RESEARCH ARTICLE

# Voluntary Insurance (VI) for Faster Growth-Trend of Digital-transactions in Bank-led Services: A PESTLE Analysis of Akim's Model

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## Abstract

Digital banking, particularly bank-led-digital services, are important in today's world-economy country-wise. However, this advancement globally faces slow growth-trends where psychological-risk factors discourage a customer or a probable customer from not using it. Concentrating on the issues underpinning the Akim's model, VI (Voluntary Insurance) can be introduced or adopted as a low cost or fixed price product. It will enhance consumer surplus, bank profits and overall transaction volume. Having VI as a new product can be vital in the journey of ensuring cashless society soon. The growth trend (S-curve) of VI product will capture revenue growth against time. In return, it will ensure higher transaction numbers of e-banking services. Accordingly, the purpose of this study is to revisit conventional wisdom about key contributions or prospects of the VI using PESTLE analysis. Here VI can serve as a strategic, trust-enhancing product designed to mitigate perceived psychological risks (fraud, hacking, etc.) in bank-led digital banking services. By embedding VI, banks can transition hesitant users into active digital-consumers by creating a "win-win" that can accelerate the growth-trend of number of digital transactions and secure revenue.

**Key Words**: *Bank-led services; Digital-banking; Perceived risk; Voluntary Insurance (VI); Akim's model; Cashless society*

## 1. Introduction

In today's tech-driven business world, the service sector is carried out in competitive, multifaceted and rationality manner. It is symbolized by evolving many factors that are very often unpredictable [1]. It is the era of human society of business-mentality country-wise. Therefore, effective utilization of Information Technology (IT) can play vital roles in today's market competition on promoting products in service sector for ensuring sustained revenues. Financial sector, especially banking sector, is no exception. Digitized banking is known here to be a vital product of services in today's financial sector of economy country-wise.

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It has been well acknowledged in literature that the IT facilitation of banking services in practices is becoming significantly profitable to parties involved [2-4]. In these services, customers compete for a comparative time-saving option and service providers compete for a comparative option that can effectively marginalize its operating costs and then enhance revenues.

In financial arena, researchers mostly agree that the said business motto as a foundation, Private Commercial Banks (PCBs), are today more desperate than ever before in market competition in open economy globally [1,2,4]. On the same token, digital banking is beneficial to customers. This is because it facilitates savings in the form of time value and monetary cost to the users [4].

With these prospects for the service provider as well as to service receiver of financial sector in economy country-wise such as Bangladesh where banks and subsidiaries such as western union, bKash, etc. are competing within the sector and beyond. Besides these, PCBs have boosted up taking further advantage of this transitional move by endorsing a range of digital or electronic services for generating extra incomes [5]. Just recently, governor of Bangladesh bank (the central bank of Bangladesh) called on commercial banks, Mobile Financial Service (MFS) providers and payment service providers to accelerate efforts to build a more widespread cashless society in the country [4].

It is well recognized globally that digital banking, particularly bank-led digital banking, is a critical service product in today's financial sector [4]. But this development faces grave drawbacks, being its insecurity where psychological risk factors dominate a customer's or a probable customer's decision not to use it [6]. In the financial sector, banks strive to marginalize their operating costs with the goals of enhancing their revenues [5]. Bank provides services based on terms & conditions of banking services, but customers do not read them, in general [7]. They do not even save contract copies. Besides this, a customer hardly remembers exactly the number of transactions or amount of each transaction of his or her own account [1]. These factors may become abusive in e-banking service market. All these risk factors undermine the growth-trends of bank-led digital services in economy country-wise.

In aim to marginalize today's digital dilemma of banking services in economy country-wise such as Bangladesh, Akim Rahman proposed Voluntary Insurance (VI), which is known as Akim's model in literature, which has been well recognized in literature [2,7]. But no country has yet introduced VI in its financial sector, i.e., in bank-led digital banking service market where customers will have choices to purchase it or not purchase it.

In aim to make the VI proposal further appealing for designing or adopting effective policy(s) soon in financial sector of economy country-wise, this study now advances with carrying out PESTLE analysis of the VI as a product in digital banking service market in economy country-wise.

## 2. Core Components of Akim's Model

Akim's model (Voluntary Insurance-VI), proposed by Akim Rahman, is a digital banking framework designed to eliminate transaction risks (e.g., fraud, phishing, etc.) by introducing a paid, optional insurance product for users. It aims to boost user confidence in digital banking and mobile payments by providing a "win-win" solution for consumers, banks and the economy.

