

**USE OF INTERNET BANKING PROGRAMMES AND RESILIENCE OF SMALL AND MEDIUM ENTERPRISES IN KISII TOWN, KISII COUNTY, KENYA.**

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## DECLARATION

This research report is presented as my original work and has not presented before an academic award in any university.

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This research project report has been presented with my approval for examination as the university supervisor.

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## **LIST OF ABBREVIATIONS AND ACRYNOMS**

SMEs	Small and Medium Enterprises
ATM	Automated Teller Machine
TAM	Technology Acceptance Model
IB	Internet Banking
UK	United Kingdom
US	United States
IT	Information Technology
SPSS	Statistical Package for Social Sciences
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
PR	Perceived Risk
CI	Customers' Innovativeness
SEM	Structural Equation Modeling
TRA	Theory of Reasoned Action

## **ABSTRACT**

In the last two decades, the need for time and cost saving banking process for SMEs coincided with modern banks seeking to improve customer service and add value to banking experience for SMEs. Since internet banking aims to enhance the customer experience, the key factors that relate to the objective of internet banking warrant attention and investigation to facilitate informed decision making. Regardless of the fact that factors influencing the adoption and use of internet banking services has been extensively done in developed countries as opposed to developing countries in Africa like Kenya since technology adoption in these countries is still in its infancy. Therefore, this study investigates the determinants of SMEs' use of IB in Kenya from users' perspective. Descriptive survey will be applied where 132 SMEs in Kisii town will be interviewed. A structured questionnaire will be randomly administered to gather data information from the customers. The data gathered from the customers will be analysed using statistical tests conducted using MS Excel and SPSS version 20.0. The study identified perceived usefulness, ease of use, risk, and customer's innovativeness as key factors influencing SMEs use of IB in Kisii County. The study recommends SMEs to embrace the use of IB so as to be resilient in hard economic times. The study recommends more representative study to be carried out of the whole country to be conducted because the findings could not be generalized for whole country.

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of the study**

Hanafizadeh et al. (2014) and Makaris et al. (2009) cited in Abolifazi (2018) opined that the IT development had a big effect in all aspect of life and that change which focused on the IT in the provision of bank services made significant changes that allowed customer to use their time efficiently. This made customers ready to use new services and products (Laukkanen 2016). Advances in technology have facilitated the development of frameworks for businesses to improve their transaction affairs, increasing the competition in the financial sector. The significant development and visibility of internet services and technologies have enhanced customers' access to financial products/services across the globe (Tsai, 2014).

There are four electronic banking channels which includes the ATM, Telephone banking, Internet banking and Mobile banking. IB is found to be a channel allowing users to use banking websites to conduct a wide range of financial affairs (Hoehle 2012). Stanford Federal Credit Union was the first organization to offer IB services in 1994. From that point, other companies started to adopt the practice globally (Yoon 2010). The IB technology allowed customers to access and utilize banking services online through the worldwide network (Rawashdeh 2015). The internet reduces service delivery costs and increases sales of service, thus playing a significant role in the modern business economy (Ahmad, 2011).

Burt and Sparks (2003) cited by Jyoti et al. (2017) contends that many advances in technology prior to the age of internet affected operations relating to business transaction, with the latest technological advancement being the onset of the internet which revolutionized the business marketplace. Schwartz (1997) also did a comparison of the way internet has evolved business processes and the ATM which changed the banking experience. Customers are attracted to use IB because it is easy to use, fast, and convenient. Jyoti (2017) established that while many firms were focusing more on cost saving business models, the evolution of e-commerce technology gave a gate pass to IB success by offering a means to delivering banking services and making banks gain a competitive advantage. 97% of developed countries like Germany, the UK, and the US use IB (Malaquias 2016). In Kenya, though not ranked among the top 30 countries with internet usage by ICT development index, internet adoption and usage is gaining prominence since many service providers more particularly financial institutions are finding it cost effective channel of offering their services. In 2009, 12 million individuals used IB and increased to 45 million by 2014 (Gustke, 2010). It is in this spirit that the banks would commence measures to deal with the tide of apathy,

customer resistance, or attrition. Hence, most customers embraced IB for its convenience, ease, and security.

According to customers' viewpoint, IB allows them to perform numerous transactions electronically via banking irrespective of their location (Grabner-Kraeuter and Faullant 2008). However, various factors influence a person's decision to use IB. I contend that these specific factors include a customers' perception of how useful, easy, safe IB is compared to physical banking and their innovativeness.

## **1.2 Statement of the Problem**

The past two decades have been marked by increased number of banks striving to improve customer services and developing business strategies for value addition. Since the IB program focuses on serving customers well, the key issue relates to the objective of IB warrant attention and investigation to facilitate informed decision making. Similar to other businesses, the banks' end game is to gain and remain resilient. Therefore, a research on internet banking use is fortuitously critical in adjusting and redirecting the plans of the banking sector (Tesunbi et al. 2019).

Tesunbi et al (2019) note that the expanding customer base together with the interconnectedness interdependence of the world economy has contributed to the dissatisfactory state of the operations management in banks for average bank customers thereby necessitating e-banking services. Regardless of research in e-banking adoption being extensively conducted in technological advanced nations, little research has been conducted in African countries like Kenya since technology adoption in these countries is still in its infancy and especially the apathy in technological innovation. This research investigates the determinants of SMEs' use of IB in Kenya from users' perspective.

