

Analysis of the adoption of e-commerce to performance of SMEs in Uganda

Muhumuza James Kamulindwa

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**UGANDA CHRISTIAN
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DECLARATION

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This Dissertation is my original work and has not been presented for a degree in any other University.

Signature *Kamulindwa*

Date *12th September 2023*

Muhumuza James Kamulindwa

J22B05/202

APPROVAL

APPROVAL

This is to clarify that this research report entitled has been under my supervision and it is ready for submission with my approval.

MAGOBA DORCAS

Signature: *Marcas* Date: *12/09/2023*

DEDICATION

I dedicate this report to my parents, family relatives and to all those people who have been there on my behalf for the financial and moral support they have given me during my education.

ACKNOWLEDGEMENTS

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Terms and Abbreviations

AST	Adaptive Structural Theory
DIT	Diffusion of Innovation Theory
E-Auctioning	Electronic Auctioning
E-Commerce	Electronic Commerce
E-Government	Electronic Government
ERP	Enterprise Resource Planning
E-shop	Electronic Shop
E-Business	Electronic Business
GDP	Gross Domestic Product
LDC	Least Developed Countries
UNCTAD	United Nations Conference on Trade and Development
UTL	Uganda Telecom Limited
PPDA	Public Procurement and Disposal of Public Assets
Shs.	Shillings
CVI	Content Validity Index
GOU	Government of Uganda
URA	Uganda Revenue Authority

ABSTRACT

This dissertation was conducted on the topic assessing the adoption of E-commerce by SMEs in Uganda. The study was commissioned by a fashion company called Kyaligonza, which is gradually integrating E-commerce into its operations, and it was guided by the following objectives: 1. To examine ECommerce adoption and performance by SMEs in Uganda; 2. To identify the benefits of E-commerce adoption to SMEs in Uganda; 3. To examine the barriers to E-commerce adoption by SMEs in Uganda.

Data collection primarily relied on secondary sources, including journal articles, expert opinions, company reports, and newspapers. Additionally, questionnaires and document review checklists were used for data collection, providing a mix of qualitative and quantitative data.

Ethical considerations were a priority, ensuring that data collection tools were designed with caution, avoiding personal questions unrelated to the study's purpose. The study focused on Kyaligonza Fashion Company, known for blending traditional Ugandan designs with modern silhouettes, catering to both local and international markets.

Kyaligonza Fashion's adoption of e-commerce was driven by its desire to reach a global market, especially the Ugandan, Congolese, and diaspora niches. However, several barriers were identified, including limited internet access, low digital literacy among staff, challenges in online payment processing, and fierce market competition.

Despite these barriers, the study revealed significant benefits of e-commerce adoption for Kyaligonza Fashion. These benefits included expanded market reach, 24/7 accessibility, reduced operating costs, and improved inventory management. These advantages contributed to the store's enhanced performance and competitive edge in the fashion industry.

Overall, this research sheds light on the opportunities and challenges faced by SMEs in Uganda when embracing e-commerce, using Kyaligonza Fashion Company as a case study. It underscores the potential for growth and globalization through e-commerce adoption, while also highlighting the importance of addressing infrastructure and skill gaps to unlock its full potential.

CHAPTER ONE: INTRODUCTION

1.0 Introduction

1.1 Background of the study

E-commerce has globally transformed the business landscape, offering unparalleled convenience and cost-effectiveness. It allows customers to shop anytime, anywhere, and enjoy the same service as traditional brick-and-mortar stores without added expenses (Zulkifli, 2001). The prevalence of E-commerce has shifted transactions from paper-based to paperless, especially in industrialized nations, where physical store visits are becoming obsolete (Mansor and Abidin, 2010). The interpretation of E-commerce varies among individuals and organizations, but its potential in enhancing customer-supplier relationships, especially in the service sector, is evident (Zillur and Bhattacharyya, 2002).

E-commerce operates in various commercial relationships, such as B2C (business to Customer), B2B (business to business), BIB (business in business), business to government, and C2C (customer to customer). B2B transactions typically involve equal bargaining power, while B2C often puts customers at a disadvantage (Aden, 2018). Notably, B2B organizations are the primary adopters of E-commerce, although its application extends beyond business-to-business interactions. Companies like Amazon and eBay exemplify how E-commerce bridges the gap between business-to-business and business-to-consumer transactions, with the internet serving as a vital distribution channel (Heizer and Render, 2001; Vrana, 2006).

Small and Medium-sized Enterprises (SMEs) are integral to the economy, contributing significantly to GDP and employment. In Uganda, SMEs make up 70% of GDP and play a crucial role in enhancing economic and social well-being (OECD, 2017). However, global SMEs face challenges in adopting E-commerce, hindering their growth potential (Businge, 2011). Uganda, despite its status as a landlocked country, was an early adopter of modern ICT tools. Still, its SMEs have been slow in embracing E-commerce, a key driver of economic growth in the Information and Digital Age (PPDA, 2010).

This dissertation explores the barriers preventing Ugandan SMEs from adopting E-commerce, proposing strategies to overcome these obstacles and unlock their growth potential. It underscores the vital role SMEs play in fostering innovation, competition, and efficient resource allocation while promoting prosperity and development in Uganda.

1.2 Problem statement

Uganda has made significant strides in embracing E-commerce through various improvements: **Increased Internet Connectivity:** The government and private sector have invested in expanding internet infrastructure, improving connectivity in urban and rural areas, enabling more businesses and individuals to access E-commerce platforms, **Digital Payment Solutions:** The adoption of digital payment systems, including mobile money and online banking, has made financial transactions easier and more secure, reducing the reliance on cash transactions, **E-Government Services:** The Ugandan government has digitized many public services, allowing citizens and businesses to access government services online, streamlining processes, and reducing bureaucracy, **E-Commerce Platforms:** Local and international E-commerce platforms have expanded their presence in Uganda, offering a wide range of products and services online, increasing consumer options.

These improvements collectively demonstrate Uganda's commitment to embracing E-commerce and leveraging its potential for economic growth and development but with all these in place SMEs have still failed to embrace E commerce. It's with this problem the researcher set out to investigate in this dissertation the effects of e commerce of SMEs.

