Challenges to Grow Customer Base in the Banking Sector in Time of Digital Transformation – Investigating Driving Factors

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Abstract

The objective of this thesis is to examine the factors that affect customers' decisions in using banking services in the context of digital transformation in the Vietnamese economy. Customers are the main source of revenue for banks, understanding their perception and behavior when using e-banking in the current and changing economic environment is critical to determining the results of the bank's deposit mobilization initiatives. This research collects survey data from VIP customers who deposit money at commercial banks in Hanoi. We found factors relating to Brand, Diversity of supplemental offers, Security and Privacy, Interest policy, Staff quality, and Technology capability play key roles in attracting and retaining customers.

Research purpose

The main objective of this study is to identify and analyse the factors that influence customers' decisions in digital banking services.

Research motivation

Bank directors need to understand what factors make a customer choose one bank over another to develop appropriate policies to retain existing customers and attract new customers.

Research design, approach, and method:

We develop a framework based on dimensions of (i) Brand; (ii) Diversity of Supplemental offers, (iii) Security, Safety, Privacy, (iv) Staff quality, (v) Technology quality factors. A survey was implemented, and data was analyzed by EFA and regression model.

Main findings:

We found bank's brand, supplemental internet-based product/services offers, interest policies, and technology capability of a bank play important roles in the decision making of customers.

Practical/managerial implications:

Understanding which factors influence and which factors have the most impact on bank customers' decisions helps managers design appropriate policies and programs to retain traditional customers and develop new customers. This research is a necessary reference, providing insights for bank managers and policymakers to make informed decisions about their digital transformation strategies to improve the service quality of their internet banking service and thereby to satisfy their customers.

Keywords: Digital transformation,

1. INTRODUCTION

In Vietnam, banks play an important role in the financial sector, providing diverse financial services to individuals and businesses. With the rising development of digital technology, banks are forced to adapt and integrate new digital technologies into their operations to stay competitive. This has led to significant changes in the way banks operate and provide services to their customers. With the use of digital technology in the process of digitizing branches, banks around the world can automate many transaction activities at branches, reduce transaction completion time, and improve data

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accuracy and storage and their exploration for business development (OECD, 2014; PWC, 2019). This has resulted in increased customer satisfaction and experience gain while reducing operating costs. Most significant effects of bank digitalization in Vietnamese banks are increased transaction coverage, efficiency, and speed. Nevertheless, the digitization also poses challenges for Vietnamese banks. A primary concern is many banks are relatively inexperienced in this area. The digital transformation proves to be lengthy process, inconsistent, and costly as it demands substantial investments in labour, technology, and infrastructure. Banks need to adopt a fresh perspective on development, devise new strategies for its system-wide implementation, and manage both internal and external interactions. These demands huge human and financial resources that could potentially strain banks, particularly those with constrained resources. The question is with such substantial investments, do banks do better to attract and keep customers? The purpose of this paper is to review, explore and examine how different factors affect customers' decisions to keep using banks' e-banking services and products.

2. LITERATURE REVIEW

Currently, in addition to traditional banking, customers use at least three forms of electronic banking: online banking, web-based banking, and Internet banks (Kegler, 1998). Previous scholars have suggested a number of factors that customers will consider in making decision whether to take services/products of a bank, such as the level of encounter satisfaction, perceived service quality, and brand image.

2.1.1 Encounter satisfaction

First and foremost, if customers are satisfied with previous encounter with a particular organisation, they will return. The higher the level of satisfaction positively influences buying intentions. Tsuji found past transactions provided increasing amount of inside information the borrower and bank have about each other, and this affects the continuity of the transaction relationship (Tsuji, 1998). Past researches have found a positive relationship between satisfaction and several forms of customer loyalty and behavioural loyalty as it leads to repeat purchases. For example, the "*personal touch*", "*responsiveness*", and "*helpfulness*" of a bank staff in an encounter was found to be one of the most significant predictors of customer encounter satisfaction. Customers desire that any issues they work with the bank tellers will be promptly resolved, and they expect transactions to retain privacy and a personal touch (Raich & Crepaz, 2007; Veloutsou, Daskou, & Daskou, 2004).