## **1.3 Purpose of the study**

The purpose of this study is establish the factors influencing the use of internet banking programmes and resilience of small and medium enterprises in Kisii town, Kisii county, Kenya.

## **1.4 Objectives of the study**

This study was guided by the following four objectives;

- i. To examine the influence of customers' innovativeness on the resilience of small and medium enterprises in Kisii town in kisii county, Kenya.

- ii. To investigate how perceived usefulness of internet banking program influence resilience of small and medium enterprises in Kisii town, Kisii County, Kenya.
- iii. To assess how perceived easiness of use of internet banking program influence resilience of small and medium enterprises in Kisii town, kisii county, Kenya.
- iv. To investigate how perceived risks on the use of Internet Banking program influence the resilience of small and medium enterprises Kisii town, Kisii County, Kenya.

### **1.5 Research questions**

This study sort answers to the following research questions.

1. To what extend does customers' innovativeness influence the resilience of small and medium enterprises Kenya?
2. How does the perceived usefulness of internet banking program influence the resilience of small and medium enterprises Kenya?
3. How does the perceived easiness of use of internet banking program influence the resilience of small and medium enterprises Kenya?
4. How do the perceived risks of use of internet banking program influence the resilience of small and medium enterprises Kenya?

### **1.6 Significance of the study**

The study seeks to understand the internet banking needs of small and micro enterprises by so doing it envisages that it will enhance the financial institutions' understanding, thereby enabling them to have outside-in approach in future banking investments in development of both the software and hardware, including developing tailor-made products meant to enhance use and adoption. This would enable the developers to modify and innovate on their product to address both the banks and their customers' needs accordingly. The study will give recommendations and identify gaps for further research. It forms a rich pool for mining data and information that might be relevant to scholars and academicians.

### **1.7 Assumptions of the study**

The key assumption is that there will be enough time and resources to conduct the research and those respondents will avail themselves and be willing to respond to the questionnaire to provide information for the research.

### **1.8 Delimitations of the study**

The study is confined to investigating the determinants of SMEs' IB use in Kenya. It focuses on four independent constructs including customers' innovativeness, PU, PEoU, and PR. The study will link these factors to the SMEs' internet banking use in Kenya. The focus will be on SMEs in Kisii town. The study was conducted between May and August 2021.

### **1.9 Limitations of the study**

While conducting the study, certain encumbrances will be faced like some respondents will fail to return their filled questionnaire. This limitation can be dealt with by getting a large sample of respondents. Due to unavailability of the owners, managers of SMEs the researcher had to pay several visits before filled questionnaires were obtained which invariably cost money and time.

### **1.10 Definition of terms as used in the study**

#### **Small and Medium Enterprises (SMEs)**

These are businesses with an annual capital outlay Kes 5million and Kes 100million and employs between 5 to 50 employees.

#### **Internet**

A group of interconnected networks, an international computer network connecting other networks and computers.

#### **Internet Banking (IB)**

A process by which banks provides banking services via the internet.

#### **Customers' Innovativeness (CI)**

It is the consumers' propensity to understand and adopt a new technology.

#### **Perceived ease of use (PEoU)**

It is the degree to which one thinks that using a technology will make work easier and stress-free.

#### **Perceived usefulness (PU)**

The extent to which one thinks the use of technology will make his performance improve.

#### **Perceived risk (PR)**

The degree of uncertainty in the user willingness to use a new technology.

#### **Resilience**

The capacity to recover quickly from difficulties; toughness.

### **1.11 Organization of the study**

The study is organised into five chapters and it is aimed at identifying how internet banking use is influencing the resilience of small and medium enterprises in Kisii town, Kisii County, Kenya. A summary is given below.

Chapter 1- introduces research topic by providing background of the study, the statement of the problem, objectives of the study, research questions, significance of the study, limitation of the study, study delimitation and the definitions of the significant terms of the study.

Chapter 2- examines literature about the research topic. The literature reviewed starts by looking at the empirical studies of the area of concern for each research constructs, methodology used, research design, target population, sample size, sampling procedure used, research instruments used, data analysis technique used, finding and the research voice.

Chapter 3- shows how the research is conducted, also critiquing the research investigation in the areas where errors could have occurred. It provides insight into the sampling method used, data collection techniques (questionnaire) and various techniques used to analyse data.

Chapter 4- presents the statistical analysis of the data obtained through questionnaires. The data is then processed into meaningful results, which the reader can interpret and understand. The data is analysed in line with the study objectives.

Chapter 5- outlines the summary and discussion of the findings in relation to the objectives. In addition, the chapter draws from the findings to make conclusions and recommendations. It also contains suggestion for further research.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The chapter provides the background of the research constructs which are IB use; PU; PEOU; PR, and customers' innovativeness. Empirical studies relating to these constructs will be reviewed.

### **2.2 Internet banking program**

Tero et al. (2004) identify IB as an online platform that allows clients to conduct a wide array of banking activities, such as paying bills and making investments. Ismail et al. (2012) studied the extent to which retail banking clients use IB. The study also assesses the factors that influence clients to use IB in Sudan. They distributed questionnaires to 400 respondents using convenience-sampling method. 269 respondents provided valid responses that were used for data analysis. The findings revealed most retail banking customers in Sudan have used IB services. Automated Teller Machine (ATM) was the most utilized method of transactions. The findings also showed high-income customers, internet, and computer literate clients were likely to use IB services than the less computer and internet literate clients. Nonetheless, the results demonstrated that there is limited evidence showing a significant association between gender, education, marital status, occupation and IB use.

