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# Response of Indian Digital Banking to Customers during the Covid-19 Pandemic

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**Abstract** - The study Indian Digital Banking Responses focuses on the digital banking services provided by Indian banking clients amid Covid-19 crucial conditions. It centered on the use of internet banking responses amid the covid-19 pandemic's high transmissibility. During the epidemic stage, an online survey approach was used to obtain data from respondents and to learn about their use of internet banking. The survey concluded that the majority of bank clients use online services, with varying levels of satisfaction with the characteristics of online banking operations of consumers during the Covid-19 epidemic.

Keywords: Banking, Covid-19, Customer, and Online-banking.

#### I. INTRODUCTION

Covid-19, a Century illness, afflicted the whole world in all ways and slowed people's lives in all areas, forcing business titans to rethink the entire organisation procedures in a new path for an effective manner of doing business. People and business classes have begun to rely on technology-driven systems for all activities in order to maintain safety and protection from covid. Before the epidemic, Indian banking consumers used both old and contemporary banking methods for all of their transactions. Banking clients are more likely to adopt digital services given by Indian banks due to the current scenario of corona virus sickness and the beginning of digital banking by the GOI. According to Trivedi et al. (2014), in order to retain clients, online banking must expand banking operations with increased security features, safety, accuracy, and protection from hackers using robust VPNs. According to Manivannan (2017), the bank should focus on the client by providing wireless fidelity technologies, the establishment of mobile wallets, and mobile payments to bank customers to streamline operations. The government encourages the use of digital money and digital payments such as plastic cards, online banking, and mobile banking to limit the danger of corona virus propagation. Gardner is a formalised paraphrase (2020). According to Bhandari (2020), during lockdown, internet services are encouraged to spend money using online payment systems. In a surveillance society, mobile phones and the internet are used to monitor payment systems (Gilliom & Monahan, 2012; Lyon, 1994).

#### II. BACKGROUND STUDY

The digital banking research study has been conducted in various countries and has focused on various aspects such as internet technologies, bank infrastructures, customer satisfaction, bank employee knowledge, and so on (Herington & Weaven, 2007; Joseph, McClure, & Joseph, 1999; Sathye, 1997), (Chen, 1999). (Boyes & Stone, 2003; Jayawardhena & Foley, 2000).

Kannabiran and Narayan (2005) demonstrated the internet strength of India's metropolitan regions and the ease with which its populace can use the internet for online banking transactions. Most financial literates (customers) are eager to utilise the internet services provided by banks since they are convenient and save time, but they are also concerned about bank transactions owing to security issues (Malhotra & Singh, 2009). In his research study, Bharadwaj and Mitra (2016) focused on two main objectives of banks, both public and private, such as minimising operational costs and satisfying bank customers by offering many internet product features such as account summary, fund transfers, credit cards, loans, and other bank features. Al-Shomali, Gholami, and Clegg (2008) stated that creating knowledge of bank internet services is very crucial to clients in order to generate awareness of online banking features.

Because of cyber fraud, software hazards, hackers, and cybercrime, bank clients are most concerned about their privacy and internet security while using digital banking. It is the bank's job to improve security in order to prevent cyber-attacks (Lu et al., 2006). The consumer can be happy with the bank activities in digital banking that provide security, trustworthiness, and safety (Vij, 2003). Bank consumers use internet banking when they have a favourable opinion about it because of its ease, simplicity, convenience, and security (Al-Shomali et al., 2008). According to Chua (1980), the usage of internet banking is influenced by family, friends, peers, and bank standards. In digital banking, trust is particularly crucial in the relationships that banks build with their consumers regarding their online offerings (Suh & Han, 2002). Customers are also influenced to adopt online banking via banking website portals. Customers anticipate security, convenience of banking activities, a fast network, and a user-friendly interface (Casalo, L. V et al, 2007). According to Sikdar and Makkad (2013), Indian internet banking increases bank empowerment, minimises actual interaction with bank workers, and has the potential to reduce the number of branches.

#### III. OBJECTIVES

- To learn about consumers' experiences with digital banking during Covid-19.
- To determine the level of satisfaction with digital banking services among Covid-19 clients.
- To evaluate the many aspects and challenges of digital banking from the standpoint of clients.

### IV. METHODOLOGY

# Samples collected:

Data were collected from 208 online banking consumers from various banks in Bangalore, including both public and private institutions. 88 samples were gathered from a total of 208 respondents. Data were collected from 208 online banking consumers from various banks in Bangalore, including both public and private institutions. Among the 208 respondents, 88 and 120 are public and private bank clients, respectively. Actually, 312 questionnaires were issued online and offline, but the number of respondents was decreased to 208 owing to non-response from bank clients, insufficient data, and filling mistakes.

