demand, Supply, Policy and Regulation. Diagnostic Report 2015, Draft Final Report*"* was sent to us by Cenfri, a think-tank based in Cape Town.

Keywords for our search on the Internet have been: "Botswana", "financial services", "SMEs", "corporate governance", "financial inclusion" and "Internet". The databases we have used for information are Supersök, as well as Google Scholar.

3.5 Managing the responses

To be able to utilize as much information as possible from our interviews, we decided to transcribe them. From the transcriptions, we used quotes that were relevant to our research. These quotes were used to lay the foundation to our empirical data, which in turn was supported by facts from other sources, where possible. The data was then analyzed through our own framework, FSA, to help us assess the situation regarding our topic. The problems of subjectivity always arise when conducting qualitative study, since we decide what to include from the interviews and what to exclude (Bryman & Bell, 2011). The quotes we do

use in our report are views that are often backed up by other quotes, so that it is shown that there is substance in the responses.

3.6 Quality of Study

3.6.1 Research quality

According to Bryman and Bell (2011) the same principles for research quality used for quantitative studies cannot be used for qualitative studies. Although there is an ongoing discussion among researchers on the topic, one method used is the one developed by Lincoln and Guba, which consists of two principal criteria, namely *trustworthiness* and *authenticity* (ibid). *Trustworthiness* is further divided into four sub-criteria which are *credibility, transferability, dependability* and *confirmability*. In this method, *credibility* means that the research has been conducted in a reliable and accepted manner, and that the respondents are aware of the results and can confirm them (ibid). In this study, all the respondents were aware of the aim of the study and were informed of the reason for their being interviewed. The fashion in which the study was conducted was through semi-structured interviews, a credible and suitable technique for a study such as ours (ibid). *Transferability* regards whether the same results would be attained in a different setting or at a different point in time (ibid). Since the results are highly dependent on, among others, external factors the results would be extremely difficult to "transfer". Since economic development brings about change that can affect technological infrastructure and improve education, the same study conducted at another point in time would undoubtedly give different results, and given a different setting, e.g. Sweden, would also surely provide other results. *Dependability* states that the whole processes should be documented and be available for others to examine and evaluate (ibid). Our entire process is transparent and thoroughly discussed in this thesis. *Confirmability* concerns the extent to which the researchers let their own objective views affect the research process (ibid). Although it is no easy task to completely separate one's own beliefs and thoughts, by being transparent throughout the whole process it is possible to minimize this risk.

Authenticity can be divided into three different categories: *reliability, validity* and *triangulation*. *Reliability* regards whether the same results would be acquired if the research was conducted again in the same setting with similar focal groups. A way to ensure that the reliability is high is to ask the questions in the same way and try to avoid influencing the

answers of the interviewees. This was considered by us while conducting the research, but it is still difficult to know if the interviewees were affected and therefore the reliability is by nature hard to measure. *Validity* concerns whether the study describes the researched phenomenon in a correct way. Problems with validity often occur by only picking a few interviewees who are chosen, consciously or unconsciously, to answer a problem in a specific way that is already deducted by the researchers. One way to minimize the validity problem is by triangulation. *Triangulation* is the checking of multiple sources and viewpoints to validate the data that is gathered. This helps with the validation of the results and in this research triangulation has been made by using both SME's and financial institutions to draw a picture of the problem with SME's adoption of online financial services (Briggs & Coleman, 2007).

3.6.2 Research ethics

Ethical thinking is an important part of doing research. One must always keep in mind that the study one is conducting might harm participants in the study in many ways. Information they provide might prove to be detrimental to them, should others find out what they have said. Therefore, researchers must proceed with care and think about the risks their study might pose to others, as well as themselves (Bryman & Bell, 2011). Throughout our whole research we have had an ethical approach toward our research subjects. The principles of research ethics mentioned by Bryman and Bell (2011) have laid the foundation for our entire study.

Bryman and Bell (2011) state that all people should be informed about the purpose of the study (ibid). We were always frank and open about our intention, and in each message we sent to a new person, asking for an interview, we told them the purpose of our demand and why we were there. This was appreciated by people, and they became less suspicious when they realized our study was for academic purposes. Always being honest and transparent is a good way of gaining people's trust.

It is also important that all the participants know that their partaking is voluntary and that they can abort whenever they want (ibid). As previously mentioned, we always asked the permission to interview people. Some turned us down, and we had to accept that. We also always asked them for their permission to record the interview and were open and clear about the purpose of us recording and what importance it would have for our study. Consent is important, since people who voluntarily help you often try their best to give you the

information you need. All our respondents volunteered and the answers they gave us were useful for our study.

All personal information must be handled with the greatest of care and confidentiality (ibid). We made sure not to give information about any of the interviewees to other people or discuss their answers with anyone. There was also one of the interviewees who preferred to stay anonymous and we accepted that. The people we interviewed were always told that they could be anonymous and it should be evident from the beginning for them. This is also a good means for transparency and gaining the trust of the respondents.

It is good research ethics that the gathered information may only be used for research purposes (ibid), which is the only way in which we have used, and intend to use, the data we gathered. Illuminating this is important, since they might otherwise be suspicious toward providing certain information that might be crucial for the study. Therefore, we were always honest and stored the information in such places where only we had access to it.

Lastly, it is critical that the researchers must not state any false purposes of their research (ibid). We were always frank and said that we wanted to interview people as part of our thesis. By doing so, we ensured the respondents of all our purposes. When they asked us questions about our thesis, we answered honestly. Since we were honest from the outset, we did not have any communication problems with our respondents, and we never perceived them as being suspicious toward us in any way.

The research ethics that we have considered have helped us in conducting a professional research with consideration of the respondents' will. To gain their trust, transparency and careful handling of information are key, which all breaks down to being honest and frank. Thus, basic research ethics has been vital for our information gathering, without which our thesis would not have been done.

3.6.3 Criticism of sources

Finding interviewees via a convenience sampling through Facebook could lead to a skewed representation of the entrepreneurs in the country since they are on social media and obviously use the Internet. This might have led to an overrepresentation of Internet

users among the entrepreneurs we interviewed, but we do not see this as a problem for answering our research question since the ones that the expansion might have helped in adopting online finance, also must use the Internet. Since our contacts managed to schedule interviews, and their identities could be verified by their business cards, we deemed most of them reliable enough to take them up on their offer to help us. Several of the interviews were conducted at the offices of the SME or the financial institution, which verified that they were who they claimed to be. Through snowball sampling, we also found interviewees through contacts that we made in Botswana, where some of the contacts were people that we had interviewed. Snowball sampling might lead to a problem of only getting one segment of entrepreneurs since the contacts might have the same attributes as the one who recommended them, leading to our interviewing a similar group of people. In our case, the interviews that we secured through contacts that we met in Botswana were mostly representatives for financial institutions. With this in regard, the representative spoke on behalf of the institution, and therefore the risk of them getting influenced by the one who recommended them should be low. To get access to the financial institutions, we have also gone through the formal channel of asking them. Although this required patience, it sometimes paid off. Convenience sampling and snowball sampling are commonly used in qualitative research since the findings do not have to represent the population (Bryman & Bell, 2011). Thus, using these two methods as sampling is not to be considered harmful for our research findings that has been gathered using a qualitative approach.

Another important problem that might arise from interviews is the possibility of the interviewee being affected by the interviewer, either unconsciously or consciously by asking questions in a leading manner. We are all subject to different norms and social coding, and since the answers are based on each person's subjective experiences; there is no such thing as a neutral interview situation. It is the interviewer's role to play an active part of the dialogue (Diefenbach, 2009). However, since we want the personal experiences of the people we interview, the best way to safeguard from affecting the interviewee is to let them talk as much as possible, and only intervene when we find it necessary in terms of gaining valuable information.

4. Empirical Data

In this section, the gathered data is introduced. Firstly, the secondary data gathered through literature, academic writings and several Internet sources is presented in a structured way in order to give a background of the current situation in Botswana. Secondly, the primary data assembled through our interviews is shown and presented according to the factors of the Framework for System Adoption. Lastly, the main takeaways of the empirical data are given.

4.1 Secondary Data

In this section, secondary data on the topic is presented. This data has been acquired through reviews of various sources such as literature, scientific reports and Internet sources, and provides a background to the situation in Botswana today and complementary information to the primary data.

4.1.1 Background

With a population of roughly two million, and an area of 582,000 square kilometers, Botswana is a big, scarcely populated, landlocked country in southern Africa. Most of the populace lives in urban areas, and the biggest cities are Gaborone, Francistown, Molelopole and Maun (The Commonwealth, 2017). According to estimations from the International Telecommunications Union (2015a), 27.5 percent of the population had access to the Internet in 2015. As the Botswana government aims to diversify the economy of the country, from being diamond-based to a more sustainable economic policy, the importance of SMEs increases. The government tries to help the SMEs develop through different means, e.g. financial assistance (Mutula & van Brakel, 2006). SMMEs in Botswana accounted, in 2014, for 35 percent of Botswana's GDP and in 2010 SMMEs contributed to 75 percent of the formal sector employment. The latest official numbers on how many SMMEs there are in Botswana were published in 1998. Back then, there were approximately 58,000 SMMEs. The small companies in Botswana are an important part of the economy, and with the government's support, their importance is bound to become bigger (Mutoko, 2014).