Muttila, et al. (2003) studied the e-banking looking at the nature of clients. They gathered data using mail questionnaires that were sent to 3000 Finland bank clients, who were categorized into the non-users, old user, and new user's groups to assess the differences in their IB experiences. Each group received a questionnaire tailored to banking experience. The findings revealed mature customers use IB as the third-most popular mode of payment. These older users identified perceived complexity of computers and limited personalized service in IB as key barriers of IB adoption. Notably, education and household income were established to significantly affect mature customers' decision of adopting IB. For instance, the study showed only 30% of mature and well-educated males use IB as their main mode of payment.

### **2.3 Small and Medium Enterprises' innovativeness and the use Internet Banking program**

In the context of this research, SMEs' innovativeness denotes the SMEs' propensity to understand and use new technology and also how receptive they are to the new technology. Grewal et al (2000) identify customer innovativeness as a predisposition for buying or adopting a new service or product. It can also refer to a customer's preference for a different or new experience. Chauhan et al. (2019) in their study to analyse consumers' willingness to use IB in India while making use of

TAM and adopting a descriptive survey of 487 respondents and analysing data through a two-step SEM approach. They concluded that consumers' innovativeness positively influenced consumers' willingness to use IB.

Chih-wei Chao et al. (2012) studied how innovativeness affects consumers' adoption of new products by using a quantitative survey-based approach on 256 Australians above 18 years by completing an online survey. They found that consumers adopt new products due to domain specific innovativeness. Also, Joaquin Aldas-Manzano et al. (2009) investigate the effect of perceived risk on consumer innovativeness use of IB. Testing the construct through structural equation modelling techniques and accessing a sample of 511 participants that utilised the Spanish internet banking services revealed a correlation between consumer innovativeness and increased IB adoption.

#### **2.4 Perceived usefulness and the SMEs use of IB program**

PU is one of the variables that have been investigated widely by researches of technology adoption and this context it is the extent to which someone is optimistic they would achieve enhanced performance by using a particular system. Numerous studies have validated PU. Wong and Hiew (2005) established the PU of mobile services strongly drives Internet Banking usage. Funmilola et al. (2018) studied the intention of students from two Nigerian universities to continue using online shops. They utilized a survey design with a sample of 455 respondents that constituted a response rate of 77% and established a positive result of the students' intention to continue using online shops.

Nadim and Moorjahan (2008) also investigated the role that PU, PEOU, IB safety and privacy, and clients' attitude had in e-banking use in Bangladesh. Results from 227 participants revealed the reliability of all five constructs. The results also showed IB clients regarded platform as safe for bank transactions, and had a positive attitude towards using IB services. The clients also showed they had the intention of using e-banking in future. Jyoti, et al. (2017) studied the behaviour of customers using IB. They used a sample population of 270 customers who were randomly selected in India and employed a conceptual model with extended TAM established that PEOU and security contributed to the positive attitude that customers have towards adopting IB, that consequently enhances their intention of using the platform in future. Jyoti, et al. (2017) further concludes that PEOU, perceived web security, and trust affect client's PU, attitude, and their willingness to use Internet Banking.

## **2.5 Perceived easiness of use of Internet Banking and resilience of SMEs**

Numerous empirical studies have established a relationship between PEOU and IB adoption. Researchers have found that PEOU is a key determinant of consumers' use of past technologies like IB (Jahangir & Begum, 2008; Guriting & Ndubisi, 2006), the intranet (Chang, 2004), 3G (Lao et al., 2003), internet commerce (Cho et al., 2007), and wireless internet (Lu et al., 2003). Rodgers (1995) noted that a single complex system could inhibit and discourage the adoption of other innovations. For this study PEOU will refer to degree that a person believes using IB requires minimal mental and physical effort. For instance, one may find accessing bank services on IB portal to be complex and tedious due to physical constraints, such as following a stringent procedure before transaction is complete or data entry difficulties.

A study done by Geetha and Malarvizhi (2012) in India; which considered the influence of PU, PEOU, and perceived risk on the bank clients' decision to start using e-banking. The study utilized a sample of 200 respondents from nineteen Indian banks using convenient sampling. The study findings revealed that PEOU, perceived risk, and PU influenced customers' decision to start using e-banking. The findings are supported by other studies elsewhere which proves that in addition to the two TAM model constructs perceived risk also affects the decision to use IB. Abolfazl et al. (2018) considered how word of mouth affected clients' adoption and satisfaction of IB in Iran using a field survey with a sample population of 385 internet users; employing a structural equation model to analyse data established PEOU together with other dimensions like web content, accessibility, privacy, transmission speed, and security have a positively influence IB adoption.

## **2.6 Perceived risk and the SMEs use internet banking program**

The impact of perceived risk on Clients' IB use has been extensively explored by scholars and hence their findings are discussed below. The Baur developed the concept of 'risk perception' or perceived risk in 1990 and means perceived uncertainty or dangers during and after purchase. Perceived risk is the perceived uncertainty when a person intends to adopt a new technology.

