

Achieve the Attractive Requirements of the Kano Model in Hotel Services Using Value Chain Cost Analysis

Saba Kareem Abbood^{a*}, Saad Salman Maaeni^b, ^aResearcher of the Post Graduate Institute of Accounting and Financial Studies Accounting Studies Department University of Baghdad, ^bThe Post Graduate Institute of Accounting and Financial Studies Accounting Studies Department University of Baghdad, Email: ^{a*}haider20202010@gmail.com

The management of the companies try to understand how to use the methods and techniques of cost and managerial accounting and benefit from them in providing relevant information that have the ability to determine the attractive costs of services, and to providing appropriate information for the company's management to face the pressures of competition; the company's management seeks to achieve strategic goals by preparing and implementing plans to increase competition in the market through satisfying the needs and requirements of customers with good specifications and competitive prices. The importance of this research stems from the importance of cost systems in hotel activity by guiding the thought of hotel management on the importance of identifying, measuring and analysing attractive attracting costs. The hotels also have the services to attract customers to achieve a competitive advantage, and to provide high-quality services and appropriate prices for customers, in the field of hotel services, and after informing customers about the services in international hotels in the world and neighbouring countries that have succeeded in achieving the dimensions of competition; the research problem is the existence of weakness in identifying and measuring costs of attractive hotel services to customers, which has a negative impact on the lack of knowledge of the hotel's management of the most important costs that affect customers' attraction for the hotel services provided. The research goal has been to propose formulas to deal with customers and attract them by providing attractive hotel services at reasonable prices and of high quality, determining the costs of attractive hotel services, studying, analysing and measuring the costs of hotel services using the Kano model, and to provide the hotel management with the costs of attractive hotel services that affect the market share of the company and thus its ability to achieve the company's competitive advantage. The research concluded that hotels do not depend on knowing and

identifying attractive costs of hotel services and the extent of the impact of these attractive services on customers. The researcher recommends that the attractive requirements of the Kano model in hotel services should be achieved using the value chain cost analysis.

Key words: *Kano model, hotel services, value chain.*

Introduction

The factors, changes, and challenges that have occurred in the world led to the emergence of globalisation and technological progress, which in turn led to increased competition in the business environment to increase the market share, and for this, the companies sought to open, renew and develop the services they provide and achieve creativity to ensure continuity; due to economic conditions and intense competition in the hotel sector meeting the customers' requirements for hotel services provided at appropriate prices and high quality, and ensuring continuity and survival, depends on the company's knowledge and ability to achieve this, through its ability to determine and measure the cost of hotel services attracting customers and focusing on them to increase the market share in the competing market. For this reason, it has become necessary for the hotel sector to achieve the attractive requirements of the Kano model in hotel services by using value chain cost analysis.

The Most Important Previous Studies

Study of Linnan Yu & Yanhao Gu (2011). The aim of this research is to take an overview of the impact of value chain activities on product performance (quality, cost, and innovation), and accordingly, we will create a conceptual model, then test whether this model applies to the process industry or not, through a case study. Research at the University of Gävle / Sweden has adopted a method of personal interviews and data analysis. The basic analysis has proven that some assumptions do not arise from the operations industry while others may have more important relationships. There is a strong influence of marketing and sales activities on product quality and these activities do not affect fixed and variable costs due to there not being clear restrictions in the market on the causal cost constraints; there is a strong impact of human resources on the quality of the product and its costs, and that education and training activities affect the performance of employees and thus the quality of the product and its costs. The management of suppliers constitutes a strong influence on the cost of the product, but this effect is not clear on the quality of the product.

The study of Jylhä & Junnila (2012), focus particularly on the value capabilities provided by information-building models, in addition to improving the environmental performance of clients. This study was conducted in Finland, and the questionnaire based on the Kano model

and open oral questions were used. The study concluded that the Kano model is a new way to determine customer value; it indicates what must be provided for in the future and what must be avoided to keep customers satisfied or even exceed their expectations. Attention to environmental issues and customers view BIM as an attractive tool for obtaining technical and functional details, as through the information building model which can improve the customer value proposition.

