

Voluntary Insurance - A Proposed Product in Bank-led E-Banking Services: Statistical Analysis of Customers' Preferences

Akim M. Rahman

Canadian University of Bangladesh, Economics, Bangladesh, Policy Research Project. OSU, E-mail:rahman.19@osu.edu
<https://orcid.org/0000-0002-8162-555x>

Abstract

In digital-world, banking-services have been modernized. But it faces pitfalls being it riskiness. Many factors are unpredictable in e-banking. Moreover, since customers do not exactly remember the total amount s/he currently has in account, receiving email confirmation on transactions cause panic to accountholder. These perceived risk-factors have been undermining the prospects of cashless-society in world-economy country-wise such as Bangladesh. Banks can eliminate perceived-risk by adopting *Voluntary Insurance* - a proposed product in e-banking. Thus, the purpose here is to know how do customers feel about this probable product? Survey *questionnaire* is used for data-collection and for carrying-out convenience sampling reliability analysis. Then Hypotheses are developed and tested in choice problem on whether bank-led users prefer *Voluntary Insurance* (VI) as a product in e-banking-services. Statistical analysis of customers' opinions reveals that "age-group" and "occupation-group" of customers have different preferences on proposed-product where demographic factors impact customers' preferences.

Keywords

Bank-Led Digital-Banking, Perceived Risk, Voluntary Insurance As A New Product, Risk-Free Digital-Banking, Cashless Society

1. INTRODUCTION

In today's *technology-driven* world-economy, banking-services have been modernized country-wise where Bangladesh-economy is no exception. Besides traditional banking, digital-banking, particularly, bank-led digital and mobile-led digital such as Agent-banking, bKash, Western-Union etc. here serve new-way financial-services (Rahman, 2020; The Daily Star, 2021). But, in the *21st-Century business-mentality era*, many factors are unpredictable (Rahman, 2018). Strict laws & its application can marginalize the magnitudes of *Perceived risk* where, in some cases, developed countries are ahead of developing countries.

In this journey, Bangladesh has made huge progress in digital-banking over the last decade where approximately over six percent of the population makes payments using mobile-led banking (The Daily Star, 2021). Being a country with population of 160 million, there are lot of opportunities and prospects when it come digital banking. However, for prompt & effective outcome in Bangladesh-economy, three factors are needed to come together and then work in cohesions (Rahman, 2018). These factors are a) payment instruments from end user's sides b) acceptance instruments from retailers & businesses and c) the trust factor. No doubt, the government has been playing important roles enabling environment with the help of FinTech - *Confirmation & Tech Communication*. But, FinTech services have been facing difficulties addressing the trust issues since the beginning of its journey in financial services (The Daily Star, 2021). It does not guarantee absolute risk-free digital transactions where developing countries are vulnerable. Furthermore,

since customers do not exactly remember the total amount s/he currently has in account, receiving email confirmation of any transactions including deducting account charges cause panic to corresponding accountholders. All these together might have led a slower growth of digital banking in countries like Bangladesh. Transferring cash takes a lot of trust in the system (Rahman, 2018). Many people in the country do not seem to truly trust digital money transfers. They feel it to be risky in multi-faucets *i.e.*, they face perceived risk. Thus, trust and feeling-risky are pivotal, which have been undermining the progression of digital-banking trends in Bangladesh-economy (The Daily Star, 2021).

Dealing with determinant “perceived-risks” (PR), the current author proposed in literature the *Voluntary-Insurance* (VI) in bank-led digital services (Rahman, 2018). In a comparison-study between bKash & bank-led e-banking, underpinning Factor Analysis and Hypothesis Testing on customers’ opinions in Bangladesh-economy Rahman (2020) concluded in two-folds. They are a) attribute “Phone call confirmation” has influenced customers’ preferences using bKash and b) attribute “No transaction fee” has influenced using bank-led digital. It clearly tells that having mobile-led banking such as bKash, Agent-banking, bKash, Western-Union etc. in place has eased overcoming technology type factor. However, there is *at least* one critical-factor category, which is overlooked or has received inadequate attention in policy-design, is the PR. Accordingly, Rahman (2020) re-emphasized the policy proposal of the VI or as a new product VI for effectively addressing the trust issues that have been undermining the expected progression of e-banking in Bangladesh. This proposed product deserves to be empirically scrutinized using customers-preferences in bank-led e-banking in Bangladesh. The recent studies in many countries such as the United States of America reveals that 70% of digital bank customers and 44% of traditional bank customers want embedded insurance offers based on transaction data (Global News wire, 2021).

