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Directorate of Distance Education and Open Learning

Master in Business Administration (General)

User perception of digital wallets and e-commerce in the Zambian economy. Study case of
Kitwe district of Copperbelt province

IJSER

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7 June 2022

DISSERTATION CLEARANCE AND DECLARATION

I, Oswell Phiri do hereby declare that this dissertation is my original work. It has been guided and marked by my supervisor following the guidelines for a Master's in Business Administration at the Copperbelt University, Zambia. It has not been submitted elsewhere for a degree at this or any other University.

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I, Dr, Collins Odoyo, read this dissertation and approved it for Submission. I am satisfied that this is the original work of the author under the name it is presented. I confirm that the work has been completed satisfactorily and ready for Submission.

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CERTIFICATE OF APPROVAL

This dissertation of **Oswell, Phiri** has been approved as partial fulfillment of the requirements for the award of Master Business Administration by the Copperbelt University

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ABSTRACT

The mobile digital wallet has been revolving around the world. However, factors are influencing the adoption and use of the mobile wallet. The purpose of this quantitative study was to determine the user perception of digital wallets and e-commerce in the Zambian economy. Study case of Kitwe district of Copperbelt province

Participants of this study included 100 individuals who have embraced and utilized a mobile wallet for different transactions. Their perceptions about the security mechanism and motivation for adoption allows for a deeper understanding of their experiences during and after the adoption. However, most available researches have been mainly focusing on users' initial adoption and the usage of mobile payment, whereas postadoption perception has not been fully investigated, therefore, this research tries to close the gap.

This study engaged the participant's general individuals who visit the banks, showrooms, and places e.g., malls for purchasing goods across social stratifications and geographical locations and services where cashless transaction was the population of the study. All 100 completed questionnaires were captured with SPSS version 21.0 from the closed-ended interviews.

The results include demographic characteristics, digital wallets and electronic money use rate, user perception and user experiences of digital wallets and electronic money. The findings from this study may benefit consumers, device manufacturers, and mobile wallet application. Future research is recommended to different setting with a larger sample of older adults as participants.

DEDICATION

I dedicate this dissertation to the Highest God for giving me the gift of life, crowned me with unmerited favor. Also, to my family and friends for their perseverance and endurance during my study.

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ABBREVIATION AND ACRONYMS

BOZ	Bank of Zambia
CSO	Central Statistics Office
MTN	Mobile Telephone Network
DFS	Digital Financial Services
MNO	Mobile Money Operators
UBA	United Bank for Africa Plc
UNCDF	United Nations Capital Development Fund
SPSS	Software Package Software
ZICTA	Zambia Information and Communications Technology Authority
ZAMTEL	Zambia Telecommunications Company Limited

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CHAPTER ONE:

INTRODUCTION TO RESEARCH

1.0 Introduction

The term electronic commerce (ecommerce) refers to a business model that allows companies and individuals to buy and sell goods and services over the Internet. However, ecommerce uses money that exists only in banking computer systems and is not held in any physical form (Andrew, 2020). In Zambia, only a small fraction of the currency in circulation exists in physical form. The need for physical currency has declined as more and more citizens use electronic alternatives to physical currency (BoZ, 2018).

Electronic payment systems, including credit-debit systems, have become a standard for most transactions based on their characteristics of trust, reliability, security, ease of use, and flexibility; however, security remains a challenge and leaves consumers vulnerable to security risks (George, Lennard & Scribbins, 2013).

However, the entire world of business depends upon the behavior of the customer. With the advent of technology, it's not only the shopping behavior of the customer that is changing, the payment modes are also changing. The environment for payments is expanding in Zambia. The increased usage of mobile phones and the development of technology are bringing a turnaround change in the landscape of payments (BoZ, 2018). Traditionally there was a cash-based economy leading to a card-based economy. But now it is finally followed by mobile payments. With the adoption and ownership of mobile phones, mobile users prefer to make money transactions with the help of mobile applications. It's not only about payments; besides payments, you can also store coupons, codes, receipts, and bills in an e-wallet. In mobile payments, the focus is more on increase towards the use of the electronic mode of payment leading to decreases in cash payments. The field of mobile payments is growing rapidly. After the advent of demonetization adoption of digital wallets and electronic money is significantly encouraged by the Bank of Zambia (BoZ, 2018). Digital wallets and electronic money payments have a unique set of capabilities to meet the challenges posed by the traditional payment system. It works as a cashless payment mode.

In a bid for financial inclusion and specifically targeting the unbanked and underbanked, telecommunication service providers such as Airtel and MTN launched their mobile money services, Airtel Money and MTN Mobile Money, in Zambia in 2011 and 2012 respectively.

The Zambian mobile market has been dominated by three mobile network operators (MNOs): Airtel, MTN, and Zamtel, which are also mobile money operators. Since 2016, mobile money transactions have been consistently increasing

However, MTN, Airtel, and Zamtel allow customers to send mobile money to customers who are on different networks for an additional fee. Airtel money customers can send money from mobile wallets to any bank in Zambia; this is a positive development in Zambia that allows their mobile money account to be more convenient. To send from a wallet to a bank account, Airtel money users can use an unstructured supplementary service data (USSD) code to select an option from a drop-down menu to send money to a bank account. Airtel money users, however, can only receive bank transfers from Barclays Bank customers via Barclays' online banking application. Access Bank, Cavmont Bank, and UBA Bank branches allow customers to do over-the-counter transfers into Airtel money accounts and these deposits are reflected immediately on the recipient's account. MTN Zambia has agreements with Standard Chartered Zambia and Banc ABC. MTN has a "Straight2Wallet" product in partnership with Standard Chartered Zambia, which allows Standard Chartered customers to make payments to MTN Mobile Wallet users (Standard Chartered Zambia, 2016). MTN also has a strategic partnership with Banc ABC that allows both MTN and Banc ABC customers to load and withdraw money from their mobile wallets using the bank's branch network and MTN agents (Lusaka Times, 2012).

Besides, the Zambian economy has experienced positive growth since 1999. The average annual growth between 2011 and 2017 was 4.7% (Central Statistical Office, 2019). This growth has resulted in Zambia being recategorized from a low-income to a lower-middle-income country in 2008 (World Bank, 2018), with a population of 17.3 million, the majority (52%) which are below the age of 18 (WHO, 2016). However, growth has slowed down since 2015 and was only 3.7% in 2018 (Bank of Zambia, 2018). The urban population is growing at 3% while also becoming increasingly. However, the share of the population living in urban areas increased from 35% in 2000 to 43.5% in 2018 (The World Bank, 2019). This rapid urbanization translates into bigger opportunities for financial service providers due to increased economic activity. The metro area population of Kitwe district in 2020 is 686,000, a 3.47% increase from 2019 (World Population Review, 2021). Therefore, the study will aim to determine the customer perception of digital wallets and electronic money in the Zambian economy.

