

To Study the Impact of E-Banking Fraud on Customers Satisfaction

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Abstract

In this decade, e-banking fraud is a major concern for banks and their customers. This study examines the impact of e-banking fraud on customer satisfaction. The results of the study represent, e-banking fraud has a significant negative impact on customer satisfaction. Those customers who have become victims of e-banking fraud are more likely to not satisfied with their bank's prevention efforts on security measures. The tremendous growth of e-banking services has offered convenience and save lot of time, but on the other hand it has exposed their customers to risk of fraud.

Keywords: E-banking fraud, Customers Satisfaction, Customer Awareness

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Introduction

In the past few years after the Jan Dhan yojana (2014), Demonetization (2016) and COVID-19 pandemic, the electronic banking industry has grown exponentially and by using e-banking services, customers save their time and manage their finances efficiently. By using e-banking, customers can check their account balances, pay all types of bills and fees, transfer funds and use all others facility through the smartphones and computers. The average waiting and resolution time to uncover fraud amount and efforts taken by bank to prevent e-banking frauds in banking industry became one of the most critical factors affecting customer satisfaction. Customers have a significant negative impact on both financially and emotionally due to e-banking fraud. Not only it can reduce customer satisfaction, but it can also damage the reputation of banks. The study will investigate the following questions:

- How does e-banking fraud impact customer satisfaction?
- How does average resolution time impact customer satisfaction?
- What are the efforts that influence banks to prevent the risk of e-banking fraud on customer satisfaction?

Review of Literature:

Gala Dipti (2016) conducted a study on the topic e-banking frauds in which researcher analysed efforts and actions taken by banks for preventing e-banking frauds, customer awareness and perspective towards e-banking frauds. It resulted that there was no significance difference between the various banks in taking preventive measures.

Deloitte (2018) Conducted survey on Indian banking fraud, in his survey he explored the issues facing by the banking industry in today's scenario like strategic and implementation challenges faced through fraud prevention efforts.

Udeh (2018) conducted study on fraud in Nigerian banking sector. The purpose of the study was to ascertain the effect of fraud on profit in Nigeria banking industry. In his study, researcher evaluate the effect of fraud on assets in Nigeria banking industry with specific emphasis on bank profits, bank assets and bank deposits. The major findings of banking fraud have adverse effects on Nigerian banking industry. It was discovered that fraud has negative impact with bank profits.

Objectives of the Study:

1. To understand the relationship between the Customer satisfaction and average time taken by bank to uncover fraud amount.
2. To analyse the efforts taken by Banks to prevent e-banking fraud.

Research Methodology:

In present research work, the data is collected through primary data by using questionnaire and seeking replies through internet by using Google forms. In this research paper, 4 questions were made to analyse the efforts taken by bank to enhance customer trust, enhance technology, enhance UPI/Mobile wallets safety, enhance e-banking awareness. All these 4 questions are classified altogether into 19 different statements. All these statements were measured on five-point Likert scale from 1 - Strongly Disagree to 5 - Strongly Agree. Factor analysis is used to analyse the relationship of these statements.

Objective wise Analysis:

Objective 1: To understand the relationship between the Customer satisfaction and average time taken by bank to uncover fraud amount.

The average time taken by bank to resolve a customer's issue have a very significant impact on customer satisfaction. The longer bank takes time to investigate the matter and resolve a customer's issue (or return customer's stolen money), the more customers become frustrated, angry and dissatisfied. Below are some important points which explains in depth about how the average time taken by bank to uncover fraud amount can impact customer satisfaction in the banking industry:

Effective Communication: It is crucial for bank to keep their customer updated or informed about the progress/delay of their issue. For some reason, if the resolution takes time, it is still crucial to regular updates their customers which can help them to manage expectations and reduce frustration. Any lack in effective communication can lead to customer's dissatisfaction, even in case the issue is eventually resolved.

First Contact Resolution (FCR): By resolving customer's issue during the first interaction with the customer through different mode of communication like phone, chat, email, help desk etc. is highly desirable. It helps customer to minimizes the time and effort required to invest in the resolution process. More FCR rates represents more customer satisfaction, which lead to reduce the operational costs, and improve overall service quality.

