EXPLORING MOBILE BANKING USAGE AND LOYALTY: A COMPARATIVE ANALYSIS OF PUBLIC VS. PRIVATE SECTOR BANKS IN KERALA

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Abstract

This study aims to compare customer usage and loyalty in mobile banking services between public and private sector banks, while also exploring the relationship between these two factors. The study is limited to Kerala, with data collected from 120 respondents. The findings reveal a slight but statistically significant variation in mobile banking usage between public and private sector banks, with public banks showing a marginal edge in customer loyalty. However, insights suggest that both sectors are evolving towards a more balanced digital banking experience. The research contributes valuable knowledge to the growing field of mobile banking by offering a detailed analysis, with implications for enhancing digital banking services across both public and private banks.

Keywords:- : Customer Loyalty, Customer Usage, Mobile Banking, Private Sector Banks, Public Sector Banks.

*A*s today's world is increasingly shaped by technological advancements, mobile banking services have emerged as one of the most convenient and efficient methods for conducting financial transactions. Globally, the shift toward digital banking has revolutionized the financial industry, with the adoption of smart phones driving this transformation. In India, the proliferation of affordable smart phones and widespread internet access has significantly boosted the growth of mobile banking,

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particularly in states like Kerala where digital literacy is high. The success of ATMs across the country laid the groundwork for this shift, making way for mobile banking services as a positive indicator of the country's digital banking evolution (Yogesh Kandre, 2015).

The widespread accessibility and convenience of mobile banking allow users to conduct financial transactions anytime and anywhere, which has become increasingly important in today's fast-paced world. Enhanced security features, such as encryption and secure networks, make mobile banking a safer option for financial transactions compared to traditional computer banking (Yogesh Kandre, 2015). The adoption of mobile banking services is now essential for banks to improve customer experience and satisfaction while fostering brand loyalty (NigarHuseynli et al., 2023). Many banks, in response to this demand, have focused on offering innovative products and services to retain customers and build loyalty (Meidan, 1996).

This study examines the usage and customer loyalty of mobile banking services across public and private sector banks in Kerala to better understand the effectiveness of these services and customer preferences. Given the rapid digitalization of the banking industry, it is crucial for banks to not only attract new customers but also retain existing ones by enhancing customer loyalty (Pritjahjono et al., 2023). Loyal customers are more likely to continue using a bank's services and recommend them to others, contributing to the bank's overall growth and success. Trust, convenience, and security play significant roles in building customer loyalty, with factors such as educational qualification influencing how customers perceive and engage with mobile banking services (Dr. R. Thiru Murugan et al., 2022).Analysing the relationship between usage and loyalty helps banks remain competitive and continually improve their mobile banking services to meet evolving customer needs.

This study addresses a critical gap in the literature by directly comparing the usage and loyalty of mobile banking services in public and private sector banks in Kerala, which has its unique socio-economic characteristics. Although existing literature has extensively explored the factors influencing mobile banking usage and customer loyalty, it has often provided generalized insights. This research, however, offers a focused comparison within Kerala's banking landscape, shedding light on distinctions and similarities between public and private sector banks.

Objectives of the Study

- To compare the usage of mobile banking services in public and private sector banks in Kerala

- To compare the customer loyalty of mobile banking services in public and private sector banks in Kerala

- To compare the relationship between usage and customer loyalty of mobile banking services in public and private sector banks in Kerala

Literature Review

The banking sector has witnessed a profound transformation through the integration of digital technologies,

necessitating an exploration of usage frequency and customer loyalty in mobile banking services. This review seeks to identify gaps in existing knowledge, initiating an examination into the dynamics of mobile banking, particularly in the context of Kerala.

Surendra Malviya et al. (2014) found that the usage of mobile banking services was higher in public sector banks compared to private sector banks in Indore. Further exploration is essential, especially in understanding the usage of mobile banking services in public and private sector banks within Kerala's distinctive banking landscape. However, Rexha et al. (2003) cautioned that increased usage of online services might reduce human interaction and affect the customer's loyalty with the service provider. This emphasizes the need for a balanced approach to digitalization to maintain positive customer relationships. In their research, Pritjahjono et al. (2003) discovered that customer experience and electronic word of mouth significantly influenced customer loyalty toward digital banking services. Conversely, Shalom Levy's (2014) findings indicate a noteworthy, direct, and negative correlation between the extent of online banking service usage and bank loyalty. This underscores the critical need for careful management during the transition to digital services to uphold customer loyalty.

