

¹Ms. Yasmine
Fathy Abdel
Moneim ,

²Ass. Prof. Dr.
shaymaa Farid ,

³Ass. Prof. Dr.
Mohamed
Abdelkader,

⁴Prof. Dr.
Mohamed A.
Ragheb

The Impact of UTAUT, trust perspective and bank's reputation on actual use of mobile banking with mediating role of behavioral intention: An empirical study on commercial banks in Egypt.



Abstract: - This research investigates the impact of UTAUT theory, trust perspective and bank's reputation on actual usage of mobile banking mediated by behavioral intention in banking industry in Egypt. The objectives of this research are: Identify the factors driving customers to adopt mobile banking among commercial banks in Egypt; evaluate the role of bank's reputation in enhancing customers' to adopt mobile banking; assess role of cultural dimensions as moderators in enhancing consumers to adopt mobile banking in Egypt ; to develop conceptual framework that explain factors affecting consumers' behavioral intention toward mobile banking and eventually its actual usage using structural equation modeling. The research uses a quantitative approach; an administrated questionnaire is used to gather the required data to test the developed hypotheses, analyzing the data through structural equation model (SEM) using AMOS software version 25. Results of this study show: there is a significant direct effect between UTAUT theory, trust attribute, bank's reputation and actual usage of mobile banking; there is a significant direct effect between UTAUT theory, trust attribute, bank's reputation and behavioral intention toward adopting mobile banking; there is a significant direct effect between behavioral intention toward adopting mobile banking and actual usage of mobile banking. Finally, the study found that Hofstede's cultural dimensions moderates the relationship between behavioral intention and actual usage of mobile banking.

Keywords: actual usage of mobile banking, bank's reputation, banking sector, trust attribute perspective, UTAUT model.

I. INTRODUCTION

The noticeable development in information technology has formidable impact on multiple service industries especially in banking sector. The banking industry has taken advantage of this technological advancement in order to shift from traditional banking services to a new delivery channel which is called self-service (1) which encompasses internet banking, E-wallet and mobile banking,..etc. Thus, banks have been investing heavily in these electronic channels in order to provide their customers with more flexible ways to accomplish their financial and non-financial transactions with clear, complete and timely information which will maximize their satisfaction, offers more convenience, easier accessibility and reduce banks' operation costs. On the other hand, the enlarged usage of smartphones has offered the banks an opportunity to use smartphones as a more flexible and consistent delivery channel for their financial services which will eventually increase customers' efficiency and satisfaction (2). Digital banking is a paradigm shift to online banking which mainly depend on high level of innovation, automation and internet in order to digitalize banks' operations. In the light of fast technological innovations, traditional banks are focusing on shifting their operations to digitized formats for delivering a web based financial services (3). One of the most recent delivery channels is mobile banking(M-banking) which is a service offered by banks that allow consumers to execute financial(fund transfer, check deposit, open or redeem certificates), and non-financial transactions (balance inquiries) without any time or location constraints using a mobile device (1).

The banking sector in Egypt is considered to be the most important part in the economy and it is also one of the most stable sectors in the region. In 2022, number of banks operating within Egypt reached to 37 banks (4). According to (5), size of banking sector in Egypt has increased three times in last 5 years as the volume of

¹ DBA, Department of Business Administration, ² Associate Professor, Department Business administration, ³ Assistant Professor, Department of Business Administration ,

⁴ Professor Doctor, Department of business Administration

^{1,2,3,4} The Arab Academy for Science and Technology & Maritime Transport, Alexandria, Egypt

Email:- ¹ jessyjessy87@gmail.com , ² ESeldesouky@aast.edu , ³ mo.abdelkader@aast.edu , ⁴ raghebmm@aast.edu

Copyright © JES 2024 on-line : journal.esrgroups.org

banking sector's assets increased to EGP 10.511 trillion in 2022. In terms of expansion, the banking sector spread in an exceptional way as banks' branches increased to reach 4598 current branch, automatic teller machine increased to reach 21459 and point of sale increased to reach 188429 POS (5). In 2016, banks pursued a digitalization process that will help them to lower their operational cost, serving a broad base of the customers, especially those that are in rural areas or don't have a nearby branch. This strategy coincide with financial inclusion strategy adopted by central bank of Egypt which focus on backing up cashless society and offering financial services to all sectors of the economy (6).

