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## Technology Adoption as a Factor for Financial Performance in the Banking Sector Using UTAUT Model

Collins Masumbuko<sup>1\*</sup>, Jackson Phiri<sup>1</sup>

<sup>1</sup> Graduate School of Business, University of Zambia, Lusaka, Zambia

\*Corresponding author

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### Abstract

This study investigated the complex relationship between technology adoption and the overall performance of selected Zambian banks. The analysis focuses on four prominent banks in Lusaka, namely Zanaco, Atlasmara, Stanbic, and FNB, which were selected based on characteristics such as footprint and income. The time frame is from 2015 to 2020, allowing for a complete examination of trends in the ever-changing banking business. The study used a mixed-methods approach, combining quantitative financial data analysis with qualitative analysis. Data was gathered through the examination of financial reports, industry databases, interviews with banking specialists, and surveys. For the quantitative and qualitative data, statistical analysis and theme coding were used, respectively. The study aimed to provide significant insights to academia, the banking sector, and industry stakeholders by providing a comprehensive understanding of how technology adoption impacts the performance landscape of banks in Zambia. The findings revealed a positive correlation between technology adoption and financial performance with a Pearson's two-tailed coefficient of 0.6. The study also investigated perceptions around IT platform stability and total bank efficiency, demonstrating a strong belief in the performance-enhancing potential of a reliable IT infrastructure.

**Keywords:** Technology Adoption, IT Platform Stability, Financial Performance, Banking Industry

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### 1. Introduction

In today's rapidly changing financial landscape, the role of technology in the banking sector has grown in importance. The purpose of this study is to investigate and analyse the relationship between technology adoption and bank performance, as well as the impact of a stable

information technology platform on overall performance. It also intends to investigate how firms have used technology to gain a competitive advantage in the banking industry.

*Technology adoption is the process by which organisations accept and use technologies*

## 2. Background to the Research

In today's rapidly changing financial landscape, the role of technology in the banking sector has grown in importance. The purpose of this study is to investigate and analyse the relationship between technology adoption and bank performance, as well as the impact of a stable information technology platform on overall performance. It also intends to investigate how firms have used technology to gain a competitive advantage in the banking industry.

### 2.1 The Landscape of the Zambian Banking Sector

Zambia's banking sector, like that of many other countries, has undergone significant transformation because of technological advancements (Haabazoka, 2019). This transformation has not only altered the way banks operate, but it has also altered customer expectations and industry competition. The background of this study investigates the development of Zambia's banking sector, highlighting the opportunities and challenges it faces in terms of technological development.

Zambia's banking sector is a dynamic and multifaceted ecosystem characterized by a diverse set of players who have shaped the country's financial landscape (Simpasa, 2013). For the longest time, there were 18 banks operating in Zambia, each contributing to the country's economic growth and financial stability. However, the vibrancy of the sector extends beyond these banks, with over 44 registered Non-Banking Financial Institutions (NBFIs) and a plethora of unregistered institutions. This diverse ecosystem has resulted in a competitive landscape that has been exacerbated by the emergence of new entrants and innovative financial initiatives (Mitchell, 2019).

The 18 banks that operate in Zambia are at the heart of the country's banking sector. These banks include both domestic and international institutions, each with its own set of offerings and strengths. Local banks frequently understand the Zambian market and cater to the unique needs of local businesses and individuals (Owolabi, 2022). International banks, on the other hand, bring global expertise and financial solutions to the Zambian market, encouraging competition and innovation.

Zambia's financial landscape is enriched by the presence of over 44 registered NBFIs, in addition to traditional banks. These NBFIs provide a wide range of financial services, from microfinance institutions that make small loans to start-ups and entrepreneurs to asset management companies that provide investment opportunities to individuals and institutions (Agri-ProFocus Zambia, 2014). This diverse group of NBFIs adds depth and variety to Zambia's financial services, catering to a wide range of financial needs and preferences.

Aside from the formally registered banking and non-banking institutions, Zambia has a large number of unregistered financial entities (Agri-ProFocus Zambia,

2014). These organisations serve a variety of functions, ranging from informal savings and credit groups to small-scale community-based financial cooperatives. While unregistered, these organisations play an important role in addressing community financial needs, particularly in rural areas where access to formal financial institutions may be limited. Village banking initiatives have gained prominence as a means of pooling resources and providing financial assistance to members of the community, thereby promoting financial inclusion at the grassroots level.

