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BARRIERS TO TECHNOLOGY ADOPTION IN URBAN COOPERATIVE BANKS

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Keywords	***Abstract***
Exploratory Factor Analysis,Urban Cooperative Banks, Exploratory, Banking Sector	Urban Cooperative Banks (UCBs) are essential for advancing financial inclusion since they offer professionals, small companies, and the urban poor access to reasonably priced banking services and credit facilities. Working under the cooperative ideals of democratic governance and mutual benefit, they promote economic growth and savings at the local level. The purpose of conducting this study is to evaluate the barriers to technology adoption in Urban Cooperative Banks. The technique used in this study is Exploratory Factor Analysis (EFA). The findings of the study indicated that major barriers to technological adoption in Urban Cooperative Banks are Technological Barriers, Organizational Barriers, and Customer-Related Barriers.

1. INTRODUCTION

In today's competitive business world, the banking sector has witnessed remarkable technological advancements and is considered the backbone of any country's economy. Businesses confront fierce competition in the contemporary web-based technological era, when consumers wish to use the internet for both personal and professional objectives. Internet banking is the most current technological development that provides users with immediate online access to their financial transactions and information. The widespread use of Internet banking across nations attests to the fact that online banking offers far more alluring options than traditional banking. discovered that

Internet banking is becoming more and more common in Asian nations, and that consumers who welcome technology innovations find it to be quite helpful. Similarly, it was mentioned that internet banking services are more prevalent in Asian nations. Due to the simplicity and comfort of completing transactions online, Internet banking has grown significantly. To keep consumers, banks have been persuaded to make massive investments in the associated IT sector. (Arif, et al. 2020).

1.1 Cooperative Movement

The cooperative movement started in India to improve the situation by providing a solution to the problems that the town man has, including those related to credit and other aspects of his business. "Urban Credit Societies may serve a helpful function in helping the upper and middle classes to comprehend typical banking fundamentals," the Mac Lagan Committee on Cooperation stated in 1915. (Juhi, et al. 2024). The Central Banking Enquiry Committee recommended in 1931 that "Limited liability cooperative companies, also known as urban banks, should be founded wherever adequate facilities and circumstances exist for the benefit of the middle sections of the people." Urban cooperative banks hold a significant position in the cooperative credit framework. These banks were established and grown in our country by private companies without government assistance. These organisations have a great history of operating with less operational risk, being financially independent, and being governed by voluntary democracy. Despite their inconsistent development, the banking industry has a promising future, even in the current competitive market conditions. (Indian Reserve Bank, 1992)

1.2 Urban Cooperative Bank

An Urban Cooperative Bank is a voluntary organisation of people with unrestricted membership and jointly owned assets that was founded by professionals, wage earners, and/or small company owners. It operates democratically under shared management for the benefit of all members, building up their savings and giving them credit with low interest and payback terms. Surpluses are made available to depositors or put into reserves. A cooperative society that primarily provides banking services and operates in urban or semi-urban regions, with particular capital and reserve requirements and a regulatory framework based on cooperative principles, is known as an urban cooperative bank. The criteria have changed over time to take into account cooperative banks' growing regulatory framework and position in the Indian financial system. (Dr.Shirasi 2012)

1.3 Growth of Urban Cooperatives and Government Support

Aspect	Details
Government Support	The Government of India, state governments, the Reserve Bank of India, and other policy-making organizations have provided preferential status to cooperatives for 50 years.
Shifting Economic	Cooperatives now operate in a competitive environment due to changing

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Policies	economic policies, where their success ensures continued survival.
Number of UCBs (2008-2009)	By March 2009, there were 1,721 UCBs, down from 1,770 in March 2008, due to consolidation.
Income Tax Paid by UCBs (Past)	1,780 UCBs and credit societies in Tamil Nadu, Karnataka, Gujarat, Andhra Pradesh, and Uttar Pradesh paid nearly Rs 1,000 crores in income tax.
Growth in UCB Sector (1991-2005)	UCB deposits increased by over 1100% (Rs. 8,600 crores to Rs. 100,000 crores) and advances increased by 733% (Rs. 7,800 crores to Rs. 65,000 crores).
Comparison with Private Sector Banks	Cooperative banks outnumber new and established private sector banks in lending and deposits, according to the National Association for Cooperative Urban Banks (NAFCUB).
Challenges Faced by Small Depositors	Joint stock banks did not cater to small depositors, forcing them to rely on dishonest money lenders and private mortgages with high interest rates and non-repayable terms.

