

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL BACKGROUND

2.1. Literature Review

In the literature review section, the results of previous studies related to improving the quality of services and other related instruments will be explained. The literature review carried out is used as a reference for research that is currently being carried out as well as the development of previous research.

2.1.1. Previous Research

Every customer from the service or product industry sector expects the best and highest quality of goods/services. Therefore, the goods or service industry manager must pay attention to the quality of the goods/services offered. Kencana et al. (2020) state hotel managers improve the service quality of hotels due to competition between hotels of similar class that are rapidly bloomed with the intention to follow international standards, and, lastly, to satisfy customers. According to Nazari et al. (2020), customer satisfaction significantly affects hotel performance because it is believed to increase customer loyalty as well as the quality of the products and services offered, increase the reputation and value of the hotel, and benefits managers because the customer loyalty provides a competitive advantage. Mariani *et al.* (2019) state that critical attributes of the hotel such as cleanliness, service from staff, staff conditions, and room comfort affect the customer's overall satisfaction with the hotel regardless of the hotel's location.

In measuring service quality, approaches identify and define the attributes that affect service quality. The most widely and frequently used are SERVQUAL and Six Sigma. The instrument used to get the data for the measurement is a survey or questionnaire, whether handed online or offline. For example, Kasih & Suprato (2017) measured service quality and customer satisfaction from a hotel in Cirebon by distributing an online questionnaire to customers who stay at the hotel. First, a questionnaire is made based on five SERVQUAL model dimensions, producing 15 attributes on the questionnaire. Jasinskas et al. (2015) also investigated service quality to assess the impact of quality on hotel services on customer loyalty. The approach is an adaptation of two approach models, the SERVQUAL model and the model for determining customer loyalty. In the publication, it is explained that to get the data, a questionnaire is distributed. Still in relation with the hospitality

industry, Nazari et al. (2020) conducted a study on small and medium- sized hotels in Malaysia. This research adopted a double-respondent method and a dual-rating system. Two questionnaires were created, then distributed to hotel workers and guests in 1-to-3-star hotels in four states in Malaysia. The questionnaires obtained results from 212 small and medium-sized hotels and 424 guests.

Regarding the research questionnaire, in the research conducted by German et al. (2022), Kumar & Hundal (2019), and Rizq et al. (2018), each attribute of the questionnaire used in his research was made based on the SERVQUAL method. However, in the process, there are differences from one study to another. In the study of German et al. (2022), respondents' demographic profile was considered in their research, while in the studies of Kumar & Hundal (2019) and Rizq et al. (2018), it is not explained whether the respondent's background is considered. In the research conducted by Kumar & Hundal (2019) and Rizq et al. (2018), the sampling technique used is simple random sampling.

In processing the data obtained, specific approaches are used to get results from the previous research. In several publications, the SERVQUAL model approach is widely used in studies related to service quality. Jain & Gupta. (2004) stated that SERVQUAL was first introduced to the gap model studied by Parasuraman et al. in 1985 which learned the difference between customer expectations and perceptions of service. The score of the gap is the respondent's ratings given on perception and expectation on the twenty-two service criteria items in an organized five dimensions (tangibility, reliability, responsiveness, empathy, and assurance) as stated by Banahene et al. (2017). According to Adil et al. (2013), there are several different gaps in the SERVQUAL Gap model and are usually symbolized by Gap 1 to Gap 7. Among the gaps, some are related to knowledge, policy, service delivery, communication, customer perceptions of service delivery, expectations about what companies in the industry should provide, and the employees' perceptions of consumer expectations, and expectations and perceptions of service from customers.

Adil et al. (2013) state that Parasuraman, Zeithaml, and Berry (1988) suggested that SERVQUAL may track service quality trends from time to time and categorize customers into perceived quality components based on customer's SERVQUAL scores. Qolipour et al. (2018) proved the usefulness of the SERVQUAL model carried out on medical tourism objects that aimed to determine the quality of

medical tourism services in private and public hospitals. The researcher assessed the quality of hospital services given to 250 Iraqi tourists referred to Ahvaz private and public hospitals in 2015. The results obtained from the analysis show a negative gap in all the dimensions of service quality in the studied hospitals. Therefore, the hospital service quality is improved to attract foreign patients. However, the studied hospital's expected service does not imply the received service needed by the manager of the studied hospital to improve their weakness.

