

Article type:
Original Research

Article history:
Received 20 July 2025
Revised 11 October 2025
Accepted 17 October 2025
Published online 01 January 2026

Alireza . Mir¹, Abbas. Babaeinejad^{1*}, Mehdi. Mohammad Bagheri², Ali. Raeispour Rajabali³

1 Department of Public Administration , Ke.C., Islamic Azad University, Kerman, Iran.

2 Department of Management, Ke.C., Islamic Azad University, Kerman, Iran.

3 Department of Economics, Ke.C., Islamic Azad University, Kerman, Iran.

Corresponding author email address:
abbasbabaei@iau.ac.ir

How to cite this article:

Mir, A. , Babaeinejad, A. , Mohammad Bagheri , M. & Raeispour Rajabali , A. (2026). Designing an Adaptive Model of Banking Service Quality in Southeastern Iran. *Future of Work and Digital Management Journal*, 4(1), 1-11.
<https://doi.org/10.61838/fwdmj.162>



© 2026 the authors. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

Designing an Adaptive Model of Banking Service Quality in Southeastern Iran

ABSTRACT

The main objective of this study was to develop and validate an adaptive model of banking service quality that integrates both traditional SERVQUAL dimensions and new context-specific constructs reflecting the sociocultural and geographic realities of southeastern Iran. This applied study employed a mixed-methods exploratory sequential design, consisting of qualitative and quantitative phases. In the qualitative phase, data were gathered through semi-structured interviews with 15 banking experts (including branch managers, senior officers, and service specialists) selected through purposive sampling until theoretical saturation. Using content analysis in NVivo 12, three emergent dimensions—social trust, accessibility, and cultural compatibility—were identified in addition to the five classical SERVQUAL factors (tangibility, reliability, responsiveness, assurance, and empathy). In the quantitative phase, a researcher-developed questionnaire with 45 items was administered to 430 customers of public and private banks in Kerman, Sistan and Baluchestan, and Hormozgan provinces. Data were analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM) in AMOS to test the measurement and structural models. The confirmatory factor analysis results demonstrated that all standardized factor loadings were above 0.65 and statistically significant ($p < 0.001$), confirming the convergent validity and reliability of the model. The overall model fit indices ($\chi^2/df = 2.23$, CFI = 0.95, GFI = 0.93, RMSEA = 0.054) indicated a strong fit between the hypothesized model and empirical data. Structural modeling revealed that adaptive service quality significantly predicted customer satisfaction ($B = 0.47$, $\beta = 0.62$, $p < 0.001$). Among the new contextual dimensions, social trust and cultural compatibility had the highest standardized loadings ($\beta = 0.79$ and $\beta = 0.81$, respectively), indicating their dominant role in customer perception of service quality. The adaptive model successfully integrates universal and local dimensions, providing a culturally sensitive framework for evaluating banking service quality in southeastern Iran. By emphasizing social trust, accessibility, and cultural compatibility, the model enhances the predictive capacity of SERVQUAL and offers practical guidance for service improvement strategies tailored to regional needs.

Keywords: Adaptive service quality, SERVQUAL, social trust, cultural compatibility, accessibility, customer satisfaction, banking industry, Iran.

Introduction

Banking service quality has long been recognized as a cornerstone of customer satisfaction, trust, and loyalty in both traditional and digital financial ecosystems. As competition in the banking sector intensifies and technological innovation reshapes customer expectations, understanding and adapting service quality models to diverse cultural and regional contexts has become a central research focus. The concept of service quality in banking first gained theoretical prominence through the SERVQUAL model developed by [1], which introduced five dimensions—tangibility, reliability, responsiveness, assurance, and empathy—to capture consumers' perceptions of service experiences. This framework laid the foundation for decades of empirical research and practical applications in assessing the quality of financial services. Later, [2] reexamined the SERVQUAL

construct, proposing refinements and extensions that emphasized the importance of customer satisfaction as both an outcome and a predictor of behavioral loyalty. These classical models continue to inform contemporary studies; however, rapid digitalization, sociocultural diversity, and evolving customer expectations demand adaptive frameworks that move beyond standardized quality measures.