4.1.2 Use of financial services

In 2009, 41 percent of the adult population in Botswana used bank services whereas 59 percent did not. Approximately 22 percent of the population belonged to informal savings schemes, such as loans from relatives/friends and pawn shops. Of these, 39 percent lived

in rural areas, and 33 percent in urban villages. However, other formal financial services were not as common among the population as banking. According to the study, "Survey on Demand for Financial Services in Botswana", only 4 percent of all bank loans granted in 2009 were connected either to starting a business or expanding an already existing one (Okurut, Ama & Setlhare, 2009).

In 2014, financial exclusion, people who do not have or use any sort of financial product, had been reduced by 7 percent as compared to 2009, and the number of people who were banked, people who use financial products and/or services provided by banks, had increased to 50 percent (FinMark Trust, 2014).

A well-developed financial market and a frequent use of its services is also a factor which is distinguishing for a modern economy. The Botswana financial sector is relatively small but thriving, and has increased substantially in the past decade. The two biggest segments of the sector are commercial banking and pension funds, and the government actively supports growth within the sector. The insurance sector is both relatively well developed and efficiently supervised (MFW4A, n.d.).

The prevalence of financial services determines their accessibility to people and companies. In Africa, today, less than 20 percent have access to formal financial services, much due to lack of physical infrastructure permitting establishment of financial service providers as well as contact with people and companies. Even where such services are accessible, they might still be out of reach to the public because of inadequate collateral, difficulty to provide required documentation, and high transaction costs (ibid).

There are four kinds of financial services principally frequent on the African continent; finance for small and medium enterprises, informal finance, microfinance, and mobile banking (ibid).

Finance for SMEs is an important tool in encouraging the development of small and medium sized enterprises, which are becoming an increasingly important contributor to several African economies and are the focus of attention of development stakeholders (ibid).

Informal finance denotes financial services that are not regulated by any supervisory authority, such as a central bank, and include family schemes and group savings. These kinds of services are very common in many African countries, primarily among those who cannot access the formal services (ibid).

Microfinance includes a wide scope of different financial services, mainly aimed at low income families. Their spread is growing rapidly, despite starting from a relatively insignificant penetration rate (ibid).

Mobile banking specifies the use of mobile phones for transmitting money and reaching banking services. This use of financial services has spread rapidly and even people living in remote areas are gaining access to this communication tool as well as using it for financial transactions (ibid).

4.1.3 Financial sector

In Botswana, there is an important separation between banks and other financial service providers. The banks are regulated by the central bank, Bank of Botswana, which is also in charge of the country's monetary policy (Bank of Botswana, 2017a). All other financial institutions are regulated by the authority known as Non-Banking Financial Institution Regulatory Authority (NBFIRA), which came into being in 2006 (NBFIRA, n.d.). These institutions include insurance companies, non-bank lenders, capital markets et cetera.

In Botswana today, there are ten licensed commercial banks (Bank of Botswana, 2017b) as well as the government owned National Development Bank, which provides funding and financial services to the business sector of Botswana (National Development Bank, n.d).

In order to further access to funding to Botswana's growing SME sector, the government established the Citizen Entrepreneurial Development Agency (CEDA) in 2001. It is a parastatal, which means that it is run like a private company but the government is the major stakeholder, and provides loans, funding for capital expenditures and other financial services, as well as training and mentoring (CEDA, n.d.). CEDA is the only institution which provides

loans without security to enterprises, and the conditions for these loans vary depending on the size and scale of the business (Muriungo Mwobobia, 2012).

4.1.4 ICT sector

The ICT sector in Botswana is regulated by the Botswana Communications Regulatory Authority (BOCRA). It was established in 1996 as the Botswana Telecommunication Authority (BTA) as a means for liberalizing the telecommunications market. The first Internet service providers' licenses were granted in 1999 by the BTA (BOCRA, n.d.a). In 2012, the BTA was reformed into BOCRA through the Communications Regulatory Authority Act, and act ever since as an independent regulator of ICT in Botswana (Parliament of Botswana, 2012).

The Botswana Fibre Network (BOFINET), is a wholesale provider of telecommunication infrastructure, and is the main developer of ICT infrastructure in Botswana. They have laid more than 9,000 kilometers of fiber network across the country, and connected the nation to neighboring countries (BOFINET, n.d.).

The telecommunications market in Botswana is dominated by three companies, namely Mascom, Orange and Botswana Telecommunications Corporation Limited (BTCL). Mascom is the biggest operator with a market share of 53 percent, followed by Orange (32 percent) and BTCL (operating under the name of beMOBILE, 15 percent). As of March 2016, there were 34,481 subscriptions to fixed broadband connections in Botswana, whereas the number subscribing to mobile broadband was 1,360,236. When it comes to mobile broadband subscriptions, the three most important providers are Mascom, Orange and beMOBILE, with Mascom being the predominant one (BOCRA, n.d.b). For this study, a representative for Mascom has been interviewed, and written responses from BOCRA have been received.

4.1.5 The Internet

The trend in Internet usage in Botswana is clear; between 2010 and 2015 the Internet penetration increased by more than four times, from 6 percent to 27.5 percent (ITU data, 2017). The International Telecommunications Union (ITU) ranks all the countries in the world, in terms of different measures of the Internet usage and value. The latest ranking is from 2014 and Botswana stands out in one aspect, the change in usage of ICT. From 2010 to

2015, Botswana was the country which made the seventh biggest leap on the rankings when it climbed 31 places, from 134th place in the world to 103rd. However, in other rankings, such as ICT access and ICT skills, Botswana dropped. Even though access has become better, it has not moved at the same pace as in the rest of the world, leading to Botswana dropping six places, from 105th to 111th. In ICT skills, Botswana got a worse value in 2015 than in 2010, leading to a drop of four places from 112th to 116th (ITU, 2015a). The components that decide these rankings can be seen in Table 4 below. The percentage values describe the percentage the factors make up of the different rankings.

ICT access	**(%)**
1. Fixed-telephone subscriptions per 100 inhabitants	20
2. Mobile-cellular telephone subscriptions per 100 inhabitants	20
3. International Internet bandwith (bit/s) per Internet user	20
4. Percentage of households with a computer	20
5. Percentage of households with Internet access	20
ICT use	**(%)**
6. Percentage of individuals using the Internet	33
7. Fixed-broadband subscriptions per 100 inhabitants	33
8. Active mobile-broadband subscriptions per 100 inhabitants	33

ICT skills	(%)
9. Adult literacy rate	33
10. Secondary gross enrolment ratio	33
11. Tertiary gross enrolment ratio	33

Table 4. Source (ITU, 2015b: 41)

In comparison to the region of Africa, Botswana's Internet usage is somewhat different. In Botswana, 49.7 percent of the people have an active mobile-broadband subscription, in comparison to Africa's average of 12.9 percent, while the fixed broadband subscription was 1.6 percent in Botswana, whereas Africa's average was no more than 0.4 percent. Botswana also has a higher percentage of households with Internet access than the African average. Botswana has a percentage of 12.1 percent, whereas the African average is 9.7 percent. Though the penetration of the Internet in Botswana looks promising, it is just slightly above that of Africa as a whole. 27.5 percent of the Botswana population use the Internet (ITU data, 2017) in comparison to 25.1 percent on the African continent (ITU, 2016). The area where Botswana is far behind when it comes to the Internet is the bandwidth per Internet user, i.e. the speed of the Internet; Africa has an average of 27.9 Bit/s, while Botswana only has an average bandwidth of 16.4 Bit/s (ITU, 2015a).

However, even though Internet use is fast on the rise, it is only used for online financial transactions to a limited extent. As mentioned earlier, only 8.6 percent of Internet users use it for online banking, and of these only 15 percent (6250 people) are entrepreneurs (Statistics Botswana, 2014).

Cost

The Internet in Botswana is relatively low priced, as compared to other countries in the region, according to ITU (2015a). Fixed broadband is priced at 5 percent of gross national income (GNI). However, Botswana is a country with high inequality, and its GINI index, which measures income inequality, is at 60.5, which is relatively high (World Bank, n.d).

Because of its landlocked position, the cost of Internet provision is magnified as well (Ministry of Transport and Communication, 2014).

Reliability

In 2014, the Botswana government adopted the "Draft National Broadband Strategy" as a means for developing the Internet access and reliability to all the population and businesses of Botswana. In pursuance of this goal, the strategy sets out several benchmarks and targets that serve as guidance to its work. The main obstacles when it comes to using the Internet in the country are the restricted access of network, which impedes the supply and reception of Internet based services, the elevated prices on wholesale and shortage of transparency, the relatively expensive retail prices, and the absence of a local environment for Internet content. The government has thus far made investments in submarine cables, but due to Botswana's landlocked position, provision is still expensive (Ministry of Transport and Communication, 2014).

