

Using Digital Queues to Achieve Customer Satisfaction: The Intermediary Role of Improving Service Performance "An Analytical Study on the Trade Bank of Iraq-Basra Branch"

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Abstract: There is no doubt that measuring customer satisfaction is one of the main factors for the success and continuity of organizations in the market. Iraq and its private banking institutions have made great strides in the field of services and customer satisfaction, and they seek to reduce time and speed of completion to provide better services to improve the reputation of the institution and its survival and continuity, This study aimed at investigating the relationship between customer satisfaction and Digital Queues through improving banking service. The study was implemented in the Trade Bank of Iraq - Basra Branch, and the study sample was (118) of the bank's customers, who were randomly selected. Statistical methods were used from descriptive statistics and proving the hypothesis by simple regression, and the results were reached that the device used in the bank that controlled the digital queues for services for customers was a complete achievement of the smoothness of the service process, reduced waiting to distribute service outlets, with excellent and correct performance by employees. The research recommends the necessity of using modern technical devices in the field of organizing digital queues, which contributes to raising the use of information technology and its multiple devices and technologies, helping to achieve speed in completing tasks, as the digital culture of the institution shows its adaptation to the digital environment inside and outside Iraq.

Keywords: Digital Queues, Improving Services performance, Customer Satisfaction.

1. INTRODUCTION

The banking sector in Iraq has witnessed many developments in the field of technology and the use of modern technologies for two decades and has increased with the wave of recent developments in technology, especially in the field of providing banking services to those requesting them through programs and applications that give the customer a waiting number until his turn and register the request in the device responsible for him. There is a great interaction between individuals and information technology represented by the devices, equipment and technologies that were found to serve him, especially his use of the mobile phone, which made it easy for him to obtain high-quality banking services applications that respond to his request within the waiting line for requests so that he is aware that the request is being responded to by the competent employee. The digital queues also help banks know the number of requests from customers and the speed of implementing them from inquiries, complaints, and registering a new bank registration, or updating information. It also contributes to saving the customer's number and communicating with him about future developments in banking services and the extent of his satisfaction with the bank, which is recorded in an electronic questionnaire sent to him by the bank.

Digital services create advantages and enhance customer satisfaction as well as to deal with their requests about the quality of the electronic recovery service for security reasons. The increasing use of digital technology has led to an increase in demand for digital banking services from customers of non-corporate banks, such as individual banking customers. Today, a large number of conventional banks are digital banks driven primarily by digital trends. People are

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compelled to use digital banking services for their regular transactions due to the rising pervasiveness of technology in society. While there might be some advantages to this, it deviates from the standard that a bank customer ought to be accustomed to. Customers will need to adjust their routines in light of this change, which could jeopardize their ability to retain prior levels of customer satisfaction.

2. LITERATURE REVIEW AND HYPOTHESES

In the contemporary business landscape, banks recognize the importance of providing exceptional customer service as more than just an additional benefit, but rather as a basic strategic necessity for the purpose of attracting and retaining customers (Anika *et al.*, 2023), and it also achieves a competitive advantage for the institution and makes it occupy a prestigious marketing position. The value of customer satisfaction lies in cases including: -

1. An employee's immediate response to a customer's inquiry.
2. Providing a 24-hour response service for any customer complaint.
3. Appreciation and respect from the employee is very important in dealing with the customer.
4. Using high-level words of appreciation for the customer is very important in providing a recommendation to customers in the bank. The transition from traditional methods to technological methods in the banking sector is a major revolution in the work of banks, and it was not born today, but two decades ago and increased with the emergence of Covid 19 and the technological revolution was important for the continuity of services and opened many applications that transfer money and use smart cards on the one hand, and most importantly, the use of modern technologies to provide services directly through traffic devices in digital queues so that each customer has a special number to wait for his turn to obtain the service, and this plays a major role in the field of receiving services quickly and with high quality in employee cabins, and also the employee focuses his activity on providing distinguished and high-quality services so that he achieves maximum satisfaction and acceptance (Apriliani *et al.*, 2024).

Rijwani *et al.*, (2017) found a direct link between service quality and customer satisfaction and mentioned two categories in service quality, namely mobile banking customer service quality and mobile banking application quality.

Digital services enabled online travel agencies (OTAs) to conduct customer marketing and selling activities on their platforms (Sharma *et al.*, 2020). Maintaining the quality of online services and customer satisfaction while using the platform is essential. Lee *et al.*, (2008).

