REVIEW

Service quality models: A review with respect to fast food restaurants

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Service quality is a measure that indicates to what extent an organization delivers or provides service to its customers against the customers' expectations. Service quality has been studied by many researchers, who have developed varied models to assess the service quality of a firm or business. This paper, being a conceptual paper, aims to review a few well-known service quality models and also give a gist of a few service quality models specifically developed for fast food restaurants. It also throws light on the disruptive technologies existing in the fast food restaurant industry. In the study, it was found that no single model can assess the service quality of all businesses in all circumstances. Models have to be modified or new models have to be developed based on the hour and environment. Technologies like artificial intelligence, big data, robotics, automation, etc., help enhance the service quality of a fast food restaurant.

Keywords: service quality, service quality models, fast food restaurants, disruptive technologies

Introduction

Fast restaurants, or quick service restaurants, are those that provide food quickly at a cheaper rate and have very minimal seating space. Usually, fast food restaurants are restaurant chains or franchises that provide standard menu recipes and ingredients all along the supply chain.

The first fast food restaurant dates back to 1921 with White Castle, a hamburger restaurant chain. Since then, a number of prominent players have entered and are dominating the field, like McDonald's, Domino's, and KFC are now multinational corporations (MNCs) and have outlets all over the globe.

This concept has spread across the world, and apart from these US-based fast food giants, every continent, region, and country have their own fast food restaurants that reflect their individual cuisines, cultures, and practices.

The United States has KFC, McDonald's, Starbucks, Subway, Burger King, Taco Bell, Pizza Hut, and a number of other fast food chains. Red Rooster, Eagle Boys, and

Oporto originated in Australia. Europe, especially the United Kingdom, had its signature fast food restaurants, as fish and chip shops, which were run by independent owners. Despite the local restaurants, the US-based MNC fast food restaurants always dominated these markets.

India being a diversified and multicultural nation, food habits vary from state to state. There is a strong presence of famous US food chains like KFC, Starbucks, Subway, Pizza Hut, Burger King, McDonald's, and Domino's. This does not affect the local fast food restaurants as each cater to different customers and serves different cuisines. South India is dominated by idli, vada, dosa, and pongal. Maharashtra has its poha, misal-pav, and pav-bhaji. The northern states focus on foods like chole bhature, litti chokha, etc.,

It is very evident that the most important aspect that makes the US fast food chains dominate all over the world is their service quality.

Service quality is a measure that indicates to what extent an organization delivers or provides service to its customers

against the customers' expectations. Customers have direct needs or desires and sometimes hidden or latent needs. It is the organization's duty to understand these needs and fulfill them either on par with the customers' expectations or exceeding them.

Service quality is one of the most important parameters that determines the success or failure of a business and, if they succeed, the extent of their success.

The same aspect applies to fast food restaurants. Customers come to the restaurants with certain expectations. Their decision to recommend the place to others and become a loyal customer depends on how well the restaurant is able to satisfy their customers by providing quality services.

With the arrival of the 4th industrial revolution, new technologies have paved their way into the fast food industry in terms of managing the operations and connecting with the customers. The restaurant industry has been very slow in adopting technologies, but with the increase in competition and the impact of pandemic, it has become a necessity in order to survive in the market. These technologies have been disruptive in nature and help increase the quality of service provided.

Literature review

Etuk et al. (1), researched on the impact of service quality delivery on the customer's fast food outlet choice. Structured questionnaires were developed, and the data was analyzed using simple regression with the help of SPSS. They found that reliability, responsiveness, tangibility, assurance, and empathy (the SERVQUAL model) had significantly impacted the customers' choice of fast food restaurants.

Song et al. (2) conducted a study on KFC in Malaysia to study customer satisfaction through service quality. They used the SERVQUAL model to analyze it. They suggested that customer satisfaction at KFC can be increased if assurance and empathy are incorporated into their fast food restaurants.

Sochenda (3) assessed the factors that had an impact on customer satisfaction in the fast food industry of Cambodia. As many as 480 questionnaires were distributed among 6 fast food restaurant brands. The respondents were chosen using the convenience sampling method. The acquired data was analyzed using software like SPSS and AMOS 26. The study revealed that service quality, physical environment quality, food quality, brand image, and price fairness were the key determinants of the success of a fast food restaurant.

Ali et al. (4) examined the influence of a number of factors that influence customer satisfaction in the fast food industry in Pakistan. As many as 500 questionnaires were distributed all over Pakistan, and the data was analyzed using multiple regression analysis. The results indicated that service quality, price, and restaurant environment had a significant impact on customer satisfaction, which in turn influenced customer loyalty.

Khan (5) conducted qualitative exploratory research to analyze the technological disruptions due to innovations in the restaurant industry. A conceptual model was developed to depict the technological disruption in a hierarchical succession in the restaurant industry. Prominent disruptions were identified in the areas of restaurant categorization, customer point of contact, and service quality. A number of challenges and opportunities related to disruptions were also identified in the study.

Kiran (6) studied varied SQ models developed by various contributors through literature reviews. Models like the Lehtinen 3-dimensional model, the Gronroos model, the Gap model, the RSQS model, the three-component model, and Brady's hierarchical model were discussed. According to the author, researchers have a lot of scope to work further in the area.

