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Measuring Client's Feelings on Mobile Banking

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Abstract.
Mobile banking is relatively a new service offered by banks around the world. Banks are obliged to keep investing in new technologies as otherwise, they would lose competitiveness and market share. It is, although interesting, to know how clients react to these innovation efforts.
This study aims to understand the client's responses to bank innovation, especially to mobile banking technology in Albania. An online experiment is conceived based on Experimental Design Principles. Participants evaluate combinations of messages (elements) about mobile banking and rate each combination. The collected data are used to create individual models and later a general model to calculate the statistical relevance of each of the messages. The models use ordinary least squares regression and advanced data mining techniques (k—means clustering) to analyze the data and classify participants accordingly.
At the end of the analyses, a set of two or three mindsets are depicted to show what pushes participants in the study in their decision-making process. These mindsets help banks understand clients' reactions and allow banks to address different issues to serve their clients better.

Keywords: Bank; Clients; Mind Genomics Technology; Mobile Banking; Statistical Models

JEL Codes: G2

1. Introduction

Mobile banking is offering its services to the large public not long after the introduction in the market of smartphones. Because of the facilities it provides, and the easiness of use, soon it became a necessity for the banks to provide such a service to their customers; an application for an instant and reliable access. Although the success of this new technology was rapid and widespread, some questions are still raised concerning mobile banking as to what extent it affects the future of banking as well as the direct impact on banks' profits. There is still a need to assess the competitive advantage that the banks will gain in the market and what are the best paths to follow to guarantee the obtained success. Adequate use and future advancements of new technology must come after a feasibility study of the adoption phase.

Thus, several studies worldwide have addressed the issue of the acceptance of this new technology. (L'Hostis & Wannemacher, 2015) provide a detailed analysis of the landscape of mobile banking. Some authors have developed a technology acceptance model that integrates the innovation diffusion theory, perceived risk, and trust in the classic TAM (Technology Acceptance Model) model to shed light on what factors determine user acceptance of mobile banking applications (Muñoz-Leiva et al., 2017). (Aboelmaged & Gebba, 2013) undertook a study aiming to extend the understanding regarding mobile banking adoption through integrating the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB).

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(Lu et al., 2015) designed a new hybrid model, the multiple attribute decision-making (MADM) model, which combines decision-making trial and evaluation laboratory (DEMATEL) for building an influential network relationship map (INRM), DANP (DEMATEL-based ANP) for determining the influential weights

of criteria. They also use the VIKOR method using the influential weights to evaluate and integrate the criteria in the gaps and reduce the gaps to satisfy the users' behavior needs based on INRM. Others (Baptista & Oliveira, 2015) have advanced the body of knowledge on mobile banking acceptance by proposing an innovative and comprehensive theoretical model that combines the extended unified theory of acceptance and use of technology.

The image of banking would be impacted by the technology and more specifically by mobile banking; this is what the banks claim (Yu, C. S. 2012). The main feature of mobile banking is that it affects three important areas of banking marketing such as banking transactions, the visibility of the bank in new markets, and e-commerce (Shaikh, A. A., & Karjaluoto, H. 2015).

The mobile banking adoption issue in specific countries has been widely discussed in the research community. (Jehan & Ansari, 2018) brings the experience and the lessons learned during the adaptation of this technology in Saudi Arabia. (Tan et al., 2010) investigate the factors that affect the adoption of online banking in Malaysia. They found that social influences, perceived usefulness, trust, and ease of use were positively associated with adopting online banking. (Yee - Loong Chong et al., 2010) showed that perceived usefulness, trust, and government support are all positively associated with the intention to use online banking in Vietnam. (Shaikh & Karjaluoto, 2015) explore the current trends in e-banking in the Pakistani banking sector to provide an easy interface to their customers who avail of the e-banking services without any physical presence in the bank vicinity. (Arvidsson, 2014), (Ilollari et al., 2020) studied consumers' attitudes on starting using mobile payment services. Others (Yu, 2012) used the Unified Theory of Acceptance and Use of Technology (UTAUT) to investigate what impacts people to adopt mobile banking.

(Mortimer et al., 2015) study the adoption of mobile banking technologies in emerging Asian economies split across Thailand and Australia. They find that perceived ease of use, usefulness, and perceived risk were the primary determinants of mobile banking adoption for Australian consumers.

