

e-Readiness Assessment of Small to Medium Enterprises for Business to Consumer eCommerce in Namibia

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Abstract: *The increasing need of convenience and affordable retail space infrastructure has created an opportunity for small to medium enterprise (SME) retailers to adopt online retailing. Namibia has an improved ICT Infrastructure and internet penetration, thus creating an ideal environment for web-based electronic commerce. SMEs have a tendency of focusing on their domestic market whilst neglecting the global marketplace. To tap into this global marketplace a sustainable eCommerce strategy should be adopted by companies. In this regard, the question that arises is, "How capable are the Namibian SME retailers to create, adopt, use and diffuse the components of a networked or digital economy using the business to consumer (B2C) business model?" This research will aim to show the e-Readiness of Namibian SME retailers and how they have adopted the business to consumer e-Commerce model (B2C) in conducting e-Transactions and then recommend ways for adopting the B2C model in Namibia's SME retail sector. B2C is a model in which businesses transact with consumers. A survey research design will be adopted in which a number of willing SME business owners will be interviewed and given questionnaires for data collection. Therefore the research will follow a mixed approach encompassing both qualitative and quantitative data analysis. For the research sample, a purposive sampling technique of fifty companies will be adopted. Thematic analysis of the qualitative data will be done using Atlas.ti and SPSS will be used for the analysis of quantitative data. In addition to the e-Readiness assessments, the results of this research will be recommendations on ways for adopting the B2C model in Namibia's SME retail sector.*

Keywords: E-commerce, E-Readiness, Digital Economy, Business to Consumer (B2C)

1. Introduction

Small to medium enterprises, commonly known as SMEs, have a vital role in developing countries. The United Nations accepts that SMEs have a role to play in the developing nations (Schmögnerová, 2002). SMEs are being regarded as "paramount in employment creation" (Machacha, 2002, p277). This is seen in Namibia as SMEs provide income to around 160 000 people (Obgokor, 2012). Considering that this is nearly a third of the nation's employable population, SMEs' contribution becomes significant. In terms of economic development in the new economies, half of the new jobs are created by SMEs (Edimiston, 2007). For a growing economy like Namibia, SMEs have become the backbone and are the main source of income for both rural and urban dwellers (Visser, 2006). Namibia as a developing country acknowledges the role played by these; thus ongoing efforts are carried out to support these small businesses. One way in which SMEs receive support is through funding provided by the Development Bank of Namibia as well as the SME bank which was established in 2012.

The environment in which SMEs operate in Namibia is highly volatile and competitive according to the Bank of Namibia (BON, 2010). Obgokor (2012) noted that in Namibia the majority of SMEs operate in the retail industry through the selling of products. They tend to focus more on the domestic market. The competitiveness of the retail industry is a challenge to most SMEs, including the high cost of operations. To curtail this, some have resorted to other marketing channels moving away from the traditional brick and mortar sales and resorting to online sales. In other words they have started practicing electronic commerce

notably known as eCommerce. Electronic commerce has thus provided opportunities for SMEs, to expand their markets. According to the World Trade Organization (WTO, 2013), many small and medium-sized enterprises (SMEs) have the possibility of benefiting largely from information and communication technology (ICT) for their daily operations. However, it is noted that whereas there are enormous benefits many however are not maximizing on the full benefits of ICT. For SMEs to participate in eCommerce they should have the necessary ICT infrastructure (Shemi, 2012).

In another study by the United Nations Conference on Trade and Development (UNACT, 2016), it is argued that in-as-much as the SMEs lag in the usage of ICTs, the SMEs are the ones to benefit the most. The use of ICT in the business of buying and selling is called electronic commerce (eCommerce) (Shemi, 2012). Turban, (2012) also defined electronic commerce (eCommerce) as the process of buying, selling, transferring, or exchanging products, services, and/or information via computer networks, mostly the internet and intranets. It is presented in different dimensions with different business models based on the participants of the transactions. For instance, if the participants are governments, the model is known as the government to government (G2G). If it is businesses, it would be business to business (B2B). When participants in the transactions are business and consumers, it is thus referred to as the business to consumer model (B2C).