Research gap

Researchers for a very long time have been studying about the service quality and its parameters. Most of the research focuses on a single industry in a particular country over a particular period of time. Only a few of them have made an effort to compare the different models developed.

No study has been done on the role of disruptive technologies in the enhancement of service quality. This paper focuses on studying the famous service quality models and also specifies a number of models built to assess fast food restaurants. It also specifies the existing technological innovations used to serve customers better. There is also scope for improvement where the Indian fast food restaurant can be studied in detail to develop a model that can assess its service quality.

Objectives

- To review the popular service quality models.
- To understand the service quality models developed for fast food restaurants.
- To study the role of disruptive technologies in enhancing service quality of fast food restaurants.

Scope of the study

This paper focuses on the review of the service quality models that have been developed over the years and lays more emphasis on the models that are designed to assess the service quality of fast food restaurants in particular. It also highlights the disruptive technologies in the fast food industry that enhance service quality.

Service quality models

Service quality as a concept stimulated interest among researchers from various domains and regions as early as the 1980 s. This led to the development of a number of service quality models, and a few of them are so famous that even today researchers use them in their studies and also keep them as a base to develop new ones.

We now briefly discuss a few of these service quality models in the following:

Perceived service quality model

Christian Gronroos from Sweden introduced the perceived service quality model in 1982. According to him, service quality is a concept similar to the marketing concept of customer focus. He stated that the quality of a service is what the customers perceive, and not what the designers or providers feel.

According to this model, the quality of the service that the customer perceives is the outcome of the comparison between his or her expectations and his or her experience.

Gronroos identified three components of service quality:

1. Technical quality: It is what the customers receive through their interactions with the service provider that is important to the customer and helps in their service quality evaluation.

2. Functional quality: It is the mode or method through which the customer gets the technical outcome. It can include staff, communication, competence, etc.

3. Image: It is an aspect that a service provider develops over time through their technical and functional quality. It can include ideology, tradition, word of mouth, public relations, and pricing.

Gap model

Parasuraman et al. (7) came up with a service quality model called the gap model. They proposed that service quality is a function of the differences between expectation and perception.

The five gaps identified were as follows:

1. Expected service vs. management's perception: It is the difference between what a consumer expects and the management's perceptions of those expectations. It is the management not knowing what the customers expect.

2. Management's perception vs. service design: It is the difference between the perceptions the management has about the customer's expectations and the specifications of the service quality. This gap emphasizes the service quality standard that is not up to par.

3. Service design vs. service delivery: It is the difference between the specifications for service quality and the service that is actually delivered. It specifies the performance gap in the service.

4. Service Delivery vs. communication: It is the difference between the delivery of the service by the management and the communication of the service delivery to the customers. It talks about the match between the promise and the delivery.

5. Expected vs. perceived service: It is the difference between the expectation and the perception of the service by the customer. This gap is dependent on the size and direction of the other four gaps.

SERVQUAL model

This model was developed by A. Parasuraman, V. Zeithaml, and L. Berry in 1988. As the name suggests, SERVQUAL is a service quality model. It initially had 10 dimensions and later was called the RATER model as it used five dimensions to measure service quality with the help of 22 questions.

The five service quality dimensions are listed below:

1. Reliability: It is the capability of a firm to render its services effectively. It is a measure of how well a firm fulfills its promises.

2. Assurance: It is the ability of the employees to build a sense of trust in the minds of the customers.

3. Tangibles: It deals with the physical facilities, equipment, staff, and communication systems.

4. Empathy: This emphasizes the importance that the firm gives to the needs and wants of the customers.

5. Responsiveness: It is the ability and willingness of the firm to help and support the customers as promised.

Three-dimensional model

Uolevi and Jarmo R. Lehtinen in the year 1991 came up with a service quality model that has three dimensions, namely:

1. Physical quality: This dimension relates to the tangible factors in service.

2. Interactive quality: This dimension emphasizes the interaction among the customers and the service providers.

3. Corporate quality: This dimension implies the image that the customers (present and potential) and the general public attribute to the service provider.

SERVPERF model

In the year 1994, J. J. Cronin and S. A. Taylor criticized the SERVQUAL model, stating that a study on the relationship between expected and experienced quality was not the right approach to studying service quality. They came up with the SERVPERF model, which is the acronym for service

performance model. This model views quality as an attitude rather than satisfaction. At the same time, it also uses the thought that perceived service quality leads to satisfaction. It also relates satisfaction to future purchase intentions. This model is a modified version of the SERVQUAL model and hence uses the same five dimensions, namely, reliability, assurance, tangibles, empathy, and responsiveness.

SERVICE quality models for fast food restaurants

Apart from the above mentioned service quality models, a few researchers have studied the service quality in fast food restaurants. A few of them are discussed below.