The Concept of the Kano Model

There are many methods used to help the company understand the customer's requirements and needs. Among these methods is the Kano model; the Kano model is a method used to hear the customer's voice to achieve his/her satisfaction (Arefi et al,2012: 348), The Kano model is one of the modern tools for total quality management that is of great importance in hearing the customer's voice and knowing the needs and requirements of the customer (Al-khateeb 2017:325), The first to develop the Kano model was the Japanese scientist (Noriaki Kano) in 1984, and this model has been used in many fields and industries (Barzoki et al,2014:17). Noriaki Kano, a Japanese scientist and a team of three scientists (N. Seraku, F. Takahahi, S. Tsuji), developed a blueprint for a model that demonstrates customer requirements for product quality, according to his attractive quality & must-be quality, published in the Japanese Society for Oversight. On the general quality 1984 (Zween 2009:10). The goal of the Kano model is to assess customer satisfaction with the attributes and characteristics specified in the services provided by the company and the possibility of identifying and distinguishing characteristics that have a significant impact on customer satisfaction. As Noriaki Kano indicated, the importance of studying the customer's voice VOC, is that customers have hidden requirements (Gupta&srivastava 2011:102), The Kano model is an effective tool to understand the expectations, needs, and requirements of customers from the services provided by economic units (Hao&Li 2011:8).

Classify Customer Requirements According To the Kano Model

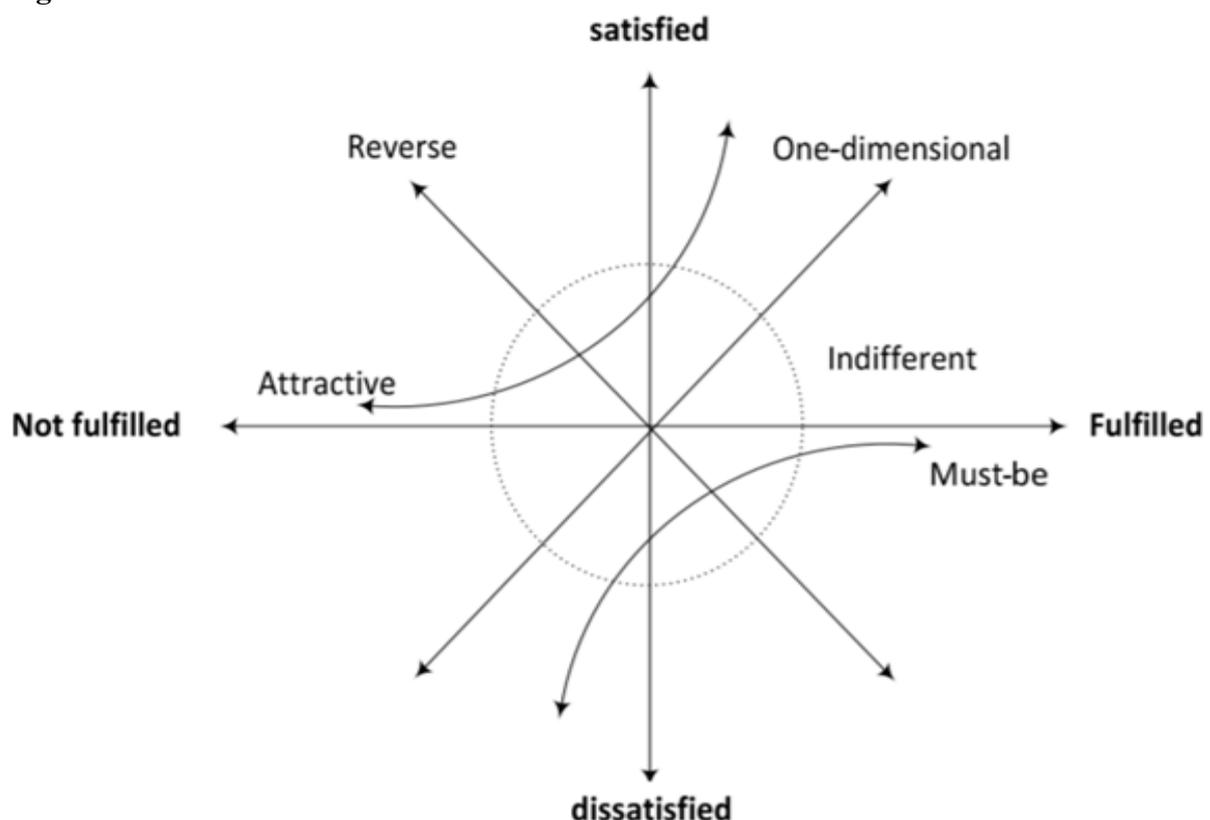
The Japanese scientist (Noriaki Kano) has categorised the client's requirements as a model (Baki et al,2008: 109-110):

"Firstly - Attractive requirements: can be defined as the service attributes which satisfy customers when present but do not dissatisfy when they are absent. Hence, these service attributes have the greatest influence on customer satisfaction level with a given service. There is not any expectation for these attributes by the customer, but when properly delivered they generate satisfaction. So, they are sufficient, but a not necessary condition for satisfaction. Attractive attributes can be used as an element of an aggressive marketing strategy to attract competitors' customers."