The e-Readiness of a company far exceeds mere use of carrying out transactions electronically. The business processes a company uses have to be evaluated, to see if they are enhanced effectively and efficiently. A gauge of the

company's resources has to be carried out and the environment in which the company operates. According to Turban (2010), the framework of eCommerce includes people, public policy (legal issues, regulations, taxes), support services (logistics) and infrastructure. The prerequisite of a successful eBusiness is eReadiness (McConnell International Report, 2000). E-readiness is the level of ICT infrastructure implementation of a country and the ability of consumers, businesses and governments to use ICT to its benefit (EIU, 2006). This research will aim to assess the e-readiness of Namibia for eCommerce usage.

2. Problem Statement

eCommerce is regarded to be in its infancy in Namibia (Chiware, 2007). Turban (2012) further stated that eCommerce can be one of the most effective business tactics for SMEs. He also noted that the merits of utilising ICTs in eCommerce can be huge. However SMEs in Namibia have a low market share and face stiff competition (Obgokor, 2009). As observed by Chiware (2007), there is low ICT usage by SMEs in Namibia. Chiware stated that SMEs who do not embrace eCommerce miss out on the opportunities to expand to other regional and global markets.

In Namibia, its B2C eCommerce market potential is still largely untapped, as evidenced by the few retailers offering online shopping and the low online share turnover by the retailers conducting eCommerce (Bon, 2002). A study carried out by the Bank of Namibia in 2002 revealed that of 121 Companies only 20 (i.e. 0,2%), had an online share turnover above 50% (Bon, 2002). To date, a few studies have been carried out on how Namibia SMEs can utilise ICTs. No identified study has been carried out in measuring the level of eReadiness of SMEs in conducting B2C eCommerce in Namibia. However some companies have been struggling to penetrate the eCommerce platform. Presently there are a number of eReadiness tools which have been developed that mark a nation's preparedness and its position in the Digital Economy. Namibia scores 2.2 out of a total of 4 on the overall eReadiness index for any country. (GRN, 2014)

The SMEs in Namibia stand to lose out in seizing the full benefits ICT can provide. Operational costs for SMEs can be greatly reduced thus boosting profitability. It is a well-known fact that the Namibia retail infrastructure is costly and the big retailers tend to have an unfair advantage over

SMEs. The SMEs struggle to compete for retail outlets as the rentals thereof erode their profit margins. The result is that after a few months of operations, these SME retailers find their businesses on their knees and close down due to high operational costs. There is a need to gauge the e-Readiness of these companies using the available tools. Therefore this study intends to assess the level of e-readiness of Namibia's SME retailers in conducting B2C e-commerce and recommend ways for adopting the B2C model in Namibia's SME retail sector.

3. Aims and Objectives

The main aim of this research study is to assess the e-Readiness of Namibian B2C Retail SME companies and recommend ways for adopting the B2C model in Namibia's SME retail sector

To achieve this, the following objectives are drawn:

- Investigate the factors that lead to low levels of ICT usage by SMEs in Namibia
- Review existing e-Readiness assessment tools in Namibia
- Assess the current eCommerce usage level (e-Readiness) of SME Retailers in Namibia?
- Recommend ways for adopting the B2C model in Namibia's SME retail sector

To aid this research the following main question will be drawn, "How can an e-Readiness assessment of SME retailers conducting B2C e-Commerce in Namibia aid in the adoption of the B2C model in Namibia?"

The sub-questions will be:

- What are the factors that influence the low level of ICT usage by SMEs in Namibia?
- Which e-Readiness assessment tools can be used to measure the e-Readiness of SMEs in Namibia?
- What is the current eCommerce usage level (e-Readiness) of SME Retailers in Namibia?
- What recommendations can be made to Namibia's SME retail sector towards the adoption of the B2C model?