In addition, some other approaches were used in previous studies related to SERVQUAL, such as the Importance Performance Analysis (IPA) method and the Quality Function Deployment (QFD) method. In a study by Dewi (2019), the SERVQUAL and KANO models were integrated to assess the quality of a retail store. On the other hand, another study by Winarno & Absor (2018) combines the SERVQUAL and IPA methods to analyze service quality at PT. Media Purna Engineering. The two previous studies found that each method has advantages when combined with the SERVQUAL pillars. The difference lies in the function of each method used in the analysis process to determine the attributes that need improvements.

2.1.2. Current Research

The research uses Hotel Dedy Jaya Ciledug as the object of the research. This study aims to improve the quality of service at the hotel by identifying the existing gaps and finding solutions to improve them. In the process, the research begins by identifying problems in the hotel based on the results of interviews with the General Manager, hotel accountants who also take care of hotel administration, hotel workers (room boys), and direct testimonials from hotel guests during their visits. As explained in sub-chapter 1.1, after being identified and confirmed, the existing problems are processed into fishbone diagrams and interrelationship diagrams to see the relationships between existing problems and to determine which problems are more significant to be solved.

When compared to problems related to housekeeping and food and beverages services at other one-star hotels in Cirebon, the Dedy Jaya Ciledug hotel has human resources who do not have hospitality knowledge, especially in the food and beverages (restaurant) department. Based on testimonials from hotel workers, this affects the turnover rate of hotel workers. However, it cannot be avoided there is no hotel schools available nearby.

There are two prominent methods that are commonly used to solve problems related to hotel service quality. The two methods are the SERVQUAL method by Parasuraman et al., established in 1985, and the SERVPERF method by Cronin & Taylor, established in 1992.

When compared, the SERVQUAL and SERVPERF methods both highlight service performance, but each method has its strengths and weaknesses. The SERVQUAL method proved inappropriate to be applied to all service business sectors. While the SERVPERF method can explain more variance in measuring service quality than the SERVQUAL method as stated by Perdhana et al. (2017).

However, the SERVQUAL method is more widely used by researchers than the SERVPERF method, mainly because the SERVQUAL method instrument is more suitable to be applied in the service provider industry. Perdhana et al. (2017) state that the SERVPERF method only uses components of perception of service quality, while the SERVQUAL method uses components of consumer expectations of the services provided by the company and their perceptions of the performance of services that have been provided.

Judging from the statement in the paragraph above, for the service problem in hotels, in which industries rely on services rather than products, the SERVQUAL method is considered more suitable for the research conducted. However, using only the SERVQUAL method, it will be hard to determine which instruments should be repaired or upgraded immediately. Therefore, there are two approaches to be considered to use including the Importance-Performance Analysis (IPA) approach and the KANO model, which is applied to map instruments, ranging from instruments that must be improved to attractive instruments. The two approaches have similarities, only the Kano model tends to ignore the performance of attributes and the importance of attributes while the IPA model only considers one-dimensional quality (Kuo et al., 2012). However, reviewing the service conditions at the hotel, the IPA model is more suitable to be applied to the problems found.

The research design is not much different from that conducted by Winarno & Absor (2018) and other researchers. The current research uses the SERVQUAL and Importance Performance Analysis (IPA) methods. However, cause and effect diagrams (Fishbone) and interrelationship diagrams are also used in the analysis stage as a tool for rooting problems so that solutions are then designed based on the analysis results.

2.2. Theoretical Background

In the theoretical background sub-chapter, there is supporting information on the research formulation and the implementation of the theory. The information displayed includes the definition of service and quality, service quality approach, and service quality dimensions.

2.2.1. Service Definition

Service can be defined as intangible objects but can still be enjoyed and felt by the public who purchase or make a transaction to get a service/treatment. In contrast to when someone buys goods from a seller of goods, in the sale of services, the seller's willingness is required before providing services to the buyer. Qi (2014) defines service as a transformation process in which both the provider and the customer interactively apply relevant knowledge, skills, and experience to create mutual benefits for service providers and their customers.