"Second - Must be requirements: can be defined as the basic attributes for service quality in terms of customer satisfaction. Consequently, if these requirements are not fulfilled properly, the customer will be extremely dissatisfied. So, fulfilling the "must be" requirements will only create a state of "not dissatisfied". In other words, they are a necessary but not sufficient condition for customer satisfaction."

"Third - One-dimensional requirements: create customer satisfaction when present and dissatisfaction when absent. These requirements increase customer satisfaction as they become more functional. So, for "one dimensional" requirements, it is possible to say that, the higher the perceived service quality, the higher the customer's satisfaction and vice versa. They are both a necessary and sufficient condition for customer satisfaction. These requirements are so important in terms of creating a competitive advantage by creating differences and being spoken among customers."

Figure 1.



Source: Barzoki, A. S., Salehzadeh, R., & Khodaei, S. A. (2014). Identifying Attractive Behaviours of Managers Based on the Kano Model in Isfahan Province Gas Company. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(1), 16-20.

Application of Kano Model

He believes (Parsa&Gregory2011:16-18) that the Kano model helps the process of designing a product or service during the stage of determining the requirements, to increase the quality of the product or service which leads to achieving customer satisfaction; Noriaki Kano has suggested that the characteristics of the product or service can be divided into the following:

Firstly - Attractive Quality

Attractive quality results in customer satisfaction if these attributes are present, but no dissatisfaction if they are not present. These attributes are not expected but are appreciated when provided. Attractive attributes, also referred to as "excitement needs" or "delighters," have been described as those of which the customer may not have conscious knowledge. These are unexpected attributes that provide a point of differentiation for the provider. Proactively preparing for anticipated requests is considered an Attractive Quality. Here are some examples from the lodging industry, i.e., feather pillows, a roll away bed or extra blankets in advance of the returning customer requesting; these items could be categorised as delighters, for example, feather pillows and a folding bed.

Second One-dimensional Quality

Also referred to as performance needs; these are those attributes that are positively related to customer satisfaction. In other words, the higher the positive performance of these attributes, the greater the level of customer satisfaction. These attributes are listed by customers as keys to their satisfaction. Examples from the lodging industry include promptness of wait staff, on-time airline arrivals/departures, greater gas mileage per gallon of gasoline; in short it is the ability of a product to support or exceed stated claims, For example, waiting for the customer and the ability to meet his requirements as quickly as possible.

Third - Must-Have (Must-Be) Quality

Without these attributes dissatisfaction increases, yet their existence does not necessarily improve customer satisfaction. These have been referred to as minimum requirements or "entry requirements" and are requirements for the provider to compete in the marketplace. These attributes are also described as "basic needs" and refer to the attributes that are expected by the customer. Examples from the lodging industry include the presence of restroom facilities within a restaurant, lobby area in a hotel, colour TV in a hotel room, working elevator in the multistoried hotel.

