



# PERCEPTIONS ON TECHNOLOGY DECEPTION: A STUDY WITH SPECIAL REFERENCE TO BANKING INDUSTRY IN INDIA

<sup>1</sup>Dr. Sudhakar Madhavedi, <sup>2</sup>Ravi Chelimela, <sup>3</sup>Ch.Prathima, <sup>4</sup>P. Sudhaker

<sup>1</sup>Associate Professor, <sup>2,3,4</sup>Assistant Professor

Department of MBA

Kshatriya College of Engineering

## Abstract

Today banking environment has become highly competitive and changing market environment at the same time to survive and grow in financial industry. Latest technology is 'enabling resource' that can help in developing learner and more flexible structure. And also helpful to the bank can quickly adopt the market scenario. This study was conducted with main primary objective of analysing the customer perception towards technology deception in banks and the result reveals that Information Securities Factors (IS), Preventive Measures (PM) and New Online Services (NOS) are the dominant dimensions of Customer Deception Perception. Further to conclude, The banker should provide guidance for secured online transaction, and to coordinate with the customers for preventing technology deceptions in banks and the customers should also need to keep their personal information with their own and use their online banking transaction through secured Wi-Fi connections.

**Keywords:** Deception, Perception, New Online Services, Preventive Measures, Information Securities.

**DOI Number:** 10.48047/NQ.2022.20.12.NQ77753

**NeuroQuantology2022;20(12): 4283-4286**

## Introduction

The banking sector is the lifeline of any modern economy. It is one of the important financial pillars of the financial sector, which plays a vital role in the functioning of the economy. The importance and role of information technology for achieving this objective cannot be undermined. Banking environment has become highly competitive today. To change market environment at the same time the bank has to be survive and grow in financial industry. Latest technology is 'enabling resource' that can help in developing learner and more flexible structure. And also helpful to the bank can quickly adopt the market scenario. And this involves cost reduction and effective communication with

customers and bank associated with the banking business. In the next part we will see about influencing the technology and its impact for development in banking sector. Technology advances have accelerated changes resulting in higher production of goods & services. The information technology has transformed the functioning of business across the world. The adoption of new technology has become a necessity for survival, particularly in the aftermath of liberalization, privatization, and globalization. Technology has become very important for banks to carve a plane for themselves and become leaders in their respective fields; to achieve this; banks have to improve their margins and profits by conducting



transactions at low costs besides being lean in size. The dire competition in the banking industry between the public sector banks, old private sector banks, new generation private sector banks and the foreign banks is mainly through technology innovation, up gradation and modernization. After influencing technology in banking sector, there are huge changes in structure, functions in banking industry and also changes in providing services to their customers. One side technology will develop the banking industry at the same time there is chance to create banking risk by using the technology. Now a day's many banks are facing these technology risk issues and most importantly the 'customers' are badly affected by over these technology risk issues. Before we see the impact of technology fraud, we need to know the influence of technology and impact of technology in banking sector.

#### **Review of Literature**

Arjan Reurink (2016), pointed that empirical universe of bank fraud has been documented in the literature. It did so by reviewing the literature on financial fraud in a variety of academic discipline. The researcher made a conceptual distinction between financial statement frauds, financial scams and fraudulent mis-selling. Timothy H. Hannan and John M. McDowell (2016), examine the focus on the rate of diffusion of automatic teller machines within banking industry. The problems associated with inter industry differences are by definition avoided, because of number of local banking markets in existence, we are able to employ a relatively large number of observations. Carolina martins (2014), stated that the determinants of internet banking adopt the important of banks and users. By understanding the role of users we come to know adoption is limited. Conceptual model with perceived risk explain behavior intention and usage behavior of internet banking. Finally the researcher concludes that usage of behavior is most important factor is behavioral intention to use internet banking. Jha et al (2014), pointed that phone phishing is one of banking misuse activity, that means identify theft. This means stealing someone identify access to their

confidential financial data which is misused by fraudsters. Chavda .V (2014), highlighted that the reason for increasing banking frauds, there is lack of knowledge of computer literacy and they not know how to use the banking services with security. So, fraudsters come in way of helping the customer and stealing their secret data and which can be misused by them. Kundu and Rao, (2014), has pointed that e-banking frauds are safe crime does not harm or cause any injury to the body of the fraudster. It is difficult to find the fraudsters of e banking crimes and even the investigators are finding it difficult to locate the fraudsters. Few of suggestions made to prevent e banking frauds are security policy to be framed by banks, monitor internal management, provide training to the staff handling e banking system, regular up gradation of technology and banks to have compulsory in house grievance settlement body, more and more investigating cells to be established and appointment of efficient investigators to be made (DHANRAJ et.al., 2023)

#### **Objective of the study**

- To study the different types of technology deception in banks.
- To analyze the customer perceptiveness towards technology deception in banks.