There are many forms perceived risk which can be categorized as financial, performance, time and security risk. However, from the customers' perspective security risk is more predominant one. Littler and Melanthion (2006) note that security risk occurs when customer fears that transfer of funds from their account and other personal information can be seen by a third party who has no express permission from them. The risk associated with customers' personal information could be the main hindrance in adopting IB and it has been recommended that bolstering security in protecting personal data could enhance the preference in using internet banking (Yousafzai 2000).

Chauhan et al. (2019) in their study to analyze consumers' IB adoption in India while applying TAM and adopting a descriptive survey of 487 respondents and analyzing data through SEM approach made a conclusion that risk perception of IB adversely affected the intention of consumers of using IB. Another study by Fadare OA (2016) conducted assessed clients' risk perception and their intention to start using IB. 120 post graduate students from the Utara University in Malaysia were include in the study and administered questionnaires. The findings demonstrated that risk perception coupled with other variables leads to intention to use IB.

Irfan and Madhavaiah (2014) in their study which investigated what influenced young consumers to use IB services in India, making use of a theoretical model that is firmly based on technology acceptance model (TAM) and by adding other variables such as social influence, PR, trust, self-efficacy, and interviewing a sample of 155 respondents and utilizing multiple regression and correlation analysis found out that PR negatively influenced the intention to IB.

## **2.7 Theoretical framework**

The study is embedded in two theories, Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) and which are most preferred theoretical models in explaining the technology adoption. The model postulates that PEOU, and PU of technology determines the users' willingness to use a technology. TAM argues that the two factors (PEOU and PU) influences the individuals' attitude which in turn causes behavioural intention leading to actual use (Mavetera et al., 2017). The theory links the perception to how behavior is influenced which influences technology use. TRA (Fishbein and Ajzen, 1980) cited by Tesunbi (2019) postulates that PEOU tends to influence PU. These two derives the individual's behavioral adoption of technology-based systems. Davis et al. (1989) explained that TAM model combined PU, PEOU, and attitude toward the using of IB. Rogers (1995) coined other attributes like perceived innovative attributes that encompass trainability, compatibility, relative advantage, and complexity. Chan et al. (2004) while agreeing that the TAM tends to predict consumers' adoption of new technologies and contends that a customer may minimize using a technology or refuse using it if they feel that they will incur a loss. Thus, consumers' attitude towards risk determines their risk perception and use of IB. Perceived risk is in many dimensions, such as psychological, physical, financial, performance, social risks, and time (Havlena & Desarbo, 1990; Stone and Gronhaug, 1993; Murray & Schlacter, 1990; Jacoby & Kaplan 1972). Why was TAM selected? It is original model in technology acceptance and use. No study has invalidated this model particularly in Kenya.

