Ojambo, M. ve Yılmaz, N. (2020). Mobile Banking Activities and Technology Acceptance Models: A Case of Uganda, *Tüketici ve Tüketim Araştırmaları Dergisi,* 12(2), 403-454

Mobile Banking Activities and Technology Acceptance Models: A Case of Uganda

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Abstract

Mobile banking in Uganda was initiated in 2004 by Bankom Ltd., a company that renders electronic payment services on mobile devices to offer financial services. Although mobile banking technology exists in Uganda, it has not reached the desired level of large consumer segments yet. Due to this deficiency, the relationship between mobile banking activities and technology acceptance models and theories is explored specifically in Uganda. This study aims to reveal the constructs of technology acceptance models and theories that affect mobile banking activities in the Kampala province of Uganda. It relies on 250 non-banking and banking participants and the data is examined by using Factor Analysis, Independent T-test, One-way ANOVA tests, and Regression Analysis. This study revealed that the demographic characteristics of users did not affect mobile banking activities in terms of perceived usefulness, perceived ease of use, behavioral intention, and

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Makale Türü / Article Type: Araştırma Makalesi / Research Article
Makale Geliş Tarihi / Received: 15.10.2020
Makale Kabul Tarihi / Accepted: 30.11.2020

customer loyalty. Furthermore, there is a relationship between mobile banking activities and technology acceptance models and theories in Kampala province.

Keywords: Technology Acceptance Models, Mobile Banking, Behavioural Intention, Perceived Ease of Use, Perceived Usefulness, Customer Loyalty

Mobil Bankacılık Uygulamaları ve Teknoloji Kabul Modelleri: Uganda Üzerine Bir Çalışma

Özet

Uganda'da finansal hizmetler sunmak amacıyla, mobil bankacılık faaliyetleri, mobil cihazlarda elektronik ödeme hizmetleri sunan bir şirket olan Bankom Ltd. tarafından 2004 yılında başlatılmıştır. Uganda'da mobil bankacılık teknolojisi mevcut olmasına rağmen, henüz istenen düzeyde geniş tüketici kesimlerine ulaşmamıştır. Uganda'da ki bu eksiklik sebebiyle, mobil bankacılık faaliyetleri ile teknoloji kabul modelleri ve teorileri ilişkisi araştırılmaya değer görülmüştür. Bu açıdan çalışma, Kampala'da, mobil bankacılık faaliyetlerini, teknoloji kabul modelleri ve teorileriyle açıklamayı amaçlamaktadır. Bankacılık faaliyetlerinde bulunan ve bulunmayan 250 katılımcıdan alınan veriler, Faktör Analizi, Bağımsız T Testi, Tek Yönlü ANOVA ve Regresyon Analizi kullanarak incelenmiştir. Bu çalışma, kullanıcıların demografik özelliklerinin, algılanan kullanışlılık, algılanan fayda, tutum, davranışsal niyet ve müşteri sadakati unsurları bakımından mobil bankacılık faaliyetlerini etkilemediğini ortaya koymuştur. Ayrıca çalışma, Kampala şehrinde, mobil bankacılık faaliyetleri ile teknoloji kabul modelleri ve teorileri arasında bir ilişki olduğunu da açıklamaktadır.

Anahtar Kelimeler: Teknoloji Kabul Modelleri, Mobil Bankacılık, Davranışsal Niyet, Algılanan Kullanım Kolaylığı, Algılanan Kullanışlılık, Müşteri Sadakati

Introduction

Change is a global rule that is forcing every field to acknowledge new banking innovations. Banking is a sector where financial institutions encourage the clients to deposit more of their savings which are then redirected appropriately to meet the institutions' aims. It relies on the business-client relationship which can be affected by failing to fulfill clients' needs. Such needs may not be satisfied if they are complicated. To solve this, financial organizations first learn what clients expect from them and then follow the necessary procedures to fulfill these expectations. Clients' expectations are now fulfilled via online techniques to render faster and simple services. Such techniques encourage clients to undertake mobile banking activities (MBA) to access funds from anywhere while saving time (Bilgin, 2001: 2). These activities are advanced by cutting down charges, keeping in touch with clients, and enhancing client experiences to strengthen their loyalty (Udeh, 2008: 147).

MBAs in Uganda are newly carried out thereby proving the low rate at which they exist. However, they are gaining publicity with the escalating use of mobile devices and the internet (Douglas and Paul, 2017: 56). These activities are escalating through rendering a variety of mobile monetary services hence providing a guarantee to handle clients extensively (Venkatesh and Davis, 2000: 189).

Technology Acceptance Model (TAM) and Theories like; TAM and Reasoned Action Theory forecast the level at which mobile banking technology is accepted. They are incorporated to ascertain how clients undertake mobile banking activities in Uganda. Also, demographic features and client loyalty are included as other vital components that play a role in the acceptance of mobile banking inventions. Client loyalty is relied on as it analyses the rate at which the MBA is carried out. Eventually, this study aims to reveal the constructs of technology acceptance models and theories that affect mobile banking activities in Kampala province of Uganda.

Literature Review

Technology Acceptance Models (TAM) and Theories

Technology acceptance involves using a certain technique to accomplish any tasks at hand and provide benefits to the communities (Venkatesh, Thong, and Xu, 2012: 159). It is a process through which clients accept to utilize specific technology to satisfy their needs. Technology Acceptance refers to having a positive perspective of using technology to get tasks done (Davis, 1989: 320).

Technology Acceptance Models (TAM) and Theories assist in clarifying how technology is accepted on a large scale. Technology acceptance has been analyzed since the 1970s as organizations needed to understand the motives that made clients accept or shun a given technology (Alaa and Mamoun, 2017: 6). TAM models and theories involve constructs that ascertain how and when technology is applied. Such constructs are examined in numerous studies where their resemblances and differences are exposed (Venkatesh, Morris, Davis and Davis, 2003: 428).

Numerous models and theories were developed to advance the initial ones. Their application in the acceptance of mobile banking inventions has been illustrated in many studies. Amongst the main models and theories include the Motivational Model, Social Cognitive Theory, Innovation Diffusion Theory, Fishbein Model, and Reasoned Action Theory (RAT) which was extended to Planned Behaviour Theory (PBT). PBT was further extended to Decomposed Planned Behaviour Theory which led to Technology Acceptance Model 1 (TAM 1). TAM 1 was expanded to TAM 2 then TAM 3 due to the evolution of IT. TAM and PBT's integration led to Combined TAM and PBT. Furthermore, the Personal Computer Utilization Model, Unified Theory of Acceptance, Use of Technology (UTAUT 1), and lastly UTAUT 2 were also formed (Venkatesh and Davis, 2000: 193). All these evaluate the extent to which people accept technology (Nafsaniath, 2015: 26). This article focused on Reasoned Action Theory (RAT) and Technology Acceptance Model 1 (TAM 1) to explain the factors of technology acceptance models and theories that

affect the adoption of mobile banking technology in Kampala province of Uganda. RAT was also analyzed to forecast people's intentions and behavior. TAM highlights why a person would prefer a specific technology and not another. In short, these forecast how an invention can be accepted by scrutinizing the people's behavior towards utilizing a certain technology which in this case is mobile banking application.

Reasoned Action Theory (RAT)

Ajzen and Fishbein developed RAT in 1967 as the first theory that highlights a relationship between conduct and attitude. RAT's constructs include attitude and subjective norm (SN). SN reveals that a person's conduct is based on the perspectives of one's communal members (John, Krishna and Yadawalli, 2013: 663). Moreover, SN refers to the positive or negative effects of conducting in a certain way. The influence of SN and attitude changes a person's objectives toward conduct (Heijden, 2003: 547). Besides, attitude is a good or negative opinion about conduct therefore; it directly or indirectly influences conduct (Sang, 2016: 40).

Corresponding to RAT, behavioral intention (BI) is a person's choice to conduct in a certain way. It is also an individual's amount of will to perform a specific activity (Aypay, Çelik, Aypay and Sever, 2012: 27). Moreover, attitude and personal opinions create the objectives for carrying out certain conduct (Venkatesh, et al., 2003: 433). Attitude determines BI if individual dominance is strong. For instance, attitude is applied while buying an item for individual purposes. Nonetheless, SN predicts conduct if communal effects dominate a person's decisions to act in a specific manner. It is relied on when buying an item for someone else (Ajzen and Fishbein, 1980).

RAT relies on only attitude and behavior intention (BI) to forecast conduct based on the activity, time interval, and circumstances. It does not emphasize other constructs that influence BI for example; fright, intimidation, and experience (Silva and Dias, 2007: 72). Although RAT renders a structure for understanding conduct, vital opinions must be ascertained before the acceptance of inventions. Furthermore, researches

are needed to recognize the appropriate views of a community. RAT only analyses a sample's subsection which could have some mistakes (Sang, 2016: 42).

Technology Acceptance Model (TAM)

In 1986, Fred Davis and Richard Bagozzi designed TAM by expanding the Reasoned Action Theory (RAT) (Priyanka and Kumar, 2013: 61). TAM's objective was to indicate the constructs responsible for the acceptance of inventions. It ignored the attitude and subjective norm (SN) and replaced them with perceived usefulness (PU) and perceived ease of use (PEoU) (Heijden, 2003: 543).

Perceived Usefulness (PU) is an extent to which individuals trust that applying inventions will increase work operations. It is the application of innovations to improve work and advance the levels of expertise (Davis, 1989: 333). In absence of PU, applying innovations produce negative results (Bong-Keun and Yoon, 2013: 19).

Perceived Ease of Use (PEoU) states that applying inventions needs minimum energy to meet the objectives of organizations. It considers the strength needed to implement inventions (Bong-Keun and Yoon, 2013: 19). PEoU emphasizes that implementing innovations relieves one from physical and mental effort (Davis, 1989: 334). Respectively, numerous individuals accept an invention that they assume is simple to operate (Aggorowati, Suhartono and Gautama, 2012: 17)

Additionally, researches prove that PU and PEoU are crucial components of conduct. TAM is among the top theories that assess the acceptance of mobile banking (Knight, 2004: 22).