4. Literature Review

Small and medium-sized enterprises, commonly known as the SMEs, play a crucial role in the Namibian economy as a developing economy. To aid them financially the Namibian Government established the SME Bank in 2012 through the dissolution of the Small Business Credit Guarantee Trust (SBCGT). However the SME sector in Namibia, like many firms in Africa, struggles due to a lack of adequate information technology infrastructure (Oshikoya, Hussain, 1998).

The emerging new technologies and the rapid developments of eCommerce solutions have created new channels of selling products (Campanell, 2001). Merchant solutions and customer solutions and techniques have improved over the

years. In most of the occasions, online marketing is at the forefront especially of social marketing. SMEs, find it easier to advertise their products or services online on the social networking sites such as Facebook. A few SMEs have fully interactive functional websites. For the SMEs to fully tap into the benefits of eCommerce there would be a need to adopt other strategies that include identifying potential customers, profitable customers, loyalty programs and staying abreast (Krotz, 2003).

4.1 E-Readiness

There are various definitions of e-Readiness, which we find. McConell states that e-Readiness is the capacity to participate in the global digital economy (McConnell, 2000), whilst Apec defined e-Readiness as the degree to which an economy or community is prepared to participate in the digital economy (APEC, 1999). E-Readiness is also defined as the measure of the country’s ICT infrastructure and the ability of its consumers, businesses and governments to use ICT to their benefit (Economist Intelligence Unit Limited, 2008).

In the context of SMEs we can thus define e-Readiness as the ability of a company to successfully adopt eCommerce technology infrastructure. E-readiness is vital to the establishment of eCommerce. The aspect of e-Readiness assessment is vital in providing detailed information on how a nation, community or economy is prepared to adopt eCommerce.

Namibia as a developing nation has embarked on being a knowledge economy by 2030 as enshrined in the National Development Plan. For a country to succeed in being a knowledge economy, the nation’s e-Readiness must be assessed or evaluated (Mani, 2002). The e-Readiness assessments provide in-depth knowledge of how ICT have been integrated, adopted, used and progress within a community.

4.2 e-Readiness assessment framework for eCommerce

The e-Readiness assessment frameworks or tools are different in their goals, strategies and results (Mutula, 2010). Due to this, when selecting an e-Readiness assessment tool, one has to take this into context. E-Readiness assessments are designed to evaluate organisational capabilities, access and opportunities offered through eGovernment initiatives. They have emerged as opportunities to collect, organize, share and manage ICT-related data (Potnis & Pardo, 2011). According to Musa (2010), e-Readiness has this diversity in order to offer different uses in different ways. The e-Readiness assessment methods also differ according to how data is collected and analysed. In this vein, there are a lot of studies which have been carried out on the assessment methods (Mutula,2010). Based on the theories and models, we find that the influencing factors are then grouped or classified into innovation characteristics, organisation characteristics and environment characteristics (Zhai, 2011). This study will also make use of the e-Readiness assessment model (The UNCTAD B2C index) developed by the United Nations Conference on Trade and Development (UNCTAD, 2016).

The following are examples of e-Readiness assessment frameworks (see Fig. 1):

Organization Name	Content tool	Year	Aspects	Area	Methodology
Economist Intelligence Unit	E-Business Readiness Ranking	(2003)	E-economy	Macro	Quantitative
Center for International Development Harvard University	Networked Readiness Index	(2002-2003)	E-society	Macro	Quantitative
IDC	Information Society Index	(2000-2002)	E-society	Macro	Quantitative
UNDP	Technology Achievement Index	(2001)	E-society	Macro	Quantitative
UNCTAD	ICT Development Indices	2001)	E-society	Macro	Quantitative
McConnell	McConnell International Risk-Business	(2000-2002)	E-economy	Macro	Qualitative
Computer Systems Policy Projects	Readiness Guide	(2001)	E-society	Macro and	Qualitative

Figure 1: eReadiness assessment frameworks (adapted from Hassan (2014))

