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EXPLORING THE IMPACT OF E-BANKING SERVICE QUALITY ON CUSTOMER SATISFACTION

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ABSTRACT

E-banking service quality and its impact on customer satisfaction is examined: Empirical evidence from Safwa Islamic Bank in Amman (Jordan) It assesses seven aspects: Tangibility, Reliability, Readiness, Empathy, Assurance, Security, and Trust as service quality. The researchers collected data from 432 e-banking customers and tested the hypotheses with SPSS and AMOS. The findings show that Empathy, Responsiveness, Assurance, Security, and Trust significantly contribute to improving customer satisfaction. On the other hand, Tangibles and Reliability have a lesser impact (Ismaeel & Alzubi, 2020). In order to better customer satisfaction, Safwa

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Islamic Bank should improve these important dimensions through training their employees, improving security for customer trust, and providing reliability. By enhancing these factors, the customer experience will be improved, and so the bank's image and competitive position in Jordan's banking industry. As customers increasingly rely on digital banking services, it will be necessary to ensure constant improvement in service quality to develop customer loyalty and sustain a long-term future.

KEYWORDS: E-Banking, Service Quality, Customer Satisfaction, Jordan.

1. INTRODUCTION

Commercial banks must provide high-quality services when needed in the current technological environment (Bhatia & Jain, 2022). Industries have gone online thanks to e-banking, which has increased technological engagement and consumer interaction (Nazir et al., 2021; Shaikh et al., 2021, Mohammad, 2025).

Banks are gradually using new technology to improve customer happiness and retention in order to stay ahead of the competition (Khanfar et al., 2023). A crucial component of this approach is e-banking (Shafiq et al., 2020, Mohammad et al., 2024a). Customers can access banking services from any location without going to a branch thanks to e-banking, which is the automatic delivery of all banking solutions through electronic channels (Karjaluoto et al., 2002; Giridhar & Thampi, 2021, Mohammad et al., 2025a).

Offering top-notch e-banking services is crucial to retaining satisfied and devoted clients. Jordan is not an exception to this trend, as Alqatan and Al-Zoubi (2021) point out, with numerous banking services becoming automated, opening up new options. Consumers today want to conduct all of their business online rather than in person at banks, which forces bank service providers to constantly innovate in order to deliver better, more accessible, and longer-lasting services (Al-Shaikh & Khanfar, 2022). Customers can access banking services whenever they want without having to visit a branch, which makes e-banking convenient (Hassan et al., 2021, Mohammad et al., 2024b).

Customer trust in digital banking platforms has increased with the introduction of AI, mobile banking apps, and safe transaction systems (Rahman et al., 2022). To optimize its advantages, e-banking adoption is currently hampered by cybersecurity risks, system outages, and the digital divide (Chauhan & Shingari, 2021, Mohammad et al., 2025b). In order to stay up with international banking trends and encourage Sharia-compliant financial practices, Islamic banks in Jordan have made investments in digital transformation (Al-Hyari et al., 2022). Offering a smooth and safe banking experience is essential to preserving client happiness and loyalty in a financial environment that is becoming more and more competitive.

1.1. Study Objectives

The study aims to assess how e-banking service quality impacts customer satisfaction at Safwa Islamic Bank in Amman city.

2. LITERATURE REVIEW

The banking industry recognizes that both banks and customers have become increasingly dependent on e-banking services to meet their needs. According to Razaq et al. (2021), commercial banks are using technology to improve client happiness and provide better services. A study on the banking industry in Jordan found that customer satisfaction is significantly improved by the aspects of internet banking service quality (Alsharairi et al., 2020). According to Ahmad et al. (2021), improving consumer satisfaction with e-banking services requires careful consideration of website design, privacy, and security. Tantawi et al. (2022) assert that elements including ease of use, service excellence, and compassion are critical to e-banking client happiness. Numerous studies have validated the impact of e-banking service quality on client loyalty and satisfaction in the banking sector.