The poll includes both public and private sector banks, with public sector banks including SBI, Canara Bank, and Bank of Baroda, and private sector banks including Axis, ICICI, and HDFC.

A systematic questionnaire is used to collect data from respondents, using a 5 point scale ranging from 1 to 5, with 1 representing severely disagree, 2 representing disagree, 3 representing neither agree nor disagree, 4 representing agree, and 5 indicating highly agree.

Data Analysis: For this article, descriptive statistics are performed by calculating the mean, standard deviation, and correlation coefficient. As indicated in table-3, the correlation coefficient was determined for two correlated parameters by assuming  $H_1$ ,  $H_2$ ,  $H_3$ , and  $H_4$ .

#### V. ANALYSIS

Table-1: Demographic Data

Particulars	Respondents								
Age	18-25 (34)	26-32 (48)	33-40 (70)	above 40 (56)					
Qualification	10 <sup>th</sup> (25)	12 <sup>th</sup> (39)	UG (66)	PG (78)					
Gender	Male (132)		Female (76)						

The demographic statistics utilised for the survey are shown in table-1 above. There are 208 responses between the ages of 18 and 25, 34 between the ages of 26 and 32, 48 between the ages of 33 and 40, and 56 beyond the age of 40. As indicated above, the respondents' educational qualifications span from 10th grade to PG level. To collect data, the study includes both male and female participants.

**Table-2: Standard Deviation Values** 

Particulars		%	2	%	3	%	4	%	5	%	Mean	SD
Knowledge of Internet		(12.5)	23	11.1	16	7.7	87	41.8	56	26.9		29.63
Ease of Bank Operations	28	13.5	38	18.3	15	7.2	77	37.0	50	24.0		23.60
Security Concerns	38	18.3	32	15.4	21	10.1	27	13.0	90	43.3		27.77
Awareness of Products	28	13.5	34	16.3	30	14.4	48	23.1	68	32.7		16.69
Customer satisfaction during pandemic	68	32.7	34	16.3	30	14.4	28	13.5	48	23.1		15.45
Cost and time	45	21.6	33	15.9	28	13.5	48	23.1	54	26.0		10.78
Perceived usefulness	12	5.8	26	12.5	28	13.5	54	26.0	88	42.3	41.6	30.04
Reliance of bank websites	36	17.3	25	12.0	17	8.2	52	25.0	78	37.5		24.21

# Total no. of respondents=208

The standard deviation values of the specified particulars are represented in table-2 above, indicating dispersed data distant from the mean value. Perceived usefulness is the greatest (30.04) among scattered respondents' data; this implies that digital banking clients demand more goods and services from the bank. Knowledge of the internet must have a standard deviation of 29.63, indicating that respondents have insufficient knowledge of the internet while utilising a digital application. The score of 27.7, which is connected to security issues, is also a source of concern for online bank clients. Banking activities had been hampered by reliance on bank websites (24.21) owing to website design and security. Ease of Bank Operations as 23.60 have differing views about the ease of banking operations. During pandemic scenarios, respondents' data show values of 16.69 and 15.45 for product awareness and consumer satisfaction. According to the data, the cost and time are less dispersed (10.78).

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**Table-3: Hypotheses Details** 

Hypotheses	Correlation Result			
H <sub>1</sub> : Knowledge of internet is positively related to ease of operations	Holds good (0.96)			
H <sub>2</sub> : Awareness of online bank products relates to customer satisfaction during pandemic	Not holds good (-0.37)			
H <sub>3</sub> : Cost and time relates to perceived usefulness	Partially holds good (0.67)			
H <sub>4</sub> : Reliance of bank websites relates to perceived usefulness	Holds good (0.88)			

Significance level=0.05

The correlation coefficients of various factors are shown in table-3 to demonstrate the link between the variables. Customers' knowledge of the internet aids in the convenience of banking processes. As a result, they have a strong positive association (0.96). Whereas product awareness has a negative association (0.377) with customer satisfaction, showing that customers are dissatisfied with product awareness.

Cost and time are partially (0.67) related to perceived utility. Other characteristics, such as dependency on bank websites, have a perceived usefulness for bank clients in utilising the website of 0.88.

#### VI. SHORTCOMINGS

The data were gathered through literature studies and surveys, since many articles were limited to the essential data, and our paper included only a few factors of digital banking owing to time and geographic area constraints. In addition, the study's convenience factors were analysed and sought to correlate with one another. Other aspects might be considered by the researchers for research objectives.

#### VII. DISCUSSIONS

For safety reasons, the covid-19 scenario has compelled bank clients to migrate to the digital era, limiting their ability to visit banks. The majority of them began with digital banking in the form of internet banking and mobile banking. As a result, the study was conducted to better understand the use of digital banking during pandemic scenarios.

