

Growth-Trends of Bank-Led Digital Transactions: A SWOT Analysis of Voluntary Insurance as a New Product in Bangladesh Economy

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Abstract

Bank-led digital banking is an important service in today's economy country-wise where Bangladesh is no exception. But this development faces severe drawbacks, being its insecurity where psychological risk factors in multi-facets dominate a customer's or a probable customer's decision not to use it. It has resulted in slow growth trends of bank-led digital services in economy. Focusing on the issues underpinning Akim's Model, Voluntary Insurance (VI), can be introduced as a low-cost or fixed-price new product. It can enhance consumer surplus, bank profits, and overall transaction volume. When VI-product is on market, it will spread from bankers to banking-customers. The growth-trend (S-curve) of VI-products will capture revenue-growth against time. In return, it will ensure higher transaction numbers of e-banking. With the prospect, this study brings the VI new product to Bangladesh policymakers' attentions for its efforts. The SWOT Analysis clearly shows that VI can mitigate perceived risks (hacking, fraud, errors) for users, thereby increasing trust, accelerating adoption of cashless services. It will function as a risk-transfer mechanism for on-the-go or bank-led digital banking transactions, which is crucial for digital-forward economies. It can ensure cashless society soon.

Keywords

Bank-Led Digital Banking Services, Perceived-Risk Factors, Voluntary Insurance (VI), Cashless Society

1. Introduction

In today's business-driven world, service sector is carried out in multifaceted and

competitive manners. These are characterized by evolving many factors that are very often unpredictable in human society country-wise where Bangladesh is no exception. Thus, 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. Banking sector is no exception. Digitized banking is known here to be a vital product of services in financial sector. It is well acknowledged in literature (Rahman & Islam, 2022; Minh Duc, 2022) that the IT facilitation of banking services in practices is becoming significantly profitable to parties involved. In these services, customers compete for a comparative time-saving option. Service providers compete for a comparative option. In aim to marginalize bank's operating costs and then enhance revenues, Private Commercial Banks (PCB) are dominating the market effectively by promoting bank-led digital services in multi-faucets in economy (Minh Duc, 2022; Rahman & Islam, 2022).

Researchers mostly agree that the said business motto as a foundation, Private Commercial Banks (PCBs), are today more desperate than ever before in open economy market competition (Minh Duc, 2022; Rahman & Islam, 2022). Similarly, digital banking is beneficial to customers because it facilitates savings in the form of monetary cost and time values to the users.

With these win-win prospects for the service-provider & service-receiver of financial sector in economy country-wise such as Bangladesh where banks and subsidiaries such as bKash, Western Union etc. are competing within the sector and beyond globally. Besides these, PCBs have stepped up taking further advantage of this transitional move by promoting a range of electronic services for generating additional incomes (The Financial Express, 2016). 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 (The Business Standard News (TBS Report), 2026).

It is well recognized globally that bank-led digital banking is a critical service product in today's financial sector (Minh Duc, 2022; Rahman & Islam, 2022). But this development meets severe drawbacks, being its insecurity where psychological risk factors dominate a customer's or a probable customer's decision not to use it (Rahman 2020).

In aim of marginalizing today's bank-led digital *dilemma* of banking services in economy country-wise, Akim Rahman & Islam, (2022) proposed Voluntary Insurance (VI), which is known as Akim's Model in literature (Rahman & Islam, 2022). It has been well recognized in literature (Minh Duc, 2022).

But no country has yet introduced VI in its financial sector, i.e., in digital banking service market where customers will have choices to purchase it or not.

In aim to make the VI proposal further appealing for effective policy design soon in financial sector of economy country-wise, this study now advances carrying out SWOT (Strength, Weakness, Opportunity, Threat) Analysis of the VI as a product in digital banking service market.

2. Core Components of Akim's Model

Akim's Model (Voluntary Insurance-VI), proposed by Akim Rahman, is a bank-led digital banking framework designed to eliminate transaction risks (e.g., fraud, phishing etc.) by introducing a paid, optional insurance product for users (Rahman, 2017; Rahman & Islam, 2022). It aims to boost users' confidence in bank-led digital banking services by providing a "win-win" solution for consumers, banks, and the economy.

By doing so, with no risk, customers should be able to transfer money from their bank accounts to mobile financial service (MFS) systems such bKash, Nagad, Rocket and Upay etc. without going to relevant agents. Besides this, customers should be able to do all kinds of transactions through bank-led digital banking accounts without facing any risks. Since today most companies, organizations and government agencies, etc. pay an employee salary through employee's account, it will facilitate bank-led digital banking users getting it done without visiting bank branches.

Since bank-led digital transactions are not covered under the DIS policy (International Association of Deposit Insurers (IADI), 2016) in banking services sector in economy country-wise, having VI in place can facilitate jointly working with the DIS for ensuring absolute risk-free digital banking services. In today's banking system, the users of these services receive text messages if there are no failures of digital connections or net service failures etc.