- **Voluntary Insurance (VI):** Customers will pay a monthly premium to ensure their digital transactions, covering risks that traditional Deposit Insurance Systems (DIS) often leave unprotected.
- **Targeted risk reduction:** The model focuses on mitigating "perceived-risk" factors that hinder e-banking growth, such as security threats, hidden fees and unauthorized transactions etc.
- **"Win-Win" structure:** It will offer benefits to both the user (in the form of security/higher utility etc.) and to financial institutions (in the form of higher transaction volume and lower operating costs).
- **Applicability:** The VI designed to be adopted by commercial banks, mobile payment providers (e.g., bKash), and remittance services, particularly to support the growth of a cashless society.
- **Key benefits and focus increased adoption:** By offering a safe & insured environment, it will attract potential users who are hesitant to adopt digital banking due to security concerns in today's world.
- **Policy design tool:** The model, which includes welfare analysis for setting insurance premiums, serves as a guide for policymakers to create secure digital banking systems [1].
- **Global relevance:** The model has been discussed for application in various economies, including the US, UAE, Pakistan, Russia, Bangladesh and in many other countries by country study and published research works, to enhance digital payment systems globally.

## 3. Prospects of Having VI as a New Product in Bank-led Digital Service in Economy

Once bank-management and relevant policymakers acknowledge the importance of the proposed VI as a product, they may introduce digital banking-provisions or a supplementary provision under Bangladesh DIS (Deposit Insurance System). Thus, the relevant authority can authorize the VI product in bank-led digital service-market. Once policy is in place, it will spread from bankers to customers. This development (as for example, customers are now buying the VI for being on safe-side) of the VI product life cycle can be shown using "S-curve" as it is shown in Figure 1.

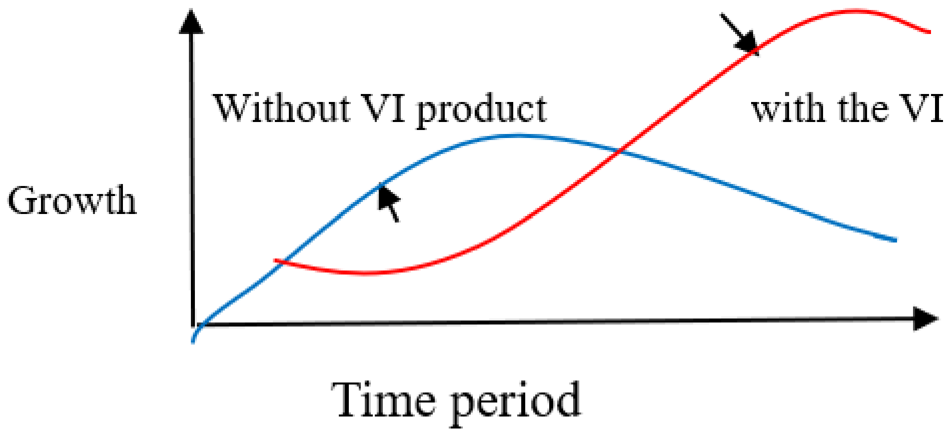


**Figure 1:** *Results of adopting VI in e-banking services.*

**Source:** Rahman AM [7].

This S-curve of VI product usages progression in Bangladesh economy will map the revenue growth trends against time. At the early stage in this progression, the new product will set itself up, which will drive the revenue growth trend slowly. Sometime on this journey, based on better understanding, the customers will begin demanding VI products to modernize lifestyle. In this market, having rebate policy or provision in place can be further instrumental to buyers and sellers.

As a result, the usage of VI will increase faster as time passes by. These changes to the demand for the VI will facilitate the growth trend to continue and will make the digital banking services more appealing. The growth trend will slow down near the end-of-life cycle. As time passes, this development will present the Bangladeshi society to be a cashless society. It can place the economy as an example to global economy country-wise. So that these countries can follow Bangladesh's footsteps. In this development, the S-curve will fully replace the traditional banking system. It will continue influencing growth trend upward.

## 4. Why Does Voluntary Insurance (VI) a Requirement, Despite Having Deposit Insurance System (DIS) in Banking Services in Economy Country-wise such as Bangladesh?

It is well known that the Deposit Insurance System (DIS) policy in today's banking services in economy country-wise protect customers' accounts where customers require providing sufficient documents such as writing check(s), other supportive options for a bank's verification in multi-faucets before granting withdrawal of deposited money [8]. On the same token, in case of digital banking services, a customer uses debit card, credit card, bank QR, etc. where customers are required to set own passwords and use it correctly for conducting money transactions through bank-led digital banking services.

While the DIS policy covers the loss of actual savings if a bank fails and the (VI) will be needed in digital banking services to protect it against technological and operational vulnerabilities. This is because the DIS does not cover the risks relating to digital banking services [8].

Thus, in today's tech-driven world, a customer may need having the facilitations of both insurances such as the DIS, which is in place already, and the VI as proposed under Akim's model, for each secured transaction under bank-led digital banking services in economy country-wise such as Bangladesh.