In their study (Nagaraj & Singh, 2017) adapted the Technology Acceptance Model (TAM) and Perceived Web Security (PWS) construct to understand the adoption of IB services in India. They heavily use the Perceived Usefulness (PU) and Perceived Ease of Use (PEoU) as the two main determinants to evaluate the Attitude towards Use (ATU) and Intention to Use (INTU) internet banking services. The same study also included Perceived Web Security (PWS) as one of the constructs in understanding the attitude and behavioral intention of the customers in adopting IB services. (A & Nassar, 2012) modified the existing Unified Theory of Acceptance and Use of Technology (UTAUT) model and added new and removed existing factors to adjust this model to the local environment. They added to the existing UTAUT model a new moderator factor called the influence of education. Also, they augmented the current set of elements with the Reliability, Design Issues, and Security issues as the three technology-related factors to the UTAUT model.

For the previous generations, the checkbook was the outcome of their relationship with their bank, but with the changing technology and the way, the banks operate everything is changing. It is less likely that the coming generation will ever use checks. With this expansion in technology, the way people communicate has drastically changed. Nowadays mobile phones have become an important asset when doing online shopping, chatting, etc. Mobile technology also changed the way people satisfy their banking needs.

Mobile banking is a new trend (Sanader, 2014). Thus, the relationship people have with their banks has changed, but also with their mobiles. New brands are acting as "money vaults" for consumers (Illollari & Gjino, 2013). The financial services providers make sure that they are the first ones to change the future of

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Mobile Money, i.e., the banking location, shopping, and making payments. These financial service providers play an essential role and they should ensure that they are not losing ground in this sector.

Nowadays, successful customer experiences will require robust technology investments, collaborations with competitors, and client strategy. This new context could greatly benefit the banks if they were open-minded, eager to learn, and provide security lessons, and marketing, drawn from developing markets (Boar, 2002). Some financial analysts have stated that taking the industry as a whole, the upside from mobile banking will be limited, and value creation may be neutral at best (Gjino. & Ilollari (Findiku)., 2014).

On the other hand, the profit and revenue opportunities are considerable at the individual banks' level. In general, banks operate their business with a primary purpose - maximizing profit (Artur Ribaj et al., 2020). Opportunities of mobile banking may have approached the prospect, but these opportunities can create worth value if banks consider three prospective:

1. The broader “mobile” industry

Mobile technology is already creating value for a range of non-banks, mobile phone manufacturers, and online pioneers. These users can produce new services and apps, generate more data traffic, offer social networking and afford marketing services. Banks may want to rap into these new sources of value or at least find partners that will give them a slice of the action.

2. Bank profits

Banks will need to develop an accurately differentiated ultra-convenient mobile banking user experience to gain share in home markets. Creating this new environment is the reason that will expand relationships with customers, permitting banks to cross-sell risk-based and liability products (A. Ribaj & Ilollari, 2019).

3. Banking industry

It will be wise for the banking industry to generate value from the new profit sources (new customers, new products) by charging for mobile’s greater opportuneness and lowering costs.

Online banking already seems to be hitting a threshold of acceptance, with some consumers skipping over this stage of financial engagement and moving directly to mobile banking. This service is already requested because the customers’ requests increase simultaneously as the technology develops. Most banks already offer mobile banking functionality; the challenge going forward will be to execute a differentiator strategy from a customer experience and revenue perspective. So that the banks are more competitive with each other, they are aware that they should be offering the latest products and functionalities. Furthermore, they should bring and implement innovation (Gomber et al., 2018).

As more innovative Smartphone applications are developed within and outside the financial services sector, the ability for banks to keep pace becomes both more critical and more complex. New devices and new tools increase engagement and contextual interaction with those banks that seize the opportunity. As the penetration of Smartphones increases, customer expectations are growing as well. So, as stated above, the banks are forced to follow the technology developments to respond to their customers’ needs.

By building an agile, best-in-class mobile infrastructure, the impact can be realized through increased differentiation, lower-cost customer acquisition, improved channel efficiency, improved customer retention, and more significant revenues through up-selling and cross-selling of services and products merchant-funded rewards (Chuang, 2019).

By designing, executing, and optimizing a successful mobile banking plan integrated with a more comprehensive multichannel strategy, banks are better positioned for future mobile banking.

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Nowadays, almost every service, request, or need is turning into a virtual service. As a result, the banking services are in the customers' hands through their smartphones, where they make their mobile transfers. The bank cash desks are not as crowded as they used to be because of the innovations in the area (Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. 2018).