## 2.9 Conceptual framework

Dependent Variables

Independent Variables

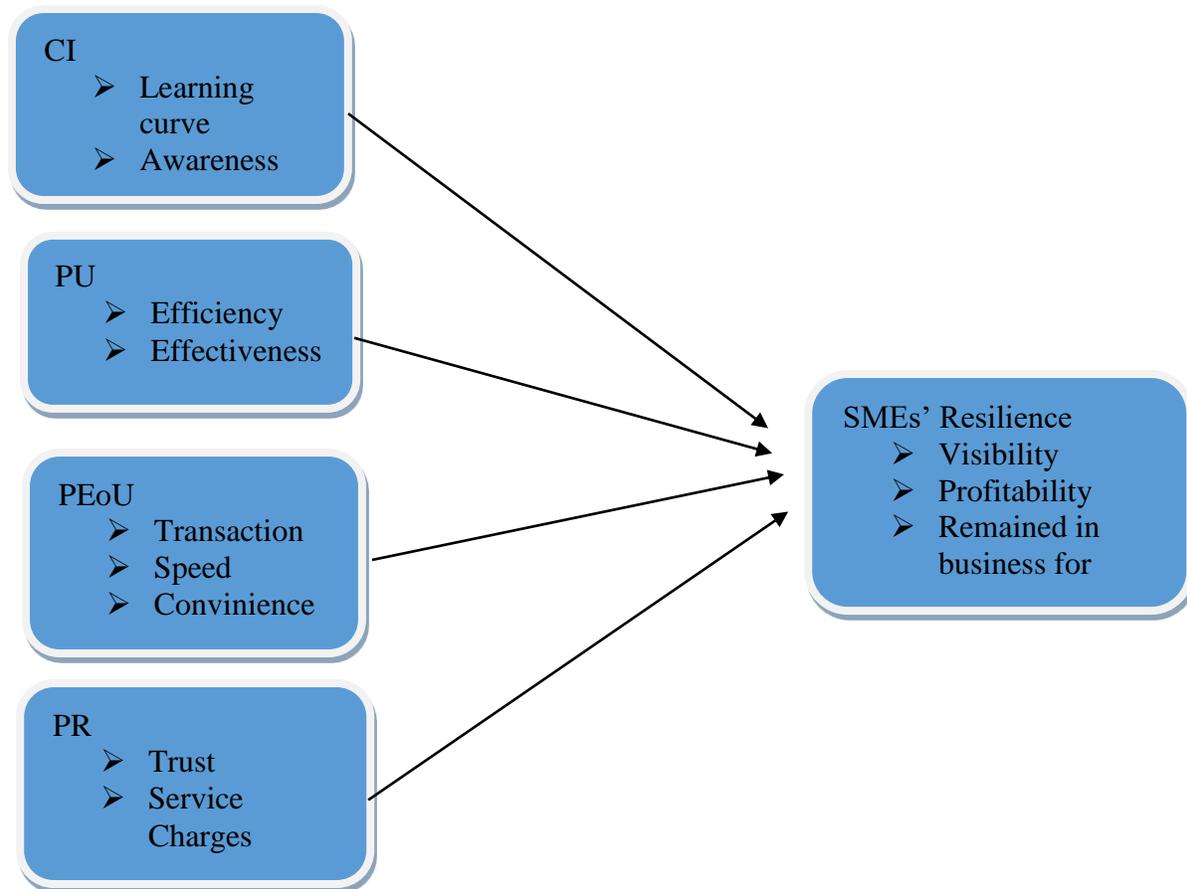


Figure 1: Conceptual Framework

Source: Researchers Construct, 2021.

## 2.10 Summary of literature

Internet banking usage is common with majority of retail banking clients in Sudan where the other popular channel is Automated Teller Machine (ATM) and it is also a popular transaction method among the mature clients in Finland (Ismail et al., 2012; Muttala et al. 2003). Customer innovativeness positively effects on the intention of SMEs' start using IB and new products (Chih-wei chao et al. 2012). Wong and Hiew (2005) found that the consumers use IB depending on its PU. Rodgers (1995) in emphasizing on PEOU as a key determinant users' adoption of past information technologies concluded that a single complex system could inhibit and discourage the adoption of other innovations. Irfan and Madhavaiah (2014), Fadare OA (2016), and Chauhan et

al. (2019) have indicated that perceived significantly influenced consumers' decision to start using IB.

### **2.11 Knowledge gap**

Although many past researchers have linked customers' innovativeness, PEOU, PU and perceived risk to adoption of information technologies, there is limited empirical evidence on how the same factors affect the actual use of the information technologies. Therefore, the gap exists in trying to explain how these same factors affect IB adoption in Kenya; hence this study assesses how customers' innovativeness, PEOU, PU and PR influence the use of internet banking in Kenya.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

The chapter identifies the appropriate research design for the study and target population that will be used. The appropriate sample size and sampling procedures will also be discussed as well as the methods that will be used to collect data. The section will also identify the research instruments and methods of analysing data appropriate for the study.

### **3.2 Research Design**

A research design as a set of conditions combining the research purpose and relevance employed in data collection (Kombo & Tromp, 2006). A descriptive research design will be employed in the study. This approach will facilitate data collection without manipulating the participants or research variable with the aim of assessing the factors influencing SMEs' use of IB program in Kenya; a case of SMES in Kisii town. The study will also make inferences among variables without the direct intervention from the dependent and independent variables.

### **3.3 Target Population**

The specific group that is of primary interest to a study constitutes the target population. A population is a group of people or objects that share particular characteristics (Mugenda & Mugenda, 2003). Populations are characterized by their conformity to particular specifications that define the elements that constitute a target group. This study targets SMEs in Kisii town.

### **3.4 Sample Size and Sampling Procedure**

A sample size is a term used in research to define that number of subjects that will be observed and provide estimates of the population. Sampling involves selecting a subset of subjects from the target population whose characteristics represent the wider population in study (Mugenda 1999). According to Krejcie and Morgan (1970), with the study population of 200 SMEs in Kisii Municipality, 132 respondents will be a represent the target population hence 132 is adequate for analysis (See appendix III). Therefore, purposive sampling technique will be employed to select SMEs based on their experience and knowledge of IB.

### **3.5 Data Sources and data Collection Instruments**

Primary data will be gathered from the SMEs in Kisii town. Questionnaires will be administered to 132 SMEs. The survey will examine the determinants of SMEs' use internet banking

programmes in Kenya. Peer reviewed studies and government data will be used support the primary data.

### **3.6 Validity and Reliability of Research instruments**

Tests was conducted to assess the questionnaires' reliability and validity used and ensure consistency of the results.

#### **3.6.1 Validity of Research Instruments**

When research results produce accurate and meaningful inferences, validity is deemed to have been achieved. Mugenda and Mugenda (1999), observed that content validity could be ensured by using an expert in a particular field to conduct study. This approach enhances the accuracy of question content, wording and minimises sequencing problems before commencing the study to ensure high quality results. For this study, the researcher will consult with project management lectureers to enhance the research instruments' validity. The feedback will be useful in revising the research instruments to align it with the study's objective.

#### **3.6.2 Reliability of Research Instruments**

The reliability of a data collection instrument is established if it provides consistent measurement after frequent assessments using the test-retest reliability method (Mugenda & Mugenda, 2013). A reliability test helps researchers identify ambiguous and inadequate items that should be addressed in a research instrument. Thus, the research instruments must be consistent, trustworthy, and dependable to be identified as reliable.

### **3.7 Data collection procedure**

The researcher will give respondents the questionnaires. The respondent will complete the questionnaire within the allowed time and on completing the researcher will collect the questionnaire checking if it is complete.