1.2 Statement of the Problem

The current scenario of the *Zambian economy* shows the tendency of movement from cash to cashless transactions. There are so many efforts that have been taken by the government to convert the face of the *Zambian economy* into a new one. Now a day every transaction is going digital. To accelerate the execution of the concept of the digital economy there is several digital payment systems were introduced. These payment systems can make changes in the economic life of people. The statistic gives information on the internet penetration in *Zambia* from 2000 to 2018. In 2018, 14.3 percent of the population accessed the internet, up from 13.47 percent in 2012. *Zambia* has a population of around 17 million people (Clement, J statistica report 2020). However, access to the internet has dramatically increased from 12% in 2015 to 17% in 2018 nationally, the 2018 National ICT Survey has revealed.

Finscope, (2015) shows that *Zambians* make most of their payments in cash. Given that 98% of *Zambian adults* made their payments in cash, the Bank of *Zambia's* National Payment Systems Vision and Strategy 2018–2022 has amongst its goals, the mission to promote a cash-lite society through the increased access and usage of electronic payment methods (Bank of *Zambia*, 2018). Recently, the United Nations Capital Development Fund (UNCDF) recorded a growth of active digital financial services (DFS) accounts for 89% (UNCDF, 2019). At the end of 2018, there were approximately 16.5 million active or digital wallets, registered in *Zambia*. The overall growth of digital wallets was mainly due to deposits into the digital wallets (cash-in transactions), withdrawals from digital wallets (cash-out transactions), and airtime top-ups. This means that what is counted as electronic transactions is still a cash transaction at heart. However, what is the perception of digital wallets and electronic money among these urban people in the current period. The current study tries to understand the solution to this problem. The study looks at customers and how digital wallets is perceived by them and will also look at the advantages and disadvantages of digital wallets and the developing electronic money system.

1.3 Significance of the Study

The study intends to provide useful information to consumers regarding the adoption of digital wallets and ecommerce. The study is also designed to contribute information to consumers to enhance technologies for the usability and security of the digital wallet. Besides, the study is intended to identify whether the use of digital wallets and electronic money is productive for customers and identifies the outcome measures for saving time

during payment transactions. This study will also serve as the basis for further studies in the introduction of digital wallets and electronic money by users in the Zambian economy. The researcher also wishes to use this study as an advocacy tool for national wide assessment and evaluation of the digital wallets and e-commerce in the Zambian economy

1.4 Objectives of the Study

1.4.1 General objective

To determine the user perception of digital wallets and e-commerce in the Zambian economy.
Study case of Kitwe district of Copperbelt province

1.4.2 Specific Objectives

1. To assess the current digital wallets and e-commerce use rate in Kitwe district
2. To study the perception level towards safety on digital wallets and e-commerce in Kitwe district
3. To determine user satisfaction towards digital wallets and e-commerce in Kitwe district

1.5 Research Questions

1. What is the current digital wallets and e-commerce use rate in Kitwe district?
2. What is the perception level towards safety on digital wallets and e-commerce in Kitwe district?
3. What is the user satisfaction towards digital wallets and e-commerce in Kitwe district?

1.6 Definitions of Key Terms

Digital Wallets, Cashless Consumer Perception

Digital Wallets:

Digital payment is a way of payment that is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment. No hard cash is involved in digital payments. All the transactions in digital payments are completed online. It is an instant and convenient way to make payments. The Digital Zambia program is a flagship program of the Government of Zambia with a vision to transform Zambia into a digitally empowered society and knowledge economy.

Banking Cards (Debit/Credit/Cash/Travel/Others)

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit, and prepaid – offers enormous flexibility, as well. These cards provide 2-factor authentications for secure payments e.g., secure PIN and OTP, Visa, MasterCard are some of the examples of card payment systems. Payment cards give people the power to purchase items in stores, on the Internet, through mail-order catalogs. They save both customers and merchants' time and money and thus enable them for ease of transaction. (Bank of Zambia, 2018).

E-Wallets

E-wallet or mobile wallet is the digital version of your physical wallet with more functionality. You can keep your money in an E-wallet and use it when needed. Use the E-wallets to recharge your phone, pay at various places, and send money to your friends. If you have a smartphone and a stable internet connection, you can use E-wallets to make payments.

Mobile Banking

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institutions for the purpose. Each Bank provides its mobile banking App for Android, Windows, and iOS mobile platform(s). (Bank of Zambia, 2018).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The scientific literature looks at how digital wallet is perceived by users and it is based on specific objectives regarding digital wallets and e-commerce use rate, perception level towards the safety of digital wallets and e-commerce, and user satisfaction towards digital wallets and e-commerce. In this study, literature was sourced as secondary data from the following; Google Scholar, PubMed, and HINARI.

2.2 Digital Wallets and E-Commerce Use Rate

Alam, M.M., Awawdeh, A., & Muhamad, A. I. (2021). Using E-Wallet for Business Process Development: Challenges and Prospects in Malaysia. This study analyses the e-wallet phenomenon using a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis to assess Malaysian business development. It is supported by findings from the literature and secondary data. The relevant secondary data were collected from Bank Negara Malaysia and the World Bank (Alam, 2021).

This study shows that e-wallets in Malaysia have still not achieved their purpose but there is huge potential to do so (Alam, 2021). The SWOT analysis identified several strengths (e.g. financial incorporation, ease to access, protection and safety, simple for other accounts to connect to, product and consumer service management, quick to implement/administer), weaknesses (e.g. lack of infrastructure and the 'tapping' of devices already cornered by the mobile phone market, opportunities (e.g. eliminating fraud, better customer service, promotion/loyalty that can be built into customer experience) and threats (e.g. attacks from viruses, frequent inquiries whether multiple wallets can be used by clients, the concerns of the reckless spending behavior of the E-wallet users).

In India, Chew et al, (2020) explored the entrance of Chinese-based Alipay's cellphone payment innovation into Indian business sectors. This passageway occurred around mid-2015 and was the first of its sort possessed by owned by a foreign company. The acknowledgment of such innovation was made conceivable by Bank Negara India and a few other local banks who considered this to be a chance to connect the business sectors of the two nations. From that point forward, businesses across the nation acknowledged Alipay shows by showing notices on wall and door stickers and table cards. This sort of E-wallet was also broadly

utilized by the Chinese travelers visiting India who considered local people to effortlessly acknowledge it thus appealing to their foreign customer's needs. On the other hand, the public authority of India also urges local people to utilize the e-wallet platforms. As referenced by the Minister of Finance, the Indian government gives an Indian rupee (IR30) subsidy to all Indian individuals reached 18 or above to take an interest in the e-wallets framework. The motivator was made to urge Indian people to take an interest in the e-wallet framework. During a 10–20-month time span from January to October 2019, insights by the Central Bank of India (BNI) showed that the exchange value for e-cash reached around RM13.9 billion with an exchange volume of 1.72 billion, outperforming the IR11 billion figure that was recorded for the entire of 2018 out of 1.92 billion exchanges (Andrew et al., 2019). Therefore, the demand for the e-wallet framework is expanding to help the Indian government program in advancing this sort of digital money.

