

# Global Scientific and Academic Research Journal of Economics, Business and Management

ISSN: 2583-5645 (Online) Frequency: Monthly

Published By GSAR Publishers

Journal Homepage Link- https://gsarpublishers.com/journals-gsarjebm-home/



# Evaluation of banking service quality factors from the customer's point of view using the Kano model / a comparative study

## BY

Azzam Abdulwahab Abdulkareem AL-Sabbagh1\*, Dhuha Mohammed M. Rashed2

<sup>1</sup>Doctor Assistant Professor. Middle Technical University -Technical Administration Institute Department of Materials Management - Baghdad, Iraq Orcid: https://orcid.org/0000-0003-3398-2613

<sup>2</sup>Master's student in Quality Technologies - Middle Technical University - Administrative Technical College- Baghdad



#### Abstrac

The study aims to assess the quality of service provided by the Iraqi private banks listed in the Iraqi stock market, and the extent of customer satisfaction with that service. The study was conducted in a number of Iraqi bankers' branches from private banks, with the participation of 70 respondents from distinguished clients. Data were collected through a two-part questionnaire, analyzed using the SPSS quantitative analysis model, and customer satisfaction and dissatisfaction index equations were used for the purpose of classifying customer requirements, and in order to determine the level of availability or unavailability of customer requirements in the services provided, the checklist was used. The results of the study show a difference in the basic, attractive, and one-dimensional requirements between the Iraqi Middle East Investment Bank and the Ashur International Bank, and the lack of classification of any adverse requirements, which indicates that the two banks provide their services with medium quality, as well as the size of the gap between what is required. The customer and what the bank provides between the two banks.

## **Article History**

Received: 15/11/2023 Accepted: 22/11/2023 Published: 24/11/2023

**Vol** – **2 Issue** – **11** 

PP: -213-225

Ethical Commitment: The study was approved by the presidency of the Middle Technical University - Administrative Technical College - Baghdad, as it conforms to the ethical standards used in postgraduate studies at the university.

Funding statement: The researchers funded the study and made the decision to publish, and the study was carried out as part of the requirements for obtaining a master's degree in total quality management techniques - Middle Technical University - Administrative Technical College - Baghdad.

**Keywords:** quality, banking service quality, customer satisfaction, Kano model, customer requirements

### Introduction

The banking sector is one of the main pillars of economic advancement in any country. Banking and investment are closely related to the process of growth and development on a firm and sustainable basis, especially since the banking sector constitutes the main financing channel for investment activities in Iraq and in other developing countries. Today, most countries tend to implement the concept of financial inclusion, reach various classes in society, and provide many services that suit the number of segments at acceptable prices in an easy way. The banking sector in Iraq currently consists of several of government and private banks as joint stock companies. These banks obtain several banking facilities,

which leads to an improvement in their performance. The Central Bank seeks to increase the capacity of Iraqi banks, expand its network of relations with international banks, and enhance the confidence of citizens and investors.

In general, the banking sector in Iraq was and remains committed to a large extent in granting loans, avoiding any degree of risk, which led to the difficulty of bank loans reaching small investors and businessmen, due to the unwillingness of banks to take risks with long-term loans and guarantees of cash flows for the project in general. Basic with a limited amount of real estate collateral.

© O Copyright 2023 GSAR Publishers All Rights Reserved

Today, banks have to take great steps towards developing information technology for the services they provide, and to provide a package of services related to technology, such as the possibility of viewing accounts through the electronic account and providing electronic payment cards quickly, as some of them take long periods for issuance. In addition, it provides ATM points and machines for the public and for companies that deal with the bank in particular.

The study focused on Iraqi banks' lack of interest in determining the needs and requirements of customers. Classified according to level of importance to customer. In addition, the availability of customer requirements for the services provided by the study sample of banks.

The oldest bankers from private banks were chosen as a sample for the study, and the data were collected using a questionnaire form, 140 of which were distributed, with 70 questionnaires for each bank, distributed to the customers of each banks in the study sample. The questionnaire was then administerrd according to the Kano model. The results of the study confirm the existence of a gap between customer requirements and the services provided by the bank, in addition to the difference in the size of the gap between one bank and another according to the services provided by the bank.

The study presents a classification of bank customer requirements using the Kano model into basic, attractive, onedimensional, and non-discriminatory requirements for Iraqi banks to focus on the most important of these requirements.

# **Literature Review**

Many studies used the Kano model, especially in the field of quality management, as Kano ratings were used to find out customer satisfaction with mobile banking service as a new feature for the bank (Mikulic & Prebezace, 2011), and (Rotar & Kozar,2017) used the Kano model with other methods As in the "two-dimensional" method for determining customer satisfaction. The Kano Model is also designed as a tool to be used in product development and to enhance product design efforts when attempting to improve an existing product or service (Mcdowall, 2016), (Xi, et, al., 2020) merged the Kano's model with performance-importance analysis into the product design process, allowing for an accurate understanding of design with new style and ideas. While (Lyu, et al., 2022) used an integrated Kano-QFD model to identify users' specific needs for wooden desks with the aim of developing design technology for office furniture and enhancing its competitiveness in the market. (Kermanshachi et al., 2022) integrating Kano's model with failure mode analysis and impact analysis (FMEA) to identify capabilities from a customer's point of view, which has rarely been done. (Pandey et al., 2022) also used the Kano model for the tourism sector. Implementation of the model enabled policymakers, marketers, and stakeholders to understand the complex behavior of customers (tourists) around the world and their needs related to quality of service. Kano's model has also been used to determine needs of students in private colleges and universities to formulate a better plan for the

teaching system (Qiu., 2022). (Suryawardani, et al., 2022) combined in his study two methods for measuring customer satisfaction, which are the Kano model and the quality of electronic service when selling tickets online by analyzing specific customer needs, based on the customer's voice. The Kano model has been widely used as a way to explain the nonlinear relationship between meeting a given requirement and customer satisfaction, and the Kano model is a way to explain the non-linear relationship between meeting a given requirement the customer satisfaction