4.2.6 Mobile

The use of mobile money, financial transactions by mobile phones, is widespread in Africa, and Botswana is no exception. According to an article published with World Economic Forum, based on data from the World Bank, Botswana is the country in the world with the highest percentage of using mobile money and banking, with 44.5 percent of all account holders having done a mobile transaction in 2014 (Myers, 2015). The number of mobile money accounts has been on the rise since big mobile companies such as Orange and Mascom introduced them in 2011. In February 2015, the number of accounts had reached 405,000. However, only between one quarter and one third of these were active, and the use of eWallet, the mobile money service introduced by First National Bank of Botswana, is higher. Mobile money services include cash-in, cash-out and bill payments (MAP, 2015). Nevertheless, mobile money transfers are one of the three most important channels for sending money (FinMark Trust, 2014). This is not surprising, since Botswana has a very high penetration of mobile subscriptions, which in March 2016 was at a level of 171 percent (BOCRA, n.d.b).

One of the services banks provide to their customers is eWallet, which has been an important development in their range of capabilities. eWallet transfers allow users to send money from bank accounts to a domestic cellphone number, of which the proprietor does

not need to have a bank account, which in turn allows the receiver to withdraw the money at any of the originating bank's ATMs. As mentioned, the service was originally introduced by the First National Bank of Botswana and its eWallet service remains the cheapest one on the market, although its competitors have launched their own services. However, it has an upper limit of 3,000 pula on the daily transfers as well as the balance on the eWallet account. Having money on an eWallet account does not grant the owner any interest (MAP, 2015).

4.2 Primary Data

In this section, the information gathered from the interviews is presented. It is structured according to the factors making up the Framework for System Adoption in order to give a design coherent to the one in the analysis.

4.2.1 Trust and control

An issue that surfaced frequently during the interviews concerning online finance was the question of trust, whether it be the entrepreneurs themselves or their views on why not everyone jumped on the opportunity of using online finance. The entrepreneurs stated that since Botswana is a traditional society, physical means are still important when it comes to building trust, and that face-to-face contact is still very important for achieving this. It is acknowledged that in order for people to trust someone they preferably have to have met the person before, and that trying to make people put their money online where they cannot physically reach them, is sometimes crossing the line in regards to trust. However, education and sensitization are described as a way of overcoming this problem. The mindset of the people is already shifting, especially among the youth who use Internet to a greater extent than before, according to some entrepreneurs. This is also backed by outside sources (Batane, 2013).

> "Yes, because they [the population] still don't trust the Internet [...]. They look at the online transactions with a bit of suspicion, but all required is a bit education" – Quincy

> "There's a lot of development of the Internet, IT and so on, so the young people are actually using a lot of Internet. Yeah, I think it will play a bigger role, definitely. It's a

> little traditional old, take time to change. If someone is used to taking that lump sum to the bank, they won't do anything differently." – Godwell

The vast majority of the entrepreneurs themselves trusted the Internet, and the issue of trust mostly came up when talking about their thoughts on the future expansion of online finance. In fact, several entrepreneurs would like to see a wider expansion of financial services online, and feel as if the Internet has facilitated the access to financial services. Nevertheless, they stated that it will take time before the majority of Botswana people to trust the use of Internet finance. Many people will first want to see it being used by someone they know and be reassured by that person before trying it themselves, according to some entrepreneurs.

> "Seeing other people prospering all using the financial services over the Internet then, […] They see the progressing, and that's when they can be confident. For them convince them now, it's going to be hard." – Mula

To overcome the trust issues and other problems with using the Internet, the entrepreneurs often pointed to the solution of education and making people more aware of the Internet, as well as being reassured by people whom they trust that the service or product is safe to use.

> "You know I think Batswana [Botswana people] need to be sensitized even in the city. They still need to be sensitized and understand that the Internet is a tool that can make your business run much faster, that you can make and access your target audience much faster. So, I think the biggest thing is education, in my perspective, to educate them about the Internet." – Swift

> "And also educating, most importantly, the consumer. There are a lot of things that can happen like that the consumer can do without queueing up at the physical bank, or at the insurance company or whatever, where they use financial services. But now, people have to know that there are these kinds of services that they have. It's just education and packing people with knowledge." – Aobakwe

This statement about education is not only supported by the entrepreneurs, but by analysts as well (Brown, 2016). Educating people and making them more literate in ICT is also a

key activity of the government's "National Broadband Strategy". Through their "Digital Literacy Programme" the government aims to train people in ICT literacy as well as making access to Internet more available for private users and expanding hotspots in public places. The program also seeks to introduce classes in Internet usage and awareness, both online and offline (Ministry of Transport and Communication, 2014).

When it comes to trust, there are also many financial institutions which feel as if lack of trust is holding the online financial services back. There is a strong belief that the average consumer has a distrust toward Internet banking and would rather do their banking in real life, as mentioned by representatives. They iterate that it is important to build a strong relationship with the customer before trying to convince them to use online services or other services that they are not used to. They have to be comfortable in order for them to listen. This is especially important with small and medium sized enterprises, which are generally less used to using technology as opposed to big corporations. This is partly due, as mentioned by some representatives, to their traditional way of thinking. This leads to a situation where people become even less habituated to using the Internet and technology, which creates a skepticism and fear of losing their money among the population, according to certain interviewees.

> "When you talk relationship, or when you're talking to SMEs, it's about building a relationship. It's about partnership. And you cannot… Only once you have built a partnership, and you've got a strong relationship, then you can start relying on communicating on the Internet basis, because now you've established a trust." – Brenda

> "I think, the key challenge for the small and medium enterprises is that they don't trust the technology. They still want to see the bankers, they actually want to do the forms, and then submit [...] So, they still believe more in the old way of doing things, but it's something we are building toward" – Kagiso

One representative continues to explain why the people have this distrust toward financial services through the Internet and how they try to get them to embrace the new technology, and reiterates the factor of fear and skepticism. However, the banks are approaching these customers with online banking and are gaining ground.

> "Our SMMEs aren't really… I don't want to say that they aren't intelligent, but they are not advanced in knowledge of these things [...]. So, they're kind of skeptical. They just have that fear [...] that people might go in and steal their money. Because they already have fear, if they just hear one or two cases of such fraud, they'll just say "You see there, I told you. This is how unsafe this is". But you're still trying to get them. Slowly we are reaching out to them." – Grace

4.2.2 Perceived usefulness

Throughout the interviews there was a clear pattern of people thinking that the Internet had made it easier to access financial services. Mostly, they praised the ease and the speed in comparison to going to a physical branch where time consuming elements, like queuing, were a common complaint. The fact that with the Internet, you could do your transactions and business anywhere facilitated not only the access to the services, but also ease of doing business, as a result of the easier access.

> "Most definitely [the Internet has helped to access financial services]. It takes away the bricks and mortar things so it's very much mobile. You are not restricted to being in your office" – Quincy

> "Yes, the Internet has helped a lot. Normally you need to go to the queues at the banks for you to send someone money, but with the Internet you can do it at home" – Edward

Although most of the entrepreneurs felt that the Internet in some way had helped them in accessing financial services, some did not agree and stated other services, such as mobile banking, as easier to use and more helpful for their doing business.

Future use

Since finance is important for helping entrepreneurs invest in and expand their business, it is important that it be made easy to access for all enterprises (CGAP, 2017). According to the World Bank (2017), digital is a great way for making finance accessible for people whose access to it is currently limited. A great number of entrepreneurs expressed their wish for using financial services online even more in the future than they do today, especially if the access to them were made easier.

> "Definitely [I would use it more]. If I had it my way, everything would be online. Because the human error when it comes to money is detrimental. Just because a person forgot to do one, two, three, your bank account is frozen, now you can't pay this person. The role of course that it plays for a small business is just too much for it to be left to error. In terms of numbers, calculating what's what, let's just go with the Internet office." – Ketumile

Nevertheless, not every entrepreneur expressed such enthusiasm for the prospect of using it more. It was stated that since SMEs do not always require an extensive use of financial services, there is no need for them at this point in time to expand their usage, which in turn means that they have not thought about a future expansion in this area. Nevertheless, this does not mean that more online finance is certain not to be used further on.

> "I don't know [if I will use financial services online more in the future]. The kind of business I'm running does not require more than what I'm already using; until the day when I start putting up my own web pages and such for the different operations we're running. I haven't really cared about it." - Ulf

Other means

For those who do not use online banking a lot, mobile money seems to be the natural alternative. Entrepreneurs who did not use online banking much, were happy over the ease of transactions that follows the use of mobile money.

> "I can send money to different accounts, to the phone numbers. I send it to my number and it goes directly to my account, or I send to someone's number and it goes directly to their account. You can use your phone number, or you can withdraw with your card, it depends. That one [mobile money], it's a good one." – Mula

One entrepreneur acknowledges that mobile money is competing with the banks for potential new customers. She also states that mobile money is mostly for those who do not use online banking, since you can do similar tasks through that service.