The ever-increasing global demand for paperless payment systems has changed how consumers think about e-wallets (Shekhar et al., 2020; Singh et al., 2020). The origin of the e-wallet concept was in the mobile phone payment system which is now widely accepted as an alternative payment method for both consumers and traders. Originally, the barter system was one in which people exchanged goods for goods but with time this system was replaced by paper currencies like the US dollar or British pound (Das Nair & Landani, 2020). In the 20th century, the world of business started employing plastic money like debit and credit cards which reduced cash-based transactions. The boom in smartphone technology coupled with the internet revolution means that new forms of payment such as those on mobile phones make the e-wallet payment platform possible (Teoh et al., 2020). Currently, various types of e-payments provide real-time and worldwide cashless transaction facilities to consumers and businesses.

2.3 Perception Level Towards Safety on Digital Wallets and E-Commerce

Dr. Megha S. Somani and Prof. Saudah Khatri (2020) on consumer perception towards cashless transactions with special reference to digital wallets in greater Mumbai. Various initiatives by the Government of India such as 'Digital India' have increased the usage of smartphones. Digital data costs have been falling by around 95% since around 2013, therefore India will now see an increase in the number of smartphone users by 40% by 2023, according to a McKinsey report. India is one of the fastest-growing markets with around 560 million internet subscribers in 2018. In the current scenario, there has been a substantial

increase in the number of people using digital wallets which has eased the buying experience of the consumers and has led to a shift towards a cashless economy. The perception of consumers plays a major role in the adoption of digital wallets. This study is an attempt to study and understand the consumer perception of digital wallets. A structured questionnaire was used to collect primary data after which certain inferences were drawn.

Forsythe and Shi (2009) found risk perception to be a consistent predictor of Internet shopping behavior; shoppers who felt at higher risk were less likely to make a purchase online. Of the six types of perceived risk identified in the previous literature (physical, financial, social, psychological, product performance concerns, and time/convenience loss), the authors examined the most common ones among Internet shoppers and concluded that increased uncertainty regarding the result of a potential behavior leads to a decrease in that behavior. Of 18 potential risks that might prevent Internet users from shopping online, respondents mostly mentioned risks related to product performance (39%), financial loss (23%), psychological/privacy concerns (32%), and time/convenience (20%) Forsythe and Shi (2009). However, perceptions and behaviors may have changed significantly since the time of these studies – 2008 and 2009, respectively.

Focusing on the determinants of e-payment adoption, Gholami et al. (2012) investigated the intention to adopt e-Payment in Nigeria using the Unified Theory of Acceptance and Use of Technology (UTAUT) model. The study identified perceived benefits, effort expectancy, social influence, trust, awareness, and demographic variables as major factors determining intention to adopt e-payment in Nigeria. Similarly, Junadi and Sfenrianto (2011) examined consumers' intention to use e-payment in Indonesia. This study also adopted the Unified Theory of Acceptance and Use of Technology (UTAUT) and concludes that culture and perceived security are important factors for electronic payment adoption in that country.

Likewise, Barkhordari et al. (2014) conducted a more specialized study on the important factors influencing trust in e-payments systems in Iran. The submission of the study is that technical and transaction procedures and access to security guidelines are the major factors that influence the perceived trust of customers. Oney et al. (2011) also examined the determinant of the electronic payment system (EPS), based on consumers' personal experiences in North Cyprus. Specifically, the study investigated the perspectives of consumers on security and trust and their effects on EPS. The finding of the study is that perceived security and trust significantly affect EPS adoption and usage. A micro-study by

Omotayo and Dahunsi (2015) focused on the factors that influence point-of-sale (POS) adoption by businesses in Ibadan and Lagos metropolis using a Multistage sampling technique. The study submitted that factors such as perceived ease of use and subjective norms significantly influence the adoption of POS, while other factors like image, characteristics of the organization, and perceived usefulness do not have a significant relationship with POS machine adoption in Nigeria. Studies of this nature have also been done in developed countries. Gerarden et al. (2017) grouped factors that influence e-payment adoption into two categories: the supply and demand-side factors. The study reveals that all the factors (both demand and supply) have a significant influence on a consumer's payment choice.

In Nigeria, Adebayo et al. (2018) investigated the effect of e-payment options on consumers' buying behavior in retail outlets of the Ilorin metropolis. This study dwells mainly on the buying and paying experience of customers and concludes that e-payment significantly affects consumer buying experience in retail outlets in Nigeria. Similarly, Adedokun (2018) examined whether e-payment methods such as mobile banking and POS services have a significant impact on the financial performance of SMEs in the Zaria metropolis, using the multiple regression method to analyze the data. The finding of Adedokun's study is that these innovative methods of payment have a significant effect on the performance of SMEs in Zaria. On their part, Adeoti and Oshotimehin (2011) discussed factors that influence the adoption of POS terminals in Nigeria using the probity model. The study reveals that factors such as convenience ease of use, security, intention to use, availability and nativity influence the use of POS terminals in Nigeria.

2.4 User Satisfaction Towards Digital Wallets and E-Commerce

A Study by Md Wasiul Karim (2022) on customer satisfaction towards E-Wallet Payment System in Bangladesh. Payment systems have been enormously switched out by introducing a new dimension in fintech where e-wallets can be used in conjunction with mobile payment. The severe competition of e-wallet services has forced providers where satisfaction is of prime concern. A total of 480 data were obtained from the respondents living in Dhaka city. The structure of this study was developed by approaching the TAM model, and Structural Equation Modeling was applied to examine all the hypotheses. Results revealed that technology self-efficacy is one of the exigent factors of satisfaction where a positive relationship exists in between. All the hypotheses were found to be significant except the

relationship between perceived usefulness and satisfaction. This study has validated external variables to contribute to the existing theory based on the previous literature. Lastly, to promote the enhancement of the mobile payment system, proposals for developing e-payments were made to increase the degree of satisfaction.