The Zambian banking sector's competitive landscape has evolved over time, driven by changing consumer preferences, technological advancements, and regulatory developments (Simpasa, 2013). The entry of mobile network providers into the financial services arena is one notable shift. These service providers have launched mobile money solutions, which allow users to conduct financial transactions, pay bills, and transfer funds using their mobile phones. This innovation has increased access to financial services while also introducing new competition for traditional banks (European Investment Bank, 2016).

Furthermore, village banking, or community-based savings initiatives, have gained traction in Zambia. These initiatives enable communities to mobilize their savings, gain access to credit, and support local entrepreneurial ventures. Village banking is an example of a community-driven approach to financial inclusion that bridges access gaps to formal banking services. Zambia's banking sector is dynamic and diverse, with a wide range of players ranging from traditional banks to non-banking financial institutions and community-based savings groups. This diversity promotes competition, innovation, and financial inclusion across the country (Simpasa, 2013). The sector's evolving dynamics, such as the entry of mobile network providers and the expansion of village banking, reflect a commitment to expanding access to financial services and meeting Zambia's diverse needs. As the sector adapts to changing consumer demands and technological advances, it has the potential to improve financial inclusion and economic development in the country.

## 3. Literature review

The banking sector has been undergoing a remarkable transformation, both globally and regionally, fueled by the relentless march of technology. Each of the studies examined adds a new layer to our understanding of this digital evolution, emphasizing its multifaceted nature and significant implications for various aspects of banking.

Kitsios et al. (2021) began by investigating the critical issue of technology acceptance in the banking sector in Greece. Their findings on bank employees' perceptions of new technologies highlighted an important point: for technology-driven changes to succeed, a thorough understanding and acceptance of new technologies within

the workforce is required. To ensure a smooth transition into the digital era, banks must not only invest in cutting-edge technologies, but also in their human capital through targeted educational programs.

In Sweden, [Ortstad and Sonono \(2017\)](#) investigated how digitalization in banking affects customer relationships. According to their qualitative case study, as banks increasingly embrace digitalization, customer interactions have shifted from highly personalized to more automated. The changing digital landscape has resulted in a shift in customer-bank dynamics. It emphasizes the importance of banks striking a delicate balance between providing personalized services and leveraging automation for efficiency. [Li et al.'s \(2021\)](#) research in China focused on the impact of Fintech on enterprise technological innovation. Their findings were startling, indicating that Fintech has the potential to significantly boost technological innovation. This is a significant finding because it not only highlights Fintech's disruptive potential, but also its ability to alleviate financing constraints and create new market opportunities for firms. Such insights are resonating around the world as Fintech continues to disrupt traditional financial services.

[Brunetti et al.'s \(2020\)](#) Tyrol-Veneto macro region study takes us to Europe, emphasizing that digital transformation is a multifaceted challenge. It necessitates a comprehensive approach that includes culture and skills, infrastructure and technology, and ecosystems. This broad view sheds light on the multifaceted nature of digital transformation, which affects not only technology but also culture and strategic planning.

[Dangolani \(2011\)](#) investigated the impact of information technology in the banking sector in Iran. The findings of the study confirm that information technology is a major driver of efficiency in banking operations. It saves time, money, and makes network transactions easier, emphasizing its critical role in streamlining banking processes. [Shetty and Nikhitha \(2022\)](#) investigated the impact of information technology on banking in India. Their findings highlighted the positive impact of information technology on efficiency, profitability, and customer service in banking operations. However, it also raised concerns about the impact of IT on employment in the banking sector, demonstrating that technological advancements can have far-reaching consequences.

[Haabazoka's \(2019\)](#) research focused on Zambia and the impact of technological innovations on commercial bank financial performance. According to the study's findings, there is a positive relationship between mobile banking transactions and financial performance. This is consistent with the larger trend of banks strategically investing in technological innovations to improve their operations. [Malambo's \(2022\)](#) research investigated Stanbic Bank Zambia's digital innovation services and how they affected customer satisfaction. The findings emphasized the

importance of banks investing in strong and dependable digital banking systems, as customer satisfaction is dependent on seamless and efficient digital services.

Finally, [Baker et al. \(2023\)](#) investigated the impact of FinTech adoption on Jordanian and UAE banks. Their research found that FinTech had a positive impact on total deposits and net profits, highlighting the financial benefits of embracing technology in banking.