TAM focuses on perceived usefulness (PU) and perceived ease of use (PEoU) only thereby ignoring other components. Implementing TAM outside organizations is complicated since PU and PEoU cannot demonstrate how an invention satisfies the desired duties. TAM assumes that behavioral intention is optional (Dishaw and Strong, 1999: 18). TAM neglects cultural aspects thereby demonstrating how it cannot

foretell conduct from certain traditions (Legris, Ingham and Collerette, 2003: 197). It is mostly implemented by scholars who need an emphasis on the background of the software. Though TAM evaluates changes in self-reports, it is not exact since there is trouble with the interviewee's opinions and perspectives. Self-reports involve personal views that are not sufficient as they influence the communal and financial components (Durodolu, 2016). It researches 40 % of the acceptance of inventions and ignores the remaining percentage (Bagozzi, 2007: 249). TAM does not express the effects and conditions for the acceptance of innovations (Nafsaniath, 2015: 40).

TAM is applied in various researches on the acceptance of micro-computers and world-wide-web software. It portrays a link between BI and the perceived usefulness of applying an invention (Venkatesh et al., 2003: 465). TAM increases the application of inventions in everyday life. It exposes certain community shortages like less implementation of inventions amongst the elderly, uneducated, and those with lower profit margins (Bagozzi, 2007: 250). Therefore, TAM improves the quality of earnings and literacy levels (Heijden, 2003: 548).

Customer Loyalty

Customer loyalty was incorporated in the survey because it impacts the acceptance of mobile banking technology. It ascertains the utilization of most monetary services and it can affect them negatively if not taken seriously. Customer loyalty helps to analyze client perspectives and conducts thereby exposing the areas that need adjustments. It also supports the identification of potential clients and exposes the new market segments (Fredrick and Isak, 2018: 35).

In terms of banking, customer loyalty is the client's choice to dedicate oneself to the services of a specific monetary institution for a given time interval (Fredrick and Isak, 2018: 30). Customer loyalty is where clients acquire their desired items or services from a specific firm continuously irrespective of marketing efforts to divert them or change their conduct. It is where clients carry out transactions with a specific firm

persistently while suggesting it to their social groups since clients believe they are serviced better compared to the competitors. Client loyalty is initiated by attaining satisfaction from the suppliers hence confirming client-firm correlations (Chiguvi and Guruwo, 2017: 56).

Mobile Banking Activities

Banking is where monetary institutions gather clients' investments and direct them appropriately to create resources. Banking procedures have been modified over the years to accommodate modern techniques like mobile banking applications (Mohr, Sengupta and Slater, 2001: 21). Mobile banking refers to utilizing mobile gadgets to execute transactions (Imetur, 2012: 7). It renders services such as; loans, credit purchases, or any desired answers to queries over mobile devices (Marangunic and Granic, 2015: 87). Through these services, mobile banking activities (MBA) is successfully carried out on mobile gadgets (Porteous, 2006: 7). The utilization of mobile banking commenced when the USA launched credit cards in 1950 and the USA and Sweden initiated ATMs in 1967. Credit cards helped to reduce the amount of cash that clients carried around hence enhancing their safety. They directed the management of little cash from monetary institutions. Moreover, in 1989 the UK initiated telephone banking for clients to fulfill their financial desires even from remote locations. Telephone banking eliminated the need to visit monetary institutions for small inquiries or requests (Fredrick and Isak, 2018: 35).

Later, the general packet radio service (GPRS) was initiated from 1999-2000 as a telecommunication system that renders fast internet for mobile devices to support mobile banking operations (Legris et al., 2003: 199). These operations were supported with the assistance of mobile money which was launched in 2000. Additionally, 3rd generation mobile devices were restored in late 2001 by Japan to back up such operations (Kurbanoglu, Akkoyunlu and Umay,2006: 741). Then, in 2006, visa and master cards were launched and connected to the banking network. This made payments from different locations faster without any

inconveniences. Moreover, through radio frequency identification chips, mobile payments were done successfully (Monzur,2017: 23). Later in 2009, mobile banking was re-initiated by Nordics to support monetary requests and inquiries (Thakur, 2013: 16).

Through mobile banking, clients can carry out transactions simply and cheaply by minimizing expenses. It tracks the clients' account activities for future references since all annual transactions are recorded (Zahra, Tahvildari, Honarmand, Yousefi and Daghighi, 2012: 1). Mobile banking notifies clients about any foreign activities done on their accounts thereby strengthening its security. Mobile banking enables monetary institutions to access clients in remote locations which eliminates communication expenses (Shaikh and Karjaluoto, 2015: 136). It grants financial institutions a competitive superiority. Mobile banking spares time which can be directed to constructive sections for example; marketing, sales et cetera (Truong, 2009: 185). It assists to retain clients and capture large client sections. Mobile banking provides high-quality services to even low-income earners from distant locations (Bangens and Soderberg, 2008: 25). It brings in development thereby uplifting destitute societies from impoverished standards (Gencer, 2011: 105).

Mobile banking is supported by the internet yet there are internet problems in the least developed states which complicate its implementation. It is insecure if wrong individuals gain access to clients' accounts and carry out illegal activities (Campbell and Frances, 2010: 21). Similarly, employees who know how to operate mobile banking technology are not easily found. Therefore, many monetary institutions rely on external capabilities to survive. Banking inventions are not sufficiently recognized by the public because most citizens have no idea that mobile gadgets assist in carrying out banking activities. Therefore, this exposes the need to sensitize people to the values of mobile banking (Lwanga and Adong, 2016: 14).

Aspects That Inspire the Acceptance of Mobile Banking Technology

The advancement of inventions has enhanced the utilization of Mobile Banking Applications, thereby increasing transactions with monetary institutions. This survey emphasizes that Customer Loyalty and Technology Acceptance Models (TAM) and Theories encourage the acceptance of mobile banking technology as seen below:

Table 1: Portrays the Related Studies That Prove the Influence of TAM and Customer Loyalty on the Acceptance of Mobile Banking Technology

Özdemir (2014)	A survey exploring the effect of innovation diffusion theory and demographic features in the acceptance of mobile banking was carried out in Turkey. It depended on relative advantage, observability, complexity, compatibility, image, cost, and risk as to its reliable constructs. It proposed that more focus should be put on the merits of mobile banking and reduces its risks and complexity.
Hossein (2015)	A survey on mobile banking loyalty in Iran was conducted to ascertain how PU, SN, and personal innovativeness impacted attitude to utilize mobile banking. It implemented structural equation modeling and path analysis to assert that system compatibility, PU, PEoU, SN, and personal innovativeness affected the attitude to accept inventions. Besides, resistance had a negative impact on PU. However, more research is necessary to scrutinize clients who do not apply mobile banking as this survey only looked at its users.
Shaikh and Karjaluoto (2015)	Research on mobile banking adoption was conducted to evaluate the constructs responsible for the acceptance of mobile banking. It declared that compatibility, PU and attitude affected the BI to accept mobile banking technology in both the first world and growing states. It suggested more emphasis on the consequences of utilizing this technology on a large scale.
Nafsaniath, (2015)	A research was conducted on constructs that influence faculty members to utilize learning management systems (LMSs) to simplify teaching and ensure that these systems were fully applied. It implemented TAM on five hundred sixty participants from two universities and used structural equation modeling to assess their beliefs, attitudes, and BI. It mentioned that system quality, perceived self-efficacy and FC affected the attitude to implement such systems.
Erick (2015)	A survey on how small and medium enterprises (SMEs) applied mobile payments was conducted in Kenya. It utilized technological, organizational, and environmental (TOE) theory while focusing on three hundred seventeen SMEs including; hotels, restaurants, supermarkets, and travel companies. It is among the few studies on SMEs since most research is about the acceptance of M-Pesa (mobile money). It reported a rise in the utilization of mobile payments and commerce of SMEs in Kenya. This was a result of high competition where all manufacturers struggled to provide the best products. Additionally, SMEs focused on using simple payment techniques with improvements in electronic and mobile commerce.

Mburu (2015)	A survey on the acceptance of mobile banking by savings and credit cooperative organizations (SACCOs) was carried out in Nairobi, Kenya. Kenya's non-banking client's accessed monetary services through SACCOs through the involvement with SACCOs are at a low level. It applied a descriptive research design on an expected sample of forty-four SACCOs in Nairobi. Semi-structured questions were administered to ten SACCOs that willingly participated in the survey. The qualitative data was evaluated using thematic content analysis. The research utilized factor analysis to classify aspects that make SACCOs to accept mobile banking. Additionally, Anova tests and multivariate regression analysis were implemented to measure the relationship between independent and dependent variables. It declared that perceived welfare, external environmental components, organizational readiness, and security concepts influenced SACCOs to accept mobile banking. It proposed that SACCOs should share the value of utilizing mobile banking to attract more users as it is suitable, accessible, and economical.
Amin (2016)	Research about the quality of internet banking and its effects on electronic client satisfaction and electronic client loyalty was carried out on five hundred and twenty respondents. With a 52% response rate, it relied on corporate image, personal need, user-friendliness, and the efficiency of the website to analyze this effect. It revealed that the corporate image, the quality of services, e-customer satisfaction, and e-customer loyalty are effective aspects of the implementation of internet banking. The quality of internet banking affects e-customer satisfaction and e-customer loyalty of clients in developing states. It also enhances the BI and attitude of clients to continue utilizing internet banking and bankers to execute favorable marketing techniques.
Muñoz-Leiva, et al. (2017)	The authors researched on BI to apply mobile banking of one hundred and three clients in Spain. They relied on TAM and innovation diffusion theory to gather data from online surveys which were analyzed through the structural equation model (SEM). It mentioned that attitude influenced MBA through its impact on BI while PU and risk didn't.
Monzur (2017)	A study ascertaining the constructs that impact BI to accept mobile banking was carried out on two hundred and seventeen youths in Eskisehir, Turkey. While relying on TAM, factor analysis and structural equation modeling, it expressed that trust and PU impacted BI while PEoU affected PU and loyalty. Likewise, mobile banking enhanced work and saved time as youths assumed that mobile banking transactions were simple and therefore utilized it. It indicated that facilitating conditions (FC) impacted behavioral control (BC) and BI. FC include availing smartphones as gifts or entering into agreements with telecom firms to provide better-priced internet packages which encourage mobile banking activities (MBA). Nevertheless, the gender effect on the acceptance of inventions was not evidenced.
Paddy (2017)	A survey was carried out on UTAUT to highlight the acceptance of mobile money utilization by clients of micro small and medium enterprises (MSME) in Uganda. MSMEs were focussed on as they are directly or indirectly impacted by the rise of mobile money technology. It expressed that social influence, habit and FC impacted BI whereas price value, effort expectancy and hedonic motivation had less significant effects**.**

