Improving the Service Quality In A Board Game Café with Quality Function Deployment Method

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Abstract

Customers are the most important factor in business because it is undeniable that customers are a source of income and the main goal of business. Given this, an enterprise must pay attention to customer satisfaction for sustainable operations. Enterprises show their concern for customer satisfaction by continuously improving and developing their service processes, as it requires a significant investment, so it should be done following the customer's preferences. Therefore, a business needs to measure customer satisfaction with its service process. This study aims to measure customer satisfaction with the service process and analyze the results of these measurements to provide improvement suggestions for service processes that customers find unsatisfactory. This study also analyzes Green Practice because previous research stated that Green Practice can indirectly increase customer satisfaction with a service. The results of this study indicate that the quality of the board game café services as a whole is still not good. They still need improvement and determine the priority for improving service processes according to the level of customer interest. In addition, customers considered the Green practices of the café to be satisfactory, so it does not require much improvement.

Keywords: Customer Satisfaction, Green Practice, Quality Function Deployment, Service Improvement, Service Quality

JEL Classification: C44, L32

1 Introduction

The current industrial development in Indonesia is increasingly rapid, especially in the culinary industry. The culinary itself contributes to the Indonesian economy around 41 percent of the total creative industry GDP contribution (Agmasari, 2021). Cafes are one of the businesses in the culinary field that has developed quite rapidly in recent years. Over time, more and more Cafes have sprung up. Not only are the numbers increasing, but cafes are also becoming more and more varied, and due to the impact of globalization, several entrepreneurs combine cafes with the entertainment industry to become board game cafes. Boardgame Café is a café with a unique concept because it offers drinks and food, also games called board games. The board game is a game that uses a board mat. This board can be in the form of an illustration of a map or the play area plot or using miniature displays or cards. An example of a commonly played board game is Monopoly.

According to the Creative Economy Agency (Bekraf), the development of board game cafes in Indonesia has experienced positive growth year after year (IndoTelko, 2019). Hapsari also shows that the thematic café trend that is currently popular is the board game café (Hapsari, 2022). Apart from these two statements, considering the impact of globalization, board games, most of which are easy to purchase from abroad, reduce the entry barrier for start-ups. Seeing from these statements, competition between board game café s is becoming very tight. Every board game café wants to be the best café to please customers so they become loyal customers and increase profits.

Based on interviews with owners and several Nexus customers, the number of boardgame café s in Surabaya can still increase, considering the trend of board game-themed cafes is increasing, which means that the boardgame café business is quite promising. The increasing number of boardgame cafes also means that there will be more competitors, so boardgame cafes that already have a name must develop an excellent business strategy to compete with many competitors.

Nigel Slack and Michael Lewis said the approach that can be applied is using the static approach or the defensive approach. This approach focused on preventing competitors from attacking existing markets or resources (Slack & Lewis, 2017). One of the defense mechanisms is to create a barrier to entry. The application of this mechanism can be in the form of developing or improving existing service processes to maintain customer loyalty, and attract new customers who have the potential to become loyal customers, and make it difficult for new competitors to win over the loyal customers.

It's important to develop and improve service quality to meet customer expectations, but achieving this objective may not always be feasible because it requires a lot of resources and costs. Given this, Nexus needs to find out what kind of service process customers want so that Nexus can make priorities to develop and improve their service processes so as not to incur resources and costs for service processes that are less relevant. Given this, we need a method to find what customers expect and adjust it to the existing service process.

The Service Quality (SERVQUAL) and Quality Function Deployment (QFD) methods are suitable for dealing with this problem because the SERVQUAL Method can determine whether customers are satisfied with the Nexus's services. While, the QFD method can process the calculation results from SERVQUAL into service quality priorities that need improvement and can provide suggestions for improvements in accordance with customer expectations.

This research focuses on a board game café called Nexus Table Top Game café in Klampis Surabaya. Nexus is a board game café that quite famous because of its advantages. Unfortunately, based on the results of interviews with Nexus managers, customer satisfaction measurements are not carried out regularly, so that customers' opinions often cannot be heard. It can be a problem because most dissatisfied customers don't feel the need to leave criticism and suggestions and decide not to come to Nexus again, notably if these customers spread their dissatisfaction to other customers, thereby

reducing the attractiveness of Nexus. Based on the author's experience conducting field studies at Nexus, customers rarely communicate their discomfort to employees. Also once, customers who felt driven out because they did not understand the Nexus operating hours limit, so these customers felt dissatisfied and shared this experience and did not even return to playing on Nexus. Apart from that, authors have also heard customer complaints about unsatisfactory food. Authors hope that this research could help the enterprise improve and sustain. From the interviews with customer, authors also found that customers also support green practice operations or environmentally friendly service process practices. Therefore, authors added green practice measurements in this research.

