KARYA ILHAM PUBLISHING
CONNECTING MINDS, BRIDGING IDEAS, INSPIRING READERS

Journal of Advanced Research in Marketing and Management

Journal homepage:
https://karyailham.com.my/index.php/jarmm/index
ISSN: 3083-9653

The Role of E-Service Quality in Enhancing Customer Retention in Commercial Banks

Subhashini R[1,*], K. Chitra[2]

[1] Research Scholar, Sri Ramakrishna College of Arts and Science for Women, Coimbatore, Tamil Nadu, India
[2] Principal and Research Guide, Sri Ramakrishna College of Arts and Science for Women, Coimbatore, Tamil Nadu, India

ARTICLE INFO

Article history:
Received 17 November 2024
Received in revised form 19 December 2024
Accepted 21 January 2025
Available online 25 February 2025

Keywords:
Commercial banks; e-service quality; e-loyalty; e-satisfaction; online banking.

ABSTRACT

This article probes the role of e-service quality in customer retention within the commercial banking sector. In the recent past, the role of e-service quality has been highly prominent in digital banking services, and the latter directly combines with the quality to determine the loyalty and retention of customers. E-satisfaction in terms of key dimensions: efficiency, system availability, fulfillment, website aesthetics, privacy/ security, responsiveness, and contact were surveyed among 481 respondents to gauge their influence on customer e-satisfaction and long-term retention. The study highlights the importance of delivering superior e-service experiences to maintain customer relationships through a detailed analysis of commercial bank customers. Findings will suggest practical implications for commercial banks in developing digital services, and thus customer loyalty will be enhanced.

1. Introduction

In today's rapidly changing digital age, the banking industry is going through a major transformation as customers increasingly rely on online platforms for everyday financial transactions. As people become more knowledgeable about technology, their expectations for the quality of services have risen sharply. Today, customers expect their banking experiences to be fast, efficient, and dependable, with as few obstacles as possible. The quality of e-services now spans several essential areas such as efficiency, system availability, fulfillment, privacy and security, website design, responsiveness, and customer support—each contributing to a smooth online banking experience. At the core of this digital transformation is e-loyalty the trust and dedication that customers build with their online banking providers. For banks, nurturing e-loyalty is essential for establishing long-term relationships and keeping customers actively engaged. When banks provide top-tier e-services, they don't just enhance satisfaction; they forge a deeper bond with their customers. This connection often inspires customers to explore and take advantage of a broader range of services, expanding their relationship with the bank and increasing loyalty. In a competitive market, providing

* *Corresponding author.*
E-mail address: subhashinir1983@gmail.com

https://doi.org/10.37934/jarmm.1.1.3241

outstanding e-service quality helps a bank stand out, positioning it as a trusted partner in the customer’s financial journey.

Mobile banking applications and digital instruments are very important in improving the quality of e-service delivery by banks. It enables banks to deliver more personalized services to their customers but at a reduced complexity procedure. They also provide access through a direct link to a customer's account on their mobile phone without necessarily visiting the actual bank branch. This means that a customer can access account information at whatever time of the day or night. However, the banks have to tackle the challenges like cybersecurity threats. The banking sector is continuously evolving, and realizing the relationship between e-service quality and e-loyalty can prove to be vital for banks, in which case they can sustain themselves successfully in the digital world. This research aims to bring out how enhancing e-service quality might enhance e-loyalty and help retain customers.

1.1 Review of Literature

Alkhouli and Samer [1] explored to understand the most important dimensions of e-service quality that have an impact on customer satisfaction, customer trust, and customer behavior, building. The four dimensions of the e-service quality model that better predict customer behavior were considered. Data from an online survey of 355 Indonesian online consumers was used. using structural equation modelling the results showed that three dimensions of e-service quality, namely website design, security/privacy, and fulfilment affect overall e-service quality. Meanwhile, customer service is not significantly related to overall e-service quality. Overall e-service quality is statistically significantly related to customer behavior.

Ricadonna *et al.,* [4] examined the Customer retention of Islamic banks in Indonesia to know how to increase customer retention in the Islamic banking sector. This study also aims to test and analyze the effect of trust and brand image on customer retention with customer loyalty as an intervening variable. 100 customer respondents who have had savings accounts for more than five years at Sharia Bank filled out the questionnaire in this study. The collected data were processed using the Smart PLS program with measurements of the inner and outer model tests. The test results proved that trust, brand image, and customer loyalty positively and significantly affect customer retention in Islamic commercial banks. The indirect testing proved that the customer loyalty variable could mediate customer trust and retention variables. However, it is unable to mediate the brand image variables on customer retention.