2.1 Hypothetical Study Plan and Its Hypotheses:

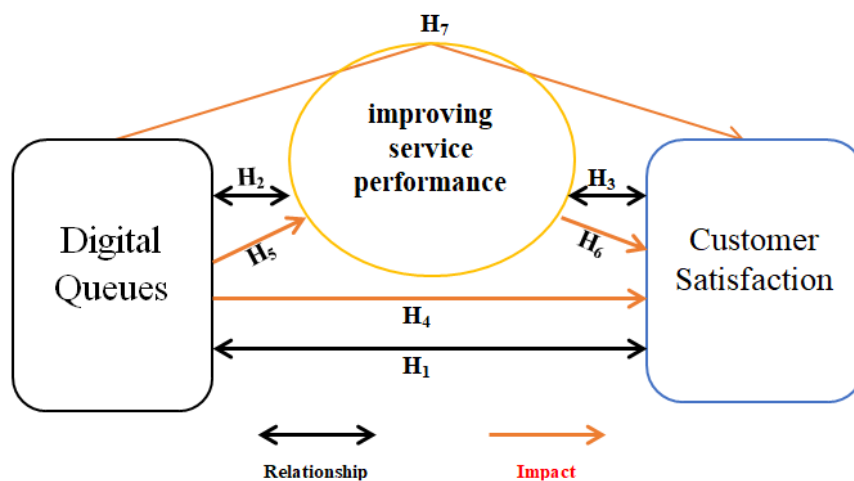


Figure 1: The hypothetical study plan
 Source: Prepared by the researcher

- H1: There is a statistically significant correlation between digital queues and customer satisfaction.
 H2: There is a statistically significant correlation between digital queues and improving service performance.
 H3: There is a statistically significant correlation between improving service performance and customer satisfaction.
 H4: There is a statistically significant impact of digital queues on customer satisfaction.
 H5: There is a statistically significant impact of digital queues on improving service performance.
 H6: There is a statistically significant impact of improving service performance on customer satisfaction.
 H7: There is a statistically significant impact of digital queues on improving service performance through improving service performance.

3. METHODOLOGY

3.1 The Study Problem:

The presence of digital use in banking institutions is a distinctive sign of technical service progress in them, especially with the presence of digital applications and platforms that respond to customer requests and inquiries and reduce the congestion on attendance. One of the biggest obstacles to customer satisfaction is the long waiting period to respond to a specific problem that the customer suffers from, which may be simple or technical and he is in dire need of a solution, but his location is far from the bank, so digital platforms for digital queues help to identify requests and the response number, which gives him a waiting period that is calculated from the response to solve the problem: The problem of the study is represented in answering the following question: "What is the relationship between achieving customer satisfaction and Digital Queues within the framework of improving the services provided by banks.

3.2 Importance of the Study:

The importance of the study lies in the role of modern technologies in improving Digital Queues to provide customers with the best services quickly and accurately, improve their satisfaction with services and give the best evaluation of service performance. It is summarized in the following: -

1. Clarifying the concept of digital queues as an important entry point for the customer service industry.
2. Clarifying customer satisfaction by ensuring that services are fast and of high quality.
3. Modern technologies achieve high service improvement as they organize the skill path, which reduces pressure on employees and gives them enough time to respond to customer requests in an appropriate and acceptable manner and achieve their satisfaction.

3.3 Objective of the Study:

1. Explaining the type of correlation between digital queues and customer satisfaction.
2. Explaining the type of correlation between digital queues and improving service performance.
3. Explaining the type of correlation between improving service performance and customer satisfaction.
4. Knowing the extent of the impact of digital queues on customer satisfaction.
5. Knowing the extent of the impact of digital queues on improving service performance.
6. Knowing the extent of the impact of improving service performance on customer satisfaction.
7. Knowing the extent of the impact of digital queues on customer satisfaction through improving service performance.

3.4 Description of the Surveyed Sample

Questionnaire forms were distributed to a sample of 118 customers of the Iraqi Commercial Bank – Basra Branch. The demographic information in the questionnaire included gender, educational qualification, and the number of interactions with the bank.

4. Digital Queues: -

Represents the amount of time a customer waits to obtain a service from a specific institution, and organizes access to the employee responsible for providing the service in a way that achieves justice, equality and preference according to attendance to receive the service (Pholkerd *et al.*, 2024). The emergence of digital banking platforms has revolutionized the banking industry by enabling users to access banking services and transactions on their phones and laptops (Smirnova *et al.*, 2024). This has eliminated the need for physical banking buildings, allowing banks to focus on enhancing the customer experience and benefiting from the advancement of digital technologies (Maduwinarti *et al.*, 2024). The advent of artificial intelligence (AI), for example, can be of great benefit in revolutionizing service provision by the public sector, which has been marred by delays in assessing the impact of digital banking services on the levels of satisfaction of individual banking customers in the business area in the modern world (Duc, 2024). Through which the traditional process has been transformed into a digital systematic process, giving a new face to the global banking sector (Khan *et al.*, 2021). However, the use of modern equipment and software is one aspect of the digital transformation in banking (Burodo *et al.*, 2024). It also includes reviewing administrative tasks and communications. The digital organizational culture ensures online banking, innovative software, and customer transaction service rules around the clock, which enhances the pace of competition in the private and government banking sector. Many traditional banks around the world have now become digital banks dominated by digital trends (Lakchan & Samaraweera, 2023). Robots for organizing customer requests for service are linked to algorithms and the answering process according to the answers previously stored in the program and waiting for the response takes time. Internet applications and social networking sites have become very important today, as most people use them. Institutions should benefit from them to communicate with the customer and respond to his requests and desires and be close to him. This gives speed and increases the efficiency of the employee's performance as well as the institution (Alnemeh & Razouk, 2024). It also helps to communicate 24 hours a day with the customer and give him attention and solve his problem quickly at all times and at the lowest cost. His ideas can be taken through a comment or like. The use of modern technology is also useful in giving a recommendation from the customer to family and relatives and has a great benefit in increasing the number of customers for the bank (Burodo *et al.*, 2024).