Sulieman et al. (2017)	A research was conducted on the effects of e-banking on client loyalty in Jordan. It applied PEoU, PU, cost, website design, privacy, and accessibility as its constructs. It focused on four hundred participants of Cairo Amman Bank, Ahli Bank, Bank Al-Etihad, Bank of Jordan, Arab Bank and the Housing Bank for Trade and Finance from the north of Jordan. It confirmed that PEoU, PU, website design, and privacy affected client loyalty whereas, accessibility did not. It suggested that experts in electronic website design must be used since the attractiveness of websites calls for expertise to please clients and maintain them. Also, the experience in software inventions should be focussed on and also strengthens privacy to attain a competitive advantage.
Ashoka and Ramaprabha (2018)	The authors carried out a survey on TAM and the utilization of mobile banking in Karnataka, India which is thriving economically. They implemented a descriptive research method on the sample of three hundred participants to comprehend the constructs that impact mobile banking. With a 40% response rate, the survey exposed that PU, PEoU, perceived cost, security, and trust positively impacted the utilization of mobile banking. Perceived risk negatively affected it whereas the region did not impact it.
Suharto and Ligery (2018)	The authors directed a survey on client loyalty regarding e-banking and client responsiveness. It applied a proportional random sampling technique and structural equation modeling on one hundred and ten clients of BRI Bank in Lampung, Indonesia. It proved a correlation between e-banking, client responsiveness, and client loyalty. Moreover, the utilization of inventions impacts client responsiveness which impacted client loyalty. This calls for high-quality services to be rendered to the clients to please and maintain them.
Fredrick and Isak (2018)	Research about the role of client loyalty in the acceptance of mobile banking amongst one hundred and fifty-three millennial participants was implemented in Sweden. It relied on exploratory factor analysis and regression analysis thus asserting that loyalty, trust, satisfaction, commitment and risk impacted the utilization of mobile banking. However, the level of loyalty is low, and therefore more surveys are needed to identify the constructs that affect the loyalty of millennials and the population at large to utilize mobile banking.
Işık (2019)	A study on the factors that impact the utilization behavior of the users of e-government systems revealed a negative effect of trust on perceived ease of use. This is because as trust increases, perceived ease of use towards utilizing such systems decreases.
Petersen, et al. (2020)	A study on the effects of socio-demographic features on the adoption of information communication technology (ICT) for diabetes self-care was carried out in South Africa. South Africa has an increased risk of diabetic patients and a low rate of utilizing ICT. This study focused on 497 respondents while relying on UTAUT and linear regression whose R squared values did not differ meaning that occupation does not impact the use of ICT.
Gültaş (2020)	A survey was carried out on shopping behavior via the internet within the context of the technology acceptance model. It was administered to seven hundred workers and students of İnönü University via questionnaires. It disclosed that the attitude of respondents to adopt technology depending on their age though their income levels differed. Whereas, the features like gender, professional status, and occupation didn't impact their attitude to adopt inventions. Besides, trust in online shopping, pleasure, facilitating conditions, perceived benefit and ease of use impact their buying behavior over the internet. Additionally, social and functional innovation influences the perceived benefit and ease of use. Furthermore, the perceived benefit impacts purchase intention.

Research and Methodology

The survey was carrıed out in 2019 (October-December) with its research methodology comprising of the; research design, target population, sample size, sampling approach, sources of data, data collection techniques, examining and processing of the data. The survey administered a descriptive research design which has been applied by multiple studies effectively thereby obtaining excessive data while consuming less time, funds and effort (Bilgin, 2001: 17). This research design deals with the distribution of questionnaires to respondents. It simplifies the provision of quick feedback for desired questions. Furthermore, it enables the researcher to report, document, appraise and recount the prevailing situations (Kothari, 2014: 30). This design is utilized to prove if there is a correlation between mobile banking activities and technology acceptance models and theories in Kampala, Uganda. The target population included banking and non-banking government employees, private sector employees, students and other citizens ranging from 21 years and above in Kampala province of Uganda.

The study applied quantitative techniques for data analysis and the data was exhibited in tables of; frequency distribution, factor analysis, normality tests of Kolmogorov-Smirnov and Shapiro-Wilk tests, linear regression analysis, homogeneity tests, independent T-test, Anova analysis and Welch and Brown Forsythe test. The data analysis was done by inputting data into the SPSS software and demonstrating the general information of respondents in the tables of a frequency distribution. Additionally, factor analysis was applied to clarify the correlations between the constructs. Also, normality tests were done to ensure the data was normally distributed to provide accurate results while homogeneity tests were applied to reveal if the variances of the constructs were equal. Furthermore, the T-tests are used to appraise whether the means of the gender groups vary. Moreover, one-way Anova tests and Welch and Brown Forsythe tests prove whether the means of the users' age, education and occupation have any variations so that their role on attitude is measured. Meanwhile, since regression analysis explains the relationship between

the dependent and independent variables (Nakip, 2003: 290); it is performed to explain the relationship between Mobile Banking Activities and Technology Acceptance Models and Theories.

Objectives of the Research

The following objectives were set to conduct this research accurately:

- *To examine the degree to which Mobile Banking Activities are prosperous in Uganda.*
- *To realize the constructs of Technology Acceptance Models and theories influencing Mobile Banking Activities in Uganda.*
- *To discover and assess the existing Mobile Banking Activities.*

Hypotheses of the Research

Based on the aims of the research, several hypotheses have been established as follows:

H_1: *Perceived ease of use impacts the attitude to carry out mobile banking activities*

H_{1a}: *Perceived ease of use affects client loyalty to carry out mobile banking activities.*

H_2: *Perceived usefulness greatly affects the attitude to undertake mobile banking activities.*

H_{2a}: *Perceived usefulness affects client loyalty to carry out mobile banking activities.*

H_3: *Attitude impacts the behavioral intention to perform mobile banking activities.*

H_4: *Behavioural intention remarkably impacts mobile banking activities.*

H_5: *Customer loyalty has a major impact on mobile banking activities.*

H_6: *The users' demographic features affect their attitude to carry out mobile banking activities.*

H_{6a}: *Users' gender impacts their attitude to carry out mobile banking activities.*

H_{6b}: *Users' age influences their attitude to carry out mobile banking activities.*

H_{6c}: *Users' occupation affects their attitude to carry out mobile banking activities.*

H_{6d}: *Users' education impacts their attitude to carry out mobile banking activities*

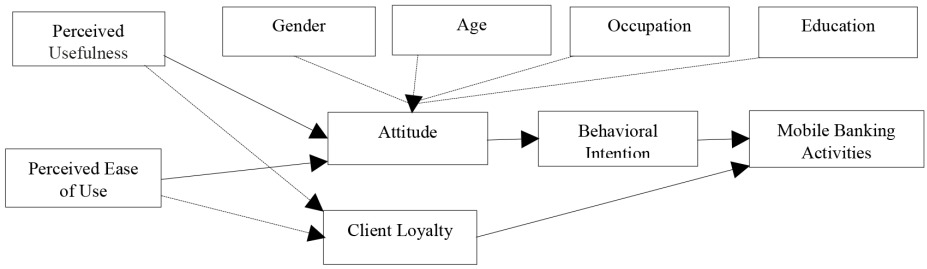

Figure 1: Illustrates the Hypotheses and Their Impact on Mobile Banking Activities

Figure 1 shows that attitude, perceived usefulness, perceived ease of use, client loyalty, behavioral intention, demographic features; gender, age, occupation and education influence the application of mobile banking activities. It is obtained from (Bilgin, 2001) and (Gültaş, 2020) but since the survey includes client loyalty, the figure has been restructured to fit the research purposes.

Methodology

Response Rate of the Participants

Although 300 questionnaires were distributed to the participants of the survey, 280 of them were recovered. Out of these, 30 questionnaires were not completed and therefore are excluded from the study leaving

only 250 questionnaires as reliable ones. From these questionnaires a response rate is measured as indicated below:

Table 2: Portrays the Respondents' Response Rate

Questionnaires	Respondents	Percentage (%)
Distributed questionnaires	300	-
Recovered questionnaires	250	83.3

Table 2 exposes a response rate of 83.3% which is sufficient enough to draft suitable conclusions. This is because a 50% response rate is considered sufficient for the evaluation, 60% is good while >=70% is better (Mugenda and Mugenda, 2008: 3). Corresponding with Table 2 83.3% response rate is superb for drafting appropriate results of the study. Such a high response rate depends on the data accumulation techniques for instance; informing willing participants earlier about the questionnaires through the drop-off-and-pick-up method. This method involves administering questionnaires to respondents then gathering them later. It avails respondents with an extensive period to answer questions comfortably. Similarly, it contributes to a better response rate in contrast to other technics of distributing the questionnaires (Oliveira and Martins, 2011: 120).

The study relied on a sample size of 250 participants who are banking and non-banking government employees, private sector employees, students, and other citizens living in Kampala province. It applied a descriptive research method which permits the usage of questionnaires that render ready feedback. Additionally, a Likert scale of 1-5 was used to ascertain a correlation between mobile banking activities (MBA) and technology acceptance models (TAM) and theories. The data were evaluated by using Factor analysis, ANOVA tests, and linear regression analysis with the results displayed appropriately.

Data Analysis and Results

The results disclose that 56% of the respondents were males while 44% were female. The rest of the demographic information is indicated below:

Table 3: Portrays the Demographic Features of the Participants

Demographic Features	Category	Frequency	Percentage
Gender	Male	140	56
	Female	110	44
Age group	21-30 years	60	24
	31-40 years	100	40
	41-50 years	50	20
	51 years- Above	40	16
Education level	Other	13	5.2
	High School	25	10
	Diploma	36	14.4
	Bachelor's Degree	75	30
	Master's Degree	55	22
	PhD	46	18.4
Occupation	Government employee	80	32
	Private sector employee	74	29.6
	Student	40	16
	Others	56	22.4

The impact of demographic features on the attitude to carry out mobile banking activities is further evaluated as displayed below: The other hypotheses were tested using the Regression analysis to ascertain a relationship between Mobile Banking Activities and Technology Acceptance Models and Theories. This analysis is conducted at two levels; the 99% as the high level and 95% as the lower level with its results demonstrated below:

H_1: *Perceived ease of use impacts the attitude to carry out mobile banking activities.*

Table 4: Portrays the Correlation Between Perceived Ease of Use Impacts the Attitude to Carry out Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.120	0.140	0.011	4.56309

Table 4. indicates R as 0.120, Regression square is 0.140, adjusted R square is 0.011 and standard error of estimate is 4.56309. This expresses that a 14.0% change in attitude to carry out Mobile Banking Activities

occurs due to perceived ease of use whereas 86.0% attributes to other constructs.