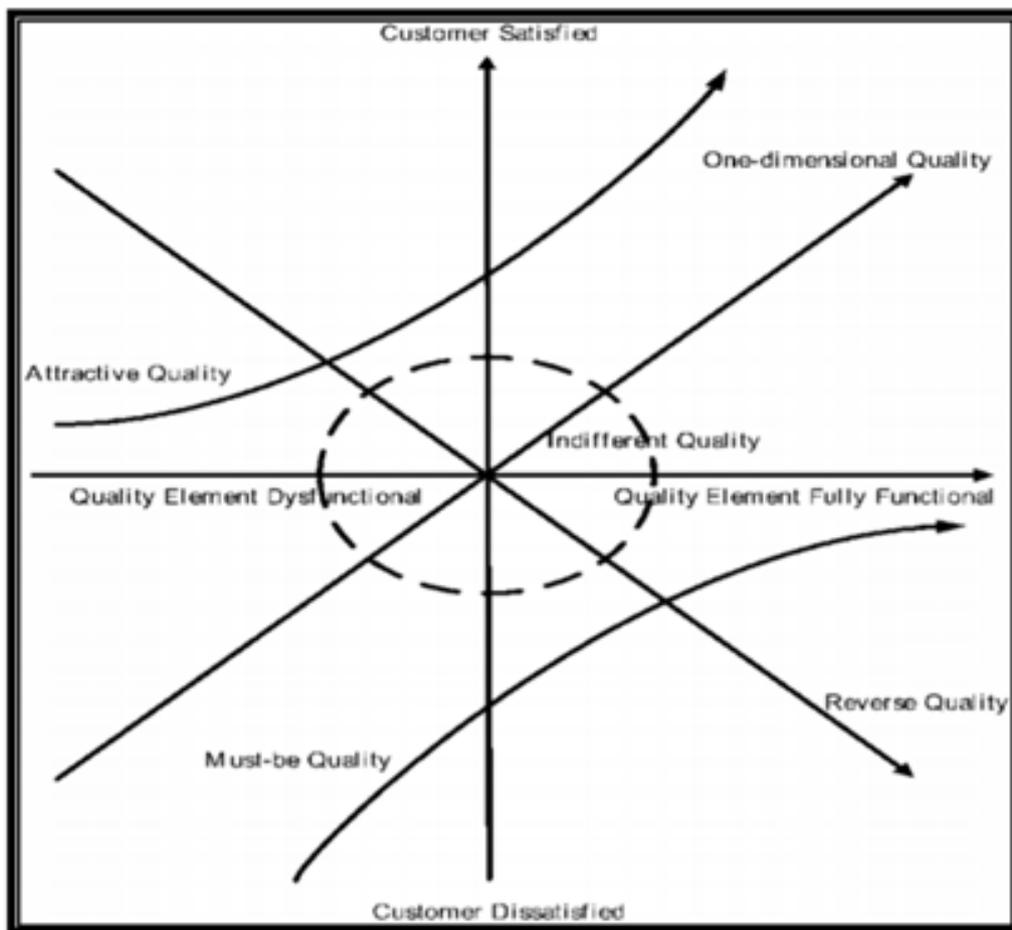
Fourthly- Indifferent Quality

There is no substantial impact on customers' satisfaction or dissatisfaction based on the presence or absence of these attributes. These attributes have no impact on customer satisfaction. An example from the lodging industry might include soft music in the lobby and common areas.

Fifthly - Reverse Quality

Contrary to must-have (must-be) attributes, reverse attributes cause dissatisfaction when present and satisfaction when absent. These attributes have a negative impact on satisfaction. Examples from the lodging industry include discourteous or non-attentive staff and long wait times at the front desk.

Figure 2. Kano Model



Source: H.G. Parsa, AMY M. GREGORY. (2011) Assessment OF Product and Service Attributes and Customers' Willingness to Pay in The Vacation ownership Industry Using The Kano Model and Conjoint Analysis, Orlando, Florida,16-19.

Value Chain Cost Analysis

Concept of Value Chain

Drury has seen that the value chain is an interconnected group of activities to create (form) the value starting from the sources of raw materials to delivering the product or service to the customer; the growing interest in analysing the value chain is to increase the interest in customer satisfaction and to increase the effectiveness of cost management (Drury,2012:592). Kinny defined it as a set of value-added functions (processes) through which inputs are converted into outputs which are the product or service that the economic unit provides to customers (Kinny&Raiborn,2011: 11). Hansen defined it as a set of activities required to better design, develop, produce, market and deliver products or services to customers; any change in the value chain from a strategic point of view is essential to implementing the cost leadership strategy and it is necessary to know the internal links represented in the relationships between the value chain activities within the economic unit. The external links are represented by the relations between the economic unit, suppliers and customers (Hansen et al,2007:11).

Importance of the Value Chain

The value chain is an analytical method used by the economic unit to determine its activities to provide the best products or services to achieve a competitive advantage and to reduce costs and to understand the cost behaviour; the value chain analysis helps to discover and identify activities that do not add value and remove it from the process and focus on activities that add value and try development and modernisation. The knowledge of these activities is done through the examination given to each activity of the value chain, which helps in improving decision-making and understanding the strengths and weaknesses within the economic unit (Plocher et al,2010:12).

Firstly - Focusing on the interest of all parties involved by linking and managing value chain activities with end users (Mohammed, Flayyih, Mohammed & Abbood, 2019).

Second - Defining the strengths in the activities of the value chain and focusing on them, while highlighting weaknesses and shortcomings, and working to address them or excluding them, which helps in making decisions and understanding the strengths and weaknesses within the organisation (Plocher et al,2010:12).