2.1.2 Customer's Perception about the Specificities of products and services offered

Knox and Maklan (2005) found major financial institutions generate substantial profits and appear to meet the expectations of shareholders by offering products and services that fulfil consumers' fundamental requirements. In Vietnam, some electronic banking services are still in their early stages of development, while others have reached a more mature state. Banks are making adjustments to their services to better align with customer needs (Kolodinsky, Hogarth, & Hilgert, 2004). Products must be customer-friendly for customers to repeat transactions, otherwise customers who initially enrolled in e-banking would discontinue its use due to dissatisfaction with the perceived complexity of the service or customer service (Kolodinsky, Hogarth, & Hilgert, 2004).

A bank can diversify their products to differentiate themselves from competitors (e.g., specific deposit product offered to each specific customer groups; how customers can take out money in part or in whole; fixed or flexible/variable interest rates for different amount of deposit). This important and positive factors for banks in attracting deposits. Previous scholars contended that the bank's products and services contribute to satisfaction of customer of Vietnamese commercial banks (Vuong; Dao; Giao; Dat; Quan, 2020).

2.1.3 Customers' perceived service quality

Previous studies found a positive relationship exists between e-service quality dimensions and customer satisfaction of internet banking and repeat buying. In the context of banking, service quality refers to the level of excellence or satisfaction experienced by customers in their interactions with a bank's products, services, processes, and employees. It consists of the "*Reliability*", "*Responsiveness*", "*Professionalism*", "*Efficiency*", and "*Perceived Credibility*", "*Service Recovery*" (Tsuji, 1998; Free, 1996; Helani & Prasansha, 2018; Veloutsou, Daskou, & Daskou, 2004). Customers need transactions done at scheduled times, precise and accurate issuance of documents in banking transactions, maintenance of transaction data, and so on. Repeated instances of sluggish online interactions can result in service delays and leave customers uncertain about the successful completion of transactions, and they do not trust that issues will be resolved promptly, thus they may return to the traditional teller-assisted transactions which cost banks a lot of money. Adopting e-banking applications is to respond to customers requirement of bank's assurance that any issues they encounter will be promptly resolved (Boylan, 2010).

2.1.4 Customer's Perception about the Safety, Security, and Privacy

Perceptions of risk can result in users hesitating to embrace new internet banking services, especially when it pertains to concerns of the safety, security and privacy of transactions and financial data in online environments. For most customers, these aspects were often ignored initially, became one of the top concerns after a while using online services.

Security first relates to the possibility of customers losing their deposit money in the bank. With the trend of volatile development nowadays (when several established big banks went bankrupt), money security is always an important factor affecting customers' deposit decisions. High-security banks can attract greater deposits. Several banks have deposit insurance to solve deposit difficulties and dangers, and to assure depositors of bank failure protection (Helani & Prasansha, 2018). Security concerns also focus on protecting customers' account information from outsiders so that they can steal the account or make fake account to receive money (Kegler, 1998). Recent security breaches result in various problems, such as system failures or unauthorized access to firms' and customers' information, leading to customer mistrust in the online security infrastructure. Thus, security is a pivotal factor for customers when considering the adoption of internet banking services; They will be reluctant to adopt online services if they perceive banks do not have a strong emphasis on security and privacy. Encryption and Digital Signatures, Smart Cards, Firewalls, Double-Click, and the Anonymizer

Customer privacy concerns relate to preventing outsiders from tracing their activities on the Internet so that the outsider can create customer profiles for marketing purposes (Kegler, 1998). Increase in digital banking raises consumer data privacy concerns – while consumers are increasingly more open to adopting e-banking applications, they demand assurance that banks to retain their privacy, ensure that user information is not improperly accessed or utilized (Lake & Foreman, 2021; Singh & Sinha, 2016). Privacy concerns often deter users from using various online services, especially when they do not trust the privacy policies in place to protect their sensitive information from unauthorized access."

Safety against virus when being active online is also a serious concern, as intruders may hack customers' precious and personal data in their computers.

To address the concerns of customers in these aspects, a key to the success of banking industry is a bank should self-imposed industry guidelines so that it can rapidly keep pace with emerging Internet developments. Electronic banking leaders need to consistently innovate and enhance electronic banking services, ensuring they remain an efficient and secure choice for the upcoming generation. The government's role as an active cautious regulator is also important; However, as the Internet changes constantly and so markedly, significant government intervention may slow down or halt its progress.

