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Determinants of Mobile Banking Services Adoption in the Fako Division of Cameroon

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Abstract

This study examines the key determinants of mobile banking adoption in the Fako Division of Cameroon, focusing on perceived trust and security, perceived cost, and marketing communication, while accounting for gender and education. A quantitative approach was employed, collecting data from 356 respondents via structured questionnaires. Reliability analysis confirmed strong internal consistency for all constructs (Cronbach's $\alpha > 0.70$). Pearson correlation and multiple regression analyses revealed that trust and security ($\beta = 0.428$, $p < 0.001$) and marketing communication ($\beta = 0.367$, $p < 0.001$) positively and significantly influence mobile banking adoption, while perceived cost ($\beta = -0.312$, $p < 0.001$) negatively affects adoption. Education also positively predicted adoption ($\beta = 0.164$, $p = 0.023$), whereas gender was not significant. The model accounted for 55% of the variance in adoption ($R^2 = 0.551$), indicating a strong explanatory power. These findings highlight the importance of building trust, implementing affordable pricing strategies, and enhancing awareness campaigns to increase adoption rates. The study provides practical insights for financial institutions, telecom operators, and policymakers seeking to improve mobile banking uptake and promote financial inclusion in emerging economies.

Keywords: mobile banking, trust and security, cost, marketing communication, Cameroon, financial inclusion

1. Introduction

Mobile banking has emerged as one of the most transformative innovations in the global financial sector, reshaping the way individuals and businesses access and utilize financial services. In both developed and developing economies, mobile banking has been promoted as a tool for financial inclusion, cost reduction, and efficiency in service delivery. Across Sub-Saharan Africa, the proliferation of mobile phones has catalyzed the adoption of mobile financial services, bridging the gap for previously unbanked populations. Cameroon has not been left out of this trend, as mobile money and banking services have grown rapidly, especially in urban centers such as Buea and other parts of the Fako Division. Studies such as those by Elle and Embi (2023) and Meli, Djoumessi, and Djiogap (2022) have emphasized how socio-economic factors, digital product attributes, and consumer characteristics shape the adoption of mobile financial services in Cameroon, reflecting the dynamic interplay between technology and consumer behavior.

Despite the rapid growth of mobile financial services in Cameroon, adoption levels of mobile banking services remain uneven, with many users relying more heavily on mobile money transfers than on integrated mobile banking platforms. Research by Loua (2023) and Wantchami et al. (2021) highlights that factors such as trust, ease of use, perceived security, and socio-economic status strongly influence adoption decisions. Similarly, international studies, including Mulili (2022) in Kenya and Wamai and Kandiri (2015), provide evidence that consumer awareness, accessibility, and financial literacy significantly determine mobile banking usage in developing countries. Yet, in the Fako Division, where financial infrastructure is still developing, many potential

users remain skeptical about mobile banking services due to concerns over fraud, limited digital literacy, and poor consumer protection frameworks, as also observed by Stephane (2018). These challenges point to a persistent gap between the availability of mobile banking services and their effective utilization.

The problem therefore lies in the paradox that, while mobile banking services are readily available and increasingly marketed by financial institutions in Fako Division, adoption levels remain suboptimal compared to the potential user base. Issues such as limited trust in digital platforms, inconsistent network quality, and lack of consumer education on mobile banking functions continue to hinder widespread adoption. Furthermore, cultural factors, risk perception, and socio-demographic characteristics, including education level and income, appear to constrain consumer willingness to shift from traditional banking and mobile money transfers to fully integrated mobile banking systems (Mefoute Badiang & Nkwei, 2024). Consequently, the potential of mobile banking to promote financial inclusion and enhance economic development in the Fako Division is not being fully realized.

In light of this, the study seeks to address the central research question: what are the determinants of mobile banking services adoption in the Fako Division of Cameroon? More specifically, it explores the extent to which factors such as perceived ease of use, perceived security, trust, socio-economic characteristics, and consumer awareness influence mobile banking adoption. The research objectives are therefore to examine the impact of technological and socio-economic factors on mobile banking adoption, to assess the role of trust and security perceptions in shaping consumer decisions, and to determine the extent to which demographic characteristics, including education and income, affect adoption levels. By doing so, the study contributes to a better understanding of the drivers and barriers to mobile banking services adoption in a developing economy context, providing insights that may guide financial institutions, regulators, and policymakers in enhancing financial inclusion strategies in Cameroon.

