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UNDERSTANDING THE SECURITY AWARENESS ON USING DIGITAL BANKING SERVICE

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ABSTRACT

The main objective of this study is to Understanding The Security Awareness On Using Digital Banking Service and the challenges faced. The data were collected through well-structured questionnaires which contain closed end question. The digital banking increases the growth of the country, moving faster, widely accepted and reduces time consumption. This survey is collected from general public residing in Chennai. The research design used for this study is descriptive in nature and Convenience sampling is used for the purpose of collecting data from the respondents in this research. It includes survey and fact-findings enquire of different kinds. The methods of data collection for the study include both primary and secondary data. A sample data of 152 respondents helped to analyze the challenges faced by digital banking users in Chennai and understand the various issues in digital banking usage. The statistical tool used for analyzing and interpreting the opinions of the users that include simple percentage analysis and hypothesis testing (chi square ,regression test). It is found that irrespective of gender respondents were aware about using digital banking services safely. However, it is necessary being an effective product of banking operations it comes with few technical and non-technical issues that needs to be addressed by authorities.

KEY WORDS: Digital payments, Digital banking, Regression, customer satisfaction.

INTRODUCTION

1.1.1 DIGITAL BANKING

Digital banking related to banking industry. The banking industry is an enormous sector of business and finance that has existed in human civilization in some form for thousands of years. In the modern world, the banking industry plays a large part in financial dealings, as it is a major and popular means for investing, borrowing, and storing money. Banks exist all over the world, and are usually heavily regulated by world governments in order to prevent corruption and protect the money of the general public. The banking industry provides clients with a variety of services and options. The most basic function of a bank is to provide customers with a safe, guaranteed record of their accumulated money, usually done through a checking account that can be easily accessed for withdrawals and deposits. Banks also provide savings accounts, which are also easily accessed but provide a slightly higher interest rate for funds. For many people, involvement with the banking industry is limited to these two basic accounts, but this is only a bare minimum of what the industry offers.

Stupendous advancements in digital technology have transformed the way banks operate. One of the latest outcomes of this is digital banking. with the availability of a large portfolio of products such as deposits, ATMs, debit cards, mobile payments, and the like a digital banking is defined as the financial transaction

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execution through smart devices or electronic devices. The clients are utilizing mobile devices with the combination of mobile communication systems for purpose of electronic transactions. The major reason for the expansion of digital banking is due to continuous growth of Internet speed, facilities, personal Digital Assistants (PDAs), Internet empowered phones, and designing of banking application.

Digital Banking is taking financial assets and moving them from traditional activities to online platforms. This is when a bank's customers use the internet to perform any sort of banking activity, rather than going into a branch or doing this via post. The process of digitizing banking activities includes moving cash deposits, withdrawals and transfers, the management of accounts, applying for financial products, managing loans, paying bills and any account services online. Increasingly popular in the 21st century, customers can use home computers or mobile phones to access an account.

1.2 THE HISTORY OF DIGITAL BANKING

The earliest forms of digital banking emerged in the 1960s. It was at this time the world began to see the first ATMs and debit cards introduced. These products were revolutionary for a couple of reasons. For one, for the first time in history, banking customers could access their funds 24/7. Remember, up until this point, you needed to go down to your local branch to withdraw or deposit funds. Depending on where you lived, this process could take considerable time.

The introduction of the internet changed digital banking forever. At first, banks relied on the internet for internal functionalities such as monitoring accounts or fund transfers. However, by the late 1990s, banks began offering services such as balance updates and fund transfers directly from the digital banking portal. By this point, digital banking was on its way to becoming a major trend. In less than a decade, the internet saw a huge expansion in capabilities. The added data transmission 2 and improved computer manufacturing techniques led to the creation of Smartphone. Today, it's hard to imagine life without your Smartphone. These handy pocket PCs enabled banks to offer a full suite of products from their portals. Consequently, a host of new services emerged because of the availability of smartphones. Features such as photo check cashing began to emerge in the market place. This feature allows clients to deposit checks by taking a picture on their cell phone via their banking app. Given all of the advantages digital banking brings to the sector, it's easy to see why today, every bank offers some form of digital banking to its clients. Both clients and banks have much to gain from this hi-tech integration.

1.3 OBJECTIVES OF THE STUDY

- To study the challenges faced by banking users to access the digital features.
- To study the awareness level on various safety measures to use digital banking.
- To analyze whether the challenges faced by digital user's impact their satisfaction.

1.4 NEED OF THE STUDY

• This study highlights the utmost support for the challenges faced by digital banking users.

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• This support, suggest that the action to be taken for the users who face hurdles and risks while using digital banking system.