2 Literature Review and Hypothesis Development

This study uses the main concepts of SERVQUAL and QFD. SERVQUAL is a method that can measure the gap or difference between what the customer expects from the service and the actual service. This gap serves as an indicator of the customer's satisfaction with the service.

According to Parasuraman, customers evaluate service quality by comparing expectations with perceptions on ten dimensions, namely: (1) tangible, (2) reliability, (3) responsiveness, (4) communication, (5) credibility, (6) security, (7) competence, (8) politeness, (9) understanding/understanding customers, and (10) access. Afterward, this dimension condensed into five dimensions, namely: (1) tangible, (2) reliability, (3) responsiveness, (4) assurance, and (5) empathy (Ladhari, 2009). SERVQUAL data obtained by conducting customer questionnaires then processed to identify the gap of each service attribute.

After identifying the SERVQUAL calculation, the QFD method is for processing data. According to Daetz, QFD is a systematic planning process created to help companies manage all the elements needed to define, design, and manufacture products or provide services that can meet consumer needs (Randi, 2018). QFD utilizes the House of Quality matrix as a conceptual map and model to comprehend how the attributes of one design node affect the attributes of the upcoming design node (Olewnik & Lewis, 2008). The data used in QFD is the result of SERVQUAL processing.

There are few previous researchs that measure service quality and carry out benchmarking as a comparison between the studied company and the competitors, which produces suggestions based on the shortcomings of competing companies. There are also studies that carry out measurements on green restaurants, which resulted in proposals in the form of green practice quality in addition to proposals of the company's operational processes, which say that the SERVQUAL usually used is less effective for measuring green practices, so it requires an additional dimension known as GSERV (Chen et al., 2015).

3 Data and Methodology

This research is a qualitative case study regarding measuring customer satisfaction with the quality of the Nexus board game café service. Primary data is from interview and brainstorming methods, questionnaires and observation. The interviews and brainstorming with managers are for obtaining information about Nexus operations. Apart from that, authors conducted interviews with customers and employees. Authors also carried out questionnaire with customers to obtain customer assesstment of the Nexus services' quality. From this, 118 participants answered the questionnaire. The secondary data is from journals, articles, books and other sources that support this research.

The process of providing proposals is carried out based on the following process: gap analysis/customer satisfaction performance, calculation of service quality, identification of What's and

How's, between How's, identify the relationship between What's and How's, identify the level of importance by consumers, identify goals, identify improvement ratios, identify absolute importance. The following describes the stages in measuring customer satisfaction with service quality:

Step 1: Gap/Customer Satisfaction Performance Analysis

The results of customer assessments of service quality from questionnaires are processed, and then gaps are calculated, or what can also be called customer satisfaction performance for each service attribute. The gap calculation is by the formula: Gap = reality score – customer expectation score. The gap value shows whether customers are satisfied with the service attributes provided by Nexus. The negative gap score means the customer is not entirely satisfied with the service attribute because the quality of the service received does not meet expectations. The positive gap score means the customer is satisfied with the service attribute. Afterward, the gap value is sorted from those with the highest negative value to the lowest to make it easier to identify the service quality that is most unsatisfactory according to customers.

Step 2: Service Quality Calculation

The next step is to calculate the service quality from the results of the customer questionnaire. Service quality calculation is by the formula: Service quality = reality score / expectation score. The score reflects the quality of service based on customer evaluation. A service quality defined good if the service quality score is above 1 (Atmaja, 2019).

Step 3: Identify What's and How's

What's is a service attribute required by customers. "What's" are identified by interviewing customers about what they need in the service process. The next step is "how's" identification. "How's" is a response from enterprise to meet customer needs (What's). How's are identified by brainstorming with Nexus managers who understand the service process. The interviews with customers found 30 service attributes expected by customers, and the brainstorming with Nexus managers found 30 responses to meet these customer needs.