Customer Service Efficiency: The efficiency of customer's support team is a key factor of satisfaction. In case the process to resolve an issue is complex which requires multiple steps, and to involves numerous transfers between departments, it can result to frustration and lower customer satisfaction. It is mandatory for the banks to stream lining their customer service processes by eliminating duplication and irrelevant steps.

Service Quality: Both resolution time and service quality play a vital role in overall customer satisfaction. Due to work pressure or workload, customer service team rushed to closed the issue and incomplete resolutions can result in dissatisfaction. In this scenario the customer may require to contact support team again for the same issue.

Software and Technology: Providing customer's support by using software and technology, such as artificial intelligence chatbots, to resolve common issues can significantly reduce resolution time and increase satisfaction.

Trust and Loyalty: Prolonged resolution times or delay can lead to a long-lasting impact on customer trust and loyalty. Those customers who experience dissatisfaction due to long resolution time and slow process, may become the reason for customer to switch to competitors bank in the future.

Customer Expectations: Some complex problems may require more time because of in-depth investigation and to involve other's departments like Police Cyber Crime, and customers may understand this, if banks being transparent and providing them with regular updates.

Feedback and Follow-up: After resolving an issue, it's mandatory to seek feedback from the customer and it can be positive, negative, or neutral. Their response ensures that they are satisfied or dissatisfied with the resolution provided by the bank. Follow-up and feedback process can help to identify the area for improvement.

Objective 2: To analyse the efforts taken by Banks to prevent e-banking fraud.

Banks take numerous measures to prevent e-banking fraud. These efforts are crucial because of the banking industry's rapid growth after the Jan Dhan yojana (2014) and Demonetization (2016). Below are some common efforts taken by banks to prevent e-banking fraud, which are characterised into four parts:

Bank Awareness Efforts: Banks send Email/SMS alerts to customers, if they detect unfamiliar and fraudulent activity. Banks send notifications, organize campaigns, webinars, workshops and educational events to prevent e-banking frauds.

Bank Technology Efforts: Banks use Artificial Intelligence and Machine Learning algorithms to identify patterns of fraudulent activity and detect abnormality in transactions. By using fraud detection & monitoring systems, banks spot unusual login times and locations, can trigger alerts for further investigation. Banks provide customer SMS/Email alerts, weekly/monthly statements used for additional verification. Many banks incorporate two-factor and multi-factor authentication, biometric authentication methods like fingerprint, facial and voice recognition to ensure that only authorized users can access their accounts.

Bank Safety Efforts: Banks ensure safety to their customers by providing options to set limits for linked UPI & Mobile wallets, options to enable/disable linked UPI & Mobile wallets, options to set time durations to allow e-banking services and options to enable/disable linked Debit/Credit Cards.

Bank Trust Efforts: Banks build trust by paying penalties to their customers, if a victim's issue is not resolved in TAT. On the other side, banks charge penalties to employees, if a customer's complaint is not registered on time. Banks ensure transparency by continuously monitoring victim issues and communicating to them. Banks also conduct workshops and seminars on anti-fraud training for employees.

Exploratory Factor Analysis

In this research, researchers investigate the multiple dimensions of efforts taken by banks to prevent e-banking fraud. Here, researchers designed a questionnaire which is characterised into four dimensions such as Bank Awareness enhancement efforts (Awareness_1..5), Bank Technology enhancement efforts (Technology_1..5), Bank Trust enhancement efforts (Trust_1..5) and Bank Safety enhancement efforts (Safety_1..5) to prevent e-banking frauds.

Table No 1: Descriptive statistics for Banks efforts to prevent e-banking frauds.

Statements	Banks efforts to prevent e-banking frauds
Awareness_1	Conducting Public Awareness Campaigns.
Awareness_2	Implementation of RBI Guidelines.
Awareness_3	Notification warnings sent by Bank to not share OTP/Card details.
Awareness_4	Conducting Advertising Campaigns.
Awareness_5	Conducting workshop and fraud awareness Training.
Technology_1	By using fraud detection & monitoring System.
Technology_2	By using Artificial Intelligence and Machine Learning in Fraud detection.
Technology_3	By upgrading the technology to prevent Cyber Crime.