5. Improving Service Performance:

Improving service performance is the responsibility of the competent employee, and banks provide modern technologies from advanced hardware software that help in providing the best services from the time of registering the service request via the waiting device and taking a number until reaching the designated service cabin. The shorter this time, the more customer satisfaction is achieved, provided that the service is of high quality (Sinha *et al.*, 2024). The customer's opinion appears in the services provided to him and the extent of his satisfaction and approval of it and his exit from the bank feeling acceptance of the services and offering his thanks to the competent employee, and if the application is a service waiting request, there will be quick responses to it (Khan *et al.*, 2021). In simple terms, digitization of banking means that the traditional services provided by banks are now provided through digital means (Lo *et al.*, 2024). These services include, but are not limited to, money transfers between bank accounts, controlling and viewing bank account details, asking for information regarding completed transactions, verifying bank account balances, paying bills, administrative loans, and more (Sofiyah *et al.*, 2023). According to (Lakchan & Samaraweera, 2023), digital banking is anticipated to offer customers a simple, safe, and easy way to conduct banking transactions from the comfort of their own home, at any time of day, using a laptop or personal computer and the bank's mobile application on a smartphone or tablet. Customer satisfaction and digital service quality factors: a link In contrast to traditional banking, the relationship between the variables influencing digital service quality and customer satisfaction in online banking is substantially different (Alnemeh & Razouk, 2024). Online banking workers can interact with a website instead of a human, which saves costs for the banking system and improves customer relations (Amankwah *et al.*, 2023). The customer often contemplates services that exceed his expectations, it is a general feeling on his part that includes emotional reactions and it differs from one individual to another. It is a behavior related to the feeling of satisfaction and compares expectations with results (Mwababa & Hapompwe, 2024). The more the degree of fulfillment of the consumer's requirements and desires increases, the more satisfied he is with the institution and its employees. It can be general beliefs that the program fulfills the customer's desires in services or is superior to them (Lundgren & Nordborg, 2024). The institution takes a prestigious position in the market and their competitive ability increases based on the customer's experience and his continuity in dealing with him and giving a recommendation to those wishing to deal with him (Awwad *et al.*, 2024). The ten dimensions, responsiveness, reliability, capability, accessibility, courtesy, communication, credibility, tangibility, security, and customer understanding have been used as an important part of obtaining customer satisfaction with the service (Pio *et al.*, 2024)

6. Customer Satisfaction:

Customer satisfaction is defined as a transient emotion or willingness that can be influenced by various factors, and being driven by customers is crucial to achieving a competitive advantage in the banking industry. Therefore, banks must use different methods, such as service redesign and task-focused strategies, to ensure customer satisfaction (Al-Sahar, 2024). An increase in the level of loyalty and retention can be adopted through perception and cumulative activation towards customer satisfaction (Amankwah *et al.*, 2023). Satisfaction is the level of service expectation during the ordering process until the service is acquired, which makes customers feel satisfied, dissatisfied, disappointed, or excited (Lundgren & Nordborg, 2024). Digital technology can support the service process to generate this service, communicate it, and provide value to customers and stakeholders (Sofiyah *et al.*, 2023), and satisfaction is the level of expectation of this service. When this level of service expectations is met (Sinha *et al.*, 2024), the customer feels satisfied. Online banking facilitates money transfers, balance inquiries, bill payments, account information, and pending payment requests (Alnemeh & Razouk, 2024).

4. EMPIRICAL RESULTS

4.1 Statistical Description of the Three Studied Variables

This section focuses on determining the response rates, overall averages, frequency distributions, means, standard deviations, and coefficients of variation for the three studied variables: Digital queues, customer satisfaction, and service performance enhancement. The details are presented in Table 1, which includes the overall average, frequency distributions, means, standard deviations, coefficients of variation, and response rates for the studied variables.

Table 1

Response Intensity	Coefficient of Variation	Standard Deviation	Mean	Response Scale										Variable Codes
				Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		
				%	S	%	S	%	S	%	S	%	S	
78.33	21.30	0.81	3.92	0.95	1.13	8.25	9.75	16.53	19.50	46.76	55.13	27.54	32.50	Digital queues

73.22	28.74	1.04	3.66	1.94	2.29	17.93	21.1	17.93	21.14	36.57	43.14	25.66	30.29	Service Performance Enhance
81.89	18.13	0.72	4.09	1.46	1.71	3.63	4.43	8.59	10.14	56.30	66.43	29.89	35.29	Customer Satisfaction

From Table (1) above, it can be observed that the variable Digital queues achieved a response rate of 78.33%, with a mean of 3.92, a standard deviation of 0.81, and a coefficient of variation of 21.30. This variable also attained an overall agreement percentage of 74.3%.

The variable Service Performance Enhancement recorded a response rate of 73.22%, with a mean of 3.66, a standard deviation of 1.04, and a coefficient of variation of 28.74. It achieved an overall agreement percentage of 62.23%.

Lastly, the variable Customer Satisfaction achieved the highest response rate of 81.89%, with a mean of 4.09, a standard deviation of 0.72, and a coefficient of variation of 18.13. This variable also achieved the highest overall agreement percentage of 86.19%.

