

Doi: 10.58414/SCIENTIFICTEMPER.2025.16.5.14

RESEARCH ARTICLE

A study on consumer's perception towards e-banking services of co-operative banks in rural areas with special reference to Gandhinagar

Pankitbhai C. Patel1*, Jignesh Valand2

Abstract

This research paper aims to investigate and analyze the perceptions of consumers residing in rural areas of Gandhinagar towards electronic banking (e-banking) services of co-operative banks in rural areas. As technology-driven financial services continue to expand, understanding how consumers in rural co-operative areas perceive and engage with e-banking is crucial for promoting financial inclusion and sustainable development. Through a combination of qualitative and quantitative methods, this study examines the factors that influence consumers' perceptions, preferences, and the challenges they encounter when adopting e-banking services. The findings contribute to a deeper understanding of rural consumers' needs and inform strategies for enhancing e-banking adoption in co-operative banking in rural areas.

Keywords: E-banking, Perception, services, consumers, co-operative, rural area, Gandhinagar.

Introduction

Rural co-operative banks play a crucial role in providing financial services to rural areas, contributing to the economic growth and financial empowerment of rural communities. With the rise of information technology and the growth of digital platforms, these banks have embraced e-banking as a means to enhance their services, improve accessibility, and cater to the evolving banking preferences of their customers. The objective of this research is to provide insights into the adoption and impact of e-banking services in rural co-operative banks operating in the North Gujarat region.

The ongoing banking sector reforms, with their focus on transparency, efficiency, and sustainability, have created a competitive environment for Indian banks with the emergence of new private sector banks and the expansion of foreign banks' branches in India. The performance of the banking sector in India is considered to be better than it was a decade ago, thanks to the relentless efforts of the Reserve Bank of India. A crucial question is now raised by each bank regarding customer service expectations, as they strive to cut operational costs and manage competition.

Customer Relations on Banks

Service Quality

The bank offers equal service quality to its customers. They don't discriminate based on nationality, religion, financial and social status, or gender. However, differentiation arising from the determination of target markets, organizational structures, and product ranges, or different approaches to high-risk customers, should not be construed as evidence of prejudice or categorization among customers.

Handling Customer Complaints

They investigate the reasons behind customer complaints and take required measures to avoid their repetition. Additionally, employees are notified of errors encountered in practices and are warned to correct such errors and prevent their recurrence.

How to cite this article: Patel, P.C., Valand, J. (2025). A study on consumer's perception towards e-banking services of co-operative banks in rural areas with special reference to Gandhinagar. The Scientific Temper, **16**(5):4294-4299.

Doi: 10.58414/SCIENTIFICTEMPER.2025.16.5.14

Source of support: Nil **Conflict of interest:** None.

© The Scientific Temper. 2025

Received: 11/04/2025 **Accepted:** 18/05/2025 **Published:** 31/05/2025

¹Research Scholar, Department of Commerce, Parul University, Waghodia, Vadodara, Gujarat.

²Assistant Professor, Department of commerce Parul University, Waghodia, Vadodara, Gujarat.

^{*}Corresponding Author: Pankitbhai C. Patel, Research Scholar, Department of Commerce, Parul University, Waghodia, Vadodara, Gujarat, India., E-Mail: risingpankit01@gmail.com

Security

As their services evolve in line with technological advancements and electronic banking, they will take the necessary technical and legal measures to ensure the security of processes involved in all service media and different service channels, protecting customers against victimization. Banks will not compromise on 'Security' either in protecting and safekeeping of the securities owned by the customers like deposits, share certificates, bonds, bills, information and documents considered as customer secrets etc., and in the presentation facilities like credit interest, etc.,