Overall, the literature review critically examines various perspectives and findings, positions the study within the existing research landscape, and identifies differences with prior studies. It appropriately includes references to substantiate the reviewed article's context and findings.

Research Methodology

Research Design

This research adopts a quantitative approach, utilising an interview-administered questionnaire to conduct a survey among customers of selected public and private sector banks in Kerala. The study aims to gather data to understand customer usage patterns and loyalty towards mobile banking services, targeting active users of these services in both sectors.

Source of Data

The study involves both primary and secondary data. Primary data were collected from customers of public and private sector banks in the districts of Thiruvananthapuram, Ernakulam, and Kozhikode through a well-structured questionnaire. Secondary data were gathered from sources such as published theses, reports from the State Level Bankers Committee, journals on banking and finance, articles, and reports from the Reserve Bank of India (RBI), Indian Bank Association, and various online sources.

Rationale of selection

A total of 120 responses were collected, with 40 respondents from each district (Thiruvananthapuram, Ernakulam, and Kozhikode), and 30 respondents from each selected bank (SBI, Canara Bank, Federal Bank, and South Indian Bank). This sample size was selected to ensure adequate representation across different types of banks and regions while maintaining feasibility for detailed

statistical analysis. The choice of 120 respondents allows for the application of inferential statistics, and stratified random sampling was used to ensure diversity in the sample, representing both urban and semi-urban customers. Although the sample size might seem small, it was deemed sufficient based on previous studies that analysed similar banking populations in specific regions, making the sample representative of the larger population.

Reliability testing

Table 1

Reliability Statistics for Frequency of Use

Cronbach's Alpha	No. of Items
.929	13

Source: Primary Data

The Cronbach's Alpha value of 0.929 for the 13 items indicates excellent internal consistency, suggesting that the scale used is highly reliable for measuring the frequency of use. This high level of reliability means that the items consistently reflect the construct they are intended to measure, providing confidence in the accuracy and consistency of the responses.

Table 2

Reliability Statistics for Customer Loyalty

Cronbach's Alpha	No. of Items
.703	6

Source: Primary Data

The Cronbach's Alpha value of 0.703 for the 6 items indicates acceptable internal consistency. This suggests that the scale used is reliable for measuring the construct, though there may be some benefit in reviewing the items to ensure they are optimally aligned and potentially improving the scale's reliability.

Table 3

Reliability Statistics for Customer Satisfaction

Cronbach's Alpha	No. of Items
.890	13

Source: Primary Data

The Cronbach's Alpha value of 0.890 for the 13 items suggests a high level of internal consistency, indicating that the scale used is reliable and that the items consistently measure the same construct. This high level of reliability means that the responses to these items are stable and consistent over time.

**Hypothesis**

H_1: *The usage of mobile banking services in public sector banks is significantly higher than that of private sector banks.*

H_2: *Customer loyalty of mobile banking services is significantly higher in public sector banks than in private sector banks.*

H_3: *There is no significant relationship between usage and customer loyalty in public and private sector banks in Kerala.*

Figure 1

Conceptual framework of hypothesis
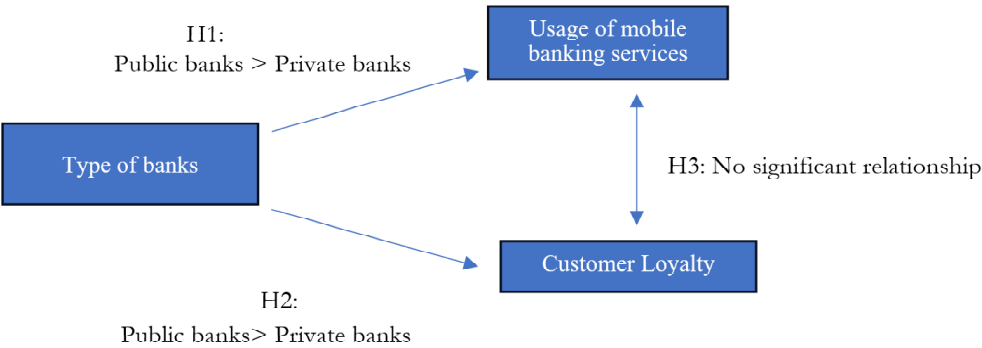
Analysis and Discussions

