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## Can VI be a Supportive Product for Rapid Growth of Digital-Banking in Economy: Seeking Attentions for Policy-Design Country-Wise

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**ABSTRACT:** Today's human-race lives in world of business-mentality where services are carried-out in a competitive manner. It has resulted technology-driven lifestyles. Meeting these advancement-needs in multi-faucets, maintaining customer-loyalty has become a strategic mandate in today's service-markets. Banking services are no exception. It is carried-out in a competitive mode that has resulted using digital banking-services in economy country-wise. However, since the beginning of its journey, the perceived-risk factors have been undermining the growth-trend of digital-banking-usages in economy country-wise such as Bangladesh. Inclusion of Voluntary Insurance (VI), a new product in digital-banking services, can be an impetus meeting the challenges - perceived risk-factors such as trust-issue, psychological risk of probable direct monetary-costs such as hidden charges, extra fees, account hacked etc. This proposed product can be supportive in increasing values that are what will keep the banks be growing. As a result, it can ensure booming-economy country-wise. If there is no new value to offer, banks wilts and eventually dies. Economic-growth-trends of countries surely endorse adding new legal product(s), which will improve society beyond just satisfactions of customers. This new supportive product can be lifeblood to banks as human society are moving ahead.

**Key words:** e-banking, Perceived-risk, Voluntary insurance, As a product, Diffusion curve.

**JEL Classification:** G24; G31.

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### 1. Introduction

In today's tech-driven business-world, service-providers provide services in competitive and rationality manner. However, any tech-driven services are characterized by evolving factors, which are often unpredictable. Digital-banking is an important product in today's financial-sector. But it faces drawbacks being it riskiness in operation. Bank-customers here compete for time-saving options. On the same token, banks compete for marginalizing its operating costs for enhancing its revenues by providing banking-services. In most cases, bank-customers do not read terms & conditions of these services. Because of digital-era, they even do not save contract-copy of banking services. These weaknesses in banking-services cause or may cause abuses. Accordingly, bank-customer faces perceived-risk such as hidden charges, extra fees, account hacked etc.

Addressing perceived-risk-factors in e-banking services, Rahman (2018a) proposed *Voluntary Insurance* (VI) as a new product in multifaceted literatures. This proposed product can be value-added to banks' today's digital-banking services, which can help attracting more customers. As a result, it can boost revenue and profits from its services, which can ensure cashless society sooner than delaying. However, the bank-management has not yet introduced the proposed VI in digital-banking services in market-economy country-wise such as Bangladesh.



## 2. Literature Review

Empirical studies in multi-facets ratify that the perceived-risk is having a significant negative and direct effect on customers' adoptions of digital-banking (Kuisma, Laukkanen, & Hiltunen, 2007; Lee, 2009; Rahman, 2018). The security or privacy-risk is one of the key issues of perceived-risk that is the most inhibiting factor in the adoption of digital-banking (Lee, 2009).

Addressing the digital *dilemmas* in banking-services globally, the current author proposed for adopting the VI as bank-provision facilitating it as a new product of bank-sector in operation (Rahman & Saadi, 2021; Rahman, 2018a, 2018b; Rahman, 2020). This addition to behavioural intention theories in literature, especially, literature in subject area of *entrepreneurship and innovation management* is now well recognized. Thus, for policymakers and bank-management's attentions & efforts purposes, authorities may prefer to know how the VI be a supportive product in e-banking services. This study advances with these tasks, which will be an addendum to the literature ensuring risk-free e-banking.

### 2.1. Lessons-learnt: Can Mobile-banking Shed Lights for Bank-led Digital Progression?

Literature shows that the current author (Rahman, 2020) earlier conducted a comparison-study between mobile-banking and bank-led options on customers' preferences. In the current study, it serves as *lessons-learnt* for better understanding of the factors that has resulted a higher growth-trend of bKash (mobile-banking) usage over bank-led usage digital in Bangladesh-economy.