2.1.5 Bank brand

Knox and Maklan (2005) contended that banks must develop brand characterized by the highest standards of ethics, banking acumen, and customer service. Veloutsou, Daskou, and Daskou (2004) found banks are increasingly more customer-led brands, not only in terms of different types of products, but also access through a range of different channels (i.e., branches, salesmen, IFAs, telephone, off-the-page). Bank brand is a key for success. Lacking of brand values with which customers can identify will make a bank loosing their customers to competitors. Today, the consumer is more aware about financial services than ever before. However, this is creating problem for traditional suppliers as the more the awareness about different offers from different banks, the less customers will be loyal to individual bank brands (Knox & Maklan, 2005). In such context, making their products more known to customers will help create more opportunities for lower-brand banks and potential entrants.

As the banks can easily copy products of others, it is better to pursue a service-based brand than a product-based brand, where the consumer is able to experience the brand at a variety of different levels, with the service being key to enhance the core products. Key components to build and assess a bank brand include 4 contents. First, brand awareness (i.e., assess target audience brand recognition and recall). Second, the brand perception (how customers view the bank's trustworthiness, reliability, innovation, and customer-centricity). Third is the brand differentiation (how brand's value proposition appeal to customers and competition). To assess that, analysts can compare a bank's products to competitors' and do market research to determine customer preference. Finally, bank's brand equity (or bank's market value) that could be assessed via its financial performance, valuation, and market share measure. Consumer Feedback is the best measure of assessment. Analysts should periodically gather and evaluate customer feedback, complaints, and reviews to understand how customers view a bank's brand and find areas for development.

2.1.6 Interest policy

According to economic theories and from the perspective of banks, interest rate is one of the major factors that affect savings and bank deposits decision. Interest rate on bank deposit is the key drivers to attract customers to place their money into a saving accounts. In Vietnam banking sector, interest rate policies have positive relationship with deposit customer decision (Vuong; Dao; Giao; Dat; Quan, 2020). The higher the interest rate of the saving offers compared to the interest of other investment alternatives, the more the saving account can attract money from people (Mushtaq & Siddiqui, 2017). Thus, bank interest rate transparency impacts the deposit flows, and should be published regularly to attract customers (Chen, Goldstein, Huang, & Vashishtha, 2022; Chen, Goldstein, Huang, & Vashishtha, 2022).

2.1.7 Diversity of Supplemental offers

In an increasingly competitive environment and customer-driven culture, in addition to the traditional core products (i.e. current account) in financial services, bank must offer supplemental products and take additional measures to ensure customers' loyalty and repeated purchases. Banks keep innovations in their supplemental offers to provide more feature offers to customers than their competition do in the financial services business to attract new customers, retain existing customers, and generate additional business for the bank. Banks falling short in doing so failed to clearly differentiate to others (Free, 1996).

Supplemental offers are undertaken by a bank to encourage customers to use specific banking products or services. They may include mobile banking, saving electricity, paying flexible principal, sending online. In addition, they include reduced interest rates, waived fees, special rewards, or other incentives to entice customers to open new accounts, apply for loans or credit cards, or use other banking services. Innovative and Diversified products are excellent strategy by which banks can increase their performance while maintaining their market efficacy (Batiz-Lazo & Woldesenbet, 2006; Ashiru, Balogun, & Paseda, 2023).

2.1.8 Bank Staff quality and Interaction with bank staff

In a service-based industry, the quality of personnel can often spell the difference between success and failure. Quality personal interaction and employees image is important (Veloutsou, Daskou, & Daskou, 2004).

A bank employee represents the image of the bank. As a result, in order to increase capital mobilization, bank employees must meet the following criteria: customer knowledge, business knowledge, process knowledge, and perfect service style. Furthermore, the attitude of employees when communicating with customers is very important because it creates a very strong first impression on customers. A good, standardized, and professional service attitude can attract customers; otherwise, it can lose customers, causing serious consequences in the bank's operations, particularly in the capital mobilization process.

2.1.9 Technology applications

Technology is a vital platform for those in financial services in achieving competitiveness. Technological advances will allow banks to create real advantages with to influence the customers' acceptance of new products and services. Firm providing financial services who best exploit technology will be the long-term winners (Free, 1996; Kolodinsky, Hogarth, & Hilgert, 2004).