> "And also, now, the banks have a lot of competition. Because, there are those people without bank accounts that the mobile operators have come into that space and actually provided these people without the need to go to a bank, you can actually now transact with your cell phone." – Gao

4.2.3 Perceived ease of use

Even though there are now financial services online in Botswana, there still seems to be some services that entrepreneurs feel are easier to access in real life than through the Internet. These services include insurance, loans and some transactions. As stated before, Botswana is described as a traditional country where face-to-face contact is important, and this is partly shown by the fact that online financial services have not been embraced to their full extent yet.

> "There are some transactions that you can't not go to the bank for. [...] There's no substitute for that. You can't do it online, so you have to go to the bank." – Gao

Nevertheless, some entrepreneurs hope to see a shift toward even more services being available to adopt through the Internet rather than having to access them in person, and many say that the future is heading that way.

> "It would be easier to do it online. Easier accessibility everywhere, ah that would be perfect. I believe in the future we will be driving to that." - Thebe

How they find new services

When asked the question of how they sought out new financial services for their businesses, most entrepreneurs answered that you must approach the bank or the insurance company yourself when you want a new service. However, some entrepreneurs had experienced banks and insurance companies approaching them. It is stated that companies that are exposed online and are seen have a greater chance of being approached by the financial institutions and that they might expect to be subjected to their advertising.

> "It depends. Normally, because of the competition in the banking sector, they approach us. But at then some point you'll find that, they might not, because they should have a need to know you, otherwise, if they don't know you exist they can't approach you. [...] You cannot do anything online before they can see what you're doing." - Thapelo

4.2.4 External factors

During the interviews, external factors were mentioned by entrepreneurs which affected their ability to adopt online financial services. From the external factors that was mentioned, a pattern could be seen where the most important and influential factors could be divided into Internet infrastructure, the products offered by the financial institution and the government. This part concerning external factors is therefore divided into these three subheadings to get a clearer view of the situation.

Internet infrastructure

Cost

The Internet is still very expensive for most people, because of previously mentioned reasons such as high GINI, which many entrepreneurs expressed in the interviews. In comparison to what speed they got, they said the standard price was too high.

> "It's expensive. It's expensive. I mean, it's ridiculous. [...] I pay the equivalent of about 500 pula a month. It's quite pricey for the speed. For your cell phone, you pay about 150 pula for 800 megabytes, which is quite ridiculous. And it doesn't last." - Swift.

However, it has become cheaper in recent years, which some entrepreneurs state. Some of them are content with the Internet they are getting for the price they pay, especially in comparison to what they got a few years back. They also expressed hopes that the prices would continue to fall as time goes on.

> "Well, they [charges] are a lot cheaper than they were a few years ago. So, for the speed that I'm getting, it's a lot cheaper than it was five years ago for instance. And one can hope that as more infrastructure comes and more players come into the market it will get even cheaper." – Gao

Internet providers and regulators also agree that the cost of the Internet is a challenge on the road to expand the usage of online services. The representative for Mascom stated that not everyone can afford the newly introduced fiber that gives the fastest speed available on the market, and therefore many people, even SMEs, are dependent on the mobile networks supplied by the three biggest providers. As stated earlier, Botswana has a mobile penetration rate of 171 percent. Due to this, many use their handset to access the Internet

through Wi-Fi hotspots and data bundles, but they do not all have Internet at home, since it is more expensive, as stated by Mascom's representative. Furthermore, the representative for BOCRA mentioned the importance of mobile networks in driving the development of Internet, and that the cost of other Internet usage is too high.

Reliability

When asked about the reliability, several entrepreneurs expressed their frustration toward the Internet as not being reliable enough. There were several aspects to this expressed by the entrepreneurs, where the two most prominent ones were speed and the connection being there. The poor Internet connection, both the low speed and the existence of a connection, play part in the amount of usage of Internet, as stated by some entrepreneurs.

> "It's slow most of the time. I don't know why it's slow, but, yeah, it's slow. [...] So that's one of the reasons also that we don't use the Internet so often, even if we could use it." – Aobakwe

> "Sometimes you'll find that there's no the Internet. So yeah, I'd say it's not reliable." – Thapelo

Other entrepreneurs seemed to feel as if it currently is reliable enough even though problems sometimes still arise. Also, here the problems expressed were due to low speed and inconsistent existence of Internet connection. The problems mostly occurred when it was raining, as compared to a few years ago when the connection could disappear without any apparent reason, even in broad daylight, as stated by some entrepreneurs.

> "It's reliable, but the only time we have problems with the Internet is when it's raining. […] When it rains, the Internet goes down and what the telecommunications will say is that they have a problem with the satellite somewhere." - Edward

However, none of the institutions expressed discontent with the Internet in its current stage. Many of them think that it has become easier to offer financial services thanks to the Internet. Nevertheless, since CEDA and NDB do not offer any financial services online, it has not been beneficial to them. Neither Botswana Insurance Company, nor Old Mutual offer any financial services online yet, only information sharing, as is the case of CEDA and

NDB. However, for the commercial banks it has been useful. The representatives for the banks mention the convenience that the Internet provides as a major reason as for why it has had an impact on people's use of financial services and there has been a relatively high acceptance level for it.

> "Yeah, I believe that [the Internet has been useful]. People are more, now, drawn to convenience. So, when you know that you can do your transfers within the comfort of your home, and even beyond designated working hours… People are adopting the online services, and knowing that they can just pop into our site and ask questions they want to ask without having to come to the bank. That's as far as it goes in them holding up to using those facilities, and that's how it's slowly getting easier to use them." – Grace

Moreover, there is a growing number of people using Internet banking in Botswana. According to Statistics Botswana (2014), 8.6 percent of all Internet users used it for Internet banking. Representatives for financial institutions say that they see a trend among customers toward more usage of Internet banking, and they follow the development closely.

> "Yep, if you look at every year, even across all the banks that I've worked in, we sit down and say "How many customers have we migrated from the general banking to the technological banking, to say how many customers have we migrated to the Internet banking, mobile banking, using those solutions?" And you will see that there's a growth going to that. And when we looked at the brackets we used to see there have been more youngsters, but you'll see that even the middle to higher age are actually starting to use those services. So, all banks have those kinds of reports." – Kagiso

Access

Internet access in Botswana is not as well-developed as in Europe, and this poses problems for providing it to SMEs. The development of networks, both mobile and fixed, has started, but according to the representative for Mascom, there is still a lot to be done. He states that the development of 4G mobile networks is still at its infancy stage, but that there are base stations that provide capacity for other, slower, networks, such as 3G. When it comes to fixed networks, the access to fiber is limited, and the solutions that are in place are somewhat outdated.

Although the networks are not very developed, the Internet is available in large parts of Botswana. The newest technology still arrives in the larger cities first, e.g. Gaborone, but the rural areas can still enjoy Internet access. Nevertheless, the Internet provided to the countryside is mostly through mobile networks, and it is predominantly older, slower, networks according to both the representative for Mascom and BOCRA. However, the representative for Mascom goes on and says that the speed and reliability of these networks are as good as their equivalents in the cities, and it has improved in recent years. He states that there is 3G coverage for about 80 percent of the population in Botswana today.

Furthermore, the continuous expansion of the Internet throughout the country is supported by BOCRA in several ways. The regulator has set up the *Universal Access and Service Fund* (UASF) to facilitate the rollout of communications services, such as the Internet, to areas where the access is poor. The fund has, among other things, financed the creation of Wi-Fi hotspots in public areas and hopes to provide Internet to primary schools in remote areas, according to the representative for BOCRA.

Power shortages

Another obstacle that is mentioned is the problem of power shortages in Botswana. This leads to Internet providers having to invest in backup systems, which has increased the costs for them. According to the representative for Mascom, this is due to the public company Botswana Power Corporation (BPC) not having performed their duties to a satisfactory level, historically speaking. These higher costs for the Internet providers in turn affect the Internet users due to the higher prices that the providers need to charge. However, the problem of power shortages has decreased during the past years.

In the future, there are hopes that a reduction in prices will lead to an increase in use and development of the Internet. The Internet usage in Botswana has been growing quickly in recent years (ITU data, 2017) and it is still increasing quickly according to BOCRA. BOCRA states that since service providers are working on expanding the high capacity networks, like 4G, Internet usage is bound to increase. Moreover, a continued reduction in bandwidth price will accelerate this increase, according to BOCRA. However, Mascom's representative mentions that many small businesses are likely to be dependent on mobile Internet solutions for a long time, until fixed Internet becomes affordable and more available to them.