There are more than thirty million customers who use bKash digital-transactions and accordingly there are over 0.2 million bKash-agents around Bangladesh (The Daily Star, 2021). Here growth-trend of bKash-users has been growing geometrically. But growth-trend of bank-led-users has been growing *mathematically* – very slowly in city areas and it would not be overstating that it does not exist in rural areas, even though bank-sector promotes it desperately curtailing the magnitudes of its operating cost (Rahman, 2020). For clarity on whether perceived-risk factor has overall played significantly undermining the growth-trend of bank-led digital-banking, the author (Rahman, 2020) used a comparison as follows:

**Table 1.** Consumer's preference between mobile-led and bank-led digital-banking.

Determinant	Mobile-led	Bank-led
	Position	Position
Confirmation by making call(s)	1 <sup>st</sup> (+)	1 <sup>st</sup> (-)
Perceived risk factors		
Psychological risk	4 <sup>th</sup> (+)	4 <sup>th</sup> (-)
Privacy risk	2 <sup>nd</sup> (-)	2 <sup>nd</sup> (+)
Financial risk	3 <sup>rd</sup> (-)	3 <sup>rd</sup> (-)
Performance risk	6 <sup>th</sup> (+)	6 <sup>th</sup> (-)
Social risk	5 <sup>th</sup> (+)	5 <sup>th</sup> (-)
Access / Familiarity with Internet	2 <sup>nd</sup> (+)	2 <sup>nd</sup> (-)
Conveniency in completing transaction	1 <sup>st</sup> (-)	1 <sup>st</sup> (+)
Bonus for using digital banking	1 <sup>st</sup> (-)	1 <sup>st</sup> (+)
Confirmation via SMS	1 <sup>st</sup> (+)	1 <sup>st</sup> (+)
Focus choice (phone call confirmation)	1 <sup>st</sup> (+)	1 <sup>st</sup> (-)
Focus of comparison effects	1 <sup>st</sup> (+)	1 <sup>st</sup> (+)
Know-how-skill	1 <sup>st</sup> (+)	1 <sup>st</sup> (-)
Self-image	1 <sup>st</sup> (-)	1 <sup>st</sup> (+)

Source: Rahman (2020).

In Table 1, the serial number or position of the determinant in contribution reflects a customer preference in choosing Mobile-led or Bank-led digital banking. Here positive (+) means “positively influences” and negative (-) means “negatively influences” the choice of Mobile-led or Bank-led digital-banking when a customer decides for On-the-Go banking. It further shows mobile-led banking is more appealing than that of bank-led digital because of perceived risk (PR) issue, which raises question: what is VI and how can it be instrumental?



## 2.2. Elaboration of Concepts

For further clarity in the subject area, this section incorporates elaboration of concepts including the VI as follows:

### 2.2.1. Digital Banking or On-the-Go Banking

Bank-led payment or mobile-led payment or a combination of the two is known as “On-the-Go or digital banking or e-banking in today’s world of business-mentality where people behave rationally without emotion.

For further clarity, digital banking involves managing bank accounts, transferring funds, depositing checks, and paying bills etc. by using a computer or mobile device. Most banks and credit unions, beside traditional services, let customers access their bank accounts *via* the internet. Online bank branch, on the other hand, is typically one that customer access only through the internet, which may ease banking services.

On the same token, mobile-led banking typically runs across major mobile-service-providers in economy country-wise through one of two ways: SMS messaging and mobile web. It is like online account connected with mobile access through mobile device or computer. This option allows for checking balances, bill payment and account transfers simply by logging into the user's account *via* a mobile web browser or by dialling targeted phone numbers.

### 2.2.2. Perceived Risks in Bank-Led Digital-Banking Services

The “risk” concept is shaped around the idea that customers’ behaviours involve risks in the sense that customers’ actions may create consequence that they cannot expect anything approaching with certainty (Bauer, 1960). “Perceived risk” is a powerful one explaining customers’ behaviours. This is because customers are more often motivated to avoid the mistake than to maximize the utility of using e-banking services (Rahman & Saadi, 2021; Rahman, 2018, 2020). Risk is often present in choice-situation. Thus, a customer cannot always be certain that a planned-use of e-banking will achieve him/her absolute satisfaction. Online shoppers perceive greater risk when paying online-bills even though goods are non-standardized and often sold without warranty (Zeithaml, 1981). Underpinning this reality in today’s competitive markets, perceived risk is regarded as a composite of several categories of risk. In literature, several types of perceived risks have been found in e-banking services (Featherman, 2001; Lee, 2009; Pavlou, 2003; Rahman, 2020). For better understanding, first, the definition of perceived risk and then its distinct types are outlined accordingly.