Demographic Characteristics

Table 4 highlights the demographic profile of mobile banking users in Kerala, revealing a majority (46.67 per cent) aged 25-35, indicating strong adoption among tech-savvy young adults. Female users (62.50 per cent) outnumber males, suggesting higher popularity among women. Most respondents are well-educated, with postgraduate (47.50 per cent) or graduate (33.33 per cent) degrees, and a significant proportion work as private employees (40.00 per cent) or students (21.67 per cent). Income levels show mobile banking is widely used across economic groups, from low-income earners (35.00 per cent below Rs. 20,000) to high-income users (23.33 per cent above Rs. 50,000). These findings reflect a diverse user base that banks can target to further enhance service adoption.

Table 5 highlights that mobile banking services are similarly utilized across public and private sector banks in Kerala, with no significant differences in most services,

including balance inquiries, fund transfers, and bill payments. The only notable variation is in the use of overdraft facilities against fixed deposits, where public banks score higher (mean = 3.97) than private banks (mean = 3.38; $p=0.048p = 0.048p=0.048$). Overall, the total use of mobile banking services is comparable between public (mean = 3.77) and private (mean = 3.69) banks, with no significant difference ($p=0.688p = 0.688p=0.688$).

Table 6 highlights that public banks in Kerala exhibit slightly higher customer loyalty and positive perceptions of mobile banking services compared to private banks. Public bank customers are more likely to recommend their bank's digital services (mean = 4.65 vs. 4.37, $p=0.010p = 0.010p=0.010$) and display greater loyalty (mean = 4.55 vs. 4.23, $p=0.009p = 0.009p=0.009$). Both sectors perform similarly in handling negative experiences and retaining customers, with no significant differences in trust or consideration of switching banks. Overall, public banks achieve marginally higher loyalty scores (mean = 3.91 vs. 3.73,

Table 4
Demographic Characteristics

Variables and items		Frequency	Percentage
Age	Below 25	14	11.67
	25-35	56	46.67
	35-45	26	21.67
	Above 45	24	20.00
Gender	Male	45	37.50
	Female	75	62.50
Locality	Rural	36	30.00
	Semi-urban	47	39.17
	Urban	37	30.83
Education	Elementary School	1	0.83
	High School	7	5.83
	Graduate	40	33.33
	Post-graduate	57	47.50
	Professional	15	12.50
Occupation	Student	26	21.67
	Government employee	20	16.67
	Private Employee	48	40.00
	Self-employed	16	13.33
	Business	4	3.33
	Retired	6	5.00
Income	Below Rs 20,000	42	35.00
	Rs20,000-30,000	26	21.67
	Rs30,000-40,000	15	12.50
	Rs 40,000-50,000	9	7.50
	Above Rs 50,000	28	23.33
Total		120	100.00

Source: Primary data

$p=0.082p = 0.082p=0.082$), indicating a slight edge in fostering customer loyalty.

Table 7 highlights mixed relationships between specific mobile banking services and customer loyalty in Kerala. Balance inquiries and fund transfers show negative correlations with positive advocacy and recommendations, while services like chequebook requests and Demat account management correlate with negative experiences and switching considerations. However, automatic bill payments and deposits positively influence loyalty and trust, suggesting areas for improvement to enhance customer satisfaction and loyalty.

Table 8 shows that services like utility bill payments, automatic bill payments,

Table 5

Frequency of Usage of Mobile Banking Services.