> "To get everybody to use [the Internet], including some of these non-sophisticated SMEs, this type of company will then be dependent on mobile Internet solutions for a long period of time, I believe. Both because of the availability of the Internet as a broadband solution and affordability." – Anders

Targeting SMEs

However, when it comes to the usefulness of the Internet in reaching out to SMEs by financial institutions, the answers varied. The mentioned reasons for it not being useful are that they think that SMEs are not online financial literate, i.e. they are not used to using financial services online, not all of them have access to Internet and they prefer seeing the bank person. However, for those who have Internet it has been beneficial, according to some representatives. The reasons for this are that they can be reached via e-mail or social media, as well as sign up for their online products.

> "The Internet is quite beneficial, and the challenge is that not all of them would have it. It's but for those who access it, who use it. I think almost a, 40 or so percent, we can reach them via e-mail. And that's the Internet. And as they can sign up on there, they can use Enterprise Online. It's very beneficial in that you can transact and do your transactions from the comfort of your office." – Onkabetse

> "Well, with particular reference to the SMEs, I wouldn't really say it's been that much beneficial. It's been more beneficial to individuals, but to SMMEs it hasn't been very beneficial. I think the only outreach we have, is when you go out and make presentations to them, that's when we make most impact. But online banking hasn't been really much helpful there. Because most of our SMEs they are small and most of them, they are not much into these online services." – Anon

So, even if not everyone finds it useful, most financial institutions do, especially when it comes to communicating with customers and advertising. Some of them mention that the younger generation uses the Internet more and more, and this is also supported by research. Although the younger generation uses it less than compared to many other places in the world, Internet usage is getting more popular among young people in Botswana (Batane, 2013).

Product offer

Banking

All the commercial banks interviewed have online banking where customers can send and receive money, pay bills, and check their balance. The online banking platforms went under different names but all had the same basic concept. However, some of the big banks stated in the interviews that they had segmented the market and adapted certain online platforms for different kinds of customers. For example, Stanbic had more segmented and tailor-made products designed for SMEs called "Enterprise Online" and "Business Online", whereas Standard Chartered also offered a product, specifically targeted at businesses, called "Straight to Bank", according to their representatives.

Insurance

So far, Botswana Insurance Company does not offer any services online, apart from information sharing and social media interaction. However, they have plans on launching an upcoming product, tailor-made for SMEs, but only information will be provided online. The actual purchase of the product will still be made offline. The interviewee pointed to the fact that SMEs want products that are conveniently packed and that in order to get information on how to best come up with the product, they used social media to interact with their customers.

When asked when this product will be launched, the respondent mentioned that their internal systems for accommodating the product were not yet in place.

> "We've understood these problems in the SMME sector, and you know what, they need something that is conveniently packaged and easily managed." – Komissa

Old Mutual does not currently have any services online either, but has plans on launching in the future. The representative for Old Mutual said that it is part of their initiative to advance their online presence and that in the next 12 to 18 months, they want to offer most of their products online.

Non-commercial banks and lenders

As of yet, the interviewed institutions in this segment do not offer any services online, except information sharing. However, the representative for CEDA highlighted the use of

their online presence for interacting with their customers, whereas at NDB you could find application forms online. Nevertheless, the way of applying for their services and products is still through traditional means offline. There are several reasons why this is the case, some stated that it is mostly an issue of customers' online literacy, but also that their internal structures must be considered. Therefore, the continuous improvement of their online network is vital, since they can there, through interacting with people, facilitate information sharing.

Mobile phones

The financial institutions are all in some way offering the opportunity for SMEs to access their services online through their mobile phone. The mobile services seem to correlate with the size of the institution. The smaller institutions offer only simpler services, such as transferring money from one bank account to another, which can often be accessed through the computer as well. Although some hope to develop a tailor-made app later, not all the financial institutions has one yet.

> "We only have our cell phone banking. Yeah, that's the only thing that we have. We don't have an app yet. I know other companies have apps that can be downloaded onto your Android phones. But we don't have that yet. We just have cell phone banking. You just dial our code and then you can do your transactions. That's all we have for now." - Grace

The larger institutions stand out by already having their own mobile app where the customers can access a range of different services through their mobile phone. Even though these are larger institutions, apps are a new technology even for them.

> "Yes, we do [have an app]. We started with it around October last year. It's relatively new. There's still a few things that we're developing on it, just to enable it to be… I think there was one issue that we had previously, was on the speed. We've now improved on that, so we should be going to market and advertise it, to clients to be able to sign up on it." - Onkabetse

Internal systems

Before being able to launch new services and products, the institutions need to make sure that these services and products are compatible with their internal systems. Sometimes, when this is not the case, the systems might need to be upgraded or replaced to be able to sustain the new product or service. Several of the financial institutions mentioned that their system would have to change and develop for them to start offering online services.

> "The volume [of SMEs] is already there, it's about readiness from our end. We are not ready to invest in systems that are tailor-made. But as a bank we acknowledge that and we are working on that. Come five years in the future, I think it will be a different story." – Anon

> "I don't see any key challenges that I think we will face, except our own internal things that we need to deal with. But any external specific challenges, I think we should be fine in terms of that. […] I think it's a question of time." - Roy

Future

The future plans for financial institutions vary, but there is generally a long-term plan of offering more services online. They hope that as technology continues to evolve, their institutions will go in the same direction and develop services that are more tailor-made for SMEs, and also be able to provide them online. There is a common understanding among the financial institutions that there is a shift in the lifestyle toward being more technology-based, and they know that they eventually must adopt their services to being able to be accessed online. For many of the institutions the plans are already there, and there is only the issue of getting their systems ready, which will take time.

> "For the future we would seriously like to segment our clients. We don't want to offer one service for all. We don't want to offer services where you get services that you don't need but cost. For SMEs, the primary question is costs. The volume is already there, it's about readiness from our end. We are not ready to invest in systems that are tailor made. But as a bank we acknowledge that and we are working on that. Come five years in the future, I think it will be a different story." - Anon

Government

As stated earlier, the two regulatory bodies of the financial sector in Botswana are the Bank of Botswana and NBFIRA. They have to agree to any new service or product before it can be launched on the market. When asked whether there is any regulation that prevents financial institutions from offering any service or product online, most of the representatives for the financial institutions answered negatively to that question. NBFIRA and Bank of Botswana are considered progressive by most of the financial institutions, who have a good perception of the regulatory bodies. As long as the financial institutions follow the laws of the country, they can provide any service or product they want, and NBFIRA and Bank of Botswana rarely turn down a new initiative from the financial sector. The need of approval is mostly to show that the new technology follows the regulations of anti-money laundering that is in place in Botswana, according to representatives of financial institutions.

> "We are operating under the regulation of the Central Bank. And whatever product we have to offer must be approved by the Central Bank. So, whatever product we offer, the Central Bank must be aware of and it has to approve it. [...] No, there is no such deregulation." – Rapula

> "We do have a regulatory body called NBFIRA, but it's very progressive. It has actually helped the industry immensely." – Komissa

Many of them talked about the need for identification and validation of their customers, even though not everyone mentioned it as a regulation per se. A law has been passed that allow financial institutions to have their documentations online, but they still need to verify the identity of the customers, which means that they still need to see the person upfront at some point.

> "The aspect of digital in there is… We would still need to know that we know you as a client, we've done our KYC [Know Your Customer], and we know that we're speaking to the right person. So, you can still send all the documentation whatever you need, through the Internet, through mail to us, and we still do that. That would be for our clients we know." - Onkabetse

Nevertheless, most of the financial institutions think that the government does a good job in supporting their strive to supply more online services. They mostly praise the government's expansion of the technological infrastructure and being a frontrunner on the Internet. Many mention Botswana Innovation Hub, a government-run technology and science park, as proof of their efforts. The government has also launched "e-Government", as mentioned by several respondents, which means that they are trying to shift many public and other societal services to being online. As stated in the e-Government strategy launch, "This will enable citizens and business community to access Government services and information as efficiently and effectively as possible through the use of Internet and other ICTs. E-Government is also going to facilitate public participation in government, which promotes transparency, maintains public confidence and trust in our Government and its institutions" (Ministry of Transport and Communication, 2012).

> "Yes [the government is helping], because right now the government is deploying the Internet in the whole country. People need to transact wherever they are. The government is putting infrastructure in place." - Anon

But not all agree that the government is doing their utmost to help financial institutions become more online-based. One representative felt that the government was on the right track, but that there still was work to be done from their side. The representative especially highlighted the fact that the government is currently not present enough online, but that it has been providing the necessary infrastructure for being so.

When it comes to governmental support in expanding the Internet in Botswana, there was a positive tone in terms of the ambition from the government. The achievements that the government had succeeded with through BOFINET were mentioned. Especially their investments in submarine cables that provide high speed Internet were brought forward as a positive aspect of their work, but also their expansion of Wi-Fi and fiber networks was highlighted. The new minister in charge of these areas is considered a good one who knows what need to be done, according to the representative for Mascom.

> "We have got a new minister who has ambitious plans, I think, on what has to be done in the area, I think. About the quality of the Internet and getting it cheap. I think the political drive is here as well. But then you work across the borders, so to speak. There is not just

> one ministry, you work with an E-Government plan, of course. The ambition is there." – Anders

But even though there was praise for the ambition of the government, some regulations were seen as hindering for the continued development of the Internet access. Especially the strict environmental regulation stopping Internet providers from building base stations for network provision was brought up, but also other regulation was considered to restrict providers' ability to put in place new stations.