Review of Literature

The literature review focuses on the evolution of e-banking, its significance in rural areas, adoption. Theories, challenges faced by rural co-operative banks, and the potential impact of e-banking services on rural customers. Customer satisfaction is one of the most significant factors for the profitability of retail banking in India. It calls for the retention of customers for the long term, which is more economical than attracting new customers (Reichheld and Kenny, 1990). Banking, being a customer-oriented service industry, the customer is at the center of attention, and customer service has to be the distinguishing factor. The challenge for Banks is to lower costs, increase efficiency, while improving the quality of their service, and increase customer satisfaction. Attention has now turned to improving the quality of the service encounter when customers enter the bank and come into face-to-face contact with bank staff (Chakravarty, 1996). The banking industry like any other financial services industries is facing a market that is rapidly changing; new technologies being introduced, fear of economic uncertainties, fierce competition and more demanding customers and the changing climate have presented an unparalleled set of challenges (Lovelock, 2001).

Statement of Problem

In a rapidly changing environment, banks have implemented various e-banking services, such as tele-banking, mobile banking, call center services, ATMs, RTGS, NEFT, IMPS, and others, one after another. Due to rapid change in technology and the entry of private and foreign banks a number of new products and delivery channels have been introduced. Among the major initiatives Internet Banking has brought to the customers the much-demanded convenience. The advent of internet banking offers banking firms a new frontier of opportunities and challenges. Despite these possibilities, various psychological and behavioral issues, such as reluctance to change, trust in one's bank, security concerns, and a preference for human interaction, impede the growth of internet banking. In this regard, a study has been undertaken to examine consumers' perception towards electronic banking services of co-operative banks in rural areas, with special reference to Gandhinagar.

Objectives of the study

The following objectives are carried out the study

- To study the conceptual framework of e-banking services of co-operative banks in rural of Gandhinagar.
- To Evaluate the level of satisfaction about e- banking services of co-operative banks in rural Gandhinagar.
- To study the effect of demographic variables on various factors leading to perception.
- To offer suggestions to improve the quality of ebanking services of co-operative banks in rural areas of Gandhinagar.

Methodology

For the purpose of this investigation, the study considered only five co-operative banks, both private and public sector co-operative banks, in Gandhinagar. The study has been used primary data. The primary data have been collected from the classes of Government/ Private employees, Professional / Businessman. A structured questionnaire was designed and administered to customers of the respective banks. Gandhinagar has been comprised of all classes of people, and researchers also own residential places, which is why Gandhinagar was selected for the study. A total of 200 respondents were selected, consisting of 20 respondents each from five co-operative bank branches, to collect the data using a convenient sampling method. The statistical tools were used in this study are Percentage analysis, Chi-Square and Garrett Ranking Techniques. The banks were included in this study.

Limitations of the study

The study is limited to rural Areas of Gandhinagar only. It is the obligation of bankers to maintain the secrecy of consumers' accounts; however, it is very difficult to gather sufficient information for research. Due to legal formalities, certain banks refused to provide specific information.

Data Analysis and Interpretation

To understand the opinion of the respondents were studied. The data collected from the customers were classified and systematically analysed. The various factors influencing internet banking services, including their problems and prospects, have been analyzed in detail and are presented in the following tables.

Age and Level of Satisfaction

Table I: Selection of banks in the study

- 1. Kalupur commercial co-operative bank ltd
- 2. Gandhinagar Nagrik co-operative bank
- 3. The Ahmedabad ditrict co-operative bank ltd
- 4. Shree Kadi Nagrik Sahakari bank Itd
- 5. The Vijay Co-operative bank ltd

Table	1: Ac	e and	level	of	satisfaction
-------	-------	-------	-------	----	--------------

SI.no	Age	No. of respondents	Percentage	Level of satisfaction				
				Low	Medium	High		
1	Below 25	52	26	14 (29.17)	22 (23.91)	16 (26.67)		
2	26-35	104	52	22 (45.83)	50 (54.35)	32 (53.33)		
3	36-45	32	16	10 (20.83)	14 (15.22)	8 (13.33)		
4	Above 45 Years	12	6	2 (04.17)	6 (06.52)	3 (06.67)		
Total		200	100	48	92	59		