2.1 Conceptual Framework

2.1. E-Banking

One of the most inventive turning points in consumer-bank interactions was the opening of Finland's first automated teller machine (ATM) in 1969, which helped to create the first e-banking services (Taloussanomat, 2018). The rapid advancement of information technology and increased competition among banks have led to significant improvements in e-banking and e-financial services., enabling clients to access services through computers, smartphones, and the Internet (Asare & Sacco, 2015).

Customers may now access banking services around-the-clock and with more simplicity thanks to e-banking, which has never been easier for them to adopt (Zahid, 2016, Mohammad et al., 2025c). However, because information and communication technology has grown more slowly in Jordan, e-banking services have proven more challenging to embrace. Because services are mostly offered on Internet and mobile banking platforms, the nation has not yet completely tapped into the potential of e-banking (Alawneh & Alghizzawi, 2018).

Although Jordan's e-banking services are available in some places, their full potential is limited by a lack of infrastructure for information and communication technologies. The nation should concentrate on expanding its technology infrastructure and fostering an atmosphere that supports e-banking services in order to overcome these constraints. If you don't, you'll lose out on the worldwide e-banking trend.

2.2. Customer Satisfaction

A key idea in marketing, customer satisfaction indicates how a customer feels about a product or service (Ismaeel & Bardai, 2019). Customers' evaluations based on value, experience, and expectations are referred to here (Kotler & Keller, 2012, Mohammad et al., 2025d). Numerous studies contribute to our understanding of the dynamics of satisfaction. For example, Lai, Griffin, and Babin (2009) found that customer happiness in retail is influenced by perceived value, service quality, and product quality. Jiang, Wang, and Wang (2019) highlighted the importance of service quality, product quality, and trust in the context of online purchasing, while Chen and Hu (2020) focused on consumer expectations and perceived value in the hospitality sector.

According to these studies, customer happiness is a complicated phenomenon with multiple components. Reliability, security, empathy, responsiveness, and trust are all important factors in financial services, such as e-banking (Parasuraman et al., 1985). Sustaining high levels of satisfaction is essential for competition as digital banking develops. A customer's assessment of e-banking services as a result of an incident is known as customer satisfaction (Khanfar, 2016, Mohammad et al., 2025e). While unpleasant encounters lead to discontent, positive ones increase loyalty and contentment. Because of this, e-banking features have the potential to either raise or lower customer happiness, necessitating ongoing service improvement.

2.3. Customer Satisfaction and E-Banking

Being customer satisfaction would be an important indictor of the success of the provision of services in the banking industry (Ismaeel et al., 2024). Studies indicate a positive association between e-banking service quality and customer satisfaction. Higher levels of service quality in banking results in higher levels of customer satisfaction according to Al-Hawari and Ward (2006).

According to Yang and Jun (2002), the satisfaction levels increase due to the quality of e-banking services. Wang, Chen and Chen (2017) reiterate that perceived usefulness, ease of use, and security enhance customers' satisfaction with e-banking. Customers who are satisfied with banking services will remain loyal and will not leave any bank (Khanfar & Almasri, 2023, Mohammad et al., 2025f). Therefore, it has become important to improve electronic services of banks to enhance satisfaction and improve customer's relations.

A smooth, secure, and easy-to-use digital banking experience helps increase the satisfaction of customers, which ultimately fosters a long-term bond and loyalty with the customers of the bank.

2.4. E Banking Service Dimensions Impacting Customer Satisfaction

E-banking has become compelling technology that will keep growing because of its convenience and usefulness. In today's digital world, customer satisfaction is an essential element in influencing the success and competitiveness of financial institutions. (Ismaeel et al., 2023) Customer satisfaction in e-banking environments rely on a range of service quality dimensions. These dimensions include

2.4.1. Tangibility

Tangibility in e-banking refers to the physical and visual features of services. This covers how websites and mobile apps should look and work so that people will have a good experience. As modern ATMs have been upgraded, they are perceived to enhance service quality. Well-designed communication materials like emails and notifications also provide a tangible feeling of reliability. Using branding on all platforms shows confidence and professionalism. Even though the services are digital, these physical elements are compelling enough to influence customer satisfaction.