Several studies have addressed the issue of what influences people to trust the e-banking approach (Xiao et al., 2017), (Ilollari & Gjino, 2013).

The data privacy issue is a far-reaching issue that banks and clients have to deal with constantly. The point of data privacy has been the focus of a few studies such as (Oyedemi, 2015); (Akpojivi & Bevan-Dye, 2015). To understand the concerns about this issue, the authors have interviewed thousands of students from different universities in South Africa. They state that while companies have made mobile advertising a strategic business plan in today's global competitive marketing world, security and data privacy is a significant concern for students of generation Y in South Africa. (Zhou, 2012) integrate both perspectives of trust and flow experience to examine the factors affecting mobile banking user adoption. They conclude that mobile service providers need to address both trust and flow experience to facilitate user adoption and usage of mobile banking services.

This paper tries to contribute to the existing literature in three different ways. First, this study addresses the perception of users regarding the mobile banking approach. There are many studies, as presented in the Introduction part of this paper, that have addressed different aspects of this technology as a whole (L'Hostis & Wannemacher, 2015); (Muñoz-Leiva et al., 2017); (Aboelmaged & Gebba, 2013); (Arvidsson, 2014); (Ilollari et al., 2020) and issues that needed to be resolved related to the mobile banking technology because of the specifics of particular countries (Zhou, 2012) ; (A & Nassar, 2012); (Oyedemi, 2015), (Akpojivi & Bevan-Dye, 2015), to name a few.

Second, this study uses the experimental design of ideas, Mind Genomics (Milutinovic & Salom, 2016); (Moskowitz et al., 2006) to understand people's minds concerning specific messages. Mind Genomics is a collection of well-accepted yet novel approaches to understanding the mind of participants in an interview. These methods begin with permuted experimental design, move on to dummy variable regression, and clustering, and then create strategies to assign a new person to one of the clusters or mindsets uncovered. Third, the overarching goal of this paper is to present to financial institutions some valuable findings and insights that deserve consideration when thinking about the need to improve mobile banking at the practical level.

The rest of the paper is presented as follows: Section Methodology shows the data used for the analyses and the scientific approach, section Results and Discussions presents a list of the results obtained by this study, and the last section, Conclusions and Recommendations, shows findings of this study.

2. Methodology

This study uses the new science of Mind Genomics (Moskowitz et al., 2006) to analyze the collected data. Initially, the researcher should study the problem to be solved and identify four pillars (silos) that will serve as the basis for the study (Todri et al., 2020). These pillars are referred to as questions by the system. Four potential answers are to be defined for each pillar, representing the most probable answers to the question. Answers from each silo are combined according to an Experimental Design model to create vignettes that are presented for evaluation to participants using a 1-to-9-point Likert scale. Each participant evaluates 25 vignettes. Regression models (Zdaniuk, 2014), data mining, and clustering techniques

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(Mucherino et al., 2009) are used to analyze the data to find the statistical relevance of each of the answers/elements presented to the participant via the vignettes (Milutinovic & Salom, 2016); Moskowitz et al., 2006).

Mind Genomics is a research procedure that can be used to address problems from different domains, be it political science, business, or marketing. It has been used to solve several such issues, and many publications have enriched the scientific literature.

Initially, Mind Genomics was used primarily to explain marketing problems by the famous duo Gofman and Moskowitz. Their work appeared in many individual and joint publications (Gofman, 2012), (Gofman & Moskowitz, 2010), (Moskowitz et al., 2006).

The theoretical work of Moskowitz and Gofman was the basis for establishing Mind Genomics as a new and respectable branch of social and psychological science, paving the way for often-breakthrough research in different areas of human activities (Moskowitz et al., 2020). Over time, scientists and business folks began to recognize the value of Mind Genomics as a valuable tool to solve decision-making problems at the granular level of particularity, the level where meaningful living occurs.

The majority of the studies using the Mind Genomics science were focused on the Food Industry. Thus, (Zemel et al., 2018) used Mind Genomics to uncover consumer thoughts regarding raw beverages. (Saulo et al., 2019) undertook a study to depict linking food endorsement labels and messaging to perceive price and emotions. (Gere et al., 2018) studied issues related to consumer requirements regarding natural food stores.(Gere et al., 2018) analyzed the minds of consumers regarding the use of milk. A study combining Artificial Intelligence, Mind Genomics, and Predictive Viewpoint Typing was conducted by (Zemel et al., 2019). It is the first time that Mind Genomics was paired with Artificial Intelligence to determine how consumers perceive dairy products.