1.3 Objectives of study

1.3.1 General Objectives

To analyze the adoption of e-commerce on the performance of SMEs.

1.3.2 Specific Objectives of study

The study is aimed at achieving the following objectives

- i. To Examine the different types of E-Commerce
- ii. To identify the benefits of E-Commerce adoption within SMEs
- iii. To examine the Barriers to E-Commerce adoption within SMEs

1.4 Research questions

The main research questions that will be focused on are:

- i. What are the different types of e commerce used by SMEs in Uganda
- ii. What are the specific benefits that SMEs in Uganda derive from the adoption of E-commerce?
- iii. What are the key barriers and challenges faced by SMEs in Uganda when attempting to adopt E-commerce?

1.5 Significance of Study

The research work is beneficial to several key stakeholders and groups such as Small and Medium-sized Enterprises (SMEs): SME owners and managers in Uganda will gain valuable insights into the benefits and challenges associated with adopting e-commerce. Your research may help them make informed decisions about integrating e-commerce into their business operations, potentially leading to improved competitiveness, expanded customer reach, and cost savings.

Government and Policymakers: Your findings can inform government officials and policymakers in Uganda about the current state of e-commerce adoption among SMEs. This information can aid in the development of policies, incentives, and initiatives aimed at promoting e-commerce adoption, stimulating economic growth, and supporting job creation.

Business Support Organizations: Organizations such as trade associations, chambers of commerce, and business development agencies can use your research to tailor their support programs and services to better assist SMEs in adopting e-commerce technologies.

1.6 Scope of the study

This will highlight the boundaries of the research and it is divided in Time and Geographical

1.6.1 Time

This study will be carried out for a period of 5-10 years from 2014 – 2024.

1.6.2 Subject scope

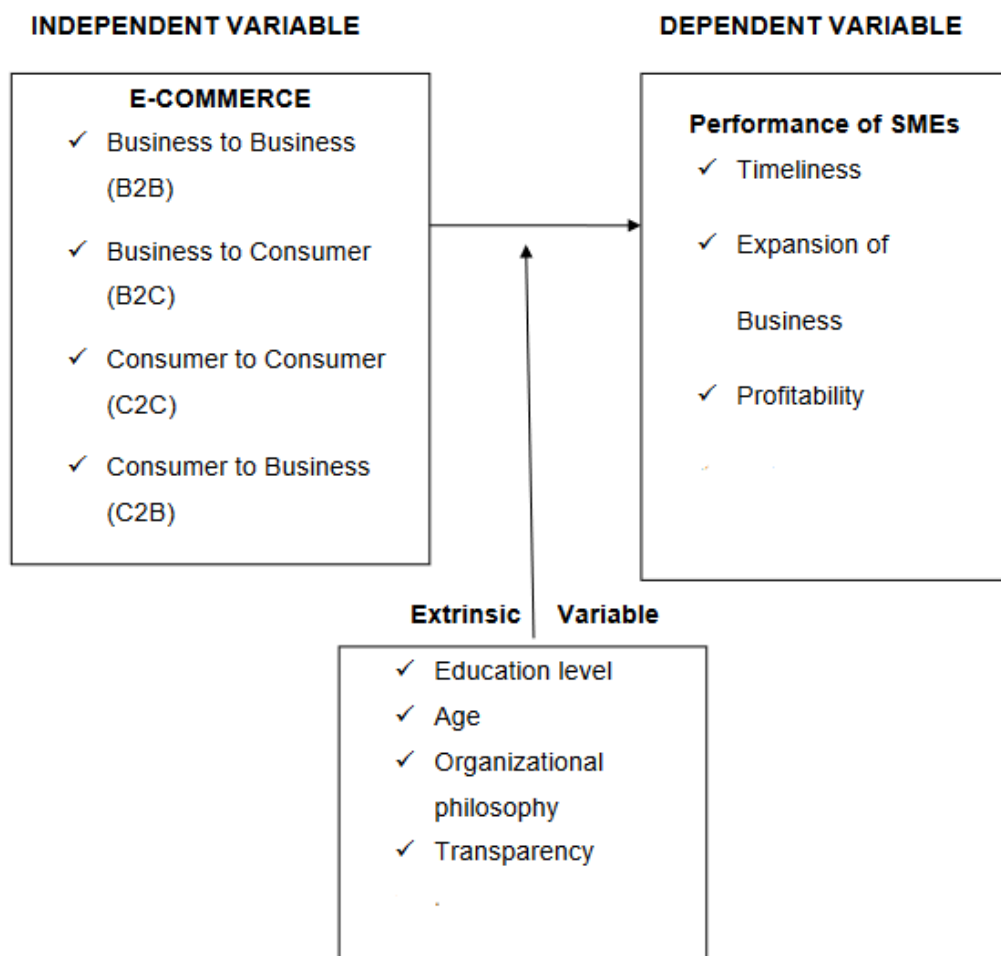
An analysis into E-Commerce Types, Benefits, and Barriers for SMEs in Uganda

1.6.3 Geographical scope

The study was carried out in Kampala this was picked basing on the fact that Kampala has among the highest number of SMEs thus sought it best to carry out the study from Kampala

1.7 Conceptual Framework

Figure 2 below shows the conceptual framework of the Dissertation.



Source: Kezia Mkwizu, 2019, Conceptual Framework Independent Variables Dependent Variables, (https://www.researchgate.net/figure/Conceptual-Framework-Independent-Variables-Dependent-Variables_fig1_332182663)

Figure 1. Conceptual framework.

Explanation of the framework

The conceptual framework in figure 1 presents the relationship between the Independent variable (E-Commerce) and the dependent variable (performance of SMEs). The illustration depicts that E-commerce models such as business to business (B2B), business to consumer (B2C), consumer to consumer (C2C), and consumer to business (C2B) could perhaps influence the performance of an organization through the effective timeliness of the organization's operations, expansion of businesses, and increase in the business's profits.