2. Literature Review

2.1 Theoretical Literature

The Technology Acceptance Model (TAM), developed by Davis in 1986 and further refined in 1989, is one of the most widely applied theoretical frameworks for understanding how individuals come to accept and use new technologies. The model was originally introduced to explain the determinants of computer acceptance and has since been extended across different domains, particularly in the adoption of information systems and financial technologies. The central statement of TAM is that two main beliefs Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) directly influence an individual's attitude toward using a technology, which in turn affects their behavioural intention to use it and ultimately their actual usage. Perceived usefulness refers to the degree to which a person believes that using a particular system will enhance their performance, while perceived ease of use relates to the degree to which a person believes that using the system will be free of effort.

The model is built on the assumption that user acceptance of technology is primarily determined by these perceptions, and that external factors such as system design, user training, or socio-economic conditions influence adoption only indirectly through their impact on PU and PEOU. TAM also assumes that behavioural intention is a strong predictor of actual system use, thereby establishing a causal link between attitudes and technology adoption. In practice, this means that if users perceive mobile banking services as useful in performing financial transactions efficiently and easy to navigate without technical difficulty, they are more likely to develop a favourable attitude toward adopting such services in the Fako Division.

The framework of TAM is simple and parsimonious, focusing on PU and PEOU as the core constructs, which influence attitudes, behavioural intention, and actual system use. Over time, the model has been extended into TAM2 and TAM3, incorporating factors such as subjective norms, facilitating conditions, and experience, but the original structure remains foundational. In the context of mobile banking adoption, the model allows researchers to map out how consumer perceptions about convenience, efficiency, security, and system usability translate into adoption behaviour. For instance, mobile banking users in Fako Division may be influenced not only by the perceived benefits of quick money transfers and balance inquiries but also by the degree to which they find the applications user-friendly despite limited digital literacy levels.

An appraisal of the model reveals its strengths in its clarity, predictive power, and adaptability across various technological contexts. It has been successfully applied in studies such as those by Wamai and Kandiri (2015) in Kenya and Bara and Ali (2025) in Jordan, which found that perceived ease of use and perceived usefulness significantly drive mobile banking adoption. Similarly, Loua (2023) and Mefoute Badiang and Nkwei (2024) demonstrate its relevance in African contexts, where consumer perceptions are critical to overcoming barriers such as trust deficits and financial illiteracy. The model's simplicity makes it easy to operationalize and test empirically, allowing for straightforward measurement of constructs in survey-based research such as the current dissertation.

However, TAM is not without criticisms. Scholars argue that it is overly simplistic, focusing too narrowly on PU and PEOU while ignoring other critical determinants of adoption such as cultural influences, trust, risk perception,

and socio-economic constraints. Critics such as Venkatesh et al. have noted that TAM may fail to capture the complexity of technology adoption in developing countries, where structural issues like infrastructure, regulatory environment, and consumer protection significantly shape adoption outcomes. In the case of Cameroon, where concerns about fraud, poor network connectivity, and limited awareness persist, relying solely on PU and PEOU may not provide a complete picture of adoption behaviour.

Despite these limitations, TAM remains highly relevant to the present study on the determinants of mobile banking services adoption in the Fako Division of Cameroon. Its constructs provide a strong theoretical lens for analysing how users' perceptions of mobile banking services influence their intention to adopt. By integrating TAM with context-specific variables such as trust, security, and socio-economic status, the study can produce a more comprehensive understanding of adoption behaviour. This makes TAM not only a suitable but also a practical framework for grounding the investigation, as it aligns with the study's objective of identifying the key factors that influence mobile banking adoption in a developing country context where financial inclusion is a critical policy goal.

2.2 Empirical Literature

Loua's (2023) study looks at what influences the uptake of online mobile lending and how financial laws in Cameroon affect SMEs in a moderating method. Utilizing TAM factors (Technological Infrastructure Awareness, Trust, Perceived Risk, Usefulness, and Behavioural Intention). The study explores the ways in which financial rules affect SMEs' adoption of mobile money through the financial liberalization theories as well as the moderating impact of financial regulations on the SME's intention to adopt mobile money in Cameroon. Using a questionnaire and Smart PLS version 3.3.7 for analysis, the study uses a mixed-method analysis with a sample size of 384 participants. According to the findings, financial management procedures may be improved via mobile money services and technology advancements. In addition to offering useful insights into the advantages of mobile financing for SMEs and economic growth, the research advances the theoretical understanding of financial inclusion and literacy. The research contributes theoretically by providing theoretical improvements to advance financial inclusion and financial literacy Recommendations cover consumer security and privacy, licensing, permission, and service execution.

