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STUDENTS' PERCEPTION OF DIGITAL BANKING WITH SPECIAL REFERENCE TO HIGHER EDUCATION INSTITUTIONS IN AHMEDABAD

Dawit Negussie Tolossa¹, Mohammad Khalid Khawrin², Dr. Gurudutta P. Japee³

^{1, 2} Ph.D. research scholars, Gujarat University

³ Associate Professor-Commerce, Coordinator: Department of Advanced Business Studies, Gujarat University Emails: \(^1\) dawitnegus@gujaratuniversit.ac.in \(^1\) https://orcid.org/0000-0001-7551-1700 \(^2\) mk.khawreen@gujaratuniversity.ac.in \(^1\) https://orcid.org/0000-0003-3313-2061 \(^3\) drdutta@gujaratuniversity.ac.in \(^1\) profgurudutta@gmail.com

ABSTRACT

The fast growth of the digital banking sector needs a higher level of customer satisfaction. This study sample data was taken as a convenient sampling technique with a standardized questionnaire. The digital banking dimension had (0.908) reliability, customers' satisfaction had (0.845), reducing waiting time variable had (0.729) reliability. The sample consisted (of 254) students of Ahmedabad city of both genders. The quantitative data was analyzed with SPSS by applying Pearson correlation and t-test to understand the relationship and difference between the gender levels of satisfaction. The result statistically proved that the gender of the participants did not have any significant difference in digital banking satisfaction levels. Moreover, the Person correlations proved that there was a significant association between the levels of customers' satisfaction with service charges, reducing waiting time, and overall digital banking.

Keywords: Digital banking, customers' satisfaction, Service charges, waiting time, higher institutions

INTRODUCTION

Digital banking is also known as electronic banking. One of the many initiatives that banks undertake to improve service delivery is introducing Information and Communications Technology (ICT) products/services. The expansion of Information Communication Technologies (ICTs) have pave the way for banks customers direct, convenience, efficient, accessible, retaining, less fee charge, effective, fast transactions, and mutual intervention in business and bank transitions. Moreover, digital banking leads to customers' satisfaction (Deraz & Iddris, 2019; Khalaf Ahmad & Ali Al-Zu'bi, 2011; Sulaiman & AbdelKarim, 2019).

The old paradigm of traditional banking has been entirely revolutionized in today's ever changing modern world, thanks to the introduction of digital banking services (DBS). The utilization of modern artificial intelligence embedded technologies makes it possible. It was done to suit the ever-increasing demands of customers by making technology more user-friendly and timesaving (Ahmed & Sur, 2021).

The COVID-19 epidemic has brought attention to digital financial services, as has the need for social distancing. Digital financial services enable social distancing; they enable governments to quickly and effectively dispense funding to customers in need; and they enable many customers and businesses to fast access online payments and financing. However, if the use of digital financial services is scaled up quickly in times of crisis without sufficient laws and protections, the threats to stability and integrity, which are always present, may worsen. Efforts to increase the use of digital financial services should not, however, exacerbate existing divisions among consumers (Agur et al., 2020).

Many firms have been pushed by Covid-19 to shift their focus to digital solutions in order to survive. As a result of the rising digital tsunami during Covid-19, aspiring entrepreneurs have had a plethora of options to enter the market. As a result, the focus of this research is on gaining a better understanding of new fields and technology for digital entrepreneurship (Modgil et al., 2022, p. 1).

LITERATURE REVIEW

Globalization brought new scope of operations for business which facilitate beyond the geographical boundaries



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by providing standard of products and services. In addition to this currently, there is interdependence among businesses and nations. Dynamic exchange of business quest for growth has escalating demand and high competition. As a consequence, many businesses have shown transformational improvement over the years. One of the businesses that have played key role in realizing these transformations and in demonstrating such radical changes is the banking sector (Hayelom, 2020). Tirhas Hayelom (2020) showed that reduced visiting branch, service fee, lower waiting time and account control are positively associated with the customer satisfaction, which is in line with various studies of digital banking.