Additionally, this analysis presents Anova test to measure any variances in the means of perceived ease of use and attitude to carry out Mobile Banking Activities as seen here:

Table 5: Portrays the Anova Test for the Influence of Perceived Ease of Use Impacts the Attitude to Carry out Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	75.840	1	75.840	3.642	0.007[b]
Residual	5163.769	248	20.882		
Total	5239.636	249			

Table 5 asserts that at 95% confidence level and the 5% significant level, F is computed at 3.642 while p value=0.007 which signifies that the variables are authentic for the research. It also confirms the existence of a statistical relationship between perceived ease of use and attitude to carry out Mobile Banking Activities.

Linear regression analysis is done to confirm a correlation between perceived ease of use and attitude to carry out Mobile Banking Activities (MBA) in Kampala province as displayed:

Table 6: Portrays the Regression Analysis Coefficients for Perceived Ease of Use and the Attitude to Carry out Mobile Banking Activities

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig,
	β	Std. Error	Beta		
(Constant)	14.317	2.110		7.119	0.000
Perceived Ease of Use	0.416	0.076	0.120	1.908	0.007

Linear regression analysis ascertains a relationship between perceived ease of use and attitude to carry out Mobile Banking Activities by basing on the equation below:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \varepsilon \quad Y = 14.317 + 0.416 X_1 + \varepsilon}$$

Where; $\boldsymbol{\beta_0}$=Constant of regression, ε=Standard error, $\boldsymbol{\beta_1}$=Coefficient of Independent variable, Y=Dependent variable: Attitude, $\mathbf{X_1}$=Independent variable: Perceived ease of use (PEoU)

Considering the regression equation above, the dependent variable, attitude is constant at 14.317 when the Independent variable, PEoU is constant at zero. Regression analysis asserts that assuming independent variable is constant at zero; an increase in PEoU declares a 0.416 rise in attitude.

At 95% confidence rate and 5% significant rate, PEoU and attitude have significant rates of 0.007 and 0.000 respectively thus supporting H1.

H_{1a}: *Perceived Ease of Use affects client loyalty to carry out mobile banking activities.*

Table 7: Portrays the Relationship between Perceived Ease of Use and Client Loyalty to Carry out Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.336	0.113	0.109	3.06977

Table 7 verifies that R is 0.336, Regression square is 0.113, adjusted R square is 0.109 and standard error of estimate is 3.06977. Moreover, it expresses that a change of 11.3% in client loyalty is attributed to perceived ease of use while the rest is due to other aspects.

Furthermore, this analysis relies on Anova test to elaborate any variations in the means of perceived ease of use and client loyalty to carry out mobile banking activities as seen here:

Table 8: Portrays the Anova Test for the Effect of Perceived Ease of Use on Client Loyalty to Carry out Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	297.114	1	297.144	31.529	0.000[b]
Residual	2337.030	248	9.424		
Total	2634.144	249			

Table 8 asserts that at 95% confidence level and the 5% significant level, F is computed at 31.529 while p value=0.000 hence signifying that the variables are authentic for the research. It also confirms the existence of a statistical relationship between perceived ease of use and client loyalty.

Linear regression analysis is done to confirm a correlation between perceived ease of use and client loyalty to carry out mobile banking activities (MBA) in Kampala province as displayed:

Table 9: Portrays the Regression Analysis Coefficients for Perceived Ease of Use and Client Loyalty

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	β	Std. Error	Beta		
(Constant)	4.213	0.765		5.507	0.000
Perceived Ease of Use	0.172	0.031	0.336	5.615	0.000

Linear regression analysis ascertains a relationship between perceived ease of use and client loyalty by basing on the equation below:

$$Y= \beta_0 + \beta_1 X_1 + \varepsilon \quad Y= 4.213+0.172X_1+ \varepsilon$$

Where; β0 = Constant of regression, ε = Standard error, β1 = Coefficient of Independent variable, Y = Dependent variable: Client loyalty, X1 = Independent variable: Perceived ease of use (PEoU)

Considering the regression equation above, the dependent variable; client loyalty is constant at 4.213 when the Independent variable; PEoU is constant at zero. Regression analysis declares that assuming indepen-

dent variable is constant at zero; an increase in PEoU marks a 0.172 rise in client loyalty.

At 95% confidence rate and 5% significant rate, PEoU and client loyalty have significant rates of 0.000 and 0.000 respectively thus supporting H_{1a}.

H_2: *Perceived Usefulness affects attitude to carry out mobile banking activities.*

Table 10: Portrays the Relationship between Perceived Usefulness and Attitude to Carry out Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.148	0.022	0.018	4.54598

Table 10 verifies that R is 0.148, Regression square is 0.022, adjusted R square is 0.018 and standard error of estimate is 4.54598. Moreover, it expresses that a change of 14.8% in attitude is attributed to perceived usefulness while the rest is due to other aspects.

Furthermore, this analysis relies on Anova test to elaborate any variations in the means of perceived usefulness and attitude to carry out mobile banking activities as seen here:

Table 10: Portrays the Relationship Between Perceived Usefulness and Attitude to Carry out Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.148	0.022	0.018	4.54598

Table 10 verifies that R is 0.148, Regression square is 0.022, adjusted R square is 0.018 and standard error of estimate is 4.54598. Moreover, it expresses that a change of 14.8% in attitude is attributed to perceived usefulness while the rest is due to other aspects.

Furthermore, this analysis relies on Anova test to elaborate any variations in the means of perceived usefulness and attitude to carry out mobile banking activities as seen here:

Table 11: Portrays the Anova Test for the Effect of Perceived Usefulness on Attitude to Carry out Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	114.474	1	114.474	5.539	0.010[b]
Residual	5152.168	248	20.666		
Total	5239.636	249			

Table 11 asserts that at 95% confidence level and the 5% significant level, F is computed at 5.539 while p value=0.010 hence signifying that the variables are authentic for the research. It also confirms the existence of a statistical relationship between perceived usefulness and attitude to carry out mobile banking activities.

Linear regression analysis is done to confirm a correlation between perceived usefulness and attitude to carry out mobile banking activities (MBA) in Kampala province as displayed:

Table 12: Portrays the Regression Analysis Coefficients for Perceived Usefulness and Attitude to Carry out Mobile Banking Activities

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	β	Std. Error	Beta		
(Constant)	15.218	1.265		12.034	0.000
Perceived Usefulness	0.135	0.057	0.148	2.354	0.010

Linear regression analysis ascertains a relationship between perceived usefulness and attitude by basing on the equation below:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \varepsilon \quad Y= 15.218+0.135X_1 + \varepsilon}$$

Where; β_0 = Constant of regression, ε = Standard error, β_1 = Coefficient of Independent variable Y = Dependent variable: Attitude, $\mathbf{X_1}$= Independent variable: Perceived Usefulness (PU)

Considering the regression equation above, the dependent variable; attitude is constant at 15.218 when the Independent variable; PU is constant at zero. Regression analysis declares that assuming independent variable is constant at zero; an increase in PU marks a 0.135 rise in attitude to carry out Mobile Banking Activities.

At 95% confidence rate and 5% significant rate, PEoU and client loyalty have significant rates of 0.000 and 0.010 respectively thus supporting H_2.

H_{2a}: *Perceived usefulness affects client loyalty to carry out mobile banking activities.*

Table 13: Portrays the Relationship between Perceived Usefulness and Client Loyalty to Undertake Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.359	0.129	0.126	3.04144

Table 13 verifies that R is 0.359, Regression square is 0.129, adjusted R square is 0.126 and standard error of estimate is 3.04144. Moreover, it expresses that a 12.9% change in client loyalty is attributed to perceived usefulness while the rest is due to other aspects.

Besides, this analysis relies on Anova test to display any variations in the mean of perceived usefulness and client loyalty to carry out mobile banking activities as seen here:

Table 14: Portrays the Anova Test for the Effect of Perceived Usefulness on Client Loyalty to Carry out Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	340.052	1	340.052	36.761	0.000[b]
Residual	2294.092	248	9.250		
Total	2634.144	249			

Table 14. asserts that at 95% confidence level and the 5% significant level, F is computed at 36.761 while p value=0.000 hence signifying that the constructs are appropriate for the research. It also confirms the existence of a statistical relationship between perceived usefulness and client loyalty.

Linear regression analysis is done to confirm a correlation between perceived usefulness and client loyalty to carry out mobile banking activities (MBA) in Kampala province as displayed:

Table 15: Portrays the Regression Analysis Coefficients for Perceived Usefulness on Client Loyalty

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	β	Std. Error	Beta		
(Constant)	4.787	0.621		7.706	0.000
Perceived Usefulness	0.182	0.030	0.359	6.063	0.000

Linear regression analysis ascertains a relationship between perceived usefulness and client loyalty by relying on the equation below:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \varepsilon \qquad Y= 4.787+0.182X_1 + \varepsilon}$$

Where; β_0 = Constant of regression, ε =Standard error, β_1 =Coefficient of Independent variable, Y = Dependent variable: Behavioural intention, X_1=Independent variable: Perceived usefulness (PU)

Considering the regression equation above, the dependent variable; client loyalty is constant at 4.787 when the independent variable; PU is

constant at zero. Regression analysis declares that assuming independent variable is constant at zero; an increase in PU causes a rise of 0.182 in client loyalty.