Thus, in aim to address the PR-factors for heightening the trends of digital-transactions, this study takes on challenges scrutinizing customers’ preferences for the VI as a new product in bank-led e-banking services in Bangladesh. In addition, this study evaluates the effects of two moderating variables *particularly* gender and experience using bank-led-digital in Bangladesh-economy.

2. LITERATURE REVIEW

Perceived risk was *first* introduced in literature in 1960 (Bauer, 1960) and it was treated as an influence that had led the overall perceived value of purchasing behaviors. *Later*, Cunningham (1967) referred the perceived risk as the deterministic feeling if the result were adversely unfavorable. In year 1989, the Technology Acceptance Model (TAM) of Davis (1989) revealed three components. They are a) perceived-usefulness b) perceived ease of use and c) system usages. Hong *et al.* (2001) added two categories of external variables. They are “individual differences” and “system characteristics.” Chau (1996) simplified it by using four perceived factors. They are a) perceived ease of use b) perceived long-term usefulness c) perceived short-term usefulness and d) behavioral intention to use.

While this progression in literature was going on, Venkatesh *et al.* (2003) compared and tested the variables in eight different models about users’ TAMs and subsequently, they proposed a Unified Theory of Acceptance and Use of Technology (UTAUT). It is consisted of four core determinants of acceptance and four moderating factors. Il Im *et. al.* (2007) and Malika (1997) investigated four potential variables in users’ technology-adoption. These variables were a) perceived-risk b) technology type c) user experience and d) gender. Their findings showed that perceived-risk, technology type and gender were found to be significant.

Since we live in a world of business-mentality where many factors are often unpredictable, it is *palatable* claiming that strict-laws & its fullest application can marginalize the magnitudes of this “perceived-risk.” On this matter, in today’s world, developed countries are doing better than that of developing countries. But it does not guarantee an absolute risk-free On-the-Go banking even in developed countries. On risk issue, developing countries are vulnerable, which might have led a slower growth of bank-led digital-banking in countries such as Bangladesh where mobile-led payment (bKash), has been dominating the trends of digital transactions (Rahman, 2018).

Dealing with determinants “perceived-risk”, current author proposed in literature *Voluntary Insurance* (VI) in e-banking services (Rahman, 2018). Under the proposal, bank will introduce the VI as a new product in digital-banking-services where customers of digital-banking will decide buying it or not buying it. In literature, the proposal has not yet been challenged. Furthermore, the proposal deserves to be scrutinized on how the customers feel about it. The expected findings can be a guidance to policymakers addressing the issue by crafting digital-banking provision for having the VI product in bank-operation country-wise such as Bangladesh. This study advances with the goal where Bangladesh-economy is chosen as a case study, which can fill-up the gap in literature.

2.1. Perceived Risk (Pr) In E-Banking Services: What Is It?

The concept “risk” is organized around the idea that a customer-behavior involves risk in the sense that any customers’ actions may create consequences that they cannot anticipate anything approaching with certainty (Bauer, 1967). Perceived-risk is powerful in explaining customers’ behaviors because customers are more often motivated to avoid mistakes than to maximize utility using digital-banking (Nygaard *et. al.*, 1999; Rahman, 2018). Risk is often present in choice-situation as customers cannot always be certain that a planned-use of digital-banking will achieve absolute-satisfaction. Online shoppers perceive greater risk when paying online-bills (Quintal *et al.*, 2006). Underpinning the reality of today’s competitive-markets, perceived-risk is regarded as being a composite of several categories of risk. In literature, eight types of perceived-risk have been identified in digital-banking (Featherman, 2003; Pavlou, 2003; Lee, 2009). They are in brief

- 1) Security / privacy risk
- 2) Financial risk
- 3) Performance risk
- 4) Psychological risk
- 5) Customer dispute
- 6) Social risk
- 7) Time risk
- 8) PIN fraud risk

2.1.1. *Voluntary Insurance: What Is it? How should it work?*

Addressing issues, *particularly* perceived risk-factors that undermine the growth of digital-banking in world-economy country-wise, *Voluntary Insurance* as a product of digital-banking proposed by Rahman (2018) in literature. That raises questions: What is *Voluntary Insurance* ? How does it work?