Wantchami et al. (2021) examines the factors that enhance the adoption and use of mobile money in Buea, capital of the South West Region of Cameroon. The theoretical framework used is the diffusion of innovation. The qualitative approach is adopted, with 10 mobile money operators and 10 mobile money users interviewed using a structured interview protocol. Results show that participants prefer adopting and using mobile services because they are easy to use, convenient, readily accessible, and have less charges compared to the traditional banking system. Telecommunications companies should therefore, continue to consider less charges and bonuses as a strategy to increase penetration and adoption of mobile money services. Likewise, the instructions and language essential to effect Mobile Money operations like internet and airtime purchase should remain simple.

Bara & Ali (2025) examines user behaviour across new banking technologies and resistance to adoption, focusing on factors such as perceived ease of use, usefulness, cost, social influence, and trust. The study employed convenience sampling because of privacy restrictions and the lack of a reliable customer database. 498 individuals completed a structured questionnaire, and 437 of them provided valid answers (87.8%). Using a 5-point Likert scale, the questionnaire evaluated demographic information and opinions about the adoption of mobile banking. The responses were analysed using SmartPLS software. The results reveal that perceived usefulness is a key predictor of the willingness of the Jordanian population to adopt mobile banking. Perceived risk also positively impacts mobile banking usage, while perceived ease of use presents a moderate but significant barrier to adoption. Perceived ease of use also has a significant influence on perceived usefulness, which mediates its effect on adoption. While social influence plays an important role in adopting mobile banking services, trust does not directly affect the intention to use these services.

Mefoute Badiang & Nkwei (2024) examines the antecedents of Mobile banking (M-banking) app adoption, explores post-adoption effects, and tests the moderating effect of consumer status orientation on the relationship between adoption intention and its consequences. The conceptual model hypothesized 20 relationships, including 10 moderations. Hypotheses are tested using the structural equation modelling method (PLS-SEM) on a sample of 509 individuals. The results reveal that the main variables of 'users' rational perception, namely behavioural control and terminal security, significantly influence the intention to adopt the application, which in turn impact relationship quality and financial inclusion. However, hedonic expectations do not have a significant impact on the intention to adopt the application; the impact of culture in these relationships is further established; indeed, traditional and modern values moderate the impact of the intention to adopt the application on key post-adoption factors, financial inclusion, and relationship quality. The main recommendations and limitations of the research are discussed.

Mulili (2022) examine the influence of perceived risks (financial risk), perceived usefulness (convenience and cost

reduction) and regulatory factors (interoperability and privacy) on the adoption of mobile banking. A sample size was 57 was obtained through convenient sampling. A correlation analysis between perceived usefulness, perceived risks, regulatory factors and mobile banking adoption was conducted. A statistically significant correlation between perceived usefulness and adoption of technology was found (r=.63, p=0.00). The study found the correlation between perceived risks and adoption of technology to be strong and statistically significant (r=.82, p=0.00). A statistically significant correlation between regulatory factors and technology adoption (r=.89, p=0.00) was established. From the findings, banking institutions must improve their systems security, enhance security, and reduce cost of mobile banking services.

Wamai & Kandiri (2015) investigates the effects of important factors that affect adoption of mobile banking technology by customers of Microfinance Institutions in Nairobi County, Kenya. Mobile technology usage has had various impacts on individuals and enterprises at different levels. Several factors have been sighted by different researchers as contributing either positively or negatively to the adoption of Mobile banking technology. Banks have implemented this technology to enable them reach more customers due to its ubiquitous nature and to reduce the cost of putting up new branches in their areas of operations. For this effort to be felt and for the technology to be implemented effectively, there is need to understand the factors contributing to its adoption by the customers. A sample of 210 customers were selected randomly and the researcher extended the Technology Acceptance Model (TAM) framework. The study found that both perceived usefulness and perceived ease of use positively correlate and affects adoption of mobile banking technology positively. On the other hand, Perceived Risk and Perceived transaction costs were found to have negative correlation with the adoption of mobile banking technology.