#### **Limitation of the study**

- The sample may not represent the population accurately as the sample size is limited to 200 respondents
- The study is limited with the Chennai city. (North Chennai)
- As the sources of secondary data vary descriptions in data reporting exist.
- All the information furnished by the respondent was presumed as genuine.

#### **Methodology**

This study based on the primary data collected through scientifically developed questionnaire. After consulting the experts in this given area, questionnaire was constructed by the researcher herself. The questionnaire was presented to e-banking services used customers then the same was modified on the basis pretested result. The questionnaire was administered on e-banking service users of the banks. The sample sizes of 200 were



chosen on a convenient basis from among public and private sector bank customers in the northern region of Chennai city.

### Data Analysis And Interpretation

The data collected were subjected to analysis using SPSS version 21.0 by percentage analysis and Factor Analysis.

Table 1 - Personal Profile of the Respondents

Personal Profiles	Description	Frequency	Percentage
Age	Below 25	55	27.5
	Between 26-35	28	14.0
	<b>Between 36-45</b>	<b>73</b>	<b>36.5</b>
	Above 45	44	22.0
Gender	<b>Male</b>	<b>157</b>	<b>78.5</b>
	Female	43	21.5
Educational Qualification	<b>Higher secondary</b>	<b>77</b>	<b>38.5</b>
	Diploma	21	10.5
	Under Graduation	21	10.5
	Post Graduation	62	31.0

  

Personal Profiles	Description	Frequency	Percentage
Nature of Employment	Professional	19	9.5
	Govt. employee	79	39.5
	Private employee	20	10.0
	<b>Self-employed</b>	<b>101</b>	<b>50.5</b>
Monthly Income	<b>Below Rs. 25000</b>	<b>81</b>	<b>40.5</b>
	Rs. 25001-50000	20	10.0
	Rs. 50001-75000	66	33.0
	Above Rs.75000	33	16.5
Nature of Family	<b>Nuclear Family</b>	<b>80</b>	<b>66.7</b>
	Joint Family	40	33.3
Marital Status	Single	100	50.0
	Married	100	50.0
Nature of Bank	<b>Public</b>	<b>171</b>	<b>85.5</b>
	Private	26	13.0
	Both	3	1.5
Usage of the Latest Technology	<b>Yes</b>	<b>155</b>	<b>77.5</b>
	No	45	22.5
Frequency of Visiting the Bank	Daily	53	26.5
	Weekly Once	24	12.0
	<b>Once In Two Week</b>	<b>76</b>	<b>38.0</b>
	Monthly Once	47	23.5
Affected by Technology Deception	<b>Yes</b>	<b>113</b>	<b>56.5</b>
	No	87	43.5
Transaction Mode	Transfer Of Funds	32	16.0
	Online Bill Payments	35	17.5
	<b>Credit card Facilities</b>	<b>108</b>	<b>54.0</b>
	Cash Withdrawal From ATM	25	12.5
Information Regarding Technology Deception	<b>Yes</b>	<b>141</b>	<b>70.5</b>
	No	59	29.5

Table 1 Shows that the Majority of the Respondents are Male (78.5%), Self Employed (50.5%), Living in Nuclear Families (66.7%) and Using Public Sector Banks (85.5%) by adopting latest technology (77.5%). Further, Majority of the respondents is affected by deception (50.5%) that deception related to credit card facilities (54.0%) and they are unaware about technology deception. Sizeable portion of the respondents are aged between 36 - 45 years (36.5%), school educated (38.5%) and visiting bank are in two weeks (38.0%) and respondents are equally distributed to married (50%) and single (50%).

Table 2 : Factorisation of Perception on Technology Deception Variables

Factor Names & Total Variance Explained	Variables	Factor Loading	MSA	Communalities	MEAN	S.D
Information Securities Factors (IS) (36.746%)	Utilize of Information Technology Effectively and Efficiently.	.854	.869	.744	3.35	1.431
	Maintaining Confidentiality of Customer's Information.	.853	.801	.751	3.34	1.423
	Providing Proper Guidance For Secured E- Transactions.	.853	.864	.772	3.60	1.378
	Maintaining Effective Customer Relationship Management to Educate Customers.	.813	.836	.797	3.59	1.346
	Actions Are Taken Against the Technology Deception In Banks	.778	.852	.716	3.52	1.382
	Adopting Emerging Technologies.	.639	.798	.573	3.27	1.291
Preventive Measures (PM) (24.751%)	Banks are coordinating with customers for Preventing the technology deception	.859	.792	.807	4.00	1.307
	Banks are providing understandable information on technology deception.	.830	.749	.692	3.64	1.604
	Banks are providing adequate information for prevent technology deception.	.765	.888	.752	4.11	1.271
	Technology helps to detect the deception.	.632	.792	.655	4.13	1.232
New Online Services (NOS) (10.963%)	Banks maintain websites as an information centre to detect technology deception.	.865	.783	.789	4.48	0.814
	Banks are regularly introducing new customer services.	.778	.766	.642	4.64	0.723
	Banks fulfils customer's expectation on new technology adoption.	.755	.782	.729	4.30	1.027
KMO-MSA= .819 Total% of variance explained= 72.460						
Bartlett's Test Of Sphericity Chi-Square Value Of 1638.197 With Df 78 At P - Value Of 0.000						