Sl. No	Services offered through mobile banking	Public banks		Private banks		t	Sig.
		Mean	S.D.	Mean	S.D.		
1	**Balance enquiry**	4.42	1.01	4.48	0.98	-0.366	0.715
2	**Transfer of funds to accounts of your bank and other banks**	4.27	1.07	4.33	1.20	-0.321	0.749
3	**Request for issue of cheque book**	3.17	1.50	2.97	1.67	0.691	0.491
4	**Enquiry regarding the Demat account**	2.50	1.65	2.42	1.72	0.271	0.787
5	**Utility bill payments**	3.93	1.41	3.63	1.63	1.079	0.283
6	**Mobile top up**	4.07	1.27	4.05	1.33	0.070	0.944
7	**Automatic bill payment**	3.75	1.47	3.57	1.62	0.636	0.526
8	**Mini statement**	4.02	1.23	3.90	1.42	0.481	0.632
9	**Deposits**	3.65	1.59	3.67	1.50	-0.059	0.953
10	**Change MPIN**	3.25	1.62	3.00	1.58	0.854	0.395
11	**Overdraft facility against fixed deposits**	3.97	1.47	3.38	1.72	1.997	0.048
12	**Scan and Pay**	4.07	1.34	4.32	1.24	-1.061	0.291
13	**Pay to contact or mobile number**	3.93	1.49	4.27	1.27	-1.315	0.191
	Total Usage	3.77	1.07	3.69	1.04	0.403	0.688

Source: Primary data

Table 6

Customer Loyalty of Mobile Banking Services.

Sl. No	Statement	Public banks		Private banks		t	Sig.
		Mean	S.D.	Mean	S.D.		
1.	Speak positive things to other people about this bank's digital banking services	4.67	0.57	4.48	0.60	1.718	0.088
2.	Recommend this bank's digital banking services to my friends and relatives	4.65	0.58	4.37	0.61	2.614	0.010
3.	I feel a sense of loyalty towards this bank's digital banking services.	4.55	0.65	4.23	0.65	2.676	0.009
4.	I have negative experiences with this bank's digital banking services.	2.65	1.55	2.58	1.29	0.256	0.798
5.	I have considered switching to another bank in the past	2.48	1.62	2.27	1.40	0.783	0.435
6.	I trust this bank to meet my all future digital banking needs through its digital services	4.43	0.62	4.42	0.56	0.154	0.878
	Total	3.91	0.60	3.73	0.53	1.751	0.082

Sources: Primary data

and MPIN changes positively impact customer loyalty and trust in digital banking. Conversely, chequebook requests and payments to contacts/mobile numbers are linked to negative experiences and a higher likelihood of switching banks. These negative correlations, though weaker, suggest areas where customer satisfaction could be improved. Overall, the data underscores

Table 7

Relationship between Usage and Loyalty in Public Sector Banks

	I will speak positive things to other people about this bank's digital banking services	I will recommend this bank's digital banking services to my friends and relatives	I feel a sense of loyalty towards this bank's digital banking services	I have negative experiences with this bank's digital banking services	I have considered switching to another bank in the past	I trust this bank to meet my all future digital banking needs through its digital services	Loyalty Total
Balance enquiry	-0.107	-0.181	-0.097	0.138	0.009	0.004	0.001
Transfer of funds. to accounts of your bank and other banks	-0.212	-0.175	-0.117	0.108	-0.017	-0.024	-0.048
Request for issue of cheque book	0.086	-0.029	0.009	.391	.287	0.012	.312
Enquiry regarding the Demat account	0.090	-0.098	0.055	.454	.415	-0.066	.382
Utility bill payments	0.098	0.137	0.226	0.144	-0.023	0.149	0.157
Mobile top up	-0.062	-0.014	0.057	0.081	-0.098	0.049	-0.003
Automatic bill payment	0.161	0.035	0.164	0.110	0.016	0.046	0.124
Mini statement	0.104	-0.039	0.073	0.235	0.098	0.035	0.176
Deposits	0.037	-0.080	0.157	0.238	0.132	0.105	0.203
Change MPIN	0.110	-0.014	0.157	0.116	0.095	0.194	0.171
Overdraft facility against fixed deposits.	-0.214	-0.174	-0.140	0.195	0.035	-0.058	0.003
Scan and Pay	-0.170	-0.123	-0.082	0.224	0.079	-0.137	0.047
Pay to contact or mobile number	-0.225	-0.126	-0.189	0.100	-0.056	-0.206	-0.109
Frequency of usage Total	-0.020	-0.083	0.037	.263	0.110	0.013	0.156

Sources: Primary Data

the importance of service quality in enhancing customer loyalty and minimizing churn in Kerala's digital banking sector.