Allada and Dubey (2014, p. 300) argued in their study that education level, age, and income of the participants has positive significant influence with digital banking and customers' satisfaction.

Worku et al. (2016, pp. 1, 16) discovered that young male educated students aged range (18-35) are significantly active users of digital banking compare to business men and this fact significantly increased the users' satisfaction and significantly decreased the waiting time. Additionally, Point-of-Sale (POS) is not known among the users however they use Automated Teller Machines (ATM) more compare to other electronic banking services.

Gender is a factor that most of the banking rules they give special privileges for women to start trade, business in nutshell to have more banking transactions. Allada & Dubey (2014, p. 293) proved that gender has not a significant difference on satisfaction level of digital banking. however, another research showed that most of the digital customers are male (Worku et al., 2016, pp. 14–15). Despite the prior argument, Riquelme & Rios (2010) proved that female are using more digital banking transitions and they are more satisfied with it because it is easy to use and affordable form everywhere.

A study in Jordanian banks also proved that digital banking has significant effect on customers' satisfaction (Khalaf Ahmad & Ali Al-Zu'bi, 2011). Khrais (2012, p. 168) also dig out that e-banking has positive significant customers' satisfaction. Sini et al. (2015, p. 2) conducted research in Saud Arabia and proved that electronic banking has positively significantly associating with customers' satisfaction. Digital banking has a positive significant influence on different factors such as customer experience, loyalty, and satisfaction (Mbama et al., 2018, p. 447). However, researchers proved in Bangladesh that customers' satisfaction do not have any significant relationship with digital banking. Additionally, they argued that staff training has positive significant correlation with waiting time of the customers (Huda et al., 2020, p. 12).

Banks in Muscat use social media to tackle the electronic transactions and customers has satisfied with this kind of transactions (Khan et al., 2017, p. 154).

Anane & Asamoah (2015, p. 93) reveled in their research that electronic banking system significantly increased the service quality and customers' satisfaction however it significantly decreased the services charges. Another researcher proved that digital banking brought many facilities and reduced money leverages on customers which increased the satisfaction level of them (Rao, 2021, p. 1467).

Banks must take care of their customers waiting time. Because some researchers proved that satisfaction level is significantly positive increased by the not waiting time in other words fast services (Kumar et al., 1997).

RESEARCH PROBLEMS

The accessibility of ICTs brought new revelation to the banking transition and customers' intervention. The digital banking has many pros which needs to diagnose for economic boosting. Furthermore, it is very important to unveil the digital banking and customers' satisfaction of students' in Ahmedabad city. It is witnessed that Ahmedabad city banks have not launch serves and lack of academic research to differentiate the active users and digital-banking users' satisfaction as some study also raised this question (Worku et al., 2016). Therefore, it is very important to diagnose the active digital banking nexus with customers' satisfaction.

RESEARCH GAP

During the pandemic, digital banking became very important for avoiding cash transactions among students in the city, which may lead speedy spreading COVID-19. Observation shows the interruption and convince responsive actions towards digital banking among students' customers.

OBJECTIVES OF THE STUDY GENERAL OBJECTIVES OF THE STUDY

The general objective of this study is to assess and examine Digital banking and customers' satisfaction the nexuswith special reference to students of Higher Institutions in Ahmedabad.



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SPECIFIC OBJECTIVES OF THE STUDY

The specific objectives of the study included the following:

- To elaborate the customers' satisfaction level with digital banking.
- To identify the Service charges of Digital Banking with customers' satisfaction.
- To understand the relationship between reduced waiting time due to digital services and digital banking customers' satisfaction.
- To differentiate the gender digital banking customers' satisfaction.

HYPOTHESIS

In addition to answering the research questions the study will test the following hypothesis

H₀: There is not a positive significant relationship between digital banking and customers' satisfaction.

H₁: There is positive significant relationship between digital banking and customers' satisfaction.

H₀: There is not a significant relationship between Service charges of Digital Banking with customers' satisfaction.