Many banks have been shifting to e-business model by adopting new efficient information technologies (i.e., the blockchain, artificial intelligence, big data, and the Internet of Things). The development of technologies such as digital signatures, smart cards, firewalls, Double-Click, and the Anonymizer help banks to ensure transaction security and privacy (Kegler, 1998). Such technologies help to simplify operations, secure information transfers, improve the processing speed, reduce service costs, and allow continuous improvement of most operational aspects of service. Banks are increasingly recognizing the importance of customer service and are blending new technological features with traditional preferences (Kolodinsky, Hogarth, & Hilgert, 2004; Kegler, 1998).

Chhaidar et a. (2022) found significant positive effect of digital technology investments on European banks' financial profitability. Larger banks benefit more from investments in financial technology to improve their performance.

Batiz-Lazo & Woldesenbet (2006) found technology infrastructure of the banks is required for banks' innovation strategy. Technology quality is widely proclaimed as being of vital importance to achieve and maintain competitive advantage. Banks that have successfully internalized new technology are seen as have more capability to provide diversified offers to customers. This in turn an essential element for maintaining competitive positioning and adapting to changes in the external environment.

Mekonnen (2016) found banks nowadays are more dependent to developments in information and telecommunications technologies (IT) to adapt changes in customer needs and new ways to price risk. Technology quality factor affects to deposit customer satisfaction. Fung (2008) found evidence from the banking industry that labour-saving technologies improved efficiency in the use of human resources.

Laupretre (1991) suggested measurements of the impact of new technologies in the banking sector include dimensions of "new technologies", "*employment*", "*competency*" and "*qualifications*" within an organisation. The technologies help reducing organisational and operations complexity, increasing qualitative characteristics of information collected and stored, and the quality of work analysis.

The framework to examine the adoption of e-banking technologies focuses on the promise of increased efficiency for the bank and increased convenience and service for the consumer.

According to the State Bank of Vietnam, the Vietnam banking industry sees many new banks entered the market in the last decade. Many banks have adopted the e-banking services and improving technology infrastructure to new levels of true Internet banks, which permit customers to open accounts, check balances, and perform the majority of their banking activities via the Internet with much cheaper costs for both customers and banks (State Bank of Vietnam, 2023; Trịnh & Trí, 2022; Nguyệt, 2019). Unlike before when the costs of entry and operations were prohibitively high for traditional banks using teller-assisted transactions, nowadays, with the web-based transaction technologies and approach, newer and smaller banks are capable to cover similar geographic regions and customers by utilizing online banking to provide services at much lower cost.

In sum, self-imposed industry guidelines could be easily altered to rapidly keep pace with emerging Internet developments. Electronic banking industry leaders must continue to develop new ways to make electronic banking a more efficient and secure alternative for the next generation (Kegler, 1998).

3. METHODOLOGY

3.1. Hypotheses development

Based on the empirical studies presented above, we find the factors found in many research papers both inside and outside Vietnam. This will offer a strong theoretical foundation, assisting in the study and application of the model in accordance with the research conditions at Maritime bank in Vietnam, based on the same research choice to deposit money.

Hypotheses include:

Hypothesis 1: The better the bank brand (reflected by the professionality of bank staffs; safety/security), the more the customers will decide to deposit money to the bank.

Hypothesis 2: The more product diversification has positive relationship with deposit customer decision.

Hypothesis 3: The interest rate policy has positive relationship with deposit customer decision.

Hypothesis 4: Supplemental offers have positive relationship with customer decision.

Hypothesis 5: The Service quality has positive relationship with deposit customer decision.

Hypothesis 6: The Technology capability (including digital transformation; infrastructure, online or mobile app) have positive relationship with deposit customer decision.

3.2. Model Specification and Description of Study Variables

The analytical framework of this study is that factors including bank brand, security, core products and services offers, interest policy, supplemental products and services offers, staff quality, service quality, and technology infrastructure quality influence customers' deposit decision.

In order to collect the customers' opinions on the factors above, we use a questionnaire with questions based on literature review. The Table below shows variables and their corresponding questions.