However, although the benefits of M-banking and high penetration rate of smartphones & internet, the adoption of mobile banking is still in its infancy especially in developing countries as Egypt. According to (KEMP, 2022), there are 75.6 million internet users in Egypt in January 2022. Although Egypt's internet penetration rate stood at 71.9% of total population at start of 2022, the percentage of mobile banking users remains small. According to (7), the report showed that only 35% of Egyptian used e-wallet while only 27% used digital money transfer application. To date, there is a clear gap of knowledge in identifying the most key factors affecting behavioral intention to adopt mobile banking and its direct and indirect effect on actual usage. Undoubtedly, the acceptance of technological innovation differs from one country to another depending on cultural differences between countries (8). However, there is a clear gap of knowledge regarding examining role of cultural differences in motivating customers to adopt M-banking especially in developing countries. Moreover, to date, there is lack of research integrating reputation in mobile banking context (9). Accordingly, this research seeks to investigate the impact of UTAUT theory, trust attribute perspective and bank's reputation on actual usage of mobile banking mediated by behavioral intention and under the moderating effect of Hofstede's cultural dimensions.

In order to achieve this aim, several objectives are needed to be attained. Therefore, this study contains five research objectives that are as follows: (RO1) Identify the factors driving customers to adopt mobile banking; (RO2) Evaluate the role of bank's reputation in enhancing customers' to adopt mobile banking; (RO3) to assess role of cultural dimensions as moderators in enhancing consumers to adopt mobile banking in Egypt. The remaining sections in this paper reviews the literature review, illustrates the research design used to collect and analyze the necessary data, clarifies the quantitative research results, the hypotheses testing through structure equation modeling (SEM), and the research conclusion and discussions.

II. LITERATURE REVIEW

UTAUT model, trust attribute, bank's reputation are considered as the independent variables, behavioral intention is considered as the mediator, Hofstede's cultural dimensions are considered moderator and actual usage of mobile banking is considered as the dependent variable

A. UTAUT model

One of the most significant models in area of technological acceptance which was presented by (10). Since its appearance, it was proved to be a very good predictor for acceptance of specific technology because it explains 70% of variance in behavior intention. This theory consists of 6 main constructs; performance expectancy (PE), effort expectancy (EE), social influence (SI) and facilitating conditions (FC), Behavioral intention (BI) and actual usage.

Performance expectancy (PE):

It is defined as the degree to which consumers think that using electronic banking channels will be more useful for them in executing their financial and non-financial transactions than traditional banking branches (11). (12) found out that PE has positive influence on behavioral intention to adopt internet banking and eventually its actual usage in Fiji. This is in line with (13) who validated that higher level of perceived usefulness would generate consumers' behavior willingness and that more substantial degree of perceived usefulness would eventually lead to higher level of adoption of financial services by M-banking users.

Effort expectancy (EE):

It can be defined as the degree of ease related to using a system (11). (12) illustrated that consumers are involved in cognitive tradeoff process between effort required to adopt this technology in front of benefits attained through it. (12) proved that EE has positive effect on behavioral intention to adopt internet banking and its actual usage in Fiji. In Vietnam, (9) asserted that perceived ease of use has a positive impact on behavioral intention to use mobile banking.

Social influence (SI):

It is the degree to which an individual realizes that people who are close to him and influence his ideas believe he should adopt the new system (11). (12) proved SI has positive effect on behavioral intention to adopt internet banking and eventually its actual usage in Fiji. (14) recorded that social influence is a critical variable in enhancing usage intention and eventually its actual usage.

Facilitating conditions (FC)

According to (Venkatesh, Morris, Davis, & Davis, 2003) facilitating conditions is the degree to which individual believes in the existence of organizational and technical infrastructure which smoothen the usage of the new system. (12) found that facilitating conditions is the most influential factor to behavioral intention adopt internet banking and its actual usage in Fiji. Based upon previous findings, the following hypothesis is developed: **(H1)** UTAUT theory influences actual use of M-banking; **(H2)** UTAUT theory influences behavioral intention to adopt M- banking.

B. Trust attribute perspectives

It encompasses two independent variables which are perceived security and trust.

Perceived security (PSC)

It indicates protection of data, personal information and financial transactions from disclosure, fraud or abuse (6) or from being disseminated, collected and misused by any unauthorized third party (15). (11) Found that customer satisfaction with security offered by electronic banking is the main antecedents to adopt mobile banking in India. In malaysia, (16) claimed that perceived security of e-wallet has a positive influence on behavioral intention to use e-wallet and eventually e-wallet actual usage.