However, other extrinsic variables are external to the study such as the education level of employees which might hinder effective usage of E-commerce if they lack ICT skills, the

people operating in organizations are more conservative, and the organizational philosophy can also be a deterrent to change. Lastly, E-commerce relies on transparency which might be lacking thus causing incompatibilities and influencing the results when ascertaining the relationship between the variables. In this regard, the influence of the moderating variables must be gauged and controlled by eliminating them to ensure that the variables under investigation are not manipulated.

1.8 Justification

The non-adoption of e-commerce by SMEs in Uganda could have significant negative repercussions for SMEs to remain competitive, attract a broader customer base, and achieve sustainable growth within Uganda

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section covers the review of both theoretical and empirical literature on the study variables. The section begins with the provision of theories informing the study and concludes with the presentation of literature on the research objectives in an empirical form. It also gives and explains the conceptual framework that is guiding this study. The Literature review analyses existing literature on the effect of Ecommerce on the performance of SMEs in Uganda. The literature survey highlights similar investigations conducted that are like this study and helps in answering the above five questions.

2.3 Definition of E-commerce

According to several authors E-commerce, a branch of E-Business, also known as electronic commerce, means the buying and selling of goods or services online, where payment for these goods and services is also made online. E-commerce is not only limited to buying and selling of physical products online; it also refers to the exchange of data and information that enables the completion of a transaction as elaborated by Chaffey (2007). For example, invoices, bills, orders and so forth. Ebusiness, on the other hand, is a broader term referring to all business operations done online. This includes the whole supply chain of a business not just the transaction of goods and services. Nanehkaran (2013) goes further to describe Ecommerce as the interaction between communication systems, data management systems and security that enables an organization to exchange information of their commercial operations.

2.4 Types of E-commerce models

Just like in the brick-and-mortar commerce, there are four main types of E-commerce models that show the different relationships between consumers and businesses. These are;

Business to Consumer (B2C): This is when a business sells a good or service to an individual consumer online. For example, when a customer buys furniture from Ikea and gets it delivered to their home without having visited Ikea shops physically. In other words, a consumer buys a product directly from the retailer

Business to Business: According to Nanehkaran (2013), business-to-business is a type of commerce transaction that exists between businesses or companies to transfer services and products. This is not as visible like B2C model, but businesses are utilizing it. For example, a company contacts a software company and purchases from them the software, and a shoemaker sells shoes to a retailer. Kumar and Raheja (2012), further explain that Many businesses are now using social media to connect with their consumers (B2C); however, they are now using similar tools within the business so employees can connect. When communication is taking place amongst employees, this can be referred to as B2B communication.

Consumer to Consumer (C2C) According to Nemat (2011) Consumer-to-consumer (C2C) marketing is the creation of a product or service with the specific promotional strategy being for consumers to share that product or service with others as brand advocates based on the value of the product. This is where consumers sell goods or service to other consumers for example on platforms like Tori, eBay, Oryx, Facebook etc. A consumer with unwanted items puts them on these platforms where other consumers can easily purchase them from.

Consumer to Business (C2B): When a consumer sells their products or services to a business or organization (e.g. an influencer offers exposure to their online audience in exchange for a fee, or a photographer licenses their photo for a business to use).

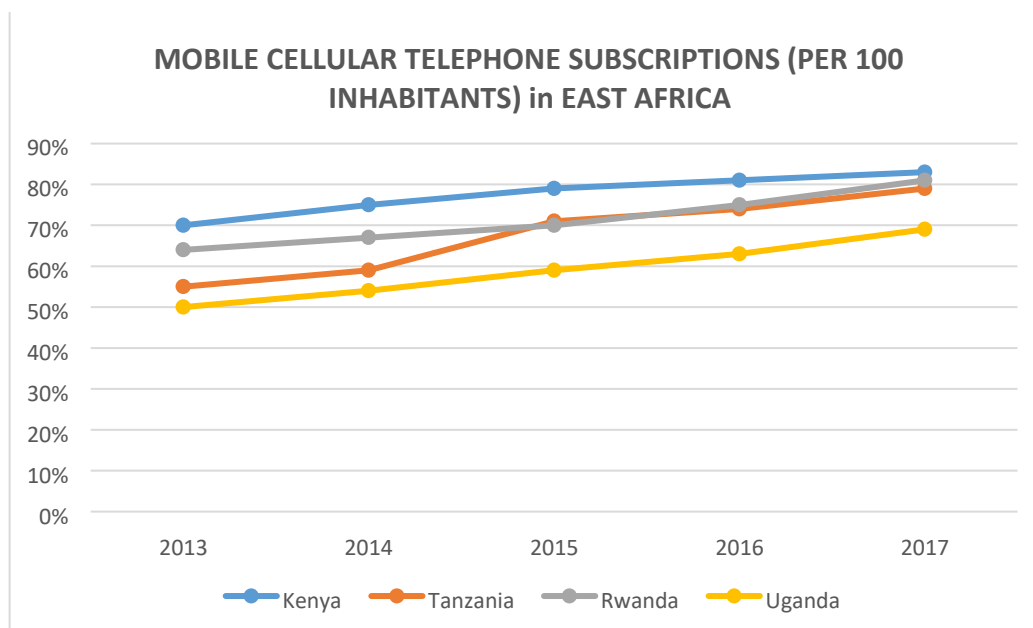
E-commerce can be in forms like, Retail where the business sells directly to a customer without any intermediary, Wholesale where the sale of products in bulk, often to a retailer that then sells them directly to consumers, drop shipping: The sale of a product, which is manufactured and shipped to the consumer by a third party

2.5 SMEs adoption of E-commerce in Uganda

According to Export.gov (2019), E-commerce in Uganda is loosely regulated and informal, but it continues to grow at a fast rate due to the widespread use of mobile money payments and rapid growth in telecommunication users. Since 2009, mobile network operators (MNO) have offered mobile money transactions in Uganda, providing informal banking services that allow clients to send and receive money and access loans of up to one million shillings (\$270) using their cell phones. The number of adult Ugandans with bank accounts increased from 28 per cent in 2014 to 33 per cent in 2017 making it possible for these consumers to transact online. E-commerce by Ugandans is on the rise through the usage of mobile money, credit cards and other

facilities like PayPal all of which is made possible as more and Ugandans achieve financial inclusion which went from 35 per cent in 2014 to 51 per cent in 2017. However, the biggest challenge the Government of Uganda (GOU) finds in regulating E-commerce is identity-enforcement which has caused it to lag. The GOU lacks regulations and enforcement mechanisms to combat illegal activities advertised on informal mobile platforms and fraud in online shops which affect the level of trust in the industry. (Export.gov 2019)

Figure 2 below is a graph showing Mobile phone usage in East Africa.