Sending customers the right message has always been a critical objective of companies offering products and services. Reaching these goals demands understanding what customers think about specific ideas and messages. In providing products and services, it is relevant to determine whether there are different Mind-Sets for the same topic. If there are, it is necessary assigning people to the right Mind-Set. (Ilollari et al., 2019) used Mind Genomics as a simple tool to understand the specifics of what features of a service or product appeals to individuals, and then a method for assigning any new person to the most appropriate Mind-Set. A simple set of questions, integrated into the PVI (Personal Viewpoint Identifier), assigns the new person to the Mind-Set, doing so in 'real-time.' Finding a couple of groups of people thinking alike allows for sending them personalized messages achieving better sales performance of the offer.

During the pandemic times of COVID-19, higher education institutions around the world had to adopt a new teaching paradigm referred to as Distance Learning (DL).

Thus, it was necessary to understand what students and professors think about this approach they were using for the first time as the primary teaching tool. It is relevant to feel the kinds of problems that are to be solved so that the traditional teaching process's efficiency and interactivity are not negatively impacted (Todri et al., 2020).

This study aims to understand how people feel about mobile banking in Albania. This study established as main pillars (silos) the following aspects:

1. Question A: What is the Culture of Mobile Banking in Albania?
2. Question B: How do Albanian clients evaluate mobile banking services?
3. Question C: What is the use of mobile banking in Albania?
4. Question D: What are the pros and the cons of mobile banking in Albania?

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For each question or referred to as a silo as well, four potential answers or elements are provided. The array of "questions" and their associated answers appears in Table 1.

Table 1. Silos and the corresponding answers and their total evaluation.

	Additive Constant	47
	Question A: What is the Culture of Mobile Banking in Albania?	
A1	Clients are well familiar with functions of mobile banking	5
A2	Clients have good knowledge of banking services	4
A3	Clients are not familiar with banking services	2
A4	Clients are attentive to mobile banking advertisements	2
	Question B: How do Albanian clients evaluate mobile banking services?	
B1	Mobile banking services are difficult to use	-1
B2	Mobile banking has improved the quality of services to clients	2
B3	Not all banks in Albania offer friendly mobile banking	-2
B4	Mobile banking is used only by the young generation	-3
	Question C: What is the use of mobile banking in Albania?	
C1	I am not confident to make online transactions	-7
C2	I use mobile banking only for paying my bills	-8
C3	Cyber security issues make me uncomfortable using mobile banking	-1
C4	Mobile banking has reduced the time I spend in bank offices	-8
	Question D: What are the pros and the cons of mobile banking in Albania?	
D1	Mobile banking is the banking of the future	-4
D2	Mobile banking exposes personal data to hackers	0
D3	Mobile banking reduces bank administrative costs	1
D4	In general, people do not largely use mobile banking services	0

An online survey was designed and created 1656 different combinations presented to participants for evaluation. Participants provided some personal data such as gender, and age and indicated one of three reasons or qualification criteria, the kind of banking services participants would like:

1. Looking for: Fast and secure banking
2. Looking for: Going to the bank to directly talk to the clerk
3. Looking for: Avoiding problems with hackers

Mind Genomics uses a class of programs called cluster programs (or clustering) to identify groups of respondents with similar patterns of coefficients or impact (Mucherino et al., 2009). For the Mind Genomics studies, one particularly favorite method computes the Pearson correlation between each pair of respondents

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(Pearson R) and then computes the number (1-R). The Pearson R varies from a high of +1 when two patterns follow identical paths, so increases in one pattern correspond to precise, predictable increases in the other pattern. In such a case, the Pearson R of +1 becomes a 'distance' of 0 (1-1) = 0. A perfect inverse relation generates a Pearson R of -1 or a distance of 2 (1- -1 = 2).

With these 'distances' between pairs of respondents, the clustering program creates solutions, such as a 2-cluster solution where each respondent is a member of exactly one of two segments (groups) or a 3-cluster solution where each respondent is a member of exactly one of three segments (groups), and so forth.