H₂: There is significant relationship between Service charges of Digital Banking with customers' satisfaction.

H₀: Reduce waiting time due to digital services have no significant relationship with digital banking customers' satisfaction.

H₃: Reduce waiting time due to digital services have significant relationship with digital banking customers' satisfaction.

H₀: Gender of the participants have no significant difference with digital banking customers' satisfaction.

H₄: Gender of the participants have significant difference with digital banking customers' satisfaction.

METHODOLOGY

RESEARCH METHOD

A quantitative research applied for data collection from students of Ahmedabad city. The quantitative data was collected with convenient sampling technique with standardized scale of questionnaire.

RESEARCH PARTICIPANTS

There were 254 voluntarily participants. Out of 300 distributed questionnaires, 84% of the participants responded the questionnaire.

RESEARCH TOOLS

The researcher used different tools to gather the data like structure questionnaire, closed ended questions. Furthermore, data analysis tool was SPSS version 22. The standardized questionnaire was used for quantitative data collection. The Likert scale was used as 1 for strongly disagree, 2 for disagree, 3 for natural, 4 for agree, and 5 for strongly agree. The questionnaire had four dimensions. First Service Charge for digital banking which had two questions with (0.701) Cronbach alpha. Second dimension Waiting time which had four questions with (0.729) Cronbach alpha. Third dimension Visit of Branch which had four questions with (0.835) Cronbach alpha. Fourth dimension Account Control which had five questions with (0.805) Cronbach alpha. Overall reliability for Digital banking was (0.908). Moreover, for assessing the customers' satisfaction dimension it had five questions with (0.845) Cronbach alpha.

ANALYSIS AND FINDINGS

The below tables shows the results of the data.

Table 1: Descriptive statistics of digital banking and customers' satisfaction

Gender		Age (ra	Age (ranged)		Marital Status			Education Level		
Male	Female	Min	Max	Single	Married	BA	MA	Ph.D.		
174	80	16	39	233	31	145	87	22		
Total N: 254				Total N: 254		Total	N: 254			

Table 1 explains descriptive statistics of the participants' demography. There were 174 males and 80 females, and the age ranged from 16 to 39. Moreover, the marital status of the sample consisted of 233 singles and 31 married, and the education level consisted of Bachelors (BA), Masters (MA), and Ph.D. (145, 87, and 22) samples respectively.



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Table 2: Participants' descriptive statistics of different kinds of digital banking usages

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Bankiı	ng cards	USSD)	AEP	S	UPI		Mob	ile Wallets	ATM	[
N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
63	10.8%	2	0.3%	7	1.2%	110	18.9%	39	6.7%	207	35.5%
Bank	pre-paid	PoS		Inte	rnet	Mob	ile banking	BHI	M	Othe	rs
cards				Banl	king						
N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
5	0.9%	1	0.2%	39	6.7%	66	11.3%	44	7.5%	0	0

Table 2 explains descriptive statistics of the participants' multiple usage of digital banking. There were banking cards (63), USSD (2), Aadhaar Enabled Payment system (AEPS) (7), Mobile Wallets (39), ATM (207), Bank pre-paid cards (5), Point of sale (PoS) (1), Internet banking (39), Mobile banking (66), and Bharat Interface for Money (BHIM) (44) users out of 254 participants.

Table 3: Descriptive statistics and Pearson Product-Moment Correlations of digital banking and customers' satisfaction

	Mean	Std. Deviation	N	Digital banking	Customers' satisfaction
Digital banking	53.00	11.54	250		
Customers' satisfaction	18.75	4.28	250	.772**	

^{**}p<.01. Correlation is significant at the 0.01 level (1-tailed).

Table 3 shows the descriptive statistics and Pearson product-moment correlation coefficient, which computed the digital banking and customers' satisfaction. Overall there were 254 participants, and four were missing.