SOURCE: data.worldbank.org, 2021, Mobile phone usage in East Africa

<https://data.worldbank.org/indicator/IT.CEL.SETS.P2?locations=A9>

Figure 2. Mobile cellular telephone subscriptions in East Africa (BMI Telecommunication Report 2016: Kenya, Tanzania, Rwanda and Uganda)

Telecommunication operators with the support of the respective governments in East Africa have contributed immensely towards infrastructural development. Figure 2 above clearly depicts that countries such as Rwanda and Kenya are relatively outstanding despite the introduction of E-commerce in a short period. The East African Countries are keen on driving E-commerce with Rwanda and Kenya looking to transform their economies into knowledge-based economies. As a fiscal measure, the Rwandese government has slashed taxes on mobile phones and introduced credit schemes to increase mobile phone penetration in rural areas which explains why E-commerce is developing exceedingly greater than Uganda that was primarily one of

the first countries to introduce E-commerce and digitization in the region. The current estimates envisage that Rwanda could be on the course of ensuring that over 90% of her population has access to the basic E-commerce platforms which are phones.

Admini (2018), says that it is common in Uganda for most businesses to use the traditional business models of manufacturing, distribution and retail. However, the entrepreneurship style is changing from the traditional start-up of opening up retail shops and boutiques to more trendy forms of business-like online business. He goes further to say, Internet world stats put Uganda at 31% penetration rate, and more and more Ugandans are embracing E-commerce. E-commerce refers to commercial transactions conducted electronically on the internet.

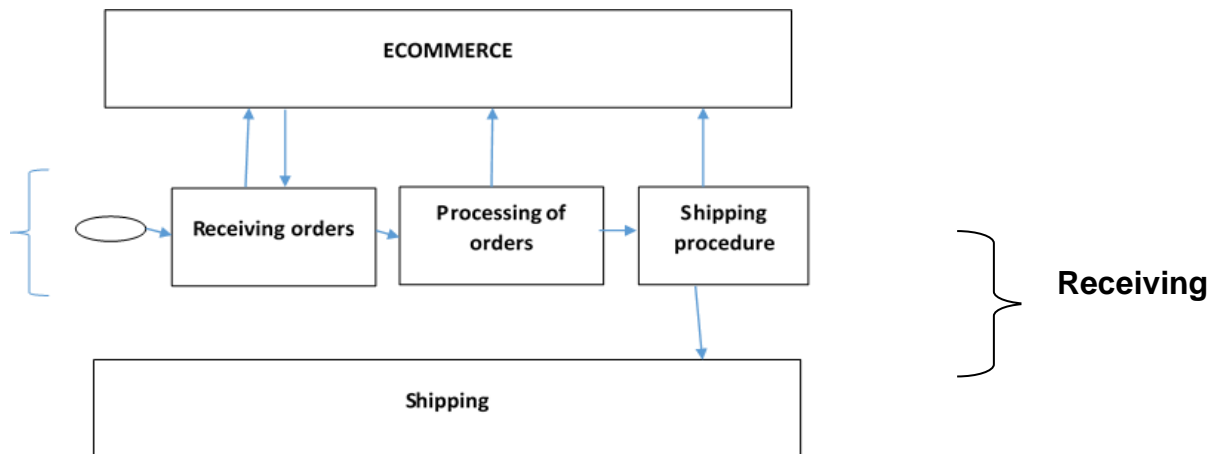
Admin (2018), quotes the ministry of Information communication technology and national guidance through its agency National Information technology Authority Uganda (NITA-U), as having commenced the trial provision of free wireless access internet in the Kampala central business district and parts of Entebbe town.

SMEs in Uganda have been able to expand their business operations using Ecommerce. For example, Jumia has expanded its business operations that see the company operating in more than 20 African countries in Africa. However, some impediments have still limited the SMEs in Uganda from fully thriving to the desired performance. For example, Kasoma (2018) mentions that Uganda is still one of the least countries in Africa to embrace the E-commerce platform in its economic transformation journey. Uganda is rated at 1% in terms of using E-commerce which registers a negative influence on SMEs performance. Kamoga (2015), notes that Ecommerce is loosely regulated and thus informally operationalized. This is factual in a sense that as well as the GOU regulates Mobile Money, identity enforcement, remains poor. This has seen many SMEs suffer as a result of fraudulent online fraudsters which has hampered SMEs performance in Uganda.

2.6 E-commerce performance measurement

According to Codeless (2017), most company usually overlook the E-commerce process flow as it is believed that it is an automated area of the business. This is not the case, and if a business wants to maximize sales opportunities and achieve a competitive advantage, it must map out an E-commerce process to show the key areas needed to be automated or modified in order to improve performance.

Figure 3 below shows the process flow of transactions in E-commerce



SOURCE: codelessplatforms, 2017, process flow of transactions in E-commerce

[\(https://www.codelessplatforms.com/blog/ecommerce-process-flow/\)](https://www.codelessplatforms.com/blog/ecommerce-process-flow/)

Figure 3. An intricate diagrammatic illustration of an E-commerce process flow of an SME business (Codeless platforms)

Explanation of the framework

Figure 3 shows that at the top level of an E-commerce process flow, the following can be easily identified:

- Customers place their orders using an E-commerce system
- The order details are extracted from the E-commerce system and subsequently entered the company's business software.
- The order is then passed to the warehouse to be processed.
- The order is placed for fulfilment