• Therefore, it is important to make a research study and to know, what made the users to face such a major issue in using digital banking, what makes the fear of using digital banking system, what are the external threats etc.

1.5 SCOPE OF THE STUDY

- To analyse the association between demographic factors and awareness of safety measures in utilizing digital banking.
- To improve customer experience & boost productivity while identifying the challenges.
- In measuring online transactions in a way that it is safer & easier to manage.
- To provide long tail convenience such as ability to go cashless & allows better management of financial sources.

1.6 LIMITATIONS OF THE STUDY

- Besides the study has a limitation of time, place and resources
- The interpretation of the study is based on the assumption that the respondents provide reliable information.
- At times some responses may not be accurate.

2.1 REVIEW OF LITERATURE

LI FANG1 and Darwin G. Quintos (2023) The main objective of this study is to assess the security measures on digital banking as a basis for improving services. The researcher used a descriptive method of research, employed with the used of a standard questionnaire. The survey questionnaire is divided into two parts: the demographic profile of respondents and the list of questions that the researcher aims to know in order to collect valid and reliable data needed for the study. The second part was subdivided into 3 parts, which are Security Measures on Digital Banking, Common Digital Banking Issues and Problems Encountered by Respondents, and an open-ended question about Suggestions & other problems encountered. The security measures on digital banking in terms of trust and security trust and security, knowledge and awareness, ease of use, and usefulness are strongly agreed upon

R Vimaladevi, A Meenakshi, Vennilaa Shree, (2019), made study on Consequence of perceiving users of digital banking. This research inferred that the customers are highly satisfied with digital banking services and usage levels of the customers are also high. Leandre Gomes, Abhinav Deshmukh, Nilesh Anute (2022) Internet security measures followed by the majority of the bank sites to protect their information are not upto-date as compared to the dynamic cyber threats. Such problems have made it easy for confidential financial information to fall into the hands of third parties and cybercriminals. Although there are several security measures to stop data breaches, there are still flaws in these systems. The goal of this study article is to look at the number of cyber security issues in internet banking in India and the consumer's awareness of these

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issues and preventive measures used by them. Our research is particularly based on primary data.

Joan Telo (2023) This study aims to identify the factors that significantly impact the security awareness of bank customers using a dataset of 477 customers of different ages. The study employs multiple regression analysis with HAC standard errors to examine the relationship between seven independent variables (Age and Experience, Education and Awareness Programs, User Experience, Cyber Threat Landscape, Trust in the Bank, Personal Factors, Convenience) and the dependent variable, security awareness. The findings indicate that all seven independent variables have a significant impact on the security awareness of bank customers at a 10 percent significance level. However, personal factors and Cyber Threat Landscape are insignificant at a 1 percent level of significance.

R. Fahima Sultana and Jihen Bousrih (2022) The outcome of this empirical study demonstrates the relationship between student awareness and frequency of use of digital banking as well as their penetration. While this research on digital penetration has made a significant contribution, there are a few limitations that offer room for future study. Future research might concentrate on how to influence the larger college community to use advanced technologies more wisely. Sujeet Kumar Sharma Saeed Al- Muharrami (2018) made their study highlights the recent trends in the banking industry and establishes a relationship between digital banking and traditional banking systems. Major benefits offered and main challenges faced by digital banking adoption are discussed in detail. Hence by exploring various dimensions of digital banking adoption, this chapter provides theoretical and practical implications for researchers and decision-makers from a developing country perspective.

When the Internet grew, the challenges the industry is facing today are developing newer and faster software whilst struggling with keeping the security (Jarrett, 2015). Privacy concerns One amongst consumers experienced problem with Internet and digital banking is privacy. This makes the security in transactions essential (Chechel et al., 2016). Many researchers has tried to explain the correlations between 1 privacy concerns and many different variables. Bergstrom's (2015) research showed that the single most important variable to high privacy concerns was the overall trust in other people. the Internet's rapid growth has had an extensive effect on today's industries, not least the banking industry. The question is not whether the consumers have been affected or not, rather to which extent. Hence the research study shows the challenges the digital banking industry is facing and what the customers complain most about.

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S Dayanithi, P Murugan (2017) made study on, Service quality of digital banking users. The study aims to make an attempt on the service quality on digital banking users using descriptive design. The required data for the study is collected from commercial banks through a well-structured questionnaire with 155 sample respondents. Service quality factors Accuracy, Communication, Devices, Willingness to help and Physical facility act as significant predictors of Customer satisfaction on Digital Banking. Gezahegn, M. (2016) analysis shows that the bank faced different challenges like technological risks (system failure, processing error, software defects, operating mistakes, inadequate recovery capabilities) where the banks should constantly upgrade digital banking technology to overcome the risks. Hence the Security challenges (control weakness, security shortcomings, malicious attacks, hacking incidents and fraudulent actions), the banks

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should adequately place both application and general control mechanism and involve their staff in training to curb the challenges.