At 95% confidence rate and 5%, significant rate; PU and client loyalty have significant rates of 0.000 and 0.000 respectively thus supporting H_{2a}

H_3: *Attitude impacts the behavioral intention to perform mobile banking activities.*

Table 16: Portrays the Relationship between Attitude Impacts the Behavioral Intention to Perform Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.320	0.102	0.099	5.02630

Table 16 verifies that R is 0.320, Regression square is 0.102, adjusted R square is 0.099 and standard error of estimate is 5.02630. Moreover, it expresses that a change of 10.2% in behavioral intention is attributed to attitude while the rest is due to other constructs.

Besides, this analysis relies on Anova test to elaborate any variations in the means of attitude and behavioral intention to carry out mobile banking activities as seen here:

Table 17: Portrays the Anova Test for the Effect of Attitude on Behavioural Intention to Undertake Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	714.596	1	714.596	28.285	0.000b
Residual	6564.404	248	25.264		
Total	6980.000	249			

Table 17 asserts that at 95% confidence level and the 5% significant level, F is computed at 28.285 while p-value =0.000 which signifies that

the constructs are fit for the research. It also confirms the existence of a statistical relationship between attitude and behavioral intention.

Linear regression analysis is done to confirm a correlation between attitude and behavioral intention to carry out mobile banking activities (MBA) in Kampala province as displayed:

Table 18: Portrays the Regression Analysis Coefficients for Attitude on Behavioural Intention

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	β	Std. Error	Beta		
(Constant)	12.310	1.297		9.487	0.000
Attitude	0.369	0.069	0.320	5.318	0.000

Linear regression analysis ascertains a relationship between attitude and behavioral intention by relying on the equation below:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \varepsilon \quad Y= 12.310+0.369X_1+ \varepsilon}$$

Where; β_0 = Constant of regression, ε = Standard error, β_1 = Coefficient of Independent variable, Y= Dependent variable: Attitude, X_1 = Independent variable: Behavioural intention (BI)

Considering the regression equation above, the dependent variable; behavioral intention is constant at 12.310 when the independent variable; attitude is constant at zero. Regression analysis asserts that assuming independent variable is constant at zero; an increase in attitude causes a rise of 0.369 in behavioral intention.

At 95% confidence rate and 5%, significant rate; attitude and behavioral intention have significant rates of 0.000 and 0.000 respectively thus supporting H3.

H_4: *Behavioural intention remarkably impacts mobile banking activities.*

Table 19: Portrays the Relationship Between Behavioural Intention Remarkably Impacts Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.016	0.240	0.004	1.46459

Table 19 verifies that R is 0.016, Regression square is 0.000, adjusted R square is 0.004 and standard error of estimate is 1.46549. Moreover, it expresses that a 24.0% change in mobile banking activities is attributed to behavioral intention while the rest is due to other aspects.

Besides, this analysis relies on Anova test to display any variations in the mean of behavioral intention and mobile banking activities as seen here:

Table 20: Portrays the Anova Test for the Effect of Behavioral Intention on Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	0.138	1	0.138	10.064	0.008[b]
Residual	532.618	248	2.418		
Total	532.756	249			

Table 20 asserts that at 95% confidence level and the 5% significant level, F is computed at 10.064 while p value=0.008 hence signifying that the constructs are appropriate for the research. It also confirms the existence of a statistical relationship between behavioral intention and mobile banking activities.

Linear regression analysis is done to confirm a correlation between behavioral intention and mobile banking activities (MBA) in Kampala province as displayed:

Table 21: Portrays the Regression Analysis Coefficients for Behavioural Intention and Mobile Banking Activities

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	β	Std. Error	Beta		
(Constant)	8.760	0.346		25.324	0.000
Behavioral Intention	0.004	0.018	0.016	.253	0.008

Linear regression analysis ascertains a relationship between behavioral intention and mobile banking activities by relying on the equation below:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \varepsilon} \qquad \mathbf{Y= 8.760+0.004X_1 + \varepsilon}$$

Where; β_0 =Constant of regression, ε =Standard error, β_1 =Coefficient of Independent variable, Y=Dependent variable: Mobile Banking Activities, X_1=Independent variable: Behavioural intention (BI)

Considering the regression equation above, the dependent variable; Mobile Banking Activities is constant at 8.760 when the independent variable; BI is constant at zero. Regression analysis declares that assuming independent variable is constant at zero; an increase in BI causes a rise of 0.004 in Mobile Banking Activities.

At 95% confidence rate and 5%, significant rate; BI and Mobile Banking Activities have significant rates of 0.000 and 0.008 respectively thus supporting H4.

H_5: *Customer loyalty has a major impact on mobile banking activities.*

Table 22: Portrays the Relationship Between Customer Loyalty Remarkably Impacts Mobile Banking Activities

R	R Square	Adjusted R	Standard Error
0.086	0.070	0.003	1.46022

Table 22 verifies that R is 0.086, Regression square is 0.070, adjusted R square is 0.003 and standard error of the estimate is 1.46022.

Moreover, it expresses that a 70.0% change in mobile banking activities is attributed to customer loyalty while the rest is due to other aspects.

Besides, this analysis relies on Anova test to display any variations in the mean of customer loyalty and mobile banking activities as seen here:

Table 23: Portrays the Anova Test for the Effect of Customer Loyalty on Mobile Banking Activities

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.958	1	3.958	1.856	0.004[b]
Residual	528.798	248	2.132		
Total	532.756	249			

Table 23 asserts that at 95% confidence level and the 5% significant level, F is computed at 1.856 while p value=0.004 hence signifying that the constructs are appropriate for the research. It also confirms the existence of a statistical relationship between customer loyalty and mobile banking activities.

Linear regression analysis is done to confirm a correlation between customer loyalty and mobile banking activities (MBA) in Kampala province as displayed:

Table 24: Portrays the Regression Analysis Coefficients for Customer Loyalty and Mobile Banking Activities

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	β	Std. Error	Beta		
(Constant)	8.760	0.324		28.074	0.000
Perceived Usefulness	0.044	0.032	0.086	1.362	0.004

Linear regression analysis ascertains a relationship between customer loyalty and mobile banking activities by relying on the equation below:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \varepsilon \quad Y= 8.760 + 0.044 X_1 + \varepsilon}$$

Where; β_0 =Constant of regression, ε =Standard error, β_1=Coefficient of Independent variable, Y=Dependent variable: Mobile Banking Activities, X_1= Independent variable: Customer Loyalty

Considering the regression equation above, the dependent variable; Mobile Banking Activities is constant at 8.760 when the independent variable; customer loyalty is constant at zero. Regression analysis declares that assuming independent variable is constant at zero; an increase in customer loyalty causes a rise of 0.044 in Mobile Banking Activities.

At 95% confidence rate and 5%, significant rate; customer loyalty and Mobile Banking Activities have significant rates of 0.000 and 0.004 respectively thus supporting H_5.

Besides factor analysis constructs were applied to reduce many items to less amount like reduce the items of hypotheses: H_1, H_2, H_3, H_4 and H_5. It is an assumption that the measured can be reduced to less latent constructs with the same variance. Factor analysis gathers constructs into clusters to be easily comprehended. It was implemented on 30 elements of the questionnaire based on 250 respondents. It reveals the factor loadings, mean and S.D of the elements. Furthermore, Kaiser-Meyer Olkin (KMO) measure is applied to evaluate how appropriate the data is for Factor Analysis. Moreover, Bartlett's Test of Sphericity is executed to measure whether the constructs are related and fit for the analysis as displayed below:

The Total Variance Explained mentions the total variance of the constructs for all individual principal components.

Table 25: Portrays the Total Variance Explained of Factor Analysis

Loadings Components	Initial Eigenvalues			Extraction Sums of Squared		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.691	36.867	36.867	4.370	15.071	15.071
2	2.800	9.654	46.521	3.625	12.501	27.572
3	2.436	8.399	54.920	3.490	11.033	39.605
4	1.914	6.600	61.520	3.402	11.730	51.335
5	1.669	5.754	67.274	3.343	11.527	62.862
6	1.172	4.043	71.317	2.452	8.454	71.317

Table 25 exposes the eigenvalues above 1 and constitutes six components with a total variance of 71.317%. This variance is more than 70% which is the limit for most research therefore, marking it appropriate for the analysis.

Table 26: Portrays the Factor Analysis of Mobile Banking Activities

KMO (Kaiser-Meyer-Olkin Measure) of Sampling Adequacy = 0.831
(Bartlett's Test of Sphericity) Approx. Chi-Square (χ2) = 612.227
Df = 406
Sig. = 0.000

Factors	Factor Loadings	Mean	S.D
Perceived Ease of Use			
Undertaking mobile banking activities is easy and simple to me	0.774	3.03	1.054
Mobile banking activities take less time	0.732	3.40	0.841
Mobile banking is less frustrating	0.523	3.09	1.051
Mobile banking is clear and understandable	0.675	2.96	1.173
Operating mobile banking apps needs less mental effort	0.796	3.03	1.043
I can use mobile banking without anyone's help	0.632	2.89	1.204
I find mobile banking activities comfortable to conduct	0.670	3.06	1.070
I can access mobile banking on my phone and make a transaction	0.771	2.69	1.048
Perceived Usefulness			
Mobile banking improves my performance when banking	0.792	2.71	1.430
Mobile banking is convenient for me to do my banking activities	0.671	2.74	1.380
Mobile banking apps help me finish banking activities faster	0.705	2.66	1.391
Mobile banking apps increase quality of banking transactions	0.959	2.62	1.390
Carrying out mobile banking activities makes me modern	0.646	3.12	1.070
Mobile banking makes my transactions easier	0.501	3.06	1.167
Mobile banking is not substituted by other banking methods	0.464	2.80	1.203
Attitude			
Undertaking mobile banking activities is a good idea	0.795	3.18	1.281
My attitude towards mobile banking activities is favorable	0.861	2.96	1.383
I think undertaking mobile banking activities is beneficial to me	0.649	2.80	1.152
I like the idea of carrying out mobile banking activities	0.584	2.88	1.281
Undertaking mobile banking activities would be pleasant	0.715	2.86	1.106
I am drawn to carry out mobile banking activities	0.675	2.92	1.148
Behavioral Intention			
I will frequently use mobile banking services in the future	------	------	------
I will recommend others to carry out mobile banking activities	0.605	2.75	1.177
I have an interest in mobile banking activities	0.732	3.16	1.319
I plan to utilize mobile banking apps	0.836	2.87	1.324
Maybe, I'll engage in mobile banking activities in the future	0.766	3.09	1.187
I am determined to indulge in mobile banking activities	0.548	3.06	1.232
Customer Loyalty			
I am likely to recommend my bank to friends or family	0.902	2.68	1.134
I am not likely to switch to another bank	0.871	2.73	1.150
If I had no bank account, I would open one with my current bank	0.813	2.96	1.259

Extraction method: Principal Component Analysis. Rotation method: Varimax with Kaiser Normalization.

