Jurnal Manajemen dan Bisnis
(Performa)

Jurnal Manajemen dan Bisnis (Performa), 19 (01): 20-30, 2022
Nationally Accredited: No. 28/E/KPT/2019 (SINTA 4)
https://ejournal.unisba.ac.id/index.php/performa/index

MOBILE BANKING ADOPTION IN EMERGING COUNTRIES: THE ROLE OF CUSTOMER DEMOGRAPHIC CHARACTERISTICS

ADOPSI MOBILE BANKING DI NEGARA BERKEMBANG: PERAN KARAKTERISTIK DEMOGRAFIS NASABAH

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INFO ARTIKEL

Sejarah Artikel:
Diterima : 28 Januari 2022
Diperbaiki :24 Maret 2022
Disetujui : 26 Maret 2022
Tersedia daring

***Keywords*:**
Mobile banking adoption, Age, Occupation, Education, Emerging countries.

Kata Kunci:
Mobile banking adoption, Age, Occupation, Education, Emerging countries.

DOI:
https://doi.org/10.29313/performa.v19i01.9718

ISSN-P: 1829-8680
ISSN-E: 2599-0039

Untuk mengutip dokumen ini:
Mardika, D.R.W., (2022). Mobile Banking Adoption In Emerging Countries: The Role of Customer Demographic Characteristics. *Jurnal Manajemen dan Bisnis (Performa), 19(01), 20-30.*

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ABSTRACT

The purpose of this study is to fill the research gap and test whether there is an effect of age, occupation, and education affect the adoption of mobile banking. This study uses the logistic regression method to examine the effect of age, occupation, and education on mobile banking adoption. We use data from the Global Financial Inclusion Database. We focused on taking respondents from emerging countries, namely Albania, Argentina, Bangladesh, Brazil, Chile, Ecuador, Egypt, Ethiopia, Ghana, Guatemala, Honduras, India, Indonesia, Jordan, Kenya, Malawi, Malaysia, Morocco, Mozambique, Namibia, Nigeria. Pakistan, Panama, Peru, Philippines, Romania, Senegal, Tanzania, Thailand, Venezuela, Vietnam, and Zambia, the total number of samples is 16,421 respondents. The implication of this finding is the need for the government to increase financial inclusion by empowering younger people already working and have higher education to adopt mobile banking. This study provides valuable knowledge about the relationship between the influence of age, occupation, and education on mobile banking adoption, which has not been carried out by including various countries in an analysis.

ABSTRAK

Tujuan penelitian ini untuk mengisi research gap tersebut dan menguji apakah terdapat pengaruh usia, responden yang bekerja dan pendidikan berpengaruh terhadap adoposi mobile banking. Penelitian ini menggunakan metode logistic regression untuk menguji pengaruh usia, responden yang bekerja dan pendidikan terhadap adopsi mobile banking. Kami menggunakan data Global Financial Inclusion Database. Kami berfokus mengambil responden dari negara emerging countries yaitu Albania, Argentina, Bangladesh, Brazil, Chile, Ecuador, Egypt, Ethiopia, Ghana, Guatemala, Honduras, India, Indonesia, Jordan, Kenya, Malawi, Malaysia, Morocco, Mozambique, Namibia, Nigeria, Pakistan, Panama, Peru, Philippines, Romania, Senegal, Tanzania, Thailand, Venezuela, Vietnam, dan Zambia, total jumlah sampel adalah 16.421 responden. Hasil penelitian ini memberikan kontribusi kepada pihak perbankan di negara – negara emerging countries bahwa ada baiknya jika ingin meningkatkan adopsi mobile banking untuk lebih berfokus pada nasabah yang usianya lebih muda, nasabah yang bekerja dan nasabah yang memiliki pendidikan tinggi. Penelitian ini memberikan pengetahuan berharga ten-

tang hubungan pengaruh usia, responden yang bekerja dan pendidikan terhadap adopsi mobile banking yang selama ini belum dilakukan dengan memasukkan berbagai negara dalam suatu analisis.