The implementation of the Kano model depends on identifying a set of double questions, as the customer's answers enable the customer to classify the studied requirements into five valid categories: (essential, onedimensional, attractive, indifferent and undistinguished, and one invalid category: doubtful) (Madzík & Pelantova, 2018) The and can also be used to identify and classify quality attributes based on their impact on customer satisfaction. The attributes must comply with the basic requirements of the product or service quality. Without these attributes, customer satisfaction cannot be achieved (Huang et al,2018), so the purpose of the model is to understand and distinguish the needs and requirements of customers to determine the important factors that make customer satisfaction and find a breakthrough point to improve customer satisfaction when developing products (Gao et al., 2017), a three-step Kano questionnaire was prepared (Chen & Hsu,2019) focused Noriaki Kano (Mote et al., 2016), and three basic categories of customer requirements that have the greatest impact on customer satisfaction (should be one-dimensional, attractive), Kano and his colleagues added three more requirements, which are (neutral, indifferent, questionable, and opposite (Suh et al, 2019). Understanding each quality attribute will help in quality management so that organizations can effectively take specific measures to improve customer satisfaction and reduce customer dissatisfaction (Kuo et al., 2012). These quality attributes can be described as follows (Shin et al., 2022)

- 1. Must-Be Quality Attributes(M): When evaluating the quality of a product or service, there are basic requirements that the product or service must mee the requirements of customers (Meng et al., 2015), and the lack of these features leads to dissatisfaction (Santhoshkumar, et al., 2022).
- 2. One-Dimensional **Ouality** Attributes (O): performance attributes are closely related to customer satisfaction. The higher the performance attributes, the higher is the customer satisfaction level. Sometimes the customer expresses them clearly and explicitly and is referred to as Functional or ordinary (Nzumile & Taifa, 2021), which creates dissatisfaction because it is not available or when it is not fulfilled by the marketer (K, Dash, 2021).
- Attractive quality traits (A): The traits show high levels of customer satisfaction if they are present, and their effect is obvious because they help to

Page 214

make the customer happy, but if they are not present, it does not affect customer satisfaction (Tseng, 2020) 'These attributes are used to differentiate products from competitors and create a competitive advantage for the marketer (K, Dash, 2021). And when these unexpected service attributes are available, the customer shows joy (Santhoshkumar, et al., 2022).

- 4. Indifferent quality attributes (I): These are qualities whose presence or absence does not affect the degree and level of customer satisfaction (Bhardwaj et al., 2021).
- 5. Reverse quality attributes (R): qualities that have the opposite effect if present in products lead to dissatisfaction and in the absence of them lead to customer satisfaction (Datta & Chaudhuri, 2022).
- Questionable quality attributes (Q): Sometimes customers do not understand these qualities as a result of doubt and contradiction or lack of understanding of the questions of the (Kano) questionnaire, which leads to a contradiction in the sample answers. These requirements do not affect the other qualities because they do not appear in the Kano model, as its percentage is very small (Shahrrestani et al., 2019). The researchers (Park & Lee, 2019) added strong and weak quality characteristics to the Kano model, including the satisfaction index and the dissatisfaction index, as it reveals the satisfaction of existing customers. It reflects customer satisfaction using all the answers in each dimension and is called (Customer Satisfaction Index) and symbolizes it (CSI). By improving customer satisfaction when quality factors are correctly provided, the Customer Dissatisfaction Index refres to the amount of customer dissatisfaction that can be reduced when quality factors are in place and is preceded by a negative sign (CDI).

$$CSI = \frac{A+O}{A+O+M+I}$$

$$CDI = -\frac{O+M}{A+O+M+I}$$

Where

M: essential attributes
A: Attractive qualities
O: one-dimensional adjectives
I: undistinguished adjectives

The Kano model and customer satisfaction coefficient analyze the current level of how customers perceive each quality attribute (Seo et al., 2017).

Service quality has been defined as meeting the desires and needs of customers and exceeding their expectations (Fida., et al., 2020). With the rapid changes in the business environment, organizations must be ready to adapt to this situation that requires an increase in the quality of service provided, in addition to rethinking the organization's focus on new services not on how much it earns but on the extent to which it meets customer requirements (A, Permana., et al.,

2021) because customer satisfaction is a person's feeling of happiness or disappointment that arises from comparing his perceived performance to his expectations, and customer satisfaction is an essential component of modern marketing thinking and practice and customer loyalty is a long-term commitment towards a service provider (Pradnyadewi., et al .,2022). Service quality and customer satisfaction are closely related, as satisfaction is higher when service quality is high and vice versa (Wang., et al., 2023). Service quality plays an important role in service design or marketing and in previous years banks have increasingly realized the importance of providing high-quality banking services (Al-Sheikh, 2017). Quality in banking services is achieved through (achieving material benefits, retaining employees, retaining customers, and maintaining customer loyalty). Often, the basis for evaluating the quality of any service is based on a set of attributes (quality dimensions) that describe the evaluated service, and the selection of these attributes is not easy (Ingaldi., 2022). (Shanmugam., et al., 2022) believes that the dimensions of service quality can be estimated according to customers' perception and their main goal of obtaining excellent service from service providers. The study (Parasurman., et al, 1985) is among the most in-depth and comprehensive studies that define the dimensions of banking service quality, which were represented in thirty-four elements through ten dimensions of quality: tangible physical aspects, reliability, responsiveness, communication, credibility, safety, efficiency, empathy, understanding customer needs, and ease of dealing. In (1988) researchers collected elements of banking service quality in five dimensions that translate aspects of banking service quality: tangible material aspects, reliability, responsiveness, assurance, and empathy (Shahraki, 2014). Service quality consists of the service product, service environment, and service delivery. Service quality is a tool for measuring how customers perceive the level of service based on the five main dimensions (Alsabbagh., 2023), which were adopted in this study. The researchers differed in favoring the dimensions of quality, one over the other. (Gamarra., et al., 2022) believes that the dimensions of reliability, empathy, and tangible elements have a greater positive effect on customer satisfaction. While (Ong., et al., 2022) sees empathy as an additional feature that enhances consumer confidence while enhancing loyalty towards the service provider. (Ali, et al., 2021) adds that there are two important points in the empathy dimension, which are honesty and trust. In other words, the customer needs a good product with high quality and in his field of work, and it is the duty of the company to make him feel comfortable with high confidence and loyalty.