Third - developing the value chain has competitive value and positive results by maximising the value of the economic unit and increasing competition in the market (Dekker,2003:5).

Fourth - Preparing an integrated business approach with suppliers and customers, which helps in making decisions related to completing activities and providing products or services to customers. (Plocher et al,2010:12).

Steps to Cost Analysis of Value Chain Activities

The steps for analysing the costs of value chain activities differ from an economic unit to another economic unit, depending on the nature and activity of the economic unit and the products or services provided by the economic unit; the costs of the value chain activities can be analysed in three stages (Sutarmin&Jatmiko,2016:185-186):

First - Determining the costs of the value chain activities: - This step is represented by how a vision, description, and assignment of the value chain activities are worked out.

Second - Determining the costs of strategic activities: - This stage (step) is the identification of activities that add a competitive advantage to economic unity, whether current or potential.

Third - Tracking activity costs with identifying cost drivers for activities; the goal of this step is to identify activities that add a competitive advantage to the economic unit, whether this feature is current or potential.

Fourth - Developing a competitive advantage by reducing costs or adding value to value chain activities.

Methodology

The research adopted the inductive approach in the theoretical side by relying on the writings related to the study literature. As for the practical side, the research adopted the descriptive analytical approach based on the financial statements of the company for the year 2017 (Baghdad Hotel Mixed Contribution).

Results

Because of the development in Iraq in the hotel sector in the seventies and eighties of the last century by building a group of hotels in Baghdad and some governorates, such as Mosul and Basra, the Baghdad Hotel is the oldest hotel in Iraq, where it was established in the year 1953 AD and opened in the year 1958 AD.

Attractive Hotel Services Costs Using the Kano Model

Determine the hotel's attractive services to clients according to the Kano survey form distributed to the company's customers.

Attractive hotel services for clients can be determined according to the Kano Model Survey List distributed to the company's clients through Table (1) shown below.

Table 1: The requirements of the Kano Model Attractive and its impact on diminishing the competitive advantage according to the customers' opinions
The concentration of attractive requirements

Attractive Customer Requirements	Quality	Cost	Speed	Flexibility	Innovation	Sample Volume	A.M	S.D	R.I	Concentration of attractive requirements
The hotel management offers a questionnaire to understand the needs and desires of the guests	2	0	0	2	21	25	1.4	1.1	28	Innovation
The hotel management makes free laundry and ironing service for guests	20	1	2	2	0	25	4.56	0.94	91.2	Quality
Hotel management provides 24-hour royal suite service and free services for guests	1	2	1	20	1	25	2.28	0.83	45.6	Flexibility
Hotel management provides room safety deposit box for each guest	22	0	1	1	1	25	4.64	1.02	92.8	Quality
The hotel management undertakes a questionnaire to understand the needs and desires of customers	2	1	1	3	18	25	1.64	1.23	32.8	Innovation

The hotel management provides tourist trips for the permanent guests	21	1	2	1	0	25	4.68	0.79	93.6	Quality
The hotel management provides poetic and heritage evenings	16	1	2	2	4	25	3.92	1.57	78.4	Quality
The hotel management is concerned with the quality of services provided to customers by providing a traditional restaurant (Baghdad)	2	0	1	2	20	25	1.48	1.14	29.6	Innovation
The hotel management provides a dinner or lunch invitation for the permanent customers	1	2	2	19	1	25	2.32	0.84	46.4	Flexibility
The hotel management is concerned with the quality of services provided to customers by providing a restaurant specialising in seafood	17	2	3	1	2	25	4.24	1.27	84.8	Quality
The hotel management undertakes a questionnaire to understand the needs and desires of customers	21	2	0	1	1	25	4.64	0.97	92.8	Quality
Hotel management provides a squash court for clients	1	1	3	0	20	25	1.52	1.1	30.4	Innovation
The hotel management provides hydrotherapy baths, sunbathing and massage chairs and is provided free of charge to clients	15	1	2	4	3	25	3.84	1.54	76.8	Quality

The hotel administration is working to provide a free day a week for all health club services	16	4	3	1	1	25	4.32	1.09	86.4	Quality
The hotel management provides free discounts for permanent customers	21	1	0	1	2	25	4.52	1.2	90.4	Quality

Source: Preparing the researcher using computer outputs

Determine the Costs of Hotel Services that Attract Customers

After determining the requirements of customers that attract hotels, according to the opinions of customers, the costs of these attractive requirements should be determined, as shown in the table below:

3-2-2-1 Attractive costs for the overnight service

Table 2: Attractive costs under the Kano overnight service model

Paragraphs	Amounts	Accounting system Tab
Questionnaire for guests	1,000,000	Expenses
Royal suite with hotel services throughout the day (15 workers * 500,000 average worker wages per month * 12 + additional decorations 100,000,000)	90,000,000 100,000,000	Expenses 20% Depreciation of furniture & office equipment
Safety deposit box for each room (175 rooms * 200,000)	35,000,000	Expenses
Monthly tourist trip for two people (500,000 * 2 * 12)	12,000,000	15% Depreciation of transfer & transmission
Free laundry and ironing for guests	14,028,840	Expenses
Total	252,028,840	

Source: Prepared by the researcher

Attractive Costs for the Food and Beverage Service

Table 3: Attractive costs under the Kano model of food and beverage service

Paragraphs	Amounts	Accounting system Tab
Questionnaire for guests	1,000,000	Expenses
Poetry Evening (4 persons * 12 months * 300000)	14,400,000	Expenses
Seafood restaurant	60,000,000	2% Depreciation of Fixed assets
Baghdadi Restaurant (Heritage)	100,000,000	2% Depreciation of Fixed assets
Weekly dinner invitation for two (52 * 2 * 50000)	5,200,000	Expenses
Total	180,600,000	

Source: Prepared by the researcher

Attractive Costs for the Health Club Service

Table 4: Attractive costs under the Kano model of health club service

Paragraphs	Amounts	Accounting system Tab
Questionnaire for guests	1,000,000	Expenses
Discounts for subscribers by 50% (12 months * 200,000 monthly subscriptions * 40 subscribers + 2,000,000 annual subscriptions * 4 subscribers)	104,000,000	Expenses
Squash court	50,000,000	5% Depreciation of Fixed assets
Hydrotherapy baths, sunbathing and massage chairs	33,500,000	Expenses
A free day a week for daily subscribers (52 weeks * 20000 daily subscriptions * 40)	41,600,000	Expenses
Total	230,100,000	

Source: Prepared by the researcher

Hotel Services Costs According to the Value Chain Cost Analysis

The table below shows the costs of hotel services according to an analysis of the value chain costs and their contribution percentage to the total hotel services

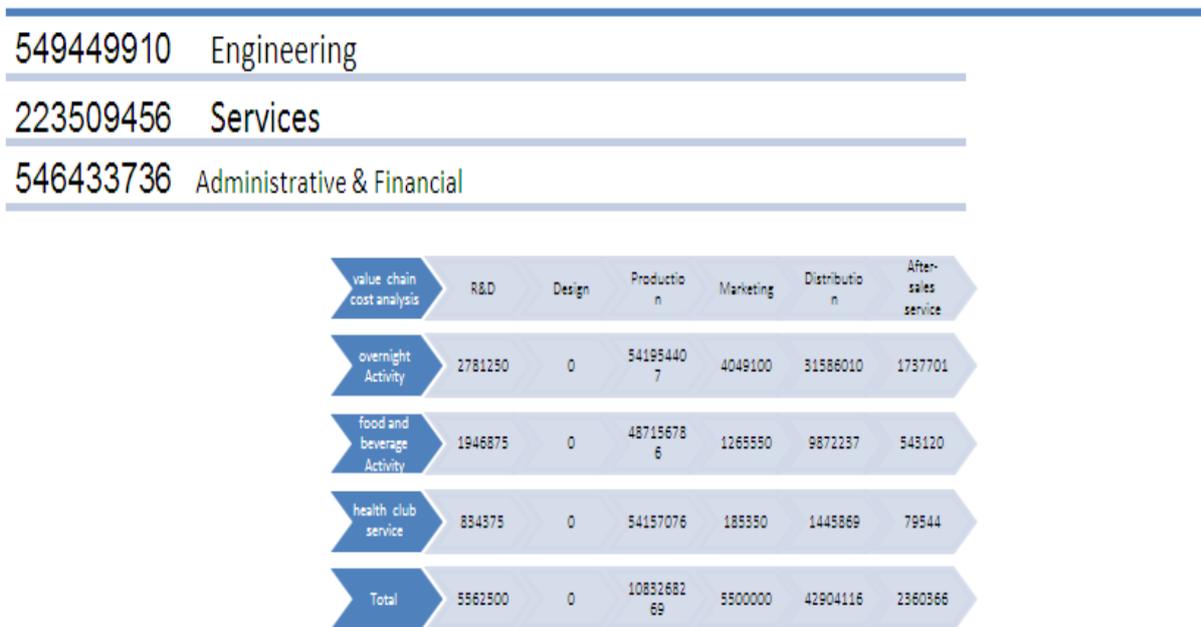
Table 5: Hotel services costs and their share of total costs