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INTRODUCTION

The banking industry is increasingly competitive, so banks must continue to innovate to maintain business continuity (Albashrawi and Motiwalla, 2019; Tan et al., 2021). One strategy to innovate is to utilize technology that is currently snowballing in the community, namely the mobile phone (Grossberg, 1991). They use mobile phones for telephone calls and navigation, booking tickets, and reading news (Kamboj et al., 2021). Banks also follow the development of these technologies by presenting banking products in mobile phones owned by the public. A technology platform that provides financial services on a mobile phone is called mobile banking. This platform is a banking strategy to offer financial services to the public to make financial transactions easily, safely, and at low costs. Mobile banking offers many financial services to the public, including funds transfers, buying insurance, balance inquiries, messaging personal banking advisors, and other benefits. These features are an advantage for banks so that people are more comfortable doing banking transactions. Most people use mobile banking to minimize time and costs when conducting financial transactions, so this brings mobile banking as an alternative to financial transactions that uphold convenience (Alalwan et al., 2016; Hoehle et al., 2012; Shankar and Rishi, 2020). Mobile banking also shows that financial transactions via mobile are lower in cost than traditional banking.

Mobile banking is an alternative to improve financial inclusion, where so far there are still many people hampered by financial inclusion problems (Fungáčová and Weill, 2015; Ghosh and Vinod, 2017). Mobile banking plays a role in the community to more easily carry out banking transactions so that people feel closer to the bank. This closeness becomes a hope for banks and also, of course, the government because people who are increasingly open to banking products show progress in a country (Chiu et al., 2017; Merhi et al., 2020). A high level of financial inclusion can increase economic growth because banking transactions can help increase people's purchasing power and increase money circulation within a country (Ali et al., 2021; Lal, 2021; Nandi et al., 2021). In addition, the ease of transactions that is upheld by mobile banking can increase the opportunities for the internationalization of business actors in a country (Gregori, 2021; Mataveli et al., 2021). Therefore, mobile banking has become a critical breakthrough to improve economic progress.

Although mobile banking offers many benefits to society, its adoption rate is still not as expected (Laukkanen and Kiviniemi, 2010; Riquelme and Rios, 2010; Shaikh and Karjaluoto, 2015). People have different cultures and characteristics, so every community in a country certainly has different characteristics in accepting mobile banking. The success of mobile banking depends on how consumers accept the mobile banking offered by banks (Changchit et al., 2017; Deb and Lomo-David, 2014; Giovanis et al., 2019; Koenig-Lewis et al., 2010). To be able to overcome this, several studies try to find out what factors can influence the adoption of mobile banking (Alwahaishi and Snášel, 2013; Chaouali and El Hedhli, 2019; Chitungo and Munongo, 2013; Makanyeza, 2017; Noreen et al., 2021). These studies are still carried out in separate places, not yet combining various places or countries to obtain more complete research results. Therefore, there is a dearth of studies looking at the causes of mobile banking adoption level that unites different places in the same context, namely the rate of adoption of mobile banking.

This study investigates the factors that influence mobile banking adoption level in terms of consumer demographic factors. This study examines the effect of age, occupation, and education and whether it affects mobile banking adoption level. A person's age tends to affect the level of adoption of mobile banking because age can show the characteristics of a person's open-mindedness. The younger the individual is, the more open to technological advances (Akturan and Tezcan, 2012; Chaouali and Souiden, 2019). Then someone who works will have more financial transactions, so they need mobile banking to occur anywhere and anytime (Chawla and Joshi, 2018). Finally, education determines how one can think more efficiently so that people who have higher education tend to accept mobile banking easily (Baabdullah et al., 2019).