(Juhi, et al. 2024).

2. REVIEW OF LITERATURE

Juhi, et al. (2024) examined the governance structures, customer service, and key financial indicators of urban cooperative banks to assess their performance. The research found that the performance of urban cooperative banks varied by area because of differences in financial management, governance practices, and customer service standards. Strong governance frameworks and customer-focused strategies were mentioned as contributing aspects to their success, whereas legal challenges and inefficiencies in financial operations were mentioned as causes of their failures. The findings demonstrated the need for improved sustainability and efficiency strategies to ensure that urban cooperative banks continue to offer services to their local communities.

Juhi, et al. (2024) studied the structure, functions, and challenges faced by urban cooperative banks within the Indian financial system. The paper claims that even with their amazing progress over the years, urban cooperative banks still face challenges like governance issues, operational inefficiencies, and regulatory compliance. Government policies and regulatory changes have been found to have a variety of effects, sometimes resulting in more compliance requirements and other times in improved financial performance. The results show that urban cooperative banks are essential for promoting financial stability and local development. This emphasises the need for continued government assistance and advancements in governance.

Sabina, Anwer, Ali., Ms., Najma, B. (2024) evaluated consumer satisfaction across the range of services offered by Tirchur Urban Cooperative Limited (TUCBL) and evaluated the performance of Urban Cooperative Banks (UCBs). 81.80% of clients expressed satisfaction with TUCBL's personnel behaviour, 80.40% with the account opening procedures, and 78.20% with the account closing procedures, according to the research. Furthermore, the overall happiness of TUCBL clients was found to be significantly correlated with the type of deposits, loans taken out, and services received. According to the findings, UCBs in Kerala may reach new heights and improve their sustainability with the help of their customers, strong governance, and regulatory backing from the RBI and top financial authorities.

Rupeshkumar., et al. (2024) The study sought to analyse the difficulties and barriers related to the banking industry's adoption of technology in India and offer suggestions for resolving these problems. The study concluded that technology has transformed the banking industry by providing new delivery channels for quick, easy, and effective financial transactions for both corporate and retail clients. The report did draw attention to certain problems, though, including the adoption of new technologies, the obstacles banks have in providing IT services to stakeholders, and operational and infrastructure limitations. The study highlighted how important technology is to changing banking services and improving stakeholder experiences, and it ended with suggestions for overcoming these obstacles.

Mohammed, & Manish. (2024) investigated the opportunities and challenges associated with the digital transformation of cooperatives in Uttar Pradesh, India, with a focus on how digital technologies may enhance operational efficiency, member involvement, and market access. According to the findings, cooperatives face numerous challenges, including a lack of technological literacy, inadequate infrastructure, resource constraints, change aversion, and cybersecurity threats, even though digital transformation offers many benefits, such as improved member participation, increased market opportunities, and increased efficiency.

Nishal, & Ramprasad. (2020) discussed and analysed the primary barriers to technology adoption as well as the elements that motivate companies to get past these barriers. It became evident that many industries struggle to integrate and adapt new technologies, even though businesses must embrace technology if they are to prosper in the highly competitive and globalised marketplace of today. The findings emphasised the importance of identifying and assessing critical components early on to ensure successful technology adoption, providing businesses with a clear framework to effectively address challenges and use motivating factors.