If examined more deeply, the intended transformation process includes a series of service encounters that can be either direct or indirect, with successive or intermittent periods, and with short or intensive times.

Wibowo (2014), says that service can be interpreted as a performance that is quickly perished and intangible and can be felt rather than owned. In contrast, customers as service buyers are more able to participate actively in consuming services. Based on the definition, it can be concluded that services are activities carried out between parties, where one party offering activities and benefits to other parties. However, the activities or benefits provided have their limitations and are intangible.

Tjiptono (in Wibowo, 2014) explains that services have the characteristics of intangibility, inseparability, variability, and perishability. As by definition, services are intangible, which means it cannot be seen, tasted, touched, smelled, or heard.

The inseparable characteristic means that services cannot be separated from their providers, for example, students in schools. Variability means that the service does not have a particular form that refers to a standard because the shape, quality, and type vary depending on the service provider. The last service characteristic is perishable. Services do not last long and have a specific time limit.

2.2.2. Quality Definition

Quality is a measure of goods or services made and determined by specific individuals or groups of organizations to fulfill the customer's wishes or expectations. According to Baskarada (2010) and Rifai (2020), the followings are the definition of quality.

- a. In 1982, Deming defined quality as "a predictable degree of uniformity and dependability at a low cost with a quality suited to the market;"
- b. In 1993, Elliot defined quality as "something different for different people and depending on time and place or said to fit the purpose;"
- c. In 1995, Goeth and Davis defined quality as "a dynamic condition related to products, services, people, processes, and the environment that meet or exceed what is expected."

Suppose the definitions according to the experts above are examined. In that case, it can be concluded that quality can be interpreted as a condition designed based on a certain level of uniformity that depends on a particular object used as a reference to meet or exceed what is expected.

2.2.3. Service Quality

Service quality is vital in determining marketing management strategies in the service industry, which also determines the success of service industry companies. Tjiptono (in Wibowo, 2014) explained that service quality is the expected level of excellence and control over the level of excellence to meet customer desires. (Sumarsid & Paryanti, 2022). Lewis and Booms (in Sumarsid & Paryanti, 2022) define service quality as a measure of how well the level of service provided can meet customer expectations.

Based on the above understanding of service quality, it can be interpreted that service quality is the level/scope expected by customers in various conditions and can be used to determine the successful fulfillment of customer expectations. According to Sumarsid & Paryanti (2022), the quality of service nowadays is driven by the competitive conditions of companies, technological advances, the economy, and social and cultural factors of society. Thus, the quality of service is essential for the company set.

2.2.4. Service Quality Dimension

The dimensions in both product quality and service quality are essential to determine the quality. Parasuraman et al. (1985) conducted considerable research

on several service industries such as maintenance of electronic equipment, banking, long-distance telephone, credit cards, and sales services. The research aims to identify the factors that affect service quality or service quality dimensions. His research summarized the original ten quality dimensions into five main dimensions as stated in the following.

- a. Reliability: the ability to provide the promised service immediately, accurately, and satisfactorily. The reliability dimension cannot be seen, but the customer can feel it.
- b. Responsiveness: the desire of employees to respond to customers and provide services responsively. An example of the responsiveness dimension is how an employee handles customer complaints.
- c. Assurance: a dimension that includes employees' knowledge, abilities, courtesy, and trustworthiness. This dimension also includes customer safety, risk, or doubt.
- d. Empathy: a dimension that includes ease of doing relationships, good communication, personal attention, and understanding of customer needs.
- e. Tangibility: attributes that can be seen and touched. Examples of actual dimensions include physical appearance, equipment, employees, and information facilities.

2.2.5. Service Quality Method

The SERVQUAL method is the method most often used to measure service quality. There are seven significant gaps in the concept of the service quality method, as shown in Figure 2.1. The model results from research from Parasuraman et al. (1985). The gaps include the following (Shanhin, 2006).