Table 26 exposes KMO as 0.831 which is >0.7 thereby proving that the data is fit for factor analysis. Bartlett's Test of Sphericity is 6120.227, p<0.000. Factor analysis relies on a rotation technique of varimax to measure five components. During this analysis, one element "I will frequently use mobile banking services in the future" is excluded as it has a high stand-alone value.

Furthermore, H_6 was analyzed with the help of the Normality tests of Kolmogorov-Smirnov and Shapiro-Wilk tests were implemented to see if the data of the users' demographic features fit a normal distribution.

Table 27: Indicates the Kolmogorov-Smirnov and Shapiro-Wilk Tests Results for Other Demographic Features

H_6	Kolmogorov-Smirnov		Shapiro-Wilk	
	Sig.	Df	Sig.	Df
H_{6a}: Users' gender influences attitude	0.200	250	0.251	250
H_{6b}: Users' age influences attitude	0.119	250	0.117	250
H_{6c}: Users' occupation affects attitude	0.162	250	0.137	250
H_{6d}: Users' education impacts attitude	0.157	250	0.272	250

Table 27. declares Kolmogorov-Smirnov's p values are >0.05 thus elaborating that the data of the users' demographic features significantly lie within a normal distribution.

Since the normality tests prove that the data was normally distributed, ANOVA analysis and T. tests were applied to analyze the following data. To understand if gender has any effect on the attitude to carry out mobile banking activities and whether the means of males and females differ, an Independent sample T-test is utilized as displayed:

Table 28: Illustrates the Independent Sample T-test for Gender Results

H_6	F	Sig.
H_{6a}: Users' gender impacts attitude	0.340	0.561

Table 28 verifies that the p-value is >0.05 hence insignificant. Therefore, users' gender has no impact on their attitude to carry out Mobile Banking Activities. This agrees with a survey on fifty-nine students in 6th grade which ascertains if gender impacts their attitude to utilize technology. It relies on online questionnaires, one-one discussions, observations, secondary data and classwork to reveal that the gender variations concerning attitude, the utilization of technology and beliefs are not effective thereby insinuating that gender does not influence the students' attitude to accept technology. Moreover, most males and females confirm that they do not find technology complicated (Bain and Rice, 2006). A different research emphasizes that the impact of gender variations on the acceptance of internet banking is not statistically acceptable (DeBaillon and Rockwell, 2005). A differing survey on the effects of demographic elements on customers' Mobile Banking Services Adoption in Nigeria revealed that 49.5% were male, while 47.8% were female. This indicates that the majority of the respondents were male hence emphasizing the gender influence on the utilization of Mobile Banking Services (Owolabi et al, 2019: 72). Another study was done on if demographic factors have a variable influence on the increased usage of Mobile Banking in Khulna City of Bangladesh. It revealed that the need for faster services influenced both males and females to adopt mobile banking. Furthermore, the male respondents were more attracted by service availability, perceived usefulness, easy transaction, employee behavior and cost-effectiveness for utilizing mobile banking technology compared to their female counterparts who were more concerned with safety and security and instant services (Khan et al, 2018: 5).

Furthermore, Homogeneity test is performed to assess whether the users' age, occupation, and education groups have equal variances as shown below:

Table 29: Indicates the Levene Test Results for Other Demographic Features

H_6	Levene statistics	Sig.
H_{6b}: Users' age influences attitude	0.226	0.878
H_{6c}: Users' occupation affects attitude	0.082	0.970
H_{6d}: Users' education impacts attitude	3.114	0.010

Table 29 proves that the significances of H6b and H6c are 0.878 and 0.970 respectively hence indicating that they are >0.05 therefore they are homogenous since the variances of the users' occupation and age groups are equal. This necessitates the one-way Anova test to find out if their means are equal as illustrated below:

Table 30: Displays the One-Way ANOVA Results of the Demographic Features

H_6	F	Sig.
H_{6b}: Users' age influences attitude	1.672	0.174
H_{6c}: Users' occupation affects attitude	1.252	0.286

Table 30 demonstrates that there is no distinction between the groups as 0.286 and 0.174 exceed 0.05 hence stressing that H6b and H6c are not agreed upon. Another study emphasizes that age variations do not impact the acceptance of online banking and therefore, age is not a crucial aspect that monetary institutions can base on to ascertain the success of internet banking (Mirza, Beheshti, Wallstrom and Mirza, 2009).

Correspondingly, a study about the influence of demographic characteristics on the acceptance of e-government services applied TAM and assessed the data via SPSS. It reveals that age does not determine the acceptance of e-government services (Mensah and Jianing, 2018). Additionally, a survey concerned with the effects of socio-demographic features on the adoption of information communication technology (ICT) for diabetes self-care was administered in South Africa. South Africa has growing rates of diabetic cases and most of the people are not involved

in the utilization of ICT. The survey relied on four hundred ninety-seven participants and UTAUT model and linear regression thus declaring that occupations do not affect the utilization of ICT since values of R squared have no variations (Petersen et al, 2020). A different survey indicated that respondents between 20-29 years applied for mobile banking due to its fast services, those ranging from 30-39 years were more impacted by its easy transaction process whereas participants beyond 40 years were attracted by its hassle-free services (Sarif et al, 2018: 6). A similar survey showed that 38% of the participants were between 18-24 years while the least participants ranged from 45-55 years. This proved that mobile banking applications were highly used by youths hence revealing the impact of age (Owolabi et al, 2019: 72).

Additionally, Table 29 indicates that H6d is not homogenous and the variances of the education groups are not equal since its significance is <0.05. This necessitates the Welch and Brown-Forsythe test to determine if the means of the users' education are equal. This test ascertains whether the hypothesis should be relied on or ignored as illustrated below:

Table 31: Portrays the Welch and Brown-Forsythe Tests for the Influence of the Users' Education on Attitude to Carry out Mobile Banking Activities

H_{6d}	Statistics	Sig.
Welch	1.395	0.236
Brown-Forsythe	1.314	0.261

Table 31 indicates that there are no significant variances between the means of the education groups as both p values exceed 0.05 therefore, implying that H6d is not supported. Besides, a survey evaluating the impacts of education on the workers' utilization of retail scanners and industrial equipment suggests that there are negative effects of education on the utilization of such inventions whereas other results show no impact at all as they do not vary from zero. A resembling study reveals that education does not influence the utilization of computer-controlled and computer-supported inventions in daily work operations (Riddell, 2012:

16). A differing study on adoption of mobile banking services proved that most of the participants were degree holders whereas the least were had primary school certificates hence insinuating the impact of education (Owolabi et al, 2019: 72). Another study revealed that highly educated individuals apply mobile banking more in contrast to their counterparts with zero or low education (Sarif et al, 2018: 6).

Discussion and Conclusion

H_1 was accepted as the arguments revealed that Perceived ease of use (PEoU) impacts attitude and behavioral intention to carry out the MBA. According to the survey, the argument that utilizing mobile banking apps needs less mental effort confirmed a strong correlation between PEoU and MBA. This is in line with research on 217 participants which confirmed that PEoU influenced mobile banking with a coefficient of 0.75 (Monzur, 2017: 40).

Furthermore, H_{1a} was agreed upon since the assumption that PEoU influences client loyalty asserts that a change in client loyalty is attributed to perceived ease of use. Another study on the influence of the quality of the hotel website design, perceived ease of use and perceived usefulness on loyalty supports that perceived ease of use has a significant impact on loyalty (Bahari, et al, 2018: 708).

The survey accepted H_2 as Perceived usefulness (PU) greatly affects the attitude to undertake an MBA since most respondents agreed that utilizing mobile banking apps increases the quality of banking. A related study emphasizes that utilizing mobile systems is based on how much people understood them. Therefore, high PU reflects a higher attitude to use the system (Mohammad, 2015: 43).

H_{2a} was accepted as the study emphasizes that PU influences client loyalty since a change in client loyalty is caused by perceived usefulness. Another research indicates that perceived usefulness affects loyalty to utilize mobile instant messaging. Instant messaging is a program used in sending texts over the internet whereas mobile instant messaging is used

to send texts over mobile devices (Oghuma, Chang, Libaque-Saenz, Park and Rho, 2015).

Besides, H_3 was supported as the assumption that attitude impacts behavioral intention to undertake MBA have a high score thus agreeing that the respondents' attitude enhances their intention to carry out mobile banking activities. This survey is related to a study on mobile banking loyalty in Iran which reveals a correlation between attitude and intention to utilize mobile banking (Mohammad, 2015: 41).

H_4 was agreed upon since behavioral intention (BI) influences MBA. This is evidenced by most respondents who agree that they plan to utilize mobile banking hence indicating that high BI leads to more MBA. Moreover, a study on Yemen asserts that 87% of the participants intend to utilize mobile banking since it saves time (Xin Luo, Zhang and Shim, 2010: 232).

The study supported H_5 as client loyalty influences MBA as participants highly recommend their bank to friends or family and are not likely to switch to other financial institutions. H_5 is supported by a survey on seventy-eight chief managers from twenty-six monetary institutions in Kenya which confirms a relationship between mobile phone banking and client loyalty with a p-value <0.05 (Nguthuku, 2018: 34).

H6 was rejected as the users' demographic features; gender, age, occupation, and education do not affect their attitude to carry out the MBA since there were no significant variances. This is supported by research on shopping behavior via the internet within the context of the technology acceptance model. It examines the academic and administrative staff at İnönü University hence reflecting that their attitude towards accepting online shopping does not differ according to their occupations (Gültaş, 2020: 83). A similar study on 477 students in India summarized by saying that there are no gender variations towards the attitude to utilize electronic learning (Suri and Sharma, 2013). Another study concerned with the acceptance of technology by uniform police forces mentioned no differences between the two age groups among these officers. This means that the old and young police officers equally accept technology to run

police errands (Kurkinen, 2013: 476). Besides, a survey on the role of education in technology use in Canada asserts that education does not impact the attitude to utilize technology (Riddell, 2012: 18).