Accordingly, these services are no complaint free (Rahman, 2017; Rahman & Islam, 2022) in economy of Bangladesh. Besides this, the major MFS providers namely bKash, Nagad, Rocket and Upay, are no complaint-free too in Bangladesh economy.

So, it is now reasonable to raise question: how will VI be contributing or working when VI policy is in practice?

The answers to the question posed are as follows

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 (Rahman & Islam, 2022).

Global Relevance:

The model has been discussed for application in various economies, including the U.S., UAE, Pakistan, Russia, Bangladesh and in many other countries by country study and published research works, to enhance digital payment systems globally

3. Prospects Once the VI Policy Is in Practice of Bank-Led Digital Banking Services: Efforts for Ensuring Effective Policy-Design

Once policymakers and bank-management in Bangladesh acknowledge the importance of the VI policy, they may introduce digital banking-provisions or a supplementary provision under Bangladesh DIS. So that the relevant authority authorizes VI product in digital banking service-market of Bangladesh.

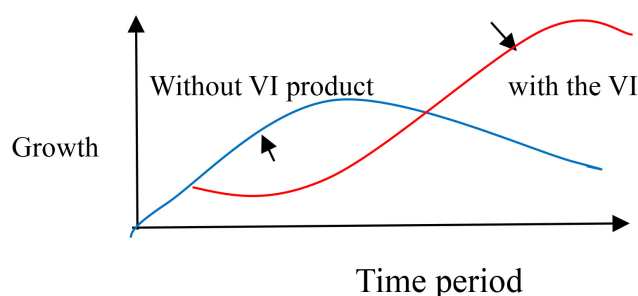


Figure 1. Effects of having VI in e-banking service-market in Bangladesh.

Once policy is in place, it will spread from bankers to customers. This progression (for example, customers are now buying the VI to be on save-side) of the VI product life cycle can be interpreted using “S-curve” as shown in **Figure 1**. This S-curve of the VI product in Bangladesh economy will chart the revenue growth-trends against time. In this journey at the early stage, as the new product sets itself up, the revenue-growth trend will be slow. Sometime in the process, based on better understanding, the customers will begin to demand the VI product. In this market, any rebate policy or provision can be further instrumental. As a result, the usage of the VI will increase faster as time passes by. These changes to the demand for the VI will allow the growth trend to continue and will make the e-banking services more appealing. The growth trend will slow down near the end-of-life cycle. As time passes, this progression will present a Cashless society or

people of Bangladesh. It can place Bangladesh economy to be an example to other countries for following Bangladesh's footsteps.

In this progression, the S-curve will fully replace the traditional banking system, which will continue influencing growth trend upward. Here the VI will have multi-faucets "product life cycle" in Bangladesh economy. They are 1) the starting-up phase 2) the rapidly increasing revenue in e-banking service market and 3) the declining trends eventually. However, it will not get off from the bottom. It will contribute significantly by presenting a secure system of bank-led e-banking services. Thus, it is now vital attracting today's probable customers of e-banking services in Bangladesh.

Over time, the progression will welcome Bangladesh to be the first nation in the globe ensuring cashless society. The first curve, i.e., the curve stands for without VI, in Fig-1 represents a growth-trend of the mixture of traditional & digital banking services in Bangladesh economy. The other curve, i.e., the curve stands for with the VI product, represents the presence of the VI product in service-market. It begins with slow growth trends. But eventually it will overtake and lead to even at a higher level. In the long-run, this progression in Bangladesh economy will be an example to other economy country-wise. Based on successful outcome, the other economy country-wise may follow Bangladesh's footstep when necessary to efforts for ensuring riskless e-banking services. Eventually the economy country-wise may present a cashless society where the initiative efforts of Bangladesh will be a part of history.

With these prospects for a service provider, a customer in the e-banking service market will recognize it in multi-faucets. However, as of today, the financial sector of Bangladesh has failed to reach-out major number of customers enhancing e-banking transactions in Bangladesh economy (*The Business Standard News (TBS Report) 2026; Rahman, 2017*). Just recently, the Governor pushed for having cashless society sooner than delaying by wider use of bank-led digital transactions, Bangla QR etc. (*The Business Standard News (TBS Report), 2026*). Here more specifically, commercial banks, mobile financial service (MFS) providers and payment service providers are inspired to accelerate efforts to build a more widespread cashless society in the country (*TBS Report, 2026*).

4. Why Does VI Policy a Requirement, Despite Having DIS Policy 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 (*International Association of Deposit Insurers (IADI), 2016*). 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 (Helms & Nixon, 2010) and the (VI) will be needed in digital banking services to protect it against technological and operational vulnerabilities (Helms & Nixon, 2010). This is because the DIS does not cover the risks relating to digital banking services (International Association of Deposit Insurers (IADI), 2016).

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.

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.

Risk Coverage Gaps

- DIS does not cover money that goes missing due to a cyberattack or a fraudulent transaction on your account (Gürel & Akkoç, 2017). 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.