Berhanu Tesfaye Misgana (2017) on assessment of customer satisfaction on e-banking practice. The case of United bank S.C. in Addis Ababa. E-Banking has become an important topic for financial institutes, especially since the business sector of financial services is related to conditions of uncertainty. Consequently, this research looks at the E-Banking practice of united bank S.C. The data were collected by questionnaire survey method and interviews for those who are convenient for the researcher the total population of those involved in E-banking practices and E-banking users were many, but those who are convenient for the study were taken and 387 questionnaires were distributed, but only 322 of them, 83% were returned. From the survey result establishing an appropriate E-Banking, the environment is found to be very important for the well-being of the bank to maintain the existing customers and attract the new ones. In general, the mean value of the four E-Banking perspectives, it is found that there is a dissatisfactory E-banking practice within united bank S.C. For instance, security, availability, ease of use since it is technology-related, and the processing activity of the bank to alleviate problems encountered by its customers should be further improved.

The history of mobile money in Zambia. The number of mobile money accounts increased from 2.3 million at the end of 2017 to 4.3 million in 2018 (UNCDF, 2019). The number of mobile money agents in Zambia stood at 47,000 by the end of 2018 compared to 23,000 in 2017 (UNCDF, 2019). The usage of mobile money has increased proportionally more than electronic fund transfer and card usage. There were 478 agents per 100,000 adults in Zambia. This significant increase in the number of agents and accounts can be explained by mobile money regulation that has resulted in Zambians being automatically registered for a mobile money account (Bank of Zambia, 2015). Furthermore, customers have been increasingly using mobile money due to the increased demand for use (UNCDF, 2019). Mobile money wallets have become more attractive to bank customers as they can make transfers between their mobile money wallets and their bank accounts (UNCDF, 2018).

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes methodology that is being used in the research to address the questions. It has begun with an explanation of research approach, study design, study area, study population, sample size, methods of data collection, data management and analysis, results presentation. The last section of this chapter discusses research-related ethical issues.

3.1 Research Approach

This is the quantitative research which will involve individual who visit the banks, showrooms, and places e.g., malls for purchasing goods across social stratifications and geographical locations either cash or non-cash transaction.

3.2 Study Design

The study will be carried out in a cross-sectional way using both primary and secondary data. Secondary data will be collected from a variety of published sources. Therefore, primary data will be collected from customers using questionnaires.

3.3 Study Area

The study will be carried out in Kitwe district of Copperbelt province of Zambia. The Central Statistics Office (CSO, 2017) stated that Kitwe, Zambia's second largest city, is located in the central part of the Copperbelt and is endowed with vast natural resources. It is currently the most populated district in Copperbelt Province and the second most populated district in Zambia. Kitwe District has a total population of 517,543 people accounting for about 24 percent of the population in the province. Kitwe's inhabitants are young, with slightly over 66 percent of the population below the age of 25 years. The observe place has been decided by the researcher due to its maximum evolved business and business regions withinside the nation.

3.4 Study Population

Study Population includes groups of people who use the digital wallet as an alternative payment method. The research population included residents of Kitwe Township that use digital wallets and e-commerce as an alternative payment method. According to Adamson

(2016), general individuals who visit the banks, showrooms, and places e.g., malls for purchasing goods across social stratifications and geographical locations and services were either cash or the cashless transaction will be the population of the study.

3.5 Sample Size

Yamane (1967) provides a simplified formula to calculate sample sizes which include the following such as:

$$n = [z^2 \times p(1 - p) / e^2] / [1 + (Z^2 \times p(1 - p) / (e^2 \times N))]$$

Where: $z = 1.96$ for a confidence level (α) of 95%, p = proportion (expressed as a decimal), N = target population size, e = margin of error.

$$z = 1.96, p = 0.5, N = 135, e = 0.05$$

$$n = [1.96^2 \times 0.5(1 - 0.5) / 0.05^2] / [1 + (1.96^2 \times 0.5(1 - 0.5) / (0.05^2 \times 135))]$$

$$n = 384.16 / 3.8456 = 99.895$$

$n \approx 100$ study participants from Kitwe district will be engaged.

3.6 Methods of data collection

3.6.1 Data Collection Tool

A structured questionnaire will be used to collect data. This questionnaire consists of four parts: demographics, current digital wallets and e-commerce usage rates, safety of digital wallets and e-commerce, and satisfaction with digital wallet and e-commerce.

3.6.2 Procedure for data collection

Once approved by the administration of Kitwe district regulators, the researcher will begin pre-testing the questionnaire prior to initial data collection.

3.6.3 Pre-test of the questionnaire

Prior to commencing the data collection process, a pre-test of the study questionnaire will be performed two days prior to data collection at the study site. A total of five respondents will participate in this pilot study. The data collection tool will be pre-checked for clarity and applicability to avoid methodological errors during initial data collection.

3.6.4 Data collection

The study will use a structured questionnaire as a data collection tool and all questions will be in closed-ended specifically designed to answer the questions on users' perceptions of digital wallets and e-commerce in the *Zambian economy*. However, data that will be collected through interviews will be appropriate for this study to understand the nature of perceptions of many individuals.

3.7 Data Management and Analysis

The researcher will use Statistical Package for Social Sciences (SPSS 21.0) so one can be used to seize and examine records. All 296 finished questionnaires will be captured with SPSS model 21.0. After data collection, the researcher will continue with data entry, which will be observed with the aid of using data cleansing in addition to data screening, to make sure that there are neither mistakes nor lacking data.

3.8 Results Presentation

The data that was collected will be represented in pie charts to describe e.g., gender will be classified as male/female and tables will also be used to ensure that variables are well explained.

3.9 Ethical Considerations

The study will be carried out ethically. Participants will be given a chance that taking part in this study is entirely up to them. They will be free to stop at any time, for any reason. If they decide to leave the study, the information they have already given this study will be kept confidential and will not be shared with anyone else to personally harm or affect them. This will not in any way affect them. If they choose to leave the study, they will need to know why for future studies. There are no physical risks involved in this study. They may feel uncomfortable answering some of the questions. They will be at liberty to refuse to answer any questions that will make them feel uncomfortable. As a participant, they can refuse not to give answers at any time and their responses will not affect them as a participant in any way. If they agree in participating in this study, it is for the best of this study that there are no benefits attached to those who be engaged in this study. Their engagement is free of charge and will encourage them to participate accordingly for the best interest of this study. If they agree to be in the study the researcher will ask them some questions. To make sure their identity is secret; none will know them by name in the study or after. The data that will be

collected from this study will not involve respondents' private or personal, life stories, and life experiences. Therefore, before conducting data collection, ethical approval will be provided to the researcher from Copperbelt university Ethical Committee and Kitwe district.

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CHAPTER FOUR: STUDY FINDINGS AND DATA PRESENTATION

4.1 Introduction

This chapter shows the results that were found after the analysis of the data that was attained from the respondents and this analysis was done by the use of the Statistical Package for Social Sciences volume 16.

4.2 Social Demographic Characteristics of The Participants

4.2.1 Study of the Gender profile

The present study is based on the samples of 100 respondents of Kitwe district. Total samples comprised of 68% male whereas 32% were female. This is found in the primary data which were collected by random sampling. The composition shows more male members are using the cashless system or payment bank method to settle their commercial transactions.