Therefore, all these confirmed that there was a relationship between Mobile Banking Activities (MBA) and Technology Acceptance Models (TAM) and theories basing on Kampala province in Uganda.

Recommendation for Future Studies

More studies are required to highlight mobile banking and its benefits to an economy's gross domestic product. This will encourage people to indulge in MBA and boost the economy since governments benefit from such inventions. Additionally, research on how to increase internet access countrywide must be availed since developing states face internet challenges. This shall equip monetary institutions with cheaper techniques to expand mobile banking coverage and extend up-to-date services to the whole Ugandan community. Moreover, utilizing the internet shall reduce paperwork as the globe is turning digital.

Alternative studies must be directed to new inventions like e-wallets which have become popularly used as mobile payment structures. E-wallets help their users to carry less cash around hence boosting their application of mobile banking. This is because banking clients are attracted to use them alongside mobile phones thus developing the third world countries.

New studies must focus on branchless banking services and the acceptance of branchless banking techniques. This is due to the growth of technology which has forced the brick and mortar techniques to be abandoned in most countries. Likewise, traditional banking has been replaced by e-banking which comprises internet banking and mobile banking that offer faster and quality branchless services hence gaining a lot of attention from clients.

Research about mobile banking via new mobile gadgets is called upon to pave way for when they will occupy the whole market. These

gadgets for instance; Google glasses and smartwatches should be recognized as they can be applied in the implementation of mobile banking. Though they are not so much utilized worldwide, their demand is anticipated to pick up in the future.

Araştırma ve Yayın Etiği Beyanı

Bu çalışmadaki tüm bilgi ve belgeleri akademik kurallar çerçevesinde elde ettiğimizi, yararlandığımız kaynaklara bilimsel normlara uygun olarak atıfta bulunduğumuzu ve etik kurallara dayanarak kaynak gösterilen durumlar haricinde özgün bir şekilde ürettiğimizi beyan ederiz.

Yazarların Makaleye Katkı Oranları

Bu çalışma, Dr.Öğr.Üyesi Nahit Yılmaz danışmanlığında yürütülen, Maureen Ojambo'nın Yüksek Lisans Tezi'nden türetilmiştir. Yazarlar makaleye eşit oranda katkı sağlamışlardır.

Çıkar Beyanı

Herhangi bir kurum, kuruluş veya kişilerle çıkar çatışması yoktur.

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Genişletilmiş Özet

Her alanda yaşanan değişim, dünya üzerinde birçok unsuru etkilediği gibi, finansal kurumlar içerisinde yer alan ve geniş kitlelere hitap eden bankacılık faaliyetlerini de etkilemektedir. Finansal kurumların faaliyetlerinin, küresel ağlarla birbirlerine bağlı olması, ekonomik bağlamda küresel etki ve gelişmelerin hızla yayılmasının temeli olarak görülmektedir. Bu sektörde yaşanan rekabet ve ürün çeşitliliği, bilişim teknolojileri temelli yeniliklerin ve uygulamaların, müşteriler tarafından kabul edilmesini zorlayan, adeta küresel bir işleyiş halini almıştır. Bankacılık, finansal kurumların, müşteri tasarruflarının daha fazlasının değerlendirilmesini teşvik ettiği ve daha sonra yine finansal değerlere ihtiyaç hissedenlerin, ihtiyaçlarını giderebilmek amacıyla ürün ve hizmetlerin sunumu biçiminde yeniden yönlendirildiği bir sektördür. Bankalar tarafından sunulan hizmetlerin, müşteriye sunumu sürecinde yaşanan karmaşık değer yaratma faaliyetleri ile müşteri memnuniyetini ve de sadakatini sağlamada oldukça hassas olduğu söylenebilir.

Müşteriler finansal konularda güvenilir bir danışman ihtiyacını sürekli hissetmektedirler. Bu açıdan Bankacılık Sektörün'nde, ihtiyaçların karşılanmadığı durumlarda, kolayca olumsuz etkilenen bir işletme-müşteri ilişkisi söz konusudur. Finansal kurumlar, gerçekleştirdiği süreçlerde yaşanabilecek olumsuzlukları ortadan kaldırmak için, öncelikle müşterilerin kendilerinden ne beklediğini öğrenir ve sonrasında bu beklentileri yerine getirmek için gerekli prosedürleri izlerler.

Bankacılık sektöründe, müşterilerin beklentileri doğrultusunda hizmetlerin daha hızlı ve kolay bir şekilde sunulması için dünya çapında çevrimiçi tekniklerin kullanılması yaygınlaşmıştır. Mobil bankacılık faaliyetleri, müşterilere zaman tasarrufu sağlaması ve mekân fark etmeksizin bankacılık faaliyetlerine, kendi fonlarına, bankacılık hizmetlerine erişebilmesine imkân tanıması gibi yararlarından dolayı teşvik edilen uygulamalar olarak karşımıza çıkmaktadır.

Uganda'da gerek altyapı gerekse ekonomik sebeplerden dolayı bankacılık sektörünün, dünya standartlarının nispeten gerisinde olduğu söylenebilir. Bu sebep, bankacılık faaliyetleriyle beraber mobil bankacılık faaliyetlerinin kullanım oranını düşüklüğünü açıklayabilir nitelikte düşünülebilir. Ancak mobil cihazların ve internet kullanımının artmasıyla, yaygın kullanımın hızı zaman içerisinde artış eğilimindedir.

Teknoloji Kabul Modeli kapsamında değerlendirilen, Sebepli Davranış Teorisi, daha önce yapılan benzer çalışmalarda mobil bankacılık teknolojilerinin kabul edilmesine yönelik gerçeklerin belirlenmesinde kullanılmıştır. Bu çalışma, Uganda'da müşterilerin mobil bankacılık faaliyetlerini kabullenmelerinin araştırılmasını hedeflemektedir. Ayrıca, demografik özellikler ve müşteri sadakati değişkeni, mobil bankacılık uygulamalarının kabul edilmesindeki muhtemel etkisi dolayısıyla dikkate değer bileşenler olarak çalışmaya dâhil edilmiştir. Nihayetinde, bu çalışmanın amacı, "Uganda'nın Kampala eyaletindeki mobil bankacılık faaliyetlerinin teknoloji kabul modelleri ve teorilerinin aracılığıyla tespit edilmesi"ni amaçlamaktadır.

Teknolojinin kabulü, yeni çıkan bir bilginin, tekniğin kullanıcılar tarafından, performans, gösterilen çaba, sosyal etki, kolaylık, keyif, fiyat, alışkanlık ve davranışsal niyet gibi sebeplerden hareketle benimsenmesini ifade eder. Müşterilerin, ihtiyaçlarını gidermek amacıyla belirli bir teknolojiyi kullanmayı kabul ettikleri, benimsedikleri bir süreçtir. Teknolojinin kabulü, görevlerin ifa edilmesi için teknolojiyi kullanma konusunda olumlu bir bakış açısına sahip olmaktır.

Teknoloji Kabul Modelleri ve Teorileri, teknolojinin geniş ölçekte nasıl kabul edildiğini açıklamaya yardımcı olur. Teknolojinin kabulü, kuruluşların belirli bir teknolojiyi kabul etmesine veya reddetmesine neden olan sebepleri anlamaya ihtiyaç duyulduğu 1970'lerden beri analizlerde kullanılmaktadır.

Teknoloji Kabul Modelleri ve Teorileri, teknolojinin nasıl, ne amaçla ve ne zaman benimsendiğini ve de uygulandığını tespit eden yapıları içerir. Bu tür yapıların, benzerliklerinin ve farklılıklarının ortaya çıkarılması amacıyla çok sayıda çalışma incelenmiştir. Dikkate değer bir araştırma yöntemi olarak, farklı model ve teorilerin geliştirilmesine rağmen, çalışmamızda, Uganda'nın Kampala eyaletindeki mobil bankacılık faaliyetlerini tespitine yönelik yapıların açıklanmasında, Teknoloji Kabul Modelleri ve Sebepli Davranış Teorisi'ne odaklanılmıştır.

Sebepli Davranış Teorisi, Ajzen ve Fishbein tarafından, icatların nasıl kabul edilebileceğini vurgulayan ilk teori olarak 1967'de geliştirilmiştir. Bu teori, bireylerin bir davranışı gerçekleştirebilmesinin, kişinin niyetine bağlı olduğunu ve niyetin ise Tutum ve Öznel Normlar tarafından belirlendiğini açıklar. Sebepli Davranış Teorisi'nde bireyin, kullanıma olan niyeti, "bireyin bir davranışı gerçekleştirmeye hazır olması" olarak, tutumu "bir davranışın gerçekleş-

tirmesine karşın olumlu ya da olumsuz değer" olarak ve öznel normları ise "bir davranışın gerçekleşmesine ilişkin algılanan sosyal baskı" olarak açıklanmıştır.

1986'da Fred Davis ve Richard Bagozzi, Sebepli Davranış Teorisi'ni genişleterek Teknoloji Kabul Modeli'ni tasarlamışlardır. Teknoloji Kabul Modeli'nin amacı, icatların kabulünden sorumlu yapıları belirlemektir. Tutumu ve öznel normu, görmezden gelmiş ve bunların yerine "Algılanan Fayda" ve "Algılanan Kullanım Kolaylığı"nı koymuşlardır. Algılanan fayda, bireylerin, icatların kullanılmasında eylemlerin, görevlerin etkinliğini artıracağına ilişkin duydukları güvenlerini açıklar. Çalışmayı iyileştirmek ve uzmanlık düzeylerini yükseltmek için yeniliklerin uygulanmasını ifade eder. Algılanan faydanın yokluğunda, yeniliklerin uygulanması olumsuz sonuçlanabilecektir.