These studies, taken together, provide a comprehensive picture of the banking sector's ongoing digital transformation. They demonstrate how technology pervades all aspects of banking, from employee acceptance to customer relations to technological innovation and financial performance. This body of research emphasizes the importance of banks strategically navigating the digital landscape and adapting to thrive in the modern banking ecosystem.

## 4. Theoretical Framework

The study saw the convergence of three theories that have been widely used in this field. The theories establish the competitive urge that could be attained due to technology adoption and also consider the decision-making aspects. The three theories considered were the resource based view, the innovation theory and the theory of reasoned action;

### 4.1. Resource based View

The Resource-Based View (RBV) is a strategic management theory which emphasizes the importance of the organisations resources in delivering competitive advantage. It contends that a firm's competitive advantage and performance are primarily determined by its distinct and valuable resources and capabilities ([Jurevicius, 2021](#)). RBV suggests that technology can be viewed as a strategic resource in the context of your research. Banks that effectively leverage technology (such as advanced IT infrastructure, data analytics, and digital platforms) gain a competitive advantage because these resources allow them to provide superior services, streamline operations, and respond more effectively to market changes. In this framework, you would investigate how banks' technological resources and capabilities affect their overall performance.

According to RBV proponents, it is much more feasible to exploit external opportunities using existing resources in a new way rather than trying to acquire new skills for each different opportunity. In the RBV model, resources are given the major role in helping companies to achieve higher organizational performance. There are two types of resources: tangible and intangible.

### 4.2. Innovation Theory

The Innovation Theory, popularized by Joseph Schumpeter, examines the role of innovation in economic growth and firm performance. It implies that technological

innovation, in particular, is a key driver of competitive advantage and economic progress (Liberto, 2022). This theory can be used in research to investigate how banks that prioritize technology as a means of innovation gain a competitive advantage. It proposes looking into how innovative technology adoption strategies, such as creating new digital services, implementing cutting-edge fintech solutions, or employing disruptive technologies, contribute to improved bank performance. This theory emphasizes the significance of banks' ability to continuously innovate through technology to remain competitive in the industry.

These two theoretical frameworks offer distinct perspectives on the relationship between technology adoption and bank performance. Theory 1 (RBV) emphasizes technology's inherent capabilities and resources, whereas Theory 2 (Innovation Theory) emphasizes the dynamic and evolving nature of technology-driven innovation in the banking sector. It may be discovered that one theory aligns more closely with the empirical evidence in the study, or that elements of both theories contribute to explaining the phenomenon under investigating.

**4.3. Theory of reasoned action**

Theory of Reasoned Action (TRA) has its roots in social psychology setting. The theory proposes three general constructs, namely "behavioral intention (BI), attitude (A), and subjective norm (SN)". According to TRA behavioral intention of a person depends on his attitude and subjective norms. Mathematically, it can be interpreted that behavioral intention is the summation of attitude and subjective norms. Moreover, intention of a person likely to convert to action if there is the intention to behave in a specific manner is strong enough. The relationship is as illustrated in the figure below:

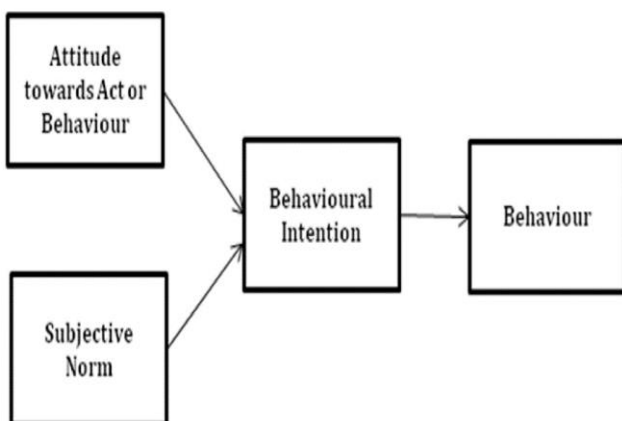


Figure 1: TRA model (Fishbein and Ajzen, 1975)

**5. Conceptual Framework**

The Unified Theory of Acceptance and Use of Technology (UTAUT) is one of the most comprehensive technology acceptance models, integrating eight influential acceptance models, including the Theory of Planned Behaviour (TPB) (Ajzen, 1985) and the Technology Acceptance Model (TAM) (Venkatesh & Davis, 2000).