Digital banking and customers' satisfaction have a strong positive correlation between the two variables, r = .772**, N = 250. Moreover, the relationship is significant at 0.01 level and p<0.00. Overall, digital banking appears to be associated with customers' satisfaction. In other words, an increase in digital banking is positively correlated with increases in the customers' satisfaction of the participants.

H₁: There is positive significant relationship between digital banking and customers' satisfaction.

The above H₁ hypothesis was accepted. It means there was a significant positive correlation between the digital banking with the customers' satisfaction. In other words, increasing digital banking has a positive relationship with an increase in the participants' customers' satisfaction. Despite, the decrease in period shoed the same time decreasing in the customers' satisfaction behaviors.

Table 4: Descriptive statistics and Pearson Product-Moment Correlations of service charges of digital banking and customers' satisfaction

	Mean	Std. Deviation	N	Service charges	Customers' satisfaction
Service charges	6.32	2.13	252		
Customers' satisfaction	18.75	4.28	250	.483**	

^{**}p<.01. Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows the descriptive statistics and Pearson product-moment correlation coefficient, which computed the service charges of digital banking and customers' satisfaction. Service charges of digital banking and customers' satisfaction have a strong positive correlation between the two variables, r = .483**. Moreover, the relationship is significant at 0.01 level and p<0.00. Overall, service charges of digital banking appears to be associated with customers' satisfaction. In other words, an increase in service charges of digital banking is positively correlated with increases in the customers' satisfaction of the participants.

H₂: There is significant relationship between Service charges of Digital Banking with customers' satisfaction.

The above H₂ hypothesis was accepted. It means there was a significant positive correlation between the service charges of digital banking with the customers' satisfaction. In other words, increasing service charges of digital banking has a positive relationship with an increase in the participants' customers' satisfaction. Despite, the decrease in period shoed the same time decreasing in the customers' satisfaction.

Table 5: Descriptive statistics and Pearson Product-Moment Correlations of Reduce waiting time due to digital services and customers' satisfaction

	Mean	Std. Deviation	N	Service charges	Customers' satisfaction
Reduce waiting time	14.34	3.52	251		
Customers' satisfaction	18.75	4.28	250	.665**	
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^{**}p<.01. Correlation is significant at the 0.01 level (2-tailed).



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Table 5 shows the descriptive statistics and Pearson product-moment correlation coefficient, which computed the Reduce waiting time due to digital services and customers' satisfaction. Reduce waiting time due to digital services and customers' satisfaction have a strong positive correlation between the two variables, r = .665**. Moreover, the relationship is significant at 0.01 level and p<0.00. Overall, Reduce waiting time due to digital services appears to be associated with customers' satisfaction. In other words, an increase in Reduce waiting time due to digital services is positively correlated with increases in the customers' satisfaction of the participants.

H₃: Reduce waiting time due to digital services have significant relationship with digital banking customers' satisfaction.

The above H₃ hypothesis was accepted. It means there was a significant positive correlation between the Reduce waiting times due to digital services with the customers' satisfaction. In other words, increasing Reduce waiting time due to digital services has a positive relationship with an increase in the participants' customers' satisfaction. Despite, the decrease in period shoed the same time decreasing in the customers' satisfaction.

Table 6: Group Statistics and Independent Samples t-Test: Gender differences on Customers' satisfactions

in Digital banking

	Male			Female					
	M	SD	N	M	SD	N	t	df	p
Customers' satisfactions in Digital banking	18.72	4.36	172	18.80	4.14	78	-0.138	248	0.89

P>.05. T-test is not significant at the 0.05 level (2-tailed).

Table 6 depicts an independent-samples t-test among the gender with Customers' satisfactions in Digital banking. There was not a significant difference between gender and Customers' satisfactions in Digital banking variable. The mean scores for males (M=18.72, SD=4.36) and females (M=18.8, SD=4.14) conditions; t (248) =-0.138, p >.05, at the 0.05 level on two-tailed test. These results suggest that gender does not affect Customers' satisfactions in Digital

H₄: Gender of the participants have significant difference with digital banking customers' satisfaction.