On the other hand, services are given great attention for their important role in achieving customer satisfaction and are closely related to quality, and they are evaluated according to various criteria. (Upadhya., et al., 2019) defined it as an intangible activity, benefit, or satisfaction that is primarily for sale, or a performance that brings benefits to customers, and (Pakurár., et al., 2019) finds that organizations perceive customer satisfaction. It is very important and is one of the success factors of organizations that think about competition,

development, and growth in the markets and that it is related to the quality of the service provided, and (Fida., et al., 2020) considers service as meeting the desires and needs of customers and exceeding their expectations, while (Medberg., et al., 2020) sees Service quality is determined by the differences between customers' expectations of the service provider's performance and their evaluation of the services they received. In light of this (Wang .,et al., 2020) indicates that service quality is an indicator of the degree and direction of contradiction between banking organizations and is essential for the survival of these organizations and achieving profitability, And (Karika, 2020) defines the quality of banking service through the level of meeting the requirements and needs of customers, that is, compliance with their increasing requirements and expectations. (Al-Sheikh., 2017) on his part believes that providing high-quality banking services aims to achieve business strategy and obtain customer loyalty, while (Dharmawan., et al., 2017) believes that providing high-quality service will maintain the survival and continuity of the banking institution, but (Chen., et al. al.,2022) and presents another vision based on the fact that the higher the quality of the product (service or commodity), the higher the customer satisfaction, and vice versa. Continuous improvements in product characteristics without taking into account what the customer wants may not lead to a higher level of customer satisfaction. (Wisnel, et al., 2022) believes that customer satisfaction is measured in two parts, the first is the level of customer satisfaction with the product or service of the bank in question, and the second is the evaluation and comparison of the product or service with the products and services of competitors. As for (Raviadaran, et al., 2019), quality of service is viewed as a measure used to manufacture services that depend largely on the number of customers, or consumers, who use those services quickly and continuously.

#### **METHODOLOGY**

- 1. Study problem:
- The lack of interest of Iraqi banks in determining the needs and requirements of customers and classifying them according to their level of importance to customers.
- Customers complaints that the services provided by banks do not meet their requirements.
- The difference in the level of services provided from one bank to another
- Objective of the study:
- Knowing the requirements of importance to the customer from the banking service.
- Determining the difference in the level of service provided by the two banks in the sample

- Approved Approach: The study adopted the comparative analytical descriptive approach, and to collect data related to the subject of the study, a questionnaire was prepared in which five basic dimensions of service quality were adopted, which reliability, (tangibility, responsiveness, assurance, and sympathy), and statistical methods (SPSS Ver. 24. Microsoft Excel) to extract results.
- Study population and sample: The study population represents the Iraqi private banks, while the study sample consisted of two banks (Ashur International Bank and the Iraqi Middle East Investment Bank) as a place to apply the study due to the variety of services provided by the two banks. with the bank.

Employing the banking service quality questionnaire to classify customer requirements according to the Kano model. The process of determining customer requirements is the starting point for designing a questionnaire that reflects the needs and requirements of the customer. The questionnaire included five dimensions of the quality of banking service, represented by (tangibility, reliability, responsiveness, assurance, and sympathy) and included (45) questions for each. The questionnaire was divided into the following sections:

- Functional questions include (5) dimensions of banking service quality and include (45) questions, each of which has (nine) questions.
- Non-functional questions include (5) dimensions of banking service quality, including (45), and (9) questions for each dimension (Appendix 1).

The questionnaire (functional and non-functional questions) was distributed to the study sample (Ashur International Bank) to survey customer opinions on banking service. The number of questionnaires was (70) for each bank to be answered by each bank was 70, ranging from (1. I like the presence of this requirement in the bank, .... 5. I do not like the presence of this requirement in the bank (for the functional question) and (1. I like deleting this requirement from the bank,... 5. I do not like the deletion of this requirement in the bank) for the non-functional question, as shown in Figure 1 )). After completing the questionnaires of the Kano model, customers' answers were linked to classify their requirements according to the opinion of the majority. For example, for the first question, the answers was (70%) of the study sample for the (basic) trait and (30%) for the other traits distributed for (one-dimensional, inverse, questionable, attractive, and undistinguished adjectives).

Page 216

functional question

- 1. The bank works to ensure that the devices and equipment used are up-to-date.
- 2. The bank provides loans through electronic cards which increases the loyalty of existing customers
- 3. Employees' assertive behaviors instill confide ice in

Non-functional question

- 1. The bank works to ensure that the de ices and equipment used are up-to-date.
- 2. The bank provides loans through ectronic cards which increases the loyalty of exis ing customers.
- 3. Employees' assertive behavior s instill confidence in

- 1. I like that this requirement is included in the product.
- This requirement must be present in the product.
- 3. I am neutral
- 4. I do not object to the existence of this requirement in the product.
- 5. I don't like that this requirement is in the product.
- 1. I like the deletion of this requirement in the bank.
- 2. This requirement should be removed from the bank.
- 3. I am neutral 4. I do not object to deleting this requirement in the bank.
- I do not like the deletion of this requirement in the

	customer's			Non-functional q	uestion	
u o	requirements	1.I like	2.Ought to	3.Neutral	4.I do not	5.I do not like
question	1.I like him	Q	А	Α	А	_ 0
	2.Ought to	R	1	1	_	М
functional	3.Neutral	R	1	1		М
g.	4.I do not	R	I	1	_	М
	5.I do not like it	R	R	R	R	Q

Tangibility	А	М	0	R	O	1	Total	Kano classification
First question								0
Second auestion								$\mathbf{M}$

Figure (1) Employment of the questionnaire according to the Kano model

Source: Madzík, P., Budaj, P., Mikuláš, D., & Zimon, D. (2019)," Application of the Kano Model for a Better Understanding of Customer Requirements in Higher Education-A Pilot Study", Administrative Sciences, Vol(9), No(1),p(11).