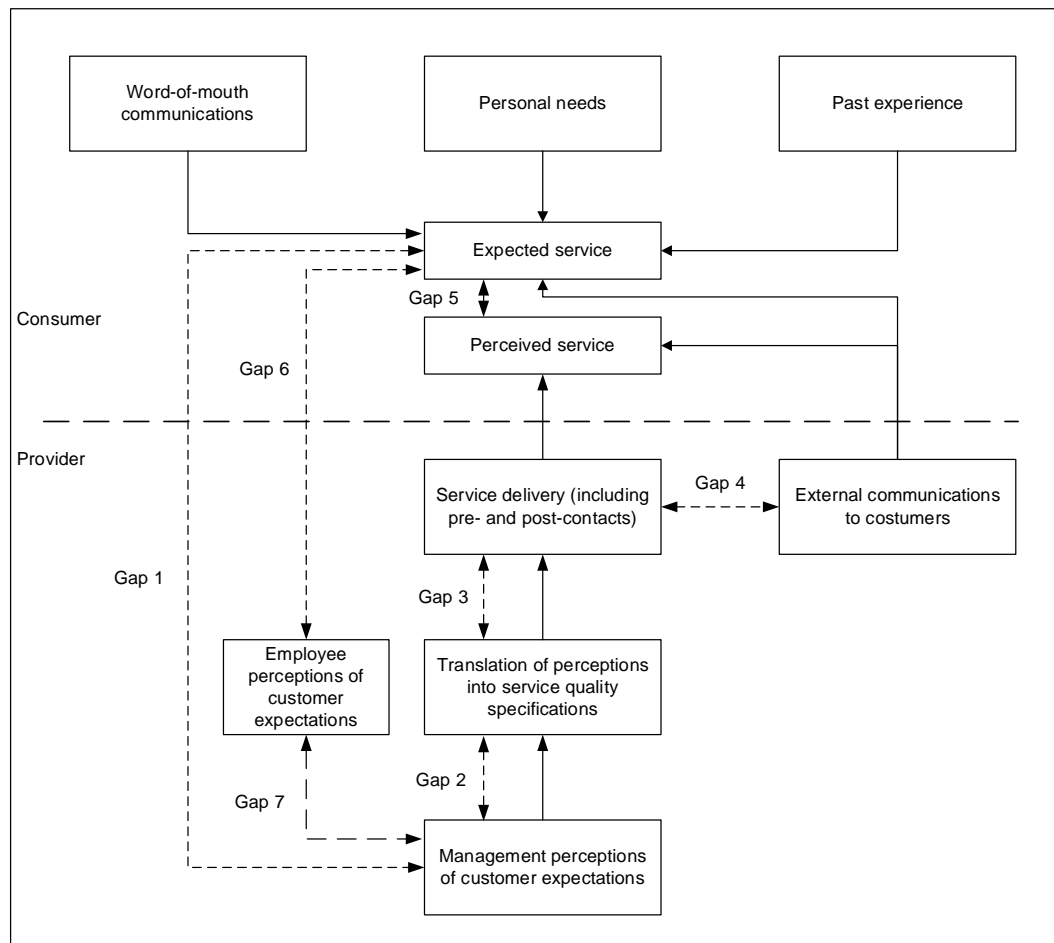


Figure 2.1. Model of Service Quality Gaps

Source: Shanhin (2006)

- a. Gap 1: Customer's expectations versus management perceptions. This gap exists due to the company's lack of marketing research orientation, insufficient communication skills, and problems related to company management.
- b. Gap 2: Management perceptions versus service specifications. Gap 2 results from a lack of commitment to the established service quality, perceptions of impracticality, lack of work standards, and the absence of goal setting.
- c. Gap 3: Service specifications versus service delivery. Gap 3 is caused by unclear roles and conflicts within the company, poor employee-job fit, lack of technology-job fit, inadequate supervision of the control system, lack of perceived control, and lack of teamwork within the company.
- d. Gap 4: Service delivery versus external communication. Gap 4 results from a lack of communication between co-workers in the company and a tendency to make excessive yet empty promises.

- e. Gap 5: The discrepancy between customer expectation and customer perceptions of the service. Gap 5 is the result of the influence or expectations made on the part of the customer and the gap on the part of the service provider. In this case, customer expectations are influenced by personal needs, recommendations from others, and experience with the service obtained.
- f. Gap 6: The difference between customer's expectations and employee's perceptions. Gap 6 results from differences in understanding customer expectations by service providers. In this case, the interaction is carried out directly between the service provider and the customer.
- g. Gap 7: Discrepancy between employee's perceptions and management perceptions. This gap can be caused by differences in understanding customer expectations by managers and service providers.