UTAUT assumes that an individual's behavioral intention to use a technology is influenced by performance expectancy (i.e., degree to which the technology is perceived to be useful), effort expectancy (i.e., degree to which using the technology is perceived to be easy to use), social influence (i.e., degree to which using the technology is appreciated in the social network important to the individual), and facilitating conditions (i.e., degree to which the individual believes to be in possession of the resources to use the technology) (Venkatesh et al., 2003)

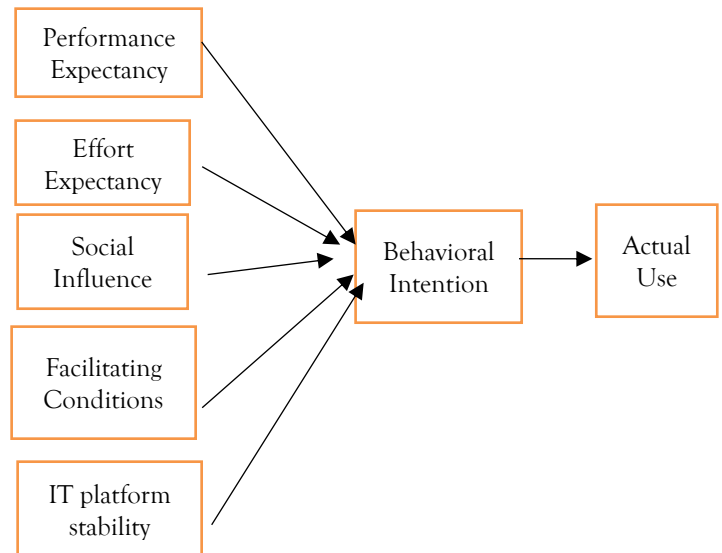


Fig 2 Modified UTAUT MODEL Source: (Venkatesh, et al., 2003)

The conceptual framework's arrows show the anticipated correlations between these factors. The study will attempt to test and validate these correlations, which are based on research questions and earlier research. This conceptual framework follows upon the Unified Theory of Acceptance and Use of Technology, UTAUT model that proposes that technology acceptance and use are influenced by the following key constructs: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Behavioral Intention, and Actual Use. Building upon the UTAUT model, the conceptual framework for the study includes the additional element of IT platform stability and its potential impact on the relationships identified in the UTAUT model.

**6. Methodology**

The research approach is the foundation of our investigation, serving as the guiding philosophy and strategy for our investigation (Budert-Waltz, 2021). A mixed-methods approach was employed in pursuit of understanding the intricate dynamics between technology adoption and financial performance in the banking sector. This method combines quantitative and qualitative research methods to provide a robust and comprehensive perspective on the multifaceted subject at hand (Shorten & Smith, 2020).

Quantitative data was collected in the form of a questionnaire. The use of questionnaires helped the study to generalize findings from data collected from the respondents.

**6.1. Hypotheses**

The following hypotheses were used:

- H1: Performance acceptance determines behavioral intention to use internet banking.
- H2: Effort expectancy affects behavioral intention to use internet banking.
- H3: Social Influence has a bearing on behavioral intention to use internet banking.
- H4: Facilitating conditions have a positive influence on behavioral intention to use internet banking.
- H5: IT platform stability has an influence on behavioral intention to use internet banking.
- H6: Behavioral intention determines actual use of internet banking.

**6.2. Research Paradigm**

The most appropriate research paradigm for this study was most likely be interpretivism. Interpretivism is a research philosophy that emphasizes understanding and interpreting the social world through the eyes of the individuals and organizations under investigation. Interpretivism fits well with the goal of delving into the subjective experiences, perceptions, and behaviors of key stakeholders, such as bank executives, employees, and customers, when exploring the intricate dynamics of technology adoption and corporate strategy within the banking sector (Nickerson, 2023).

Interpretivism is especially useful when studying phenomena involving human decision-making, organizational culture, and the contextual factors that influence strategic choices. In the banking sector, where technology adoption is influenced by a complex interplay of internal and external factors, interpretivism allows us to investigate not only the "what" and "how" but also the "why" behind technology-related decisions and strategies. This paradigm lends itself well to conducting in-depth interviews, qualitative case studies, and content analysis to gain insights into the nuanced ways in which technology is integrated into banks' strategic fabric (Kivunja & Kuyini, 2017).