Shafiq *et al.,* [5] investigated the role of customer commitment and satisfaction in influencing the relationship between service quality and innovation in developing customer loyalty. To address this issue, a quantitative investigation was carried out by a researcher in Pakistan. The primary data was collected from 369 Pakistani customers through a survey questionnaire and the results of SEM analysis showed a strong positive correlation between the variables service quality, service innovation, market orientation, customer commitment, customer satisfaction, and customer loyalty.

Alzaydi and Zyad [2] studied the association between service quality and customer satisfaction. The study also tried to find the indirect association between service quality and customer loyalty through customer satisfaction, and the mediation effect of multi-channel integration quality in the relationships between service quality, customer satisfaction, and customer loyalty. 265 customers were surveyed in Arabia and the results showed a significant relationship between service quality and customer satisfaction. Their study results also proved that higher quality enhances satisfaction. However, service quality does not directly influence customer loyalty, rather, it is mediated through customer satisfaction, especially when multi-channel integration quality is high.

Zhengmeng *et al.,* [3] examined 281 participants from Pakistan and 312 from China to understand how customer satisfaction acts as a bridge and how financial technology influences this relationship. Their findings showed that service quality, customer trust, and cultural differences all play a significant role in boosting customer satisfaction in both countries. Despite the cultural diversity between Pakistan and China, these core factors consistently enhanced how satisfied customers felt with the services they received. This indicates that despite varying cultural contexts, these key elements consistently contribute to higher levels of customer satisfaction in both Pakistan and China. This indicates that despite varying cultural contexts, these key elements consistently contribute to higher levels of customer satisfaction in both Pakistan and China. Results also revealed that service quality and customer trust have a positive effect on customer retention behavior in China, but customer trust has no significant impact on customer retention behavior in Pakistan. Financial technology moderated the relationship between customer satisfaction and customer retention behavior, but it was insignificant in the context of China and Pakistan.

1.2 Objective of The Study

To assess the relationship between e-service quality, e-satisfaction, e-loyalty, and customer retention in Commercial banks. Figure 1 explains how the independent variables of E-Service Quality are influenced by various factors such as efficiency, system availability, fulfillment, privacy/security, website aesthetics, responsiveness, and contact. E-Satisfaction, a mediating variable, connects E-Service Quality to E-Loyalty, as satisfied customers are more likely to return to a bank. The dependent variables (DVs) are E-Loyalty and Customer Retention, with E-Loyalty influencing Customer Retention. The model suggests that e-service quality factors lead to customer satisfaction, loyalty, and retention.

Fig. 1. Conceptual framework

2. Research Methodology

This study used a descriptive research design to explore the relationships among various variables existing within commercial banks of the Coimbatore district. A purposive sampling method was undertaken for selecting the respondents and ensured that the sample consisted of individuals with experience and insights regarding the banking sector. The sample size used for the research is 481 respondents. Data is collected from the primary as well as secondary sources. Structured questionnaires were used to collect primary data from customers of commercial banks. Such an approach permits first-hand information on customer experience, satisfaction levels, and perceptions of service quality. Secondary data collected are based on literature developed currently, bank reports, and relevant academic studies.

3. Analysis and Interpretation

The demographic profile of respondents indicates that the dominant age group is the youth and better-educated population -40 % of them are in the age group of 26-35 years, and 31% between the ages of 18-25 years. The proportion of millennials and Gen Z is good. Proportion is slightly biased toward male gender, which is 58%, and females comprise 42%. As viewed from the educational background, 49% hold a graduation degree, while the percentage of post-graduation achievement lies in 34%, hence it falls into the category of a well-educated group that is likely to have high expectations from e-banking services. Meanwhile, only 2% of them have educational qualifications at the school level, and 15% fall into other categories of educational qualification. Overall, this demographic suggests a tech-savvy, informed user base actively engaged in evaluating digital banking services.