From Table (1), it is evident that the variable Customer Satisfaction demonstrated the highest response rate (81.89%) and the highest overall agreement percentage (86.19%) when compared to the other studied variables.

4.2 Measuring Questionnaire Reliability

The stability of responses regarding a specific value represents the reliability of the questionnaire. The consistency of responses across different samples confirms the reliability of the surveyed sample's responses. Reliability refers to the degree of consistency in responses and is measured using the stratified alpha coefficient, as highlighted by Feldt & Brennan (1989).

The Reliability Coefficient is categorized into Three Levels:

- Values exceeding 70% are considered high-level reliability.
- Values between 40% and 70% are considered moderate-level reliability.
- Values below 40% are considered low-level reliability.

Cronbach's alpha coefficient is defined as a measure of test reliability and validity. It is an essential metric for research results and their generalization.

Table (2) below illustrates the stratified Cronbach's alpha reliability test for the study variables:

Table 2: Reliability Measurement of Study Variables

Core Variables	Stratified Alpha Coefficient for Combined Dimensions
Digital queues	0.83
Service Performance Enhancement	
Customer Satisfaction	

From Table (2) above, it is observed that the stratified alpha coefficient value is 0.83, which is greater than 0.70 for the study variables. This indicates that there is strong reliability for the study variables based on the stratified alpha coefficient.

4.3 Internal Consistency among the Studied Variables

Internal consistency is defined as the strength of the correlation among the questionnaire items pertaining to each variable. The values for this measure are calculated by determining the average of the absolute correlation coefficients for all item pairs within a single variable. The purpose of this measure is to assess the extent of correlation among the items for each variable it represents.

Table (3) below presents the results of the internal consistency test for the main variables under study.

Table 3: Internal Consistency Values for the Main Variables

Inter-Item Correlations					
Main Variables	Mean	Minimum	Maximum	Variance	NO. of Item
Self-Queuing	0.21	0.003	0.50	0.022	8
Service Performance	0.40	0.122	0.71	0.036	7
Customer Satisfaction	0.30	0.042	0.53	0.028	7

4.4 Internal Consistency Values

BrckaLorenz & Nelson (2013) defined the internal consistency value as an average between the range of 0.15 to 0.5, indicating that there is internal consistency among the studied variables.

From Table (3) above, it is observed that internal consistency exists within the specified range. Specifically, for the variable Self-Queuing, the average value was 0.21, with the lowest correlation between questions being 0.003 and the highest correlation between questions being 0.50. The variance value between the questions for this variable was 0.022.

For the variable Service Performance, the average value was 0.40, with the lowest correlation between questions being 0.122 and the highest correlation being 0.71. The variance between the questions for this variable was 0.036.

For the variable Customer Satisfaction, the average value was 0.30, with the lowest correlation being 0.042 and the highest correlation being 0.53. The variance between the questions for this variable was 0.028.

4.5 Common Method Bias (CMB) Test

The Common Method Bias (CMB) test is essential for obtaining accurate and valid estimates and relationships. Studies have indicated that this bias arises from several factors, such as:

- Not using diverse sources for data collection
- Administering the scale at the same time
- Lack of variety in the Likert scale used in the questionnaire
- Similarity and ambiguity in some items
- Length of the questionnaire, among others.

One of the problems caused by this bias is the distortion of relationships between variables, leading to inaccurate results. To detect the presence or absence of this bias, the Harman Single Factor Test was used. According to Bagozzi & Yi (1991), if the value of this test exceeds 50%, it indicates the presence of common method bias.

For the current study, the value of this test was CMB = 22.641%, which is less than 50%, meaning we can conclude that there is no issue with common method bias.

4.6 Test of Normality for Data

The Kolmogorov-Smirnov statistical test was used to assess the degree to which the probability distribution of the studied variables conforms to a normal distribution. It is important to note that failure to meet this statistical assumption could distort the results and necessitate the application of tests that are not affected by the validity of this assumption.

Table 4: presents the normality test results for the study data

Main Variables	Test of Normality		
	Kolmogorov Smirnov		
	Statistic	df	sig
Digital queues	0.193	118	0.000
Service Performance Enhancement	0.148	118	0.000
Customer Satisfaction	0.175	118	0.000

From Table (4), it is observed that the P-value is less than 0.05, indicating the rejection of the null hypothesis and the acceptance of the alternative hypothesis. This suggests that the three variables do not follow a normal distribution. Given the violation of this assumption, traditional estimation methods cannot be used, and alternative estimation methods that do not require this assumption should be applied.

4.7 Correlation Hypotheses

Main Hypothesis 1:

There is a statistically significant correlation between the variable Digital queues and the variable Customer Satisfaction at a significance level of ($\alpha \geq 0.05$).

The results in Table (5) indicate a positive correlation between the Digital queues variable and the Customer Satisfaction variable, as evidenced by the correlation coefficient value of 0.28. This relationship is statistically significant based on the P-value, which is 0.029, and is less than 0.05.

This leads us to accept the study hypothesis stating: "There is a correlation between the Digital queues variable and the Customer Satisfaction variable," and this relationship is positive and statistically significant at the $0.05 > \alpha$ significance level.

