



Nepalese banking in the digital era: An evolution of mobile banking adaptation

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ABSTRACT

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The research paper assesses the influence of perceived ease of use, perceived trust, social influence, and facilitating conditions on behavioral intention to adopt mobile banking services. The study fills up the research gap revealed in the literature. Research embraced the positivism philosophy and deductive approach. The cross-sectional primary sources of data employed for the study. A convenience sampling technique was employed in this research. The structured questionnaire of 607 was distributed to respondents in Kathmandu, Nepal, and received only 400 useful questionnaires. Descriptive statistics were utilized to depict the general background information of respondents. Correlation analysis was utilized to assess links between predictors and response variables. Further, linear regression analysis is employed to investigate the effects of predictors on response variables. The findings of the result revealed positive links between perceived ease of use, perceived trust, social influence, facilitating conditions, and behavioral intention to adopt mobile banking services. It depicted that the factors determining the behavioral intention for the adoption of mobile banking services depend on perceived ease of use, perceived trust, social influence, and facilitating conditions. The findings of this study contribute to existing literature and can be applied to understand the determining factors of the behavioral intention of users of mobile banking services to adopt appropriate policy and for the decision-making process.

Contribution/Originality: The recent survey contributes to the existing literature by assessing the influence of determinants of adopting mobile banking services in the Nepalese context, which reflects a path and a benchmark to investigate the behavioral dimension of mobile service users.

1. INTRODUCTION

The banking institutions' transformation into the digital era is a burning issue in the financial institutions of countries like Nepal as institutions are in the transition phase of the digital generation. As Nepal is an evolving country in a technological field, a trend of embracing services based on mobile banking by formal institutions and users is in dilemma despite the fast evolution in technology-friendly banking services around the globe. The perceived ease of use, trust, social influence, and enabling conditions among mobile banking users are dynamic elements that strongly influence their desire to embrace these services. Consequently, banks globally, including those in Nepal, have adopted mobile banking as a survival strategy in recent decades. Therefore, financial organizations at present heavily provide mobile banking services to their clients to enhance performance and retain clients through convenient digital services (Cudjoe, Anim, & Nyanyofio, 2015; Koksai, 2016).

In addition, mobile banking services are provided by direct phone calls, mobile-based internet apps, short messaging service (SMS) on mobile phones, and certain specially created "Apps" in mobile data application systems (Ashraf, 2012; Chikomo, Chong, Arnab, & Hutchison, 2006; Laukkanen & Lauronen, 2005; Shareef, Baabdullah, Dutta, Kumar, & Dwivedi, 2018). Further, the empirical previous research also examined the several factors motivating consumers to use new devices and its finding illustrated the significant role of organizational leaders and planners in promoting the positive intention of digital app users to stimulate them to utilize mobile-based banking services for their transactions depicting the modern era of technology in banking services (Simiyu, Gatawa, & Mwambia, 2018; Tan & Leby Lau, 2016; Yousafzai, 2012). Importantly, technology has transformed human life in numerous ways. Life has become easier and faster, and the gap between people has decreased. The Smart Phone is one of the greatest gifts that technology has bestowed upon humanity. Today, practically everyone owns at least one smartphone. The increased use of smartphones and their habits have provided several opportunities for all types of businesses. The smartphone market has grown to the point where the majority of enterprises in the world are now providing services through smartphone applications. Similarly, banks are providing services via smartphones. Numerous banking transactions, including balance inquiries, cash transfers, and checkbook requests, no longer need an in-person visit to the bank. These things may be accomplished using a smartphone application. The market for mobile phones, especially smartphones, is reaching new heights, and banks seek to capitalize on this boom by offering mobile banking as an alternate channel for providing services (Bhatt & Bhatt, 2016).

Moreover, banks have been able to transition from a traditional brick-and-mortar business to a user-friendly technology that can be accessed via handheld devices. Today, nearly every bank offers similar services. The race among banks is to provide a service that is both technologically and consumer-friendly. In mobile banking, banks must continue to update the service to retain customers. Application-oriented service of banks significantly depicts the essential aspects that consumers have adequately employed; as a result, banks must update to maintain and satisfy their clients. Mobile Banking refreshes the knowledge of the behavioral desire to use mobile for the transfer of amounts, funds, credit, and debit (Mohanraj & Jaganathan, 2017).