Table 1
Demographic – profile of the respondents

Demographic Profile	Variables	No of Respondents	%
Age	18-25	150	31
	26-35	190	40
	36-45	96	20
	46-55	36	7
	55 & above	9	2
	Total	481	100
Gender	Female	201	42
	Male	280	58
	Total	481	100
Education	Graduation	235	49
	Post-graduation	164	34
	School	10	2
	Others	72	15
	Total	481	100

The profile of the respondents indicates a clear interaction level with their banks. 42% have been associated with their banks for more than 3 years. However, 35% have accounts for 1-3 years with their bank, which reflects a section of customers still building closer ties. At the same time, 24% are relatively new customers as their association is less than 1 year, and it shows a developing customer segment. When considering services, 38% of the respondents are highly active users who utilize banking services more than four times a month, reflecting relatively high digital usage. Another 28 percent use the services twice a month, whereas 18 percent use them just once - presenting different levels of dependence on Internet banking. This multigenerational and mixed customer base, along with an intensity of service use, essentially brings together an extremely diversified user base with rather changing expectations and experiences in digital banking. This mix of long-term and newer customers and varying service usage patterns highlights a diverse user base with different expectations and experiences in digital banking.

Table 2
Banking profile of the respondents

Banking Profile	Variables	No of Respondents	%
Years of association	1-3 year	166	35
	Less than 1 year	114	24
	More than 3 years	201	42
	Total	481	100
Frequency of service usage per month	More than 4 times	176	38
	Thrice	77	16
	Twice	133	28
	Once	85	18
	Total	481	100

The constructs' reliability and validity are good; Cronbach's alpha and composite reliability rho-a and rho-c for all the latent variables is above 0.7, hence it shows high internal consistency. E-Service Quality has the highest reliability with Cronbach's alpha = 0.890, and AVE = 0.646, and strong measurement; E-Satisfaction and E-Loyalty have satisfactory reliability and convergent validity since the AVEs are higher than 0.5. Although Customer Retention appears to have a lower Cronbach's alpha value of about 0.685, the composite reliability and AVE are still above minimum thresholds, hence indicating the construct as being reliable enough.

Table 3
Construct reliability and validity

Latent Variables	Cronbach's alpha	Composite reliability (rho-a)	Composite reliability (rho-c)	Average variance extracted (AVE)
E-Service Quality	0.890	0.891	0.890	0.646
E-Satisfaction	0.763	0.763	0.750	0.586
E-Loyalty	0.788	0.793	0.755	0.543
Customer Retention	0.685	0.713	0.724	0.516

All the factor loads from the constructs, on the whole, are highly and statistically significantly related to the constructs. All the estimates derived are also above the threshold acceptable of 0.5 and the p-values are less than 0.001. The indications of Efficiency, System Availability, Fulfilment, and Privacy/Security attained a high loading, especially that of System Availability (SA7 = 0.7896) and Privacy/Security (PS16 = 0.7443). Similar indications from Website Aesthetics and Responsiveness. In this regard, notable loads include WB23 = 0.6812 and RES24 = 0.7784. Some of the indicators include E-Satisfaction, E-Loyalty, and Customer Retention. Those were proved to be robust with strong factor loadings, such as C Retention4 with 0.7362 and E-loyal2 with 0.7140, thus proving the reliability and validity of the constructs.

Journal of Advanced Research in Marketing and Management
Volume 1, Issue 1 (2025) 32-41

Table 4
Factor loading

Factor	Indicator	Estimate	SE	p
Efficiency	EF1	0.5984	0.0462	<.001
	EF2	0.6153	0.0405	<.001
	EF3	0.6048	0.0436	<.001
	EF4	0.6883	0.0451	<.001
	EF5	0.6147	0.0413	<.001
System Availability	SA6	0.6269	0.0453	<.001
	SA7	0.7896	0.0477	<.001
	SA8	0.5798	0.0470	<.001
	SA9	0.6976	0.0509	<.001
Fulfilment	FUL10	0.6048	0.0458	<.001
	FUL11	0.6298	0.0447	<.001
	FUL12	0.6017	0.0398	<.001
	FUL13	0.5982	0.0394	<.001
	FUL14	0.5832	0.0416	<.001
Privacy/Security	PS15	0.6390	0.0448	<.001
	PS16	0.7443	0.0456	<.001
	PS17	0.5407	0.0422	<.001
	PS18	0.5979	0.0436	<.001
	PS19	0.5920	0.0453	<.001
Website Aesthetics	WB20	0.5319	0.0409	<.001
	WB21	0.6057	0.0412	<.001
	WB22	0.5219	0.0406	<.001
	WB23	0.6812	0.0432	<.001
Responsiveness	RES24	0.7784	0.0455	<.001
	RES25	0.6003	0.0469	<.001
	RES26	0.5847	0.0411	<.001
	RES27	0.5902	0.0452	<.001
Contact	CONT29	0.6227	0.0499	<.001
	CONT30	0.5903	0.0516	<.001
	CONT31	0.6702	0.0480	<.001
E-Satisfaction	E-satis1	0.6548	0.0419	< .001
	E-satis2	0.7042	0.0425	< .001
	E-satis3	0.6095	0.0391	< .001
	E-satis4	0.5989	0.0425	< .001
E- Loyalty	E-loyal1	0.6218	0.0442	<.001
	E-loyal2	0.7140	0.0411	<.001
	E-loyal3	0.5710	0.0413	< .001
	E-loyal4	0.6421	0.0416	< .001
	E-loyal5	0.6644	0.0442	<.001
Customer Retention	C retention1	0.6554	0.0498	<.001
	C retention2	0.5926	0.0506	<.001
	C retention3	0.6689	0.0465	<.001
	C retention4	0.7362	0.0469	<.001
	C retention5	0.5923	0.0454	<.001