**6.3. Sample Size and Sampling Technique**

Estimating the population size at 5,000, the researcher calculated the sample size without the finite population correction using the formula for a known population:

$$n = \frac{N(Z^2 * p * (1-p) + E^2)}{1 + N * Z^2 * p * (1-p)}$$

- $n$  is the required sample size.
- $N$  is the population size (5,000).
- $Z$  is the Z-score corresponding to your desired confidence level. For a 95% confidence level, the Z-score is approximately 1.96.
- $p$  is an estimate of the proportion of the population that possesses the characteristic under studying. In the absence of an estimate, 0.5 is used to be conservative.
- $E$  is the margin of error as a decimal (0.05 for 5%).

Now, let's calculate the sample size:

$$n = \frac{5,000(1.962^2 * 0.5 * (1-0.5) + 0.05^2)}{1 + 5,000 * 1.962^2 * 0.5 * (1-0.5)}$$

$$n = \frac{5,000(3.8416 * 0.25 + 0.0025)}{1 + 19.2105}$$

$$n = \frac{5,000(3.8441 + 0.0025)}{19.2105}$$

$$n = \frac{19,210.5}{19.2105}$$

$$n = 1,000$$

$$n \approx 230.03$$

To ensure representation from different bank branches and employee levels within the banking industry, a sample size of 230 employees will be selected using stratified random sampling.

**7. Results**

**7.1. Effort expectancy**

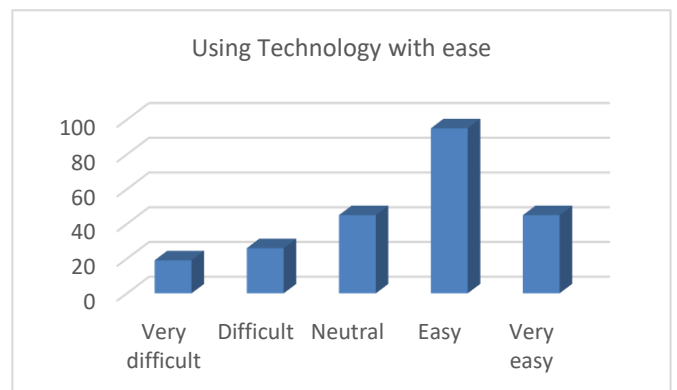


Figure 3 Using Technology with ease

Figure 3 depicts the survey results on the ease of utilizing technology at the bank, which show a divided sentiment among respondents. Most respondents, 45 in total, fall into the "Neutral" group, reflecting a balanced opinion of the ease of utilizing technology. Meanwhile, a sizable proportion of respondents, 95 in total, evaluate it as "Easy," indicating that a sizable proportion finds the bank's technology user-friendly. On the other hand, 26 respondents rate it as "Difficult," and 19 rate it as "Very difficult," indicating a

significant subset that faces obstacles or views technology use as less intuitive. The distribution across these categories highlights the diversity of bank employees' experiences and perceptions of the ease of using technology, emphasizing the importance of user-friendly technology interfaces and support mechanisms to ensure a positive and efficient technological experience across the organization.

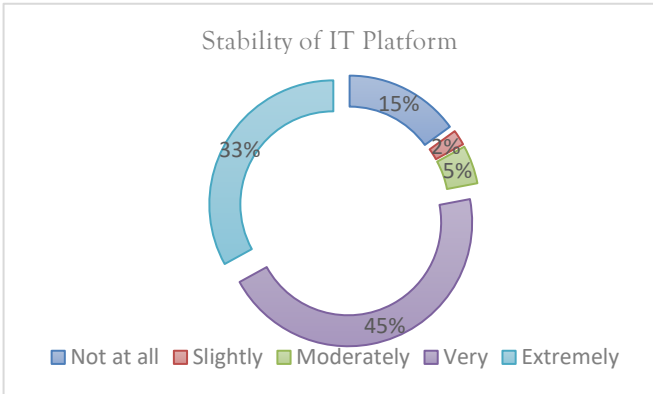


Figure 4 Stability of IT Platform

The survey results given in Figure 5 addressing the impact of IT platform stability on respondents' willingness to adopt new technologies provide useful insights into respondents' perspectives. A sizable majority, 45%, believe that the stability of the IT platform has a "Very" substantial influence on their willingness to adopt new technology. Furthermore, 33% report a "Extremely" influential relationship, highlighting the critical role that IT platform stability has in influencing their receptivity to technological improvements. On the other end of the scale, a smaller proportion of respondents, 2% for "Slightly" and 5% for "Moderately," indicate a less noticeable influence. Notably, 15% said the reliability of the IT infrastructure has no bearing on their readiness to "not at all." This distribution demonstrates a substantial association between respondents' perceived stability of the IT platform and their willingness to embrace new technologies. The findings highlight the significance of maintaining a solid IT infrastructure to generate a conducive environment for the successful integration of innovative technology within the company.