From the seven gaps above, Gap 1, Gap 2, Gap 3, Gap 4, Gap 6, and Gap 7 can be identified as functional processes that can be reviewed from the perspective of the customer and the company. Meanwhile, Gap 5 refers to the customer's point of view only. The difference makes the consideration that Gap 5 is an accurate measure of service quality. The following is equation 2.1, which is the equation for calculating the SERVQUAL score Gap 5.

$$\text{SERVQUAL Score (Gap 5)} = \text{Perception Score} - \text{Expected Score} \quad (2.1.)$$

2.2.6. Questionnaire Definition

Questionnaire is one of the research instruments often used in scientific research. Questionnaire is an alternative method of communication between researchers and respondents by asking questions and recording respondents' answers for later analysis (Cooper & Emory in Pujihastuti, 2010). Pujihastuti (2010) defines a questionnaire as a primary data collection tool with a survey method to obtain respondents' opinions. In practice, the respondent's understanding is fundamental to answering and completing the questionnaire.

Kasnodiharjo (1993) explains that a questionnaire must meet the following requirements: easy to ask, answer, and process. The definition that is easy to put forward is very relative and depends on the type of survey, the knowledge of the respondents, and the party conducting the survey. Therefore, there are principles in making questionnaires as follow (Kasnodiharo, 1993).

- a. Clear. The words used are easy to understand by the respondents. One odd word can result in respondent's misunderstanding. In making statements/questions in the questionnaire, it is necessary to avoid using double negatives (e.g., Shouldn't the company not have taken this action?) to avoid biased opinions.
- b. Helping the respondent's memory. Well-structured questions make it easier for respondents to remember information needed to answer the questionnaire.
- c. Making respondents willing to answer. In making the questionnaire, avoiding harsh or personal words is best. Instead, questions should be easy for the respondent to answer pleasantly.
- d. Bias free. The purpose of this principle is not to lead respondents to answers that are not in accordance with the respondent's condition or experience. Questions that often invite biased answers, for example, are those related to economic status.
- e. Screening respondents. The purpose of screening respondents before they answer the questionnaire is to avoid the respondent's inability to answer questions because they do not have the knowledge or experience regarding the questions asked.

2.2.7. Questionnaire Eligibility Test

a. Validity Test

The validity test determines the data set that is to occur in the object under study. A questionnaire can be considered valid if it can reveal the items to be measured (Halin, 2018). This measurement can be done using the product moment correlation technique from Pearson by correlating the score of the question items with the total items.

Miftahuddin & AR (2008) explained that this approach is called product-moment correlation because the correlation coefficient is obtained by finding the product of the correlated variable moments of the questionnaire attributes.

Product moment correlation is a technique to find the correlation between two variables that occurs in the form of positive or negative correlation, no correlation, and perfect correlation. Budiastuti and Bandur (2018) explain that positive correlation means that there is an increase that follows the score of the first variable to the score of the second variable or vice versa, that the low score of the first variable is followed by the low score of the second variable. On the other hand, a

negative correlation indicates that if one variable score increases, the value of the other variable decreases. In short, negative correlation means there is a decrease in the score of the second variable followed by an increase in the score of the first variable.

b. Reliability Test

Reliability test is conducted to determine the level of confidence or reliability of the results of a measurement. Sutriyono (2016) explains that a measurement can be considered reliable if the measurement results have a high reliability value. The data instrument should be used after the reliability test shows the results of reliability measurements against the reliability test's determination by using the Cronbach Alpha approach.

Yusup (2018) explains that reliability testing using the Cronbach Alpha test is carried out for instruments with more than one correct answer. So, it can be ascertained that the instrument being tested is in the form of a questionnaire. The measurement of the Cronbach Alpha coefficient can be seen in the following formula.

$$r_i = \frac{k}{(k-1)} \left\{ 1 - \frac{\sum s_i^2}{s_t^2} \right\} \quad (2.2.)$$

With the following information:

r_i = Cronbach Alpha reliability coefficient;

k = number of question items;

s_t^2 = total variance;

$\sum s_i^2$ = total variance score for each item.