Table (1) shows the results of the study sample's answers to post-tangibility questions after processing them according to the Kano model, indicating that questions (4, 5, 7) for bankers, and questions (2, 3, 6, 9) for the Assyrian Bank, and question (8) for the Middle East Bank were classified as attractive qualities (A) with the highest frequency, and the presence of these requirements in the two banks indicates joy and happiness for the customer but does not lead to dissatisfaction with their absence.

As for questions (1,8) for the Ashur Bank and questions (2,3,6,9) for the Middle East Bank, were classified as basic attributes (M), and the basic attributes are attributes whose presence is necessary because they are considered essential and their lack of availability leads to a lack of satisfaction and enhances the bank's position in the financial markets, so banks must work to increase it.

Question (1) for the Middle East Bank was classified as a one-dimensional characteristic (O) according to the highest frequency, and bank management must adhere to providing this characteristic as it is directly proportional to customer satisfaction: that is the higher the performance of this characteristic, the greater the customer satisfaction, and vice versa

Table (2) Classification of the reliability dimension according to the Kano model

Reliability	Assyria Bank			Middle East Bank		
questions	Category	satisfaction index	dissatisfaction index	Category	satisfaction index	dissatisfaction
B1	M	0.394	-0.788	A	0.559	-0.441
B2	A	0.486	-0.429	M+A	0.486	-0.486
В3	M	0.314	-0.657	M	0.294	-0.618
B4	A	0.469	-0.406	A	0.688	-0.438
B5	M	0.258	-0.903	A	0.656	-0.313

В6	A	0.657	-0.2	I	0.4	-0.486
В7	A	0.438	-0.406	I	0.219	-0.438
В8	M	0.324	-0.735	A	0.515	-0.485
В9	A	0.545	-0.333	A	0.625	-0.438

Table (2) shows the results of the reliability dimension and their classification according to the Kano model. The results indicate that questions (2, 4, 9) for the two banks, questions for Ashur Bank (6, 7), and questions (1, 5, 8) for Middle East Bank were classified as attractive characteristics. (A) These exceed customer expectations and are not expected to exist.

As for question (3) for the two banks and questions (1,5,8) for Ashur Bank, they were classified according to the highest frequency as basic specifications (M), and these characteristics are among the basic items for customers and these characteristics contribute to increasing the market share of the bank.

The two questions (6 and 7) for the Middle East Bank were classified as undistinguished characteristics (I), and customers were considered indifferent to their presence or absence in the bank and did not affect their satisfaction.

Classification of the response	dimension accor	ding to the	Kano model
--------------------------------	-----------------	-------------	------------

Response	Assyria Bank			Middle East Bank		
questions	Category	satisfaction index	dissatisfaction index	Category	satisfaction index	dissatisfaction index
C1	M	0.313	-0.625	A	0.606	-455.0
C2	M	0.353	-0.676	M	0.424	-606.0
С3	A	0.667	-0.091	О	0.581	-806.0
C4	A	0.706	-0.118	A+M	0.406	-406.0
C5	I	0.353	-0.324	0	0.516	-677.0
C6	A	0.457	-0.257	A	0.5	-397.0
C7	M	0.273	-0.697	I	0.364	-394.0
C8	I	0.265	-0.324	A	0.641	-359.0
С9	A	0.471	-0.176	M	0.424	-515.0

Table (3) shows the results of the response dimension and its classification according to the Kano model, where the results indicate that the two banks shared that questions (4,6) were classified as attractive qualities, while questions (3,9) were classified as attractive qualities for Ashur Bank, and questions (1, 8) for Middle East Bank also has attractive qualities (A), meaning that these exceed the expectations of customers and are not expected to exist.

As for question (2) for the two banks, and questions (1, 7) for the Ashur Bank, and question (9) for the Middle East Bank, they were classified, according to the highest frequency, as basic specifications (M), which are among the basic characteristics of customers, and these characteristics contribute to increasing the share market for the bank.

The two questions (5, 8) for Ashur Bank and question (7) for Middle East Bank were classified as undistinguished characteristics (I), and customers were considered indifferent to their presence or absence in the bank and did not affect their satisfaction.

The two questions (3, 5) of the Middle East Bank were classified as one-dimensional (O) and according to the highest frequency.

Table (4) Classification of the security dimension according to the Kano model

Security	Assyria Bank			Middle East Bank		
questions	Category	satisfaction index	dissatisfaction index	Category	satisfaction index	dissatisfaction index

D1	M	0.353	-0.765	A	0.543	- 0.429
D2	M	0.412	-0.559	M	0.377	-0.609
D3	A	0.571	-0.371	M	0.286	-0.686
D4	A	0.545	-0.212	A	0.581	-0.355
D5	A	0.645	-0.226	Ι	0.406	-0.493
D6	I +A	0.412	-0.176	M	0.412	-0.588
D7	A	0.545	-0.273	0	0.571	-0.543
D8	M	0.314	-0.714	A	0.706	-0.294
D9	M	0.382	-0.471	M	0.377	-0.609

Table (4) shows the results after the guarantee and their classification according to the Kano model. The results indicate that the question (4) For the two banks, the questions for Ashur Bank (3,5,7), and questions (1,8) for Middle East Bank were classified as attractive qualities (A), meaning that these exceed the expectations of customers and are not expected to exist. Questions (2,9) for the two banks, questions (1,8) for Ashur Bank, and questions (3,6) for Middle East Bank were classified according to the highest frequency as basic specifications (M). These characteristics are among the basic items for customers and these contribute to attributes in increasing the market share of the bank.

Question (6) for Ashur Bank, and question (5) for Middle East Bank were classified as non-distinguishing qualities (I): customers are considered indifferent to their presence or absence in the bank and do not affect their satisfaction.