In the Iranian context, banking service quality has undergone major transformation due to the parallel growth of electronic banking and shifts in customer behavior. Early research by [3] identified notable discrepancies between employees' and customers' perceptions of service quality, indicating the need for dual-perspective models in assessing public and private banks. Subsequent investigations by [4] applied integrated approaches such as SERVPERF and Analytic Hierarchy Process (AHP) to evaluate electronic banking performance, highlighting the advantages of combining perceptual measures with decision-making tools. Over time, Iranian researchers have increasingly recognized that cultural, geographical, and infrastructural differences play a crucial role in shaping service expectations. For instance, [5] analyzed electronic banking service quality in eastern Iran and reported that limited accessibility and technological inequality significantly affect customer satisfaction. Similarly, [6] developed an indigenous model using hybrid FAHP–ANP techniques, revealing that contextualized service dimensions offer stronger explanatory power for customer loyalty than imported frameworks like SERVQUAL.

Parallel research in other regions further underscores the necessity of contextual adaptation. [7] identified persistent service quality gaps in private banks, emphasizing that even in competitive markets, managerial attention to responsiveness and assurance remains uneven. [8] utilized structural equation modeling (SEM) to validate multidimensional constructs of service quality, confirming its direct influence on customer satisfaction and loyalty among Iranian banking clients. These findings echo the argument by [9], who demonstrated that customer trust operates as a mediating variable between perceived service quality and long-term loyalty, indicating that quality perception extends beyond functional performance into psychological and relational domains. As digital transformation accelerates, the relational dimension of service quality—especially in regions with strong social and cultural bonds—requires renewed theoretical and empirical exploration.

In recent years, the evolution of digital banking has redefined how customers interact with financial institutions. Studies such as [10] employed fuzzy Analytic Network Process (ANP) techniques to evaluate service quality in banking, providing a robust quantitative structure for decision-making under uncertainty. Building on such quantitative approaches, new frameworks have incorporated human–computer interaction elements, recognizing that user experience (UX) and user interface (UI) design are now intrinsic to service quality evaluation. [11] and [12] both advanced user-centered design methodologies for mobile banking interfaces, illustrating how intuitive design and interactive features significantly influence customer satisfaction. Similarly, [13] explored mobile banking adoption among younger generations during the COVID-19 pandemic, finding that convenience, responsiveness, and technological assurance outweigh traditional determinants of trust in digital settings. These insights suggest that digital service quality, when conceptualized through the lens of user engagement and emotional experience, constitutes a key competitive advantage in the contemporary banking industry.

Nonetheless, the increasing reliance on digital channels introduces new challenges concerning system security, reliability, and customer confidence. [14] proposed a security assessment framework for Android mobile banking applications, noting that perceived security directly affects the perceived service quality and adoption intentions. Complementing this perspective, [15] demonstrated that interface design, system quality, security, and customer involvement collectively shape mobile banking adoption, reinforcing the argument that technical and experiential factors are intertwined. These findings

resonate with [16], who identified significant positive effects of mobile banking service quality on customer satisfaction in Bank Central Asia (BCA), highlighting that reliability, responsiveness, and assurance remain pivotal even within digital platforms. The convergence of technological performance and human experience thus defines the new frontier of service quality measurement.

In global contexts, emerging studies extend this debate to incorporate organizational and behavioral dimensions. [17] found that employee attitudes and work experience moderate the relationship between service quality and customer outcomes in the banking industry, emphasizing the role of human capital in sustaining consistent service delivery. Meanwhile, [18] empirically confirmed that perceived communication, entertainment, and gamification enhance perceived value and customer willingness to continue using mobile banking, suggesting that emotional engagement and enjoyment are new determinants of service quality perception. This shift from purely functional measures to affective and experiential indicators mirrors trends across service industries, but in banking—where trust and reliability are paramount—it assumes particular importance.

From a cultural and ethical standpoint, scholars have called for models that integrate moral and religious values into service quality frameworks. [19] introduced the concept of Halal Service Quality, providing a systematic review and conceptual model that align service excellence with Islamic ethical principles. This approach underscores the importance of trust, transparency, and moral responsibility in financial transactions—factors especially relevant in societies with strong religious values and community-based trust systems. Such cultural integration resonates deeply with service contexts in southeastern Iran, where ethnic diversity, traditional social structures, and regional economic conditions collectively shape customer expectations toward banking institutions.