Thus, the application-oriented services of financial institutions represent a strategic initiative that facilitates users in transferring and receiving funds via digital apps (Lama, 2021). Application-based digital banking services provide several tasks, including cash issuance, money transfers, online bill payments, and total deposit identification (Lama, Subedi, Lamichhane, Karki, & Chalise, 2024). Moreover, the transfer of digital currency encompasses several functions that may be executed using app-based devices, such as smartphones, facilitating financial transfers, and payments, enabling customers to document personal information, and providing different billing options. Consequently, a digital wallet serves as a comprehensive repository of user information essential for conducting transactions with digital apps (Chawla & Joshi, 2019).

The economy of developing nations such as Nepal is mostly controlled by real money, which is used directly for investment and commerce. However, the banking pattern has changed since the invention of cell phones. Because of technological advancements, mobile banking's rapid growth has led to a significant change in how most businesses provide their goods and services to both current and future clients. The actual and anticipated objective of financial and non-financial companies in both developed and developing nations is to adopt and use mobile banking apps as a corporate practice and as a means of expanding their market share (Thapa, 2021). However, Very little attention has been paid to the study of m-banking in Nepal in the literature. Therefore, the purpose of this study is to assess more about the factors that influence the adoption of mobile banking in Nepal (Pokhrel, Adhikari, & Mishra, 2020; Shrestha, Wenan, Rajkarnikar, & Jeong, 2020; Sthapit & Bajracharya, 2019). Thus, this study aims to evaluate the impact of perceived ease of use, perceived trust, social influence, and facilitating conditions on the uptake of mobile banking services in Kathmandu, Nepal. Further, this study seeks to address the subsequent research inquiries: What factors influence the uptake of m-banking services in the Kathmandu Valley? Does the perceived ease of use, perceived trust, social influence, and facilitating conditions significantly affect the uptake of mobile banking?

2. LITERATURE REVIEW

2.1. Technology Acceptance Model (TAM)

The Technology Adoption Model (TAM) created by Davis in 1989 is a paradigm that is frequently utilized for the purpose of getting a better understanding of how users embrace new technology (Silva, 2015). The Technology Acceptance Model (TAM) suggests that perceived utility and perceived ease of use are significant factors that influence user adoption (Alomary & Woollard, 2015).

2.2. Perceived Ease of Use and Adoption of Mobile Banking Services

Perceived ease of use is an important aspect of technology acceptance, affecting user behavior and adoption of the system (Venkatesh, 2000). It relates to the degree to which people inclined to use a mechanism would be easy (Recker, Rosemann, Green, & Indulska, 2011). Perceived ease of use is dependent on a variety of factors, including control, intrinsic motivation, and emotion, which serve as anchors for initial views. Perceived ease of use changes to represent objective usability and system-specific judgments, suggesting that users with higher perceived ease of use are more inclined to use mobile banking services. In addition, when individuals are given technology to use, their first assumption is that it would simplify what they have been doing in the past. The use of new technologies should be simple. People expect to learn new technologies quickly. People are likely to accept technology more quickly when it is simple. Users are more inclined to adopt an application that they believe is easier to use than another (Davis, Bagozzi, & Warshaw, 1989).

The findings of previous studies suggested that there is a favorable correlation between the perceived ease of use and the behavioral intention to use mobile banking services among customers. According to the findings of the study conducted on the adoption of mobile banking, the impression of ease of use has a major impact on the desire to behave. Numerous studies have shown that customers' perceptions of how easy it is to utilize mobile banking services are two of the most important factors in their likelihood to use these services (Gu, Lee, & Suh, 2009; Jeong & Yoon, 2013; Widiar, Yuniarinto, & Yulianti, 2023).

H₁: There is a significant relationship between perceived ease of use and behavioral intention to adopt mobile banking.

2.3. Perceived Trust and Adoption of Mobile Banking Services

Perceived trust is indispensable to mobile banking service adoption. Trust in the bank exerts a heavy influence on users' intention to adopt mobile banking (Almarashdeh, 2016). Trust eliminates perceived risk, which is another key factor influencing adoption (Liza, 2014). Perceived usefulness, including benefits and sacrifices, has a substantial impact on customers' adoption intentions (Xiong, 2013). Innovation characteristics such as perceived relative advantage, simplicity of use, and compatibility, in addition to knowledge-based trust criteria such as regarded competence and honesty, are variables that impact attitudes toward the adoption of mobile banking (Lin, 2011).