Table 3-1: Variables and Question code

Code		Content
V1	Interest1	The transaction procedures and processes are strictly regulated and safe for customers
V2	Interest2	The bank offers better variety of interest rates for different deposit products than other banks do
V3	Interest3	The bank publishes Interest rates transparently
V4	Security1	The bank's privacy policies safeguard customer confidential information securely against unauthorized access
V5	Security2	The transaction procedures and processes are strictly regulated and safe for customers

Code		Content
V6	Secur ity3	Online savings transactions have many layers of safety protection for customers
V7	Serv Qual1	Transactions paperwork are simple, user-friendly
V8	Serv Qual2	Transactions are reliable, fast, and convenient
V9	Serv Qual3	The bank handles requests or complaints effectively, with personal touch
V10	Brand 1	The bank is prestigious to make transaction
V11	Brand 2	The bigger banks are likely safer
V12	Brand 3	The bank do business and manage risks well
V13	Tech no1	The bank's online banking system is smooth and uninterrupted
V14	Tech no2	The bank is ready to provide mobile, internet banking/ E-KYC
V15	Tech no3	The bank provides online services with multiple channels for customers
V16	Core Produ ct1	Bank's online savings products are competitive
V17	Core Produ ct2	The bank has a wide range of savings products suitable to the target needs of customers
V18	Core Produ ct3	There are always many new innovative products introduced to compete with other banks and closely match the needs of customers
V19	Staff1	Staff are professional and qualified
V20	Staff2	Staffs of the bank are always customer-oriented, taking customers as the focus
V21	Staff3	Staffs of the bank are responsible people
V22	Supp Produ ct1	The bank has a good loyalty program for VIP savings customers compared to other banks
V23	Supp Produ ct2	The bank has additional combo product packages for VIP customers who save money (such as giving away beautiful digital accounts, credit cards, reducing

Code		Content
		fees, reducing exchange rate points when transferring money abroad)
V24	Supp Produ ct3	The bank has programs to give gifts and give priority services to VIP savings customers
V25	Loyal ty1	This bank is always my first choice when saving money
V26	Loyal ty2	In the future I will still work with my bank

(Source: Author, 2023)

3.3. Survey questionnaire

The questions, or so-called observed variables, were constructed using references to previous studies' interview question measures, as well as some sentence modifications to fit the MSB bank. Customers who are transacting can easily understand the question's content.

The survey questionnaire will be designed in Vietnamese and translated into English. The questionnaires were in both paper-based and online form. The online form was published at https://forms.gle/TJtAQRysE2Nc76Si6.

Question will be measured on a five-point Likert scale, where 1 = strongly disagree, 2 = disagree, 3 = neutral (neither disagree nor agree), 4 = agree, and 5 = strongly agree. I used a preliminary research and construction model to conduct qualitative research (through reports from the banking system and relevant ministries) and quantitative analysis. To conduct qualitative research, the Vietnamese form was used. Questionnaire was designed to ask questions relating to driving factors that had been identified in the literature review – that made all questions relevant. In addition, the questionnaire quality was improved with in-depth advices from 5 experts of the banking industry, working in different commercial banks. The questionnaire was trialed before use with the participation of 5 very important value Maritime bank - contributed customers to ensure that the questions were relevant and meaningful, respondents did not have any problem to understand or interpret the meaning of questions.

During the interview, I wanted to determine if the chosen measurement scale was suitable for conducting the research in Vietnam. The survey questionnaire was slightly modified based on respondents' feedback to make it more transparent and understandable. After the trial, the survey was sent to customers visiting different offices/divisions/branches of MSB bank. The data received was processed by the Excel and SPSS.

For each variable, its value will be calculated as the average of answers to its sub-questions. For instance, the INTEREST was calculated as AVERAGE = (Interest 1 + Interest 2 + Interest 3)/3; The SERVICE QUALITY was calculated as AVERAGE (ServQual1, ServQual2, ServQual3).

4. Findings and discussions

There were 416 valid responses from the VIP customers.

4.1. EFA output

EFA output shows that the KMO = 0.947, greater than 0.5, sig Bartlett's Test = 0.000 < 0.05, thus EFA is relevant to reduce the dimension of research model. There are 4 factors having eigenvalue >1 with Cumulative Total Variance of 68.6%, meaning it can explaining 74.45% of the variance. Therefore, we conclude that there are 4 factors.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.947
Bartlett's Test of Sphericity	Approx. Chi-Square	7559.556
	df	276
	Sig.	.000

Table 4-1: The Rotated Component Matrix[a]

