

ONLINE BANKING SECURITY THREATS - A COMPREHENSIVE ANALYSIS

***Ansu Susan Jacob, **Dr. Sarun S G**

Abstract

Banks must contend with a wide range of online security concerns as digital transactions take place commonly. It is very dangerous for banks and other financial institutions. Cyber crimes are always more innovative and invent new ideas to make threats in the digital world. They take advantage by weakening the banking system in order to steal confidential information of customers. This study focuses on the content analysis of frauds taking place in the online banking system, reporting the frauds to RBI, how the fraud cases are being closed and RBI cautions against frauds. The Reserve Bank of India (RBI), realizing how important it is to protect the financial industry, has put strict regulations in place to improve online security for banks.

Keywords:- Online Banking, Cyber Frauds, Cyber Threats, Block Chain Technology, Financial irregularity.

The banking business involves safeguarding other people's money. Banks generate interest income by lending money which is beneficial to both the customers and banks. A financial entity permitted to provide financial services in addition to accepting deposits and issuing

loans is known as a bank. The business of banking involves safeguarding other people's money. The emergence of online banking has transformed and reshaped the financial system by offering convenience to consumers around the world. Customers can access their accounts and every transaction from their

**Ansu Susan Jacob, Assistant Professor, Department of Commerce, St.Stephen's College, Pathanapuram.*

***Dr. Sarun S G, Assistant Professor, PG and Research Department of Commerce, Government College, Attingal.*

comfort zone and it's possible in a few clicks. Although online banking has many benefits, it is accompanied with risks and security threats.

Hence the financial institutions and customers have to deal with a wide range of hazards and security concerns. It is essential to understand the complex interactions between technologies, security measures in the context of online banking. In order to ensure the growth of online banking, customers' preferences and trends should also be considered along with security and risk factors.

Significance of the Study

In this digital world, it is of higher relevance to conduct a study on risk and security issues in the banking sector. Especially in internet banking, millions of customers rely on online banking services for accessing financial services. A study about risk and security issues in online banking is essential to identify the pros and cons of internet banking and to identify the threats that result in monetary loss to people. This research paper intends to examine the nature of risk and security issues in online banking. It will explore the overall risk environment associated with online banking, understanding the challenges and threats inherent in online banking is essential to develop strategies to enhance the security of online banking. In short, this study attempts to study the hazards that exist in the digital world of online banking.

Scope of the Study

The study aims at a detailed examination of the risk and security measures associated with online banking.

It aims to provide valuable insights into banks for safeguarding their customers' interest from the security issues faced by banks especially in their online banking area and also to provide general guidelines to customers to be followed while using online banking. The study mainly focuses on providing a content analysis from the cautions and measures issued by RBI against the frauds in online banking.

Review of Literature

1. Sapna Kumari and Vinitha Chaudhary (IJARIIE-ISSN (O)-2395-4396 Vol-3 Issue-4 2017) attempted to determine the opinion of customers about security issues and risk factors inherent in online banking. It resulted from the study that customers are not willing to adapt to credit card usage as they are more concerned about security and risk factors. So they proposed in their study, in order to overcome these issues, banks should take initiatives to educate customers and to adopt with biometric and security matters
2. Gabriela Mogos and Nor Shahida Binti Mohd Jamail (TELKOMNIKA Indonesian Journal of Electrical Engineering, September 2020) in their study about security issues of the E-banking system come with the hazards faced by online banking. Even though technology places numerous benefits to online banking, there are many threats created by this technological advancement. One of their aims in their study is to examine the risks that could affect the customers. They recommended

many measures to prevent the frauds such as access control by limiting the sensitive data.

3. Binayee Mishra in her study on cyber Threats in E-Banking & its Effect on Consumers' Behaviour: An analytical Study concludes that cyber criminals are relatively active in recent years due to low cost of execution finding it challenging to prevent cyber crimes. Also it showed from her study that India is more facing this challenge.

Objectives of the Study

1. To identify and segregate online banking frauds.
2. To investigate the fraud reporting mechanism followed by banks.
3. To examine the procedures for closure of fraud cases by banks.
4. To compile a comprehensive list of do's and don'ts for customers engaged in online banking.

Methodology & Data

The study primarily uses secondary data for analysis and interpretation. The data are collected from authentic published sources including the websites of Reserve Bank of India and legal systems. The analysis technique adopted is content analysis.