Table 5: Correlation Coefficient between the Digital queues Variable and the Customer Satisfaction Variable

Independent Variable	Relationship Direction	Dependent Variable	Correlation Value	95% Confidence Interval		P-value
				Lower	Upper	
Digital queues	<-->	Customer Satisfaction	0.28	0.042	0.476	0.029

Source: Prepared by the researcher based on the results of statistical analysis using AMOS V24 software, n=118.

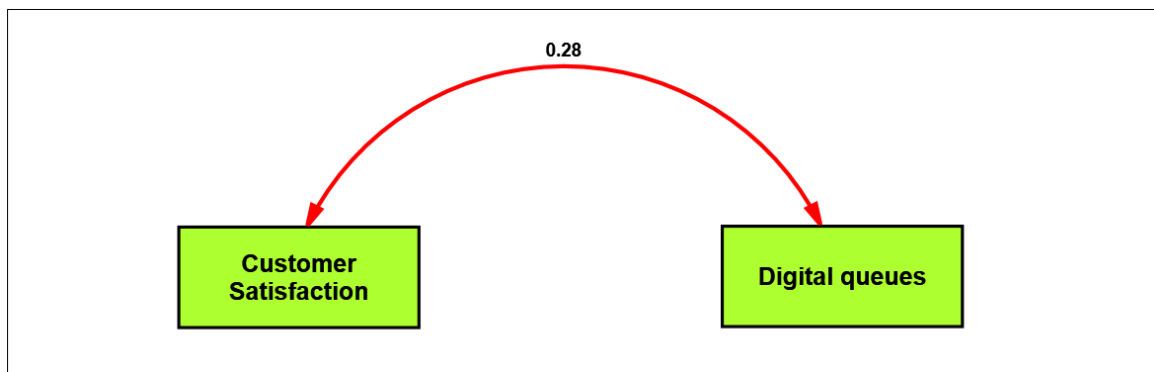


Figure 1: Correlation Coefficient between the Digital queues Variable and the Customer Satisfaction Variable

Main Hypothesis 2:

There is a statistically significant correlation between the Digital queues variable and the Service Performance Enhancement variable at a significance level of $(\alpha \geq 0.05)$.

The results in Table (6) indicate a positive correlation between the Digital queues variable and the Service Performance Enhancement variable, as evidenced by the correlation coefficient value of 0.63. This relationship is statistically significant based on the P-value, which is 0.002, and is less than 0.05.

This leads us to accept the study hypothesis stating: "There is a correlation between the Digital queues variable and the Service Performance Enhancement variable," and this relationship is positive and statistically significant at the $0.05 > \alpha$ significance level.

Table 6: Correlation Coefficient between the Digital queues Variable and the Service Performance Enhancement Variable

Independent Variable	Relationship Direction	Mediating Variable	Correlation Value	95% Confidence Interval		P-value
				Lower	Upper	
Digital queues	<-->	Service Performance Enhancement	0.63	0.490	0.736	0.002

Source: Prepared by the researcher based on the results of statistical analysis using AMOS V24 software, n=118.

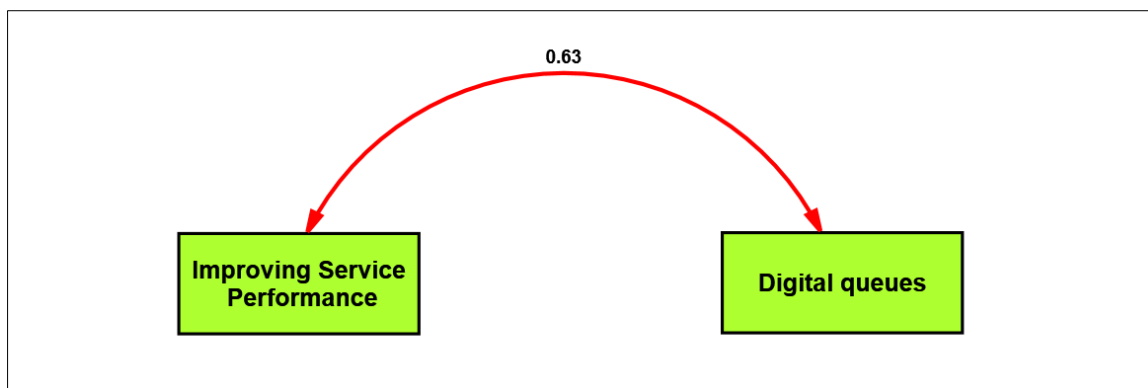


Figure 2: Correlation Coefficient between the Digital queues Variable and the Service Performance Enhancement Variable

Main Hypothesis 3:

There is a statistically significant correlation between the Service Performance Enhancement variable and the Customer Satisfaction variable at a significance level of ($\alpha \geq 0.05$).

The results in Table (7) indicate a positive correlation between the Service Performance Enhancement variable and the Customer Satisfaction variable, as evidenced by the correlation coefficient value of 0.49. This relationship is statistically significant based on the P-value, which is 0.002, and is less than 0.05.

This leads us to accept the study hypothesis stating: "There is a correlation between the Service Performance Enhancement variable and the Customer Satisfaction variable," and this relationship is positive and statistically significant at the $0.05 > \alpha$ significance level.