Step 4: Identify What's and How's Relationships, Between How's

After identifying What's and How's, the next step is to identify the relationship between What's and How's and the relationship between How's. Identification of this relationship was done by brainstorming with Nexus managers. The relationship between What's and How's is identified to find out whether one How's can influence several What's and how strong the relationship is. Meanwhile, identifying the relationship between How's is carried out to find out whether the relationship between How's supports each other or contradicts each other.

Step 5: Identify Interest Level By Consumers

The level of importance by consumers is the priority of "What's or customer needs that are most important to customers. Identifying this priority level will add consideration to improving service attributes so that improving service quality becomes more targeted. The level of interest by customers is from the results of the customer expectation questionnaire scores. As the expectation score increases, customers prioritize the corresponding service attribute more.

Step 6: Identify Goals

It is imperative to establish clear objectives to enhance the quality of service. Small and medium-sized enterprises (SMEs) can effectively determine their customer satisfaction objectives by examining their satisfaction survey scores. This approach allows SMEs to gain insights into the needs and desires of their customers, enabling them to tailor their products and services to meet their customers'

expectations. By carefully analyzing customer feedback, SMEs can identify areas of improvement and develop strategies to enhance customer satisfaction and loyalty. Thus, the use of satisfaction surveys can be an essential tool for SMEs seeking to enhance their competitiveness and build lasting customer relationships. Utilizing the QFD technique, this study aims to elevate the standard of Nexus' service quality, bringing it in line with the expectations of its customers.

Step 7: Identify the Improvement Ratio

Improvement ratio is a ratio that shows how much effort Nexus needs to improve the quality of its services so that it meets customer expectations. The improvement ratio calculation using the following formula: Improvement Ratio = goal / reality. The greater the improvement ratio score, the greater the effort that Nexus must make to improve the quality of the service so that it can meet customer expectations.

Step 8: Identify Absolute Importance

Absolute importance is the technical response value after being influenced by the level of importance obtained from customer. Absolute importance is needed to calculate the priority of technical responses according to customers, thereby adding consideration to improving service quality so that improvements in technical responses become more targeted according to customer expectations. The absolute importance calculation using following formula: Absolute Importance = final importance x numerical value. Then, it will be analyze. The greater the value, the more prioritized the technical response will be by customers.

4 Results and Discussion

There are 25 of 30 service qualities with negative gap value, or the reality score is lower than the expected score. It means that these quality attributes still cannot satisfy customer needs, while the rest have positive values, which means that the service attributes aligned with customer expectations. Out of 25 attributes, the order of service quality attributes from the highest negative value is (1.) Adequate parking space, (2.) Variety of food and drink menus, (3.) A comfortable place to play and eat, (4.) Having a complete type of board game, and (5.) The speed of kitchen staff prepares food and beverages. After determining the gap, the next step is determining consumer needs (What's) and the SME response (How's) in meeting consumer needs, usually referred to as technical response that is useful for satisfying consumer needs. Based on the brainstorming, authors obtained technical responses shown in table 1. Next, the analysis of the service quality calculations resulted in all dimensions still having score below one, means that the quality of the SME service cannot be said to be good, as seen in Table 2.

The next step is to identify the level of interest by customers. Based on the level of importance by customers, it shows that the five service attributes most prioritized by customers include: "employee friendliness in serving customers," "employees show good attitude (smile, greet)," "board game guides master the game and can explain clearly good," "the guide can suggest board games that suit the customer's wishes," and "employees serve politely." The next step is to determine the goal or goal or when the quality improvement can be said to be successful. Afterward, authors calculate how much effort is needed for Nexus to achieve that goal or be able to meet customer expectations. This business calculation is called the improvement ratio (see Table 3).

The next step is to calculate the priority of the technical response by looking at the numerical value of the technical response in the picture of the relationship between "What's" and "How's," which has been influenced by the level of interest by the customer. Based on calculations, several technical responses that have the highest priority are "tidying up tables and chairs, if necessary," "greeting

customers," "employees playing together when there are no visitors to master the game," "increasing the board game collection," "always cleaning tables and chairs," "employees at each job desk have a partner," and "employee training."