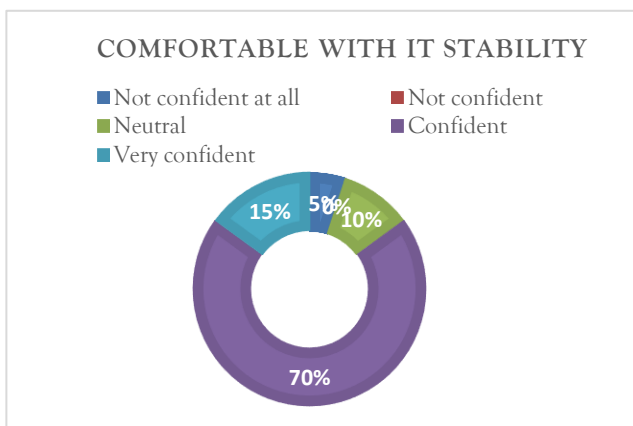


Figure 5: Comfortable with IT Stability

The depicts the survey results, which rate respondents' confidence in the stability and reliability of their bank's IT platform on a scale of 1 to 5, revealing a largely positive sentiment. A sizable majority, 70%, expresses a high level of confidence, falling into the "Confident" group. Furthermore, 15% express a higher level of assurance, claiming that they are "Very confident" in the IT platform's stability. This collective 85% demonstrates a high level of trust in the IT infrastructure's stability. Meanwhile, 10% of respondents maintain a "Neutral" position, indicating a moderate level of confidence, and 5% admit to being "Not confident."

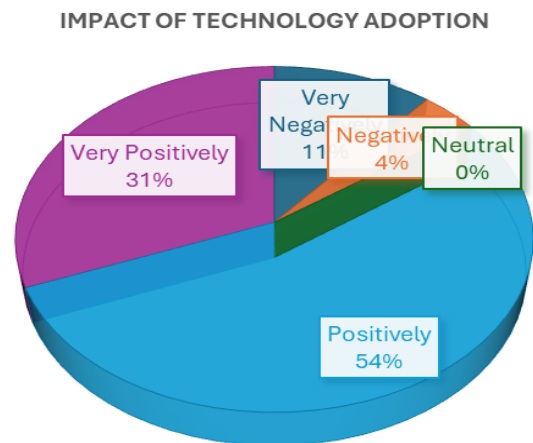


Fig 6: Impact of Technology Adoption

A sizable 54% believe that technology adoption has improved the bank's competitiveness "Positively," with an additional 31% indicating a "Very Positive" impact. These replies from 85% of participants show a significant belief in the positive impact of technology adoption on the bank's competitiveness within the sector. On the other hand, 11% of participants believe the impact has been "Very Negative," while 4% believe it has been "Negative." Notably, no participants chose the "Neutral" option, indicating a lack of indifference to the impact of technological adoption.

7.2. Correlation Analysis

Table 1: Correlation matrix

	Mean	Std. Dev	1.	2.	3.	4.	5.	6
1. Actual Use	3.7788	.68008	1					
2. Performance Expectancy	3.4159	1.24507	.301**	1				
3. Effort Expectancy	3.6908	1.07934	.408**	.737**	1			
4. Social Influence	2.9771	1.16546	-.090	-.246**	-.193**	1		
5. Facilitating Conditions	3.6042	1.08446	.368**	.502**	.581**	-.180**	1	
6. IT Platform Stability	3.7993	.97181	.096	-.067	-.049	.372**	-.016	1
7. Behavioural Intention	4.1908	.79356	.542**	.550**	.527**	-.213**	.509**	.022

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*.. Correlation is significant at the 0.01 level (2-tailed).