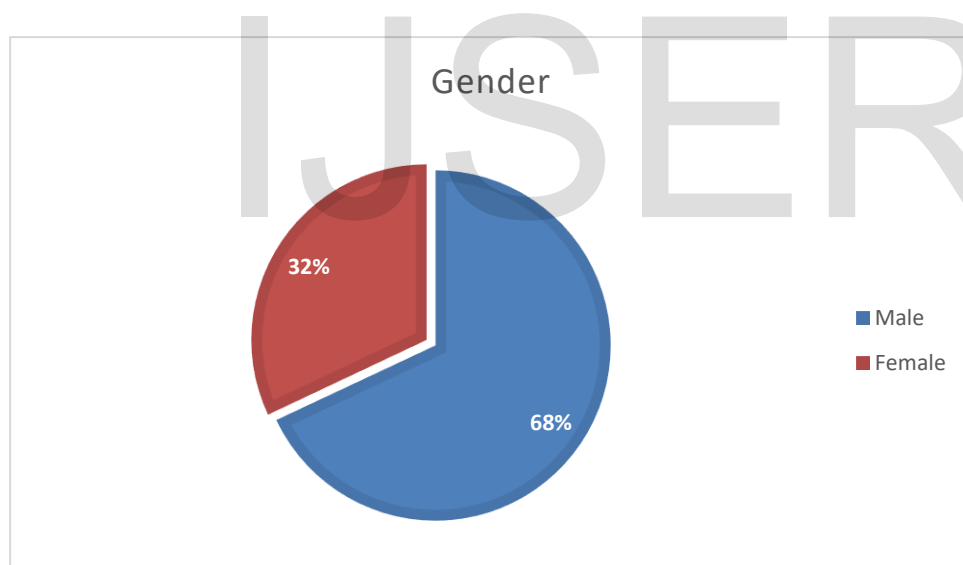


Figure 1 Sources: Compiled from Collected data

4.2.2 Study of Age profile

The present study about the age profile of the sample as per Figure-2 shows that there is 31% of the user of digital wallets and e-commerce are belonging to the age group below <30 years old, whereas 43% of users are belonging to the age group of 31-40 years, 13% users are belonging to the age group of 41-50. This reflects that the majority of users are in the age

group of 31-40 years. The lowest users of digital wallets and electronic money belong to the age group of above 50 years which is about 6%. This indicates the insecurity as regards the use of digital wallets and electronic money increases with increasing age.

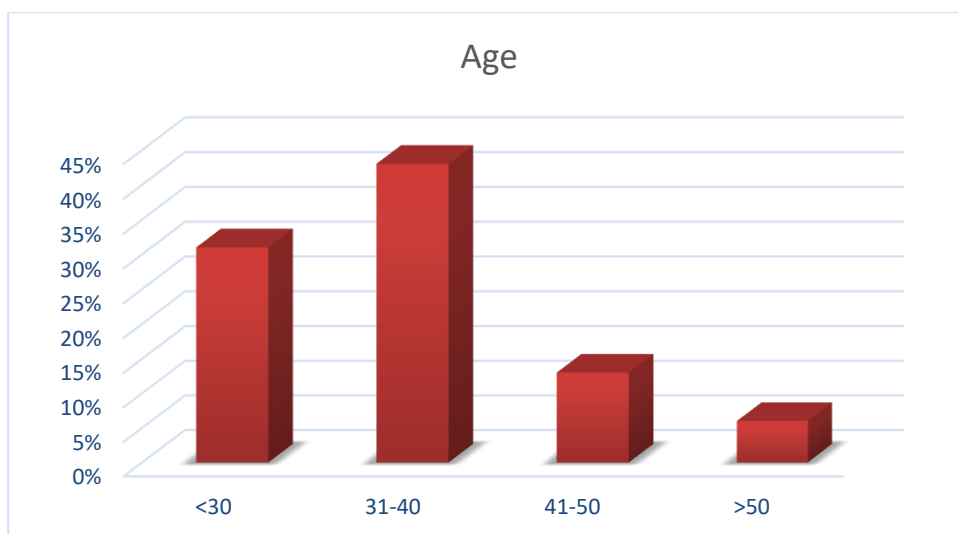


Figure 2: Compiled from Collected data

4.2.3 Study of Educational Qualification profile

Figure-3 of the present study shows the Educational Qualification profile of samples. The digital wallets and electronic money users having high school certificates were 13%, undergraduate 39%, and postgraduate qualification 48%. This reflects with a higher level of education the users of digital wallets and electronic money are more comfortable and have a positive perception towards cashless transactions.

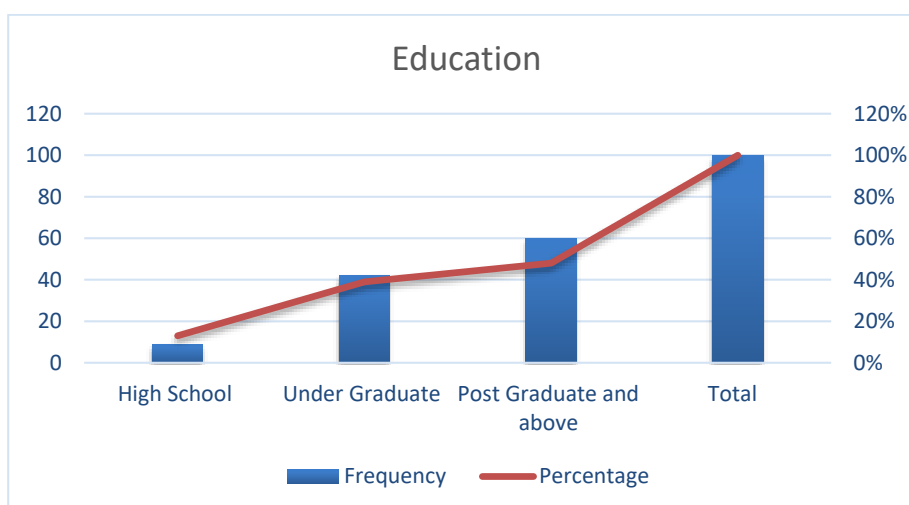


Figure 3 Sources: Compiled from Collected data

4.2.4 Study Participants Profession Category

Figure-4 of the present study shows the participant's profession category of samples. students were 15%, private sector employee represents 66%, public sector employee represents 36% and self-employed ones represents 21%.