Discussion

This study meticulously examines mobile banking service usage patterns and customer loyalty across both sector banks in Kerala. In contrary to the preconceived notions, the close mean values (3.77 vs. 3.69) and the non-significant p-value (0.688) suggest an overall similarity in mobile banking usage. However, a statistically significant difference (Sig. = 0.048) in the usage of the "Overdraft facility against fixed deposits" indicates a nuanced variation in customer usage. The investigation into customer loyalty, which covers diverse aspects, reveals no significant difference between both sector banks (p = 0.082). Despite higher levels of positive engagement, recommendations, and loyalty among public sector bank customers, the overall loyalty scores remain comparable. This finding challenges the traditional belief that public sector banks inherently enjoy a distinct advantage in customer loyalty. The weak

Website: **https://www.imdrtvm.com**

Table 8

Relationship between Usage and Loyalty in Private Sector Banks

	I will speak positive things to other people about this bank's digital banking services	I will recommend this bank's digital banking services to my friends and relatives	I feel a sense of loyalty towards this banks digital banking services	I have negative experiences with this banks digital banking services	I have considered switching to another bank in the past	I trust this bank to meet my all future digital banking needs through its digital services	Loyalty Total
Balance enquiry	0.144	0.152	0.432	0.081	0.053	-0.125	0.178
Transfer of funds to accounts of your bank and other banks	0.197	0.131	0.399	-0.116	-0.003	0.218	0.133
Request for issue of cheque book	-0.086	-0.138	0.211	0.111	0.410	-0.057	0.216
Enquiry regarding the Demat account	0.114	0.143	0.368	0.079	0.235	0.080	0.273
Utility bill payments	0.203	0.035	0.437	-0.187	0.066	0.263	0.133
Mobile top up	0.204	0.102	0.143	-0.007	0.220	0.334	0.239
Automatic bill payment	0.228	0.131	0.279	0.160	0.283	0.230	0.352
Mini statement	0.278	0.141	0.118	0.134	0.243	0.117	0.284
Deposits	0.277	0.062	0.203	0.093	0.244	0.127	0.272
Change MPIN	0.251	0.298	0.281	0.207	0.443	0.133	0.463
Overdraft facility against fixed deposits	0.197	0.203	0.360	0.165	0.401	0.253	0.436
Scan and Pay	0.293	0.001	0.244	-0.064	0.165	0.245	0.194
Pay to contact or mobile number	0.162	-0.041	0.211	0.120	0.178	0.032	0.198
Frequency of usage total	0.259	0.133	0.395	0.091	0.335	0.204	0.374

Source: Primary data

positive correlation between mobile banking usage frequency and customer loyalty in both sectors adds complexity to the narrative, prompting critical reflection on presumed loyalty benefits and challenging the notion that public sector banks hold a significant edge over private sector banks in mobile banking services. The results highlight the evolving landscape of mobile banking, where both public and private sector banks in Kerala are leveraging technological advancements. This evolution necessitates a reassessment of strategies by both sectors to adapt to changing customer preferences and technological trends, moving beyond traditional notions and embracing innovative approaches to attract and retain customers effectively.

Conclusion

In conclusion, this study challenges assumptions about disparities in mobile banking usage and loyalty between public and private sector banks in Kerala. Findings reveal comparable usage patterns

and loyalty levels, questioning the perceived advantage of public sector banks. The study highlights a consistent relationship between customer loyalty and usage frequency in both sectors, debunking misconceptions about public sector dominance. The dynamic banking landscape shows both sectors actively leveraging technology, with increasing adoption of mobile banking services. This shift calls for innovative strategies such as tailored services, user-friendly interfaces, and trust-focused marketing to attract and retain customers. Emphasizing customer feedback, educational resources, and positive testimonials can further enhance mobile banking adoption and satisfaction. The study is region-specific, limiting its ability to generalize. Variations in banking landscapes and technological literacy across regions could impact findings. Future research should address these gaps to deepen understanding of mobile banking dynamics and customer preferences.

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