Technology_4	By using SMS/Email alert and by providing weekly/monthly statement.
Technology_5	By enabling or providing two-factor and multi-factor authentication.
Safety_1	Option to set limit for linked UPI & Mobile wallets.
Safety_2	Option to enable/disable linked UPI & Mobile wallets.
Safety_3	Option to set time duration to allow e-banking services.
Safety_4	Option to enable/disable linked Debit/Credit Card.
Trust_1	Bank pay penalty to customer if victim issue is not resolved in TAT.
Trust_2	Bank charge penalty to employee if complaint is not registered on time.
Trust_3	Bank continuously monitor and communicate to their customer.
Trust_4	Bank conduct workshop and seminar on anti-fraud training to employees.
Trust_5	By implementing a whistle-blower hotline.

Principal Components Factor Analysis with varimax rotation was performed for 19 statements which represents the Bank efforts to prevent e-banking fraud.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy – This measure varies between 0 and 1, and values closer to 1 are better. Looking at the table below (Table No 2), The KMO measure is **0.840**, which is close to 0.9 and therefore can be strongly accepted.

Bartlett's Test of Sphericity – This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is matrix in which all the diagonal elements are 1 and all off diagonal elements are 0. You want to reject this null hypothesis. Looking at the table below (Table No 2), KMO and Bartlett's Test are significant as Chi-square value 2756.128 and corresponding p-value is **0.000**.

By consider both together, these tests provide a minimum standard, which should be passed before a factor analysis (in other words, a principal component analysis) should be conducted.

Table No 2: KMO and Bartlett's Test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.840
Bartlett's Test of Sphericity	Approx. Chi-Square	2756.128
	df	171
	Sig.	0.000

In below table (Table No 3 Rotated Component Matrix with Banks enhancement factors.) All the statements inside Awareness_1 to Awareness_5 factor have strong impact on customer reliability. Followed by, all the statements inside Technology_1 to Technology_5 factor indicates that bank have rapidly invested and upgraded their technology to combat cybercrime. Such as fraud detection and monitoring system, Artificial intelligence, Machine learning technology so that they early detect any warning of fraud or red flag. Followed by, all the statement inside Safety_1 to Safety_4 factor is related to safety provided by banks by allowing them to enable or disable their Credit/Debit Card and Mobile wallets & UPI, by allowing them to set the limit for maximum transaction for a day and similarly allow user to set time duration for login to e-banking. Followed by, all the statement inside Trust_2 to Trust_5

factor is related to gain customer trust and loyalty by providing whistle-blower hotline, workshop on anti-fraud training to employees.

Table No 3 Rotated Component Matrix with Banks enhancement factors.

Rotated Component Matrix ^a				
	Component			
	Technology Enhancement Factors	Banks Awareness Factors	Trust Enhancement Factors	Safety Enhancement Factors
Awareness_1			.617	
Awareness_2			.695	
Awareness_3			.710	
Awareness_4			.744	
Awareness_5			.734	
Technology_1		.710		
Technology_2		.777		
Technology_3		.717		
Technology_4		.819		
Technology_5		.762		
Safety_1	0.885			
Safety_2	0.887			
Safety_3	0.872			
Safety_4	0.653			
Trust_1				0.680
Trust_2				0.677
Trust_3				0.686
Trust_4				0.803
Trust_5				0.861
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				

Conclusion:

The average time taken to resolve a customer's issue is a key factor to determine customer satisfaction. It's not just about how fast banks resolve customer issue, it's also about how efficiently banks communicate to customer, service quality, and the overall customer experience. Maintaining the right balance between these elements can lead to higher customer satisfaction, loyalty and trust.

Suggestions:

Banks can hire more problem-solving skilled employees to speed up the first response. If employee can have more deeply and quickly understanding of customer/victim issue, then there is a probability of more customer satisfaction. In order to increase first contact resolution (FCR), over hiring of customer support team or employees, at the expense of quality, will have a significant negative impact on customer loyalty and trust. It is necessary for the banks to focus on hiring skilful employees, providing training, seminar, and retaining top talented employees.

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