*Perceived risk* - In first stages of digital-banking services, six major factors of perceived risk were known (Littler & Melanthiou, 2006). They are financial, performance, time, social, psychological, security. Perceived risk is powerful in explaining customers’ behaviours. This is because customers are often motivated to avoid a mistake than to maximize the utility using digital banking (Mitchell, 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 him/her absolute-satisfaction.

*Psychological risk* - It is a threat when something goes wrong with Internet banking transaction. It causes customer’s frustrations. Also, sometime customer feels shamed to be.

*Trust factor* - Despite huge investment in the progression of bank-led digital, “lack of trust” stays a barrier in the widespread adoption of digital banking both in the context of the bank and the overall online environment (Yousafzai, Pallister, & Foxall, 2009). The magnitudes of the trust issue are more in rural & urban areas than that in city areas. These are the common *scenarios* no matter what country is in discussion.

*PIN fraud risk* - As alternative delivery channels, customers use Credit Card or ATM Card or Dual Currency Card etc. Accessing to account using a card, a customer requires password, or PIN. However, the card can be stolen, or the password can be misused in practice.

*Security / privacy risk* - It is a threat where a fraud or hacker may get unauthorized access to online-bank-users’ accounts and acquire sensitive information such as username, password, credit card / debit card information and then misuse it. Overall, the system reliability is a critical issue.

*Financial risk* - It is a threat where monetary loss could take place due to an *error*, which can take place in transaction.

*Performance risk* - Any unexpected breakdown or disconnection from the Internet can cause annoying problem.



*Customer dispute* - It refers to the possibility of getting into dispute with digital-service-providers or Online seller or with individual or group that has caused the problem. It may call for legal cases.

*Societal risk* - It refers to the possibility that using Internet banking may result in the disapproval of one's family, friends, or work group (Lee, 2009). It happens when a relative or friend or workgroup signed on as the guarantor.

*Time risk* - When using "Internet & completing transaction" it may take unexpected longer times, or the server can be down. With these causes & delays, customers may become frustrated losing time. On scheduled payment issues, sometime customers may be penalized for *late* transaction completion.

### 2.2.3. Voluntary Insurance: What is it? How can it Work?

Addressing the issues that undermine the progression of digital-banking in Bangladesh, Rahman (2018) proposed *Voluntary Insurance* as a product in e-banking services. Bank Management can introduce it as a product in digital-banking operation where bank or third-party can collect insurance-premium for ensuring secured-services. The way it would work is that customer's participation will be voluntary. Insurance will be attached to the bank-account if accountholder wants it for digital services. Since the program will be designed 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 can be protected by setting two security-requirements such as password and a finger-scan. Suppose a customer wants to use ATM Card. Accessing to his / her account, the customer will have to use previously setup password and finger-scan say the customer's thumb or forefinger scan. Here fingerprint in addition to password can be connected to the ATM system, which will make digital banking to be enhanced secured. Overcoming the risk of heist or hacker's access to bank accounts, under the proposal, similar own set up prerequisite can be used. In global banking cases such as remittances, a joint-effort program can ensure risk-free On-the-Go or digital banking services.

It is well recognized that PR has an influential role in setting the stage for the VI option in e-banking services (Covergenius.com, 2022; Global News Wire, 2021; Rahman, 2018). It is palatable assuming that customers of e-banking services are risk-averse. They prefer certainty to uncertainty. Figure 1 illustrates risk preferences of a risk-averse banking-customer.