Actual Use, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, IT

Platform Stability and Behavioral Intention are key variables in the analysis of financial inclusion. The correlation between Actual Use and Performance Expectancy was 0.301, significant at the 0.01 significance level. Similarly, the correlation between Actual Use and Effort Expectancy was 0.408, significant at the 0.01 significance level. Furthermore, the correlation between Actual Use and Social Influence was 0.090, which was not found to be significant at the 0.05 and 0.01 significance levels, also the correlation between Actual Use and saving and Facilitating conditions was 0.368, significant at the 0.01 significance level, while the correlation between Actual Use and IT Platform stability was 0.096, which was not found to be significant at the 0.05 and 0.01 significance levels. Lastly, the correlation between Actual Use and Behavioral intention was 0.542, which was found to be significant at the 0.01 significance level.

The correlation findings underscore the significance of UTAUT model in helping predict the adoption and use of technology. The positive correlations indicate that these variables are associated with the adoption and use of technology.

**7.3. Regression Analysis**

Two models were run in the multiple regression analysis of the study, the first model of the study included assessing the relationship between the independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and IT Platform Stability) and the dependent variable (Actual Use) of the study. In the second model the study included the moderating variable (Behavioral Intention) to determine if it enhances the relationship between the independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and IT Platform Stability) and the dependent variable (Actual Use) of the study. To undertake this, the independent variables were entered in the block 1 while the moderating variable was entered into block 2 of SPSS to ensure that the results would show the change in the overall effects in the model when the moderating variable is included.

The model summary the results of the regression analysis was shown in Table 2 below

Table 2: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.461 <sup>a</sup>	.212	.194	.61681	.212	11.522	5
2	.586 <sup>b</sup>	.344	.325	.56434	.131	42.647	1

The results in model 1 show that the independent variables (Performance Expectancy, Effort Expectancy,

Social Influence, Facilitating Conditions, and IT Platform Stability) explain 21.2% (0.212) of the variance in the dependent variable (Actual Use) of the study.

The results in model 2 show that the independent variables (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and IT Platform Stability) as well as the moderating variable (Behavioral Intention) explain 34.4% (0.344) of the variance in the dependent variable (Actual Use) of the study. This also indicates that after the inclusion of the moderating variable the R2 value increased from 21.2% (0.212) to 34.4% (0.344).

The regression results of model 1 and 2 of the study were shown in Table 3 below

Table 3: Multiple regression results

Model	Variables	B	Std.		Sig.
			Error	t	
1	(Constant)	2.382	.250	9.533	.000
	Performance Expectancy	-.020	.051	-.392	.695
	Effort Expectancy	.199	.062	3.210	.002
	Social Influence	-.025	.040	-.641	.522
	Facilitating Conditions	.133	.048	2.773	.006
	IT Platform Stability	.086	.046	1.864	.064
2	(Constant)	1.428	.271	5.262	.000
	Performance Expectancy	-.095	.048	-1.983	.049
	Effort Expectancy	.155	.057	2.722	.007
	Social Influence	.001	.036	.026	.979
	Facilitating Conditions	.055	.045	1.203	.230
	IT Platform Stability	.061	.042	1.433	.153
	Behavioral Intention	.400	.061	6.530	.000

Based on the results in Table 3 above the results indicate that the independent variables Performance Expectancy and Effort Expectancy as well as the moderating variable behavioral intention were found to have a significant influence on the dependent variable Actual Use with P-values of less than 0.05.

Following the results in Table 3 above the final hypotheses of the study were outlined as shown below.

- H1: Performance acceptance was found to have an influence on the use of internet banking.
- H2: Effort expectancy was found to have an influence on the use of internet banking.
- H3: Social Influence does not influence the use of internet banking.
- H4: Facilitating conditions does not have an influence the use of internet banking.
- H5: IT platform stability does not influence the use of internet banking.
- H6: Behavioral intention was found to have an influence on the use of internet banking.

## 8. Conclusion

### Objective one discussion

To assess the Influence of Performance Expectancy on Technology Adoption in Banks

The findings of this study provide important insights into the complex dynamics of performance expectancy impacting technology adoption in the banking sector. Figure 5, which explores participants' perspectives on the relevance of IT platform stability to the bank's overall efficiency, indirectly touches on the complex aspect of performance anticipation. Notably, an overwhelming majority of participants (85%) expressed a strong belief in the influence of performance expectancy on technology adoption, with a significant 31% indicating a "Very Positive" influence. The positive correlation between performance expectancy aligns with the thought that individuals are more inclined to embrace technology when they perceive it as advantageous to their performance. This empirical evidence substantiates the imperative consideration of performance expectancy as a pivotal determinant in the technology adoption landscape within the banking industry.