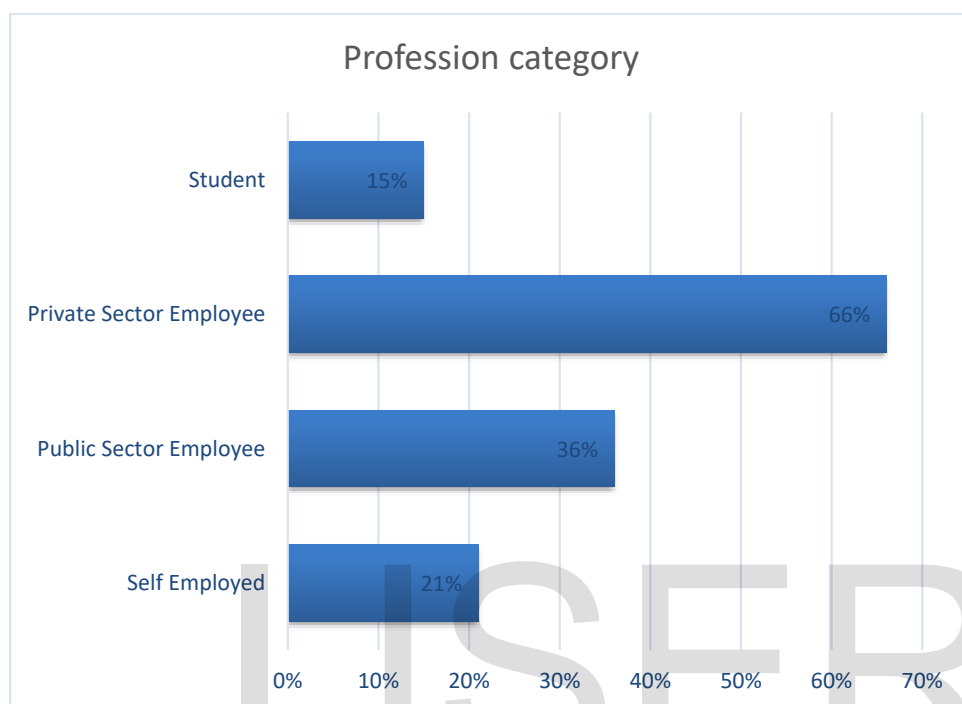


Figure 4 Sources: Compiled from Collected data

4.3 CURRENT DIGITAL WALLETS AND E-COMMERCE USE RATE

The payment acceptance methods were captured by geography, sector, and matching activity of the platforms. This section provides an overview of the prominent payment instruments accepted by digital platforms.

Participants identified six payment instruments. These were bank transfers, cards, cash, mobile money, digital wallets (including PayPal). They described the acceptance of these payment instruments and compare payment-acceptance trends for both consumers and providers of goods and services on the platform (see Table 1).

Use Rate	How consumers can pay (% of platforms)	How providers can receive payments (% of platforms)	% Of adult population with access to these

Bank Transfer	75%	25%	100%
Card	80%	20%	70%
Cash	41%	38%	62%
Mobile Money	90%	10%	100%
Digital wallet	70%	30%	100%
PayPal	21%	18%	36%

4.3.1 Bank transfers are the most widely accepted payment instrument for providers.

According to the collected data, 75% of platforms accept bank transfers as a method for suppliers of goods and services to receive income from the platform. This payment instrument is more prevalent for providers than for consumers.

4.3.2 Credit and debit cards are the most widely accepted payment instrument for consumers.

Eighty percent (80%) of platforms offer some form of card acceptance for payments. Platforms are around four times more likely to accept this as a payment instrument from consumers than a payment instrument for providers.

4.3.3 Cash acceptance is prevalent across all platform types.

Figure 5 shows that 41% of platforms accepted cash as a payment instrument for consumers, while 38% of platforms accepted cash as a payment instrument for providers. The data further reveals that 62% of platforms operating in the transportation sector accept cash as a means of payment by consumers.

4.3.4 Mobile-money acceptance varies by geography and sector.

In our scan, 90% of platforms identified accepted mobile-money payments from consumers, while 10% of platforms identified accepted mobile-money payments from providers. This payment mechanism was most prevalent for consumers in Zambia. The data also found that mobile-money acceptance was particularly prevalent for platforms operating in the agricultural sector.

4.3.5 Digital wallets are nascent, but platforms are looking to change that.

Digital wallets are a nascent payment option in the platform economy when compared to cards, bank transfers, and mobile money. Participants reviewed that about 70% of platforms accept digital wallets for consumer payments and 30% of platforms allow suppliers to receive income through a digital wallet.

4.3.6 PayPal is prevalent on professional services and cross-border matching platforms.

PayPal is a form of a digital wallet, but we considered it separately due to its universal reach. It is accepted by around 21% of the participants interviewed. This payment acceptance option is particularly prevalent in the professional services sector where it follows bank transfers as the second-most prominent payments acceptance channel.

4.4 PERCEPTION ON SAFETY OF DIGITAL WALLETS & E-COMMERCE

The majority of respondents said it is important or highly important to associate with the brand, convenient in use, secure transactions, save time, acceptance of digital wallets and electronic money at different stores, and pricing of the transaction (transaction cost, service fee, etc.)

4.4.1 Brand loyalty

This section explains the participants that are respondents said it is important or highly important to associate with the brand. Therefore, after the analysis of the data, it was recorded that 48 highly important, 36 important, 11 moderately important, 4 slightly important, and 1 not important.

4.4.2 Convenience in usage

This section explains to the participants that are respondents that digital wallets and electronic money is convenient in usage. Therefore, after the analysis of the data, it was recorded that 18 highly important, 47 important, 18 moderately important, 8 slightly important, and 9 not important.

4.4.3 Secured Transaction

This section explains the participants that are respondents that their transaction on digital wallets and electronic money is secured. Therefore, after the analysis of the data, it was recorded that 14 highly important, 47 important, 22 moderately important, 15 slightly important, and 2 not important.

4.4.4 Time Saving

This section explains to the participants that are respondents that digital wallets and electronic money save time. Therefore, after the analysis of the data, it was recorded that 75 highly important, 13 important, 6 moderately important, 4 slightly important, and 2 not important.

4.4.5 Acceptance

This section explains the participants that are respondents that acceptance of digital wallets and electronic money at different stores was recorded that 20 highly important, 50 important, 17 moderately important, 8 slightly important and 5 not important.

4.5 USER SATISFACTION TOWARDS DIGITAL WALLETS & E-COMMERCE

The majority of the respondents agree that digital wallets and electronic money provides benefits to an individual for the purchase of products, improve the quality of the decision, helpful in buying products as compared to traditional methods, offer a wide range of banking services and payment options. They also agreed that interaction with digital wallets and e-commerce is helpful and that they trust the service providers.

4.5.1 Trust the service providers of digital wallets and e-commerce

This section explains to the participants that are respondent that they trust the service providers of digital wallets and electronic money. Therefore, after the analysis of the data, it was recorded that 16 participants agreed, 58 participants strongly agreed, 20 participants partially agreed and 6 participants disagree.