The synthesis of these theoretical and empirical contributions suggests that while SERVQUAL and its derivatives remain foundational, they require contextual adaptation to reflect regional, technological, and sociocultural realities. As [4] and [7] demonstrated, the classic dimensions of tangibility, reliability, responsiveness, assurance, and empathy are necessary but insufficient in capturing localized service dynamics. In regions characterized by dispersed populations, infrastructural disparities, and strong social networks, additional dimensions such as accessibility, cultural compatibility, and social trust must be considered. The need for a context-specific model is particularly acute in southeastern Iran—a region marked by geographic vastness, ethnic plurality, and uneven development—where uniform service standards may fail to meet community-specific needs.

Furthermore, as banks increasingly digitize operations, new quality determinants emerge at the intersection of technology, culture, and human experience. User interface design, perceived security, and digital trust now coexist with traditional service values in determining customer satisfaction. As observed by [11] and [12], the human-centered perspective must remain central even in automated environments, ensuring that digital transformation enhances rather than replaces relational quality. This is consistent with [17] and [16], who emphasize that sustainable service excellence relies equally on employee competence, technological assurance, and emotional resonance.

Consequently, the present study seeks to design an adaptive model of banking service quality in southeastern Iran that integrates classical SERVQUAL dimensions with newly identified regional constructs—social trust, accessibility, and cultural compatibility—derived from qualitative inquiry and validated through quantitative analysis. Drawing on the methodological advances of fuzzy and hybrid models [6, 10] and the recent developments in digital service quality assessment [11, 14, 15],

this research aims to capture the complex interplay between institutional performance, customer perception, and contextual realities. By aligning theoretical frameworks with empirical evidence, the study contributes to both the academic discourse on service quality measurement and the practical efforts of Iranian banks to improve customer experience across diverse sociocultural environments.

The main objective of this study is to develop and validate an adaptive banking service quality model tailored to the socioeconomic and cultural conditions of southeastern Iran.

Methodology

This study adopted an applied purpose and employed a mixed-method design combining qualitative and quantitative approaches. The overall research framework followed an exploratory sequential design, in which qualitative data were first collected and analyzed to identify contextual dimensions of banking service quality, followed by a quantitative phase to validate and generalize the findings.

In the qualitative phase, the statistical population consisted of banking experts, including branch managers, senior officers, and specialists in banking services across three southeastern provinces of Iran: Kerman, Sistan and Baluchestan, and Hormozgan. Participants were selected using purposive sampling based on expertise and experience in the field of banking operations. Theoretical saturation was reached after conducting 15 in-depth interviews, which included eight branch managers, five senior officers, and two service specialists, with an average work experience of more than 10 years.

In the quantitative phase, the population comprised all customers of public and private banks in the same three provinces. Using Cochran's formula with a 5% margin of error and a 95% confidence level, the total sample size was calculated at 430 participants. The sample was proportionally distributed among the provinces according to the size of the banking customer population, with 172 respondents from Kerman, 150 from Sistan and Baluchestan, and 108 from Hormozgan. A multistage cluster sampling technique was applied to ensure representation from different cities and bank branches across the selected provinces.

In the qualitative phase, data were collected through semi-structured, in-depth interviews developed based on the SERVQUAL framework and the review of relevant literature on service quality and cultural adaptation in banking. The interview guide focused on dimensions such as tangibility, reliability, responsiveness, assurance, empathy, accessibility, trust, and cultural congruence. The qualitative instrument aimed to uncover locally relevant factors that influence customers' perception of banking service quality in southeastern Iran, taking into account the socio-cultural diversity of the region.

For the quantitative phase, a researcher-developed questionnaire consisting of 45 items was designed based on the SERVQUAL model proposed by Parasuraman et al. (1988) and the contextual dimensions identified in the qualitative stage. The questionnaire included eight dimensions: five derived from SERVQUAL (tangibles, reliability, responsiveness, assurance, and empathy) and three newly identified in the local context (social trust, accessibility, and cultural compatibility). Each item was rated on a five-point Likert scale ranging from "strongly disagree" to "strongly agree."

To ensure the validity of the instrument, content validity was assessed by ten experts in banking management and service quality. Modifications were made based on their feedback to improve the clarity and relevance of the items. Reliability was tested using Cronbach's alpha coefficient. The coefficients for the subscales ranged between 0.79 and 0.91, and the overall

reliability of the questionnaire was 0.89, indicating strong internal consistency. These results confirmed that the instrument was both valid and reliable for measuring adaptive service quality in the studied context.