Cost Elements Activities	Direct materials	Labour	F.O.H	Total activity costs	Total costs of hotel services	Cost Component Cost Ratio to Total Activity Costs	Cost Component Cost Ratio to Total Costs of Hotel Services
overnight Activity	216,095,906					14.93%	8.79%
		325,858,501				22.51%	13.25%
			905,683,357			62.56%	36.83%
				1,447,637,764			
food and beverage Activity	18,474,489					20.84%	7.515
		302,411,897				34.12%	12.30%
			399,165,536			45.04%	16.23%
				886,322,322			
health club service	-					0%	0%
		54,157,076				43.32%	2.20%
			70,871,188			56.68%	2.88%
				125,028,264			
Total					2,458,988,350		

Source: Preparing the researcher based on the financial statements of the Baghdad Hotel Company

As it is noticed from the above table, the percentage of salary, wage costs and indirect industrial costs are high, and the researcher sees the need for the company to focus on paying attention to these costs; through analysing the value chain costs, the researcher calculated the costs of the main activities actually spent for hotel services during the year and then the costs of activities were determined. Al-Samna Hotel Services has been calculated and distributed using different foundations in a way that suits the nature of the hotel services activities, as shown in Figure (3) below.

Figure 3. Analysis of the costs of the activities of the value chain



Source: Preparing the researcher based on the financial statements of the Baghdad Hotel Company

Measuring the Costs of Hotel Services in Light of the Kano Model

After the costs of hotel services have been determined, the attractive costs of the customers should be identified, determined and measured according to the customers' opinions.

Calculating the Costs of Overnight Service under the Kano Model

These services are the core of the hotel services provided by the company; through this service the hotel provides all the requirements of the guests, from receiving the guest at the hotel entrance to taking care of him and knowing all the requirements and needs of the guest and providing him/her with them. According to the survey list that was distributed to customers, attractive requirements were set for the overnight service according to customer opinions; the table below shows these costs.

Table 9: Distribution of costs for overnight service

Details	Costs
Costs while using value chain analysis	1,447,637,764
+ Additional attractive costs under the Kano model	89,828,840
Total Costs	1,537,466,604

Source: Preparing the researcher based on the financial statements of the Baghdad Hotel Company

Calculating the Cost per Unit of Food and Beverage Services

The restaurant provides the best food and beverages to its visitors, whether it is local or foreign food or drinks, and all kinds of cocktails. Breakfast is given for guest rooms and this service is for money, and according to the survey list distributed to customers, attractive requirements for food and beverage service have been determined according to the opinions of customers, and the table below shows these costs.

Table 10: Distribution of costs for food and beverages

Details	Costs
Costs while using value chain analysis	886,322,322
+ Additional attractive costs under the Kano model	23,800,000
Total Costs	910,122,322

Source: Preparing the researcher based on the financial statements of the Baghdad Hotel Company

Health Club Service: There is a health club in the hotel, and a health club subscription is a subscription for the guest, then it is free, but if the subscription is for the customer, it is either a monthly subscription in the amount of 200,000 dinars or an annual 2 million dinars, or one day payment of 20,000 dinars, according to customer desire; according to the survey list that was distributed to customers, attractive requirements for food and beverage services were determined according to the customers' opinions, and the table below shows these costs.

Table 11: Distribution of costs for the health club

Details	Costs
Costs while using value chain analysis	125,028,264
+ Additional attractive costs under the Kano model	182,600,000
Total Costs	307,628,264

Source: Preparing the researcher based on the financial statements of the Baghdad Hotel Company

Conclusions

- 1- The Baghdad Hotel Company does not know, define and measure its attractive costs for hotel services according to the opinions of customers, which makes it have no ability to compete in the competing market, and thus its market share is weak
- 2- Knowing, identifying, and measuring the costs that attract customers helps the company's ability to know which of these costs leads to more service costs than the other.

3- The Kano model helps the company to know the amount of profit or loss for hotel services separately, as the income statement reflects the result of the individual activity of these services.