4.3 B2C eCommerce

Business to consumer (B2C) eCommerce entails selling online to the general public mainly through electronic catalogues e-Catalogues and shopping cart software (UNCATD, 2016). In Africa there has been growth in eCommerce (Brown & Jayakody, 2008). The B2C business model when compared to the business to business (B2B) however remains small (Mishra & Aditya,2011). It is not sufficient for an organization or company to merely have a website but rather an interactive site that has merchant solutions as well as consumer mechanisms that facilitate the smooth flow of transactions. The B2C index of UNCTAD stipulates that besides having web presence for the business, the online purchase process will require internet access on the part of the users to review the electronic catalogues and place orders. A payment method or methods should be stated. Once payment is fulfilled products are sent to customers either digitally for digital goods or physically for non-digital products.

The diagram below (Figure 2) denotes the steps to be followed:

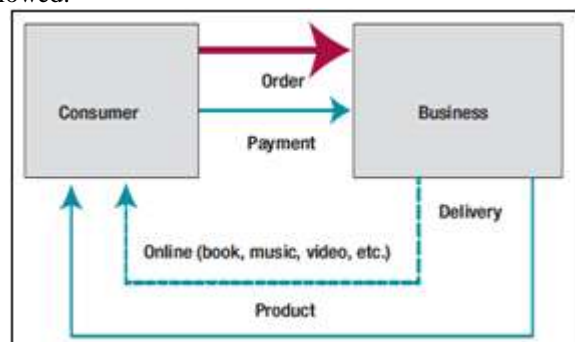


Figure 2: B2C processes (adapted from UNCTAD, 2016)

Electronic commerce mechanisms besides having the internet as the backbone should have enablers that include databases, networks, security, server software, and hosting services (Turban, 2012).

The United Conference on Trade and Development however shows concern that Africa ranks lowly as compared to other continents in eCommerce readiness. This has led to the

failure of Africa to harness the opportunities brought about by the internet. The B2C eCommerce readiness index measures the readiness of countries to engage in online commerce. South Africa in 2016 was rated as the front-runner in eCommerce readiness on the African continent. (UNCATD,2016).

The SMEs in Namibia stand to lose out if they do not realise the full benefits ICTs can provide. In order not to struggle to compete for retail outlets, Namibian SMEs will have to see the benefits ICT can provide and make maximum use of it. This will enable them to stand in competition with other retail outlets that have already adopted ICT in their business operations.

4.4 SME Retailers in Namibia

Obgokor (2012) in his study reveals that the majority of the SMEs are found in the retailing sector. The role played by the SMEs cannot be ignored as they immensely contribute to economic growth (Iiedholm and Mead, 1987; Schmitz, 1995). Employment creation is one of the areas in which SMEs contribute. The retail industry in Namibia is dominated by South African based companies such as Edcon, Foschini, Markhams, Pick n Pay, Shoprite, etc.. These companies tend to dominate the retail industry as they have a large market share. According to the Chamber of Commerce, Namibia's SME retailers find it difficult to operate in this competitive environment they find themselves and therefore closed down within the first five years of operation (NCCI, 2010). In a study carried out by Amwele (2013) in a pursuit to find the factors affecting the SMEs in the Namibian retail industry she pointed out that lack of resources and competition are the main factors that affect the performance of SMEs in the Namibian retail sector.

Another study by Bank of Namibia (BON, 2012) carried out by Mirjam states that SMEs in Namibia suffer from limited market infrastructure and a lack of innovation. This is worsened by the limited space of market places. The study suggests that SME retailers in Namibia suffer from unfair competition thus rendering them unprofitable. The South African and Chinese retailers are said to dominate the small domestic market. In light of this could Namibia's SME retailers benefit from an expanded market share that eCommerce brings?

5. Guiding Theory of the Research

The guiding theory of this research will be the Grounded Theory, which is a collection of procedures to develop an inductive theory from the data (Moghadam, 2006). This encompasses theoretical sampling, coding and constant comparison. Theoretical sampling is 'the process of data collection for generating a theory whereby the analyst jointly collects, codes and analyses the data and decides what data to collect next and where to find them, in order to develop his theory as it merges' (Strauss, 2015). The data collected from the SMEs, will be deductively analysed to obtain the eCommerce strategy for Namibia.