### 4.1. Different types of protection

- **Deposit Insurance System (DIS):** Protects bank customers' deposited funds if the financial institution itself becomes insolvent or goes bankrupt (Helms & Nixon, 2010).
- **Voluntary Insurance (VI):** It will protect individual's digital transactions against unauthorized access, hacking, phishing, and fraudulent transfers.

### 4.2. Risk coverage gaps

- DIS does not cover money that goes missing due to a cyberattack or a fraudulent transaction on your account. But the proposed VI can do so.
- If a customer loses digital wallet balances or bank funds due to a security breach, DIS does not reimburse them. But the presence of the VI acts can serve as an additional layer of protection specifically for bank-led digital and e-banking activities.

### 4.3. Building consumer trust

- Digital transactions face psychological and perceived risk factors, such as the fear of being defrauded or losing funds to digital glitches.
- Offering VI can increase confidence in a cashless economy by assuring customers that their daily e-banking and digital transactions are secure from digital threats.

Building secured bank-led digital transaction under Akim's model. While a Deposit Insurance System (DIS) protects the actual funds in a customer's bank account from macroeconomic or institutional bank failures, it does not cover day-to-day transactional risks like digital heists, hacking, or fraudulent transfers. However, under Akim's model, VI will be a specialized product, which can be attached to customer's account, if and only if, a customer wants it directly in bank-led digital banking services.

### 4.4. VI is needed in digital banking, even with a DIS in place: why so?

- **Mitigates transactional losses:** DIS only triggers if the bank itself fails or goes bankrupt. It does not reimburse a customer if a scammer or hacker drains their account. VI provides direct coverage for daily digital transaction risks.
- **Solves "perceived risk" and panic:** The threat of unauthorized digital access creates psychological panic for users (e.g., fearing mobile app glitches or hacker breaches). VI can remove this fear, offering accountholders an absolute sense of certainty that their on-the-go transactions are fully protected.
- **Encourages digital adoption:** Perceived risks and security hesitations slow down the adoption of cashless societies. By offering a risk-less digital banking experience, VI can help build the necessary trust to transition users away from physical cash and into fully digital, on-the-go financial services.

Thus, the situation deserves immediate attention of policymakers and bank management of Bangladesh for effective policy-design. So that the people can enjoy the benefits soon. For better understanding these gaps, policymakers and researchers should advocate VI as a highly innovative, necessary layer of protection for everyday digital users, which can be a direction for future study on the topic.

## 5. PESTLE Analysis: Voluntary Insurance as a New Product in Digital Banking Services

The concept of PESTLE analysis was first introduced in 1967 by Francis J Aguilar in his book scanning the business environment [9]. Based on the importance of the findings of the book, it is well recognized that PESTLE analysis should be used during strategic planning, new market entry, product launches, or major organizational changes to assess external political, economic, social, technological, legal and environmental factors [9].

Accordingly, in this study the PESTLE analysis can help in advance identifying risks and opportunities allowing banking services to adapt VI for macro-environmental changes and gain competitive advantage [9]. It can surely enhance the growth trends of bank-led digital banking services in economy country-wise such as Bangladesh. Thus, using PESTLE analysis for the VI, a proposed new product under Akim's model in digital banking services, is highly reasonable in this study. This is because it can provide a comprehensive macro-environmental framework.

It can facilitate corresponding policymakers and financial institutions evaluating the external forces necessary to successfully integrate VI as a new, risk-mitigating product into existing e-banking systems.

## 5.1. Importance of PESTLE analysis in this study

It is well recognized that PESTLE analysis should be used during strategic planning, new market entry, product launches or major organizational changes to assess external political, economic, social, technological, legal and environmental factors. It can help in advance identifying risks and opportunities, allowing businesses to adapt to macro-environmental changes and gain competitive advantage.

With these advantages, this study advances as follows with PESTLE analysis of the proposed VI as a product in today's digital banking service-market in economy country-wise.

## 5.2. PESTLE analysis of VI in bank-led digital banking services

- **Political/legal:** Current banking laws often fail to cover digital transactions. Introducing or adopting VI policy requires, or serves as, a new regulatory policy to ensure risk-free banking. Policymakers are encouraged to view VI as a tool for creating a cashless society in economy country-wise.
- **Economic:** The VI can be proposed as a low-cost or fixed-price product, which will increase consumer surplus, bank profits and overall transaction volume. It will act as an impetus to boost the digital economy, which can ensure having cashless society sooner than delaying.
- **Social:** Customer's adoption is driven by overcoming psychological risks and trust issues. The "Age-group" and "education-level" of consumers will significantly influence the preference for VI, with younger and educated users showing high interest.
- **Technological:** The solution can address security pitfalls in bank-led digital banking, aiming to stabilize the "S-curve" growth of revenue against time in today's world.
- **Legal issues/environmental:** The VI product can address issues like account hacking, fraud and disputes, providing a legal safety net.
- **Environmental (economic context):** The move can gear toward creating a sustainable "cashless society," reducing reliance on physical, resource-heavy transaction methods.