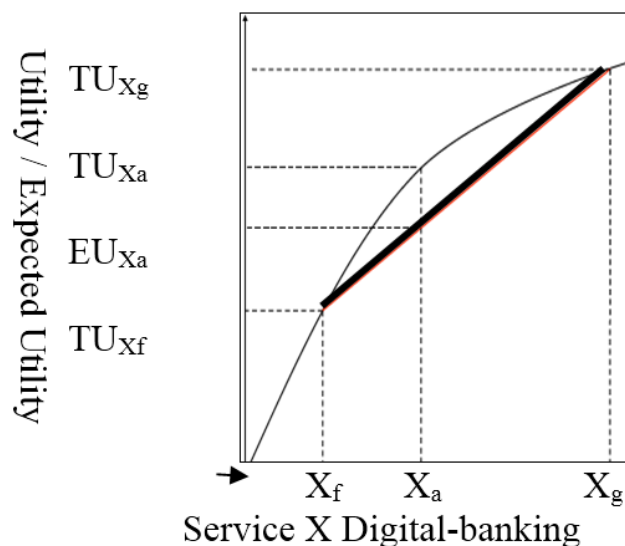


Figure 1. Risk aversion scenario.

Source: Rahman (2018).

In 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 Figure 1, shows digital-banking service-outcome. Here customer may use a certain level of service X. Since the  $X_f$  is 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 is 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.

### 2.3. Prospects of the VI Product

Once bank management recognizes the importance of the proposed VI under Akim's model and policy practitioners decide introducing banking-provisions, which will authorize the VI as a new product. With further efforts, it can spread from bankers to banking-customers in the economy. This process of cycle of the VI product can be described using the "S-curve," which is also known as "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 sets up itself. At some point customers begin to demand and the product growth increases more rapidly. These new incremental changes to the product will allow the growth to continue. Toward the end of its cycle, the growth will slow down 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 set up a secured bank-led digital banking through the bankers who introduce this new product, it can present a Cashless society sooner than delaying.

This successive S-curve will come along to replace the traditional banking and will continue to drive growth upwards where the VI is likely to have "product cycle" in three phases. They are a) a start-up phase b) a rapid increase in revenue and c) eventual decline. But it will never get off the bottom of the curve and will never produce normal returns. In this progression, it will have important roles presenting a secured bank-led digital-transaction system. It is mostly needed to attract today's probable customers.

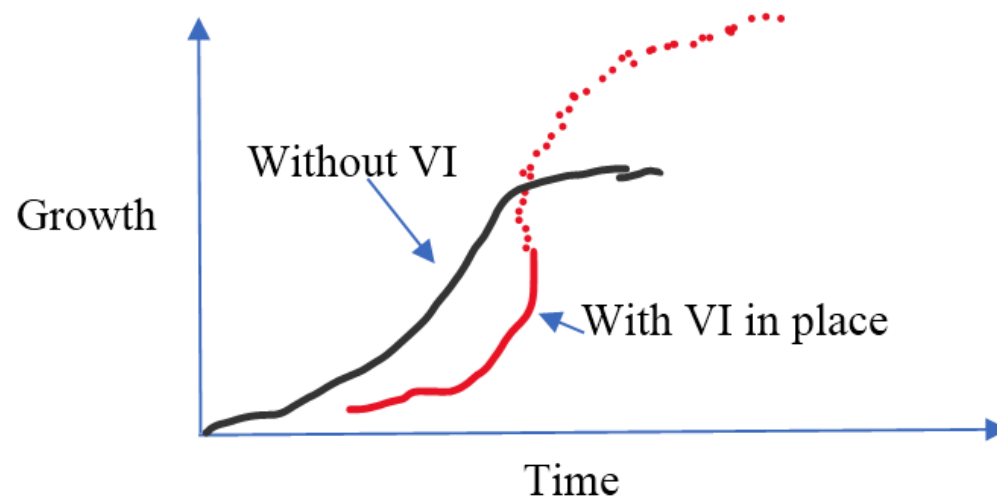


Figure 2. Impact of VI through e-banking services.

Overall, this progression can promote for cashless society sooner than delaying in the economy. In Figure 2, the first curve (without VI) shows a growth evolved from today's mixed of traditional & digital banking services in the economy. The second curve (with VI in place) shows that currently yields lower growth but will eventually overtake the current growth rate and lead to even greater levels of growth. In the long-run, this growth-trend of digital-banking will be an example to others. Accordingly, someday economy country-wise can present cashless society country-wise.

### 2.4. Can VI be a Supportive Product?

In determining whether the VI can be a supportive or not, few very arcane rules can be used by the bank management. They are shown in Table 2, however, they are not limited to any numbers.