The understanding of trust is often referring to the idea that someone or something is reliable, trustworthy, honest, and efficient. In the context of mobile banking, trust refers to the degree to which an individual believes that using mobile banking is safe and does not include any risks to their privacy (Chong, Jin, Chow, & Saint, 2010). In addition, when it comes to internet banking, customers are looking for more trustworthy channels. Because mobile banking is largely done online these days, it is critical to establish the trust of customers. The adoption intention for mobile payment uptake is directly influenced by trust, which has a direct impact (Xin et al., 2015). Thus, the adoption of mobile banking is influenced by several elements, with trust being one of the prominent considerations. The inclination to use mobile banking services is much more heavily influenced by trust (Lin, 2011; Liu, Min, & Ji, 2009; Zhou, 2011).

H₂: There is a significant relationship between perceived trust and behavioral intention to adopt mobile.

2.4. Social Influence and Adoption of Mobile Banking Services

The concept of social influence relates to an individual's perception of the impact that others have on their adoption of technology. A client's intention to utilize mobile banking can be influenced by the social environment in which they are located, which may include reference groups, family members, prominent leaders, friends, and coworkers, among other sources (Venkatesh, Morris, Davis, & Davis, 2003). According to empirical studies conducted in many countries, numerous significant factors influence mobile banking uptake. Social impact is regularly identified as a strong predictor of adoption intention (Hong, 2019; Song, 2015).

H₃: There is a significant relationship between social influence and behavioral intention to adopt mobile banking.

2.5. Facilitating Condition and Adoption of Mobile Banking Services

The term "facilitating condition" refers to the extent to which an individual believes that a technological and institutional environment continues to exist in order to allow access to technology. Several environmental factors contribute to the adoption of mobile banking, including technology resources and infrastructure, as well as support and knowledge (Venkatesh et al., 2003). The adoption of mobile banking was shown to be influenced by several different factors, including favorable conditions (Farah, Hasni, & Abbas, 2018; Micheni, Lule, & Muketha, 2013; Yu, 2012; Zhang, Lu, & Kizildag, 2018).

H₄: There is a significant relationship between facilitating conditions and behavioral intention to adopt mobile banking.

3. METHODOLOGY

The objective of the study was to determine the extent to which the perceived ease of use, perceived trust, social influence, and facilitating conditions had an impact on the behavioral intention of adopting mobile banking services among individuals who make use of mobile banking services in Kathmandu, Nepal. In addition to this, the research endeavored to test the research hypothesis to settle the research query and accomplish the research objectives. Thus, the research employed a positivist philosophy and deductive approach to test the hypotheses. The primary data through structured questionnaire 607 was disseminated among the targeted respondents and received 400 (65.89 percent) useful questionnaires. The research employed cross-sectional data. Further, the questionnaire was arranged into two different segments first consisting of the basic information of respondents and the second segment of the questionnaire represented the opinions of the respondents collecting the views and opinions based on a five-point Likert scale. Thus, the study employed Cronbach's alpha for testing reliability and descriptive statistics for generating general characteristics of respondents and employed linear regression analysis for testing hypotheses and their effects.

Table 1. Cronbach alpha of variables.

Variables	Cornbach alpha
Perceived ease of use	0.895
Perceived trust	0.886
Social influence	0.892
Facilitating conditions	0.864
Behavioral intention	0.933

Table 1 shows Cronbach's alpha which indicates the internal consistency. The Cronbach's alpha for perceived ease of use is 0.895, Cronbach's alpha for perceived trust is 0.886, Cronbach's alpha for social influence is 0.892, Cronbach's alpha for facilitating condition is 0.864, and Cronbach's alpha for behavioral intention is 0.933. The Cronbach's alpha is >0.70 for all the research variables depicting internal consistency.

3.1. Model Specification

The following model has been developed for the study:

$$BI = \alpha + \beta_1 PEU + \beta_2 PT + \beta_3 SI + \beta_4 FC + \dots \dots \dots ei \quad (1)$$

Where,

BI= Behavioral Intention to adopt mobile banking.

α = Constant/ Y-intercept.

PEU = Perceived ease of use.

PT =Perceived trust.

SI = Social influence.