The best segmentation, i.e., the 2-cluster, 3-cluster, 4-cluster solution is selected based on two simple criteria, parsimony and interpretability, respectively. Parsimony means as few segments or clusters as possible. Ideally, no clusters would be best; everyone would be like everyone else. Typically, this is not the case, but some situations come close, such as responding to an interview where people share a common opinion. Usually, the system creates two clusters or three clusters, occasionally with four clusters. The created clusters are referred to as mindsets.

Interpretability means that the segmentation should tell a story. That is, the mindsets should reveal to us a meaningful, unique pattern for each cluster. Interpretability is a subjective notion, left best to one's ability to see a bigger 'picture' within the data.

3. Results and Discussions

Table 1 shows the regression results for our study. The additive constant = 47 (Intercept by statisticians) shows that 47% of participants appreciate mobile banking in the absence of elements. It means almost one in two respondents favor mobile banking (MB) without looking at the elements. Element A1: Clients who are well familiar with the functions of mobile banking has the highest coefficient = 5. The interpretation of this value is: the presence of A1 in a vignette will likely increase by 5% the respondents voting in favor of MB. A single vignette with A1 included will generate 47+5=52% of respondents voting in favor of MB.

Obtained results show that 68% of respondents have selected Looking for: Fast and secure banking. For this group of respondents, the additive constant is 46. They have evaluated silo A positively: What is the Culture of Mobile Banking in Albania but have a less favorable evaluation for silo B and a negative assessment for silos C and D.

20% of participants have selected Looking for: Going to the bank to directly talk to the clerk as the reason for mobile banking. Almost all the silos (A, B, C, and D) are evaluated negatively by this group, especially silo C: What is the use of mobile banking in Albania? (C1 evaluated with -16, C2 with -12, C3 with -10, and C4 with -26).

12% of participants have selected Looking for: Avoiding problems with hackers as the reason for mobile banking services, and the additive constant of this group is 31. Participants that would like to avoid hackers and hacking problems are the most pessimistic ones. This group of participants has evaluated by 14 the answer C1: I am not confident in making online transactions and by 8 answer C3: Cybersecurity issues make me uncomfortable using mobile banking. This group of respondents is also pessimistic about MB being the banking of the future as they have evaluated D1: Mobile banking is the banking of the future with -2.

The elements with the smallest overall coefficient are C4=-8, C2=-8, C1=-7 related to the use of MB in Albania. The presence of C4 or C2 in a vignette will decrease by 8% the number of respondents voting positively for MB. Elements C1, C2 and C4 are part of the silo: *The Use of Mobile Banking in Albania*. It shows that people are not comfortable with MB because of security issues.

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58% of participants are female and 42% male. Results show that regarding the issues of silo A, females are more favorable than males. The answer of familiarity with mobile banking females have evaluated with 9 while males with 0. Females think that Clients are not familiar with banking services and have evaluated with 6 while males with -1.

Regarding the answers of silo B: How Albanian clients evaluate mobile banking services, males and females do not have sharp divisions in their evaluations; both have a negative assessment with females with a total of -5 and males with a total of -4.

Even the evaluation of silo C: What is the use of mobile banking in Albania females and males are in the same negative direction with females with a total of -20 and males with a total of -30. Only the evaluation of the future of mobile banking, silo D: What are the pros and the cons of mobile banking in Albania females have a slight difference from males. Females have a total of -7 and males a total of 1. Females see with skepticism the future of mobile banking.

Group ages 18-24 and 45-54 have values of additive constant of 65 and 56, positively inclined towards MB in the absence of any other information offered by other answers. The same groupages that form 40% of respondents have a total evaluation of silo A of 43 and 36.

Regarding the set of answers of silo B groupages, 25- 34 and 55-64 are more positive with a respective total of 4 and 27. When evaluating silo C, only groupages 35-44 have a positive evaluation of 41; all other groupages have a negative assessment. Only groupage 18-24 sees mobile banking as the banking of the future. The same groupage is concerned with the issue of exposing personal data to hackers and the fact that mobile banking has reduced banking administrative costs.

In the end of the study, Mind Genomics creates two mindsets that include people that think alike. Table 2 shows the elements of the table that form the two mindsets.

Table 2. Selecting the mindsets for the study.