4.2.5 Organizational readiness

As previously stated, Internet usage in Botswana has increased fast during the last years (ITU data, 2017). It was evident among the entrepreneurs, since many of them use the Internet frequently in their business. When asked whether they used it a lot, many of the answers were positive, which shows that using the Internet has become a normal part of their everyday life as well as vital for their doing business.

> "Yeah, I do [use Internet] a lot. Because that's how I work. I use it for marketing, I use it for Internet banking, I use it for my mails. Right now, that is actually my main ways of reaching out to people." – Thapelo

Nevertheless, some of the entrepreneurs still do not use it extensively in their business, but they still sometimes have to use it. Some of them state that it probably will increase further in the future, mainly because of the younger generation entering the market.

The financial services that are being used by the interviewed entrepreneurs were mostly of the simpler kind. These simpler services include transactions and transfers from their bank account, but not services that were more complicated to use than these. This means that even though everyone has a bank account, these were for many the only financial service they enjoy. The entrepreneurs did mostly not see any need to use other, more complicated services, since their perception was that it would not benefit them in their business at the moment.

> "We just use a bank account, we do normal transactions, we deposit, withdraw, we don't have any loans at the moment" – Godwell

> "Eh, financial services, it's just payments, banking and then… for payments, yeah, I think that's basically it" – Aobakwe

Most of the entrepreneurs do not use any kind of insurance in their company. Some feel that their company is not ready yet for the cost that comes with being insured or that they are in no need of insurance. However, there were two entrepreneurs who had insurance within their businesses. Nevertheless, these two were the exception and the others thought the costs of insurance were too great for them at this point.

> "I do use insurance, such as travel insurance for when I travel. Then some of our equipment is insured like our sound equipment and things like that." – Swift

Even though most of the financial services that are used by the entrepreneurs are through formal channels, some feel that the access to formal finance is too difficult and use private funders. This highlights the fact that there are barriers that impede the access to formal finance in Botswana, and that private channels might be easier and more accessible to some. The premiums needed to pay for using the formal channels are, in some cases, too high for small businesses to pay, as shown by the following statement.

> "Right now, because it [the company] is still very small, I've only been using my siblings [for finance]. And when I deliver, I get paid, I pay back. [...] It's with my siblings only, because these microlenders have a percentage they add on to. And, small as my business is, I cannot be dealing with the percentage. First, I just get 500 pula from my sister, what I give back is 500, that's it. Microlenders want to have back 650." - Boineelo

How the entrepreneurs access their financial services differed a lot from person to person. Some people have adopted the new technology and almost solely use Internet banking. It shows that Internet banking is becoming more prevalent and is taking over from more traditional means of payment.

> "I mostly use it [banking] online. There's only a couple of checks that I've written. But mostly I pay online now." – Gao

> "I do have an online account. It's easier, it's quicker actually. The queues in the banks, they are crazy" – Boineelo

Other people decided to only use their bank account online sporadically, and some entrepreneurs still prefer to do their banking in real life rather than online.

> "Normally, for me, I don't use it much, the Internet. [...] Normally I just go directly to the bank" - Mula

Other financial services, such as insurance, might not be available to adopt online and therefore this could lead to the customer having no other option than to access it offline, as described by some of the entrepreneurs. The scarcity of services being offered online is one factor currently impeding the accessibility for SMEs.

> "In Botswana, unfortunately, the Internet based systems are only taking, people are only starting to use them now. A lot of the business sector, and private sector, are still walk-ins, or telephone. I mean in Botswana for example, we still use faxes. I mean in Botswana, sometimes, you still have to write a letter and go and hand-deliver it. So, with insurance, I usually deal with them over the phone." – Swift

4.5. Main takeaways

There are several main issues highlighted with further adoption of online financial services in the interviews, and firstly the high cost of Internet, its slow speed and low reliability are takeaways needed to remember. Low trust and technological literacy rates among the general population and SMEs are also main factors brought up in the interviews that should be kept in mind. Finally, the fact that there are few financial services directed at SMEs offered online and the internal systems among the financial institutions not yet being able to accommodate new services must also be retained. Nevertheless, there were exceptions and the entrepreneurs interviewed in this survey were mostly technologically inclined. Statistics show that entrepreneurs in general have not yet adopted Internet finance to a large extent (Statistics Botswana, 2014), and therefore the entrepreneurs interviewed here are part of the exception. Also, some financial institutions do provide specifically designed products to SMEs. Furthermore, people are hopeful and see where the future is heading,

namely toward more adoption of online financial services and more services being provided online.

5. Analysis

From the data received during the interviews and gathered from other external sources, several patterns can be deduced. To get a clear view and perception of the current situation, the Framework for System Adoption is used to give an understanding through the themes constituting the foundation of the framework.

5.1 Trust and control

Most of the entrepreneurs interviewed in this study trust the Internet, and feel as if they are in control of what is going on. Nevertheless, they also mention that people in general are distrustful toward online services. The given reasons behind these trust issues are a lack of financial literacy, i.e. knowhow of using financial services, throughout the population, in combination with it being a cultural problem. There is a lack of financial literacy that is holding back the development of financial services and financial adoption in Botswana, and a stronger focus on improving this would be needed in order to further this advancement (MAP, 2015). Since the Botswana people are not very financially literate, as mentioned by many interviewees, they have no experience of using these services, thus making them less keen to start using them.

> "If someone is used to taking that lump sum to the bank, they won't do anything differently." – Godwell

Trust is also basis for the perceived credibility factor, added to the TAM-framework by Wang (2003). People who do not believe that the Internet is a safe place for their money are less likely to put it there. This is the case for many entrepreneurs in Botswana, according to the interviewees, since they are less literate when it comes to using financial services online. The credibility of the Internet is also impeded by scams and frauds; one of the entrepreneurs had been scammed himself. This lowers their sense of control on the Internet, and they might start regard it as an unsafe place, which creates a skeptic attitude toward it and, in turn, affects their behavior toward the Internet negatively.

Due to the belief that the Internet is an unsafe place, the perceived credibility criterion (Wang, 2003) is not met by many entrepreneurs in general in Botswana. Safety and reassurance are key, according to many respondents, both financial institutions and entrepreneurs. For trust to be built, the perceived credibility must be in place.

> "[...] it's about reiterating the safety net that we already have in our platform." – Oaipetla

Many respondents mention the fact that Botswana people generally are traditional and skeptical to new innovations. This is argued as affecting the perceived credibility factor in that it might be difficult to convince entrepreneurs to go directly to online finance without their first being reassured by someone they know or a professional representative whom they have met face-to-face. However, online finance is gaining ground in Botswana, and, many financial institutions are seeing an increase in the number of people using online finance and continued to encourage this development. This might be due to an occurrent shift in mindset, accelerated by the younger generations' growing use of Internet in Botswana (Batane, 2013). One can presume that with further education and sensitization on digitalization, the trust toward online financial services will grow. As people become more sensitized to the new technology, they will get used to its being there and will further perceive it as credible. The government's strive to encourage online activities might be an accelerator for this.

5.2 Perceived usefulness

According to Davis, Bagozzi & Warshaw (1989), the respondents must consider the new technology as improving their current situation in order for them to adopt them. Perceived usefulness has a proven positive correlation to the usage of a system (Davis, Bagozzi & Warshaw, 1989; Wang, 2003). This criterion is met for many of the entrepreneurs interviewed in the study, who mention the Internet as a tool that has helped them much. Those who have implemented Internet financing in their business mention the queues at the banks as an important reason as to why the Internet is convenient and has helped them; especially in saving time entrepreneurs mention that the Internet has helped them in taking part of financial services. However, those who do not use the Internet often have other means that help them, such as mobile banking. To them, the perceived usefulness of the other means either outweighs the one of the Internet, or there are other factors stopping them from using it. The increased speed of using the service online in comparison to real

life is also mentioned as an important part of why they perceive the adoption of online services as being useful. To be able to use services within minutes, rather than hours, is considered a positive aspect of the online services and improves the perceived usefulness.

When entrepreneurs in Botswana get exposed to others who use online financial services successfully, more of them can be expected to realize the usefulness of these services. It is argued by Davis, Bagozzi & Warshaw (1989) that people who have a positive impression of using a service have a stronger intention of using it later. This is also stated by some entrepreneurs, who would like to see online financing being used more.

The younger generation is starting to use Internet services more (Batane, 2013), and can therefore be expected to better comprehend the usefulness of doing transactions online than the older people. Many people, as well entrepreneurs and financial institutions, argue that the future is heading toward more online services, and the younger people are driving this forward, due to their positive impression, as cited by Davis, Bagozzi & Warshaw (1989).