Trust:

It plays a fateful role in online-banking activities because it diminishes the feeling of insecurities and uncertainties that results from the absence human interactions in mobile banking platform and in alleviating risk related to online technology (17). (18) argued that when banks firstly build initial trust throughout their interactions with their customers, keep their promises, act on customers' own interest, then consumers will in return trust their financial institution. In this case, consumers are willing to translate this trust in accepting M-banking technology. In consistent with this, (11) concluded that trust is the main factor for customer satisfaction in adopting M-banking in India. (19) acknowledged that trust positively influences behavioral intention to use e-wallet in Indonesia and eventually its actual usage. THUS, the following hypotheses are developed: **(H3)** trust attribute influences actual use of M-banking; **(H4)** trust attribute influences behavioral intention to adopt M-banking

C. Bank's reputation (BR)

(2) defined bank's reputation as the degree to which mobile banking users realize the bank's identity, image and personality. It is degree to which bank is recognized to possess the ability, goodwill and integrity in delivering mobile banking services. Taking into consideration that customers who use online financial services aren't able to interact face-to-face with bank's staff which means that there is lack of reassuring social information as facial expressions and gestures. Thus, good reputation can alleviate feeling of insecurity resulting from lack of non-verbal communication (9). In a study conducted in U.K, U.S, India and Brazil, (2) proved that bank's reputation positively related with mobile banking usage. (9) confirmed that good reputation is a good predictor of customers' behavior intentions. Thus, the following hypotheses are developed: **H5:** bank's reputation influences actual usage. **H6:** bank's reputation influences behavioral intention M-banking.

D. Behavioral intention (BI)

It is defined as individuals' intention to take certain actions. With reference to UTAUT, A person's intention to use will definitely determine his usage behavior (20). In line with this, (1) argued that there is significant positive relationship between behavioral intention and actual usage in Iran. In the same token, (21) underlined the significant impact of behavioral intention on user behavior toward using mobile banking in Indonesia. Based upon the previous studies, the following hypothesis is developed: **H7:** behavioral intention to adopt mobile banking influences actual usage

E. Actual usage

It's defined as user's self-reported frequency and volume of use. In other words, it's the observable response in a given situation. It is considered a consequence of behavioral intention and provides an indication about individual readiness to execute a specific action (12).

F. *hofstede's cultural dimensions*

Culture can be defined as the way in which people can solve problems and dilemmas in patterns of values and ideas that are important for human behavior. Beyond any doubts, human behaviors toward innovations are influenced by his/her cultural orientation. For example, national characteristics of culture can shape our perceptions toward a specific innovation. Research demonstrates that customer's behavior toward adopting new innovation can vary from country to another. (2) confirmed that cultural dimensions are important factors to consider when studying adoption of information technologies. In this essence, hofstede advocated a number of cultural dimensions which are uncertainty avoidance, masculinity & femininity.

Uncertainty avoidance (UNCERT)

It represents the level to which individuals feel uncomfortable or threatened with new situations. It exemplifies the degree to which individuals feel threatened by ambiguous situations (3). (2) compared between 4 different countries which present different cultural characteristics namely UK, India, Brazil and the U.S, (2) concluded that uncertainty avoidance has a positive moderating effect on intention to use and actual usage.

Masculinity & femininity (M/F):

It is defined as the level to which dominant values are masculine as strength, assertiveness and not caring for others (22). A culture with high score of M/F index is masculine culture where people tend to be more assertive, materialistic, like achievements and success which help banks to be more efficient and competitive (3). While a low score of M/F level is a feminine culture which is symbolized by caring for others, sympathized and prefer quality of life. In a comparative study between effect of culture on usage of digital banking in Pakistan and China, (3) reported that in china; masculinity was found to have a moderating effect on actual usage of digital banking. This shows the tendency of Chinese toward competition and struggle for success. Thus, the following hypothesis is developed: **H8**: hofstede's dimensions moderate the relation between behavioral intention and actual use.