Several fit indices have been applied to assess the model fit and quality. Good enough fit indices of the model exist to explain the relations between the constructs of the study. APC is less than 0.001 and denotes that really strong and significant relations exist. ARS is 0.463 and AARS is 0.460, respectively with a p-value of less than 0.001, which signifies the existence of significant explanatory power. The mean block VIF is within the acceptable ranges, implying no major signs of multicollinearity. The measure of the goodness of fit is done using the Tenenhaus GoF. The entire set of fit indices is well within acceptable ranges. Therefore, these sets of metrics cumulatively show that the model fits well and is reliable for customer retention, e-loyalty, and e-satisfaction dynamics.

Table 5
Model fit indices for SEM

Fit indices	Acceptable value	Model Value
Average path coefficient (APC)	P<0.001	0.274, P<0.001
Average R-squared (ARS)	P<0.001	0.463, P<0.001
Average adjusted R-squared (AARS)	P<0.001	0.460, P<0.001
Average block VIF (AVIF)	≤ 5, ideally ≤ 3.3	2.055
Average full collinearity VIF (AFVIF)	≤ 5, ideally ≤ 3.3	2.395
Tenenhaus GoF (Goodness of Fit)	Small ≥ 0.1, Medium ≥ 0.25, Large ≥ 0.36	0.487
Simpson's paradox ratio (SPR)	Acceptable if ≥ 0.7, Ideally = 1	0.875
R-squared contribution ratio (RSCR)	Acceptable if ≥ 0.9, Ideally = 1	1
Statistical suppression ratio (SSR)	Acceptable if ≥ 0.7	1
Nonlinear bivariate causality direction ratio (NLBCDR)	Acceptable if ≥ 0.7	1