4- The Kano model helps in determining the requirements of customers according to what the customer desires from services and diminishing the competitive advantage, and can be linked with the customer's requirements, the speed of response to it and looking to the future.

5 - The company does not use the research sample modern technologies for its hotel services, which can know the requirements and desires of customers and thus their impact on the dimensions of competitive advantage (cost, quality, speed, flexibility, innovation).

Recommendations

1 – There is a necessity of using the Kano model for hotel services, because it can determine and measure the costs of attractive hotel services in a more realistic way, because the measurement process takes place on individual activities and main services.

2 – There is a necessity to use the Kano model to find out the attractive costs of hotel services and thus to know the requirements and desires of customers, and thus focus on them to achieve the dimensions of that competitive advantage related to speed, quality, flexibility, cost and innovation.

3 - The company should use the Kano model in determining the requirements of customers according to what the customer desires from the services that increase his satisfaction and even achieve his joy and happiness.

4 - The company should know which hotel services can be developed to help stay in the market and achieve a competitive advantage.

5 – There is a need to focus on the requirements and desires of customers for hotel services, and thus know the impact of these requirements on the dimensions of competitive advantage related to cost, quality, speed, flexibility, and innovation.

REFERENCES

- Arefi, M., Heidari, M., Morkani, G. S., & Zandi, K. (2012). Application of Kano Model in higher education quality improvement: Study master's degree program of educational psychology in State Universities of Tehran. *World Applied Sciences Journal*, Vol. 17, No. 3, pp. 347-353.
- Baki, B., Cigdam S. B., Cigdam S.B., Zuhail C. & Liker M. (2008) An application of integrating SERVQUAL and Kano's model into QFD for logistics services A case study from Turkey, Department of Business Administration, Karadeniz Technical University,109-110
- Barzoki, A. S., Salehzadeh, R., & Khodaei, S. A. (2014). Identifying Attractive Behaviors of Managers Based on Kano Model in Isfahan Province Gas Company. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, Vol. 4, No. 1, pp. 16-20.
- Blocher, E. J., Stout, D. E., & Cokins, G. (2010). *Cost management: A strategic emphasis. Includes index.*
- Drury, C. M. (2012). *Management, and Cost Accounting*, 8 ed. Springer.
- Gupta, P., & Srivastava, R. K. (2011). Customer satisfaction for designing attractive qualities of healthcare service in India using Kano model and quality function deployment. *International Journal of Mechanical Engineering*, Vol. 1, No. 2, pp. 101-107.
- Hansen, D. R., & Mowen, M. M. (2007). *Managerial accounting 8th edition*. Ohio (USA): Thomson Wouth-Western.
- Hao, S. and Le, M. (2010) Building Attractive Quality of Career Service in Library & Learning Resources of the University of Borås Based on Kano theory Thesis submitted to gain the degree of "master of Industrial Engineering Quality and Environmental Management", University of Borås.
- Henri, C. D. (2003). *Value chain analysis in interfirm relationships: a field study*, Amsterdam, The Netherlands.
- Kinney, M. R., Kinsey, J. P. & Raibourn, G.A. (2011). *Cost Accounting: Foundations and Evolutions*. 8th ed., Thomson South-Western.
- Mohammed, B. H., Flayyih, H. H., Mohammed, Y. N., & Abbood, H. Q. (2019). The effect of audit committee characteristics and firm financial performance: An empirical study of listed companies in Iraq stock exchange. *Journal of Engineering and Applied Science*, Vol. 14, No. 4, pp. 4919-4926.
- Mohsen, A. K. and Al-Najjar, S. M. (2012). *Production and Operations Management*, fourth edition, Memory Library, Baghdad .



- Parsa, H.G. and Amy, M. G. (2011). Assessment of Product and Service Attributes and Consumers' Willingness to Pay in the Vacation Ownership Industry Using the Kano Model and Conjoint Analysis, A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Education at the University of Central Florida Orlando, Florida,16-19.
- Sutarmin, S. & Jatmiko, D. P. (2016). Value chain analysis to improve corporate performance: a case study of essential oil export company in Indonesia. Investment management and financial innovations, Vol. 13, No. 3 (contin. 1), pp. 183-190.
- Tuuli, J. and Seppo, J. (2012), Using the Kano model to identify customer value. In 20th Annual Conference of the International Group for Lean Construction.
- William, N. L., Shannon, W. A. and Michael, W. M. (2011). Fundamentals of Cost, 3e, Americas, New York.