### **3.8 Data analysis methods**

The filled questionnaires received from the respondent will be assessed to ensure that they care completed before data analysed. After ascertaining that no anomalies are found the second phase of checking data analysis will commence. A minimal scale will be used to analyse the closed-end questions categorically by using descriptive statistics. The descriptive data will be analysed using SPSS V 20.0 and MS Excel

### **3.9 Ethical Consideration**

The aim ethics is to make sure no adverse consequence due to the research activities. Quite often, the relationship between the researcher and the respondents is sensitive and therefore reasonable safeguards must be ensured for human studies based on ethical considerations. Consequently, the researcher will inform the participants that the data gathered during the research period will be confidential and used only with their informed consent. Participants will be guaranteed of anonymity throughout the study.

## CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

### 4.1 Introduction

This chapter analyses the data collected during the study using statistical methods. The data from the questionnaires was processed into meaningful results for the reader to understand. The data were analysed according to the research's objectives. Inferential and descriptive statistics were employed to analyse the data.

### 4.1 Response Rate

132 respondents were targeted in the study; and utilized 120 questionnaires that were completed and returned with a 90.9% response rate. Mugenda and Mugenda (2008) notes that 50% is a suitable response rate while above 70% response rate is excellent for data analysis. Table 4.1 is an illustration of the response rate.

*Table 1 Response Rate*

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Returned	120	90.9
Unreturned	12	9.1
Total	132	100

## 4.2 Respondents' Profile

Table 2 Response Profile

		Frequency	Percent
Gender	Male	66	55
	Female	54	45
Age	25 and Below	2	1.7
	26-35	23	19.2
	36-45	36	30
	46 and Above	19	15.8
Period in Business	Below 2 years	15	12.5
	2-6 years	48	40
	7-10 years	37	30.8
	Above 10 years	20	16.6
Number of Employees	Below 10 employees	15	12.5
	11-30 employees	25	20.8

	31-50 employees	40	33.3
	51-100 employees	30	25
	Above 100 employees	10	8.3

Highest education  Qualification	Postgraduate	10	8.3
	Graduate	60	50
	Diploma	45	37.5
	Others	5	4.2

From the results, 45% of the participants were female while 55% constituted male. The results demonstrate gender balance and hence eliminating internal validity issues due to gender bias.

The age range of 30% of the respondents was 36 to 45 years while 33% were from 25 to 35 years old. The age range of 19.2% of respondents was 26 to 35 years. 15.8% were above 46 years and 1.7% was less than 25 years. This indicates that individuals used in this study were majorly between 36 and 45 years old.

The participants were asked the period their business has operated and results showed 40% have operated the business between 2 and 6 years, 30.8% between 7 and 10 years, 16.6% for more than 10 years and 12.5% for less than 2 years. This means that mostly businesses have operated for two to six years.

Asking the respondents, the employee capacity in their firms, the results showed that 20.8% of the businesses had between 11 and 30 employees, 33.3% of them reported to having between 31 and 50 employees, 25% showed that their employees ranged between 51-100 employees, 8.3% of them had above 100 employees and 12.5% below 10 employees. The results show that most businesses had between 11 and 30 employees.

Asking respondents about their highest educational level, 50% indicated that they were graduates, 37.5% diploma holders, 8.3% had postgraduate certification and 4.2% had other education backgrounds. The results indicate that most participants had university qualifications.

### 4.3 Descriptive Statistics

*Table 3 Their bank offer Internet Banking*

<b>Bank offer internet</b>	<b>Frequency</b>	<b>Percent</b>
Yes	68	56.7
No	52	43.3

Asking respondent to indicate if their bank offer internet banking, 56.7% of the respondents indicated their bank offer IB services while 43.3% stated their banks lack the service. This indicates that IB services are available in banks.

*Table 4 Use of Internet Banking*

<b>Use internet banking</b>	<b>Frequency</b>	<b>Percent</b>
Yes	88	73.2
No	32	26.8

The respondents indicated that they use IB in their business. The results showed 73.2% used IB in their business while 26.8 of the respondents have not adopted it. Respondents who reported that they did not use IB said it costly due to higher bank charges associated with IB transaction and the security risk that somebody could get access to their private information. This shows that most SMEs use internet banking.

*Table 5 SMEs' use of Internet Banking*

<b>IB service</b>	<b>Used</b>	<b>Very Rare</b>	<b>Rarely</b>	<b>Neutral</b>	<b>Often</b>	<b>Very Often</b>	<b>Mean</b>	<b>STD dev.</b>
Access to acc.	70.8	2	4	5	32	39	4.240	1.070
Transaction pro.	86.4	3	4	6	34	35	4.150	0.990
Product information	84.8	5	6	8	28	35	4.000	0.900
Bill payments	90.0	4	5	7	37	29	4.000	0.900
Acc. Bal Enq.	82.9	2	3	4	41	32	4.200	1.040
Notifications	76.8	3	6	6	39	28	4.010	0.920

The participants were required to show the IB services they have used and how often they use them.

About the IB service used to access their account, 70.8% of the participants noted that they use it to request their financial statements. The results show most businesses use IB to request their financial statements.

Results on using IB in transaction processing showed 86.4% use IB for transaction processing. Transaction processing is shown to be the most preferred internet banking use by SMEs.