The H₄ hypothesis was rejected because there was not a significant difference between genders regarding digital banking customers' satisfaction.

Table 7: Liner regression of digital banking and customers' satisfaction

R	R square	Adjusted R ²	Std. error	В	t	F	Level of sig	Min	Max
.772	0.596	0.594	2.71519	0.772	19.08	364.25	.00	8.82	25.07

Dependent Variable: customers' satisfaction. Predictors: (Constant), Digital Banking

Table 7 depicts the linear regression analysis that was used to predict customers' satisfaction from digital banking. Digital banking explained a significant amount of variance in customers' satisfaction, F(1,247=364.25, p<.00, R²_{Adjusted}=.594. The regression coefficient (B=.772, 99% CI [8.82, 25.07], t=19.08) indicated that an increase in one score of digital banking corresponded, on average, to an increase in customers' satisfaction score of .772 points. H₁: There is positive significant relationship between digital banking and customers' satisfaction.

The H₁ is accepted because the digital banking did a significant contribution to the customers' satisfaction at 0.01 level.

CONCLUSION AND RECOMMENDATIONS

The study proved that digital banking of students' in Ahmedabad city has positive significant association with customers' satisfaction. In other words by increasing digital banking variable it positively increase the satisfaction of the students in Ahmedabad city. Similarly, some researchers in other cities also proved same kind of result (Hayelom, 2020; Khalaf Ahmad & Ali Al-Zu'bi, 2011; Khrais, 2012; Sini et al., 2015).

This research proved that students in Ahmedabad city are positive significant satisfied with service charges of digital banking. It is inferred that increasing in students' service charges of digital banking has also increase their satisfaction level and by decreasing of any variable also decrease another variable. However, Tirhas Hayelom (2020) proved that of service charges of digital banking has negative significant association with customers' satisfaction. The researcher argued that reducing of service charges increase the satisfaction level of digital bank

Students of Ahmedabad city statistically showed that reducing waiting time for banking transactions has a positive significant correlation with their satisfaction. It means that less reducing increase the satisfaction level of the bank

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customers. Similarly, a researcher also proved that decreasing the waiting time variable increase the customers' satisfaction level (Hayelom, 2020).

In this study, students of Ahmedabad city's gender did not have any difference between the male and female of the participants on digital banking customers' satisfaction. Similarly, Allada & Dubey (2014, p. 293) also proved that gender don not have significant difference on satisfaction level of digital banking. However, Riquelme & Rios (2010) proved that female are using more digital banking transitions and they are more satisfied with it because it is easy to use and affordable form everywhere.