Kamdjoug et al. (2021) study aims to know what are the factors determining the adoption of M-Banking app among customers in Cameroon. In other words, what are the factors that influence users in their decisions to adopt and use a system or technology such as the MBanking app, and indirectly, what is the impact of this use on both the customers and financial inclusion? The research model developed relying on a combination of Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT2), Information System Success Model (ISSM), and Protection Motivation Theory (PMT) and other constructs; it was then tested with a sample of 223 users of the "SARA" M-Banking app of the financial institution called "Afriland First Bank". Findings revealed that: (1) utilitarian expectation, hedonic motivation, and status gain, habit, and perceived privacy concern have a significant influence on the intention to adopt M-Banking apps; and (2) the exploitative/explorative use of this technology has an impact on user's loyalty and satisfaction but also contributes strongly to fostering financial inclusion in Cameroon. Also, the multi-group analysis was performed on the sample using 2 gender-based groups (males, n=121; females, n=102).

Tengeh & Gahapa (2020) examine the factors justifying the adoption and usage of Mobile Money Services (MMS) among SMEs, the types of Mobile Money Services used by these SMEs, and the interdependences between these variables, this study adopted an exploratory approach. Representatives of 12 SMEs were interviewed during the qualitative phase to corroborate the 285 SMEs surveyed in the quantitative part of the study. Descriptive and inferential statistics were adopted to analyse the quantitative data using the Statistical Packages for Social Sciences version 26 (SPSS version 26). The researchers described the qualitative data according to themes, and the findings were combined after that. While no single factor was accountable, it emerged that accessibility, safety, and convenience were the main factors that entice SMEs in Douala, Cameroon to embrace mobile money services in the effort to receive money from clienteles, pay suppliers, and purchase airtime for additional transactions (most preferred mobile money services). Furthermore, it was found that there was a statistically significant association between most of the motivating factors cited and the most preferred mobile money services used by SMEs in Douala. These findings validate the role that mobile money plays in promoting the inclusive finance agenda for SMEs, mainly in the context of emerging economies where the majority of people and businesses do not have access to banking services and therefore may be of interest to policymakers and different stakeholders.

3. Methodology

The methodology of this study is designed to provide a systematic approach for examining the determinants of mobile banking services adoption in the Fako Division of Cameroon. Given the objectives of the research, a quantitative research design is adopted, as it allows for the collection and statistical analysis of numerical data to test the hypothesized relationships between the independent variables perceived usefulness, perceived ease of use, trust, security, and socio-economic characteristics and the dependent variable, mobile banking adoption. A cross-sectional survey approach is employed, which is suitable for capturing data from a large number of respondents within a single period of time. This design is also justified because it enables the study to generalize findings to the wider population of mobile banking users in the Fako Division, thereby providing meaningful insights into adoption behaviour in a developing economy context.

The target population of the study consists of individual customers of commercial banks and microfinance institutions in the Fako Division who have access to mobile phones and are either current users or potential users

of mobile banking services. This population is considered appropriate since mobile banking services are delivered through banks and financial institutions, and customers' perceptions are central to adoption decisions. Given the large and diverse nature of the population, the study relies on a sample of 356 respondents, which is statistically sufficient for quantitative research of this type. The sample size determination is based on Cochran's (1977) formula for calculating representative samples, adjusted for the estimated mobile banking user base in the division. A stratified random sampling technique is applied to ensure that respondents are drawn proportionally from different strata such as gender, age groups, education levels, and income brackets, thus enhancing representativeness and minimizing sampling bias.

The model specification for this study is grounded in the Technology Acceptance Model (Davis, 1989), extended with additional constructs relevant to the Cameroonian context, such as trust and security. The general model can be expressed as:

$$MBA = \beta_0 + \beta_1 PTS + \beta_2 PEC + \beta_3 PMC + \beta_4 GEND + \beta_5 LEDU + \varepsilon$$

Where MBA represents mobile banking adoption, PU represents perceived trust & security, PEC is perceived cost, PMC is perceived mmarketing communication, GEND captures Gender (Control), LEDU represents Education (Control), and ε is the error term. This specification allows the study to empirically test how the key constructs influence the adoption of mobile banking services among customers in the Fako Division.