The study depicts demographic variables (age, qualification, and gender) of Indian bank customers who use digital banking operations and analyses a few variables of the digital banking system to understand the features of online banking products and customer satisfaction level with digital banking online services.

According to the aforementioned correlation research, knowledge of the internet is more significant for operating banking online services. As a result, knowledge generation for bank clients must be undertaken through training programmes. Another problem is that most clients are unaware of bank digital offerings, which leads to customer discontent with banks. As a result, its bank's obligations include advertising and promoting its online offerings through various advertising methods. Finally, bank customers' reliance on bank websites has resulted in good utility due to their design and user-friendliness.

According to the report, users want digital services for simplicity of operation, rapid service, and health safety during corona seasons.

# VIII. REFERENCES

- 1. Al-Shomali, S. A., Gholami, R., & Clegg, B. (2008). Internet banking acceptance in the context of developing countries: An extension of the technology acceptance model. European Conference on Management of Technology, Nice, France.
- 2. Bhandari, S. (2020). Ahmedabad says no to cash on delivery to stop spread of COVID-19. May 11, Retrieved May 28, 2020, from India TVhttps://www.indiatvnews.com/news/india/ahmedabad-digital-payments-mandatory-no-cash-on-delivery-to-stop-covid19- 616239.
- 3. Bharadwaj, S. G., & Mitra, D. (2016). Customer satisfaction and long-term stock returns. Journal of Marketing, 80, 116–121.
- 4. Boyes, G., & Stone, M. (2003). E-business opportunities in financial services. Journal of Financial Services Marketing, 8(2), 176–189.
- 5. Casalo, L. V., Flavián, C., & Guinalíu, M. (2007). The role of security, privacy, usability and reputation in the development of online banking. Online Information Review, 31(5), 583–603.
- 6. Chau, P. Y. K., & Hu, P. J. H. (2002). Investigating healthcare professionals' decisions to accept telemedicine technology: An empirical test of competing theories. Information and Management, 39(4), 297–311.
- 7. Chen, T. Y. (1999). Critical success factors for various strategies in the banking industry. International Journal of Bank Marketing, 17(2), 83–91.
- 8. Gardner, B. (2020). Dirty banknotes may be spreading the coronavirus, WHO suggests. March 2, Retrieved May 16, 2020, from The Telegraphhttps://www.telegraph.co.uk/news/.
- 9. Herington, C., & Weaven, S. (2007). Can banks improve customer relationships with high quality online services? Managing Service Quality, 17(4), 404–427.

- 10. Jayawardhena, C., & Foley, P. (2000). Changes in the banking sector: The case of internet banking in the UK. Internet Research: Electronic Networking Applications and Policy, 10(1), 19–30.
- 11. Joseph, M., McClure, & Joseph, B. (1999). Service quality in the banking sector: The impact of technology on service delivery. International Journal of Bank Marketing, 17(4), 182–191.
- 12. Kannabiran, G., & Narayan, P. C. (2005). Deploying internet banking and e-commerce: Case study of a private sector bank in India. Information Technology for Development, 11(4), 363–379.
- 13. Lu, S. C., Lai, K. H., & Cheng, T. C. E. (2006). Adoption of internet service in linier shipping: An empirical study of shippers in Taiwan. Transport Reviews, 26(2), 189–206.
- 14. Malhotra, P., & Singh, B. (2009). The impact of internet banking on bank performance and risk: The Indian experience. Eurasian Journal of Business and Economics, 2(4), 43–62.
- 15. Manivannan. P. (March 2017). Usage of Digital banking. Asia Pacific Journal of Research in Business Management. Vol. 8. Issue 3. Impact Factor: 5.16, ISSN: (2229-4104).
- 16. Sathye, M. (1997). Internet banking in Australia. Journal of Internet Banking and Commerce, 2(4), 1–2.
- 17. Sikdar. P. Makkad M. (2013). Internet Banking in India A Perspective On Benefits and Challenges Involved. International Journal of Engineering, Business and Enterprise Applications. pp. 2279-0020.
- 18. Suh, B., & Han, I. (2002). Effect of trust on customer acceptance of internet banking. Electronic Commerce Research and Applications, 1(3), 247–263
- 19. Trivedi. G. Remedios. R. (2014). Internet Banking and Customer Retention-A Study on the Impact of Internet Banking on Customer Retention of Hdfc Bank. Galaxy International Interdisciplinary Research Journal.Vol.2 (2). ISSN 2347-6915.
- 20. Vij, M. (2003). The new world of banking a paradigm shift. Journal of Management Research, 3(3), 139.