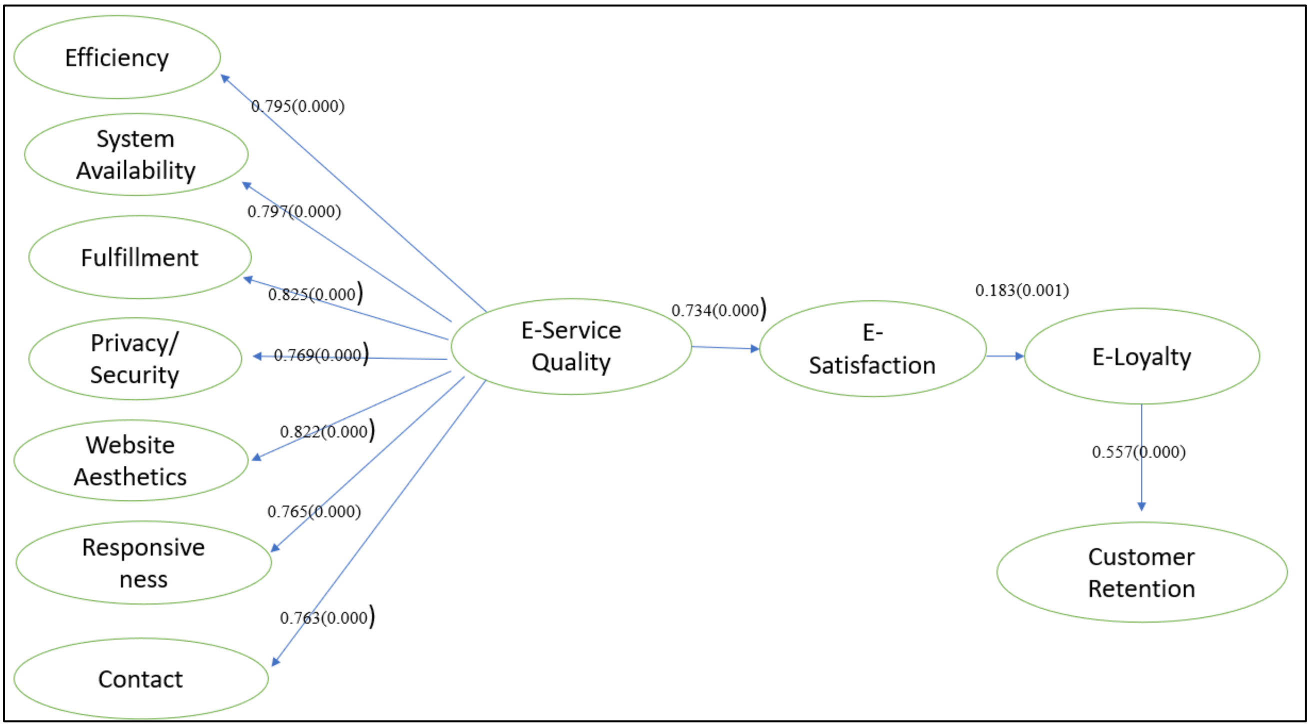

Fig. 2. Inner structural model

The path coefficients, means, standard deviations, t-values, and p-values were scrutinized to assess the relationships between key constructs in the structural equation model. The path analysis revealed the following significant relationships

H1: E-service quality has a significant impact on e-satisfaction.

E-service quality is highly significant ($p < 0.001$), demonstrating that e-service quality is a key driver of e-satisfaction. The study found a strong and statistically significant positive relationship between e-service quality and e-satisfaction indicating that improvements in e-service quality are likely to lead to increases in e-satisfaction.

H2: E-satisfaction has a significant impact on E-loyalty

E-satisfaction significantly and positively correlates to e-loyalty, positing the integral function customers' e-satisfaction serves in enhancing e-loyalty. In simple, higher e-satisfaction involves a slight increase in e-loyalty.

H3: E-loyalty has a significant impact on customer retention.

The analysis exhibits a healthy relationship between e-loyalty and customer retention with a path coefficient of 0.557. This relationship is strong and statistically significant at 0.000 levels, and hence the customers scoring high in loyalty towards digital banking were likely to remain with the service provider. In other words, from the above findings, it can be interpreted that e-loyalty is a prime predictor for customer retention proving the point that loyalty maintained through online channels is important for businesses to retain their customers in the long run.

Table 6
Path coefficient: mean, standard deviation, T-values and P-Values

Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T	P values
E-Service Quality -> E-Satisfaction	0.734	0.719	0.031	23.474	0.000
E-Satisfaction -> E-Loyalty	0.183	0.182	0.053	3.467	0.001
E-Loyalty -> Customer Retention	0.557	0.565	0.044	12.588	0.000

The total indirect effects show significant positive relationships between the variables, with all p-values below 0.05. E-Satisfaction has a notable indirect effect on Customer Retention (0.102, $p = 0.001$), indicating its strong influence through mediating factors. Similarly, E-Service Quality significantly impacts both Customer Retention (0.073, $p = 0.002$) and E-Loyalty (0.131, $p = 0.001$). The T-values further confirm the strength of these relationships, all exceeding the threshold of 1.96, supporting the hypothesis that service quality and satisfaction drive loyalty and retention.

Table 7
Total indirect effect- mean, standard deviation, T- values and P- values

Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T	P values
E-Satisfaction -> Customer Retention	0.102	0.103	0.031	3.345	0.001
E-Service Quality -> Customer Retention	0.073	0.074	0.023	3.146	0.002
E-Service Quality -> E-Loyalty	0.131	0.131	0.040	3.289	0.001

The total effects highlight strong and significant relationships across the model. E-Loyalty shows the strongest influence on Customer Retention (0.557, $p < 0.001$), indicating that loyal customers are more likely to stay with the bank. E-Satisfaction also positively impacts both Customer Retention (0.102, p = 0.001) and E-Loyalty (0.183, p = 0.001), underscoring its importance in fostering loyalty and retention. E-Service Quality significantly influences E-Satisfaction (0.717, p < 0.001), demonstrating its critical role in shaping customer satisfaction, which in turn drives loyalty and retention.