The study employs a structured questionnaire as the main instrument for data collection. The questionnaire is divided into sections that capture demographic information, perceptions of mobile banking services, and adoption behaviours. Measurement of constructs is done using a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Perceived usefulness and perceived ease of use are measured using items adapted from Davis (1989) and Venkatesh and Davis (2000). Trust and perceived security are measured through items adapted from prior mobile banking and mobile money adoption studies such as Wantchami et al. (2021) and Loua (2023). Socio-economic characteristics are measured through categorical items such as gender, education level, age, and income. The questionnaire is pre-tested on a small group of respondents to ensure reliability and validity, with necessary modifications made before the main data collection.

For data analysis, both descriptive and inferential statistical techniques are applied. Descriptive statistics such as frequencies, percentages, means, and standard deviations are used to summarize the demographic profile of respondents and general adoption trends. Inferential statistics, including correlation and multiple regression analysis, are employed to examine the relationships between the independent variables and mobile banking adoption. The multiple regression model allows for testing the significance and strength of each determinant while controlling for demographic factors. Additionally, the level of education is treated as a categorical control variable, analysed using dummy variables within the regression model. Statistical software such as SPSS or STATA is employed to conduct the analysis, ensuring accuracy and robustness of results. Reliability of the measurement scales is tested using Cronbach's alpha, while construct validity is established through factor analysis.

To test the internal consistency of the scales used in this study, Cronbach's alpha was computed for each construct. A reliability threshold of 0.70 or higher was considered acceptable (Nunnally, 1978).

Table 1. Cronbach's Alpha Results

Construct	**Number of Items**	**Cronbach's Alpha (α)**
Mobile Banking Adoption	4	0.861
Perceived Trust & Security	5	0.876
Perceived Cost	4	0.791
Marketing Communication & Awareness	5	0.842

Source: Author Computation.

The reliability analysis presented in Table 1 shows that all the constructs used in this study have Cronbach's alpha values above the widely accepted threshold of 0.70, indicating satisfactory internal consistency of the measurement instruments (Nunnally, 1978; Hair et al., 2019). Specifically, Mobile Banking Adoption (α = 0.861) and Perceived Trust & Security (α = 0.876) demonstrate excellent reliability, reflecting that the items measuring these constructs are highly consistent. Marketing Communication & Awareness equally recorded strong reliability with an alpha value of 0.842, falling within the "good" range as classified by George and Mallery (2016). Perceived Cost, with a Cronbach's alpha of 0.791, also surpasses the 0.70 benchmark, suggesting acceptable reliability. Overall, these results affirm that the measurement scales applied in this study are reliable and suitable for further statistical

analysis, including correlation and regression modelling.

The high reliability of the constructs, as evidenced by Cronbach's alpha values above 0.70, provides a solid foundation for the regression analysis conducted in this study. Reliable measurement scales ensure that the observed relationships among variables — namely, Mobile Banking Adoption, Perceived Trust & Security, Perceived Cost, and Marketing Communication & Awareness reflect true associations rather than random measurement error (Nunnally, 1978; Hair et al., 2019). Consequently, the significant effects observed in the regression results can be interpreted with confidence, as the consistency of the underlying survey items reduces the likelihood of bias or noise distorting the findings. In essence, the validated reliability of the constructs strengthens the overall robustness and credibility of the statistical conclusions drawn regarding the determinants of mobile banking adoption in the Fako Division.

Ethical considerations are observed throughout the research process. Participation is voluntary, and respondents are assured of confidentiality and anonymity in handling their responses. Informed consent is obtained from all participants, and the study complies with ethical research guidelines. This methodological framework is therefore well suited to addressing the research objectives and providing reliable empirical evidence on the determinants of mobile banking adoption in the Fako Division of Cameroon.

4. Results and Discussion

The analysis examines the effects of perceived trust and security, perceived cost, and marketing communication and awareness on mobile banking adoption while controlling for gender and level of education.

4.1 Descriptive Statistics

Table 2. Demographic Profile

Variable	**Category**	**Frequency**	**Percentage (%)**
Age	18–25	102	28.7
	26–35	128	36.0
	36–45	78	21.9
	46–55	32	9.0
	56+	16	4.5
Gender	Male	186	52.2
	Female	170	47.8
Level of Education	Primary	34	9.6
	Secondary	102	28.7
	Tertiary	180	50.6
	Other	40	11.2
Occupation	Student	88	24.7
	Employed	142	39.9
	Self-employed	86	24.2
	Unemployed	40	11.2
Mobile Banking User	Yes	312	87.6
	No	44	12.4

Source: Author Computation.