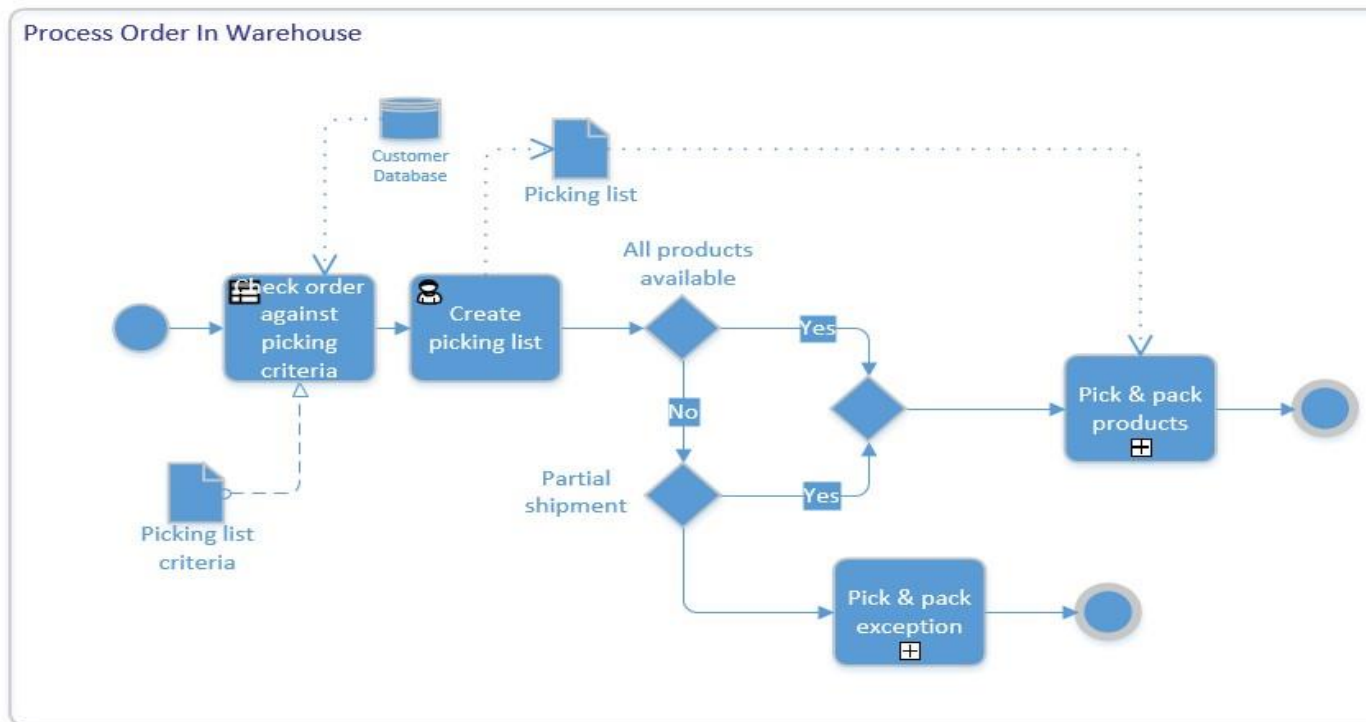
2.6.1 Sub process: Receiving orders

When a customer places an order within your E-commerce system the order details need to be extracted and placed into your business software. Manually dealing with information held within a sales order can detract from the businesses planned objectives. It is important to note that in the case of data entry errors, employee efficiency is reduced, and order processing costs increase; thus, employees ought to ensure that minimal or no errors are made.

2.6.2 Sub process: Processing an order in an SME organization

After the order is checked and processed into the business software, the order is passed onto the warehouse for processing. Here, employees will have to check the order against your pick list business rules manually.

Figure 4 shows the process of receiving orders by Warehouse in E-commerce.



SOURCE: codelessplatform, 2017, process of receiving orders by Warehouse in E-commerce

<https://www.codelessplatforms.com/blog/ecommerce-process-flow/>

Figure 4. The receiving process in an E-commerce organization (Codeless platforms)

Explanation of the above illustration

The Employee notifies the organization of an order that needs to be processed; the information is passed down to the organizations’ warehouse department The organization's employee manually checks the order against pick list criteria, for example, stock availability, item location in warehouse and so forth.

The organization’s employee creates and prints pick list If the products are in stock and available, the order is picked and packed. Lastly, the order is made ready for the shipping process which might be handled by the organization or third-party logistics providers

2.6.3 Factors influencing successful implementation of E-commerce within SMEs in Uganda

There are various factors that influence the successful implementation of an Ecommerce system in an organization.

Availability of resources: For any business to successfully implement E-commerce, it should have adequate financial resources to invest in the project. The organization will have to spend on things like hardware, software, labour and so forth. If the organization has enough resources, it will find it easy to progress with the implementation. For example, this can be seen in some organizations like Jumia, Oryx, MTN and so many others that have successfully implemented E-commerce. However, Uganda as a developing country is still at a stage where the majority of the population lives below the poverty line, and most of its efforts and resources are geared towards meeting their basic needs. This means that few people are willing to spend on the appliances that support E-commerce such as mobile phones, computers, internet fees etc. This, therefore, hinders even those companies that are willing to implement E-commerce because they cannot get the population needed.

Environmental Factors: The environment in which the organization operates is going to affect how easy/ hard it finds it to implement E-commerce. This involves the competitors, customers, culture etc. Small businesses that are in an environment that is more competitive would feel a greater need to turn to electronic commerce to gain a competitive advantage. External Support from consultants, vendors and government programmes/policies are also important factors in E-commerce as these policies could either build or break the E-commerce adoption.

2.6.4 The critical success factors of E-commerce implementation

Content: Content is the ability to present a unique and innovative product or service by using the electronic environment in a value-added way. For instance, in Uganda Ecommerce organizations such as Jumia have found challenges when packaging the content of the mobile foodstuff applications that enable customers to receive lunch in their offices. The targeted customers have failed to differentiate the service as it presents no differentiation apart from the fact that it avails food at their premises.

Commitment: The clear idea of companies' goals and objectives as a strong motivation for using the Internet. This is still a weak area in Uganda considering a great multitude of the SMEs still has deprived commitment.