Table 7: Correlation Coefficient between the Service Performance Enhancement Variable and the Customer Satisfaction Variable

Mediating Variable	Relationship Direction	Dependent Variable	Correlation Value	95% Confidence Interval		P-value
				Lower	Upper	
Service Performance Enhancement	<-->	Customer Satisfaction	0.49	0.333	0.617	0.002

Source: Prepared by the researcher based on the results of statistical analysis using AMOS V24 software, n=118.

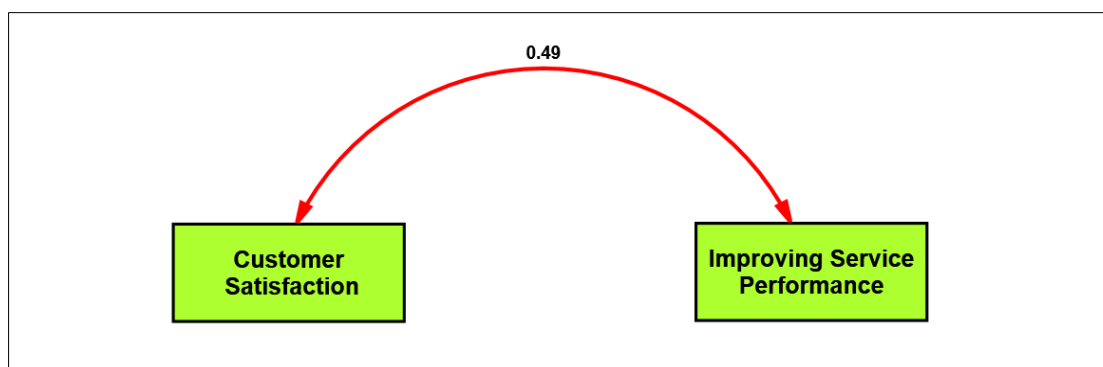


Figure 3: Correlation Coefficient between the Service Performance Enhancement Variable and the Customer Satisfaction Variable

4.8 Hypotheses of Impact

Main Hypothesis 1:

There is a statistically significant impact of the Digital queues variable on the Customer Satisfaction variable at a significance level of ($\alpha \geq 0.05$).

Table (8) and Figure (4) show the following:

- There is a positive impact of the Digital queues variable on the Customer Satisfaction variable, as evidenced by the regression coefficient estimate (β) value of 0.222. This impact is statistically significant based on the P-value,

which is 0.028, and is less than 0.05. Additionally, the confidence interval boundaries (Lower and Upper) for the 95% Confidence Interval are similar at the 0.05 significance level.

This leads us to accept the study hypothesis stating: "There is an impact of the Digital queues variable on the Customer Satisfaction variable," and this impact is positive and statistically significant at the $0.05 > \alpha$ significance level.

Table 8: Results of the Impact of the Digital queues Variable on the Customer Satisfaction Variable

Independent Variable	Direction of Impact	Dependent Variable	Regression Coefficient Estimate(β)	95% Confidence Interval		P-value
				Lower	Upper	
Digital queues	←	Customer Satisfaction	0.222	0.033	0.370	0.028

Source: Prepared by the researcher based on the results of statistical analysis using AMOS V24 software, n=118.

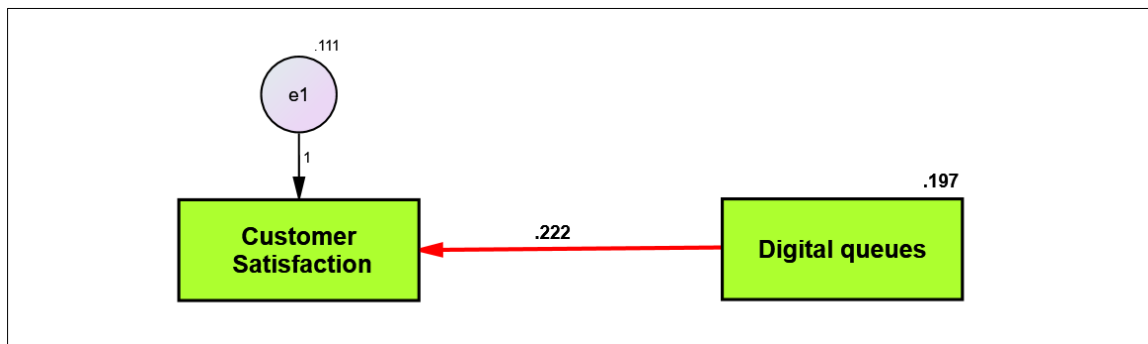


Figure 4: The impact of the Digital queues Variable on the Customer Satisfaction Variable.

Main Hypothesis 2:

There is a statistically significant impact of the Digital queues Variable on the Service Performance Improvement Variable at a significance level of ($\alpha \geq 0.05$). Table (9) and Figure (5) below show the following:

- A positive impact of the Digital queues Variable on the Service Performance Improvement Variable, as indicated by the regression coefficient Estimate (β) value of (1.024). This impact is statistically significant with a p-value of (0.002), which is less than (0.05). Additionally, the lower (Lower) and upper (Upper) bounds of the 95% confidence interval show consistent signs at a significance level of (0.05).