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**5.2.1. In summary:** The integration of PESTLE and Akim's model which can be designed to alleviate a customer's perceived risks (like psychological fear of hidden charges or account hacking) and promote a cashless society aligns perfectly across the following dimensions,

On policy, support and stability issues:

- **On policy and support issues:** It assesses whether local governments and central banks (e.g., Bangladesh bank) are motivated to foster a cashless society.
- **Stability:** It evaluates the geopolitical and regulatory backing required for commercial banks or third-party entrepreneurs to introduce VI into everyday digital transactions

On transaction growth and welfare cost & pricing issues:

- **Transaction growth:** It analyzes how Voluntary Insurance (VI) adds a new "value" to digital banking to keep financial institutions growing.
- **Welfare cost & pricing:** It helps benchmark consumer willingness to pay against efficiency costs and adverse selection in the insurance market to ensure the premium is appealing to both the payer and the provider.

On consumer trust & demographic preference issues:

- **Consumer trust:** It targets the "perceived-risk dilemma" that deters users such as the psychological panic caused by seeing automatic deductions or unremembered transaction totals.
- **Demographic preferences:** It explains how distinct variables like age and education level heavily impact customer acceptance and preferences for the VI product.

On infrastructure reliability & user experience issues:

- **Infrastructure reliability:** It addresses the tech-driven nature of banking and the need for seamless integration, ensuring that Voluntary Insurance is easily attached to digital accounts.
- **User experience:** It focuses on minimizing the effort required by e-banking customers, allowing them to benefit from the insurance without a steep learning curve.

On consumer protection & contractual clarity issues:

- **Consumer protection:** It evaluates current banking laws, which often fail to insure or protect "on-the-go" digital deposits and transactions.
- **Contractual clarity:** It mitigates issues where customers fail to read complicated digital terms and conditions, offering a legal layer of safety that protects them against account hacks or unseen fees.

On paperless transition issues:

- **Paperless transition:** It supports the long-term environmental goal of shifting to a cashless, paperless economy by building the security and consumer trust required to adopt digital tools full-time.

## 6. Current Author’s Earlier Works Relate to Statistical Analysis on the Topic

Traditional banking accounts are insured under the DIS but digital transactions are not. Thus, perceived-risk-factors including psychological-panic have been undermining the prospects of having cashless-society in economy country-wise such as Bangladesh. The current authors earlier. Statistical analysis of convenience sampling reliability based on customers’ opinions and then hypotheses were developed & tested in choice problem on whether bank-led users prefer VI as a new product in e-banking services [10]. The findings clearly show that “age-group” and “occupation-group” of customers have different preferences on the proposed product [10]. Demographic factors impact on customers’ preferences for the new product in the economy where it can attract more users by improving customer satisfaction, customer-based services, banks benefits, including reduction in operational costs. It can be a win-win-win for parties involved [10].

The limitation of the referred statistical analytic study was that the data statistics were collected only from bank-led e-banking-users where probable e-banking-users' opinions were not counted [10]. So, further study can be conducted using opinions of randomly chosen customers as well as probable customers of digital banking services in economy country-wise such as Bangladesh. It is the direction for future on this topic in economy country-wise such as Bangladesh [11].

## 7. Conclusion

Digital-banking, particularly bank-led digital services, is an important service product in today's economy country-wise. But this progression witnesses' slow growth trends where psychological risk-factor dominates decisions of customers or probable customers' decisions not to use it. Thus, integration of VI into bank-led digital banking service market is a strategic initiative aimed at mitigating perceived-risk factors like trust issues, psychological risks of monetary loss and cybercrime, which currently hinder the growth of digital financial transactions. But current banking laws fail to cover digital transactions. So, introducing Voluntary Insurance (VI) requires a new regulatory policy to ensure risk-free digital banking. Thus, underpinning Akim's model, VI can be adopted as a low-cost or fixed-price product, which will enhance consumer surplus, bank profits and overall number of transactions in digital banking services. Since a customer's choice is driven by overcoming psychological risks and trust issues, the "age-group" and "education-level" of consumers will significantly influence the preference for VI where younger and educated users may be highly interested. Since the VI can address issues like account hacking, fraud and disputes, adopting VI can ensure providing a legal safety net in digital banking services. In this journey, it can gear toward creating a sustainable "cashless society," reducing reliance on physical, resource heavy transaction methods.

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