2.6.5 The development of E-commerce in SMEs

Every project starts with a plan which serves as a guide throughout the whole implementation process. An E-Commerce development strategy is needed when a decision to add E-commerce to a business is adopted. The company needs to conduct exhaustive research on all aspects of the E-commerce development process in order to develop an E-commerce development strategy that will fit into and serve towards realizing the mission and goals of the company. There are many guidelines and existing theories that can be used during the development of Ecommerce development strategies. The most relevant is Paul Smith's SOSTAC framework as used by Smith and Chaffey (2005) to develop a roadmap for implementing E-commerce. The table in appendix 1 explains the SOSTAC Framework

Since Paul Smith has clearly explained each stage, the researchers will not go into details but will however base on the framework to emphasize the importance of the planning stage when developing E-commerce.

When the planning process is done, and a decision is made by the business to add E-commerce to its business model, and the strategy is adopted on how to successfully have this done, the next stage is the setting up of the E-commerce shop. An E-commerce shop begins with the development of a website or the modification of the existing company website to enable the building of the shop. There are several steps involved in the development of an E-commerce shop, and these are briefly discussed below.

2.6.6 Identify the product/service and the targeted customers

According to Wallace (2019), when setting up an online shop, the first step is to decide on what to sell. These can be commoditized or unique products. It is important to find yourself a product niche that you can capitalize on and use to set you apart from all the other shops online. It is also important to study the online trends and see which items/services that are pulling large numbers of the customer

then form a strategy to help you get a market share in this trend. Google Trends is a tool that can be used to identify current trends to help inform your decision.

2.6.7 E-commerce Website development platform

According to Demates (2019) there are several different kinds of E-commerce software, and it can be hard to tell the difference in features and performance which factor can affect the performance of your business. It is therefore very important to be sure of which vendors to engage as all of them profess to have the best software in terms of speed, reliability, suitability to search engine optimization, PCI readiness for credit card etc. All these premises are detrimental towards creating a well performing E-commerce shop. Below are some of the top performing E-commerce platforms;

Biocommerce, Shopify, 3dcar

Zorzini (2017) emphasizes these factors to consider when choosing a platform; your stock size, are you selling physical or digital goods, the payment method you will use, hosting options and the payment and budget available.

2.6.8 E-commerce Website hosting platform

According to Wood (2019), web hosting means having a server that hosts other companies' website. Maintaining a server explicitly dedicated to the Ecommerce website can prove expensive so it makes sense to have a hosting company host the website. According to Gotler (2018) choosing a hosting platform is as important as all the other steps involved in setting up an online shop. There are several E-commerce hosting companies that one can choose from for example; Bluehost, just host, HostGator, GoDaddy etc. However, it is important to consider the following factors when deciding on which hosting company to use; security capabilities, E-commerce and CMS software support and compatibility, Performance capabilities, Database capacity, Intuitive Administration Interface, Available budget

2.6.9 E-commerce development providers

After all the research on the product, platforms and hosting company is done, it is important to decide on the different companies to partner with in terms of service provision for the E-commerce project. These will include service providers like telecom companies, computer hardware providers, software and website development companies, financial institutions with payment platforms etc. Research needs to be

done and comparisons made between providers and the best chosen. The budget and type of product may contribute to the decision of which provider to partner with. The choice of the E-commerce service providers (CSP) is a choice one needs to make after careful research

2.6.10 E-commerce website testing

According to Apphawks (2019) a website will need to be tested before it can be launched, and transaction commenced. Every website is developed with the user in mind, therefore, everything about it is developed for the comfort of the user. Web testing is, therefore, to make sure that all is okay and there are no errors that will inconvenience the users in any way. The website is tested for security, compatibility, usability, reliability and accuracy. If all checks out in the tests, then the website is ready for operations, and the transacting can begin.

2.6.11 Marketing tools

Like a physical shop, an online shop has to continuously use of the available tools to position its brands in the online the market if it is to stay competitive and grow. There are several tools available that a company can use to promote its website/shop and attract customers. These include search engine optimization to help make the website more visible to search engines, Google analytics, videos, emails etc. The map in figure 5 below shows the different tools one can use to make a website more effective.

The map in figure 6 below shows the different tools one can use to make a website more effective.



SOURCE: Tangelo Creative, 2020, **different tools one can use to make a website more effective.** (<https://bigfelddigital.com/wp-content/uploads/2020/06/BFD-Content-Image-5.png>)

2.7 The benefits of E-Commerce to SMEs

One of the biggest challenges facing both large and small enterprises in the developed world is the need to find ways to increase the customer's value for their products, to gain revenue growth that is continued instead of purely short-term (Vandermerwe, 2000). The main aim is to make customers want the services of a particular company as their sole or dominant choice because they provide superior value at low cost, from which the company benefits by obtaining a more in-depth and broader share of customer purchases for more extended periods. This economic transformation has been driven by electronic business, and more specifically electronic commerce (E-Commerce), that has provided a powerful way for many organizations to achieve tangible benefits based on web-enabled transactions and use of the Internet.

The effects of E-commerce already appear in all areas of business, from customer service to new product design. It facilitates new types of information-based business processes for reaching and interacting with customers-online advertising and marketing, online, order taking and online customer service etc. It can also reduce costs in managing orders and interacting with a wide range of suppliers and trading and trading partners, areas that typically add significant overheads to the cost of products and services.

The role of E-commerce in providing an avenue to shift out of the home and onto consumers' digital communication devices by matching messages to consumer preferences and demographics, marketers will be able to better target the right recipient with the right message at the right time. Other than that, marketing functions are now performed under a hypermedia-computer-mediated-environment where interactivity and connectivity are replacing the traditional model of negotiation and communication (Fatimah 1999).

E-commerce has enabled companies to keep track of their expenditures by keeping track of financial expenditures. This has enabled companies to predict the anticipated need for financial services such as loans to foster effective delivery. Financial institutions have business loans that are offered to SMEs that need quick cash to foster business growth and sustainability. However, only E-commerce companies that predict and plan for the resources timely have realised business triumph by ensuring that their customer base enjoys business continuity

2.9 The barriers to adoption of E-Commerce by SMEs

The usage of E-commerce in Uganda has registered tremendous benefits; however, the country being a least developed countries (LDC) has some challenges as far as economic progress is concerned. E-commerce encounters unique challenges ranging from socio-political, legal and human preference, cognitive barriers including literacy, content and language as well as economic barriers.