Müşteri sadakatinin, müşteri-işletme ilişkilerinin farklı kapsamlarda ortaya konduğu çalışma sayısı oldukça fazladır. Çalışmamızda müşteri sadakati, teknoloji kabulü modellerinde yer alan değişkenlere etkisi olacağı düşüncesi ile incelenmeye değer görülmüştür. Müşteri sadakati kavramı, sadık müşterilerin işletmelerin ürünlerine olan ilgilerinin sürekliliğini sağlaması bakımından önemlidir. Özellikle işletmelerin müşterilerine sunduğu değerlere ilgi göstermesi beklenen sadık müşteriler, ciddiye alınmadığı takdirde, olumsuz sonuçlar ortaya çıkabilecektir. Müşteri sadakati, müşteri bakış açılarının analiz edilmesine imkân sağlar. Bu sayede işletmeler, ilgilenmeleri gereken faaliyet ve alanları netleştirebilirler ve geliştirebilirler. Ayrıca potansiyel müşterilerin tespit edilmesini desteklerler ve yeni pazar segmentlerini ortaya çıkartabilirler. Bankacılık açısından, müşteri sadakati, müşterinin kendisini belirli bir zaman aralığı için belirli bir finansal kurumun hizmetlerine adaması olarak ifade edilebilir.

Bankacılık, müşterilerinin yatırımlarını belirli getiriler karşılığında topladığı ve yine müşterilere kaynak yaratmak için bu fonları, uygun şekilde yönlendirdiği finansal kurumlardır. Bankacılık süreçleri, mobil bankacılık uygulamaları gibi modern tekniklere uyum sağlamak için yıllar içinde gelişme ve değişimler yaşamıştır. Mobil bankacılık, bankacılık işlemlerinin mobil cihaz uygulamaları üzerinden kullanılmasıdır. Bankalar, güvenlik, uyum ve benimsenme sorunlarına rağmen maliyet, geniş müşteri kesimlerine hitap edebilme, etkin ve verimli süreçler yürütebilme adına, çeşitli mobil bankacılık uygulamalarının kullanılması ve yaygınlaşması için büyük çabalar sarf etmektedirler.

Çalışmamızda, anket aracılığıyla elde edilen verilerle, tanımlayıcı bir araştırma yöntemi uygulanmıştır. Anket uygulamasında elde edilen verilerin temininde katmanlı, rastgele ve sistematik örneklem yöntemi kullanılmıştır. Elde edilen

veriler, Faktör Analizi, ANOVA Testi ve Doğrusal Regresyon Analizleri ile değerlendirilmiştir. Hipotezler üzerindeki tartışmalar, Mobil bankacılık faaliyetleri ile Teknoloji Kabul Modelleri arasındaki ilişkinin, Uganda'daki Kampala eyaletindeki durumunun tespitine yönelik bir sonuç keşfetmeye odaklanmıştır.

Çalışmadaki amacın daha iyi anlaşılması için, öncelikle teorik olarak teknolojinin kabulüne yönelik çeşitli başlıklardan bahsedilmiştir. Buna rağmen bu araştırma tüm dikkatini Teknoloji Kabul Modeli ve Sebepli Davranış Teorisine vermiştir. Çalışmada, ankete katılanların demografik özellikleri ile bahsedilen model ve teoride yer alan algılanan kullanım kolaylığı, algılanan fayda, tutum, davranışsal niyet değişkenlerine ve öneminden dolayı müşteri sadakati değişkenine yer verilmiştir. Çalışmada, algılanan kullanım kolaylığının, mobil bankacılık faaliyetlerinin gerçekleştirilmesinde, tutumu ve davranışsal niyeti etkileyen yapısı olduğu ortaya konulmuştur.

Ankete dâhil olan katılımcılardan, 217'sinden elde edilen veriler neticesinde, algılanan kullanım kolaylığının, 0,75 puan ile mobil bankacılık tercihlerini etkilediği ortaya konulmuştur. Bu durumda, mobil bankacılık uygulamalarını kullanmanın daha az zihinsel çaba gerektirdiği argümanından hareketle, algılanan kullanım kolaylığı ve mobil bankacılık faaliyetleri arasında güçlü bir ilişki olduğu düşüncesi desteklenmektedir. Benzer bir çalışmada, otel web sayfaları tasarım kalitesinin, algılanan kullanım kolaylığını ve algılanan kullanışlılığı, müşteri sadakatini olumlu yönde desteklediğini tespit etmiştir.

Yapılan anket çalışmasında elde edilen verilerin analizi, algılanan kullanışlılığın mobil bankacılık faaliyetlerini tercih edilmesindeki tutumu büyük ölçüde etkilediğini açıklığa kavuşturmuştur. Buradan hareketle, çoğu katılımcının, mobil bankacılık uygulamalarının, bankacılık faaliyetlerinin kalitesini artırdığını kabul ettiği tespit edilmiştir. Algılanan kullanışlılığın, müşteri sadakatini etkilediği hipotezi, müşteri sadakatinde meydana gelebilecek bir değişikliğin algılanan yararlılıktan kaynaklandığını beyan etmektedir. Algılanan kullanışlılığın, mobil bankacılık faaliyetleri üzerindeki etkisini araştıran bir çalışmada, algılanan kullanışlılığın, mobil bankacılık kullanma tutumunu geliştirdiğini ifade edilmiştir. Ayrıca bir başka çalışmada ise, algılanan kullanışlılık açısından, işletmelerce sunulan mobil anlık mesajlaşma uygulamalarını kullanmanın, müşteri sadakatini olumlu etkilediği ortaya konulmuştur.

Tutum değişkeninin, mobil bankacılık faaliyetlerinin tercih edilmesinde, davranışsal niyeti etkilediği hipotezi yüksek bir puanla tespit edilmiştir. Katılımcıla-

rın tutumlarının, mobil bankacılık faaliyetlerini tercih etme niyetlerini artırdığı kabul edilebilir. Bu hipoteze ilişkin, mobil bankacılık faaliyetleri ve müşteri sadakati konusunda yapılan bir başka çalışmada, mobil bankacılığı tercih etme tutumu ve niyeti arasında bir korelasyon olduğu ortaya konulmuştur. Bununla birlikte, farklı bir çalışmada, tutumun, mobil bankacılık ile ilişkili olması beklenmesine rağmen, elde edilen bulgulardan hareketle, tam tersi bir sonuç tespit edilmiştir.

Elde edilen verilerden hareketle yapılan analizler, davranışsal niyet değişkeninin, mobil bankacılık uygulamalarının tercih edilmesinde, diğer değişkenlere göre en yüksek puanı aldığı sonucunu ortaya koymuştur. Bu açıdan, ankete katılan katılımcıların ekseriyetinin, mobil bankacılık uygulamalarını tercih etmelerindeki faktörün davranışsal niyet olduğu söylenebilir. Bu bağlamda yapılan bir başka çalışmada, davranışsal niyetin, teknolojik buluşların kabul edilme olasılığını artırdığı vurgulanmıştır.

Kullanıcıların demografik özellikleri ile mobil bankacılık faaliyetlerine karşı tutumlarını belirlemeye yönelik hipotezler araştırıldığında, cinsiyet, yaş, meslek ve eğitimin mobil bankacılık faaliyetleri ile ilişkisine yönelik tutumlarında önemli farklılıklar tespit edilmemiştir. Bu sonuçlar, üniversite akademik ve idari personelinin online alışveriş davranışlarını belirlemeye yönelik yapılan bir çalışma ile benzerlik göstermektedir. İlgili çalışma, online alışverişi kabul etme tutumlarının mesleklere göre farklılık göstermediğini ortaya koymuştur. İspanya'da 2104 kişi üzerinde yapılan bir başka çalışmada ise, cinsiyetin mobil ticaretin tercih edilmesi ve kullanım tutumunu etkilemediğini doğrulamıştır. Benzer bir amaçla polis memurları kapsamında yapılan ve yaş değişkeninin teknoloji kabulünü etkileyip etkilemediğini yönelik gerçekleştirilen bir çalışmada da, farklı yaş gruplarının tutumları arasında hiçbir farklılık olmadığı ifade edilmiştir. Bu açıdan, yaşlı ve genç polis memurlarının, işlerini yürütmek için teknolojiyi eşit derecede kabul ettiği sonucu çıkmaktadır. Kanada'da yapılan ve eğitim değişkeninin, teknoloji kullanımındaki rolü üzerine gerçekleştirilen bir araştırmada ise, eğitimin teknolojiyi kullanma tutumunu etkilemediğini ileri sürülmüştür.

Teknolojinin kabulüne yönelik, işletmeler ve müşterileri odak alan birçok farklı çalışma söz konusudur. Ancak, teknolojinin işletmeler ve müşteriler açısından etkinlik ve verimlilik üzerinde olumlu etkisinin olacağı beklentisinden dolayı, farklı sektörlerde araştırılması da gerekliliktir. İşletmeler ile müşterilerin

teknolojiye bakışları ve tercih etmeleri arasındaki uyumsuzlukların tespiti ve giderilmesine yönelik stratejilerin geliştirilmesi her iki tarafa da fayda sağlayabilecektir. Özellikle Bankacılık Sektöründe, mobil bankacılık uygulamalarının, bankalara, bireysel ve kurumsal müşterilere ve dolayısıyla genel ekonomik duruma sağlayabileceği faydaları vurgulamak için bu tür çalışmaların sonuçları dikkatle değerlendirilmelidir. Özellikle hükümetlerin, mobil bankacılık faaliyetlerinin geliştirilmesine yönelik altyapı yatırımlarının gerçekleştirmesi, işletmelerin, müşterilerin bu tür uygulamalara yönelik tutumlarını olumlu etkilemeyi amaçlayan stratejiler geliştirmeleri, mobil bankacılığa bakışı değiştirebilecektir. Mobil bankacılık faaliyetlerinin sağlayabileceği, maliyet avantajı, hız ve uygulama kolaylıklarının geliştirilerek yaygınlaştırılmaya çalışılması, Uganda özelinde gelişmemiş ve gelişmekte olan ülkeler açısından başka sektörleri ve dolayısıyla ekonomik yapıyı olumlu etkilemesi mümkün görülebilir. Mobil bankacılık kapsamında söz konusu olan uygulamaların, geliştirilmesi, yaygınlaştırılması ve güncel hizmetlerin tüm Uganda toplumuna sunulabilmesi, ilgili teknolojilere uzak finansal kurumların daha ucuz, daha geniş ve daha hızlı hizmetler sağlayabilecek tekniklerle donatılmasına imkân tanıyacaktır. Dahası, dünya dijital ekonomiyi yaşarken, gelişmemiş ülkelerin bu imkânlardan yararlanması birçok alanda değişime sebep olabilecektir.