2.1.1.1. The Voluntary Insurance (VI)

It is well recognized that PR plays an influential role in setting the stage for the VI option in e-banking services (Rahman, 2018; Global News Wire, 2021). It is palatable assuming that customers of e-banking services are risk-averse. They prefer certainty to uncertainty. Fig - 1 illustrates risk preferences of a risk-averse banking-customer.

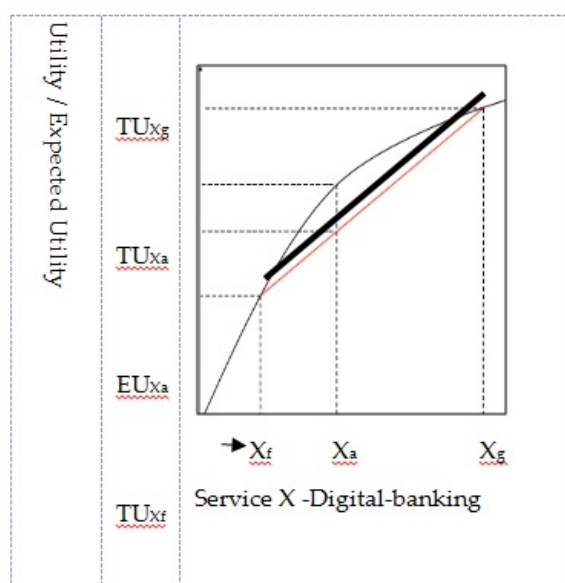


Fig. 1: Risk aversion scenario; Source: (Rahman, 2018)

In this uncertainty-world-activities, a customer receives actual utility from digital services, which will never fall on the TU (X) but on the chord (the bold line) as it is shown in Figure 1. The X_g as shown in Fig. 1, represents digital-banking service-outcome. Here customer may use a certain level of service X. Since the X_f represents negative outcome, thus, customer may use less of service X. Since the existence of the level of uncertainty is undeniable, a customer may not use X_g units of service X. Thus, the utility that this customer receives will lie somewhere on the chord (the bold line). Here the chord represents the expected utility (EU) of using service X that lies in the concavity of the curve. This is because, it is the average probability that the customer will use service X or will not use it. As a result, an individual will never receive TU (X_a) but s/he will receive EU (X_a). Thus, it can be preferable to customers of e-banking in Bangladesh-economy.

2.1.1.2. The way VI should work in bank-led digital-banking services

The financial sector can introduce it as a product in operation where bank or third-party can collect premium ensuring secured services. The way it would work is that customer's participation will be voluntary (Rahman, 2018). Insurance will be attached to customer's account, if and only if, customer wants it for digital services. Since the program will be designed in a way of transferring the risk away from its premium-payers, it will ensure premium-payers with a sense of certainty. Here premium-receivers will take *extra* measures for ensuring risk-free digital-banking services. For example, ATM Card or Credit Cards, Bank Cards etc. can be protected by setting two identifications such as password and a finger-scan. Suppose a customer wants to use ATM card where to access his account, the customer will have to use two identifications namely own setup password and previously chosen finger-scan say his thumb or forefinger scan. Here finger scan in addition to password can be connected to the ATM system, which will make digital banking to be enhanced secure. Overcoming the risk of heist or hacker's access to bank accounts, under the proposal, similar own set up identifications can be used. In global banking cases such as remittances, the program can ensure risk-free on-the-go or digital banking services.

2.2. Prospects of VI As A New Product In E-Banking Services

Once a bank introduces Voluntary Insurance (VI) as a new product, it may be spread from bankers to customers. This process of life cycle of the VI product can be described using the "S-curve" or diffusion curve. This S-curve maps the growth of revenue or productivity against time.