After calculation, the Cronbach Alpha coefficient is compared with the theoretical Cronbach Alpha value. Streiner stated that an instrument is reliable if the Cronbach Alpha reliability coefficient is more than 0.70 and the Cronbach Alpha reliability coefficient cannot exceed 0.90 (Yusup, 2018).

2.2.8. Likert Scaling in Questionnaire

The Likert scale measures perceptions, attitudes, or opinions of a particular person or organization regarding an event based on a predetermined operational definition. Qomari explained that this scale is a psychometric scale usually applied in questionnaires and is most often used for research in the form of surveys (Febtriko & Puspitasari, 2018).

Initiated by Rensis Likert, the Likert scale is used in two forms of questions in the questionnaire. Positive questions to measure the positive scale, and the form of negative questions to measure the negative scale. Positive questions are usually given a score of 5, 4, 3, 2, and 1; the negative question form is given a score of 1, 2, 3, 4, and 5 or -2, -1, 0, 1, 2. Each number stands for a respective explanation, including strongly agree, agree, undecided, disagree, and strongly disagree.

2.2.9. Importance-Performance Analysis (IPA) Method

Importance-Performance Analysis (IPA) is a descriptive analysis method used to identify what performance attributes are essential, which an organization must focus on in meeting service user satisfaction (Suhendra & Prasetyanto, 2016). First introduced by John A. Martilla and John C. James in 1977, the importance-performance analysis method is carried out by determining the total score of each questionnaire instrument. After the total score of each questionnaire instrument is determined, the X (performance) and Y (importance) values are calculated by using the IPA formula as follows.

$$X = \frac{\sum \text{Performance } (\tilde{x})}{\text{Number of respondents } (n)} \quad (2.3.)$$

$$Y = \frac{\sum \text{Importance } (\tilde{y})}{\text{Number of respondents } (n)} \quad (2.4.)$$

Then, after the X and Y values are found, it means that the coordinates of each questionnaire instrument, namely the coordinates for importance and performance are also found. The values will then be mapped into the Cartesian diagram of the IPA method or also known as the Importance Performance Matrix (Immanuel & Setiawan, 2020). Figure 2.2 is a quadrant division of the Importance Performance Matrix.

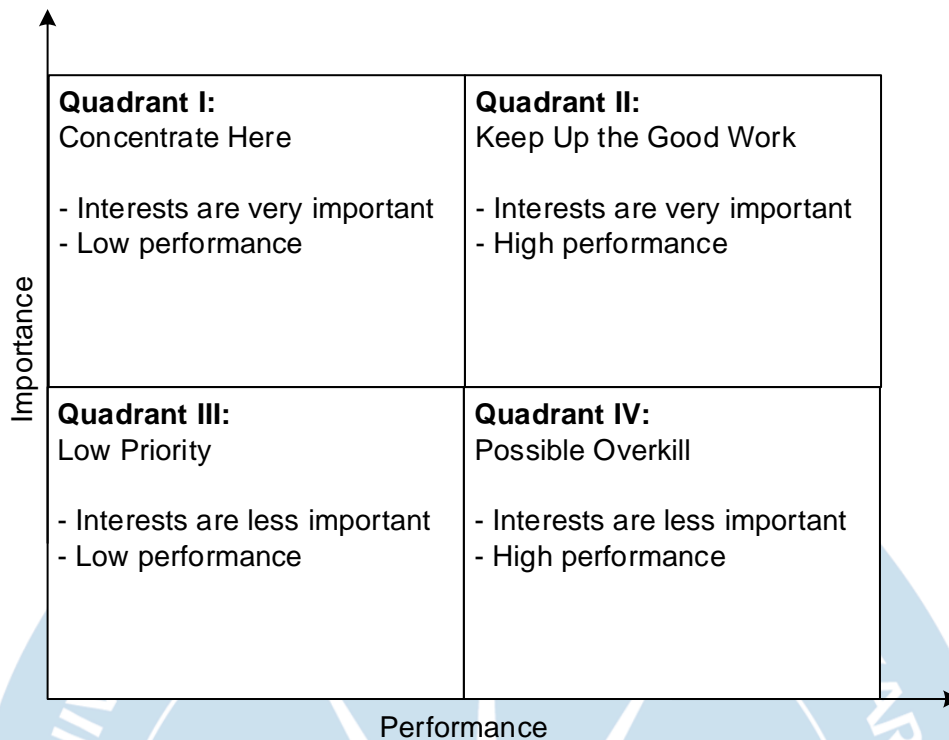


Figure 2.2. Importance-Performance Matrix

Source: Immanuel & Setiawan (2020)