REFERENCES

- [1] Agur, I., Peria, S. M., & Rochon, C. (2020). Digital Financial Services and the Pandemic: Opportunities and Risks for Emerging and Developing Economies (pp. 1–13) [IMF Research]. International Monetary Fund.
- [2] Ahmed, S., & Sur, S. (2021). Change in the uses pattern of digital banking services by Indian rural MSMEs during demonetization and Covid-19 pandemic-related restrictions. Vilakshan XIMB Journal of Management, 1–27. https://doi.org/10.1108/XJM-09-2020-0138
- [3] Allada, V. K., & Dubey, R. (2014). Investigating the online banking customer satisfaction model under the controlled effect of demographic variables. International Journal of Services and Operations Management, 18(3), 281–304. https://doi.org/10.1504/IJSOM.2014.062232
- [4] Anane, M., & Asamoah, F. O. (2015). Customers' Satisfaction and Attitude towards Electronic Banking Services in Ghana: A Case Study of Selected Banks in Kumasi Metropolis. European Journal of Business and Management, 7(32), 93–100.
- [5] Deraz, H., & Iddris, F. (2019). CUSTOMERS SATISFACTION IN INTERNET BANKING: A REVIEW (2008–2017). International Conference E-Society, 3–13. http://urn.kb.se/resolve?urn=urn:nbn:se:hh:diva-40374
- [6] Hayelom, T. (2020). EFFECT OF ATM SERVICE ON CUSTOMER SATISFACTION: THE CASE OF COMMERCIAL BANK OF ETHIOPIA MEKELLE CITY BRANCHES. RIFT VALLEY.
- [7] Huda, S. N., Aktar, S., & Islam, M. S. (2020). IMPACT OF E-BANKING ON SERVICE QUALITY AND CUSTOMER SATISFACTION IN SELECTED PRIVATE COMMERCIAL BANKS IN BANGLADESH. Globus An International Journal of Management & IT, 11(2), 21–27. https://doi.org/10.46360/globus.mgt.120201005
- [8] Khalaf Ahmad, A. M., & Ali Al-Zu'bi, H. (2011). E-banking Functionality and Outcomes of Customer Satisfaction: An Empirical Investigation. International Journal of Marketing Studies, 3(1), 50–65. https://doi.org/10.5539/ijms.v3n1p50
- [9] Khan, F. R., Al-balushi, H. Y., Algaithi, A. D., & Al-shihi, A. A. (2017). IMPACT OF SOCIAL MEDIA ON CUSTOMERS SATISFACTION: BANK MUSCAT A CASE STUDY. Ahead International Journal of Recent Research Review, 1(11), 154–164.
- [10] Khrais, L. T. (2012). The Adoption of Online Banking: A Jordanian Perspective. European Journal of Business and Management, 4(16), 163–172.
- [11] Kumar, P., Kalwani, M. U., & Dada, M. (1997). The Impact of Waiting Time Guarantees on Customers' Waiting Experiences. Marketing Science, 16(4), 295–314. https://doi.org/10.1287/mksc.16.4.295
- [12] Mbama, C. I., Ezepue, P., Alboul, L., & Beer, M. (2018). Digital banking, customer experience and financial performance: UK bank managers' perceptions. Journal of Research in Interactive Marketing, 12(4), 432–451. https://doi.org/10.1108/JRIM-01-2018-0026
- [13] Modgil, S., Dwivedi, Y. K., Rana, N. P., Gupta, S., & Kamble, S. (2022). Has Covid-19 accelerated opportunities for digital entrepreneurship? An Indian perspective. Technological Forecasting and Social Change, 175, 121415. https://doi.org/10.1016/j.techfore.2021.121415
- [14] Rao, V. V. (2021). EXPLORATION OF BANKING SECTOR QUALITY OF SERVICES AND CUSTOMERS SATISFACTION-A STUDY ON BANKS IN PRAKASAM DISTRICT OF ANDHRA PRADESH- INDIA. ICTACT JOURNAL ON MANAGEMENT STUDIES, 07(04), 1466–1470.
- [15] Riquelme, H. E., & Rios, R. E. (2010). The moderating effect of gender in the adoption of mobile banking. International Journal of Bank Marketing, 28(5), 328–341. https://doi.org/10.1108/02652321011064872
- [16] Sini, A. A., Almansour, Y., & Almansour, B. (2015). THE EFFECT OF E-BANKING ON CUSTOMERS' SATISFACTION IN FINANCIAL SERVICES: AN EMPIRICAL INVESTIGATION ON FINANCIAL SECTOR IN SAUDI ARABIA. Journal of Arts, Science & Commerce, 6(3), 2–12.
- [17] Sulaiman, M. S., & AbdelKarim, N. (2019). Electronic Banking Strategies and Their Impact on Customers' Satisfaction: Empirical Evidence from Palestine. Asian Social Science, 15(10), 20–35. https://doi.org/10.5539/ass.v15n10p20



International, Peer Reviewed journal E-ISSN: 2583-3014

[18] Worku, G., Tilahun, A., & Tafa, M. (2016). The Impact of Electronic Banking on Customers 'Satisfaction in Ethiopian Banking Industry (The Case of Customers of Dashen and Wogagen Banks in Gondar City). Journal of Business & Financial Affairs, 5(2), 1–18. https://doi.org/10.4172/2167-0234.1000174