In the early stage of this progression, growth is slow as the new product establishes itself. At some point customers begin to demand and the product growth increases more rapidly. These new incremental changes to the product can allow the growth to continue. Toward the end of its life cycle, the growth slows and may even begin to decline. In later stages, no amount of new investment in that product will yield a normal rate of return. However, it will establish a secured bank-led digital banking through the bankers who introduce this new product.

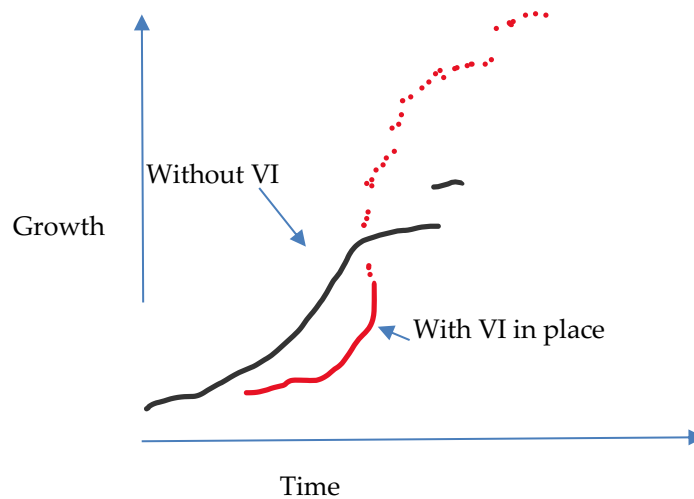


Fig 2: Impact of VI as a new product in digital banking Services

This successive S-curve will come along to replace the traditional banking and will continue to drive growth upwards where the VI new product is likely to have “product life” i.e., a start-up phase, a rapid increase in revenue and eventual decline. But it will never get off the bottom of the curve and will never produce normal returns. In this progression, it will play important roles presenting a secured bank-led digital-transaction system, which is mostly needed to attract today’s probable customers. Overall, this progression will welcome cashless society sooner than delaying in the economy country-wise (Covergenius.com, 2022). In Fig. 2, the first curve shows a growth evolved from today’s mixed of traditional & digital banking services. The second curve shows, with introducing VI as new product in digital-banking services, that currently it yields lower growth but will eventually overtake the current growth rate and lead to even greater levels of growth. This progression can someday present cashless society country-wise.

OBJECTIVES OF THE STUDY

1. To examine the relationship between customer preference and *Voluntary Insurance* as new product in aim to overcome perceived-risk factors in e-banking services.
2. To assess e-banking-customers’ perceptions whether the proposed VI product in e-banking should be added for addressing perceived-risk factors.

3. METHODOLOGY

The survey *questionnaire* in this study was designed to carry-out convenience sampling reliability analysis and then develop Hypotheses and test them in choice problem on whether bank-led users prefer *Voluntary Insurance* (VI) as a new product in digital-banking. For data collection purposes, Google Survey Form was used, and questionnaire was randomly sent to one hundred

(100) Bank-led digital users where users email addresses were collected using Facebook media. For hypothesis development & testing, respondents were informed that they would be presented alternatives and asked to indicate their preferences based on feature(s) of options. It was emphasized that there was no right or wrong answer. The researcher was interested only in “personal preference” of the participants.

Sampling procedure: For collecting data from respondents of digital-banking-users (only bank-led) convenience sampling procedure was followed. Under this procedure, it was taken care that responses were collected from only those respondents who were able to understand the necessity of the research and could interpret that any of the fruitful outcomes would benefit them by having absolute risk-free digital-banking services. One of the key issues was under consideration while selecting the respondents for this study was that respondents should be aware about services offered by digital-banking channels of bank-led digital where VI as a product was available for addressing perceived risk-factors. Here respondents were asked whether the VI as a product in banking-services should be available for dealing with the perceived risk-factors. Questionnaire was designed in two parts. The first part was used to record the demographical characteristics of individuals whereas the second part records the attitude of individuals about preferences whether VI in e-banking services should be available addressing perceived-risk.

4. RESULT

For ensuring reliability, reliability coefficient has been tested by using Cronbach's alpha (α) analysis. To measure the reliability for a set of two or more constructs, Cronbach's alpha is a commonly used method where alpha coefficient values range between 0 and 1 with higher values indicating higher reliability among the indicators (Hair, *et al.*, 1992).