The demographic profile of the 356 respondents reveals that the majority of participants are young adults, with 36.0% aged between 26–35 years and 28.7% aged 18–25 years, indicating that mobile banking adoption in the Fako Division is predominantly influenced by the younger population. Gender distribution is relatively balanced, with males constituting 52.2% and females 47.8%, suggesting an equitable representation of both sexes in the study. In terms of education, over half of the respondents (50.6%) have attained tertiary education, while 28.7% have secondary education, reflecting a generally well-educated sample. Regarding occupation, 39.9% are employed, 24.7% are students, 24.2% are self-employed, and 11.2% are unemployed, indicating that the study covers a diverse workforce and student population. Notably, a high proportion of respondents (87.6%) are current

users of mobile banking services, highlighting the relevance of the sample for examining adoption behaviour. Overall, the demographic distribution suggests that age, education, and occupation may influence mobile banking adoption, while gender appears to be evenly distributed.

4.2 Inferential Statistics

Table 3. Correlation Matrix

Variable	Adoption	Perceived Trust & Security	Perceived Cost	Perceived Marketing Communication	Gender	Education
Adoption	1					
Perceived Trust & Security	0.63**	1				
Perceived Cost	-0.41**	-0.12*	1			
Perceived Marketing Communication	0.59**	0.58**	0.08	1		
Gender	0.04	0.05	-0.04	0.06	1	
Education	0.15*	0.18**	0.12*	0.20**	0.02	1

Source: Author Computation. Note: *p < 0.01; p < 0.05.

The Pearson correlation matrix in Table 3 indicates the strength and direction of relationships among the study variables. Mobile banking adoption is strongly and positively correlated with Trust & Security ($r = 0.63$, $p < 0.01$) and Marketing Communication ($r = 0.59$, $p < 0.01$), suggesting that higher perceived security and greater awareness significantly enhance adoption. Conversely, Perceived Cost shows a moderate negative correlation with adoption ($r = -0.41$, $p < 0.01$), indicating that higher costs discourage users from adopting mobile banking services. Gender exhibits a very weak and non-significant correlation with adoption ($r = 0.04$), implying no meaningful difference in adoption between males and females. Education has a weak but statistically significant positive correlation with adoption ($r = 0.15$, $p < 0.05$), suggesting that respondents with higher educational levels are slightly more likely to adopt mobile banking. Overall, these results support the expected relationships, highlighting Trust & Security, Perceived Cost, and Marketing Communication as key determinants of mobile banking adoption, while demographic factors, particularly gender, appear less influential.

Table 4. Regression Results (with Control Variables)

Variable	Coefficient (β)	Std. Error	p-value
Perceived Trust & Security	0.428	0.058	0.000
Perceived Cost	-0.312	0.049	0.000
Perceived Marketing Communication	0.367	0.063	0.000
Gender	0.041	0.052	0.430
Education	0.164	0.072	0.023
_cons	1.212	0.214	0.000
Observation	356		
R-square	0.551		
Adjusted R-square	0.544		
F-statistics	0.001		

Source: Author Computation.

The regression results in Table 4 show the effects of the independent variables—Perceived Trust & Security, Perceived Cost, and Marketing Communication—on mobile banking adoption, while controlling for gender and education. Perceived Trust & Security has a significant positive effect on adoption ($\beta = 0.428$, $p < 0.001$), indicating that respondents who perceive mobile banking services as secure and trustworthy are more likely to adopt them. Perceived Cost, on the other hand, has a significant negative effect ($\beta = -0.312$, $p < 0.001$), suggesting

that higher costs reduce the likelihood of adoption. Marketing Communication also has a significant positive impact on adoption ($\beta = 0.367$, $p < 0.001$), highlighting the importance of awareness campaigns and effective communication in encouraging users to adopt mobile banking services.

Among the control variables, gender does not have a significant effect on adoption ($\beta = 0.041$, $p = 0.430$), implying that males and females do not differ meaningfully in their adoption behavior. Education, however, shows a positive and significant effect ($\beta = 0.164$, $p = 0.023$), indicating that higher educational attainment slightly increases the likelihood of adopting mobile banking services. The constant term (intercept) is positive and significant ($\beta = 1.212$, $p < 0.001$), representing the baseline level of adoption when all predictors are held at zero.