The qualitative data were analyzed using the conventional content analysis method with NVivo version 12 software. The coding process followed three systematic stages: open coding, axial coding, and selective coding. In open coding, key concepts and themes were identified directly from interview transcripts. These codes were then organized into categories and subcategories in the axial coding stage to establish relationships between service quality dimensions and contextual factors. Finally, in selective coding, the core categories were integrated into a conceptual model that reflected the adaptive structure of banking service quality in southeastern Iran.

The quantitative data were analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM) with AMOS software. CFA was applied to assess the validity and goodness of fit of the measurement model, verifying that the observed variables appropriately represented the latent constructs identified in the qualitative phase. Subsequently, SEM was employed to test the structural model and examine causal relationships among the dimensions of service quality and overall customer satisfaction. The model's fit indices—including the Chi-square/df ratio, Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA)—were used to confirm the adequacy of the proposed adaptive model.

Findings and Results

The qualitative phase of this study aimed to identify the contextualized dimensions and components that define adaptive banking service quality in southeastern Iran. Through in-depth semi-structured interviews with banking experts, the analysis revealed that while the classical SERVQUAL framework remains relevant, additional dimensions rooted in the region's sociocultural and geographic characteristics are essential for a more accurate representation of customer expectations. The coding process yielded four main dimensions—social trust, accessibility, cultural compatibility, and traditional SERVQUAL dimensions—each encompassing several axial codes and subthemes that collectively form the foundation of the adaptive model of banking service quality.

Table 1

Identified Qualitative Dimensions and Components of the Adaptive Banking Service Quality Model

No.	Main Dimension	Axial Codes	Description and Elaboration
1	Social Trust	- Honesty and truthfulness in interactions - Full transparency in fees and charges - Protection of customer confidentiality and privacy - Commitment to fulfilling promises and obligations	This dimension extends beyond technical reliability to the institutional and social trust level of the banking system within the tribal and ethnic fabric of the region. Customers perceive banks not merely as financial entities but as social institutions expected to maintain long-term trustworthiness.
2	Accessibility	- Establishing branches in remote and underserved areas - Flexible working hours adapted to local lifestyles - Quality and stability of online and mobile banking services - Density and reliability of ATMs	Given the vast geography and dispersed population in provinces such as Sistan and Baluchestan, both physical and digital accessibility to banking services has emerged as a primary and decisive concern.
3	Cultural Compatibility	- Respect for local customs, traditions, and values - Priority in hiring local staff familiar with regional dialects - Designing financial products aligned with local culture (e.g., community-based lending funds) - Observance of Islamic dress code and decorum in banking environments	This dimension indicates that standardized nationwide service delivery is insufficient. Understanding and respecting the distinct cultural norms of Baluchi, Kermani, and Hormozgani communities directly influence customer satisfaction and loyalty.

4	Traditional SERVQUAL Dimensions	• Tangibles (branch appearance, equipment) • Reliability (delivering services as promised) • Responsiveness (willingness to assist customers) • Assurance (employee competence and knowledge) • Empathy (individualized attention to customers)	These dimensions were also confirmed by experts but are interpreted differently in the local context. For instance, “empathy” in this region particularly emphasizes understanding clients’ specific economic and cultural concerns.
---	---------------------------------	---	--

The findings reveal that the adaptive model of banking service quality in southeastern Iran integrates both the conventional SERVQUAL framework and context-specific elements that reflect local realities. Social trust emerged as a distinctive dimension highlighting institutional credibility, moral integrity, and confidentiality as determinants of perceived quality. Accessibility was redefined not only in terms of geographical reach but also through digital inclusiveness, reflecting the infrastructural disparities in remote provinces. Cultural compatibility surfaced as a powerful mediator between service delivery and customer loyalty, underscoring the need for culturally informed management practices such as employing local staff and tailoring financial products to indigenous norms. Meanwhile, traditional SERVQUAL dimensions—tangibles, reliability, responsiveness, assurance, and empathy—remain relevant but acquire nuanced meanings shaped by regional socioeconomic and cultural contexts. Overall, the qualitative phase confirmed that a standardized approach to service quality assessment is inadequate for regions characterized by ethnic diversity and geographic dispersion, necessitating a localized, adaptive model grounded in social and cultural understanding.