Furthermore, this research contributes to at least two contributions. First, we research emerging countries to obtain more comprehensive results because it involves many countries so that the level of generali-

zation of research results becomes higher than one country. In addition, it can also see more broadly how the level of adoption of mobile banking in various countries. Second, we tested demographic characteristics to see their effect on the level of mobile banking adoption. Demographic factor testing is carried out to see a general picture of mobile banking adoption level more broadly.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Mobile Banking Adoption

Mobile banking was first released in the late 1990s when Paybox collaborated with Deutsche Bank to launch this technology (Shaikh and Karjaluoto, 2015). In the initial launching phase, this technology was developed in European countries such as Germany, Spain, Sweden, Austria, and the United Kingdom. In developing countries, it was first released in Kenya in 2007. Over time, mobile banking continues to grow, and until nowadays, it has become a natural thing when someone uses mobile banking. Further shows that mobile banking has developed very rapidly from a long time ago and is an excellent technological breakthrough for the current era (Baptista and Oliveira, 2015; Foroughi et al., 2019).

Mobile banking is a way to use products from banking via a mobile phone or smartphone by utilizing the internet network (Bongomin et al., 2021; Wu and Ho, 2021). Apart from the terminology used by mobile banking researchers, mobile banking is often defined as an application on a smartphone that can be used for banking transactions. Features that can be used when using mobile banking such as payments, transfers, balance checks, etc. Mobile banking has excellent benefits to make it easier for customers to use banking products—the relationship between the bank and the customer closer. Mobile banking is a more accessible alternative than Automatic Teller Machine (ATM), Telephone banking, SMS banking, and internet banking. Alternative uses other than mobile banking require cost and time to perform banking transactions (Albort-Morant et al., 2021; Giamo et al., 2021; Siyal et al., 2019). Therefore, mobile banking has become one of the most popular electronic transactions and has had rapid growth so far (Asmy et al., 2019).

The customer's decision to use mobile banking is a decision that has considered various risks that could occur. Its very simple use makes many people decide to use mobile banking (Ewe et al., 2015; Goswami and Raghavendran, 2009; Kirimi et al., 2021). They can make transactions wherever and whenever they want (Farah et al., 2018). Compared to traditional transactions, mobile banking has uniqueness and advantages that customers can utilize (Zhang et al., 2018). Data security issues can cause some customers to be reluctant to use mobile banking. They prioritize data security by tending to be more exclusive to banking products.

Customers highly expect the data security of a banking transaction (Berraies et al., 2017; Bhandari et al., 2017). Those who are reluctant to use banking transactions are often concerned about data security. Data security issues can take the form of password security issues and cyber security issues. The more open a banking transaction is, the riskier it is in terms of security. Customers highly consider security risks. They do not want their account balance to be lost or reduced by irresponsible people. Losing an account balance without the customer's knowledge is a concern. Therefore, those who have a high sense of worry about data security tend to avoid using mobile banking so that they only use conventional transactions.

In addition to security, several previous studies have found that a person's failure to use mobile banking is a failure to use mobile banking (Agyei et al., 2020; Joshi et al., 2021). Those who do not use mobile banking usually lack the knowledge to use different technologies. In addition to customer knowledge, failure can occur in mobile banking, which often experiences a disruption (Alalwan et al., 2016; Glavee-Geo et al., 2020; Majumdar and Pujari, 2021). These disturbances can occur due to inadequate equipment and an unstable internet network. People live in different areas. Of course, the characteristics of the internet network are different. Customers who feel uncomfortable when using mobile banking when they are disturbed. In addition to system failure, information failure can also occur. The customer does not have enough information to use mobile banking. When a customer wants to access a particular feature, the customer does not have sufficient information on accessing the feature. The adequacy of information can be strengthened by where the community lives, whether it is far from the city center or not. People closer to the city will find it easier to get reliable information.

Information related to how to use mobile banking is essential for customers, especially when people have various characteristics (Malik et al., 2021). Some people tend to adapt quickly and efficiently to get

specific information, and some still have difficulty accessing information. The diversity in society needs to be included in the analysis of mobile banking adoption to find a complete explanation, not only tends to a particular society. Issues related to security and information continue to be improved to this day. Data security and internet network stability are now better than when the initial phase of mobile banking was developed. Data security and internet network stability are also helped by the rapid development of technology and increasing public knowledge.