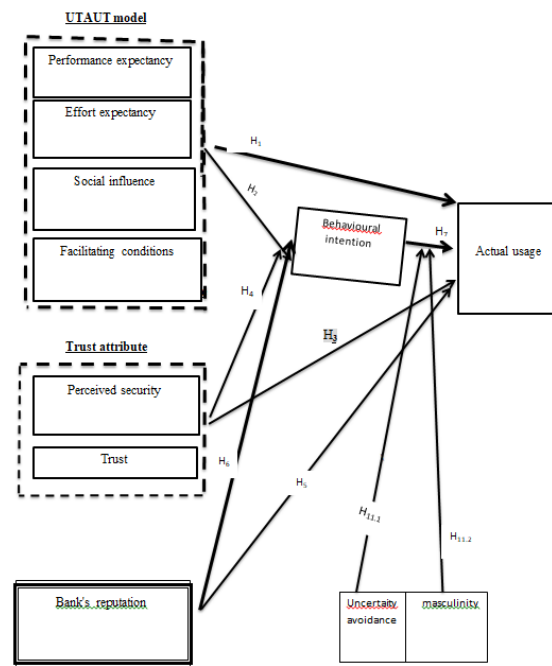


Figure 1- Conceptual Framework

III. RESEARCH METHODOLOGY

For the purpose of this research, the research population is customers who are using M- banking of any commercial bank in Egypt. The research questionnaire was administered to 700 respondents, 499 questionnaires representing 71.3% were returned, 62 questionnaires representing 8.9% were incomplete or ineligible or refusals and 201 (28.7%) were not reached. There were 437 acceptable responses, a response rate 62.4%, which is highly adequate for the nature of this study. In this Research Paper, the Amos 25.0 software package was used to perform the structural equation modelling (SEM) to investigate the inter-relationships between the constructs of the hypothesized model. Hypotheses Testing Following a confirmatory factor analysis, the valuation of the structural model through testing of the hypotheses underlying the research model is conducted.

IV. RESULTS AND FINDINGS

Based on the frequency analysis, the respondents in this study were customers who are using mobile banking of any commercial bank operating in Egypt and who came from different socio-demographic background as shown in table 1.

Table 1: The Respondents Socio-demographic Traits

Var	Desc	Freq	%	Var	Desc	Freq	%
How many times use M-banking	Daily basis	131	30	Name of responde nt's bank	NBE	231	52.9
	One/two a week	174	39.8		BM	26	5.9
	One/two a month				BDC	10	2.3
	rarely				CIB	44	10.1
					QNB	49	11.2
		43	9.8	other	77	17.6	
Services when using M-banking	Balance inquiries	97	22.2	Educatio n level	Interme diate/ab ove-intermed iate	19	4.3
	Open/red eem certificat e	12	2.7		Bachelo r degree	222	50.8
	Fund transfer	59	13.5		Post graduate	196	44.9
	All of the above	226	51.7				
	other	43	9.8				
Age	16-30	155	35.5	Professio n	Govern mental	161	36.8
	31-40	193	44.2		Private	211	48.3
	41-50	73	16.7		Self-employe e	32	7.3
	Above 51	16	3.7		Housewi fe	5	1.1
					student	28	6.4
Income level	Less than 3000 EGP	22	5	I don't use m-banking when	Unsure of its quality	129	29.5
	3301-5000EGP	51	11.7		It does s.thing strange	130	29.7
	5001-1000EGP	131	30		Security is compro mised in anyway	178	40.7
	10001-15000EG	77	17.6				
	15001-2000EGP	69	15.8				
I Use m-banking to	Achieve fame & glory	43	9.8				

	Compete with people	51	11.7			
	Help people even if I have to do s.th difficult	343	78.5			

Composite reliability (CR) is used to measure the reliability of a construct in the measurement model. CR is a more presenting way of overall reliability and it determines the consistency of the construct itself [19]. CR of (PE = 0.837, SI=0.807, EE=0.827, FC =0.918, BI=0.938, BR=0.872, PSC= 0.843, Trust = 0.755 and Actual usage =0.920). So, it clearly identified that in measurement model all construct have good reliability. The Average Variances Extracted (AVE) should always above 0.50 (Hair et al., 2019). The average variances extracted (AVE) of the particular constructs (PE= 0.564, SI =0.583, EE= 0.561, FC =0.691, BI=0.750, BR =0.581, PSC = 0.573, Trust = 0.540 and Actual usage =0.698) are more than 0.500. Overall, these measurement results are satisfactory and suggest that it is appropriate to proceed with the evaluation of the structural model.

Table 2: Model Measures

Variables	Composite Reliability CR	Average Variances Extracted AVE	Square Root of AVE	Maximum Reliability MaxR(H)
Performance expectancy	0.837	0.564	0.751	0.854
Social influence	0.807	0.583	0.763	0.814
Effort expectancy	0.827	0.561	0.749	0.790
Facilitating conditions	0.918	0.691	0.831	0.932
Behavioral intention	0.938	0.750	0.835	0.925
Bank's reputation	0.872	0.581	0.757	0.846
Perceived security	0.843	0.573	0.735	0.871
trust	0.755	0.540	0.866	0.941
Actual usage	0.920	0.698	0.762	0.891

Measurement model Results:

The 9 factor was subjected to CFA using the AMOS software. DF was 702 (it should be more than 0), χ^2/DF has a value of 1.966, that is less than 2.0 (it should be less than or equal 2.0). The RMSEA was .045 (it should be less than 0.08). The TLI index was .942 which is very close to 1.0 (a value of 1.0 indicates perfect fit). The

CFI was .948. All indices are close to a value of 1.0 in CFA, indicating that the measurement models provide good support for the factor structure determined through the CFA.