2.4.2. Reliability

Reliability refers to the consistency and dependability of the e-banking service. Customers are more likely to be satisfied when they perceive the service to be reliable, meaning the system is consistently available and services are delivered as expected (Nguyen et al., 2020).

The paper highlights reliability but does not address specific issues related to system downtimes or service interruptions. To reduce system downtimes, measures such as investing in robust IT infrastructure and implementing effective contingency plans should be discussed.

2.4.3. Empathy

Empathy involves offering personalized attention to customers based on their unique needs and preferences, which significantly enhances their satisfaction (Wu & Li, 2020). The paper recommends implementing comprehensive training programs that equip employees with communication, emotional intelligence, and problem-solving skills.

These programs should focus on understanding customer expectations, recognizing verbal and non-verbal cues, and tailoring services accordingly to

foster stronger customer relationships and satisfaction.

2.4.4. Responsiveness

Responsiveness, or the bank's ability to quickly and effectively address customer inquiries, complaints, and issues, also plays a vital role in ensuring high levels of satisfaction (Nguyen et al., 2020). The paper suggests implementing automation technologies like chatbots to enhance responsiveness and provide instant support to customers.

2.4.5. Assurance

Assurance encompasses the knowledge, courtesy, and professionalism of the bank's employees, fostering customer confidence in the service. Strategies such as clear guarantees, continuous employee training, and transparent communication can boost customer confidence.

2.4.6. Security and Trust

Security and Trust refer to keeping customers' data and finances secure as well as ensuring that customers feel confident their data or money is safe. The article suggests using important safety measures like encryption and regular updates like two-factor authentication. It is also necessary to have schemes to earn customer trust with measures like continuous updates and transparency on security. Research by Soltani et al. (2020) these features positively contribute to the satisfaction levels of customers in e-banking services.

By working on these aspects, banks can enhance overall customer satisfaction and improve customer experience quickly in rapidly evolving markets to stay ahead of the competition. As customer expectations continue to become more demanding, optimizing these dimensions will also be important so as to maintain long-term loyalty and competitiveness.

2.5. Study Model

Service quality usually refers to the Parasuraman et al. (1988) service quality model, which is a conceptual way to define the effect of service elements on customer satisfaction from a customer perspective. The Tmodel covers customer service quality with seven major aspects that include tangibles and assurance.

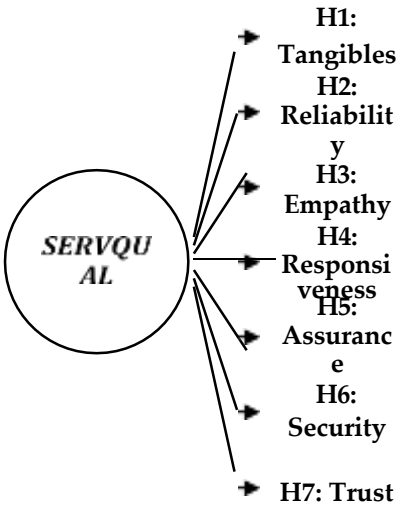

Figure 1: Theoretical Frameworks.
Sources: Compiled by the authors based on existing literature.

2.3. Hypotheses Formulation

Based on the SERVQUAL service quality model, the following hypotheses were formulated:

H1: Tangibles have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

H2: Reliability have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

H3: Empathy have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

H4: Responsiveness have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

H5: Assurance have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

H6: Security have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

H7: Trust have a significant impact on customer satisfaction at Safwa Islamic Bank in Amman, Jordan.