Data Analysis and Interpretation

Data for content analysis is extracted from the Reserve Bank Report on online banking frauds. Data source is represented by the Reserve Bank Report on Frauds - Classification and Reporting published on 01st July 2011 with

Reference No DBS.CO.Fr MC.BC. No.2/23.04.001/2011-12 of RBI/2011-12/75. The results of content analysis are summarized and interpreted as follows

Classification of Frauds

Frauds have been categorized as under, primarily based on the provisions of the Indian Penal Code, to ensure consistency in reporting.

1. Misappropriation and criminal breach of trust.
2. Fraudulent encashment through forged instruments, manipulation of books of account or through fictitious accounts and conversion of property.
3. Unauthorized credit facilities extended for reward or for illegal gratification.
4. Negligence and cash shortages.
5. Cheating and forgery.
6. Irregularities in foreign exchange transactions.
7. Any other type of fraud not coming under the specific heads as above.

Closure of Fraud Cases

Banks will disclose the specifics of closed fraud cases, together with the reasons for closure in cases where no further action was required, to the relevant regional office of the Reserve Bank of India's Urban Banks Department, under whose authority the bank's head office is located. Fraud cases that are closed within a quarter must be reported in the FMR-2 quarterly reporting. Banks should only report fraud cases as closed once the following steps have been taken.

Table 1
Reporting of Frauds to Reserve Bank of India

<p>Frauds involving amounts of less than Rs. 1.00 lakh</p>	<p>RBI should get statistical information about these frauds in a quarterly statement, not to be reported individually to the RBI.</p>
<p>Frauds involving amounts of Rs. 1.00 lakh and above but less than Rs. 25.00 lakh</p>	<p>reported, in the format specified in FMR-1, within three weeks of the date of detection to the Reserve Bank of India's Regional Office of Urban Banks Department, which oversees the bank's Head Office.</p>
<p>Frauds involving amounts of Rs. 25.00 lakh and above</p>	<p>within three weeks of the date of detection, in the format specified in FMR-1, to the Frauds Monitoring Cell, Department of Banking Supervision, Reserve Bank of India, Central Office, World Trade Center, Centre-1, Cuffe Parade, Mumbai 400005.</p> <p>Additionally, a copy of FMR-1 must be sent to the Reserve Bank of India's Regional Office of Urban Banks, which oversees the bank's head office.</p>
	<p>In addition to the requirement given above, banks may report the fraud by means of D.O. letter contain brief particulars of the fraud such as amount involved, nature of fraud, modus operandi in brief, name of the branch/office, names of parties involved (if they are proprietorship/partnership concerns or private limited companies, the names of proprietors, partners and directors), names of officials involved and whether the complaint has been lodged with the Police.</p> <p>addressed to the Chief General Manager-in-Charge of the Department of Banking Supervision, Reserve Bank of India, Central Office, within a week of such fraud coming to the notice of the bank's Head Office.</p> <p>A copy of the D.O. A letter should also be endorsed to the Regional Office of Urban Banks Department of Reserve Bank of India under whose jurisdiction the bank's branch, where the fraud has been perpetrated, is functioning.</p>
<p>Frauds committed by unscrupulous borrowers</p>	<p>It has been noted that dishonest borrowers, such as businesses, partnership firms, proprietary concerns, and/or their directors or partners, perpetrate a significant number of frauds using a variety of techniques, such as the following:</p> <p>Falsifying the clearance effects of a kite flying or discounting instruments.</p> <p>Inflating the value of stocks in the stock statement and obtaining excess bank financing; dishonestly removing pledged stocks; or secretly discarding hypothetical equities.</p> <p>Funds being diverted, borrowers, partners, etc. showing no interest in upholding financial discipline, managerial failure with malicious intent causing the unit to become ill, and bank employees' laxity in exercising effective oversight over the operations in borrowal accounts making the advance difficult to recover and resulting in financial loss</p>