Y Lokeswara Choudhary, (2013) made a study on impact of digital banking services through path analysis founded that there is positive correlation on paths between Internet Banking and customer satisfaction on Loyalty. The relatively low Internet usage, the non familiarity with technologically advanced devices and problems regarding security and privacy are the main factors that have a negative influence on the adoption of digital banking services by customers. Angelakopoulos, G., & Mihiotis, A. (2011)

Auta, E. M. (2010) shows that digital banking serves several advantages in banking sector. The customers (respondents) perception is that digital banking provides convenience and flexible advantages. It also provides transaction related benefits like easy transfer, speedy transaction, less cost and time saving. However, the study shows that the customers have security, access, and no enough knowledge regarding digital banking services. J yang, M Whitefield, K Boehme (2007) The research objective is to investigate how those smaller and community banks located in rural areas have attempted to catch up with their counterparts in larger cities in 15 terms of the application of Digital banking, focusing on emerging issues and challenges. Thus, the results are discussed with managerial implications along with suggestions for future research.

3. RESEARCH METHODOLOGY

The type of research design is used in this study is descriptive research design. The main aim characteristics of this method is that the researcher as no control over the variables and he/she can only report what was happened and happening. Sample of 152 respondents is taken from Chennai city

Convenience sampling is used for the purpose of collecting data from the respondents in this research. Convenience sampling is the most common form of non-probability sampling. It is a method of collecting samples by taking samples that are conveniently located around a location or internet service. data is collected through primary and secondary sources. Secondary data is collected through Journals and books and self-assessed questionnaire is used to collect primary data from respondents.

3.1 HYPOTHESIS

- 1. **H0 (Null hypothesis):** there is no association between the gender and awareness of safety measures in using digital banking.
- 2. **H0 (Null hypothesis):** there is no significant impact of facilities & duration with bank on customer satisfaction.

4. DATA ANALYSIS AND INTERPRETATION

4.1 PERCENTAGE ANALYSIS

From the study it is found that out of 152 respondents 44.74 % are male and 55.26 % are female.33.55 % are using digital banking for the period of less than 1 year, 33.55 % are using for the period of 1-2 years, 16.45 % are using for period of 3-4 years, 9.21% are using above 4 years.

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34.21 % uses weekly ,27.63 % uses digital banking daily, 3.95 % uses fortnights ,9.87 % uses monthly ,24.34 % uses once in month. With respect to Usefulness 22.37 % of the respondents uses digital banking as they are cheap and best, 50.00 % uses digital banking as it is convenience (24*7), 8.55 % uses digital banking as they no need to visit bank often, 7.89 % uses digital banking as it is safe & secure and 11.18 % uses digital banking as it is easy to maintain banking transactions. Two – Factor

Authentication are preferred by 62.5 % of the respondent, 37.5% do not use it. 28.3% are less than 1 year Period Of Being Customer Of Bank By The Respondent, 52.0 % 1-4 years, 10.5 % 4-8 years, 9.2 % above 8 years are being customer of bank. Respondents prefer digital banking for transfer fund to other account are 52.6%,26% of them use it to view or download the statement. Less than 24% of the respondents using digital banking for bill payments, ticket booking and online purchase.

4.2 CHI – SQUARE CHI-SQUARE TEST

To find association between Gender and awareness on safety measures to use digital banking system.

HO (Null hypothesis): there is no association between the gender and awareness of safety measures in using digital banking.

H1 (Alternative hypothesis): there is association between the gender and awareness of safety measures in using digital banking.

GENDER * a Aware of Safety measures in using digital banking services Pearson chi – square	symptotic significance (2 – sided)
Do you change your password regularly	.581
Do you share your bank information with anyone	.933
Do you keep checking your savings account regularly	.763
Do you access your bank account on public Wi – fi	.933
Do you always we licenced anti-virus software	.102
Do you disconnect the internet connection when not in use	.205
Do you use two factor authentication	.011

4.2 CONSOLIDATION OF CHI – SQUARE TEST

INFERENCE:

The significant value 0.05 is lesser than the calculated value. Hence H0 is Accepted and H1 is Rejected. There is no association between the gender and awareness of safety measures in using digital banking.

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4.3 REGRESSION

To find impact of facilities & duration with bank on customer satisfaction.

HO (Null hypothesis): there is no significant impact of facilities & duration with bank on customer satisfaction..