Variables	Component				Included to the model?
	1	2	3	4	
V10	0.75				Included
V11	0.74				Included
V8	0.66				Included
V12	0.63				Included
V9	0.63				Included
V7	0.60				Included
V23		0.76			Included
V22		0.69			Included
V21		0.68			Excluded
V20		0.68			Excluded
V19		0.67			Excluded
V24		0.66			Included
V2			0.73		Included
V1			0.71		Included
V5			0.66		Excluded
V4			0.65		Excluded
V3			0.62		Included
V6			0.59		Excluded
V17			0.50		Excluded
V14				0.78	Included
V13				0.76	Included
V15				0.71	Included
V16				0.52	Included
V18			0.50	0.51	Excluded

Based on this Rotated Component Matrix and the nature of the variables, the model keeps 15 (out of initial 24 variables) variables that fit into the 4 factors below:

(1) The first component includes V7 to V12. They are questions regarding the customers' perception about the Bank's brand (i.e., the prestigious name, safety, service quality, risk management, effective complaints handling, simplicity of transactions); We identify this component as **Bank Brand** factor (fBRD_SQY).

(2) The second component includes V19, V20, V21 (questions regarding employee quality) and V22, V23, and V24 (questions regarding offers supplemental to core products). Because they are two groups different in nature, we cannot combine them into a single factor. After consideration, we took the second variable group with V23, V22, V24 to make the **Supplemental internet-based offered products** factor (fSOP).

(3) The third component includes 3 groups – V1, V2, V3 (questions regarding interest policy of bank); V4, V5, V6 (questions regarding safety of transactions with bank); and V17 (question regarding product offer). Same as the second component, we can select just one group and take V1, V2, V3 as **Interest policy** factor (fIRP) because we care more about the impact of interest policy on customers' decisions.

(4) The fourth component includes V14, V13, V15 (questions regarding technology infrastructure, digital transformation) and V16 (question on digital product). We combine these 4 variables into the **Technology capability** factor (fBTY).

4.2. Reliability of the variables

The reliability test for the **Bank Brand** factor with variables V7 to V12 shows a alpha reliability coefficient for the 6 variables is .9 (> threshold of 0.6) and all have high Corrected Item – Total Correlation (greater than 0.6), suggesting that all variables have relatively high internal consistency and belong to the corresponding factor. Similarly for *Supplemental offered products* factor, *Interest policy* factor, and *Bank's technology capabilities* with alpha coefficients of .87, .80, and

.86. respectively.

4.3. Hypothesis test

Customer Decision = (Constant) + a_1*fBRD_SQY + a_2*fSOP + a_3*fIRP + a_4*fBTY

In which fBRD_SQY is the Bank Brand factor, fSOP is the Supplemental Offered Product factor, fIRP is the Interest Policy factor, and fBTY is the Technology Capability factor.

The regression model output shows that this model can explain 58% (R^2= .58) changes in customers' decision to continue using services and products offered by a bank. This is a relatively moderate explanation power.

Table 4-2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.76[a]	.58	.58	.51
a. Predictors: (Constant), fBTY, fSOP, fIRP, fBRD_SQY				

All factors have p-value under 5%, thus coefficients are statistically meaningful. The positive coefficients prove that there are evidence supporting that these factors have positive impacts on the customers' decision.

Table 4-3: Coefficients of independent variables [a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.53	.138		3.83	.000
fBRD_SQY	.21	.051	.198	4.00	.000
fSOP	.34	.042	.350	8.07	.000
fIRP	.18	.039	.211	4.69	.000
fBTY	.13	.046	.141	2.86	.004

a. Dependent Variable: SDN (Decision)

All factors have low VIF, suggesting there is no problem of collinearity between factors.

Table 4-4: Test of collinearity

	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
fBRD_SQY	.413	2.422
fSOP	.536	1.864
fIRP	.498	2.010
fBTY	.419	2.388

The outcome show that there are statistic evidence supporting 6 hypotheses given in the section 3.1.

5. Findings and conclusions

First, we found factors relating to Brand, Diversity of supplemental offers, Security and Privacy, Interest policy, Staff quality, and Technology capability play key roles in attracting and retaining customers. Second, Supplemental Internet-Based Products/services factor (fSOP) seems to have highest impact, then Bank Brand – related factor (fBRD_SQY).

Practical implications for this study include:

- Providing insights for bank managers and policymakers to make informed decisions about their digital transformation strategies.
- Helps managers design appropriate marketing programs, policies, and programs to retain traditional customers and develop new customers.

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