4.5.2 Interacting with digital wallets and e-commerce is helpful.

This section explains to the participants that are respondents that interacting with digital wallets and e-commerce is helpful. After the analysis of the data, it was recorded that 12 participants agreed, 88 participants strongly agreed, 0 participants partially agreed and 0 participants disagree.

4.5.3 Digital wallets and e-commerce are capable of providing benefits to an individual for the purchase of the product.

This section explains to the participants that are respondents that digital wallets and e-commerce are capable of providing benefits to an individual for the purchase of the product.

The response was recorded that 26 participants agreed, 60 participants strongly agreed, 6 participants partially agreed and 8 participants disagree.

4.5.4 Using digital wallets and e-commerce improves the quality of my decision making for buying products.

This section explains to the participants that are respondent that using digital wallets and electronic money improves the quality of decision making for buying products. After the analysis of the data, it was recorded that 15 participants agree, 25 participants strongly agree, 20 participants partially agree and 40 participants disagree.

4.5.5 Believe mobile wallets are useful in buying products than the traditional methods.

This section explains the participants that are respondents that Believe mobile wallets are useful in buying products than the traditional methods. After the analysis of the data, it was recorded that 16 participants agree, 30 participants strongly agree, 10 participants partially agree and 44 participants disagree.

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CHAPTER FIVE

DISCUSSION OF PRINCIPAL FINDINGS

5.0 Introduction

The purpose of the study was to determine the user perception of digital wallets and e-commerce in the Zambian economy. Study case of Kitwe district of Copperbelt province. This chapter gives a discussion of the results obtained from the questionnaires that were answered and analysed and it is going, to begin with, the Social Demographic Characteristics of the participants.

5.1 Demographic Characteristics of Respondents

First, the total respondents of the sample of 100 respondents were determined in Lusaka city. Total samples comprising 68% male whereas 32% were female. This was found in the primary data which were collected by random sampling. The composition shows more male members are using the cashless system or payment bank method to settle their commercial transactions.

Second, the study revealed the age profile of the sample as per Figure-2 shows that there is 31% of the user of digital wallets and electronic money are belonging to the age group below <30 years old, whereas 43% of users are belonging to the age group of 31-40 years, 13% users are belonging to the age group of 41-50. This reflects that the majority of users are in the age group of 31-40 years. The lowest users of digital wallets and electronic money belong to the age group of above 50 years which is about 6%. This indicates the insecurity as regards the use of digital wallets and electronic money increases with increasing age. Third, the study shows the Educational Qualification profile of samples. The digital wallets and electronic money users having high school certificates were 13%, undergraduate 39%, and postgraduate qualification 48%. This reflects with a higher level of education the users of digital wallets and electronic money are more comfortable and have a positive perception towards cashless transactions. Fourth the Study Figure-4 of the present study the participant's profession category of samples. students were 15%, private sector employee represents 66%, public sector employee represents 36% and self-employed ones represents 21%.

5.2 Digital Wallets and E-Commerce Use Rate

According to the collected data, 75% of platforms accept bank transfers as a method for suppliers of goods and services to receive income from the platform. Eighty percent (80%) of

platforms offer some form of card acceptance for payments. Table 1 shows that 41% of platforms accepted cash as a payment instrument for consumers, while 38% of platforms accepted cash as a payment instrument for providers. The data further reveals that 62% of platforms operating in the transportation sector accept cash as a means of payment by consumers. In the collected data, 90% of platforms identified accepted mobile-money payments from consumers, while 10% of platforms identified accepted mobile-money payments from providers. Digital wallets are a nascent payment option in the platform economy when compared to cards, bank transfers, and mobile money. Participants reviewed that about 70% of platforms accept digital wallets for consumer payments and 30% of platforms allow suppliers to receive income through a digital wallet. PayPal is a form of a digital wallet, but we considered it separately due to its universal reach. It is accepted by around 21% of the participants interviewed. This payment acceptance option is particularly prevalent in the professional services sector where it follows bank transfers as the second-most prominent payments acceptance channel.

5.3 Perception Level Towards Safety on Digital Wallets & E-Commerce

The majority of respondents said it is important or highly important to associate with the brand, convenient in use, secure transactions, save time, acceptance of digital wallets and electronic money at different stores, and pricing of the transaction (transaction cost, service fee, etc.)

5.4 User Satisfaction Towards Digital Wallets & E-Commerce

The majority of the respondents agree that digital wallets and electronic money provides benefits to an individual for the purchase of products, improve the quality of the decision, helpful in buying products as compared to traditional methods, offer a wide range of banking services and payment options. They also agree that interaction with digital wallets and electronic money is helpful and that they trust the service providers.

CHAPTER SIX

CONCLUSION, LIMITATIONS, AND RECOMMENDATIONS

6.1 Conclusion

It was observed that the age profile of the sample as per Figure-2 indicates the insecurity as regards the use of digital wallets and electronic money increases with increasing age. The study of educational qualification profile reflects with a higher level of education the users of digital wallets and electronic money are more comfortable and have a positive perception towards cashless transactions. Zambia has 10 provinces and the reach on the use of digital wallets and electronic money should go beyond the 17 million people within Zambia, even those without proper education standards shouldn't be left out if we were to see the economy of Zambia to be boosted. The mobile money showed a good positive towards the use rate among respondents in Zambia, this is because it is secured and it helps a lot in necessities. However, there could be a need to boost digital wallets across Zambia. It is good when it came to user perception towards the digital wallets and e-money because the majority of respondent said it is important or highly important to associate with the brand, convenient in use, secured transactions, save time, acceptance of digital wallets and electronic money at different stores and pricing of the transaction (transaction cost, service fee, etc.). However, on the user satisfaction, the majority of the respondents agree that digital wallets and electronic money provides benefits to an individual for the purchase of products, improve the quality of the decision, helpful in buying products as compared to traditional methods, they offer a wide range of banking services and payment options. They also agree that interaction with digital wallets and electronic money is helpful and that they trust the service providers.

6.2 Limitations

This research was designed to determine the perception of digital wallets and electronic money by users in the Zambian economy. A small number of participants ($N = 100$) was used in this study, and this is considered a limitation as it might not represent the entire population of digital wallets and electronic money by users in Zambia. Another limitation was the participants' limited available time for the interview due to Covid19 restriction, few people were available to respond. However, they had limited time to devote to the interview, as they were not interested in participating outside their working hours. This subsequently led to a reduction in interview time the use of quantitative.

6.3 Recommendation for Future Studies

Digital wallets and electronic money have been adopted progressively. However, previous researchers have not fully identified many factors that could significantly improve the adoption and continued usage of digital wallets and electronic money. The objective of this study was to build on previous research to close the gap in our knowledge about users' perception during the period of digital wallets and electronic money by studying the lived experience of users' perceptions.