Table 2: Gender and level of satisfaction

Sl.no	Gender	No. of Respondents	Percentage	Level of Satisfaction		
				Low	Medium	High
1	Male	122	61	22 (45.83)	60 (65.22)	40 (66.67)
2	Female	78	39	26 (54.17)	32 (34.78)	20 (33.33)
Total		200	100	48	92	60

Table 3: Marital status and level of satisfaction

SI.no	Age	No. of Respondents	Percentage	Level of Satisfaction		
				Low	Medium	High
1	Married	70	35	18 (37.50)	36 (39.13)	16 (26.67)
2	Unmarried	130	65	30 (62.50)	56 (60.87)	44 (73.33)
Total		200	100	48	92	60

Age is an important factor in decision-making on matters concerning the day-to-day life of individuals. Age is also a symbol of an individual's maturity. Age is one of the stages or phases in a lifetime, measured in terms of years.

It reveals that 52% of the respondents fall within the 26 to 35 years age range, 26% are below 25 years old, 16% are between 36 and 45 years old, and the remaining 6% are above 45 years old (Table 1).

Gender and Level of Satisfaction

Sex refers to the character that distinguishes people as male and female based on some unique behavior. The behavior and the opinions of the males differ from the females. Their opinion behavior plays a vital role in using internet banking services.

Table 2 shows that 61% of the respondents identify as male, and 39% identify as female.

Marital Status and Level of Satisfaction

An attempt is made to analyse the marital status of the respondents. For this purpose, marital status has been classified into two categories: married and unmarried.

Table 3 shows that 65% of the respondents belong to the unmarried category, while 35% belong to the married category.

Education and Level of Satisfaction

Education refers to the process of acquiring and gaining knowledge through learning. With the help of education, people have such awareness of handling cash transactions

It reveals that 44% of the respondents belong to the postgraduate level, 32% of the respondents belong to the graduate level, 19% of the respondents belong to the higher secondary level, and the remaining 6% of the respondents belong to other categories (Table 4).

Table 4: Education and level of satisfaction

SI.no	Educational	No. of	Percentage	Level of satisfaction			
	qualification	respondents		Low	Medium	High	
1	Higher Secondary	38	19	8 (16.67)	18 (19.57)	12 (20.00)	
2	Graduate	64	32	20 (41.67)	24 (26.09)	20 (33.33)	
3	Post Graduate	88	44	18 (37.50)	48 (52.17)	22 (36.67)	
4	Others	10	5	2 (4.17)	2 (2.17)	6 (10.00)	
Total		200	100	48	92	60	

Table 5: Occupation and level of satisfaction

SI.no	Occupation	No. of	Percentage	Level of satisfaction		
		respondents		Low	Medium	High
1	Profession / Business	66	33	18 (37.50)	28 (30.43)	20 (33.33)
2	Employed in Govt.	28	14	6 (12.50)	14 (15.22)	8 (13.33)
3	Employed in Private	74	37	12 (25.00)	32 (34.78)	30 (50.00)
4	Others	32	16	12 (25.00)	18 (19.57)	2 (3.33)
Total		200	100	48	92	60

Table 6: Annual income and level of satisfaction

SI. no	Occupation	No. of	Percentage	Level of satisfaction		
		respondents		Low	Medium	High
1	Less than Rs. 3,50,000	90	45	20 (41.67)	34 (36.96)	36 (60.00)
2	Rs. 3,50,00 to Rs. 5,00,000	56	28	8 (16.67)	34 (36.96)	14 (23.33)
3	Rs. 5,50,00 to Rs. 10,00,000	36	18	12 (25.00)	18 (19.57)	6 (10.00)
4	Above Rs. 10,00,000	18	9	8 (10)	6 (17)	4 (18)
Total		200	100	48	92	60

Occupation and Level of Satisfaction

An attempt is made to analyse the occupation of the respondents. For this purpose, the respondents have been classified into four categories: business/profession, employed in Government, Employed in Private, and others (Table 5).

Inference

Table 5 reveals that 37% of the respondents belong to employed in private, 33% of the respondents belong to business/profession and 14% of the respondents belong

to employed in government and remaining 16% of the respondents belong to the others.