3. STUDY METHODOLOGY

The population under study, sample size, sampling strategy, hypothesis, questionnaire design, analysis technique, and reliability findings are all described in this area of the research design.

3.1. Population and Sample Size

The targeted population of the study was customers of Safwa Islamic Bank, Amman City. Out of 450 questionnaires distributed, 432 valid responses

were received. The Sample Size Was Chosen According To Sekaran (2016) So As To Ensure Statistical Validity & Reliability

3.2. Pretesting and Sampling Method

To ensure the statements were understandable, a pretest of the questionnaire was given to 35 clients. The feedback received led to the amendments that were required being made. It was chosen due to the ease of accessibility to responders as well as large sample size. Even though this can lead to bias, this method can be used for preliminary exploratory research.

3.3. Questionnaire Design

The questionnaire was divided into three sections. The first section consisted of the details concerning the age, income, marital status, and education level of respondents Questions about tangibles, dependability, empathy, responsiveness, assurance, security, and trust were asked in this section. This part had 27 questions to measure their satisfaction. To lessen bias of respondents, a seven-point Likert scale was used (Churchill & Iacobucci, 2019). The purpose of this scale, which is often used in research marketing, is to indicate how the respondent agrees or disagrees with any statement (Burns & Bush, 2020). For the research, Safwa Islamic Bank customers residing in Amman City were convenience sampled. Customers filled out a questionnaire using a 7-point scale.

3.4. Reliability Test

Given the result of the reliability of all study variables and the value of Cronbach alpha is greater than 0.70. According to Hair et al (2019). It tells that measurement scales used for all constructs were reliable and consistent. All seven independent variables – Tangibles, Reliability, Empathy, Responsiveness, Assurance, Security, and Trust – exhibited good internal consistency. The dependent variable was customer satisfaction. Table 1 presents the reliability scores for all constructs The results allow us to validate the instrument.

Table1: Results of Reliability.

Construct	Original Items	Total Mean	Items after CFA	Composite Reliability
Tangibility	5	3.8	2	.72
Reliability	4	3.6	2	.80
Empathy	5	3.4	2	.75
Responsiveness	6	3.6	2	.86
Assurance	6	3.5	3	.83
Security	4	3.2	2	.87
Trust	4	3.2	3	.71
Customer Satisfaction	5	3.7	2	.84

Source: Created by the authors based on data analysis.

This table summarizes the constructs examined in the study, including the number of original items, total mean scores, items retained after confirmatory factor analysis (CFA), and their respective composite reliabilities.

3.5. Confirmatory Factor Analysis (CFA)

New analytical studies show that model indicators are important for Confirmatory Factor Analysis (CFA), a necessary first step for Structural Equation Modeling (SEM). We analyse or evaluate whether or not the number of variables as well as their loadings conform to our expectations through CFA to guarantee the proposed model as veracious representation of data. SEM, which is brief for Structural Equation Modeling, is a statistical process that measures relationships between more than two variables. CFA in this study is applied to check the loadings for seven constructs (which are expected to load into each other), namely, tangibility, reliability, empathy, responsiveness, assurance, security and trust and customer satisfaction. The data was analysed using https://bit.ly/2IG7due 20.0 from SPSS to assess the fit of the proposed model.

The CFA Outcomes Showed Various Fit Indices Indicating the Adequacy of the Model. The value of chi-square was 134.272 which has 107 degrees of freedom that is admissible for fit. The GFI score was 0.968 while the AGFI score was 0.949. This means that the model fits well. The model fit is very good with Incremental Fit Index (IFI) and Tucker-Lewis Index (TLI) being 0.992 and 0.988, respectively. Also, the NFI (Normed Fit Index) and CFI were found to be 0.960 and 0.992 respectively. Since both values are greater than 0.90, the quality of the model is confirmed. The RMSEA score of 0.024 was very good, whereas the CMIN/DF scored at 1.255 which is below the threshold 3.