Table 1. Technical Response Based on Nexus Customer Needs

No.	Service Attributes	Technical Response
1	The building looks clean and well-kept from the outside.	Collaborate with the dentist on the ground floor to keep the building tidy.
2	A comfortable place to play and eat.	Employees turn on the lights and air conditioning.
3	Has a complete type of board game.	Add to your board game collection.
4	Has a variety of board games for all ages.	Buy board games for a variety of ages.
5	Have clean eating utensils.	Wash eating utensils regularly.
6	The table is spacious enough for both dining and gaming purposes.	Add a table or replace the table with a larger size if necessary.
7	The neatness of customer tables and chairs.	Tidy up tables and chairs if necessary.
8	Toilet cleanliness.	Clean toilets if necessary.
9	Cleanliness of customer tables and chairs.	Always clean tables and chairs.
10	Has a nameplate that is quite clearly visible.	Add signage if necessary
11	Sufficient parking space.	Hire a parking attendant.
12	Variety of food and beverages.	Changing and adding menus.
13	There are plants in the café for greenery.	Add plants to the café building if necessary.
14	The materials used for the utensils and packaging are eco-friendly and recyclable for reuse.	Reduce the use of plastic bottles and disposable cutlery.
15	Employees show good attitude (smile, greet).	Greet customers.
16	The board game guide knows the game and can explain it well.	Employees play together when there are no visitors.
17	Kitchen staff can provide satisfying food and drinks.	The manager ensures the quality of the food.
18	The service provided by employees is fast and precise.	Employees at each job desk have a partner.
19	Employee alertness when dealing with customer complaints and requests.	Maintain employee attention to customers.
20	Employees promptly assist visitors in need of help.	Every employee always maintains communication.
21	The speed of kitchen staff prepares food and beverages.	The menu at the café is an easy-cook menu.
22	Guarantee of good service from employees.	Employee training.
23	Guarantee that customers can play comfortably.	Always check the quality of lamps, air conditioners, tables and chairs.
24	Guaranteed customers can order food and drinks.	Kitchen employees purchase raw materials before the café opens.
25	Employee friendliness in serving customers.	Speak in a friendly and cheerful tone.
26	Providing services that do not discriminate between visitors.	Provide the same service to all visitors.
27	The guide can explain the board game well and doesn't beat around the bush.	The guide explains the board game briefly using language that is easy to understand.
28	The guide can suggest board games that suit the customer's wishes.	Pay attention to the character of the customers who come.

| 29 | Employees serve politely. | Employees behave and speak politely with visitors. |
| 30 | Employees show or reflect attitudes that demonstrate environmental friendliness. | Employees show the importance of protecting the environment to customers. |

Source: Results of the author's brainstorming

Table 2. Service Quality in Each Dimension

No.	Dimension	Performance/Reality	Expectation	Gap	Service quality
1	Tangible	3.99	4.13	-0.14	0.96
2	Reliability	4.24	4.32	-0.08	0.98
3	Responsiveness	4.11	4.19	-0.08	0.98
4	Assurance	4.20	4.23	-0.03	0.99
5	Empathy	4.23	4.26	-0.03	0.99
	Mean	4.15	4.22	-0.072	0.98

Source: Developed by authors

The final step in this research also adds discussion regarding green practice according to SDGS Point 12 relating to responsible consumption and production. The four things emphasized in this research are greening, saving energy, using non-disposable goods, and food waste. Based on the customers questionnaire, greening has been able to satisfy customers. It seen from the service attributes that there are plants in the café , as greening has a positive gap value, while the use of non-disposable goods still has a negative gap value because there is still the use of plastic drink packaging bottles.

From the measurement steps above, service improvement proposals are then designed in accordance with previously determined considerations and priorities. The proposed improvements include:

Tangible: An improvement plan suggested is to regularly clean chairs that are starting to look dirty because the chairs are dirty and stained, which can reduce comfort when playing and eating. For the problem of sufficient parking spaces, there are suggestions made to overcome this problem. Nexus can collaborate with two other businesses to hire more competent parking attendants.

Reliability: The recommendation is to create standards, namely that staff/employees who are in a position to be seen by new customers who come in are required to greet them, because the problem is that employees often do not greet customers and only greet customers they already know.

Responsiveness: Suggestions to improve service quality in this dimension are adding employees, especially kitchen employees, to increase the service attribute "service provided by employees is fast and precise" and "speed of kitchen employees when preparing food and drinks."

Assurance: Recommendations for improvement could include increasing the frequency of collaborative play sessions to prevent the risk of the Game Master forgetting the rules of the board game.

Empathy: The proposal suggested to improve the quality of the attribute "employee friendliness in serving customers," similar in the reliability dimension, namely creating a new standard regarding greetings. Another suggestion is to understand better the customers' desires regarding the board games they want to play or buy boardgames with more varied playing methods or by considering customer requests.