The model explains a substantial proportion of the variation in mobile banking adoption, with an R^2 of 0.551 and an adjusted R^2 of 0.544, meaning that approximately 55% of the variance in adoption is accounted for by the independent and control variables combined. The overall model is statistically significant, as indicated by the F-statistic ($p < 0.001$), confirming that the predictors jointly have a meaningful influence on mobile banking adoption. These results suggest that trust and security, cost considerations, and marketing communication are key determinants of mobile banking adoption in the Fako Division, while education slightly moderates adoption, and gender does not play a significant role.

4.3 Discussion

The variable Perceived Trust & Security exhibits a significant positive relationship with mobile banking adoption ($\beta = 0.428$, $p < 0.001$). This aligns with findings from Merhi et al. (2019), who identified perceived security as a critical determinant of mobile banking usage. Their study highlighted that institutional and technological trust significantly influence users' behavioural intentions to adopt mobile banking applications.

Perceived Cost shows a significant negative effect on adoption ($\beta = -0.312$, $p < 0.001$), suggesting that higher perceived costs deter users from adopting mobile banking services. This finding corroborates the work of Wessels and Drennan (2010), who concluded that perceived cost negatively affects mobile banking adoption intentions.

The coefficient for Perceived Marketing Communication is positive and significant ($\beta = 0.367$, $p < 0.001$), indicating that effective marketing communication strategies enhance mobile banking adoption. This supports the findings of Çelik and Özköse (2023), who emphasized the role of marketing communication in influencing consumer acceptance of mobile banking services.

5. Conclusion

The study investigated the determinants of mobile banking adoption in the Fako Division, focusing on perceived trust and security, perceived cost, and marketing communication, while controlling for gender and education. The findings indicate that perceived trust and security is the strongest positive predictor of mobile banking adoption, highlighting that users are more likely to adopt services when they perceive transactions to be secure and the system to be reliable. Perceived cost was found to significantly deter adoption, suggesting that high or unclear charges reduce users' willingness to engage with mobile banking platforms. Additionally, marketing communication and awareness positively influence adoption, demonstrating that informed and well-targeted campaigns effectively increase user uptake.

The analysis of control variables revealed that education positively affects adoption, indicating that more educated individuals are better able to understand and use mobile banking services. Conversely, gender was not a significant predictor, suggesting that both males and females have similar adoption patterns in this context. Overall, the regression model explained approximately 55% of the variance in mobile banking adoption, demonstrating that the selected determinants and controls are relevant and meaningful. These results affirm that a combination of trust, affordability, and effective communication, alongside consideration of user education, are essential for promoting mobile banking adoption in emerging economies like Cameroon.

6. Policy Recommendations and Implementation

Based on the findings, the following policy recommendations are proposed to enhance mobile banking adoption in the Fako Division and similar contexts:

(1) Strengthening Trust and Security

- Financial institutions and mobile network operators should invest in robust security systems, including two-factor authentication, encryption, and fraud monitoring.
- Transparent communication regarding security measures, privacy policies, and user protection mechanisms should be prioritized to build consumer confidence.

Mobile banking providers should prioritize robust security infrastructure and transparent communication regarding safety measures. Since perceived trust significantly drives adoption, investments in cybersecurity, fraud detection, and privacy protection can strengthen customer confidence and retention.

(2) Reducing Perceived Cost Barriers

- Banks and telecom operators should adopt transparent and affordable pricing structures, avoiding hidden fees that could discourage adoption.
- Consider introducing tiered pricing or subsidies for low-income users to promote financial inclusion.

Providers should adopt affordable and transparent fee structures to reduce cost-related barriers. Implementing tiered pricing or subsidies for low-income users can enhance accessibility, thereby expanding the customer base.

(3) Enhancing Marketing Communication and Awareness

- Implement continuous educational campaigns through SMS alerts, social media, community outreach, and workshops, particularly targeting populations with lower digital literacy.
- Highlight the benefits, safety measures, and step-by-step usage of mobile banking services to reduce apprehension and encourage adoption.

The significant impact of marketing communication suggests that providers must engage in continuous educational campaigns. Utilizing digital channels, social media, SMS, community workshops, and local influencers can improve awareness, demystify mobile banking processes, and increase adoption.

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