Table-1 interprets that total case has followed under examinations which are found to be valid are 100. This is because the total numbers of cases were 100. No missing or excluded cases are recognized. All the responses collected through respondents and governed by the questionnaire were systematically filled and specific attention was given to all the respondents if required so that proper and confirmed responses about the issues could be collected.

In Table-2, it is recognized that Cronbach value for the responses of the 100 respondents of the study is found to be 0.897 which is an excellent representation of the quality of data. It confirms approx. 89.7 % reliability of the collected data. Cronbach's α (alpha) is an important psychometric instrument to measure the reliability of data. The reliability coefficient indicates that the scale for measuring trust & commitment is reliable. So, various statistical tools can be applied and tested.

Table 1: Case processing summary

		Number	%
Cases = 100 (Bank-led)	Valid	100	100
	Excluded ^a	0	0
	Total	100	100
^a List wise deletion based on all variable in the procedure			

Source: Author, Survey Data 2021

Table 2: Reliability Statistics

Cronbach's α	No. of Items
0.897	100

Source: Author, Survey Data 2021

4.1. Analysis Of Relationship Between Respondents' Demographic Variables And Preferences For Vi Product In E-Banking

Analysis of relationships between respondents' demographic variables and preferences for VI in e-banking services in Bangladesh is captured in this section of the study. To investigate the relationship between demographic variables a) educational qualification b) age c) gender and d) occupation and respondent-preferences for the VI, the following hypotheses are formulated. Here demographic variables are independent and respondents' preferences for VI are dependent.

H₀₁: There is no relationship between Gender and preference for VI as a product in digital banking services.

H_{a1}: There is relationship between Gender and preference for VI as a product in digital banking services.

H₀₂: There is no relationship between Age and preference for VI as a product in digital banking services.

H_{a2}: There is relationship between Age and preference for VI as a product banking in digital-banking services.

H₀₃: There is no relationship between Educational Qualification and preference for VI in digital-banking services.

H_{a3}: There is relationship between Educational Qualification and preference for VI in digital-banking services.

H₀₄: There is no relationship between Occupation and preference for VI in digital banking services.

H_{a4}: There is relationship between Occupation and preference for VI in digital banking services.

H₀₅: There is no relationship between Concerns of perceived risk-factor and preference VI in digital-banking services.

H_{a5}: There is relationship between Concerns of perceived risk-factors and preferences for VI in digital-banking services.

Consequences of Examination of Relationship between Demographic Variables and Preferences for the VI by the Respondents are as follows:

Table-3: Homogeneity test of variance for Gender & Usage of digital-banking

Test of homogeneity of variances			
Usage pattern of digital-banking services: Mobile-led & Bank-led			
Levene Statistic	df1	df2	Sig.
0.728	1	98	0.523

Source: Author, Survey Data 2021

The Levene Statistical Test for Equality of Variance is performed to test condition that the variances of both samples are equal or not. A high value results normally is in a significant difference. But here the Table - 3 result Sig. = 0.523, which could interpret as no equal variance.

Table-4: One way ANOVA for gender and usage of digital-banking services

ANOVA					
Usage pattern of digital-banking services					
	Sum of square	df	Mean square	F-value	Sig.
Between Groups	5.236	1	5.236	2.091	0.058
Within Groups	245.320	98	2.503		
Total	250.556	99			

Source: Author, Survey Data 2021

In the Table – 4, the variation (Sum of Squares), the degree of freedom (df) and the variance (Mean Square) are given for the within and the between groups, as well as the F value (F) and the significance of the F (Sig.). Significance (Sig.) indicates whether the null hypothesis – the population means are all equal, which must be rejected or accepted. As we can see, there is a good difference between the two Mean Squares (5.236 and 2.503), resulting in a non-significant difference ($F = 2.091$; Sig. = 0.058). The Sig. value is higher than the Sig. level of 0.05. This means that H_{01} must be accepted which states that there is no relationship between gender and preferences for the VI in digital-banking services. Both male and female equally prefer the VI in digital-banking services and shows positive response for it.