FC = Facilitating Conditions.

ei = Error term.

4. DATA ANALYSES AND RESULTS

4.1. Profile of Respondents

Table 2 shows the demographic characteristics of respondents. The total number of respondents in the survey was 400 and out of them female participants were 208 (52 percent) and male 192 (48 percent). Similarly, the age group between 26 to 35 years old was 218 (54.50 percent) as the majority of respondents, and the age group above 36 remained 52 (13 percent) as the least participants' age group. Moreover, married participants were 210 (52.50 percent) and unmarried were 190 (48.50 percent). The educational background of participants with bachelor's completed remained at 169 (42.30 percent) as the majority of participants and intermediate completed remained at least 89 (22.30 percent). Similarly, the occupation of respondents as employee non-bankers remained at 211 (52.80 percent) as the leading occupation in the survey, and the least was employed banker at 93 (23.30).

Table 2. Profile of respondents.

Demographic variables	Classification	Frequency	Percent
Age of respondents	15-25	130	32.5
	26-35	218	54.5
	36 and above	52	13
	Total	400	100
Gender of respondents	Male	192	48
	Female	208	52
	Total	400	100
Marital status of respondents	Married	210	52.5
	Unmarried	190	47.5
	Total	400	100
Education of respondents	Up to intermediate	89	22.3
	Bachelors	169	42.3
	Masters and above	142	35.5
	Total	400	100
Occupation of respondents	Employed-banker	93	23.3
	Employed-non-banker	211	52.8
	Unemployed	96	24
	Total	400	100
Income level of respondents	less than 15000	83	20.8
	15001 to 30000	88	22
	30001 to 45000	83	20.8
	45001 to 60000	57	14.2
	60001 and above	89	22.3
	Total	400	100

Table 3. Use of mobile banking application.

S.N.	Status of mobile banking use	Frequency	Percentage
1	Mobile banking service use	384	96
2	Non-user of mobile banking service	16	4
Total		400	100

Table 3 depicts the status of the use of mobile banking application services by respondents. Digital application-oriented service user respondents remained 384 (96 percent) and the remaining participants were non-users of mobile banking services. A total of respondents 400 participated in the survey.

Table 4. Mobile banking service using frequency.

S.N.	Frequency of use for mobile banking service	Frequency	Percentage
1	Frequently	297	74.3
2	Occasionally	60	15
3	Rarely	34	8.5
4	Never	9	2.3
Total		400	100

Table 4 shows the frequency of using mobile banking services by participants. In the survey frequently using participants 297 (74.30 percent) remained as a majority of respondents, occasional users of mobile banking service remained at 60 (15 percent), respondents using mobile banking services rarely remained at 34 (8.50 percent) and never using respondents in the survey remained 9 (2.30 percent).

Table 5. Reason for using mobile banking services.

S.N.	Reason for using mobile banking service	Frequency	Percentage
1	Regular monetary transactions	221	55.3
2	Observe bank statement	25	6.25
3	Monitor banking transaction	80	20
4	Use for utility payment	74	18.5
Total		400	100

Table 5 reflects the respondent's purpose for using mobile banking services. A greater number of survey participants used their regular mobile banking services to conduct monetary transactions 221 (55.30 percent). The next purpose of using mobile banking service for 25 (6.25 percent) participants was to observe bank statements. Similarly, 80 (20 percent) respondents of the survey used their mobile banking to monitor banking transactions and 74 (18.50 percent) participants of the survey used their mobile banking service to make payment of utility services.

4.2. Correlation Analysis

For the purpose of determining the degree of link between variables, Pearson's correlation is utilized. Perceived ease of use, perceived trust, social influence, and facilitating conditions are the characteristics that are considered to be predictors' variables. The study's response variable is the participant's behavioral intention to utilize mobile banking.

Table 6. Correlations analysis matrix.