The table 2 shows that perception on technology deception variables with their communality and MSA values ranging from 0.749 to 0.888 and .573to .807 have goodness of fit for factorization. KMO-MSA value 0.819 and Chi-square value of 1638.197 with df 78 and P-value of 0.000 reveal that factor analysis can be applied for factorization of 13 perception on technology deception variables. Three dominant independent perceptions on technology deception factors explaining 72.460 of total variance have been extracted out of 13perceptions on technology deception variables. Of them the most dominant factor Information Securities Factors (IS), Preventive Measures (PM) and New Online Services (NOS) in the order of their dominance.

### Suggestions

The researcher suggested that those who are using online transaction with their bankers' online portals they should aware about the technologies used by the bankers for ignoring duplicate online portals, customers are should avoid their personal information sharing through websites. The customers when they are using the online portals of the bankers' they should change password time to time and the customers are should stay away from scam calls and e-mails for protecting online transaction through their online banking. The banker should provide guidance for secured online transaction, and to coordinate with the customers for preventing technology deceptions in banks.

### Conclusion



Technology deception in bank is an important issue in the banking sector the main impact of technology deception for customers that losing lot of money, creating stress. The bank customers are using imaginable passwords to access to their accounts; it is easy task to the hackers. The hackers sending through phishing, smishing, and Vishing activities are easy to known about the bank customers account details for the online hacking. The Bankers should have to take steps for protect the online transactions with well-built passwords such as combination of lower case with upper case and letters, numbers with symbols. These are the security measures should be taken by the bankers. Whereas the customers are have to keep their personal information with their own and use their online banking transaction through secured Wi-Fi connections.

#### References

1. Adrienne Curry and Susan penman (2004), "The relative importance of technology in enhancing customer relationship in banking." An International Journal, Vol.14, ISS: 4, PP3.
2. Afzaal H. seyal and Mahbular Rahim (2016), "e-service Journal, Vol.7, No.3 PP.47- 68.
3. Allen N. Berger (2003), " The Economic effects of technology progress" Evidence from the banking industry. Vol. 35, No:2 PP141-176.
4. April Wright (2002), "Journal of International Marketing, Vol.10, No.2, PP83-98.
5. Arjan Reurink (2016), "financial fraud, e-services" ISSN 0944-2073
6. Chavda. V (2014), E-Banking System: Opportunities and Challenges - A Study, Research
7. NASA DHANRAJ, M. Sithamahalakshmi, P.Venkaiah Babu, Sudhakar Madhavedi. (2023). Online Banking Experience of Rural Banking Customers: An Empirical Study. European Economic Letters (EEL), 13(5), 819–826.
8. Hub - International Multidisciplinary Research Journal, Volume-1, Issue-5, December 2014, Pg. No.1-4.
9. Damien Hutchinson and Matthew Warren (2003), "Security for internet banking", Logistics information management, Vol.16, ISS: 1 PP.64 - 73.
10. David J. Hand (2010), "Technometrics Vol.52. No.1,PP-34-38.
11. Doiphode. R, (2014), E-Crime in Banking Sector, Asian Journal of Management Sciences 02 (03 (Special Issue)); 2014; Pg. No.83-86.
12. Gokhansonmezler and Ismail Siriner (2006), "Fragility in Banking sector and Public's Role" social responsibility, Vol.2 ISS: 3 PP. 335-343.
13. IoannisKoskosas (2011), Risk management Vol.13. No.1/2, PP81 - 99.
14. Jha et al (2014), " A survey on fraud and ID theft in Cyber Crime, JCSN International Journal of computer science and Network, Volume3, ISS3, PP112-114.
15. Linda S.goldberg (2009), IMF Staff paper 56, 171-197, DOI10, 1057 imfsp 2008. 31
16. Lorin M. Hitt and Frances X.Frei (2002), "Management Science, Vol: 48, No.6 PP732-748.
17. MuthuKurman (2008), "Cyber Crime Scenario In India, Criminal Investigation Department ReviewJanuary 2008 PP 18-20.
18. Paul M. Horvitz (1996), "Journal of money; Credit and Banking, Vol.28, No.4, PP 971-974.
19. Philip A. Dover (2006), "Innovation in banking: The in- home computerized Banking." International Journal of Banking Material, Vol 5 Issue 1 PP 39-54.
20. Ram N. Acharya, Albert Kagam, Marian.GSobal and VinodKodepaka (2006), "e-services Journal, Vol.4, PP: 61-76
21. Ravi Nath. Paul Schrick and Monica Parzinger (2001), "e- service Journal, Vol.1 PP.21-36.