Table 5: Test of Homogeneity of Variance for Age and Preferences for VI

Test of Homogeneity of Variances			
Preference Patterns for the VI product in digital banking services			
Levene Statistics	df1	df2	Sig.
1.235	3	96	0.002

Source: Author, Survey Data 2021

Underpinning the Table-5, it can be interpreted that because of Sig. = 0.003, the equal variance can be assumed. Underpinning the Table – 7, it can be interpreted that there is a difference between the two Mean Squares (2.177 and 2.642), resulting in a significant difference ($F = 0.823$; Sig. = 0.032). The Sig. value is lower than the Sig. level of 0.05.

This means that H_{02} must be rejected which states that there is relationship between the age and preferences for the VI in digital-banking services, which can be offered to respondents by their banks. Thus, the usage of digital-banking services is not equal for the different age group (Under 20 Years, 21-30 Years, 31-40 Years and Above 41 Years) people / respondents

Table 6: One Way ANOVA for age and

ANOVA					
Preferences pattern for the VI					
	Sum of Sq.	df	Mean Sq.	F	Sig.
Between Groups	6.532	3	2.177	0.823	0.032
Within Groups	253.69	96	2.642		
Total	260.222	99			

Source: Author, Survey Data 2021

Underpinning Table – 7, it can be interpreted that since the value of the Sig. = 0.016, therefore, the equal variance can be assumed. Relying on Table – 8, it can be interpreted that there are differences between the two Mean Square values (1.307 and 2.474), which result a significant difference ($F = 0.5283$; Sig. = 0.042). Here the Sig. value is lower than the Sig. level of 0.05.

Table 7: Test of Homogeneity of Variance for Educational Qualification and Preferences for the VI in Digital-banking Services

Test of Homogeneity of Variances			
Preferences pattern for the VI			
Levene Statistics	df1	df2	Sig.
1.624	3	95	0.103

Source: Author, Survey Data 2021

Table 8: One Way ANOVA for Education. Qualification and Preferences for the VI in digital banking operation

ANOVA					
Preferences of VI in digital-banking services					
	Sum of Sq.	df	Mean Sq.	F-value	Sig.
Between Groups	5.231	4	1.307	0.5283	0.042
Within Groups	235.12	95	2.474		
Total	240.351	99			

Source: Author, Survey Data 2021

This means that the Hypothesis (H_{03}) must be rejected, which states that there is relationship between the educational qualification and preferences for the VI among the respondents. Thus, preferences for the VI among the respondents are not equal for the respondents of different qualification background like below secondary, higher secondary, graduate, post-graduate, and professional degree-holder. Means educational qualification significantly affects the preferences for the VI as a product in digital-banking services.

Table 9: Test of Homogeneity of Variances for Occupation and Preferences for the VI in digital-banking services

Test of Homogeneity of Variances			
Preference pattern for the VI			
Levene Statistic	df1	df2	Sig.
1.235	5	194	0.32

Source: Author, Survey Data 2021

Table-9 interprets that because of Sig. = 0.023, the equal variance can be assumed. Accordingly, Table-10 interprets that there is difference between the two Mean Squares (0.4246 and 5.774), resulting in a significant difference ($F = 0.0735$; Sig. = 0.032). The Sig. value is lower than the Sig. level of 0.05.

This means that the H_{04} must be rejected, which states that there is relationship between occupation and preferences for the VI. Thus, the preference for the VI is not equal for the respondents of different occupation background like student, Govt. Service, Private Service, Business and Professional. It interprets that a working person will frequently use bank-led digital-banking channels like ATM, Internet Banking rather than students. At the same time, person working in private jobs, businessman and professional use bank-led digital services frequently rather than that of government service bank-led users.

Table 10: One Way ANOVA for Occupation & Preferences for the VI product

ANOVA					
Preference pattern for the VI product in today's digital-banking services					
	Sum of Sq.	df	Mean Sq.	F-value	Sig.
Between Groups	2.123	5	0.4246	0.0735	0.032
Within Groups	542.78	94	5.774		
Total	544.903				

Source: Author, Survey Data 2021

Table 11: Status of Hypotheses established for analysis of relationship between demographic variables and preference for the VI product today's digital banking

Serial No.	Hypotheses	Differences	Status
1	H ₀₁	Non-Significant	Accepted
2	H ₀₂	Significant	Rejected
3	H ₀₃	Significant	Rejected
4	H ₀₄	Significant	Rejected
5	H ₀₅	Significant	Rejected

Source: Author, Survey Data 2021

So, by acceptance and rejection of the hypotheses, in Table–11, it interprets that age, qualification and occupation are the significant variables. And preferences for the VI product here vary according to age, education, occupation. Only gender variable is not found to be significant means there is no variation for gender (male and female) for the preferences here.