Arif, I., Aslam, W., & Hwang, Y. (2020) identified the main obstacles that prevent users from utilising internet banking in Karachi, Pakistan, in order to analyse the obstacles preventing its adoption. Value, risk, and image barriers were found to be significantly positively correlated with internet banking use. The image barrier was the most influential of them, followed by the risk and value barriers. Additionally, the study discovered that internet banking usage was negatively but negligibly impacted by the traditional barrier. Furthermore, it was noted that men encountered more obstacles than women.

Ogutu, H. A. (2018) aimed to pinpoint the challenges impeding Co-operative Bank, Migori Branch's adoption of technological innovation and provide ways to enhance uptake. The study found that personal computers, electronic transactions, mobile banking, and client automation were the main technological advancements that the bank adopted. However, challenges such as inadequate infrastructure, cultural resistance, and managerial issues were identified as barriers to implementation. The research made recommendations for strategies to enhance the bank's use of new technologies, such as restructuring, mentorship, training and development, incentives, and rewards.

3. OBJECTIVES OF THE STUDY

1. To evaluate the barriers to technology adoption in Urban Cooperateive Banks
2. To give suggestive measures to overcome these barriers in technological adoption in Urban Cooperative Banks.

4. METHODS AND MATERIALS

Table No: 1 Research Methodology

Research Design	Descriptive Research Design
Data Sources	Both primary and secondary data
Data Collection Tool	Structured questionnaire with a 5-point Likert scale
Sample Size	355 Urban Cooperative Employees
Analysis Technique	Exploratory Factor Analysis (EFA) using SPSS

5. DATA ANALYSIS AND INTERPRETATION

Table No: 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.705
Bartlett's Test of Sphericity	Approx. Chi-Square	303.685
	df	45
	Sig.	.000

Table No: 3 Total Variance Explained

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Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	3.896	38.961	38.961	3.896	38.961	38.961	3.001	30.011	30.011
	2.103	21.030	59.992	2.103	21.030	59.992	2.287	22.866	52.877
	1.231	12.305	72.297	1.231	12.305	72.297	1.942	19.420	72.297
	.830	8.302	80.599						
	.585	5.848	86.447						
	.478	4.777	91.225						
	.363	3.630	94.855						
	.298	2.984	97.839						
	.149	1.485	99.324						
0	.068	.676	100.000						
Extraction Method: Principal Component Analysis.									

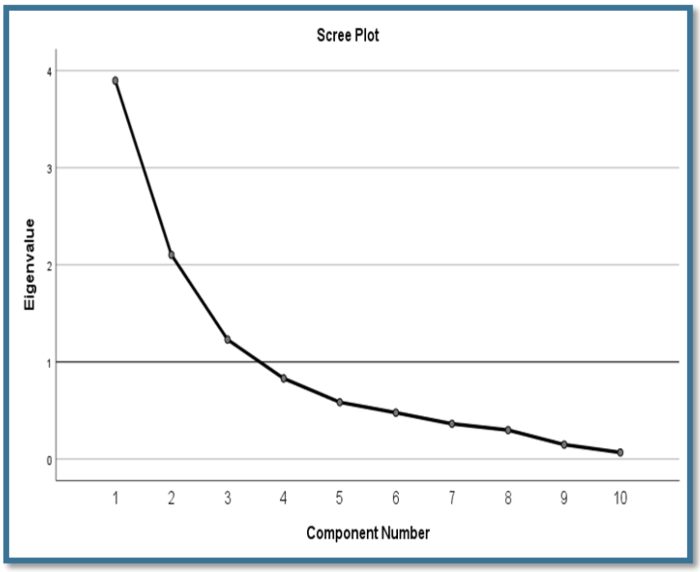

Figure No: 1 Scree Plot

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Table No: 4 Rotated Component Matrix

	Component		
	Technological Barriers	**Organizational Barriers**	**Customer-Related Barriers**
Lack of top management support for adopting new technology.		.800	
Resistance to change among employees due to fear of job loss.		.681	
Insufficient training programs for employees to adapt to new technologies.		.849	
Inadequate IT infrastructure to support advanced technological systems.		.655	
Complexity of the new technologies makes implementation difficult.	.880		
Poor integration of new systems with existing banking processes.	.938		
Frequent technical glitches and system failures hinder operations.	.920		
Low technology literacy among customers of urban cooperative banks.			.563
Resistance from customers to shift to digital banking platforms.			.802
Lack of trust in the reliability and safety of technology-driven services.			.891