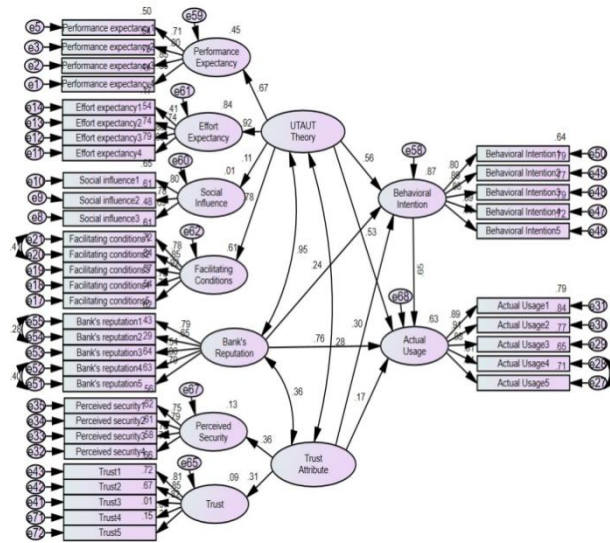


Figure (2) Structural Model (Final Result)

Structural model summary:

As shown in figure 2, the results of structural' model using the AMOS software, shows that DF was 729 (it should be more than 0), χ^2 / DF has a value of 2.644, that is less than 2.0 (it should be less than or equal 2.0). The RMSEA was .059 (it should be less than 0.08). The TLI index was .902 which is very close to 1.0 (a value of 1.0 indicates perfect fit). The CFI was .908. All indices are close to a value of 1.0 in CFA, indicating that the measurement models provide good support for the factor structure determined through the CFA.

V. RESEARCH CONCLUSION

This research investigated the UTAUT model, trust attribute and bank's reputation on actual use of M-banking with mediating role of behavioral intention and moderating role of Hofestede's dimensions in banking sector in Egypt. The objectives of this research are: to identify the factors driving customers to adopt mobile banking; to evaluate the role of bank's reputation in enhancing customers' to adopt mobile banking; to assess role of cultural dimensions as moderators in enhancing consumers to adopt mobile banking in Egypt; to develop conceptual framework that explain factors affecting consumers' actual usage toward mobile banking whether directly or indirectly through mediating behavioral intention; to formulate recommendations that help banks' managers and marketers in enhancing consumers to adopt mobile banking., using structural equation modeling. The following paragraphs illustrate the results of each objective achieved.

The individual tests of significance of the relationship between the variables reveals that, a positive relationship between UTAUT theory and actual usage ($\beta = 0.528$, CR (Critical Ratio) = 15.934, $CR > 1.96$, $p = 0.000$, $p < 0.05$). Therefore, (**H₁**: UTAUT influence actual usage) is supported. That result is consistent with (12). **H₂**: UTAUT influence Behavioral intention is supported as the result shows that ($\beta = 0.565$, CR (Critical Ratio) = 28.224, $CR > 1.96$, $p = 0.000$, $p < 0.05$). That result is consistent with (12); (9), (1). **H₃**: Trust attribute perspective influences actual use is supported as the result shows that ($\beta = 0.172$, CR (Critical Ratio) = 13.672, $CR > 1.96$, $p = 0.000$, $p < 0.05$), that result is consistent with (11), (19). **H₄**: Trust attribute perspective influences behavioral intention is supported as the result shows that ($\beta = 0.300$, CR (Critical Ratio) = 15.058, $CR > 1.96$, $p = 0.000$, $p < 0.05$), the result is consistent with (19), (16). **H₅**: Bank's reputation influences actual use is supported as the result shows that ($\beta = 0.762$, CR (Critical Ratio) = 28.224, $CR > 1.96$, $p = 0.000$, $p < 0.05$). That result is consistent with (2) and contradictory with (23). **H₆**: Bank's reputation influences behavioral intention is supported as the result shows that ($\beta = 0.240$, CR (Critical Ratio) = 3.985, $CR > 1.96$, $p = 0.000$, $p < 0.05$) that result is consistent with (9). **H₇**: Behavioral intention influences the actual use is supported as the result shows that ($\beta = 0.646$, CR (Critical Ratio) = 11.297, $CR > 1.96$, $p = 0.000$, $p < 0.05$) that result is consistent with (20). **H₈**: Hofestede's dimensions moderates relationship between intention to use and actual use is supported. The result is consistent with (2)& (3).