**Table 2.** Factors that may influence decision of having VI product in digital banking services.

Favourable factor in adding VI Product	Unfavourable Factors in adding VI Product
<ol style="list-style-type: none"> <li>1. Adding VI in operation can be win-win-win for banks, customers as well as for the economy as a whole</li> <li>2. It can attract more customers, which can ensure growth-trend of digital banking usages in the economy</li> <li>3. It can ensure a secured digital banking transaction, which can ensure cashless society sooner than delays</li> <li>4. It can earn more public supports than today's public supports for the e-banking services in practice</li> <li>5. Based on understanding of the importance of VI, feeling-riskier-customers will be feeling protected</li> <li>6. Bank will not require <i>extra</i> monetary investment</li> <li>7. Customers will not be required filing complaint with the authority of Central Bank but to communicate with insurance provider for its action</li> <li>8. The VI will not cause government expenses</li> <li>9. Public support can be an asset. This support can be judged based on opinions of government units and public</li> <li>10. Rebates on number of transactions can be inspirational to customers</li> </ol>	<ol style="list-style-type: none"> <li>1. The customer will be paying insurance-premium, which can be an additional cost to them</li> <li>2. The probable customers who now feel risky to use it can feel riskier when they see the presence of the VI product in the digital banking services</li> </ol>

Using the above factors in [Table 2](#) and other appropriate ones, the bank management or interested researchers can conduct an empirical study whether the VI can be supportive not for the parties involved.

### 2.5. Goal of the Current Efforts

The goal of this study is to bring the issue to policy-practitioners' and bank management's attentions through Conferences such as the International Conference on Economics, Finance and Accounting (ICEFA) for spreading messages. For this year, the 609<sup>th</sup> ICEFFA is going to taking place in Dhaka, Bangladesh on the 1<sup>st</sup> & 2<sup>nd</sup> of November of 2022. So, the findings of this study can be introduced in digital-banking operation in countries such as Bangladesh. This raises questions: how can this new product be instrumental to bank-sector and to society? Why is it important? Why now?

Answering the questions posed, it is palatable that transferring risk away from customers will help both private commercial banks (PCBs) and customers. It can further attract new customers who were on the brink using digital banking but just felt it was risky. The model can ease the customers with incentives for increasing usages of digital services maximizing the utility of its services.

Any new product, *obviously* legal one, is the lifeblood of running a business and societies. It can ease ways such as: ensured new value for customers, improved society, and continued existence of the company or bank that runs the business in market competition.

Having VI in place can ensure risk-free On-the-Go-banking, which can guarantee elevated self-service-banking activities in any economy. This can be beneficial to customers because it can ensure savings in the form of cost and time. Thus, customers will flock to it when they use banking services. By *extra* advancement of the ICT usages, bank-sector can be further competent cutting off its operating costs, meeting customers' needs and keeping up with global changes.

With this *win-win* prospect for supplier & user of the product, bank-sector globally is no exception. For sailing through tough competition and to sustain revenues, bank-sector in countries such as Bangladesh is engaging more than that of other kinds of bank on the adoption of IT in its operation ([The Financial Express, 2016](#)). However, it has failed reaching out to a major part of customers in case of digital banking in countries such as Bangladesh.

### 3. Conclusion

Now adding *Voluntary Insurance*, a new supportive product, can be impetus meeting the 21<sup>st</sup> Century digital-banking growth-trend challenges. This new and increasing value is what will keep banks or firms be growing, which can present booming economy in Bangladesh. If there is no new value to offer, bank or firm



wilts. The economic growth-trend of Bangladesh ratifies that addition of a new legal product will improve society beyond just immediate gratification of consumers. New products and services are the lifeblood of any firm or bank. Society is well-served by the continuance of these companies from the employment of individuals who work there or are consumers, and support for society at-large in the form of taxation and charitable giving. Companies and civilizations have little choice but grow and improve if they want to move from survival to thriving. The new products and services created and provided by companies of all sizes supply the mechanism for this growth and improvement. So, the question is: can bank management and policymakers' efforts for better-ness of its modern-society when it come digital-banking services? The answer to the question posed is, YES, where efforts of this publication can play significant roles, which can be inspirational to bank management & policy-practitioners sooner than further delays. It can ensure a faster growth in economy country-wise.

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