Sumaedi and Yarmen (8) proposed a service quality model specifically for the Islamic country. The dimensions of the model are as follows:

1. Food quality
2. Halal quality
3. General physical environment
4. Islamic physical environment
5. Waiting time
6. Islamic-related expertise
7. Process
8. Personnel

Tan et al. investigated the service quality of Chinese fast food restaurants and its relationship with customer satisfaction. The Chinese Fast Food Restaurants Service Quality Scale (CFFRSERV) was developed with the following six dimensions:

1. Responsiveness
2. Food
3. Cleanliness
4. Reliability
5. Tangibles
6. Assurance and empathy

Qin et al. modified the SERVPERF model by adding recoverability and studied the following dimensions in fast food restaurants in China:

1. Recoverability
2. Responsiveness
3. Reliability
4. Empathy
5. Assurance

6. Tangibles

Yunus et al. applied the SERVQUAL model to McDonald's in Malaysia to study the service quality of the fast food giant. Along with the five parameters, they also studied three other determinants of service quality, which are:

1. Low food prices
2. Short service time
3. Convenient location

Disruptive technologies in fast food restaurants

Technological advancements, also known as disruptive technologies, have impacted every walk of life. The success of a fast food restaurant depends on its ability to provide quality service to its customers. It is important for the restaurant to keep up with the changing demands and needs of the customers and the technological innovations.

Disruptive technologies are useful in enhancing service quality and hence need to be incorporated into business models.

The following are the disruptive technologies used in fast food restaurants

1. Online ordering and delivery apps: Ordering and delivery of food has become easy with the in-house food delivery apps and third-party food delivery partners. Domino's has also started delivering pizza to your parked car using location tracking technology.

2. Digital menu boards: Disruptive technology of this kind helps the restaurant serve the customers better by improving customer relations by providing easy information about the daily menu and easy incorporation of changes in the menu. It also avoids long waiting lines to order food and encourages quick service.

3. Service robots: Robots are a good partial replacement for human labor in terms of their efficiency and consistency. It is also a safer option during adverse situations. Robots that can't show human emotions can only complement the service provided by humans.

4. Contactless payment: Payments made using smartphones, smartcards, or smartwatches are gaining prominence, especially after the COVID pandemic. It is easier to pay without the hassle of searching for change, and the need to wait for the delivery person is gone.

5. Digital kitchen boards: Time has changed from when waiters had to go around tables and customers with books and papers to get their orders. These kitchen boards display orders in a particular sequence with other details

pertaining to the order, making it easy for both the staff and the customers.

6. Automated inventory management systems: Forecasting the order quantity well in advance can help schedule reorders and avoid food waste. It can also help avoid food shortages and excessive waiting times, which will increase customer satisfaction.

7. QR codes: In this era of social distancing and no touch, the use of QR codes is gaining prominence. QR codes are used to access online menus, place online orders, and pay for them.

8. Virtual customer assistants: Chatbots are very helpful in assisting customers with queries and complaints. This enhances the quality of service and, hence, customer satisfaction.

9. Artificial intelligence and big data: Understanding the customer's buying behavior is a very important aspect of succeeding in the competitive market. AI and big data have come to the rescue in collecting and analyzing data related to customers buying patterns and making decisions.

10. Voice order: Restaurants like Domino's have come up with the concept of "easy ordering" by integrating with Amazon Echo, where an order can be placed just by talking to the device. This has made ordering food easy.

Findings and suggestions

From the literature reviewed and the models discussed, it is clear that no single model can hold up in all circumstances. Service quality models vary from sector to sector, industry to industry, and country to country. Different business models will aim to satisfy different needs of the customers and will have their own parameters to judge their success and hence, the service quality models will also vary accordingly.

Even if we take fast food restaurants in particular, the basic idea of a fast food restaurant remains the same, but there are a lot of differences and variations in the purpose and functioning of fast food restaurants in different countries and in different regions of the same country.

Hence, while choosing or selecting a service quality model for an organization in general and a fast food restaurant in particular, the local significance and aspects have to be taken into consideration. Culture, practices, customs, demography, preferences, etc., have to be taken into consideration while assessing the service quality of the business.

In order to sustain the tough competition, restaurants have to adapt to the changes and come up with technological innovations. The use of disruptive technologies like artificial intelligence, big data, robotics, automation, etc., has made serving customers easy and efficient. Enhancing the quality of service offered to the customers is the ultimate way of

sustaining in the market, and that is possible using these technological innovations.

Conclusion

Service quality is a very important parameter that determines the success of any business or organization. Fast food restaurants are very famous all over the world, with every country having variations according to their local characteristics. Irrespective of the type of fast food restaurant, providing quality service is an attribute that cannot be compromised.

There are a number of service quality models that have been developed over the years, with the SERVQUAL model being the most sought after. Every industry has its own set of important factors that contribute to its quality, and hence the models vary accordingly.

In this paper, we have summarized a few service quality models that are generally used in all businesses. It also mentions a few models built especially for fast food restaurants.

From the study, we can conclude that a service quality model can either be modified according to the need or a completely new service model can be developed to assess the service quality of any business.

In this era of emerging and disruptive technologies, it is important for fast food restaurants to adapt and keep pace with the change. Service quality and customer satisfaction are the ultimate goals of any business, and so it is with quick service restaurants. Disruptive technology can help enhance service quality to a great extent.

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