On use of IB for product information, 84.8% of the participants revealed that they used IB when seeking bank product information. This indicates that most organizations use internet banking to gain product information.

On use of internet banking for bill payments, 90% of the respondents indicated that they used internet banking to pay bills, an indication that many organizations use internet banking to pay bill.

On use of internet banking for account activity enquiry, 62.3% were shown to be using it for account activity checking. This shows that a good number of SMEs prefer to use IB to inquire about bank activities.

Results also showed that 76.8% of the SMEs were found to be using IB for account notification. Internet banking is popular for notification on account activities among the SMEs.

On the frequency of using IB, the SMEs stated that they often use IB services for account access demonstrated by the mean of 4.240, account activity enquiry by mean of 4.200, transaction processing by mean of 4.150, product information by mean of 4.000, and a mean of 4.010 for account activity notification.

*Table 6 Importance of Internet Banking*

<b>Degree of importance</b>	<b>Frequency</b>	<b>Percent</b>
Not important 1	0	0
Less important 2	10	8.3
Moderate 3	15	12.5
Important 4	35	29.2
Very important 5	60	50

After asking the SMEs rate the importance of IB to their organization using a scale of 1 to 5, they responded by indicating that 50% of them viewed it as very important, 29.2% viewed it as important, 12.5% viewed it moderate in terms of importance and 8.3% viewed it less important to their organization. This implies that majority of SMEs think that internet banking is important for their business.

## 4.4 Inferential Statistics

### 4.4.1 Model Summary

*Table 7 Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820	0.67	0.632	0.0025

Elements of the model summary table are relevant in interpreting the results. The study analysed the influence of PEOU, PU, customer innovativeness and perceived risk on SMEs' use of IB. R value was 0.820 which represent the correlation between the dependent and independent variable and  $> 0.4$  is considered for the analysis. The results show a value of 0.820, which is significant. 0.67 was the value of the R square, representing the total variation for the dependent variable.  $>0.5$  is statistically significant to establish the relationship between variables. The adjusted R determines whether the results can be generalized, implying 63.2% degree of influence on internet banking use by SMEs. The remaining 36.8% imply existence of other elements that influence the use of internet banking by SMEs that were not explained in the research study.

#### 4.4.2 Analysis of Variance

Table 8 Analysis of Variance

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	19.960	5	3.990	26.800	.005
	Residual	15.790	106	0.150		
	Total	35.750	111			

The third table presents results from a regression test that was conducted using ANOVA. It determines the statistical significance of the model in determining outcome. A 5% level of significance and  $< 0.05$  p-value mean the results are statistically significant. F value which is 26.800 show improved prediction of the variable after putting into consideration the inaccuracy present in the model. Notably,  $> 1$  F- value show that the model is efficient.

#### 4.4.3 Coefficients

*Table 9 Coefficients*

Model	Unstandardized		Standardized		
	Coefficients		Coefficients		
	-----				
	B	Std. Error	Beta	t	Sig.
1(Constant)	1.130	0.155		7.271	0.001
PEOU	0.540	0.096	0.432	5.667	0.004
PU	0.530	0.094	0.456	5.617	0.004
PR	0.520	0.089	0.406	5.876	0.004
CI	0.610	0.09	0.534	6.822	0.002

**H01: Perceived ease of use does not affect SMEs' internet banking use**

The PEOU is significant in determining the use of IB by SMEs as shown by (Beta= 0.540, P=0.004). Null hypothesis rejected ( $0.004 < 0.05$ ). We accept the alternative hypothesis that PEOU affect SMEs' use of IB since there is a significant change in SMEs' IB use due to deemed PEOU of internet banking by SMEs. It concurred with TAM model which included PU PEOU, and attitude toward adopting IB (Davis et al. 1989).

**H02: Perceived usefulness does not affect SMEs' internet banking use**

PU is statistically significant to use of IB by SMEs as (Beta=0.530, P=0.004) shows. Null hypothesis rejected ( $0.004 < 0.05$ ). We accept the alternative hypothesis that perceived usefulness affect SMEs' IB use as there is significant change in SMEs' internet banking use caused by PU. This result aligns with TRA model (Fishbe & Ajzen, 1980) cited by Tesunbi (2019), perceived usefulness together with PEOU being the factors that determined the people's intention of using a technology-based system.

**H03: Perceived risk does not affect SMEs' internet banking use**

Perceived risk is significant to the SMEs use of internet banking as (Beta=0.520, P=0.004) indicates. Null hypothesis rejected ( $0.004 < 0.05$ ). Alternative hypothesis that perceived risk affect SMEs' IB use is accepted due to the fact there is significant change SMEs' internet banking use caused by perceived risk. This concurs with the TAM which predicts that the user of new technologies tends to start using it if they feel that it is not risky. While Chan et al. (2004) agree that the TAM tends to predict consumers' adoption of new technologies; they contend that a customer may minimize using a technology or refuse using it if they feel that they will incur a loss.

**H04: Customer's innovativeness does not affect SMEs' banking use**

Customer's innovativeness is significant to the SMEs use of internet banking as (Beta=0.490, P = 0.004) indicates. Null hypothesis is rejected ( $0.004 < 0.05$ ). We accept the alternative hypothesis that customer's innovativeness affects SMEs' internet banking use as a result significant change in SMEs' use internet banking caused by customers' innovativeness. This is in agreement with the study done by Chauhan which concluded that consumers' innovativeness positively influences the intention of consumers to start using IB (Chauhan et al 2019).