Table 2

Results of Confirmatory Factor Analysis (CFA) for the Adaptive Banking Service Quality Model

Dimension	Number of Items	Standardized Factor Loadings (Range)	Average Variance Extracted (AVE)	Composite Reliability (CR)	Cronbach’s Alpha	Model Fit Indices (CFA)
Social Trust	5	0.71 – 0.88	0.64	0.89	0.91	$\chi^2/df = 2.31$; CFI = 0.94; RMSEA = 0.056
Accessibility	5	0.68 – 0.86	0.61	0.88	0.84	$\chi^2/df = 2.19$; CFI = 0.95; RMSEA = 0.053
Cultural Compatibility	5	0.69 – 0.90	0.67	0.91	0.86	$\chi^2/df = 2.27$; CFI = 0.94; RMSEA = 0.055
Tangibles	5	0.70 – 0.84	0.59	0.87	0.82	$\chi^2/df = 2.11$; CFI = 0.95; RMSEA = 0.051
Reliability	6	0.72 – 0.89	0.66	0.90	0.88	$\chi^2/df = 2.25$; CFI = 0.93; RMSEA = 0.054
Responsiveness	5	0.70 – 0.85	0.62	0.88	0.85	$\chi^2/df = 2.18$; CFI = 0.94; RMSEA = 0.052
Assurance	6	0.73 – 0.87	0.65	0.90	0.87	$\chi^2/df = 2.24$; CFI = 0.94; RMSEA = 0.055
Empathy	4	0.69 – 0.82	0.58	0.85	0.79	$\chi^2/df = 2.09$; CFI = 0.95; RMSEA = 0.050
Overall Model Fit	–	–	–	–	–	$\chi^2/df = 2.23$; GFI = 0.93; AGFI = 0.91; CFI = 0.95; TLI = 0.94; RMSEA = 0.054

The results of confirmatory factor analysis (CFA) confirmed the structural validity and reliability of the adaptive banking service quality model. All standardized factor loadings exceeded the acceptable threshold of 0.60 and were statistically significant at the 0.001 level, demonstrating that the observed variables were strong indicators of their respective latent constructs. The Average Variance Extracted (AVE) values ranged from 0.58 to 0.67, confirming satisfactory convergent validity, while Composite Reliability (CR) coefficients ranged from 0.85 to 0.91, indicating strong internal consistency across all dimensions. Cronbach’s alpha values were similarly high, supporting the reliability of each construct. Fit indices for both the individual dimensions and the overall model met conventional standards ($\chi^2/df < 3$, CFI > 0.90, RMSEA < 0.08), suggesting an acceptable and robust fit between the measurement model and the empirical data. These results empirically validated the inclusion of the three new contextual dimensions—social trust, accessibility, and cultural compatibility—alongside the

traditional SERVQUAL factors, confirming that the extended model provides a more comprehensive and culturally grounded framework for assessing banking service quality in southeastern Iran.

Discussion and Conclusion

The findings of this study confirmed that the adaptive model of banking service quality in southeastern Iran provides a more comprehensive and contextually grounded understanding of how customers perceive and evaluate banking services. The integration of three new dimensions—social trust, accessibility, and cultural compatibility—alongside the traditional SERVQUAL constructs (tangibility, reliability, responsiveness, assurance, and empathy) significantly improved the model's explanatory power for customer satisfaction. This result suggests that while the SERVQUAL framework [1] remains a valid foundation for assessing service quality, its standardized form does not fully capture the nuances of sociocultural and geographical diversity observed in the Iranian banking sector. The addition of context-specific dimensions aligns with the argument that service quality is both universal and localized, requiring models that reflect the economic, technological, and cultural dynamics of each region [6, 7].

The prominence of social trust as a new dimension underscores the importance of institutional integrity and moral responsibility in fostering customer confidence. The findings demonstrated that customers in southeastern Iran perceive banks not merely as financial intermediaries but as social institutions embedded within the moral and communal fabric of society. Trust in this context is built on transparency, honesty, confidentiality, and fulfillment of commitments. This is consistent with [9], who reported that trust mediates the relationship between service quality and loyalty, reflecting that customer confidence extends beyond functional performance. Similarly, [19] conceptualized *Halal Service Quality* to emphasize the ethical dimensions of transparency and sincerity, especially in Islamic banking systems, which resonate strongly with the regional cultural context of Iran. The present study's finding that social trust exerts a strong positive influence on satisfaction corroborates the conclusions of [8], who identified reliability and assurance as critical factors in building perceived trustworthiness. Together, these studies reinforce the notion that in culturally cohesive societies, service quality cannot be divorced from moral and ethical expectations of institutional behavior.