6. Significance of the Research

The study will aid SME business owners who wish to adopt the B2C model for their companies to know the key factors for a successful adoption. The study will shed more information on the current state of SME B2C retailers' activities. The government will be sensitised on the key areas of e-Readiness that SMEs B2C retailers need help on. Insights from the study will inform Information Systems specialists and SMEs who wish to enter the eMarket space.

7. Research Methodology

This research is a survey. Greaves, Kirby and Reid (2006) define methodology as a step-by-step plan of what data gathering instruments the researcher will use, how the population will be selected, how data management strategies are likely to be utilised as well as ethical strategies. Therefore, this section will cover the research design, research instruments, population, sampling procedures and data analysis.

7.1 Research Design

The study will use mixed methods because the researcher wants to get the different viewpoints of its target population. The researcher is of the view that the qualitative method will provide detailed data which is relevant when soliciting various views from respondents, while also using quantitative method may solicit information that may have not been covered by another method. Furthermore, adopting both approaches ensured reliability in the study. The two methods may act as checks and balances.

7.2 Research Instruments

Data collection instruments to be used in this research are questionnaires and interviews. The questionnaires will be used to collect data from business owners in order to answer the first, second and third research questions. Interviews will also be used for data collection. This will help the researcher to get a direct overview of the pertinent problems from the retailers

7.3 Population

Neuman (2006) defines a population as a large pool of cases or elements, such as persons, groups of people, organisations, written documents, symbolic messages, or even the social actions under investigation. The population for the study consists of all Namibia retail outlets practicing the B2C model.

7.4 Sample and sampling techniques

Sampling enables the researcher to study a relatively small number of units in the place of the target population, and in doing so, obtain data that is representative of the whole target population. Sampling is therefore, the process of choosing the units of the target population that are to be included in a study (Sarantakos, 2007). For the purposes of this study, a simple random sample of 50 SMEs will be selected from a population of all SMEs in retail in Windhoek.

7.5 Data analysis

Once data is collected, it is essential that it is organised in such a way that conclusions may be drawn. According to Sarantakos (2007:313) the process of data processing and of converting raw data into meaningful statements is otherwise known as the analysis and interpretation of data. Data collected from questionnaires and interviews will be analysed qualitatively using the ATLAS.ti software since it qualitatively analysis large bodies of textual, graphical and video data. The quantitative data will be analysed using SPSS since SPSS is a statistical analysis tool.

8. Limitations of the Study

Although there are several industries in which Namibian SMEs are active in, this study will only focus on the SMEs in the retail industry. There several eCommerce business models SMEs can adopt such as the B2B, business to business e-commerce model. This study will only focus on the business to consumer model (B2C).

9. Assumptions

The research will be carried out bearing in mind the following assumptions

- SMEs are engaged in e-Commerce
- E-Commerce-strategies fit when they are contextualised/localised
- Ministry of Trade and Cooperation will take interest in the results of the research

10. Ethical Considerations

To be in a position to collect data, an ethical clearance letter will be requested from NUST that will introduce me as the researcher and seek permission from the SME business operators to solicit data. Data that will be used in this research obtained from SME business operators is to be sought on voluntary basis and will be kept confidential. The data will solely be used for the study only and will not be made use of in other means. The research ethics to be followed are as enshrined in the NUST Research Ethics policy.

11. Conclusion

A B2C adoption model for SMEs in Namibia will need to be contextualized rather than a mere adaption of a model from developed economies. . To tap into this global market place a sustainable B2c adoption model should be adopted by companies. In this regard, the question that arises is, "How capable are the Namibian SME retailers to create, adopt, use and diffuse the components of a networked or digital economy using the business to consumer (B2C) business model?" This research will aim to show the e-readiness of Namibian SME retailers and how they have adopted the Business to Consumer e-commerce model (B2C) in conducting e-transactions and then recommend ways of adopting B2C model. B2C is a model in which businesses transact with consumers.

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