The participants were selected through banks, showrooms, and places e.g., malls for purchasing goods across, which suggests that participants with knowledge about information digital wallets and electronic money participated in the study; this may thus limit the generalizability of the results to the general population. Using a larger sample to expand the study may provide in-depth characteristics of potential participants.

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APPENDICES

Appendix 1: Work Plan

The work plan shows the time (months) and activities to be done

TASK PERFORMED	RESPONSIBLE PERSON	FEB	MAR	APR	MAY	JUN	JUL
Topic submission	Researcher						
Submission of research proposal and progress report	Researcher						
Submission of literature review	Researcher						
Submission of research methodology	Researcher						
Thesis Final Version	Researcher						
Course Survey	Researcher						

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Appendix 2: Research Budget

ITEM		UNIT	UNIT COST	TOTAL COST
STATIONARY				
Reams of Paper		2	80,00	160,00
Pens (box)		1	30,00	20,00
Rubber		4	2,00	8,00
Note books (Each)		4	10,00	40,00
Tipex (Box)		3	30,00	90,00
Stapler		1	60,00	60,00
Perforator		1	80,00	80,00
Flip charts		2	50,00	100,00
Markers		4	10,00	40,00
Steeple (Box)		1	10,00	10,00
Box Files (Each)		2	45,00	90,00
Small Folders		10	5,00	50,00
Field Bag		1	250,00	250,00
Folder Clips		10	1,50	15,00
Paper Glue		1	15,00	15,00
Memory Stick 2GB		1	100,00	100,00
Diary		1	80,00	80,00
Manila Paper		3	2,00	6,00
			SUBTOTAL:	K1,244,00
SECRETARIAL SERVICES				
Research Proposal Binding and Printing		1	50	50,00
Questionnaire printing		296	2,00	592,00
Binding of Research Reports		3 copies	150,00	450,00
Research Report Printing		3 copies	360,00	360,00
			SUBTOTAL:	K 1,402,00
PERSONNEL				
Transport Allowance during Research Activities		14 days	30,00	420,00
Lunch Allowance for the researcher		14 days	280,00	280,00
SUBTOTAL				K690,00
	GRAND			TOTAL:
	K 3,336,00			

Appendix 3: Informed Consent Document

Title: User perception of digital wallets and e-commerce in the Zambian economy

Introduction: Hi. My name is OSWELL PHIRI an MBA student from the Copperbelt University researching the: user perception of digital wallets and e-commerce in the Zambian economy. A study case of Kitwe district. I will read you a form that explains the research study you are being asked to join. Please, feel free to ask me any questions before agreeing to join. You may also ask questions at any time after joining the study should you choose to take part.

Purpose of Study: The main purpose of the study is to bring out the user perception of digital wallets and e-commerce in the Zambian economy. The study will look at customers and how digital wallets is perceived by them and will also look at the advantages and disadvantages of digital wallets and the e-commerce system. Many customers use digital wallets and e-commerce. It is for this reason this study will highlight how user perception of digital wallets and e-commerce in the context of the Zambian economy.

Risk(s) and Compensation: While there are no known risks to you to the best of the researcher's knowledge, as a participant there will be no compensation in any form for participating in this study.

Benefits: There is no direct benefit to you for participating in this study, however, the information gained will be useful in the formulation and implementation of measures that the body of knowledge that is relevant in user perception of digital wallets and e-commerce in the country.

Declaration of Confidentiality: Any identifying information will be kept in strict confidence to the extent permitted by law. All individual data obtained will be reported as group data

Participant's ID

Interview date

_____/_____/2022

I confirm that my participation in this research project is voluntary.

I understand that I will not receive any payments for participating in this research interview.

I understand that most interviewees will find the discussion interesting and thought-provoking. I have the right to decline to answer any question or to end the interview.

I confirm that the research interview will last approximately 20-30 minutes.

I understand that the researcher will not identify me by name in any reports using information obtained from this interview and that my confidentiality as a participant in this study will remain secure.

I have read and understood the explanation provided to me.

I have been given a copy of the consent form.

I wish to review the notes, transcripts, or other data collected during the research interview.

I agree that the researchers may publish documents that contain quotations by me.

(Right thumbprint if unable to sign)

Date Signed

____/____/2022

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Date Signed

____/____/2022

Thank you for taking the time to read through the information sheet. If you choose to participate in this research study, please sign the informed consent form below. For any questions regarding the study please contact the researcher or the supervisor on the following contact details;

Researcher:

Names: Oswell Phiri

+260 96 2269682

Research Supervisor:

Dr. Danielle Babb

Appendix 4: Questionnaire

Section A. Socio-demographic characteristics of the study participants

Gender	Male	
	Female	
Age of respondents, years	<30	
	31-40	
	41-50	
	>50	
Educational Qualification	High School	
	Under Graduate	
	Post Graduate and above	
Profession Category	Student	
	Private Sector Employee	
	Public Sector Employee	
	Self Employed	
	Others	

Section B: Current Digital Wallets and E-Commerce Use Rate

Use Rate	How consumers can pay (% of platforms)	How providers can receive payments (% of platforms)	% of the adult population with access to these
Bank Transfer			
Card			
Cash			
Mobile Money			
Digital wallet			
PayPal			

Section C: Perception Level Towards Safety on Digital Wallets & E-Commerce

This section explains the participants that are respondents are asked on the perception of digital wallets and electronic money.

Brand loyalty	highly important	
	important	
	moderately important	
	slightly important	
	Not important	
Convenience in usage	highly important	
	important	
	moderately important	
	slightly important	
	Not important	
Secured Transaction	highly important	
	important	
	moderately important	
	slightly important	
	Not important	
Time-Saving	highly important	
	important	
	moderately important	
	slightly important	
	Not important	
Acceptance	highly important	
	important	
	moderately important	
	slightly important	
	Not important	

Section D: User Satisfaction Towards Digital Wallets & E-Commerce

This section explains the participants that are respondents are asked about the satisfaction of digital wallets and electronic money.

Do you trust the service providers of digital wallets and electronic money	agree	
	strongly agree	
	partially agree	
	disagree.	
Do you agree that interacting with digital wallets and electronic money is helpful?	agree	
	strongly agree	
	partially agree	
	disagree	
Digital wallets and electronic money are capable of providing benefits to an individual for the purchase of the product.	agree	
	strongly agree	
	partially agree	
	disagree	
Using digital wallets and electronic money improves the quality of my decision making for buying products.	agree	
	strongly agree	
	partially agree	
	disagree	
Believe mobile wallets are useful in buying products than traditional methods.	agree	
	strongly agree	
	partially agree	
	disagree	