VI. RESEARCH DISCUSSION

This paper explored the direct and indirect effects of UTAUT model, trust attribute and bank's reputation on actual usage of mobile banking. The outcomes of this study are supported by existing research. For example, the results of **H₁** (UTAUT influence actual use) match with (12) who indicate the higher level of ease, usefulness, ease, social influence and the existence of adequate infrastructure and tutorials of mobile banking, the higher number of people who will use it. The result of **H₂** (UTAUT influences behavioral intention) match with (12); (9), (1) who indicates customers will be intended to use M-banking as far as the application is easy learning, useful, not complicated in its usage and that the bank provides illustrations, live chat, chat bot and tutorials concerning internet banking usage.

The results of **H₃**(Trust attributes influences actual use) matched with (11) who Found that customer satisfaction with security offered by electronic banking is the main antecedents to adopt mobile banking in India. Also the findings match with (24) who stated that building trust in online transactions is a delicate process as it is tough to be achieved and easy to lose. Moreover, trust plays a crucial role in M-banking because it helps in reducing customers' anxieties of insecurities and uncertainties resulting from lack of human contact and physical interaction. The results of **H₄**(trust attribute influences behavioral intention) matched with (16) claimed that perceived security of e-wallet has a positive influence on behavioral intention to use e-wallet in Malaysia. It is also in line with (25) who affirmed that perceived security positively influence intention to reuse M-banking in Morocco because of fateful role of perceived security and confidentiality of transactions and personal information in shaping customers' attitude toward M-banking. Moreover, (26) found out that trust was ranked the second in importance in describing the factors behind adoption of mobile banking among three different segments (egyptians in egypt, americans in U.S and egyptians in U.S). This denotes that no matter where consumers live; trust in mobile banking providers, application and their banks will be their key predictor in mobile banking adoption.

The results of **H₅** (bank's reputation influences actual use) match with (2) who proved that bank's reputation positively related with M-banking usage which means the higher degree that the bank is perceived as possessing the goodwill and integrity to deliver mobile banking, the higher usage of mobile banking in U.S, U.K, India and Brazil. The result of **H₆** (bank's reputation influences behavioral intention) matches with (9) who confirmed reputation plays an important role in promoting intention to use mobile banking. **H₇** (behavioral intention influences actual use of M-banking) matches with (27) who pointed out the strong correlation between behavioral tendency of using mobile banking and customer actual behavior in Tehran. This denotes that the higher intention to use M-banking, the higher probability of frequency of actual using M-banking. The result of **H₈** which states that hofestede's dimensions moderates the relationship between behavioral intention and actual use matches with (2) who concluded that uncertainty avoidance has a positive moderating effect on intention to use and actual usage in U.S, U.K, Brazil and India. This denotes that the higher degree of certainty that people have toward mobile banking, the higher degree of adoption toward mobile banking. It matches with (3) who found that in china, masculinity was found to have a moderating effect on actual usage of digital banking. This shows the tendency of Chinese toward competition and struggle for success.

VII. LIMITATIONS AND FUTURE DIRECTIONS

This study faced several limitations when conducting the research. First, because this study was cross-sectional, it is not possible to investigate the nature of cause-and-effect connections between the variables. Future study should therefore focus on the requirement for a longitudinal strategy. Second, as a method of data collection, the questionnaire also had its limitations and could not examine all the information in detail. The answers in the questionnaire were based on the customers' perception and did not take into account deeper explanations and reasons for choosing the selected answers. These limitations also represent recommendations and guidelines for future studies. Third, a convenience sample approach was used to gather information from respondents over a predetermined period of time, which led to a limitation. The range of respondents who might participate was restricted by the short time window for data collecting. Because responses are acquired based on respondents' accessibility and may not give a representative sample, the convenience sampling approach used to gather responses may have also limited the range of respondents who would participate.

Références:

- [1] Extending UTAUT2 in M-banking adoption and actual use behavior: Does WOM communication matter? Farzin, Milad, et al., et al. 2, 2021, Asian Journal of Economics and Banking, Vol. 5, pp. 136-157.