This leads us to accept the hypothesis of the study stating: "There is an impact of the Digital queues Variable on the Service Performance Improvement Variable," and this impact is positive and statistically significant at a significance level of ($0.05 > \alpha$).

Table 9: Results of the impact of the Digital queues Variable on the Service Performance Improvement Variable

Independent Variable	Impact Direction	Mediating Variable	Regression Coefficient Estimate(β)	95% Confidence Interval		P-value
				Lower	Upper	
Digital Queues	←	Service Performance Enhancement	1.024	0.855	1.186	0.002

Source: Prepared by the researcher based on statistical analysis results using AMOS V24 software, n=118

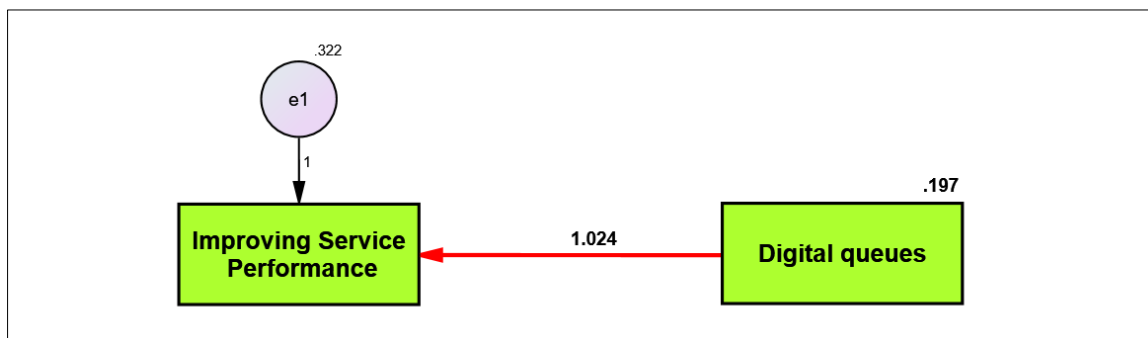


Figure 5

Main Hypothesis 3:

There is a statistically significant impact of the service performance improvement variable on the customer satisfaction variable at a significance level ($\alpha \geq 0.05$). The table (10) and figure (6) below show the following:

- A positive impact of the service performance improvement variable on the customer satisfaction variable, as indicated by the regression coefficient Estimate (β) value of (0.233). This impact is statistically significant with a p-value of (0.001), which is less than (0.05). Additionally, the confidence intervals (Lower and Upper) for the confidence range of (95% Confidence Interval) at a significance level of (0.05) have similar signs.

This leads us to accept the study hypothesis, which states that "there is an impact of the service performance improvement variable on the customer satisfaction variable," and this impact is positive and statistically significant at a significance level ($0.05 > \alpha$).

Table 10: Results of the impact of the service performance improvement variable on the customer satisfaction variable

Mediating Variable	Impact Direction	Dependent Variable	Regression Coefficient Estimate(β)	95% Confidence Interval		P-value
				Lower	Upper	
Service Performance Enhancement	←	Customer Satisfaction	0.233	0.163	0.311	0.001

Source: Prepared by the researcher based on the results of statistical analysis using AMOS V24 software, n=118

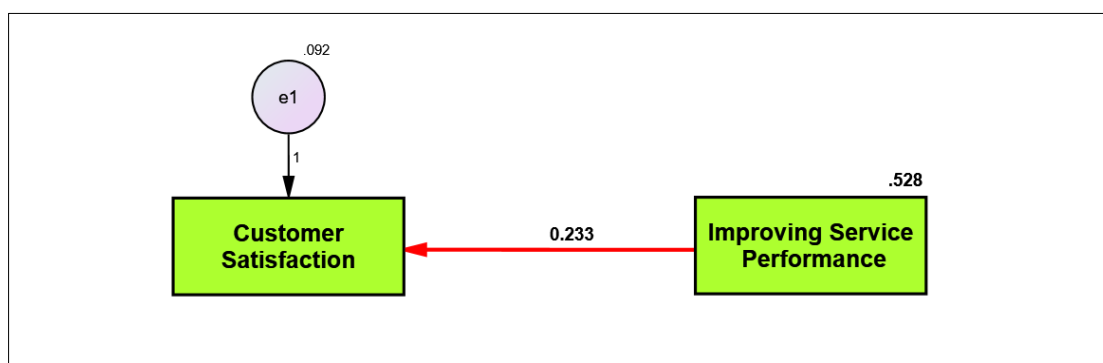


Figure 6: The impact of the variable "Service Performance Improvement" on the variable "Customer Satisfaction"

Main Hypothesis Four:

There is a statistically significant impact of the digital queue variable on the customer satisfaction variable, mediated by the service performance improvement variable, at a statistical significance level ($0.05 \leq \alpha$). The table (11) and figure (7) show the following:

The direct impact of the digital queue variable on the customer satisfaction variable was inverse, as indicated by the regression coefficient estimate between them, which equals (-0.027). This estimated coefficient represents the direct impact of the digital queue variable on the customer satisfaction variable, reflecting the relationship between these two variables. Additionally, this impact was not significant, as evidenced by the p-value, which was (0.810), greater than 0.05. Furthermore, the signs of both the lower (Lower) and upper (Upper) bounds of the 95% Confidence Interval differ at a significance level of (0.05).