Age and mobile banking

Age is a characteristic inherent in humans. The development of a person's thinking tends to be different at each stage of human age (Chiu et al., 2017). Often people who have an older age tend to be more mature in thinking, calmer and more patient in dealing with specific situations. Meanwhile, young people tend to think practically and look for shortcuts to learn something. Age is also a sign that the older, the more have a weakness to catch innovations that are accepted (Chawla and Joshi, 2017; Danyali, 2018; Giamo et al., 2021; Vaid et al., 2020). For example, technology that is increasingly developing requires someone to be willing to follow and learn about the development of the technology. When someone older has less understanding, they tend to be reluctant to learn something new. Younger ages tend to be more dynamic and modern, so they have an open mind to accept changes or innovations related to technology. Therefore, younger people tend to be more likely to adopt mobile banking.

Customers from a bank certainly have different characteristics from one customer to another. Those who are young and those who are older will have different preferences. For example, when offered a particular innovation from banking, younger customers tend to be willing to learn, and there are opportunities to use innovations from banking. In comparison, older customers tend not to want to learn and maintain conventional methods. Older customers are less likely to learn something new or innovative offered by banking. Several previous studies have also found that the younger age of customers can increase the chances of adopting mobile banking (Agyei et al., 2020; Makanyeza, 2017). Therefore, there is a more significant opportunity to adopt mobile banking when younger customers encounter it (Akturan and Tezcan, 2012; Chaouali and Souiden, 2019).

H_1: Age has the potential to reduce mobile banking adoption.

Occupation and mobile banking

A person's work status is often the background for someone to have a different lifestyle. People who have jobs have higher purchasing power than people who do not work. People who have jobs tend to have higher purchasing power because they have income than those who do not have jobs, such as school children and college students. High purchasing power indicates higher money transactions so that these transactions can be made easier by mobile banking. Those who work will feel comfortable when financial transactions can be done anywhere and anytime (Ali et al., 2021; Kang et al., 2012; Souiden et al., 2021). It also helps them, even more, when they are at work to use mobile banking to still make financial transactions while working. Therefore, people who work tend to be more likely to use mobile banking than people who have not worked.

The innovations carried out by banks aim to increase the level of inclusion of banking products. This level of inclusiveness increases when customers can also respond positively. Customers from banking have different demographic backgrounds. One of the demographic factors that can motivate someone to decide is income. Customers who have income are related to whether they have a job or not. They have jobs in a company, and sometimes some do not. Those who work indeed have income and expect convenience for every transaction made. This convenience can be achieved by adopting mobile banking. Those who want to adopt mobile banking can easily use their income to carry out banking transactions. Customers who do not work tend not to have a steady income so that they are enough to make transactions with conventional banking transactions (Majumdar and Pujari, 2021; Siyal et al., 2019). Income can increase customers' chances of adopting mobile banking (Albort-Morant et al., 2021). It shows that working customers will tend to have the opportunity to adopt mobile banking (Chawla and Joshi, 2018).

H_2: Occupation are more likely to adopt mobile banking.

Education and Mobile banking

Education is a way for humans to improve their thinking abilities. An increase in one's way of thinking can lead to an increase in a better decision-making capacity. A person spends years getting an education to have a better mind. Good thinking will tend to be able to make good decisions and also have the ability to

learn something new for themselves. This good thinking is also the background for someone to accept the innovations easily. Currently, technological developments are extraordinary and multiplying. When someone has a high education, it tends to be easier to accept technological developments (Chitungo and Munongo, 2013; Jun and Palacios, 2016; Makanyeza, 2017). Higher education makes a person's capacity to learn something higher. It indicates that higher education trains people to think more openly about development. This openness will bring people who tend to be advanced and willing to learn innovations, especially technology.