- [2] Cultural impact on mobile banking use – A multi-method approach. Picoto, Winnie Ng et Pinto, In^{es}. 2021, Journal of Business Research, Vol. 124, pp. 620–628.
- [3] How does culture influence digital banking? A comparative study based on the unified model. UllahKhan, Ikram. 2022, Technology in Society, Vol. 68, pp. 1-12. <https://pdf.sciencedirectassets.com/271744/1-s2.0-S0160791X21X0005X/1-s2.0-S0160791X21002979/main.pdf?X-Amz-Security-Token=IQoJb3JpZ2luX2VjEC8aCXVzLWVhc3QtMSJHMEUCIQDDgarnlfAiHIZU74m8JMNBrMc%2B27xXBWIpbr3SG%2FyXAIgL8gAEh8SRFm1XYqhNpoHJWpCuIo4x7%2B77cNik3>.
- [4] Galal, Saifaddin. www.statista.com. <https://www.statista.com/statistics/1375306/number-registered-banks-south-africa/>. [En ligne] 27 03 2023. [Citation : 03 05 2023.] <https://www.statista.com/statistics/1375306/number-registered-banks-south-africa/>.
- [5] Mounir, Hossam. <https://www.zawya.com/en/economy/north-africa/egypt-has-third-best-banking-system-in-arab-world-in-terms-of-assets-deposits-and-loans-uab-q9a18kkh>. *zawya*. [En ligne] 01 01 2023. [Citation : 03 05 2023.] <https://www.zawya.com/en/economy/north-africa/egypt-has-third-best-banking-system-in-arab-world-in-terms-of-assets-deposits-and-loans-uab-q9a18kkh>.
- [6] Mobile banking service quality: anew avenue for customer value co-creation. Mostafa, Rania B. 5, 2020, International Journal of Bank, Vol. 38, pp. 107-1132.
- [7] A.Moneim, Doaa. ahramonline.ahramonline. [En ligne] 07 08 2022. [Citation : 12 04 2023.] <https://english.ahram.org.eg/NewsContent/3/1239/472772/Business/Tech/-of-Egyptian-increased-their-use-of-digital-paymen.aspx>.
- [8] The moderating role of cultural factors in the adoption of mobile banking in Brazil. Goularte, Alexandre da C. et Zilber, Silvia Novaes . 1, 2019, International Journal of Innovation science, Vol. 11, pp. 63-81. <https://www.emerald.com/insight/content/doi/10.1108/IJIS-11-2017-0119/full/html>.
- [9] Reputation and its consequences in Fintech services: the case of mobile banking. Nguyen, Yen Thi Hoang, Tapanainen, Tommi et Nguyen, Hai Thi Thanh . 7, 2022, International Journal of Bank marketing, Vol. 40, pp. 1364-1397.
- [10] Venkatesh, V., et al., et al. User acceptance of information technology: toward a unified view. *MIS Quarterly* . 2003, Vol. 27, pp. 425–478.
- [11] Customers’ perspectives regarding e-banking in an emerging economy. Agarwal, Reeti, Rastogi, Sanjay et Mehrotra, Ankit. 2009, Journal of Retailing and Consumer Services, Vol. 16, pp. 340-351.
- [12] Modelling internet banking adoption in Fiji: A developing country perspective. Sharma, Rashmini, Singh, Gurmeet et Sharma, Shavneet . 2020, international journal of information management, Vol. 53, pp. 1-13.
- [13] “Exploring customer intentions to adopt mobile banking services: evidence from a developing country. Akhter, Ayeasha, et al., et al. 2, bangladesh : Consulting Publishing Company “Business Perspectives, 27 4 2020, Banks and Bank Systems, Vol. 15, pp. 105-116.
- [14] A meta-analysis of the UTAUT model in the mobile banking literature: The moderating role of sample size and culture. Jادل, Yassine, Rana, Nripendra P. et Dwivedi, Yogesh K. . s.l. : Elsevier Inc., 2021, Journal of Business Research, Vol. 132, pp. 354–372. <https://www.sciencedirect.com/science/article/abs/pii/S0148296321002903>.
- [15] Challenges to Mobile Banking Adaptation in COVID-19 Pandemic. Salam, Muhammad Abdus, et al., et al. 3, s.l. : Published by Science and Education Publishing, 2021, Journal of Business and Management Sciences, Vol. 9, pp. 101-113.
- [16] Factors Influencing the Use of E-wallet as a Payment Method among Malaysian Young Adults. Ulfy, Mohammad Arije, et al., et al. 2, 2020, Journal of International Business and Management (JIBM), Vol. 3, pp. 1-12. 2616-5163.
- [17] Banking “on-the-go”: examining consumers’ adoption of mobile banking services. Zhang, Tingting, Lu, Can et Kizildag, Murat. 3, 2018, International Journal of Quality and service sciences, Vol. 10, pp. 279-295.
- [18] Predicting young consumers’ takeup of mobile banking services. Koenig-Lewis, Nicole, Moll, Alexander et Palmer, Adrian. 5, 2010, International Journal of Bank marketing, Vol. 28, pp. 410-432.
- [19] Usage Behavior on Digital Wallet: Perspective of the Theory of Unification of Acceptance and Use of Technology Models. Sukaris, Sukaris, et al., et al. Indonesia : IOP Publishing, 2021. Journal of Physics: Conference Series. Vol. 1764, pp. 1-8. 012071.
- [20] Cognitive and emotional resistance to innovations: concept and measurement. Castro, Cristiano A.B., Zambaldi, Felipe et Ponchio, Mateus Canniatti . 4, 2020, Journal of Product & Brand Management, Vol. 29, pp. 41-455.
- [21] The intention and use behavior of mobile banking system in Indonesia: UTAUT model. Purwanto, Edi et Loisa, Julia. 6, july 2020, Technology Reports of Kansai University, Vol. 22, pp. 2757-2767.
- [22] Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators. Baptista, Gonçalo et Oliveira, Tiago. 2015, Computers in Human Behavior, Vol. 50, pp. 418-430. <https://www.sciencedirect.com/science/article/abs/pii/S0747563215003118>.
- [23] The Influence of Discount Framing towards Brand Reputation and brand image on purchase intention and actual behavior in e-commerce. Wathoni, Ruhmaya Nida, Santoso, Adhi Setyo et Agmeka, Fanni . Indonesia : Procedia Computer Science , 2019. The Fifth Information Systems International Conference 2019. Vol. 161, pp. 851-858.
- [24] Examining consumer experience in using m-banking apps: A study of its antecedents and outcomes. Shahid, Shadma, et al., et al. 03 2022, Journal of Retailing and Consumer Services, Vol. 65, pp. 01-11.
- [25] The Effect of Trust, Perceived Risk and Security on the Adoption of Mobile Banking in Morocco. Lafraxo, Younes, et al., et al. s.l. : Science and Technology Publications, 2018. In Proceedings of the 20th International Conference on Enterprise Information Systems. Vol. 2, pp. 497-502. 978-989-758-298-1.
- [26] Does country culture influence consumers' perceptions toward mobile banking? A comparison between Egypt and the United States. Heba E. Hassana et Wood, Van R. 2020, Telematics and Informatics, Vol. 46, pp. 1-14. <https://www.sciencedirect.com/science/article/abs/pii/S0736585319308044>.