The interviewed entrepreneurs who do not already use Internet finance all stated that they would adopt it in the future, and that they can see where the future is heading. Many entrepreneurs also said that they would use it even more in the future than today. This trend is also backed up by the financial institutions' data, showing that more people are going online for their finance. This means that a great number of people have passed the *perceived usefulness* stage in TAM and are at the stage called *attitude toward using*. With the further development of Internet reliability and speed, it can therefore be assumed that many more people will go further and find Internet finance useful and easy enough to use that they will start using it.

5.3 Perceived ease of use

Davis, Bagozzi & Warshaw (1989) argue that systems that are easy to use are perceived as being more efficient and more useful for enterprises. This means that financial services to SMEs through the Internet need to be easy to adopt for them to be used more extensively. Some of the financial institutions have understood this, and if the services are not already there, they are on the way. The entrepreneurs also argue that Internet services often are

easier to manage than the previously used services, which is probably one reason as to why these have been adopted. This is supported by the statements of efficiency by Davis, Bagozzi & Warshaw (1989).

The online financial services used by the SMEs are also relatively simple, often just a normal online bank account. This is probably because they are easier for them to use, and the most efficient ways for them to access their financing. The services by banks specifically designed for SMEs are also of the simpler kind. All of this is in line with the description of perceived ease of use by Davis, Bagozzi & Warshaw (1989).

Another factor affecting the ease of use of Internet finance is the competition from mobile money. The entrepreneurs who use mobile money are happy with it as a substitute and highlighted its ease of use. The mobile providers can therefore be seen as competitors to financial institutions. The users of mobile money thus acknowledge the ease of use when it comes to mobile money as greater than the ease of use of using Internet banking, as described in TAM. TAM mentions that if the ease of use is perceived as higher when it comes to mobile money the users will not develop an attitude toward using Internet finance, principally online banking in this case. Only when they feel that Internet banking will be easier to use than mobile money will these entrepreneurs start developing an attitude toward using Internet banking.

"That one [mobile money], it's a good one." – Mula

Several of the factors that need to be addressed in order to improve the ease of use for Internet finance are the reliability and speed of Internet, as well as the cost of the Internet, as stated by the respondents. These are all external variables that affect the ease of use as described in TAM.

The mobile penetration of more than 170 percent has financially included people who still have not been able to get bank accounts (MAP, 2015). With an Internet penetration of 27.5 percent, it does not cover enough people to fully compete with mobile money (ITU data, 2017). It can be argued that there is still a long way to go for Internet banking until they can truly compete with the ease of use of mobile money, since the access to mobile money is much wider in Botswana. Still, most of the interviewed entrepreneurs

used Internet banking instead of mobile money and therefore perceived the Internet banking as having an advantage over mobile money.

5.4 External factors

According to the TOE-framework, external factors are the factors surrounding the company, and perform pressure on it. These factors are the pressure exerted by the market, the infrastructure and the government (Oliveira, Martins, 2011). Also, TAM mentions external variables as an indirect factor on the intention to adopt new technologies (Davis, Bagozzi & Warshaw, 1989). Three main external factors have been deduced from the interviews, namely the Internet infrastructure, the products offered by financial institutions and the government.

5.4.1 Internet infrastructure

The TOE-framework states that if the infrastructure is in place to accommodate the technology in an adequate way, it will have a positive effect on its adoption (Oliveira & Martins, 2011). The cost of the Internet is today one of the problems of the infrastructure of Botswana, and there is a unanimous dissatisfaction with it. The entrepreneurs consider the price, for both fixed broadband and mobile data bundles, to be too high. These views on the infrastructure affect the intention to adopt a new technology negatively as stated in the TOE-framework (ibid). But among the entrepreneurs there is an expectation for the cost to decline in upcoming years. Since the cost has been declining in the past years, some entrepreneurs hope and believe that there will be better competition within the ICT sector that will ensure continuous cost reductions in the future. The interviewed Internet provider agrees that the current cost of the Internet is expensive for individuals and SMEs, and that they, in a bigger extent, are dependent on using mobile data bundles. A decrease in the cost would lead to a more positive view of the infrastructure, and would therefore, according to the TOE, lead to a higher intention to use the new technology (ibid).

> "[The Internet] it's expensive. It's expensive. I mean, it's ridiculous." - Swift

It is not only the cost, but also the reliability of the Internet that hinders an extended use of online services. Most of the interviewed entrepreneurs feel that the Internet is too slow and that you do not get value for your money. This is backed up by the data from ITU (2015a)

which mentions that the speed of the Internet in Botswana is considerably lower than the African average. The slow Internet damages the SMEs through making their work online slower or even unmanageable. This factor is also affecting the intention of using new technology negatively according to the TOE-framework, as mentioned by Oliveira and Martins (2011). The problems with the Internet affect the entrepreneurs also according to TAM. It states that the external variables, such as the Internet in this research, indirectly affect the entrepreneurs' intention to adopt a new technology, since it affects the perceived usefulness and the perceived ease of use of the technology. The extensive prevalence of mobile phones in Botswana is one such external factor that has had an impact on the ease of use of mobile money, which can be seen by the high penetration rate of mobile money in Botswana (Myers, 2015).

5.4.2 Product offer

Since SMEs can only access the services that are provided on the local market by the financial institutions, the progress of the financial institutions is a decisive factor for the accessibility and development of their economic activity (Cull, Ehrbeck & Holle, 2014). In the TOE-framework, the structure of the market and the characteristics of the industry affect the adoption of new systems (Oliveira & Martins, 2011). Currently, the services which are offered online are mostly basic. Some of the bigger commercial banks offer specific platforms for SMEs, where they could access financial services. If the services were to develop, this would positively impact the SMEs intention to adopt the technology, according to the TOE-framework (ibid). Many of the financial institutions have plans to offer more services online, although the plans are at different stages. The most expressed reason as of why they do not have more services online is their own readiness. The institutions need time to get their own systems in place, to be able to offer more services.

> "The volume [of SMEs] is already there, it's about readiness from our end"
> – Anon

SMEs demand conveniently packed services, according to the financial institutions, and the existence of such services would be an external factor improving the ease of use of online finance, in accordance with TAM. Few such services are currently in place, and the situation is described as a "leader-follower" situation where the external factors, the

services, must exist for the SMEs to adopt them. Once the services are put in place, the SMEs can start adapting their behavior, according to TAM, toward using them.

Nevertheless, according to Hoti (2015) an important environmental factor is *consumer readiness*. This means that the SMEs must be ready to adopt the services before they can be put in place. With the situation being "leader-follower", this means that the financial institutions themselves must sensitize the SMEs to their services to prepare them to adopt the services, according to the TOE-framework (Hoti, 2015). In addition to this, if the financial institutions do not perceive that the entrepreneurs' readiness is there in terms of a new technology, the pace of which the new technology will be launched will be reduced, according to the TOE-framework (ibid).

5.4.3 Government

The TOE-framework mentions government regulation as a direct factor that affects the intention to adopt new technologies (Oliveira & Martins, 2011). The SMEs are not directly affected by the government in terms of access to financial services online, instead, the government's actions affect the SMEs indirectly. One indirect effect is the regulations that affect the financial institutions ability to offer services online, since new products need to be approved by the regulators (Bank of Botswana, 2017a; NBFIRA, n.d.). However, the banks do not see this as a problem, because the central bank was generally positive to the new services that were submitted to them and is therefore not affecting the intention for financial institutions to adopt new systems negatively, according to the TOE-framework (Oliveira & Martins, 2011).

The support from the government to the financial institutions also affects their ability to offer services online. Here, the institutions are generally positive toward the government. They mention that the government helps the development through improvements in online infrastructure, and through them, pushes for an elevated use of technology-based solutions, including the Internet. Through observing the TOE-framework, the external factors derived from the government will in a positive way affect the financial institutions when it comes to technology system adoption (Oliveira & Martins, 2011), which in turn will aid the SMEs.

The government has also launched e-Government, as mentioned by several respondents, which means that they continuously keep improving the society's functioning online. This initiative is in line with Hoti's (2015) mentioning of governmental support of the TOE-framework, and since the situation in Botswana has been described as a "leader-follower" situation, it is important that the government continues being in the forefront of development. This can have an impact on people's behavior and attitudes toward going online, in the way described in TAM, since it might improve the functioning of the online services.

5.5 Organizational readiness

According to the TOE-framework, in order to adopt a new technology, the company, or organization, must have a system and structure in place for accommodating it (Oliveira & Martins, 2011). For simple technologies, such as online banking, not much is needed. However, for a financial institution to launch a new product, sometimes a major change is necessary. This is supported by the answers from several of the financial institutions. Improving the environment for payments through, e.g. improved interoperability is something that has been requested by previous research to advance financial inclusion in Botswana (MAP, 2015).