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.

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.

Here is why VI is needed in digital banking, even with a DIS in place.

- *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. SWOT Analysis: Voluntary Insurance (VI) as a New Product in Digital Banking Services

The SWOT (Strength, Weakness, Opportunity and Threat) analysis methodology was first introduced or developed by Albert Humphrey and his team at Stanford University created the predecessor framework (originally called “SOFT”) in the 1960s and 1970s (Humphrey, 2005; Helms & Nixon, 2010; Vráblik et al., 2017).

In practice, the SWOT Analysis uniquely synthesizes internal strategic capabilities (Strengths and Weaknesses) with external environmental dynamics (Opportunities and Threats), offering a holistic view of the organization’s current strategic position (Gürel & Akkoç, 2017).

Accordingly, this study raises question: why is SWOT Analysis reasonable in this study? Why is it now?

Answers to the question posed are as follows

The SWOT analysis is essential for evaluating Akim’s Voluntary Insurance (VI) model in the Bangladesh economy because it translates an innovative, bank-led fintech product into actionable, localized strategy. It maps the model’s strengths to Bangladesh’s digital banking growth, highlights vulnerabilities like cyber-threats, and mitigates risks to ensure financial inclusion (Gürel & Akkoç, 2017).

Thus, this section advances with SWOT Analysis of Akim’s Model, which reveals the following key dynamics within the Bangladeshi market:

1) Strengths (Internal Capabilities) Enhanced Digital Trust: The VI model guarantees risk-free bank-led digital transactions, which combats consumer hesitation and builds trust in e-banking. **New Revenue Streams:** Banks can introduce this as a secondary product, simultaneously increasing institutional revenue and economic value.

2) Weaknesses (Internal Vulnerabilities) Implementation Hurdles: The model requires structural integration between traditional banking systems and insurance providers, which can cause administrative bottlenecks.

Adverse Selection Risk: Fixed pricing for the voluntary insurance product may

attract users who are more likely to make claims, thereby increasing costs for the providers.

3) Opportunities (External Market Advantages) Young and Educated Demographic: The growing population of tech-savvy e-banking users in Bangladesh has a statistically higher propensity to purchase voluntary insurance, making them a prime target audience.

Fintech Expansion: The government's push for a "Cashless Bangladesh" provides a tailwind for incorporating VI into digital wallets and mobile financial services (MFS).

4) Threats (External Risks) Regulatory and Market Challenges: Navigating the regulatory procedures set by the central bank and Insurance Development and Regulatory Authority (IDRA) requires careful compliance.

Cybersecurity and Fraud: As digital transactions become more ubiquitous, banks offering VI must defend against cyber risks and data breaches to maintain the viability of the insurance product.

Summary underpinning SWOT Analysis of the VI product for attracting policymakers' attention is as follows

- **Strengths (Internal):**

Risk Mitigation: Transfers risk away from the customer, addressing perceived dangers of cybercrimes and technical glitches.

Increased Trust: Enhances customer confidence in using e-banking platforms, overcoming hesitancy.

Service Value Addition: Provides a new feature that distinguishes traditional banks from other digital wallets

- **Weaknesses (Internal):**

Implementation Costs: Potential for high initial setup costs for banks to structure the insurance product.

Premium Pricing Complexity: Finding the right balance in pricing (VI premium vs. user benefit) to ensure uptake

- **Opportunities (External):**

Rapid Growth Potential: Facilitates faster growth in digital transactions and aids in building digital economy.

Expanding Digital Adoption: Reaches potential users currently reluctant due to security concerns.

Market Growth (S-Curve): Expected to follow an, over time as awareness grows.

- **Threats (External):**

Psychological Hesitancy: Elevated levels of risk perception among consumers in certain markets.

Legal and Regulatory Hurdles: Requires effectiveness to be designed by policy-makers.

Key Findings

- **Insurance as a Growth Driver:**

The research indicates that VI acts as a catalyst in enhancing growth trends of transaction, especially where transaction growth has been slower than expected.

- Targeting User Risk:

The “Perceived-Risk Factor” is the main bottleneck for digital adoption; VI directly counters this fear

- Market Impact:

Implementing this insurance transforms bank-led digital banking into a safer, more attractive option compared to other financial technologies.

6. Conclusion

Bank-led digital banking is an important service-product in today’s economy country-wise. But this advancement faces slow growth trends where psychological risk-factors dominate a customer’s or a probable customer’s decision 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 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 the VI bank-led can address issues like account hacking, fraud, and disputes, adopting VI can ensure providing a legal safety net in digital banking services. It will spread from bankers to banking-customers. The growth-trend (S-curve) of VI-products will capture revenue-growth against time. In return, it will ensure higher transaction numbers of e-banking. With the prospect, this study brings the VI new-product to -policymakers’ attentions of Bangladesh for its efforts. In this journey, it can gear up creating a sustainable “cashless society,” reducing reliance on physical, resource-heavy transaction methods.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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