4.2. How The Findings Of This Analysis Be Instrumental?

This effort is to bring the findings of the Survey-Opinions to bank authority(s) or policymakers' attentions so that the VI can be introduced as a product in digital-banking services in Bangladesh-economy. This raises questions: how can the proposed product be instrumental to bank-sector and to the human society we live in?

Answering the questions posed, it is palatable that having the VI in place can transfer the risk away from customers, which will directly benefit both banking sector as well as the bank-customers. It can further attract new customers who were on the brink using digital banking but just felt it was risky. It can facilitate the customers with incentives for increasing usages of number of transactions of digital banking while maintaining optimal utility of it. Furthermore, it will be a new product, *obviously* legal one, which can serve as lifeblood to business-companies and to societies. It can ease in multi-faucets. They are a) ensured new value for customers, b) improved society and c) continued existence of the company in competitive market.

Thus, bank authority(s) or policymakers of Bangladesh can play effective roles for better-ness of its modern-society when it come digital-banking services. Bank Laws in Bangladesh contains multi-faucets provisions. The adoption by the Bangladesh Bank of a deposit insurance system (DIS) was a significant development, which now covers bank-deposits, bank-account, however, digital transactions are not insured. But the ongoing usages of FinTech are assumed to ensuring risk-free but, it has been facing difficulties addressing the trust issues since the beginning of its journey in financial services (The Daily Star, 2021; The Financial Express, 2016). It does not guarantee absolute risk-free digital transaction, which might have led a slower growth of digital banking in countries like Bangladesh.

Voluntary Insurance as a new product in place can ensure risk-free On-the-Go-banking, which can guarantee elevated self-service-banking activities in world-economy country-wise such as in Bangladesh. This can be beneficial to customers because it can ensure savings in the form of cost and time. Also, it can facilitate a sense of relief of a user from psychological stress of perceived risk-factors in digital-banking services. Thus, customers will flock to it when they use banking

services. By *extra* advancement of ICT usages, banking sector can be further competent cutting-off its operating costs, meeting customers' needs and keeping up with global changes.

With this *win-win* setting for service-provider & customer (user) of the product (the voluntary insurance) in digital-banking, financial sector globally is no exception. To sail through tough competition and to sustain revenues, financial sector in many countries such as Bangladesh are engaging more than that of other kinds of bank on adoption of ICT in its operation (Quintal et al., 2006; Ludmila et. al., 2019). However, it warrants for bank authority(s) or policy-practitioners' prompt effective-efforts on attracting more customers meeting challenges in case Bangladesh is moving for being "cashless society" in the future.

5. CONCLUSION

It can be concluded that having *Voluntary Insurance* as a product in digital-banking services can be helpful to the progression of digital banking by ensuring risk-free services, which can reduce bank-operational-costs. It can attract more users by significantly improving customers' satisfactions, customer-bases, bank-benefits and many more. It is also observed that customers are deriving several benefits from the digital banking over their traditional way of banking. However, several negative factors are significantly affecting the prospects of digital banking to its fullest. But banks should work to eliminate the negative issue particularly perceived risk-factors by introducing the VI as a product in digital-banking, which can ensure cashless society sooner than delaying in Bangladesh-economy. The result of this study clearly shows that different age group of customer and different occupation group of customers have different preferences for the VI product. The results also propose that demographic factors significantly impact customers' preferences in supports of the product for ensuring risk-free digital-banking services. Accordingly, bank authority(s) and policymakers of Bangladesh can play effective-roles for better-ness of its modern-society when it come digital-banking services. Thus, this effort is to bring the findings of the Survey-Opinions to the attentions of bank-leadership and policymakers so that proposed product can be introduced in digital-banking in Bangladesh-economy, which can be example for other countries.