Internet services in Uganda come at a high cost to the users who not only cannot afford the luxuries but also go without the basics thereby affecting E-commerce usage. The low internet penetration rate in Uganda makes it impossible for the SMEs to access their customers and suppliers thus rendering E-commerce impossible

Digital literacy in Uganda continues to lag low which minimizes on the transactions that are undertaken using E-commerce. Digital literacy among consumers and businesses in terms of computer literacy, language barriers, awareness of Ecommerce benefits, lack of confidence and security in online transactions, including lack of a skilled workforce in E-commerce enterprises, is a common phenomenon in Uganda. Relatively big corporations in Uganda have intentionally resisted Ecommerce usage due to limited capacity in terms of human resource and compatibility. Cybersecurity is still lacking, and SMEs continue to be targeted to cybercrimes.

Obstacles to E-commerce in Uganda, are immense and the primary obstacles can be grouped into three categories;

Socio-political factors including legal and human preference for example, the president of Uganda often finds it necessary to disable the internet as a tool for creating stability in the country which greatly hampers SMEs that depend on E-commerce.

The cognitive factors. These include literacy and language command of the population. The low literacy rate and low command of the English language have led to limit the usage of E-commerce because it requires a certain level of education which is not attainable by most people in Uganda.

The limited affordability of ICT infrastructure, particularly the Internet and broadband, is one of the key factors affecting the growth of E-commerce. The cost of E-commerce gadgets and daily data costs are still a pinch to many African SMEs that wish to integrate E-commerce.

Laudon (2014) asserted that digital literacy among consumers and businesses in Uganda in terms of computer literacy, language barriers, awareness of E-commerce benefits, lack of confidence and security in online transactions, including lack of a skilled workforce in E-commerce enterprises has contributed towards the limited diffusion of E-commerce amongst SMEs. Reports of SMEs being vulnerable to cybercrimes are increasingly evident with larger institutions such as banking institutions and government ministries suffering from the misadventure. Also, the Legal frameworks to build security and trust which is the basis of E-commerce has created difficultness in adopting E-commerce as a strategic business tool. Ensuring a legal and regulatory environment is critical for the complete functioning of Ecommerce in a country which is still lacking in most African countries.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This section covers how data for the study was collected, analyzed and interpreted in order to answer the research questions, thereby meeting the purpose of this study. This section comprises research design, study population, determination of sample size, sampling techniques, data collection methods, data collection instruments, quality control, data collection procedures, data analysis, measurement of variables and ethical considerations.

3.2 Research Design

This study used a cross-sectional research design. This design was selected because it is crucial for the researchers to find out the opinion of a cross section of employees from different SMEs in Uganda using E-Commerce in order to get prospects of expansion. In this study, numerical figures regarding the sales volume, number of branches was obtained in order to reflect the firm's expansion, thus giving the research both a quantitative and qualitative dimension. While the quantitative design involved administering closed-ended questions to respondents within the selected SMEs in Uganda, the qualitative design used questions that looked for interviewees' opinions.

3.3 Study Population

The population of this study constituted 60 accessible employees from SMEs using E-Commerce and 30 accessible customers (shoppers). In specific terms, managers and customers constituted the study.

3.4 Sample size and sampling design

Due to time constraint and the deadline for submission, the researchers decided to use only conveniently accessible respondents from SMEs using E-Commerce in Uganda.

3.5 Data sources and collecting methods

Data were collected from mainly secondary sources.

3.5.1 Secondary data sources

Secondary data was already established data from journal articles mainly published by the SMEs and experts in E-commerce of Uganda and individual companies and unpublished reports, newspapers reports. According to Amin (2005), secondary data can provide a basis for comparison with the collected primary data.

3.6 Data collection instruments

The researchers used instruments like a questionnaire, and document review checklists as instruments of data collection. Both qualitative and quantitative approaches were considered as data collection methods. Combination of instruments (questionnaires, interview guide and documentary checklists) were used to collect data for the study

3.7 Questionnaires

The researchers used a questionnaire to collect data from the respondents. A questionnaire was used to collect the data sample size of 30 shoppers who were moving around in Oasis mall. The research assistants helped to stop these shoppers and asked those questions from the questionnaires. Those who were willing were given to fill the questionnaires themselves. The results were believed to be dependable and reliable. Since the target respondents were mainly customers in an upscale mall, they were literate and had knowledge and interest in Ecommerce. This made the questionnaire appropriate to the respondents to collect data and gather the right information. The questionnaire consisted of both closed and open-ended questions. The questionnaire was developed using a three Likert scale ranging from strongly disagree, not sure and agree to help researcher analyze qualitative data quantitatively.

3.8 Ethical considerations

In this study ethical consideration was ensured through the researcher exercising caution while designing the data collection tools and conducting data collection exercise. The researchers made sure they avoided personal questions that would arouse the personal feeling of the respondents through only asking questions related to the study and giving clear explanations of why the study is conducted. Besides that, she also made sure that she used simple and only related questions to the study.

3.9 Limitations of the study

Some of the limitations during the study included poor communication infrastructure; lack of ict knowledge; lack of financial resources and a poor legal infrastructure thus responsible for the low adoption of e-commerce by SMEs with in Uganda

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Case study: Introduction

Kyaligonza Fashion Company derived its name from Daphne Kyaligonza, the founder of Kyaligonza Fashion House. The company blends vibrant *Kitenge* (an African Print design) fabrics and prints with modern silhouettes to create innovative garments and products. Unlike most of the fashion and design clothing lines in Uganda, Kyaligonza company limited prides its existence with a human resource of professional staff that received formal training in fashion designs in various specialties from different University. The proprietor of the company Kyaligonza, has expanded her business by sharing her training and techniques with young Ugandan and Congolese women whom she now employs and works with jointly with. Though she is aware of the fierce competition in this industry, she is confident that her designs will continue to stand out and gather much demand.