The second emergent dimension, accessibility, was found to significantly predict perceived quality and satisfaction, indicating that spatial and technological access to banking services remains a critical determinant of customer experience. Given the geographic vastness and infrastructural disparities of southeastern Iran, physical proximity to bank branches and reliability of electronic channels are fundamental to perceived service quality. This aligns with earlier findings by [5], who noted that limited accessibility to e-banking services in eastern Iran negatively affects user satisfaction and adoption rates. The current study extends this insight by showing that accessibility encompasses both physical and digital dimensions, including branch distribution, flexible working hours, ATM functionality, and stability of mobile or online platforms. Such dual accessibility reflects the modernization challenges faced by banks operating in underdeveloped regions. Comparable results have been observed in Southeast Asia, where [13] demonstrated that convenience and digital availability were among the strongest predictors of mobile banking adoption among young users during the pandemic. Similarly, [15] confirmed that system quality and security jointly influence user satisfaction and adoption, emphasizing the role of technological assurance as a key accessibility component. Hence, improving both infrastructure and technological capacity remains pivotal for sustainable service quality development.

The third dimension, cultural compatibility, emerged as a novel construct that captures the alignment of banking operations with local customs, languages, and social norms. Respondents emphasized the importance of respectful communication, cultural awareness, and recruitment of local staff familiar with regional dialects and traditions. This result strongly resonates with [19], who argued that service quality should reflect religious and moral conformity to maintain customer trust and loyalty within Islamic societies. In the Iranian context, the cultural dimension reinforces the findings of [6], who proposed that localized factors enhance the explanatory capacity of service quality models. Beyond Iran, digital banking research by [12] and [11] demonstrated that user-centric design principles grounded in local cultural preferences significantly improve customer satisfaction and engagement with mobile banking apps. This cultural responsiveness indicates that banking institutions must treat service quality as a dynamic social construct shaped by the interplay of cultural expectations, religious norms, and modern technological capabilities.

The confirmatory factor analysis (CFA) and structural equation modeling (SEM) further validated that the adaptive model fits the empirical data well. All dimensions exhibited strong standardized loadings and high reliability coefficients, suggesting both conceptual coherence and measurement validity. The high explanatory power of the overall model supports the argument made by [10], who showed that fuzzy multi-criteria approaches such as ANP can effectively model service quality constructs with interdependent variables. This methodological consistency with hybrid and multivariate frameworks enhances the robustness of the current study. Moreover, the structural path from adaptive service quality to customer satisfaction ($\beta = 0.62$) indicates that the proposed model captures a substantial portion of variance in satisfaction levels. Similar empirical relationships were observed in [8] and [7], confirming that improving multidimensional service quality has a direct, significant, and positive effect on customer satisfaction and loyalty.

From a theoretical perspective, this study extends the SERVQUAL model [1] by embedding contextual and cultural determinants that influence customer perception. The empirical confirmation of culturally oriented dimensions such as social trust and compatibility demonstrates that service quality in banking is not static but evolves alongside social values and technological transformation. The inclusion of digital and ethical dimensions aligns with recent global shifts toward value-based and technology-mediated service quality frameworks. For instance, [17] highlighted that employee work experience moderates service quality outcomes, implying that human factors continue to play a vital role even in technologically advanced banking systems. Similarly, [16] and [18] emphasized the importance of customer engagement, entertainment, and gamification in shaping satisfaction and continuous usage, reflecting how psychological and experiential variables complement traditional quality constructs. In the Iranian setting, where social cohesion and interpersonal relationships remain strong, these affective and experiential components reinforce trust and strengthen long-term customer–bank relationships.

Another significant insight relates to the role of technology and digital interface design as enablers of service quality. Participants in this study repeatedly highlighted that mobile and internet banking services are perceived as extensions of a bank's reputation for reliability and assurance. In line with [14], system security was identified as a key element of perceived quality, as users equate data protection and transaction safety with institutional competence. This aligns with the findings of [15], who underscored that security, system quality, and customer involvement collectively determine adoption intention and satisfaction in digital banking platforms. Meanwhile, the user interface and experience dimensions explored by [12] revealed that intuitive design and ease of navigation significantly increase satisfaction levels. [11] further supported this

conclusion, demonstrating that user-centered interface design directly correlates with perceived service quality and satisfaction among mobile banking users. Collectively, these studies confirm that the quality of digital interaction has become inseparable from traditional service quality measures, transforming the very definition of “service” in contemporary banking.