Question (7) of Middle East Bank was classified as one-dimensional (O), according to the highest frequency Table (5) Classification of the empathy dimension according to the Kano model

Empathy	Assyria Bank			Middle East Bank		
questions	Category	satisfaction index	dissatisfaction index	Category	satisfaction index	dissatisfaction index
E1	M	0.364	-0.818	A	0.576	-0.485
E2	M	0.281	-0.75	M	0.394	-0.606
E3	A	0.647	-0.147	A	0.6	-0.433
E4	A	0.667	-0.091	I	0.393	-0.393
E5	A	0.469	-0.188	A	0.536	-0.393
E6	Ι	0.242	-0.364	M	0.468	-0.532
E7	A	0.667	-0.152	0	0.6	-0.633
E8	Ι	0.5	-0.206	I	0.345	-0.488
E9	M	0.219	-0.688	M	0.353	-0.588

Table (5) shows the results of the sympathy dimension and its classification according to the Kano model, where the results indicate that questions (3,5) for the two banks, questions (4,7) for Ashur Bank, and question (1) for Middle East Bank were classified as attractive qualities (A), meaning that these superior customer expectations are not expected to exist.

Questions (2, 9) for the two banks, and question (1) for Ashur Bank, and question (6) for Middle East Bank, were classified according to the highest frequency as basic specifications (M). These characteristics are among the basic items for customers, and these characteristics contribute to increasing the share market for the bank.

Question (8) for the two banks, question (6) for Ashur Bank, and question (4) for Middle East Bank were classified as undistinguished qualities (I), and customers were considered indifferent to their presence or absence in the bank and did not affect their satisfaction.

Question (7) of the Middle East Bank, it was classified as one-dimensional (O) and according to the highest frequency

**Third:** Evaluating the availability of the customer's requirements in the bank's services

To determine the size of the gap between what the customer requires of attractive and basic characteristics and the availability of these characteristics in the services provided by the bank, a checklist was prepared according to the classification of the customer's requirements according to the Kano model, which checklist consisted of seven levels (fully implemented, documented, fully implemented partially documented, fully implemented not documented, partially implemented fully documented, partially implemented partially documented, partially implemented not documented, not implemented not documented).

Table (6) The reality of the size of the gap by applying the requirements according to the Kano model and for the two banks

customers requirements	application reality	The degree achieved by each bank		
		Assyria Bank	Middle East Bank	
	Weighted arithmetic mean	3.608	3.578	
customers requirements	The percentage of compliance	60%	60%	
	Gap ratio	40%	40%	
	Weighted arithmetic mean	4.062	3.812	
attractive requirements	The percentage of compliance	68%	64%	
	Gap ratio	32%	36%	
	Weighted arithmetic mean	3.835	3.695	
total requirements (attractive and basic)	The percentage of compliance	64%	62%	
(attractive and busic)	Gap ratio	36%	38%	

#### Discuss the results

The Kano model is a necessary tools for classifying the a customer's requirements according to their degree of importance. Knowing the customers' needs and requirements for banking services is necessary for the success and survival of any bank. The customer's prioritization of banking service varies according to their needs and the nature of their work. One bank to another according to the needs and requirements of the bank's customers. The classification of the paragraphs of each dimension of the quality of banking service differs according to the Kano model and their location in the degree of importance. With regard to the sample's tendency toward the dimensions of quality, the reliability dimension had the highest arithmetic mean for the dimensions of banking quality for the Middle East Bank Iraqi Investment, while the guarantee dimension had the highest arithmetic mean For Ashur International Bank, the number of basic, attractive, and one-dimensional requirements differed between the Iraqi Middle East Investment Bank and the Ashur International Bank: no adverse requirements were classified, indicating that the two banks (Iraqi Middle East for Investment and Ashur International) provide their services at a medium quality level, and the basic, attractive, non-distinctive, and one-dimensional requirements differ From the Middle East Bank for what the customer specified in the Ashur Bank.

It reflects the satisfaction or dissatisfaction of the customer, The paragraph of the bank's preservation of the confidentiality of accounts and the speed of customer transactions had the highest index of satisfaction for the customer with the paragraphs of the quality of banking service provided by the Middle East Bank. Finance is attractive and communication over the phone and e-mail to the bank is easy and available on the highest index of customer satisfaction in Ashur International Bank, where the results showed the customer's dissatisfaction with Ashur Bank's interest in making the devices and equipment used the latest.

The size of the gap between the customer's requirements and what the bank provides for those requirements differed between the Middle East Bank and Ashur International Bank with regard to the attractive, basic, non-discriminatory, and one-dimensional requirements. The gap between what the bank's customers demand and the actual reality of the service provided to bankers

# (Appendix 1)

	Tangibility					
seq	questions					
A1	The bank works to ensure that the devices and equipment used are up-to-date.					
A2	The bank offers visually appealing physical facilities.					
A3	The bank has suitable parking spaces.					
A4	The bank's employees are characterized by decent and good appearance.					
A5	The bank enjoys an easily accessible location.					

A6	Brochures, credit notes, checks, and similar materials are visually appealing.
A7	The presence of an ATM in the bank building increases the number of customers and attracts new customers.
A8	The bank provides loans through electronic cards, which increases the loyalty of existing customers.
A9	The presence of ATM services in multiple regions increases the competitiveness of the bank.
	Reliability
seq	questions
B1	Employee affirmation behaviors instill confidence in customers.
B2	The bank's employees have distinguished expertise that can be relied upon to provide high-quality services.
В3	The bank is committed to its promises to its customers.
B4	Bank employees are interested in solving customers' problems.
В5	The bank does the service right the first time
В6	The presence of modern technologies such as early warning contributes to reassuring customers to deal with the bank.
В7	The waiting time for the service is short.
В8	The bank is keen on having error-free records.
В9	The bank employee is characterized by initiative and speed in delivering banking services
	Response
Seq	Questions
C1	The staff has the competent knowledge to answer questions
C2	The staff at the bank will tell you exactly when the services will be done.
C3	The bank sends currency rates to existing customers on a daily basis.
C4	Contacting the bank via phone and via e-mail is easy and available.
C5	The bank management responds to customer complaints and deals with them quickly.
C6	The bank's staff is interested in answering inquiries in a timely manner.