4.2 The product

As mentioned in the introduction, Kyaligonza mainly deals in the traditional Ugandan dress. These traditional outfits are mostly worn during traditional ceremonies such as introduction parties, giveaways, coronation ceremonies and many others where it is improper to dress up in casual clothes. Some include the Kanza, which looks similar to a tunic and is mostly composed of a white or cream fabric, then there is the Gomesi/Busuuti, Omushanana, Suuti, which is worn by the women of western Uganda, Grass skirts and the Kikoyi, a multi-colored piece of cloth that has cultural attachment to several tribes.

Figure 6 below shows samples of Kyaligonza's products



Figure 6. Kyaligonza's products

4.3 Reasons for considering E-commerce

Kyaligonza is conscious about the power of E-commerce and the contemporary fashion modifications that exist today. It is to this effect that most of the attires made by the company have a touch of traditional Ugandan art which is blended with exotic foreign designs they believe will enable the product to capture a global market's interest. Kyaligonza believes, that E-commerce will create a competitive advantage for the company on a global scale as it enables them to target the Ugandan and Congolese market niche as well as the diaspora.

4.4 Barriers preventing Kyaligonza fashion store from adopting to e commerce

Some of the barriers of Kyaligonza fashion store may included:

Limited Access to the Internet: In Uganda, access to the internet is limited, especially in rural areas. This lack of internet infrastructure hindered the shop's ability to establish and maintain an online presence for e-commerce.

Low Digital Literacy: some of the staff of Kyaligonza Fashion lacked the necessary digital skills to effectively manage an e-commerce platform. These included skills related to website development, online marketing, and customer relationship management.

Payment Processing Challenges: E-commerce relies on online payment processing systems, and Uganda has limited options for secure and reliable online payment gateways. Customers were also be hesitant to use online payment methods due to security concerns.

Market Competition: The fashion industry in Uganda is already established e-commerce players or larger competitors with more resources. Kyaligonza Fashion struggled to gain visibility and market share online.

4.5 Benefits of Kyaligonza fashion store from adopting to e commerce

The potential benefits that e-commerce adoption has brought to Kyaligonza Fashion and how these benefits enhanced the store's performance include:

Expanded Market Reach: E-commerce allowed Kyaligonza Fashion to reach a broader customer base beyond its physical location. The store targeted customers not only in Uganda but also in international markets, potentially increasing sales and revenue.

24/7 Accessibility: An online store is open 24/7, provided customers with the flexibility to shop at their convenience. This led to increased sales as customers can make purchases at any time.

Reduced Operating Costs: E-commerce helped reduce overhead costs associated with maintaining a physical store, such as rent, utilities, and in-store staff salaries. This cost savings contributed to higher profit margins.

Improved Inventory Management: E-commerce platforms often came with inventory management tools that helped Kyaligonza Fashion track stock levels more accurately. This led to reduced instances of overstocking or understocking, optimizing inventory turnover.

CHAPTER FIVE: SUMMERY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the key findings, conclusions, recommendations, and areas for further study related to the adoption of e-commerce by Small and Medium-sized Enterprises (SMEs) in Uganda.

5.1 Summery of Findings

In summary, the study found that while E-commerce adoption is on the rise, it is still relatively low due to barriers such as initial investment requirements and limited internet access. However, those SMEs that embraced E-commerce experienced benefits like increased customer reach and cost savings. Measures of SMEs expansion included rising sales volumes and customer numbers. Furthermore, there was a strong positive correlation between E-commerce adoption and SMEs expansion, emphasizing the importance of E-commerce for SME growth in Uganda.

5.2 Conclusions

Going by the findings from the study, there is no doubt that E-commerce is essential to the performance of SMEs and a country's economic growth. There are different barriers that can explain the limited adoption of E-commerce within SMEs in Uganda.

Therefore, the framework to improve adoption is called to center much on the removal of those constraints as well as working towards developing innovations that can promote E-commerce in Uganda.

5.3 Recommendations

Basing on the above conclusions resulting from the analysis of data collected from the interviews and the questionnaire, the recommendation is to initiate and speed up the process of E-commerce adoption SMEs as it has clearly been seen that E-commerce can answer their quest for expansion, make them more efficient in terms of reducing their operation costs and smoothing the supply chain. However, for this to be a reality there should be efforts to address the barriers to SMEs adoption of E-commerce in Uganda either by the government, NGOs and any other concerned parties. The government should increase its investment in ICT related infrastructure

or reduce taxes on information related equipment. Once this is done, it will reduce the high costs of E-commerce installation to SMEs thus improving e-commerce adoption.

For general benefit, Enterprises Uganda should sensitize small and medium enterprises owner and management about the many benefits they can realize from embracing E-commerce technology. This would help in improving the adoption of technology. The situation that can improve business expansion which would improve on employment and increase tax revenue to Uganda. Small and medium enterprises owners should form an umbrella organization that would improve their bargaining power. This would enable them to have a combined effort to acquire a joint E-commerce server as minimizes costs of installation.

The government should eliminate foreign infrastructure barriers through regional integration. This would help in creating the E-commerce infrastructure in the country a situation that would help in improving E-commerce adoption among the SMEs in the country

5.4 Areas for further study

Based on the observed low rate in E-commerce adoption during this research process, there is an urgent need for further research that can ascertain variations in E-commerce adoption based on industry differences, business size differences and complexity of products in SMEs. This way, the SMEs can have more detailed and specific information on which to base their decisions.

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APPENDICES

APPENDIX 1. E-Commerce implementation road map



APPENDIX 2. Dissertation Letter



**UGANDA CHRISTIAN
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SCHOOL OF BUSINESS

1st Aug 2023

TO WHOM IT MAY CONCERN

Name: MWAMUZA JAMES KAMUKUNWA Reg. No. J22BOS/202

A bachelor's student who is seeking permission from your office to collect data for his/her dissertation titled

"ANALYSIS OF THE ADOPTION OF E-COMMERCE TO PERFORMANCE BY SMEs IN UGANDA"

We shall be grateful if you could render assistance to him/her in collecting the necessary data for his/her dissertation

The Uganda Christian University School of Business thanks you in advance

A handwritten signature in blue ink, appearing to read 'Mukisa Simon Peter'.

Mukisa Simon Peter
Research coordinator