Furthermore, the present study substantiates the findings of [9] and [8] by reinforcing the mediating role of trust and satisfaction in the service quality–loyalty nexus. As banking moves toward digitalization, the psychological aspects of safety, empathy, and assurance become even more critical in sustaining customer loyalty. Consistent with [2], the results reveal that customer satisfaction serves as both a mediating variable and an outcome of perceived service quality. This dual function suggests that improvements in service quality produce cumulative benefits, including stronger emotional attachment, reduced switching intention, and higher advocacy behavior. The adaptability of this model, therefore, offers banks a strategic framework for managing relationships in a culturally sensitive and technologically dynamic environment.

The comparative review of results also highlights the consistency of findings across diverse contexts. Studies in Southeast Asia, including [13] and [16], corroborate the direct positive effect of service quality on satisfaction and retention, particularly in digital environments. Likewise, the hybrid modeling efforts of [6] and [10] validate the need for multi-dimensional analytical tools capable of integrating both quantitative rigor and qualitative insight. The present study contributes to this growing literature by demonstrating that combining qualitative exploration with quantitative validation produces richer, more contextually appropriate models. The identified dimensions—social trust, accessibility, and cultural compatibility—reflect a successful localization of the SERVQUAL model and contribute new theoretical insight into how service quality frameworks evolve within developing economies marked by social and infrastructural heterogeneity.

Overall, the adaptive model developed in this study bridges the gap between universal service quality frameworks and localized realities. It substantiates the argument that the banking sector in emerging markets cannot rely solely on imported measurement scales but must embed indigenous factors reflecting social norms, cultural expectations, and regional disparities. The empirical support for the adaptive model demonstrates its potential as a decision-making and diagnostic tool for banking managers seeking to improve customer satisfaction through culturally sensitive strategies. Furthermore, by incorporating elements from previous models such as SERVQUAL [1], SERVPERF [4], and Halal Service Quality [19], the study presents a holistic understanding of service excellence within the Iranian context.

Despite its methodological rigor, this study has certain limitations. The data were collected from three southeastern provinces of Iran, which may limit the generalizability of the findings to other regions with different socioeconomic structures or cultural patterns. The mixed-methods design, while offering depth and triangulation, relied on self-reported perceptions, which could introduce response bias. Additionally, although the sample size in the quantitative phase was statistically adequate, future studies could expand the dataset to include comparative analyses across urban and rural banking environments. The cross-sectional nature of the research also precludes causal inferences about the long-term effects of service quality on loyalty and retention. Finally, while qualitative coding provided rich insights into contextual dimensions, future validation through longitudinal or experimental designs would strengthen the model’s predictive capacity.

Future studies should explore the dynamic interaction between technological innovation and cultural adaptation in shaping banking service quality. Expanding the scope of investigation to include other regions of Iran or cross-country comparisons within the Middle East could enhance the external validity of the adaptive model. Researchers could also employ longitudinal methods to examine how digital transformation influences customer perceptions of service quality over time.

Further integration of machine learning or data-driven approaches, such as sentiment analysis of customer feedback, could provide complementary evidence to traditional survey-based methods. Additionally, the mediating and moderating roles of variables such as financial literacy, digital trust, and perceived risk merit deeper exploration to refine predictive relationships within the model.

For practitioners, the results highlight the necessity of embedding cultural and social awareness into service design and delivery. Banking managers should prioritize transparent communication, equitable accessibility, and culturally respectful interactions to strengthen social trust. Investing in technological infrastructure—particularly in underserved regions—will enhance both digital and physical accessibility, thereby improving overall customer satisfaction. Employee training programs should emphasize empathy, ethical conduct, and local sensitivity to align service behaviors with customer expectations. Finally, integrating user-centered design in mobile and online platforms can enhance usability, security, and engagement, positioning banks as trusted and adaptive institutions within their communities.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Written consent was obtained from all participants in the study.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

References

- [1] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality," *Journal of Retailing*, vol. 64, no. 1, pp. 12-40, 1988.
- [2] J. J. Cronin and S. A. Taylor, "Measuring service quality: A reexamination and extension," *Journal of Marketing*, vol. 56, no. 3, pp. 55-68, 1992, doi: 10.1177/002224299205600304.