REFERENCES

- Bauer, R. A. (1960). *Consumer behavior as risk-taking*, In R. S. Hancock (Ed.), *Dynamic marketing for a changing world*, Chicago: American Marketing Association, 1960. Pp. 389-398. Cited from D. F. Cox (Ed.), *Risk-taking and information-handling in consumer behavior*, Boston: Harvard University Press, 1967, Pp. 23-33.
- Chau, P. Y. (1996). An empirical assessment of a modified technology acceptance model. *Journal Of Management Information Systems*, 13(2), 185-204.
- Covergenius.com (2022), Research Shows Consumers Desire Embedded Insurance Offers from Their Financial Institutions, <https://www.covergenius.com/embedded-insurance-report/> (Date of access: February 13 of 2022)
- Cunningham, S.M. (1967). *Perceived risk as a factor in informal consumer communications*, In D.F. Cox (Ed.), *Risk-taking and information-handling in consumer behavior*, Boston: Harvard University Press, Pp. 265-288.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- Hong, W., Thong, J. Y., Wong, W. M., & Tam, K. Y. (2002). Determinants of user acceptance of digital libraries: an empirical examination of individual differences and system characteristics. *Journal Of Management Information Systems*, 18(3), 97-124.
- Featherman, M.S. (2003). Extending the technology acceptance model by inclusion of perceived risk, *Americas Conference on Information Systems*, Boston, MA, pp. 758-760.
- Hair, J.F., R.E. Anderson, R.L., & Tatham, W.C. Black (1998). "Multivariate Analysis", Pearson Prentice Hall, Englewood.
- <https://www.globenewswire.com/news-release/2021/06/16/2248140/0/en/New-Research-Reveals-70-of-Digital-Bank-Customers-and-44-of-Traditional-Bank-Customers-Want-Embedded-Insurance-Offers-Based-on-Transaction-Data.html> (Date of access: March 14, 2022).
- Im, I., Kim, Y. and Han, H. J. (2008). The effects of perceived risk and technology type on users' acceptance of technologies. *Information & Management*, 45(1), 1-9.
- Lee, M. C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic commerce research and applications*, 8(3), 130-141.
- Lee, K. C., & Chung, N. (2009). Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean's model perspective. *Interacting with Computers*, 21(5-6): 385-392.
- Malika Rani (1997). A Study on the customer perception towards e-banking - start ellen what to know before you spend cyber dough, *Money Magazine*, pp. 33-35, (January 1997).
- Nygaard, Arne., & Robert Dahlstrom (1999). An empirical investigation of ex post transaction costs in franchised distribution channels, *Journal of Marketing Research*, 36(2), 160-170.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: integrating trust & risk with the technology acceptance model, *International Journal of Electronic Commerce*, 7(3), 101-134.
- Quintal V. Ruth., & T. Takle, S. (2006). Risk, uncertainty, and the theory of planned behavior: A tourism example, *Tourism Management*, 31 (6), 797-80.

- Rahman Akim (2018). Voluntary insurance for ensuring risk-free on-the-go banking services in market competition for Bangladesh, *The Journal of Asian Finance, Economics and Business*, 5(1), 17-27.
- Rahman, Akim (2020). bKash vs. Bank-led Option: Factors Influencing Customer's Choices – Does it Warrant Voluntary Insurance-policy for Rapid Growth Digital-banking in Bangladesh-economy? *The Journal of Banking and Financial Economics*, 1(13), 51-69.
- The Financial Express (2016). Combating online frauds and security threats in banks, the financial express, e-paper, Bangladesh, Retrieved December 2, 2019, from [https://thefinancialexpress.com.bd/ views/ combating-online-frauds-and-security-threats-in-banks](https://thefinancialexpress.com.bd/views/combating-online-frauds-and-security-threats-in-banks) .
- The Daily Star (2021). Digital Bangladesh 2021: Payment systems and fin-tech, Conference was held on September 26 of 2020. Summary of the discussion of the Conference, organized by the Daily Star and Visa Cards published by the Daily Star on November 22 of 2021.
- Venkatesh V., Michael , G. M., Gordon G. D., & Fred D. D. (2003). User Acceptance of Information Technology: Toward a Unified View, *MIS Quarterly*, 27(3), 425-478.