Education can determine how a person thinks and then makes decisions. Someone who has higher education tends to accept many more points of view of thought so that if there is innovation, he tends to be willing to accept and try. It is also helped by a high level of understanding of technology. The higher the level of education, the person can openly accept innovations and technological updates from the banking sector (Glavee-Geo et al., 2020; Koksal, 2016). If the newness of this technology is accepted, customers can accept and adopt mobile banking (Baabdullah et al., 2019).

H_3: Education has the opportunity to increase mobile banking adoption.

METHODS

This study uses the logistic regression method because the dependent variable is a dummy variable. This study explains whether age, occupation, and education affect the decision to adopt mobile banking. This study uses data from the Global Financial Inclusion Database. This data is 2017 data with a total of 154,923 respondents. The data collected by the world bank is a survey of the general public in various countries. We focused on taking respondents from emerging countries, namely Albania, Argentina, Bangladesh, Brazil, Chile, Ecuador, Egypt, Ethiopia, Ghana, Guatemala, Honduras, India, Indonesia, Jordan, Kenya, Malawi, Malaysia, Morocco, Mozambique, Namibia, Nigeria, Pakistan, Panama, Peru, Philippines, Romania, Senegal, Tanzania, Thailand, Venezuela, Vietnam, and Zambia. In addition, we also eliminated respondents who did not provide answers or missing values so that the total number of samples was 16,421 respondents. This study uses mobile banking adoption as the dependent variable. The variable age, respondents occupation, and education as independent variables, and there are income and gender as control variables. The measurement of each variable is described in table I below:

Table 1.
List of Variable Measurement

Variable	Measurement
Mobile Banking Adoption (MBA)	Measured using a dummy variable, namely 1 = have mobile banking, 0 = otherwise
Age (Age)	Natural logarithm of respondent's age
Occupation (OCC)	Measured using a dummy variable, namely 1 = work, 0 = otherwise
Education (EDU)	Measured using an ordinal scale 1 = Completed primary education or loss 2 = Completed Secondary education 3 = Completed tertiary education
Control variables	
Income (INC)	Measured using an ordinal scale, a person's income belongs to a group in a country 1 = Poorest 20% 2 = Second 20% 3 = Middle 30% 4 = Fourth 20% 5 = Richest 20%
Gender (GD)	Measured using a dummy variable, namely 1 = Female, 0 = Male

Source: Own Study (2022).

This study measures the MBA variable with categorical variable one = having mobile banking and 0 = otherwise. The AGE variable was measured by the natural logarithm of the respondent's age. The OCC variable was measured using a categorical scale of 1 = working and 0 = otherwise. The EDU variable was measured using an ordinal scale, namely 1 = completed primary education or less, 2 = completed secondary education, 3 = Completed Tertiary education. The INC variable was measured using an ordinal scale 1 = poorest 20% 2 = Second 20% 3 = Middle 20% 4 = Fourth 20% and 5 = Richest 20%. The GD variable was measured using a categorical variable 1 = Female 0 = Male.

This study uses binary logistic regression because the dependent variable is categorical. To test the hypothesis, we have the following specifications:

$$MBA = \alpha\text{-}\beta1.Age+\beta2.OCC+\beta3.EDU+\beta4.INC+\beta5.GD+\varepsilon$$

We predict that the coefficient 1 is negative, meaning that age has a negative effect on mobile banking adoption, the younger a person is, the more likely he is to use mobile banking. This study also predicts that 2 and 3 are positive, meaning that occupation and education have a positive effect on mobile banking adoption, the more likely someone is to work and have a high education, the more likely they are to use mobile banking.

RESULT AND DISCUSSION

Descriptive statistics

Table II shows that more than half of the respondents are respondents who do not have mobile banking, 83.7%. The age variable has an average value of 3,608 which means that the average age of the respondents is not too young. The OCC variable shows an average of 0.705, meaning that most of the respondents in this study have jobs. The EDU variable shows an average of 1,828, meaning that most respondents have a sufficient level of education. The INC variable shows an average of 3,516, indicating that most of the respondents in this study have more than middle income. The GD variables showed an average of 0.501, meaning that most of the respondents in this study were women.