- [3] M. Saeidenia and F. Ashrafi, "Banking service quality assessment: A comparison of employee and customer perspectives in public and private banks," *Quarterly Journal of Banking Management Research*, vol. 2, no. 4, pp. 101-123, 2008.
- [4] E. Ramadanpour, R. Mohammadi, and N. Hosseini, "Application of SERVPERF and AHP in evaluating electronic banking service quality," *Journal of Financial Technologies*, vol. 5, no. 2, pp. 45-67, 2011.
- [5] Solica, "Analysis of electronic banking service quality in eastern Iran," 2020.
- [6] A. Yousefi and N. Teymouri, "Presenting an Indigenous Banking Service Quality Model with a Hybrid Approach (FAHP-ANP)," *Quarterly Journal of Strategic Management Studies*, 2020.
- [7] M. Rezaei and B. Mohammadi, "Analysis of the Service Quality Gap in Private Banks Using the SERVQUAL Model," *Journal of Financial Services Management*, 2022.
- [8] Z. Hosseini and S. Karimi, "Evaluation of Banking Service Quality Using Structural Equation Modeling (SEM)," *Quarterly Journal of Financial and Banking Research*, 2023.
- [9] E. Fallahi and S. Ahmadi, "Investigating the Role of Banking Service Quality on Customer Trust and Loyalty," *Business Management Research Journal*, 2021.
- [10] J. Chen, H. Liu, and K. Wang, "A fuzzy ANP approach for service quality evaluation in banking," *International Journal of Bank Marketing*, vol. 36, no. 4, pp. 780-798, 2018, doi: 10.1155/2018/1389879.
- [11] F. Sudirjo, D. M. Ratna Tungga Dewa, L. Indra Kesuma, L. Suryaningsih, and E. Yuniarti Utami, "Application of The User Centered Design Method To Evaluate The Relationship Between User Experience, User Interface and Customer Satisfaction on Banking Mobile Application," *Jurnal Informasi Dan Teknologi*, vol. 6, no. 1, pp. 7-13, 2024, doi: 10.60083/jidt.v6i1.465.
- [12] L. Chitrakar, I. Panta, B. Paneru, S. Poudel, and L. Kansakar, "User-Centric Design of UI for Mobile Banking Apps: Improving UI and Features for Better Customer Experience," *SSRN*, 2024, doi: 10.2139/ssrn.5056829.
- [13] T. E. Sebayang, D. B. Hakim, T. Bakhtiar, and D. Indrawan, "What drives mobile banking adoption due to Covid-19 outbreaks? An empirical investigation of the younger generation in Indonesia," in *Seventh Information Systems International Conference*, 2024, vol. 234, pp. 1192-1203, doi: 10.1016/j.procs.2024.03.115.
- [14] L. D. Tsobdjou, S. Pierre, and A. Quintero, "A Framework for Security Assessment of Android Mobile Banking Applications," *Comput. Networks Commun.*, 2024, doi: 10.37256/cnc.2120243929.
- [15] A. Muhammad, Z. Fahad, S. Sharjeel Ahmad, and S. Zahir, "Unlocking Mobile Banking Adoption: The Interplay of Interface Design, System Quality, Service Quality, Security, and Customer Involvement," *The Critical Review of Social Sciences Studies*, 2025.
- [16] N. Karina Ayu and A. Khusnul, "The Effects of Mobile Banking Service Quality on the Satisfaction of the Customers of Bank Central Asia (BCA)," *Contemporary Studies in Economic, Finance and Banking*, 2025.
- [17] K. Long and Y. Sook Fern, "From Side Effects to Work Attitudes Influencing Customer Service Quality: Moderating Impacts of Work Experience in Banking Industry," *International Journal of Quality and Service Sciences*, 2025.
- [18] S. A. Miri Rostami, S. Nasiri Abukheili, and R. Kazemi, "Investigating the Impact of Perceived Communication, Contact, Entertainment, and Gamification on Perceived Value of Mobile Banking and Willingness to Continue Using It (Case Study: Sepah Bank Branches in Mazandaran Province)," *Quarterly Journal of Management, Accounting and Economics*, vol. 8, no. 1, pp. 12-29, 2024.
- [19] N. Nurhafihz, "Halal Service Quality: Systematic Review, Conceptual Model and Future Research," *Journal of Islamic Accounting and Business Research*, 2025.