However, the organizational factor of the TOE-framework also implies that organizational readiness is not always technological. Competence, often based on education and previous experience, is also important in this context. If an entrepreneur does not have the knowledge of how to use a certain technology, it is possible that he or she will not do it (Hoti, 2015). Furthermore, some entrepreneurs want to use financial services even more, but are not ready to do so. This is often due to it not being prioritized or because of the cost. The TOE-framework mentions the size of the company as a factor in adopting new technologies. Small companies might suffer from resource poverty, and therefore have more difficulties in adopting technologies. There is a need for the company to grow, and earn more money, before it can afford to spend the time and money that is necessary to adopt a new system (ibid). The cost issue in the case of SMEs in Botswana is derived from the cost of the Internet, where a fixed broadband is too expensive and the mobile data was limited in use, but also for the cost of certain services, such as insurance.

Since many SMEs are run by a single person, the entrepreneur's personal experience is important when it comes to adopting a new system in the organization. If the entrepreneur is used to doing their finance in a certain way, and it has worked for them so far, they might be reluctant to change their habits. This is supported by statements from several respondents.

6. Conclusions

In this final chapter, the answer to the research question is given. Furthermore, implications for practice and implications for research are presented. Finally, the authors present their recommendations for future research on this topic.

6.1 Main findings of the study

The research question is *"To what extent has Internet finance been adopted among SMEs in Botswana, and what are the reasons for this current adoption rate?"* Through the conducted research, the conclusion is: it has been adopted to a limited extent among SMEs. There are several reasons behind the current adoption rate and these are elaborated below.

Empirical data points to the fact that only a fraction of all people in Botswana use the Internet for financial services, such as money transfers and online banking, and the use among SMEs is not very widespread according to statistics. Therefore, these findings from the interviews are skewed in favor of Internet users, probably since the entrepreneurs mostly were contacted via the Internet which implies their being technologically literate. Nevertheless, the problems they face are the same as those of many other entrepreneurs, which is shown by the secondary data.

This thesis has analyzed the adoption of Internet finance through the lens of FSA. It is evident that several aspects affect the adoption and these need to be addressed in order to further the adoption of Internet finance in Botswana. Botswana is a traditional country in the middle of a transition toward more digital solutions being introduced. This means that several impediments still exist that need to be overcome. Through the analysis it has been deduced that trust toward third parties must be established, and there are different ways of doing so, such as first meeting a person whom the adopters may trust. Furthermore, the reliability, speed and cost of the Internet need to be enhanced in order for it to be perceived as useful enough to entrepreneurs in general. Moreover, the Internet already has

competition from mobile phones which are sometimes perceived as being easier to use than the Internet, as well as being more useful due to the reliability, cost and speed issues. Many other external factors also affect the situation of the Internet in Botswana today, and these are the Internet infrastructure, which in turn affects the cost, speed and reliability. The Internet infrastructure is dependent on governmental support, and also other Internet providers. Furthermore, the number of services currently being offered online is low, which impacts the SMEs possibility of adopting financial services. Simpler kinds, such as online banking, are prevalent, but when it comes to insurance, there is none to be found, despite the fact that there is a demand for it among the interviewees. This is due in large part to the financial institutions not being ready to introduce these services to the market yet. The government, on the other hand, is seen as supportive in this aspect.

According to the FSA many aspects, such as financial literacy, need to be addressed in order for SMEs to be ready to adopt the services. This is supported by several respondents who say that many enterprises are not at the point of adoption because of the lack of know-how in this area.

6.2 Implications for practice

Although it is evident that the Internet already has had effects on financial adoption for small and medium sized enterprises, there is still much work to be done for it to grow further among Botswana SMEs. Online financial literacy must be expanded, and the best way to do this is through education. The work done by organizations such as CEDA is therefore key for improving the literacy rate. For entrepreneurs, it is important to educate themselves on this topic and use the acquired knowledge to implement changes in their structure and embrace online financing as a tool, instead of being skeptical toward new things. A mind shift among entrepreneurs is needed, and this might be accelerated by help from the government, especially through education. Government must also support the lowering of Internet prices and the improvement of Internet reliability in order to make it beneficial for SMEs to use more financial services online.

The offer of financial services to SMEs online is still not as extensive as most entrepreneurs would like. Some of the financial institutions are working on it and are developing online services for SMEs. However, at present, the services used by SMEs are often very simple,

and some even informal. If more conveniently packed services could be developed, they would most likely be well received among SMEs. The entrepreneurs are demanding financial services online that are easy to adopt.

To summarize: The increased Internet penetration in Botswana has made it easier for SMEs to adopt online financial services to some extent and a number of entrepreneurs do use them, although often only simpler services. The most prevalent obstacles to overcome to facilitate further adoption of these services are the trust issue, which can be solved by focusing on technology and financial literacy, the cost and reliability of the Internet, as well as a greater offer of convenient services to SMEs. However, problems like Internet costs and educating the population could take time to solve and pose difficulties unless handled properly from the outset.

6.3 Implications for research

For this study, no framework has been found that covers the entity of variables needed to keep in mind when analyzing why people adopt certain technologies or not. The TOE-framework does not cover the psychological aspects that play a part in people's minds, but is complemented by TAM in this aspect. TAM on the other hand is slightly outdated in its original form and does not consider the special characteristics of the Internet, with trust and control being the most prominent ones. These are however introduced in the extended TAM, which is the one used in this thesis. Therefore, when researchers conduct studies of this kind, they sometimes need to combine the different frameworks in order to cover the whole picture, as done by Riyadh, Akter and Islam (2009) and Lin, Wu and Tran (2015). The broadness of these frameworks makes it difficult to draw general conclusions, since every research done has unique variables that are not considered within the frameworks. Still, the broadness makes the frameworks easy to use for a lot of different research. The frameworks are also relatively old and with the rapid technological development in the world an update of these frameworks would be beneficial to be able to highlight new factors in technology adoption, such as trust and control, as done by Al-Somali, Ghomali and Clegg (2008).

Furthermore, the framework created for this study, Framework for System Adoption, could further be used in similar studies in order to strengthen its suitability and credibility as theoretical framework in research. If need be, it could be adapted to different conditions,

despite the fact that it has been developed in order to cover all factors involved in this kind of study. The framework is not recognized as being flawless, but since it has been enough for covering the factors involved in this study, it is presumed to be of use for research in similar fields.

6.4 Recommendations for future research

An extensive research among SMEs in the entire country would be needed, in order to get a better sample that reflects their current situation more accurately than this study, of which the sample has only been found in the capital Gaborone. This could help find solutions to problems concerning people across the entire land. If research were to be done across all of Botswana, the results could show if there are differences in the ability, and willingness, to adopt online financial services in the rural and the urban areas.

It would also be interesting to study what importance mobile banking has in this context, and whether it covers entrepreneurs who could adopt Internet services instead. And if they are, find out what the reason behind their using mobile services in their enterprise instead of the Internet banking is. Using the TAM model and compare whether the perceived usefulness of the Internet or mobile banking is higher would be a good way to start. It would also be interesting to see if the mobile services are standing in the way of an increased use of Internet services, and research on this topic would also assist in highlighting challenges that are prevalent for a more extensive use of Internet services.

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8. Appendix

8.1 Appendix 1

Interview Guide – entrepreneurs

What kinds of financial services are being used, and why these? What is the most common way to use financial services for you?

What kind of financial services do you access through the Internet? Why do you access these services through the Internet?

Do you feel that the Internet has helped you take part of financial services? Do you use financial services more and/or does it make it easier to access financial services?

In what way, do you seek out financial services? Actively, informal, formal etc.?

How is the possibility to get access to the Internet for you? Complicated/easy, expensive/cheap, mobile/fixed etc.? Any special benefits for companies?

Is the Internet connection reliable? Do you use the Internet a lot in your daily business?

Has access to financial services become better in the past years, given the growing the Internet usage?

Do you think financial services through the Internet could expand in the future? Do you think you will use it more/start to use it in the future?

Are there any financial services that are still easier to access in life than online?

8.2 Appendix 2

Interview Guide - financial institutions

What kinds of financial services do you offer online? Why these services in particular? For how long have you offered these? What is the reason behind offering these services online?

Has the Internet been beneficial to reach SME:s with financial services? To what extent?

Do you have any online services that are especially directed at SME:s? In what way do you notify the SME:s of the services that you provide?

Is the government (or other institutions) supporting the development of financial services through the Internet in any way?

Do you have services that are adapted for mobile phones?

Has it become easier to offer financial services online in the past years, given the growing the Internet usage?

Do you have plans to expand financial services online to SME:s in the future?

Are there any institutional regulations that prevent you from offering certain services online?

8.3 Appendix 3

Interview questions - Botswana Communications Regulatory Authority

What is your role in supporting the development and expansion of the Internet in Botswana?

How do you work with improving the Internet connection and expanding the access to the Internet in the country?

What are the most important challenges that you perceive in developing and providing the Internet in Botswana?

How has the position of the Internet in society developed over recent years? Any means for using the Internet that are more popular than others?

What do you think it will look like in a few years time?

Do you make any specific efforts in aiding the development of financial services online?

Do you have any special programmes aimed at facilitating the accessibility to the Internet for small and medium sized enterprises?