Greeen practice: A suggestion is that the supplier of coffee sold by Nexus is an acquaintance of the owner of Nexus so that they can use this advantage to negotiate about replacing coffee bottle packaging made from plastic with bottles made from glass to reduce plastic waste. Another suggestion that may further improve the situation is including vegetable options in various menus that offer the option to add them, which can help prevent them from being stored for an excessive amount of time. Furthermore, exploring alternative methods for storing vegetables could prove beneficial.

Table 3. Technical Response Based on Nexus Customer Needs

No.	Customer Needs	Goal	Performance	Improvement Ratio
1	The building looks clean and well-kept from the outside.	4.01	3.96	1.01
2	A comfortable place to play and eat.	4.26	3.99	1.06
3	Has a complete type of board game.	4.20	3.99	1.05
4	Has a variety of board games for all ages.	4.00	3.89	1.02
5	Have clean eating utensils.	4.25	4.17	1.01
6	The table is spacious enough for both dining and gaming purposes.	4.22	4.07	1.03
7	The neatness of customer tables and chairs.	4.23	4.15	1.01
8	Toilet cleanliness.	4.13	3.97	1.04
9	Cleanliness of customer tables and chairs.	4.17	4.08	1.02
10	Has a nameplate that is quite clearly visible.	4.16	4.1	1.01
11	Sufficient parking space.	4.13	3.75	1.10
12	Variety of food and beverages.	4.17	3.83	1.09
13	There are plants in the café for greenery.	3.82	3.88	0.98
14	The materials used for the utensils and packaging are eco-friendly and recyclable for reuse.	4.05	4.04	1.00
15	Employees show good attitude (smile, greet).	4.37	4.23	1.03
16	The board game guide knows the game and can explain it well.	4.36	4.27	1.02
17	Kitchen staff can provide satisfying food and drinks.	4.23	4.21	1.00
18	The service provided by employees is fast and precise.	4.20	4.09	1.02
19	Employee alertness when dealing with customer complaints and requests.	4.15	4.14	1.00
20	Employees promptly assist visitors in need of help.	4.23	4.24	0.99
21	The speed of kitchen staff prepares food and beverages.	4.17	3.99	1.04
22	Guarantee of good service from employees.	4.24	4.18	1.01
23	Guarantee that customers can play comfortably.	4.22	4.23	0.99
24	Guaranteed customers can order food and drinks.	4.23	4.2	1.01
25	Employee friendliness in serving customers.	4.39	4.25	1.02
26	Providing services that do not discriminate between visitors.	4.29	4.22	1.01
27	The guide can explain the board game well and doesn't beat around the bush.	4.27	4.3	0.99

28	The guide can suggest board games that suit the customer's wishes.	4.32	4.17	1.03
29	Employees serve politely.	4.31	4.28	1.01
30	Employees show or reflect attitudes that demonstrate environmental friendliness.	4.01	4.16	0.96

Source: Developed by authors

5 Conclusion

The study concluded that the SME still needs to improve service quality as the service quality of the SME still not good, as seen from the fact that there are still many negative gaps in each dimension and from the service quality calculations. The SERVQUAL data processed using the QFD method resulted in service improvement priorities so that several improvements can be proposed in the Five dimensions of SERVQUAL, as previously stated in results and discussion. Service quality measurement from the customer's perspective is important for improving the service process. It's beneficial to determine priorities for improving service processes, because often the points of view of customers and service providers are different, and if improvements do not take into account the customer's point of view, improving service quality can actually reduce customer satisfaction.

The managerial implications of this study include that improving service quality is important and is better done based on customer desires while still having to determine the priority of the importance of the attributes to be improved. Apart from that, it is important to carry out performance measurements and service quality measurements regularly. This measurement aims to maintain service quality that customers think is good, and the SME can be aware of service quality deficiencies from the customer's perspective. A limitation of this research is the lack of data to compare the board game cafes, so the results isn't benchmark. This limitation means that authors cannot know the advantages Nexus holds compared to other boardgame café s and influences the recommendations to provide less additional competitiveness. For further research, we suggest adding the dimensions of GSERV or Green SERVQUAL if the objective is to measure the green practices of the enterprise. If it is possible to compare the service quality of an enterprise with the competitor, further study could show the position of the enterprise under study with competing enterprise.

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