Variables	1	2	3	4	5
Behavioral intention	1.00				
Perceived ease of use	0.712**	1.00			
Perceived trust	0.545**	0.211**	1.00		
Social influence	0.711**	0.481**	0.530**	1.00	
Facilitating condition	0.807**	0.447**	0.596**	0.791**	1.00

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

Table 6 presents Pearson's correlation coefficient, which is a measure of the link between the perceived ease of use, perceived trust, social influence, and facilitating condition, as well as the behavioral intention to apply mobile banking services. Behavioral intention is shown to have a substantial positive link with perceived ease of use ($r = 0.712$), as demonstrated by the analysis of the results. It indicates that an increase in the perceived ease of use

contributes to a rise in the adoption of additional mobile banking services, demonstrating that user-friendly services regarding mobile banking are a factor that stimulates the usage of mobile banking services. In a similar vein, Pearson's correlation between perceived trust and behavioral intention to embrace mobile banking demonstrates a modest link ($r = 0.545$). This indicates that an increase in the level of trust among users of mobile banking services should be able to promote the adoption of mobile banking services. Furthermore, Pearson's correlation between social influence and behavioral intention discovered a substantial link ($r = 0.711$), which demonstrates that an increase in social influence contributes to an increase in the proportion of people who use mobile banking. As a conclusion, the connection between facilitating condition and behavior intention was found to have a high positive association ($r = 0.807$), which indicates that a better-facilitating condition assists in increasing the adoption of mobile banking among the users of mobile banking services in Kathmandu, Nepal.

4.3. Regression Analysis

The purpose of the regression analysis that was conducted in this study was to determine the impact that perceived ease of use, perceived trust, social influence, and facilitating conditions had on the behavioral intention to use mobile banking services of individuals. The regression model that has been calculated for the investigation is that of $BI = \alpha + \beta_1 PEU + \beta_2 PT + \beta_3 SI + \beta_4 FC + ei$. Perceived ease of use (PEU), perceived trust (PT), social influence (SI), and facilitating condition (FC) are the predictors' factors that are being investigated in this study. The response variable, on the other hand, is behavioral intention (BI).

Table 7. Regression coefficients.

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.	Adj. R square	F	Sig.
		B	Std. error	Beta					
1	(Constant)	0.310	0.134		2.316	0.021	0.734	158.652	0.000
	PEU	0.077	0.047	0.079	1.635	0.103			
	PT	0.056	0.035	0.054	1.610	0.108			
	SI	0.131	0.052	0.119	2.512	0.012			
	FC	0.424	0.056	0.380	7.522	0.000			

Note: a. Dependent variable: BI., B = Beta coefficient
PEU = Perceived usefulness, PT = Perceived trust, SI = Social influence, & FC = Facilitating condition.

A regression coefficient is presented in Table 7 for the purpose of analyzing the impact of perceived ease of use, perceived trust, social influence, and facilitating conditions on the behavioral intention to embrace mobile banking in Kathmandu, Nepal. For mobile banking adoption, the beta coefficient of perceived ease of use ($\beta = 0.077$, $p = 0.103$) demonstrates a positive influence on behavioral intention, whereas the effect determined to be negligible and is not significant. Specifically, it indicates that a change of one unit in perceived ease of use brings about a change in behavioral intention for mobile banking adoption by 0.077 units, which is a rather modest contribution. It is worth noting that the beta coefficient for perceived trust ($\beta = 0.056$, $p = 0.108$) demonstrates a favorable impact on behavioral intention to embrace mobile banking, showing that the effect is not significant. It demonstrates that an increase of one unit in perceived trust results in an increase of 0.056 units in the adoption of mobile banking, which is an impact that is marginally significant. Furthermore, the beta coefficient for social influence ($\beta = 0.131$, $p = 0.012$) demonstrates a positive and statistically significant impact on the degree to which mobile banking services are adopted. A one-unit increase in social influence is shown to bring about a 0.056-unit shift in the uptake of mobile banking services, as seen within this illustration. In conclusion, the beta coefficient for the facilitating condition ($\beta = 0.424$, $p = 0.000$) suggests that there is a favorable and substantial impact on the adoption of mobile banking, which has a considerable impact on the situation. In other words, a one-unit increase in the facilitating condition has a 0.424-unit effect on the usage of mobile banking, which indicates that it has a considerable influence.

4.3.1. Model Specification

The following model has been developed for the study:

$$BI = 0.310 + \beta_1 0.077 + \beta_2 0.056 + \beta_3 0.131 + \beta_4 0.424 + \dots \dots ei \quad (2)$$

Where,

BI= Behavioral Intention to adopt mobile banking.

α = Constant/ Y-intercept.

PEU = Perceived ease of use.

PT =Perceived trust.

SI = Social influence.