C7	The service can be obtained instantly.
C8	The procedures for providing banking services are smooth and flexible
С9	The services provided by the bank satisfy the desires and needs of the customer
Security	
seq	questions
D1	Bank employees instill confidence in customers.
D2	Customers feel safe in their dealings with the bank's employees.
D3	The bank provides ways to protect money by investing in successful projects.
D4	The staff at the bank are friendly and polite
D5	The employees of the bank always respect the customers.
D6	The behavior of employees gives confidence to do business.
D7	The bank's employees have good communication skills and a positive approach
D8	The bank maintains the confidentiality of accounts and the confidentiality of customer transactions.
D9	Employees show a high sense of preserving customers' money
	Empathy
seq	questions
E1	The bank gives the customer individual attention
E2	The bank has suitable working hours for all customers
E3	Bank employees give the customer a sense of personal attention.
E4	Bank employees show personal knowledge of the customer and make sure to welcome him.
E5	The bank offers customers loans at low interest rates.
E6	The bank places the interest of the customer at the forefront of its interests.
E7	The employees of the bank have knowledge of customers' needs and are interested in achieving them.
E8	The bank staff assists the customer in filling out the required data in banking transactions.

E9

The bank's work team considers the customer to be the most important link in the bank.

#### Reference

- 1. A Permana ., and H, Purba, H., and D, Rizkiyah, N., (2021), "A systematic literature review of Total Quality Management (TQM) implementation in the organization International Journal of Production Management and Engineering", VOL. 9 NO. 1, p25
  - https://polipapers.upv.es/index.php/IJPME/article/vi ew/13765/13531
- 2. Ali, Bayad Jamal., and Saleh ,Pakzad Fadel ., and Akoi ,Shwana., and Abdulrahman , Aram Ahmed., and Muhamed, Awezan Shamal, and Noori, Halwest Nowzad., and Anwar ,Govand., (2021) ,"Impact of Service Quality on the Customer Satisfaction: Case study at Online Meeting Platforms" ,International journal of Engineering, Business and Management (IJEBM)Vol-5, Issue-2. file:///C:/Users/win10/Downloads/g18-
  - $\underline{19 Impact of Service Quality on the Customer Satisfactio}$ n%20(1).pdf
- 3. Al-Sheikh, F.O., (2017), "The Impact of Software Quality Assurance on Incident Management of Information Technology Service Management (ITSM) A Field Study on Website Development Companies in Jordan", (Doctoral dissertation, Middle East University. https://scholar.alaqsa.edu.ps/3611/1/5a153737b2288 \_1.pdf
- 4. Alsabbagh, A. A. Azzam .,(2023),"Evaluating the quality of delivery service from the customer's point of view using the importance-performance matrix", International Journal of Professional Business Review, Miami, Vol. 8, N. 4, p. 01-16 | e01742 |. file:///C:/Users/o.s/Downloads/1742+JPB.pdf
- 5. Bhardwaj, J., Yadav, A., Chauhan, M. S., & Chauhan, A. S. (2021), "Kano model analysis for enhancing customer satisfaction of an automotive product for Indian market", Materials Today: pp.10996-11001. Proceedings, Vol. (46),https://www.sciencedirect.com/science/article/pii/S2 21478532101155X
- 6. Chen, L. S., & Hsu, J. Y. (2019), "Discover users' needs in e-learning by Kano analysis and decision trees", International Conference on Industrial Engineering and Applications (ICIEA).pp. 572-576. https://ieeexplore.ieee.org/document/8714873
- 7. Chen, Y., & Zhong, Y., &Yu, S., & Xiao, Y., & Chen, S. (2022), "Exploring Bidirectional Performance of Hotel Attributes through Online Reviews Based on Sentiment Analysis and Kano-IPA Modell, Applied Sciences", Vol. (12), No. (2). file:///C:/Users/win10/Downloads/Exploring Bidire ctional Performance of Hotel Attri.pdf
- Datta, A., & Chaudhuri, S. K. (2022), "Application of Kano Model in evaluating indoor environment

- qualities of university libraries", Annals of Library and Information Studies (ALIS), 69(2), 149-157. https://nopr.niscpr.res.in/bitstream/123456789/5990 0/1/ALIS%2069%282%29%20149-157.pdf
- Darmawan, Didit., and Mardikaningsih, Rahayu., and Hadi, Surjo.,(2017)," The Effect of Service Quality, Customer Satisfaction, and Corporate Image on Customer Loyalty in the Banking Sector in Indonesia", IOSR Journal of Business and Management. Volume 19, Issue 11. Ver. VI (November.), PP 46-51. DOI: 10.9790/487X-1911064651
  - file:///C:/Users/win10/Downloads/DarmawanetalF1 911064651.pdf
- 10. Fida, B. A., Ahmed, U., Al-Balushi, Y., & Singh, D.(2020), "Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman", Sage Open, 10(2). https://journals.sagepub.com/doi/pdf/10.1177/21582 44020919517
- 11. Gao, X., Zhao, C., & Han, Y. (2017), "The Research of Outdoor Fitness Facilities Design Based on Kano Model", In 2017 2nd International Conference on Automation, Mechanical and Electrical Engineering (AMEE 2017). Atlantis Press. 2352-5401, pp. 233-237. https://dx.doi.org/10.2991/amee-17.2017.48
- 12. Gamarra-Miranda, Miguel Antonio., and Rojas -Chávez, Johisi., and Jauregui - Arroyo , Ralphi., and Rondon-Jara, Evelyn., (2022), "Relationship between Service Quality and Customer Satisfaction in Restaurants in Los Olivos, Peru", Proceedings of the International Conference on Industrial Engineering and Operations Management Nsukka, Nigeria, 5 - 7 April, IEOM Society International. https://ieomsociety.org/proceedings/2022nigeria/36 9.pdf.
- 13. Huang, J. C. (2018), "Application of Kano model and IPA on improvement of service quality of mobile healthcare", International Journal of Mobile Communications, Vol. (16), No.(2), pp.227-246. https://www.inderscience.com/info/inarticle.php?art id=89761
- 14. Ingaldi, Manuela., (2022), "E-Service quality assessment according to hierarchical service quality models", Management Systems in Production Engineering, Volume 30. Issue file:///C:/Users/win10/Downloads/E-Service Quality Assessment According to Hierar ch.pdf
- 15. K, Dash. S.,(2021), "Identifying and classifying attributes of packaging for customer satisfaction - A Kano Model approach ", International Journal of Production Management and Engineering, Vol. 9 .p57-64. 1 https://polipapers.upv.es/index.php/IJPME/article/vi ew/13683/13534