Table 8
Total effect – mean, standard deviation, T- values and P- values

Relationships	Original Sample (O)	Sample mean (M)	Standard deviation (STDEV)	T	P values
E-Loyalty -> Customer Retention	0.557	0.565	0.044	12.588	0.000
E-Satisfaction -> Customer Retention	0.102	0.103	0.031	3.345	0.001
E-Satisfaction -> E-Loyalty	0.183	0.182	0.053	3.467	0.001
E-Service Quality -> Customer Retention	0.073	0.074	0.023	3.146	0.002
E-Service Quality -> E-Loyalty	0.131	0.131	0.040	3.289	0.001
E-Service Quality -> E-Satisfaction	0.717	0.719	0.031	23.474	0.000

4. Findings

The analysis reveals that the dimensions of e-service quality are significant in forming the experience of a customer with a strong and positive impact on e-satisfaction and e-loyalty. The positive outcome of e-satisfaction reinforces the view that a satisfied customer is more likely to have loyalty (0.183). E-loyalty thus reflects the most crucial factor in retaining customers, thereby portraying the likelihood of loyal customers maintaining their relationships with their banks in the long term. Indirectly, e-service quality impacts customer retention by occupying a fundamental position in creating e-satisfaction and loyalty. Generally, the improvement of e-service quality directly ensures an increase in the following: e-satisfaction, e-loyalty, and, therefore, retention in the system of commercial banks.

4.1 Managerial Implications of The Study

The study offers practical insight for commercial bank managers to improve the quality of their e-services, thereby ensuring customer satisfaction, loyalty, and engagement in the long run. At a minimum, factors such as the ease with which the customer can contact the bank, the guarantee of privacy and security, and an attractive online experience would uplift customer satisfaction. The more satisfied customers are the more likely to stay with the bank, therefore earning them loyalty. Loyalty, on the other hand, drives retention. This investment in seamless, secure, and user-friendly e-services for bank managers is not only a path toward keeping their customers satisfied but also a relationship-strength pathway toward ultimate success.

4.2 Limitations of The Study

This study is subject to certain geographical and contextual constraints that may influence the applicability of its findings.

i. The geographical scope of this study is limited to the Coimbatore district, which may impact the generalizability of the findings.
ii. The study focused on commercial banks specifically only the public and private bank customers using online banking services.

5. Conclusions

In conclusion, this study highlights e-service quality is important for the determination of customer e-satisfaction, e-loyalty, and retention in commercial banks. Improving aspects such as customer support, online privacy, and website content can increase customers' satisfaction considerably, which boosts loyalty. Loyal customers are more likely to stay with the bank. Hence, aligning with e-service improvement can become a strategic move to gain success in the long term. Therefore, it is concluded that banks should prioritize the importance of delivering quality e-services to develop sustained customer relationships

References

[1] Alkhouli, Samer. "The effect of banks website service quality and e-satisfaction on e-loyalty: An empirical study on Swedish Banks." *International Journal of Business and Management* 13, no. 1 (2017): 1. https://doi.org/10.5539/ijbm.v13n1p1

[2] Alzaydi, Zyad. "Examining the mediating effect of multi-channel integration quality in the relationship with service quality, customer satisfaction and customer loyalty in the Saudi banking sector." *Management & Sustainability: An Arab Review* 3, no. 2 (2023): 132-149. https://doi.org/10.1108/MSAR-12-2022-0061

[3] Zhengmeng, Chai, Muhammad Malik, Muttahir Hussain, and Salamat Hussain. "Exploring customer retention dynamics: A comparative investigation of factors affecting customer retention in the banking sector using mediation-moderation approach." *Heliyon* 10, no. 19 (2024). https://doi.org/10.1016/j.heliyon.2024.e36919

[4] Ricadonna, Nadia Adriane, Muhammad Saifullah, and Ari Kristin Prasetyoningrum. "The effect of trust and brand image on customer retention with customer loyalty as intervening variables to customers of sharia commercial banks." *Jurnal Keuangan Dan Perbankan* 25, no. 2 (2021): 311-323. https://doi.org/10.26905/jkdp.v25i2.5145

[5] Shafiq, Muhammad Aqib, Muhammad Mohsin Ali Khan, Muhammad Sibt e Ali, and Shoaib Asim. "Assessment of service quality and innovation in developing customer loyalty; the mediating role of customer commitment and satisfaction." *Pakistan Journal of Humanities and Social Sciences* 11, no. 1 (2023): 243-257. https://doi.org/10.52131/pjhss.2023.1101.0346