Annual Income and Level of Satisfaction

An attempt is made to analyse the annual income of the respondents. For this purpose, the respondents have been classified under four heads viz., less than Rs. 350000,Rs. 350,000 to Rs. 5,00,000, Rs. 5,50,000 to Rs. 10,00,000 and more than Rs. 10,00,000.

Table 6 reveals that it is referred that 45% of the respondents have an annual income ranging below Rs.

Table 7: Family size and level of satisfaction

SI.no	Family	No. of respondents	Percentage	Level of satisfaction		
	members			Low	Medium	High
1	Less than 4	114	57	37	38	39
				(77.08)	(41.30)	(66.10)
2	4 to 8	56	28	8 (16.67)	34 (36.96)	14 (23.33)
3	More than 8	30	15	3 (6.25)	20 (21.73)	7 (10.17)
Total		200	100	48	92	60

Table 8: Summary of chi-square analysis

SI. no	Attributes	χ2 value	d.f	Table value at 5% Level	Significant/Not-significant
1.	Age	10.088	6	5.348	Not Significant
2.	Gender	5.991	2	7.842	Significant
3.	Marital status	8.256	2	7.842	Not Significant
4.	Education	4.725	6	5.348	Significant
5.	Occupation	4.671	6	5.348	Significant
6.	Annual income	5.054	6	5.348	Significant
7.	Size of the family	12.526	4	9.487	Not Significant

3,50,000 and followed by 28% of the respondents come under the category Rs. 3,50,000 to Rs. 5,00,000, 18% of the respondents have Rs. 5,50,000 to Rs. 10,00,000 and remaining 9% of the respondents have above Rs. 10,00,000.

Family Size and Level of Satisfaction

An attempt is made to analyze the size of family members and their usage of internet banking products. For this purpose, the respondents' family members have been classified into three categories: less than 4, 4 to 8, and more than 8 members.

Inference

Table 7 reveals that 57% of the respondents have utilized e-banking services, with families of less than 4 members, followed by 28% of respondents with 5 to 8 family members, and the remaining 15% with more than 8 family members.

Chi-Square Analysis

The satisfaction of Internet banking service users was studied among the selected sample respondents in this study area. The opinions collected from customers are analyzed in conjunction with their personal factors and specific factors to measure their influence on the level of satisfaction of the respondents.

$$x^2 = \frac{1}{all \ cells} \sum \frac{(O - E)}{Expected}$$

With Degree of Freedom (C-1) (R-1)

Where, O = Observed frequency

E = Expected frequency

C = Number of Columns

R= Number of Rows

Ho

There is no significant association between attributes of the respondents and their level of satisfaction.

The chi-square Table 8 reveals that there is a significant association between gender, education, occupation and annual income and also an insignificant association between the age, marital status and size of a family of these attributes and the internet services use

Findings

After analyzing the data, I found that 52% of the respondents, aged 26 to 35 years, are highly satisfied with the e-banking services of co-operative banks in rural areas of Gandhinagar.

In 61% of the respondents from the male category are highly satisfied with the banking services of co-operative banks in rural areas of Gandhinagar.

About 65% of the respondents highly satisfied belong to the unmarried category.

About 44% of the respondents belong to the postgraduate level of education, and they are highly satisfied.

About 37% of the respondents reported that the internet services they use belong to those employed in the private sector.

About 45% of the respondents with an annual income below Rs. 350,000 are highly satisfied with the e-banking services.

Out of 200 respondents, 63% of the respondents are dissatisfied with not being aware of the e-banking products advertisement.

About 40% of the respondents, level of satisfaction is satisfied on the available e-banking

About 65% of the respondents, level of satisfaction is satisfied on cost chargeable that operation while using the e-banking.

About 36% of the respondents, level of satisfaction is moderate with the internet services provided by the public banks compared as private banks.

About 37% of the respondents, level of satisfaction is dissatisfied with the available features of the product and its information.