- Kermanshachi, S., Nipa, T. J., & Nadiri, H. (2022), "Service quality assessment and enhancement using Kano model", PIOS one, 17(2). <u>file:///C:/Users/win10/Downloads/journal.pone.026</u> <u>4423%20(1).pdf</u>
- 17. Kuo, Y. F., Chen, J. Y., & Deng, W. J. (2012), "IPA–Kano model: A new tool for categorising and diagnosing service quality attributes", Total Quality Management & Business Excellence, 23(7-8), 731-748. https://www.tandfonline.com/doi/abs/10.1080/1478 3363.2011.637811
- Lyu, J., and Chen, R., and Yang, L., and Wang, J., and Chen, M.,(2022), "Applying a Hybrid Kano/Quality Function Deployment Integration Approach to Wood Desk Designs for Open-Plan Offices", Forests, 13, 1825. <a href="mailto:file:///C:/Users/win10/Downloads/forests-13-01825.pdf">file:///C:/Users/win10/Downloads/forests-13-01825.pdf</a>
- Madzík, P., & Pelantová, V. (2018), "Validation of product quality through graphical interpretation of the Kano model: An explorative study", International Journal of Quality & Reliability Management, Vol. (35), No. (9), pp. 1956-1975. <a href="https://doi.org/10.1108/IJQRM-12-2017-0281">https://doi.org/10.1108/IJQRM-12-2017-0281</a>
- Madzík, P., & Budaj, P., & Mikuláš, D., & Zimon, D. (2019)," Application of the Kano Model for a Better Understanding of Customer Requirements in Higher Education-A Pilot Study", Administrative Sciences, Vol (9), No (1) p (11). file:///C:/Users/win10/Downloads/admsci-09-00011% 20(3).pdf
- McDowall, M. P. (2016), "Applying the Kano model to higher education: Moving beyond measuring student satisfaction", The University of North Dakota. <a href="https://core.ac.uk/download/pdf/235078345.pdf">https://core.ac.uk/download/pdf/235078345.pdf</a>
- 22. Medberg, G., & Grönroos, C., (2020), "Value-inuse and service quality: do customers see a difference", Journal of Service Theory and Practice. https://doi.org/10.1108/JSTP-09-2019-0207
- 23. Meng, Q., Jiang, X., He, L., & Guo, X. (2015), "
  Integrating fuzzy theory into Kano model for classification of service quality elements: a case study of machinery industry in China", Journal of Industrial Engineering and Management (JIEM), 8(5), 1661-1675. http://www.jiem.org/index.php/jiem/article/view/17 08
- 24. Mikulić, J., & Prebežac, D. (2011), "A critical review of techniques for classifying quality attributes in the Kano model", Managing Service Quality: An International Journal. file:///C:/Users/win10/Downloads/MSQ-RESUBMIT-EDITED-Kanoreview-PRINT.pdf
- 25. Mote, S., Kulkarni, V., & Narkhede, D. B. E. (2016), "Kano Model application in new service

- development and Customer satisfaction", IOSR Journal of Business and Management, 18(1), 10-14. <a href="https://www.iosrjournals.org/iosr-jbm/papers/Vol18-issue8/Version-1/B1808011014.pdf">https://www.iosrjournals.org/iosr-jbm/papers/Vol18-issue8/Version-1/B1808011014.pdf</a>
- 26. Nzumile, J. M., & Taifa, I. W. (2021), "Stratification Of Students'satisfction Requirements Using The Kano Model", Business Education Journal, 10(1). file:///C:/Users/win10/Downloads/STRATIFICATI ONOFSTUDENTSSATISFACTIONREQUIREME NTSUSINGTHEKANOMODEL.pdf
- Ong, J. Y., Ong, W. C., Ong, A. C., & On, K. Q. (2022). Service Quality and Customer Satisfaction:
   A Study of My Rapid in Malaysia. Journal of Tourism & Hospitality in Asia Pacific, 5(3), 117-130.. file:///C:/Users/win10/Downloads/1904-4895-1-PB%20(1).pdf
- Pakurár, M.,& Haddad, H.,& Nagy, J., &Popp, J., & Oláh, J., (2019), "The service quality dimensions that affect customer satisfaction in the Jordanian banking sector", Sustainability, 11(4). file:///C:/Users/win10/Downloads/sustainability-11-01113%20(4).pdf
- Pandey, A., Sahu, R., & Joshi, Y. (2022), "Kano model application in the tourism industry: A systematic literature review", Journal of Quality Assurance in Hospitality & Tourism, 23(1), 1-31. https://www.tandfonline.com/loi/wqah20
- 30. Parasuraman, A Parsu., and Zeithaml, Valarie A., and Berry, Leonard L .,(1985), "A Conceptual Model of Service Quality and its Implication for Future Research (SERVQUAL)", Journal of Marketing, January, 49:41-50.. file:///C:/Users/win10/Downloads/Zeithaml85Conce ptualModel.pdf
- 31. Park, A. J., & LEE, Y. S. (2019), "A study on the quality improvement of mobile app services of medical institutions: Focus on the Kano model and pcsi index", The Journal of Industrial Distribution & Business, 10(6), 19-27. http://koreascience.or.kr/article/JAKO20191565823 3315.pdf
- 32. Pradnyadewi, L. P. Ariestari., and Giantari, IG. A. K., (2022),"Effect of E-Service Quality on Customer Satisfaction and Customer Loyalty on Tokopedia Customers in Denpasar", European Journal of Business and Management Research, Vol 7, Issue 2. <a href="https://www.ejbmr.org/index.php/ejbmr/article/view/1297/744">https://www.ejbmr.org/index.php/ejbmr/article/view/1297/744</a>
- Qiu, Youmei ., (2022)," Application of Personalized Demand Based on Kano Model in Private Colleges", Hindawi Discrete Dynamics in Nature and Society Volume 2022, Article ID 3921824. <a href="https://downloads.hindawi.com/journals/ddns/2022/3921824.pdf">https://downloads.hindawi.com/journals/ddns/2022/3921824.pdf</a>