However, the indirect impact of the digital queue variable on the customer satisfaction variable, mediated by the service performance improvement variable, was also positive, with a regression coefficient estimate of (0.249). This value represents the indirect impact of the digital queue variable on the customer satisfaction variable through the mediation of service performance improvement. Moreover, this impact was significant, as shown by the p-value, which was (0.001), less than 0.05. Additionally, the signs of both the lower (Lower) and upper (Upper) bounds of the 95% Confidence Interval were consistent at a significance level of (0.05).

Thus, based on the non-significant direct impact and the significant indirect impact, there will be full mediation of the digital queue variable in the customer satisfaction variable, mediated by the service performance improvement variable.

By using the AMOS software, the direct and indirect impacts of the digital queue variable on customer satisfaction, mediated by the service performance improvement variable, are illustrated in Table (11) below:

Table 11: Direct and Indirect Impact Analysis of the Digital Queue Variable on Customer Satisfaction, Mediated by the Service Performance Improvement Variable

Type of Mediation	P	Confidence Interval 95%		Estimate	Type of Impact	Dependent Variable	Path of Impact	Mediating Variable	Path of Impact	Independent Variable
		Upper Bound	Lower Bound							
Full Mediation	0.001	0.356	0.169	0.249	Indirect Impact	Customer Satisfaction	↓	Service Performance Improvement	↓	Digital Queues
	0.810	0.145	-0.196	-0.027	Direct Impact					

Source: Prepared by the researcher based on statistical analysis results using AMOS V24 software, n=118

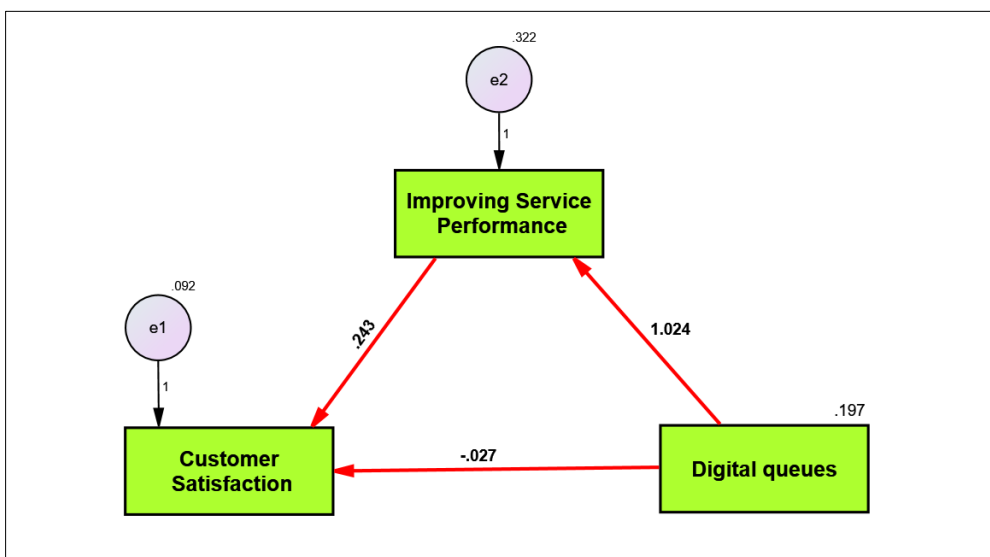


Figure 7: The impact of the variable "Digital Queues" on the variable "Customer Satisfaction" mediated by the variable "Service Performance Improvement."

5. CONCLUSIONS

Customer satisfaction is a concept that stems from the behavioral approach (1997) and at the same time it can help organizations expand and keep customers happy while also improving the organization's service performance. According to (Gilbert and Veloutsou, 2007). Expectation is a preconceived idea or belief about the delivery of a service that serves as a standard or reference for evaluating the performance of a product. So customer satisfaction is a tried and true concept when it comes to consumer behavior, and many other studies have been conducted on the many independent factors that affect customer satisfaction .However, the model was created using the variables of digital queues in addition to improving service performance and demonstrating their role individually and collectively in customer satisfaction, and accordingly the study developed the research model further based on the information collected from the literature (Lee *et al.*, 2008, Rijwani *et al.*, 2017, Apriliani *et al.*, 2024 & Anika *et al.*, 2023).

The results showed a significant positive association between the independent study variables (digital queues) and the intermediate (improving service performance) with the dependent variable (customer satisfaction), except for the

indirect effect. When the variable (improving service performance) was entered as an intermediate variable, it showed a greater effect in the analysis model than the variable (digital queues). This guides us to the fact that improving service performance in the bank, the field of study, will contribute to achieving customer satisfaction, regardless of digital queues. However, the study suggests conducting more studies in order to achieve customer satisfaction in other Iraqi banks. Moreover, with the prevailing economic and technological situation in Iraq, most people have started working through electronic platforms to facilitate their daily lives. Therefore, the number of digital banking customers is growing, and with the busy lifestyle, managers should focus heavily on how to attract and retain new customers by fully utilizing the competitive advantage of digital queues. Moreover, the results of the study contribute to enriching theories and emphasizing that banks should pay attention to customer expectations and pay special attention to areas such as cybersecurity, blockchain technology, and customer support systems.

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