- [27] Factors influencing customers' change of behaviors from online banking to mobile banking in Tejarat Bank, Iran. Danyali, Arezo Ahmadi. 6, 2018, *Journal of Organizational Change management*, Vol. 31, pp. 1226-1233.
- [28] Mobile banking services adoption in Pakistan: Are there gender differences? Glavee-Geo, Richard, Shaikh, Aijaz A. et Karjaluoto, Heikki. 7, 2017, *International Journal of Bank Marketing*, Vol. 35, pp. 1088-1112.
- [29] Security factors on the intention to use mobile banking applications in the UK older generation (55+). A mixed-method study using modified UTAUT and MTAM - with perceived cyber security, risk, and trust. Lallie, Harjinder Singh et Hanif, Yasmeen . 2021, *Technology in Society*, Vol. 67, pp. 1-14. 101693.
- [30] The relationships between electronic banking adoption and its antecedents:A meta-analytic study of the role of national culture. Zhang, Yun, Weng, Qingxiong et Zhu, Nan . 2018, *International Journal of Information Management*, Vol. 40, pp. 76-87. <https://www.sciencedirect.com/science/article/abs/pii/S0268401217302049>.
- [31] Mobile Banking Adoption: Application of Diffusion of Innovation Theory. Al-Jabri, Ibrahim M et Sohail, M. Sadiq . 4, 2012, *Journal of Electronic Commerce Research*, Vol. 13, pp. 379-391.
- [32] Factors Affecting Jordanian Consumers' Adoption of Mobile Banking Services. Khraim, Hamza Salim, AL Shoubaki, Younes Ellyan et Khraim, Aymen Salim. 20, 2011, *International Journal of Business and Social Science*, Vol. 2, pp. 96-105.
- [33] What factors drive the adoption of digital banking? An empirical study from the perspective of Omani retail banking. Ananda, S., Devesh, Sonal et Al Lawati, Anis Moosa . 2020, *Journal of Financial Services Marketing*, Vol. 25, pp. 14-24.
https://www.researchgate.net/publication/341709456_What_factors_drive_the_adoption_of_digital_banking_An_empirical_study_from_the_perspective_of_Omani_retail_banking.
- [34] ANALYSIS OF THE EFFECT OF COGNITIVE AND AFFECTION VARIABLES IN FORMING INTERNET BANKING ACTUAL USAGE IN INDONESIA. Amelia, S.E. 2020. Universitas Pelita Harapan Surabaya - Department Of Business School - Faculty Of Management. pp. 509th International conference on management, economics&social science- ICMESS.
- [35] Understanding users' initial trust in mobile banking: An elaboration likelihood perspective. Zhou, Tao. 2012, *Computers in Human Behavior*, Vol. 28, pp. 1518–1525.