FC = Facilitating Conditions.

ei = Error term.

4.4. Discussion

A behavioral intention to embrace mobile banking services was the focus of this study, which attempted to examine the effect of perceived ease of use, perceived trust, social influence, and facilitating conditions on the intention of users of mobile banking services in Kathmandu, Nepal. Although the outcomes of the study indicated that there was a favorable influence of perceived ease of use on behavioral intention to embrace mobile banking services, the researchers discovered that the effect was small. According to [Gu et al. \(2009\)](#); [Jeong and Yoon \(2013\)](#); [Bhatt and Bhatt \(2016\)](#) and [Widiar et al. \(2023\)](#) this discovery is in agreement with past research. On the other hand, it is in disagreement with [Shaikh and Karjaluoto \(2015\)](#). In a similar vein, the perceived trust factor had a favorable influence on the behavioral intention of mobile banking users; however, the impact of this factor was very small. This finding is in line with the conclusions of prior studies: [Liu et al. \(2009\)](#); [Lin \(2011\)](#); [Zhou \(2011\)](#) and [Bhatt and Bhatt \(2016\)](#). On the other hand, [Shaikh and Karjaluoto \(2015\)](#) came to a different conclusion. Furthermore, social influence was found a positive and substantial impact on the behavioral intention of mobile banking users, demonstrating that social influence is a crucial aspect in determining the outcome of the behavioral intention of mobile banking users. While this discovery is in the same direction as the findings of prior research conducted by [\(Karma, Ibrahim, & Ali, 2014\)](#) and [Song \(2015\)](#) it is found to be in disagreement with the findings of [Gu et al. \(2009\)](#) on the other hand. In conclusion, it was discovered that the influence of the facilitating conditions on the behavioral intention to embrace mobile banking services was both positive and substantial. Previous research conducted by [Yu \(2012\)](#); [Micheni et al. \(2013\)](#); [Zhang et al. \(2018\)](#); [Farah et al. \(2018\)](#) and [Acter et al. \(2020\)](#) has confirmed this conclusion, which is consistent with the findings of those studies.

5. CONCLUSION

The objective of the study was to determine the extent to which the perceived ease of use, perceived trust, social influence, and facilitating conditions had an impact on the behavioral intention to embrace mobile banking services among users of mobile banking in Kathmandu, Nepal. Based on the findings of the study, it was discovered that the perceived ease of use had a favorable impact on the behavioral intention of users to embrace mobile banking services. It concludes that having an awareness of users and the capacity to feel comfortable using mobile banking services are both factors that contribute to an increase in the adoption of mobile banking services among them. The utilization of mobile banking services is heavily influenced by this element, which is a crucial deciding factor. Another finding was that there was a favorable link between perceived trust and the behavioral intention to utilize mobile services. The study comes to the conclusion that an increase in the proportion of trust among users of mobile banking services contributes to a rise in the behavioral intention to adopt mobile banking, which demonstrates the beneficial impact that mobile banking services play. In a similar vein, social influence has a favorable and considerable impact on the behavioral intention of users to utilize mobile banking services. It is concluded that the amount of social influence

plays a significant role in determining the deterrent function that mobile banking adoption plays. The final point is that the facilitating conditions found a favorable and significant impact on the behavioral intention of using mobile banking services. Additionally, it comes to the conclusion that the facilitating condition is a significant factor in determining the level of user engagement with mobile banking services among those who use mobile banking services. As a result, the facilitation condition plays a crucial part in the process of boosting the positive behavioral intention to embrace mobile banking services. However, this research has certain limitations as it was based only on cross-sectional data, employed few determining variables for the study, limited the sample size, conducted research mainly in the Nepalese context, and this study embraced only the specific research methodology. As a result, the findings may produce the conclusion merely based on these circumstances. Thus, future studies can take place in different geographical regions, including more representing variables, methodologies, and longitudinal data, with more sample sizes taking the survey in different fields as well. Further, the findings of this research can be useful for policymakers, practitioners, and banking sector leaders while developing strategies and making decisions for the promotion of banking services.

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Transparency: The authors declare that the manuscript is honest, truthful and transparent, that no important aspects of the study have been omitted and that all deviations from the planned study have been made clear. This study followed all rules of writing ethics.

Data Availability Statement: The corresponding author can provide the supporting data of this study upon a reasonable request.

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