	Base Size	696	960
	Additive Constant	51	47
		MindSet1	MindSet2
	Question A: What is the Culture of Mobile Banking in Albania?		
A1	Clients are well familiar with the functions of mobile banking	-2	8
A2	Clients have good knowledge of banking services	-1	8
A3	Clients are not familiar with banking services	-3	6
A4	Clients are attentive to mobile banking advertisements	-4	4
	Question B: How do Albanian clients evaluate mobile banking services?		
B1	Mobile banking services are difficult to use	-11	3
B2	Mobile banking has improved the quality of services to clients	-2	4
B3	Not all banks in Albania offer friendly mobile banking	-10	5
B4	Mobile banking is used only by the young generation	-6	-2
	Question C: What is the use of mobile banking in Albania?		
C1	I am not confident to make online transactions	10	-19

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C2	I use mobile banking only for paying my bills	4	-17
C3	Cyber security issues make me uncomfortable to use mobile banking	12	-10
C4	Mobile banking has reduced the time I spend in bank's offices	4	-17
	Question D: What are the pros and the cons of mobile banking in Albania?		
D1	Mobile banking is the banking of the future	-12	0
D2	Mobile banking exposes personal data to hackers	-7	4
D3	Mobile banking reduces bank's administrative costs	-14	12
D4	In general, people do not largely use mobile banking services	-6	3

As shown in Table 2, the members of the mindset1 are the ones that are positive about the use of mobile banking in Albania; we could refer to these people as the "mobile-banking users." In the same way, we could refer to people included in mindset2 as "mobile-banking believers." Depicting the mindsets is important for advertisement purposes; in the event, that an advertisement should be sent to a person belonging to mindset1, then messages reflecting answers to silo C should be used. In the event an advertisement is sent to a person belonging to mindset2, then messages on silos A, B, and D should be included.

Mind Genomics has a well-appreciated feature referred to as the Personal Viewpoint Identifier (PVI) that, based on the obtained results, can classify new participants that have not participated in the interview into mindsets already depicted by the system. The mindsets and the PVI tool help create a database where clients and their mindset classifications are stored. The database allows for personalized marketing.

4. Conclusions and Recommendations

Banks are now being prepared to take advantage of another profit opportunity, another product usable by all of us, the "Mobile phone." The interest in "Mobile Banking" products is becoming increasingly intense. Applications and new technologies are spreading through European banks mobilized to embrace this profitable product. Mind Genomics has a well-appreciated feature referred to as the Personal Viewpoint Identifier (PVI) that, based on the obtained results, can classify new participants that have not participated in the interview into mindsets already depicted by the system. The mindsets and the PVI tool help create a database where clients and their mindset classifications are stored. The database allows for personalized marketing.

As smartphones become more commonly used and their capabilities expand, they may increasingly be the means consumers use to access financial services and manage their finances.

In fact, our study has identified two meaningful mindsets:

1. Optimistic Mindset - The believers in mobile banking
2. Careful Mindset - The careful users of mobile banking

What is noticed in the first mindset is that most of the positive responses were that customers are well familiar with mobile banking functions and have good knowledge of banking services. What is characteristic of the second mindset is that one of the factors that restrict some customers from using mobile banking is that they still have uncertainties regarding the security of the technology. Most respondents do not trust to conduct their transactions through Mobile Banking, so banks need to increase the security of their customers for them to trust in the use of Mobile Banking. There is a lot of work to be done by the banks to spread

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confidence that mobile transactions are secure. Based on the answers given, mobile banking is not a familiar tool used by all ages of customers. The generations that use online banking are 24-34 years as they are also the ages that much easier accept technology and be updated in all sectors. Usage of mobile banking on a large scale decreases the administrative costs of the banks. According to this study, men use mobile banking more than women, and maybe even banks should think that for this category to send promotions for their products, e.g. (leasing to buying a car). Banks have to develop tools to promote the use of mobile banking for women as well. An education/information process is necessary for women to appreciate the comfort of mobile banking. The group age of 55+ is not comfortable using mobile banking and rightly very suspicious of hackers and the data privacy issue. But based on the variety of their products, according to the classification of their age, gender, and financial knowledge, banks can promote their products in a personalized way by sending these groups various promotions about banking products. 47% of participants are optimistic about mobile banking, and this means that there is still a lot of work to do by banks to inform and educate their customers to be in the same range of use in both the region and EU. We think that banks will find their stride in cost reduction over the following years due to mobile banking requiring them to be more cutting-edge thinkers and nimbler in implementing necessary changes in the services offered and security required.

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