In line with the current findings, the literature on technology acceptance in the banking sector, such as [Kitsios et al \(2021\)](#) study in the Greek banking setting, emphasizes the critical significance of employees' impressions of new technologies. The findings of this study, particularly the positive perception of technology adoption's impact on the bank's competitiveness, as shown in Figure 6, support the notion that perceived performance is a foundational factor influencing successful technology adoption. This confluence of study and existing literature findings emphasizes the need of recognizing and addressing performance expectancy as a significant aspect in the varied and developing landscape of technology adoption in the banking sector.

### Discussion of objective two

To examine the Role of IT Platform Stability in Moderating Technology Adoption

While IT platform stability plays a critical role in the success of internet banking transactions, it was found not be a significant driver for behavioral intention. The correlation between Actual use and IT platform stability was found to have Pearson's value of 0.0942 but this was not significant at both 0.05 and 0.001 significance levels. The failure of this objective may be due to the variable being vague to the respondents as IT platform stability is itself a complex construct which may contain factors like bandwidth, power issues on the mobile network providers etc.

### Discussion of objective 3:

To explore the Effect of Facilitating Conditions on behavioral intention.

Facilitating conditions were the second most significant variable after performance expectancy on behavioral intention. The correlation value was 0.509 which shows a very significant positive correlation. The question on this variable was very important to understanding what would be within the employer's power to influence behavioral intention. Upon examining of the responses, there was a clear emphasis on ongoing training and skill development, dedicated support channels, and the recognition and rewards for active contributors. These factors, taken together, indicate the presence of supportive conditions within the organizational framework. The creation of a favorable organizational climate, along with resources for skill development, produces conditions that may mitigate the impact of social factors on technology adoption.

This finding then becomes quite significant in light of the result which rendered social influence as not contributing significantly to actual use.

### Financial performance

The financial performance that technology adoption introduces goes beyond what would be perceived because of an increase in efficiency of accomplishing traditional banking tasks but catapults the institution into a new sphere altogether. Banks that have properly leveraged on technology have ended up competing in the fintech space where mobile telecommunications providers have taken the lead. Equity bank of Kenya ended up setting up a network and issued mobile sim-cards to provide banking services which is quite revolutionary.

### SWOT Analysis

On way of assessing the impact of technology adoption is through a swot analysis of an institution that has adopted technology. A swot analysis is a tool for assessing a business by looking at its strengths, weaknesses, opportunities, and threats ([Shetty & Nikhitha 2022](#)).

#### Strengths

- Improved customer service through mobile platforms such as apps ([Malambo 2020](#))
- Reduced cost and increased efficiency through cutting edge technology and artificial- intelligence based analysis.
- Reduced operational cost and closure of branches due to reduced need for human interaction.
- It can stay ahead of the competition through innovation.

#### Weaknesses

- Increased cybersecurity threats
- Job losses due to automation which can bring public

resentment.

- Higher costs if not managed properly.
- Needs constant investment.

#### Opportunities

- Can be used to create new innovative products.
- Can help banks tap into new markets and bank the unbanked (Haabazoka 2019)
- Can take banks to rural areas without heavy investment in physical buildings.
- Improves security as it encourages growth towards a cashless society.
- Reduction in transaction processing time

#### Threats

- Economic recession (Gololo 2018)
- It can pose a threat to the stability of banking.
- Fear of digital banking among the poor, illiterate and

weaker sections (Cavus N & Christina 2015)

A review of the swot analysis will present a much stronger entity showing more strengths and opportunities than weaknesses and threats. This would imply that the organization gains a competitive edge due to the acquired resources and financial performance becomes a natural outcome.

This study contributes to this complete knowledge by drawing links with the literature review, which highlights the many problems of digital transformation, including the importance of culture, skills, infrastructure, and ecosystems (Brunetti et al., 2020). While the study did not directly investigate mediating factors, the findings implicitly support the notion that a supportive organizational architecture is critical for successful technology adoption. Positive impressions of organizational support in aiding technology adoption are consistent with the research, underlining the importance of a comprehensive approach to effective digital transformation.

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