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 introduction**

This chapter summarizes the results in relation to the research objectives. In addition, the chapter draws from the findings to make conclusions and recommendations and outlines the implications of the study.

The study aimed to determine the determinants of IB use by SMEs in Kisii town. The extent of influence of customers' innovativeness, PU, perceived risk and PEOU on the SMEs use of IB in Kisii was examined.

#### **5.1 Summary of Findings**

##### **SMEs and Use of Internet Banking in Kisii County**

The first objective was to determine the SMEs use of IB in Kisii County. The findings revealed that SMEs use the internet banking largely because many banks in Kisii County offer internet banking and customers find it convenient and affordable. The SMEs also use internet banking because it saves them time of going to the bank since most of the services they need to go to bank to do can be done at their premises. This indicates that internet banking is popular among SMEs in Kisii town.

##### **Determinants of SMEs Use of Internet Banking**

The other objective was to assess the determinants of internet banking usage by SMEs in Kisii County. The study revealed that internet banking usage by SMEs has largely been determined by customers' innovativeness, PU, PR and PEOU.

Convenience and cost effectiveness were found to influence the SMEs' use of IB. Knowledge and willingness to try new innovation also significantly influenced SMEs use of IB in Kisii County.

Trust, which includes assurance and confidence that transactions will be completed without any security itch also, was found to influence internet banking usage.

## **5.2 Conclusions**

The study actually did found out that the SMEs use internet banking in carrying out their banking because internet banking has been found to be convenient and cost effective in terms of saving them time going to the bank, since with the internet banking this can be done at their premises.

The study also established that other factors like PR, trust and security of IB tend hinder the usage of IB by SMEs in Kisii County.

## **5.3 Recommendations**

The study recommends that SMEs use internet banking as a way of adapting to changing technologies of new innovations. This will make them remain competitive. Internet banking will also increase their viability by making them profitable through cutting costs of expanding physical infrastructure.

The study also recommends that banks increase the awareness of internet banking so that many customers can use it. This will increase trust thus dispelling fear of using internet banking.

The study further recommends that further research to be conducted for the SMEs of whole country so that the findings can be representative of the whole country.

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## APPENDICES

### Appendix I: Introduction

From: Isaac Machogu Matieka.

To: Respondent,

RE: Questionnaire

I am a post graduate student pursuing Masters in Project Planning and Management, carrying out a study on **USE OF INTERNET BANKING PROGRAMMES AND RESILIENCE OF SMALL AND MEDIUM ENTERPRISES IN KISII TOWN.**

Kindly complete the attached questionnaire to enable me accomplish the study. Please, note that the information given shall be treated purely for academic purposes and shall be treated as confidential.

Thanks in advance for your time as you complete the questionnaire.

Yours faithfully,

Isaac Machogu Matieka

M.A Student University of Nairobi, Kenya.

## **Appendix II: Questionnaire**

### **PART I: General Information**

1. What is your gender?  
 Male       Female
2. What is highest level of education attained?

- ( ) Postgraduate ( ) Diploma  
 ( ) Graduate ( ) Others
3. What is your age?  
 ( ) Below 25 years  
 ( ) 26-35 years  
 ( ) 36-45 years  
 ( ) Above 45 years
4. How long has your business been in operation?
5. How business has how many employees? Below  
 5 ( ) 6-15 ( ) 16-50 ( ) Above 50 ( )

**PART II: Determinants of Internet Banking use by SMEs**

1. You hold an account with which bank?  
 .....  
 .....
2. Is internet banking one of the services offered by bank?  
 Yes ( ) No ( )
3. Are you an internet banking user?  
 Yes ( ) No ( )  
 (If Yes, please proceed to number 4)  
 (If No, kindly outline the reasons below why you are not a user)  
 .....  
 .....
4. Please indicate in the spaces provided how often you use these internet banking services.

<b>Internet Banking Service</b>	<b>Very Often</b>	<b>Often</b>	<b>Neutral</b>	<b>Rare</b>	<b>Very Rare</b>
Accessing account					
Processing transactions					
To obtain information on bank products and services					
Funds transfer					
Accounts opening					
Notification					

5. In a scale 1 to 5 indicate how you consider internet to be important.

Not important 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) Very important

6. Indicate your level of agreement with the following statements about what you consider influences internet banking use by SMEs

Scale, 1-Highly disagree, 2-Disagree, 3-Moderate, 4-Agree, 5-Highly agree

statement	5	4	3	2	1
Ease of use of internet banking influences its use					
Usefulness of internet banking determines its use					
One's innovativeness determines his propensity to use internet banking					
Potential risks determines the willingness to use internet banking					

7. In what ways has the use of internet banking improved/helped your business operations?

(Tick all appropriate answers)

- a) Increased customer base due to easy and real time payment ( )
- b) More time to carry out other business activities ( )
- c) Easy access to funds in the bank ( )
- d) Increased business transactions ( )
- e) Increased profits ( )
- f) Increased business efficiency ( )

Others.....  
 .....

8. What in your own opinion is the main problem with internet banking in Kenya?

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### Appendix III: Krejcie and Morgan table.

Table 1.1 Krejcie and Morgan Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