About 43% of the respondents reported a moderate level of satisfaction with the overall services and awareness of the e-banking system provided by the bankers.

The chi-square table reveals a significant association between gender, education, occupation, and annual income, as well as an insignificant association between age, marital status, and family size and the e-banking services used.

Suggestions

The awareness level about electronic banking is very low among consumers of co-operative banks in rural areas of Gandhinagar. So, banks have to conduct customer meetings regularly to educate customers on e-banking. The bank can also distribute booklets containing information about the new schemes, which can be distributed directly to customers.

The introduction of core banking should be expedited because the size of the bank is considered an important factor in choosing e-banking.

The organization's structure needs to be changed to accommodate IT experts who can provide training in computer use to employees. The call center concept needs to be brought down to an ordinary person's level in this aspect, so that they may utilize e-banking services.

Banks can also extend more loan facility to buy computers which in turn will increase the Internet usage levels among our bank customers.

An exclusive TV channel or programme for public sector banks can be established to educate customers about

The banker is expected to serve customers without delay, and it is advisable toconsistently follow time management principley.

Conclusion

Consumers' Perception towards e-banking services of cooperative banks in rural areas of Gandhinagar still needs

to be more aware of the various e-banking services and how they have become a reality. However, there is still a need to create more awareness about e-banking services. An increased level of awareness among customers leads to increased preferences. Today's customers are not satisfied with care and courtesy alone; they expect genuine concern and a commitment to their needs. Therefore, customercentric approach is the need of the hour. The study on the perception of e-banking services among rural customers of co-operative banks in North Gujarat reveals a high adoption rate and positive perception towards the convenience and efficiency of digital banking. While core services like ATMs and debit cards are widely used, there is a need to promote less common services. Key challenges identified include security and privacy concerns, inadequate rural banking infrastructure, and language accessibility.

References

- Ardestani, S. S. (1, January 2015). Satisfaction level of Internet-Banking: A Comparison Study of Public and Private Sector Banks in India. Asian Journal of Research in Business Economics and Management, 88-96.
- Arpita Khare, A. K. (2010). Role of consumer personality in determining preference for online banking in India. Consumer personality and preference for online banking in India, 17 (4), 174-187.
- Bansal, K. G. (2012). Development of an instrument to measure internet banking service quality in india. Researchers World Journal of Arts, Science & Commerce, 3 (2), 11-25.
- Barry Howcroft, R. H. (2002). Consumer attitude and the usage and adoption of home-based banking in the United Kingdom. International Journal of Bank Marketing, 20 (3), 111-121.
- Bloor, J. W. (2010). Adoption and effectiveness of electronic banking in Kenya. Electronic Commerce Research and Applications, 277-282.
- Changsu Kim, W. T.-S. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. Electronic Commerce Research and Applications, 84-95.
- Cheung, Z. L. (2002). Internet-based e-banking and consumer attitudes: an empirical study. Information & Management, 283-295.
- Chou, D. C. (2006, December). A Guide to the Internet Gupta S.P., Statistical Method Sultan Chand & Sons, New Delhi, 1995.
- Memoria & Joshi C.B., Principles and Practice and Practice of Marketing in India, Kitab Mahal Agencies, Allahabad, 1995.
- Philip Kotter & Gary Armstrong, Principles of Marketing, Prentice Hall of India, New Delhi, 1997.
- Patel, A., & Shah, M. (2018). Evaluating the impact of digital learning tools on student performance in Gujarat. Journal of Educational Technology, 14(3), 200-215. Patra, S., & Sahu, K. K. (2020).
- Varki, S. & Colgate, M. 2001. The Role of Price Perceptions in an IntegratedModel of Behavioral Intention, *Journal of Service Research*, (3), 232-240.
- Williamwells & John Burnett & Sandra Morarty, Advertising Principles & Practice, Prentice Hall of India, 1989.
- Woodside, A.G., Frey, L. & Daly, R.T. 1989. Linking Service Quality, CustomerSatisfaction, and Behavioral Intention, *Journal of Care Marking*, 5-17.