The results of CFA showed that almost all the factors were confirmed and accepted as having fit indices above the recommended values of Hair et al. (2006). The supposed model on e-banking service dimensions fitted well with data obtained through the study. Moreover, it indicates that the hypotheses are accepted The proposed dimensions of five-star e-banking service were accepted as valid. The model being a good fit indicates that the proposed constructs are valid and reliable for measuring customer satisfaction for e-banking services.

4. HYPOTHESIS TESTING OF GENERATING MODEL

The dependent constructs are directly affected by the independent constructs, showing a direct

relationship. As depicted in Table 2, the Critical Ratio (CR), estimate, and Standard Error (SE) of each parameter are tested in the Generating Model. The findings confirm that hypotheses H3, H4, H5, H6, and H7 significantly impact customer satisfaction directly and positively, as indicated by the critical ratios and p-values. However, the direct effect of hypotheses H1 and H2 on customer satisfaction is positive but insignificant.

Table 2: Results of Hypotheses.

H.	Regression Weights From	To	Estimate	SE	C.R.	P	
H1	Tangibility	Customer Satisfaction	.023	.074	0.324	.744	
H2	Reliability	Customer Satisfaction	.076	.056	1.354	.174	
H3	Empathy	Customer Satisfaction	.235	.068	3.43	***	
H4	Responsiveness	Customer Satisfaction	.451	.085	5.24	***	
H5	Assurance	Customer Satisfaction	.335	.077	4.301	***	
H6	Security	Customer Satisfaction	.465	.097	3.982	.***	
H7	Trust	Customer Satisfaction	.265	.097	2.982	.***	

Source: developed by the authors on the basis of data analysis.

Figure 2: Graphical Results Structural Model.

Sources: developed by the authors on the basis of data analysis.

5. CONCLUSION

This research study has fulfilled its aims by contributing to academic research on client satisfaction in Amman City, Jordan. The study offered valuable insights into the factors that influence customer experiences at Safwa Islamic Bank by analyzing key indicators of satisfaction. According to the path analysis outcome, though the effect of two hypotheses (H1 and H2) on client satisfaction was deemed positive but statistically insignificant, the effect of five hypotheses (H3, H4, H5, H6, and 7) is found to be positive and significant. The study highlights that customer satisfaction with e-services offered by the bank requires empathy, responsiveness, assurance security and trust. The outcome of this research is also in line with study findings of Harout (2007), Yan and Lee (2015), Dora and Ferlita (2016) and Mawwala in 2017. By constantly enhancing these important dimensions, strengthen their competitive position, and build long-term customer loyalty.

So, the results of this study kind of match up with what's happening in digital banking in the region, especially in Jordan. You know, mobile banking apps and AI customer service are really becoming popular. It turns out that things like empathy, being responsive, providing assurance, ensuring security, and building trust are super important when it comes to keeping customers happy. This really shows how much people value personalized and safe digital experiences nowadays. On the flip side, when it comes to things like physical presence and reliability, those didn't seem to matter as much. Maybe that's because of some cultural or tech-related stuff that's specific to this area. So, what does this Jordanian banks can improve customer satisfaction, all mean? Well, it suggests that banks should really pay attention to these crucial aspects if they want to boost their competitive edge and build loyal customers for

the long haul.

5.1. Recommendations

To improve customer satisfaction and strengthen the competitive position of Safwa Islamic Bank, it should enhance the service dimensions of empathy, responsiveness, assurance, and security through employee training and the application of two-factor authentication and encryption. The bank should also embrace cutting edge technologies like AI and Blockchain in service delivery. Further, the bank ought to launch a customer digital literacy program to teach customers how to utilize the bank's online services. With the continued impact of Covid-19 on the people, the bank should continue to assist customers who prefer digital banking by offering safe online service. Regular customer feedback, resolving communication issues, liaising with the Central Bank of Jordan for regulatory changes, and so forth, are good ways to stay the customers' favorite trusted digital banker.

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