Page 223

- 34. Raviadaran, H., & Dastane, O., & Ma'arif, M. Y., & Mohd Satar, N. S. (2019), "Impact of Service Quality Dimensions on Internet Banking Adoption, Satisfaction and Patronage", International Journal of Management, Accounting and Economics, 6(10). https://www.ijmae.com/article 114649 35f990dcf0 5fceb63c76dd0be7c40937.pdf
- 35. Rotar, L. J., & Kozar, M. (2017), "The use of the Kano model to enhance customer satisfaction", Organizacija, 50(4). file:///C:/Users/win10/Downloads/The Use of the Kano Model to Enhance Customer Sati%20(2).p
- 36. Santhoshkumar, F., and Jeyarajasekar, T., and Kumar, S. A. Senthil., (2022)," Kano's model for customer satisfaction analysis of a hospital", International Journal of Health Sciences,6(S1) https://media.neliti.com/media/publications/430650kanos-model-for-customer-satisfaction-an-49dfd42c.pdf
- 37. Seo, H. S., Seo, J. H., & Kim, H. M. (2017), "A Study on Service Quality of Defence Quality Assurance Activites using Kano Model & PCSI Index", Journal of Korean Society for Quality Management, 45(2), 261-274. https://www.jksqm.org/upload/pdf/jksqm-45-2-261.pdf
- 38. Shahraki, A. R. (2014), "Evaluation of customer satisfaction about Bank service quality", Int. J. 6, No. 2 Industrial Mathematics, Vol. https://ijim.srbiau.ac.ir/article\_2473\_aa6c6613e092 2df27715a658a1b5282c.pdf
- 39. Shahrestani, H. V., Shahin, A., Teimouri, H., & Barzoki, A. S., (2019), "Revising the Kano model for designing an employee compensation system: Developing one-dimensional attributes", The TQM Journal. Vol. 32 No. file:///C:/Users/win10/Downloads/2019-TQM-vaezshahin.pdf
- 40. Shanmugam, RM., and Chandran, M. (2022), "A relationship between service quality and customer satisfaction in e-banking services- a study with reference to commercial banks in Chennai City", International Journal of Professional Business Review Miami, Vol. 7, N. 3, p. 01-13 | e0490 | .https://doi.org/10.26668/businessreview/2022.v7i3. 0490
- 41. Škarica, I. (2020), "Employee job satisfaction in public health institutions with an implemented quality management system", Doctoral dissertation, University of Rijeka. Faculty of Tourism and Hospitality Management. https://repository.fthm.uniri.hr/en/islandora/object/ft hm%3A2227/datastream/PDF/view
- 42. Shin, J. G., Heo, I. S., Yae, J. H., & Kim, S. H. (2022), " How to Improve the Acceptance of Autonomous Driving Technology: Effective Elements Identified on the Basis of the Kano

- Model", Applied Sciences, Vol. (12), No.(3), pp.1-15. https://doi.org/10.3390/app12031541
- 43. Suh, Y., Woo, C., Koh, J., & Jeon, J. (2019), " Analysing the satisfaction of university-industry cooperation efforts based on the Kano model: A Korean case", Technological Forecasting and Social Change, Vol. (148),No. https://www.sciencedirect.com/science/article/abs/pi i/S0040162518316305?via%3Dihub
- 44. Suryawardani, Bethani ., and Gusnadi, Dendi., and Wulandari, Astri., and Marcelino, Dandy ., (2022), "Integration Kano Model and E-Servqual to Evaluate Online Travel Agent Services in Bandung 2022", the journal of social sciences humanities, Vol. 12, file:///C:/Users/win10/Downloads/73937-283815-1-PB.pdf
- 45. Tseng, C. C. (2020), "An IPA-Kano model for classifying and diagnosing airport service attributes", Research in Transportation Business & 100499. Management, 37, https://www.sciencedirect.com/science/article/abs/pi i/S2210539520300614
- 46. Upadhyai, R., Jain, A. K., Roy, H., & Pant, V., (2019), "A review of healthcare service quality dimensions and their measurement", Journal of Health Management, 21(1), 102-127. file:///C:/Users/win10/Downloads/PublishedPaper.p <u>df</u>
- 47. Wang, C., & Teo, T. S. (2020), "Online service quality and perceived value in mobile government success: An empirical study of mobile police in China", International Journal of Information 102076. Management, 52, https://doi.org/10.1016/j.ijinfomgt.2020.102076
- Wang, Cheng-Kun., and Masukujjaman, Mohammad., and Alam, Syed Shah., and Ahmad, Ismail., and Lin, Chieh-Yu., and Ho, Yi-Hui., "The Effects of Service Quality (2023),Performance on Customer Satisfaction for Non-Banking Financial", Institutions in an Emerging Economy. International Journal of Financial Studies 11: 33. file:///C:/Users/win10/Downloads/ijfs-11-00033%20(1).pdf
- 49. Wisnel, Wisnel, and Cantika, Tara., and Wirdianto, Eri., (2022), "Analysis of the Effect of E-Service Quality on E-Commerce Customer Satisfaction and Loyalty ", Journal of Mechanical, Electrical and Industrial Engineering, Vol, http://motivection.imeirs.org/index.php/motivection /article/view/145/88
- 50. Xi,Le .,and Zhang, Hui ., and Li, Sunan,. and Cheng, Jianxin., (2020), "Integrating fuzzy Kano model and fuzzy importance-performance analysis to analyse the attractive factors of new products", International Journal of Distributed Sensor Networks, Vol.

 $\frac{16(5).\underline{https://journals.sagepub.com/doi/pdf/10.1177/}{1550147720920222}$