Table II Descriptive Statistics Research Variable

Variables	n	Mean	SD	Min	Max
MBA	16,421	0.163	0.37	0	1
AGE	16,421	3.608	0.407	2.708	4.595
OCC	16,421	0.705	0.456	0	1
EDU	16,421	1.828	0.702	1	3
INC	16,421	3.516	1.388	1	5
GD	16,421	0.501	0.5	0	1

Source: Own Study (2022)

Table III shows descriptive statistics that explain the average of each variable by country. The highest MBA variable is Kenya, with the proportion of mobile banking respondents being 85.9%. At the same time, the lowest MBA is Morocco, with the proportion of respondents who have mobile banking being 1.5%. The highest AGE variable was Romania, while the lowest AGE was Zambia and Namibia. It shows that Romania has older respondents than other countries. At the same time, Zambia and Namibia have younger respondents than other countries. The highest OCC variable was Kenya, with the proportion of working people being 89.5%, while Egypt was the lowest country regarding the number of working respondents, which was 54.4%. The highest EDU variable is Malaysia, with the average respondent completing education up to the third level. At the same time, Ethiopia is the country with the lowest level of education, so only some of them complete the second level education. The most significant INC variable is Zambia, where most of the respondents have middle to upper income, while respondents from Chile have the lowest income. The highest GD variable in this study was Pakistan, meaning that most of the respondents from Pakistan were women. At the same time, the lowest GD was Namibia, so it can be concluded that most of the respondents from Namibia were men.

Tabel III Descriptive statistics of the main firm level variables

Country name	n	MBA	AGE	OCC	EDU	INC	GD
Albania	346	0.046	3.728	0.662	2.020	3.910	0.436
Argentina	456	0.037	3.817	0.660	1.768	3.649	0.432
Bangladesh	356	0.281	3.554	0.607	1.739	3.548	0.590

Brazil	628	0.056	3.755	0.670	1.936	3.428	0.425
Chile	628	0.204	3.672	0.689	1.936	3.065	0.392
Ecuador	448	0.056	3.625	0.797	1.904	3.613	0.482
Egypt	323	0.037	3.794	0.554	1.845	3.644	0.622
Ethiopia	425	0.019	3.420	0.840	1.480	3.951	0.482
Ghana	381	0.606	3.433	0.745	1.867	3.669	0.622
Guatemala	286	0.028	3.485	0.815	1.720	3.601	0.441
Honduras	289	0.062	3.573	0.772	1.706	3.647	0.478
India	2,256	0.026	3.563	0.586	1.449	3.118	0.503
Indonesia	430	0.065	3.550	0.707	1.877	3.623	0.407
Jordan	365	0.019	3.682	0.584	2.088	3.647	0.614
Kenya	512	0.859	3.410	0.895	1.934	3.654	0.537
Malawi	187	0.449	3.448	0.872	1.684	3.866	0.471
Malaysia	788	0.154	3.501	0.744	2.563	3.211	0.529
Morocco	1,497	0.015	3.718	0.612	1.695	3.695	0.631
Mozambique	330	0.455	3.439	0.809	1.576	3.864	0.606
Namibia	710	0.562	3.388	0.730	1.889	3.325	0.332
Nigeria	533	0.148	3.423	0.829	1.974	3.786	0.690
Pakistan	196	0.204	3.588	0.694	1.934	3.796	0.837
Panama	366	0.068	3.654	0.686	2.096	3.650	0.423
Peru	356	0.053	3.623	0.831	2.118	3.728	0.488
Philippines	307	0.059	3.702	0.733	2.072	3.726	0.387
Romania	531	0.047	3.876	0.578	2.090	3.733	0.467
Senegal	185	0.584	3.505	0.816	1.757	3.870	0.676
Tanzania	203	0.631	3.550	0.818	1.591	3.842	0.542
Thailand	784	0.070	3.828	0.769	1.523	3.096	0.379
Venezuela	724	0.131	3.729	0.760	2.007	3.421	0.396
Vietnam	299	0.077	3.534	0.856	2.247	3.629	0.445
Zambia	296	0.537	3.388	0.730	1.980	3.970	0.524