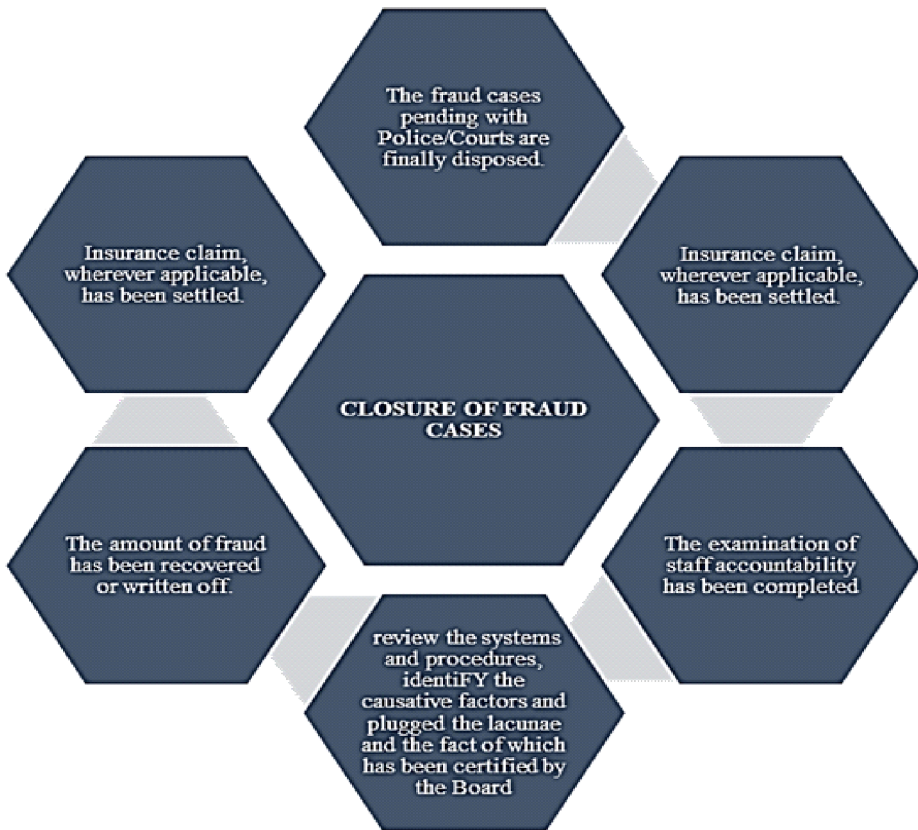
Source: Developed by the Researcher

RBI Cautions against frauds in the name of KYC Updating.

In the press release issued by Reserve Bank of India on 13th September 2021, warning against the scams posing as KYC Updates. RBI requests the public to be vigilant and cautious to prevent loss and to be protected from the frauds.

Such scams work to get personal information, account and login details through phone calls, SMS or emails. When we respond to these, Customers provide fraudsters illegal access to their accounts and enable them to do fraudulent acts when they divulge critical personal information or login credentials. The

Figure 1
Closure of Fraud Cases



Source: Developed by the Researcher

public should report financial cyber crimes as soon as possible by calling the cybercrime helpline (1930) or via the National Cyber Crime Reporting Portal (www.cybercrime.gov.in). Additionally, people are urged to take the following precautions to protect themselves:

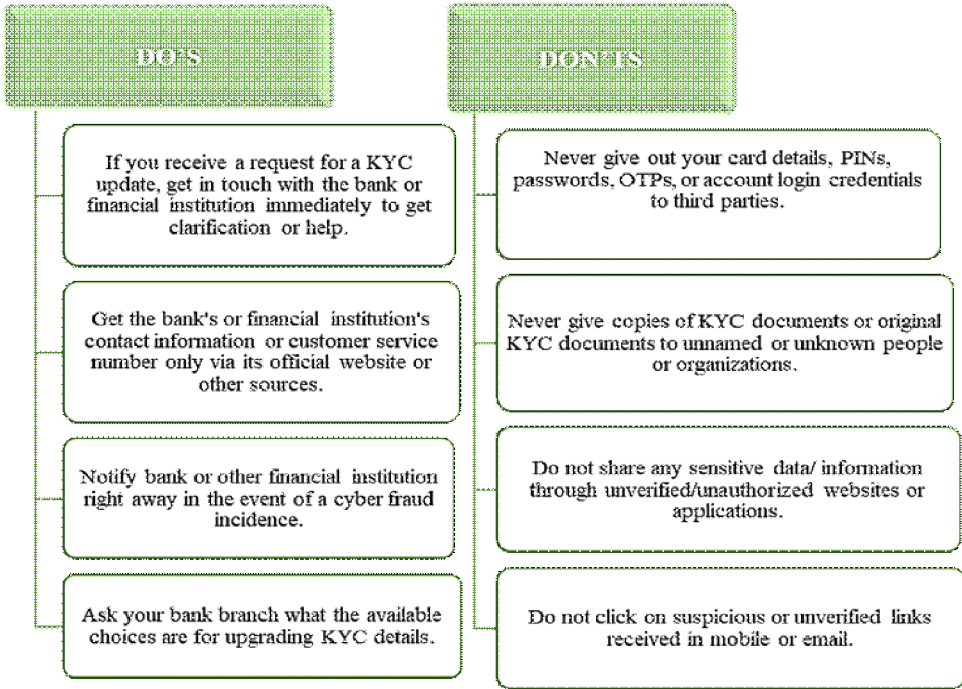
Suggestions of the Study

To assist customers in safeguarding them from fraudulent activities, the Reserve Bank of India periodically releases cautions and advice. It is important that you should be aware of

these concerns and take appropriate safety measures to protect your money and confidential data. It is very important to report any suspicions you have regarding possible fraud to the relevant authorities. The growing acceptance of online banking has brought about a dramatic transformation in the worldwide banking services sector. In order to be safe from the online banking frauds and enhancing security, we can adopt strategies namely;

- I. Biometric Authentication
- II. Block chain Technology
- III. AI Tools for fraud detection

Figure 2



Source: Developed by the Researcher

Conclusion Remarks

In conclusion, convenience, accessibility, affordability, security, personalization, globalization, and shifting customer behavior are the main reasons behind the growing reliance on online banking services across the globe. It is anticipated that online banking will become even more integral to banking services in the future as technology develops and digital channels become more pervasive in daily life. It's critical to always exercise caution when it comes to

fraud, particularly in the financial domain. To assist consumers in safeguarding themselves against fraudulent activities such as phishing scams, identity theft, and fraudulent investment schemes, the Reserve Bank of India (RBI) periodically releases cautions and advises. It's imperative that you heed these concerns and take the appropriate safety measures to protect your money and private data. It's advisable to report any worries or suspicions you may have regarding possible fraud right away to the relevant authorities.

References

1. Kumari Sapna, and Vinitha Chaudbary. "Risk Factors and Security Issues Inherent in Online Banking with Reference to the Ghaziabad Region." *IJARIII*, vol. 3, no. 4, 2017, ISSN 2395-4396.

2. *Mogos Gabriela, and Nor Shabida Binti Mohd Jamail. "Study on Security Issues of E-Banking System." TELKOMNIKA Indonesian Journal of Electrical Engineering and Computer Science, vol. 21, no. 2, February 2021, pp. 1065-1072. ISSN: 2502-4752, DOI: 10.11591/ijeecs.v21.i2.pp1065-1072.*
3. *Mishra Binayee. "Global Journal of Current Research." GJCR, vol. 9, no. 3, 2022, pp. 53-58. ISSN 2320-2920.*
4. *Reserve Bank Report on Frauds - Classification and Reporting published on 01st July 2011 with Reference No DBS.CO.FrMC.BC. No.2/23.04.001/2011-12 of RBI/2011-12/75*
5. *https://www.rbi.org.in/scripts/Search_Results.aspx?search=classification%20and%20reporting%20of%20frauds*

ENVIRONMENTAL MANAGEMENT - ANCIENT TO MODERN TIMES

Dr. C.V. Jayamani, Dr. R. Vasanthagopal

Examines the causes and consequences of environmental degradation and suggest remedial measures to tide over the global situation through traditional methods.

- *Man and Environment * Environmental Ethics**
- * Vedic Approach to Environmental Management**
- * Non-Violence to Nature * Sustainable Development**
- * Limits to Growth * Kuznet's Curve * Environmental Economics**
- * Market Failure * Environmental Pollution * Environmental Laws**
- * Environment and Health * Global Environmental Issues**
- * Global Warming * Carbon Trading * Green Technology**
- * Bio-diversity Conservation * Corporate Responsibility**
- * Environmental Accounting * Corporate Experiences * Green GDP**

New Century Publication

Bharat Ram Road, Ansari Marg, Daryaganj, New Delhi 110002

Published in 2013

Pages 210

Priced Rs. 695

Hardbound