H1 (Alternative hypothesis): there is significant impact of facilities & duration with bank on customer satisfaction.

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.514	.165		9.151	<.001
	Facilities offered in digital banking	.323	.053	.444	6.089	<.001
	How long have you been a customer of the bank	064	.048	098	-1.342	.182

TABLE NO 4.3 REGRESSION ANALYSIS

INFERENCE

The calculated significant value 0.001 is less than the significant value 0.05 (0.001 < 0.05). Hence H0 is rejected and H1 is accepted. There is significant impact of facilities & duration with bank on customer satisfaction.

SUGGESTIONS

- From the above findings, digital banking has direct impact with customer satisfactions. So, all banks should give more importance on their digital options and its related services.
- Digital banking can even develop loyalty among customers through better and faster services.
- Banks should build robust systems to avoid fraudulent activities, create more awareness on digital banking features and its security.
- Another concern which the banks must look at is the failed transactions on digital platforms. Steps need to be taken to avoid failed transactions as much as possible. And awareness on recovering options of the money in failed transaction need to be created.
- Customers need to complete their banking transactions with a few clicks on their laptops or mobile devices while sitting in the comfort of their own homes

5.3 CONCLUSION

Every technology has its advantages and disadvantages. Digital banking too follows the same suit. In this modern era, more and more users are going to use digital banking. Digital banking is becoming trendier and a culture that customers in mind as well as in business industries. It has taken e-commerce to a whole new

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level as it provides flexible payment options. It saves time & money, provides 24 / 7 accessibility, strengthens privacy and security and restricts circulation of black money. On the other side, there are increasing online frauds, many people are still hesitant to embrace digital banking and at last there is also a tendency to overspend. But all these can be controlled by banks and people by being more aware and responsible.

Hence from research study we can conclude that digital banking is not only one of the leading and successful products but also an essential tool in the growth of the nation. Banks and people being more responsible will make this technology a secure and convenient to use.

BIBLOGRAPHY

- [1] Jamaluddin, N. "Digital Banking: Challenges and opportunities in India." Proceedings of 23rd International Business Research Conference. Volume No: 18(2013). Yang, J., Whitefield, M., & Boehme, K. (2007). New issues and challenges facing Digital banking in rural areas: an empirical study. International Journal of Electronic Finance, 1(3), 336-354. Volume no: 32(2)
- [2] Mukherjee, Avinandan, and Prithwiraj Nath. "A model of trust in digital banking relationship "International journal of bank marketing (2003). Volume no: 3, Issue 12. Angelopoulos, Georgios, and Athanassios Mihiotis. "Digital banking: challenges and opportunities in the Greek banking sector." Electronic Commerce Research 11.3 (2011): 297-319. Volume No: 5(2).
- [3] Sardana, Varda, and Shubham Singhania. "Digital technology in the realm of banking: A review of literature." International Journal of Research in Finance and Management 1.2 (2018): 28-32. Volume No: 7(2).
- [4] Leandre Gomes, Abhinav Deshmukh, Nilesh Anute, Cyber Security and Internet Banking: Issues and Preventive Measures. Journal of Information Technology and Sciences Volume-8, Issue-2 (May-August, 2022).
- [5] Aladwani, A. M. (2001). Digital banking: a field study of drivers, development challenges, and expectations. International journal of information management, 21(3), 213-225. Volume no :32
- [6] Gautam, L., & Khare, S. K. (2014). Digital Banking in India: Issues and challenges. Scholar Journal of Economics, Business and Management, 1(2), 54-56. Volume no :3 Angelakopoulos, G., & Mihiotis, A. (2011). Digital banking: challenges and opportunities in the Greek banking sector. Electronic Commerce Research, 11(3), 297-319. Volume no :12
- [7] Vishnuvardhan, B., Manjula, B., & Lakshman Naik, R. (2020). A study of digital banking: Security issues and challenges. In Proceedings of the Third International Conference on Computational Intelligence and Informatics (pp. 163-185). Springer, Singapore. Volume no :4. No 12.
- [8] Velayudham, A., & Rose, S. (2019). Impact of Search Engine Marketing Towards Customer Purchase Behavior. *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 4 (! 2), 2454-6194.
- [9] Goi, C. L. (1970). Digital Banking in India: Opportunity and challenges. The Journal of Digital Banking and Commerce, 10(3), 1-11. Volume no:7(35).
- [10] A Ojeka, S., & Ikpefan, O. A. (2011). Electronic commerce, automation and digital banking Challenges and benefits. Iranian Journal of Management Studies, 4(2), 29-52. Volume :1 no :9