Source: Own Study (2022)

Hypothesis Testing

Table IV shows the results of hypothesis testing. First, we tested AGE, OCC, and EDU without including control variables. Column 1 in Table 5 shows the coefficient of the AGE variable is -1.3373. It means that when AGE increases, the opportunity for MBA decreases significantly. The OCC variable shows a variable coefficient of 0.7926. It means that when the OCC opportunity increases, the MBA opportunity also increases significantly. The EDU variable shows a variable coefficient of 0.3573. It means that the higher the EDU, the chances of the MBA increase significantly. Therefore, hypothesis 1, hypothesis 2, and hypothesis 3 can be stated to be supported.

Table V The results of the main logistic regression analysis

Dependent variable: MBA			
Independent variables	Predicted sign	(1)	(2)
AGE	-	-1.3373(0.0594)***	-1.3916(0.0598)***
OCC	+	0.7926(0.0572)***	0.7321(0.0581)***
EDU	+	0.3573(0.0317)***	0.2709(0.0330)***

INC	+		0.1814(0.0174)***
GD	+		0.1726(0.0448)***
Intercept (β0)		1.7866(0.2236)***	1.4352(0.2265)***
Pseudo R2		0.0729	0.0821
n		16,421	16,421

***significance at 1%
Source: Own Study (2022)

Discussion

The above study results indicate that in emerging countries, age, occupation, and education have a significant effect on mobile banking adoption. Hypothesis 1 says that age has a significant negative effect, so that people who have a young age are more likely to adopt mobile banking. Hypothesis 2 says that working people tend to be more likely to adopt mobile banking. While hypothesis 3 finds that education can have a significant positive effect on mobile banking adoption, the higher the education, the more likely it is to adopt mobile banking. These results reinforce the results of previous research, which is still divided into different countries that age, occupation, and education can affect the level of adoption of mobile banking. This study describes the influence of demographic characteristics on the level of adoption of mobile banking in emerging countries. These results prove that demographic characteristics still dominate the causes of mobile banking adoption level in a more significant number of respondents than in previous studies. Tables VIa, VIb, VIc, and VId show that Brazil, Chile, Malawi, Thailand, and Venezuela have a significant effect of Age, WF, and EDU on MBA. It indicates that it is more specifically for these countries to pay more attention to age, occupation, and education to increase mobile banking adoption.

CONCLUSION

The community's demographic characteristics can affect the willingness to adopt mobile banking. The demographic characteristics analyzed in this study were age, occupation, and education. Younger people tend to be more likely to adopt mobile banking, people who have jobs are more likely to adopt mobile banking and higher education people tend to be more likely to adopt mobile banking. We use global financial index data from world banks involving 32 countries to see the effect of demographic characteristics on mobile banking adoption. Firstly, this study provides several contributions to the banking sector in emerging countries. It is better if banks want to increase the adoption of mobile banking to focus more on younger customers, working customers, and customers with higher education. Second, the results of this study indicate that by using a broader sample in many countries, this study can analyze the factors that cause increased adoption of mobile banking more comprehensively and have a high level of generalization. Countries such as Brazil, Chile, Malawi, Thailand, and Venezuela significantly influence Age, OCC, and EDU on MBA. The implication of this finding is the need for the government to increase financial inclusion by empowering younger people already working and have higher education to adopt mobile banking. Meanwhile, the bank needs to carry out a promotional segment that focuses more on younger people already working and who have higher education to increase the number of people who adopt mobile banking. This research has limitations. Namely, it has not included factors from the countryside, such as the quality of the internet network and macroeconomic conditions, so it is hoped that subsequent research can carry out these factors.

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