6. FINDINGS

Technological Barriers explains 38.961 percent of variance with λ 3.896 it has total three items viz, Complexity of the new technologies makes implementation difficult. with factor loading .880, Poor integration of new systems with existing banking processes with factor loading .938, and Frequent technical glitches and system failures hinder operations with factor loading .920.

Organizational Barriers explains 21.030 percent of variance with λ 2.103 it has total four items viz, Lack of top management support for adopting new technology with factor loading .800, Resistance to change among employees due to fear of job loss with factor loading .681, Insufficient training programs for employees to adapt to new technologies with factor loading .849, and Inadequate IT infrastructure to support advanced technological systems with factor loading .655.

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Customer-Related Barriers explains 12.305 percent of variance with λ 1.231 it has total three items viz, Low technology literacy among customers of urban cooperative banks with factor loading .563, Resistance from customers to shift to digital banking platforms with factor loading .802, and Lack of trust in the reliability and safety of technology-driven services with factor loading .891.

7. CONCLUSION

The research found that there are several barriers to new technology adoption at Urban Cooperative Banks, which can be categorised as organisational, technological, and customer-related problems. Technological obstacles are mostly caused by the complexity of integrating new systems with existing banking practices, the challenge of implementing new systems, and the frequent technical problems that disrupt day-to-day operations. The primary organisational problems include inadequate top-level management support, employee resistance to change due to job loss fears, a lack of appropriate training programs to help people adapt to new systems, and inadequate IT infrastructure that is unable to support cutting-edge technological systems. The situation is further complicated by customer-related barriers such as low tech literacy, reluctance to use digital banking systems, and suspicion of the security and dependability of technology-driven services. These findings suggest that a comprehensive approach that considers both external customer concerns and organisational internal factors is necessary for Urban Cooperative Banks to successfully adopt and integrate new technology. Banks may improve customer satisfaction, operational efficiency, and competitiveness in an increasingly digital banking environment by tackling these challenges.

8. SUGGESTIONS

- The adoption of new technology should be actively supported and funded, giving technological projects top priority, and making sure the adoption is in line with the bank's strategic objectives.
- The management should cultivate an environment that views technical advancement and innovation as chances for development.
- Comprehensive training programs should be put in place to assist staff in becoming knowledgeable about banking systems and new technology. Dedicated support teams to help staff through the shift, online learning materials, and practical seminars should all be a part of these initiatives.
- Human resources could host awareness campaigns and workshops to help staff members see the advantages of new technology, lessen concerns about losing their jobs, and increase their confidence in their capacity to adjust to change.
- The bank should be able to support new technologies such as enhancing network security, increasing server capacity, and making sure the systems can manage more digital transactions without any problems are all part of this.
- The Banks should try to integrate new technology with current systems to keep things running smoothly, phased implementation strategy can be used to minimise technical issues and guarantee seamless transitions.

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- Campaigns should be started by the marketing and customer support divisions to inform clients about the advantages and simplicity of utilising online banking systems.
- Customer support representatives from the bank should highlight the security elements of their online platforms, such as fraud prevention techniques and encryption.
- Reluctant clients should be made aware of the benefits of switching to online platforms.
- Regulatory agencies should create and offer precise policies and procedures so that Urban Cooperative Banks can implement new technology.
- Regulators and trade groups should support collaborations between Urban Cooperative institutions and fintech firms or technology service providers to create unique, tailored solutions that address the unique requirements of these institutions and their clients.

9. AUTHOR(S) CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

10. CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

11. PLAGIARISM POLICY

All authors declare that any kind of violation of plagiarism, copyright and ethical matters will take care by all authors. Journal and editors are not liable for aforesaid matters.

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