Suhendra & Prasetyanto (2016) explained that in the Importance-Performance Matrix, there are four quadrants that explain different levels of importance and performance.

a. Quadrant I (Concentrate Here)

Quadrant I is an area that contains factors that are considered necessary by service users. Still, service providers have not appropriately implemented these factors from the point of view of service users. Instrument variables included in quadrant I must be increased.

b. Quadrant II (Keep Up the Good Work)

Quadrant II is an area that contains factors that are considered necessary by consumers, and these factors are considered to be following customer expectations. In short, customers are satisfied with the performance given to the instrument in quadrant II. Instrument variables included in quadrant II are essential to be maintained because these variables make the service superior from the customer's point of view.

c. Quadrant III (Low Priority)

Quadrant III is an area that contains factors that are considered less important by consumers, with instrument variables performance that have less perceived influence. The increase in the variables included in quadrant III can be reconsidered, this is because the effect is small in the eyes of the customer.

d. Quadrant IV (Possible Overkill)

Quadrant IV is an area that contains factors that are considered less critical by service users but whose performance is deemed too excessive considering their importance. Instrument variables included in quadrant IV can reduce performance and save company resources.

2.2.10. Fishbone Diagram

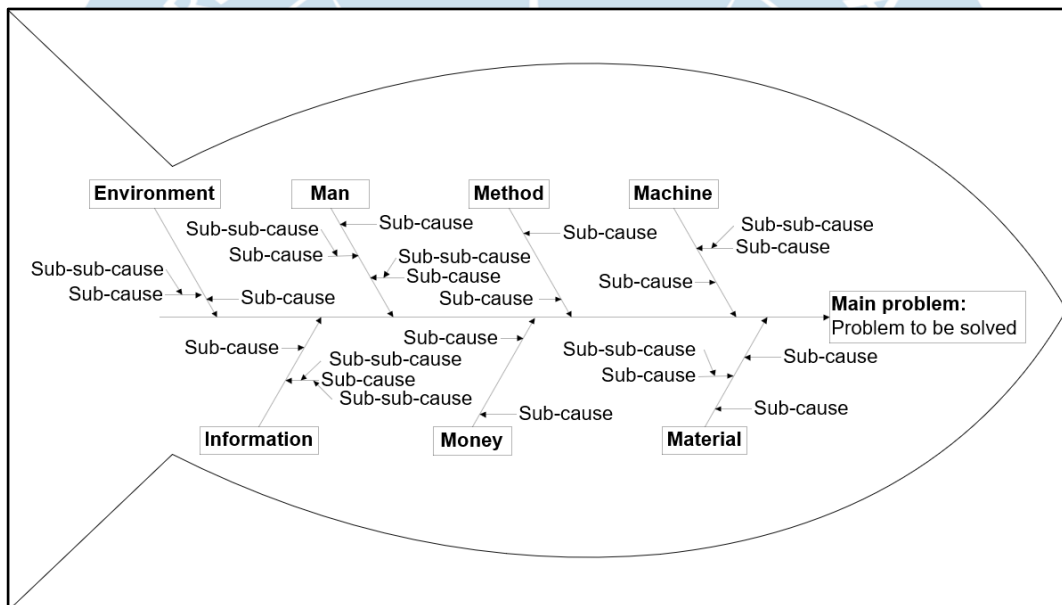


Figure 2.3. Fishbone Diagram

The Fishbone diagram, also known as the Ishikawa diagram, is one of the many tools to analyze problems related to quality control. Introduced by Kaoru Ishikawa, the fishbone diagram is a reactive risk management method for identifying potential causes of a problem to find the root cause (Hisprastin & Musfiroh, 2021). The function of the fishbone diagram is to read the causal relationship of a problem, so it is widely used as a tool to determine the cause of the significant problem. The steps in the execution of the fishbone diagram are as follows.

- a. Define the problem. The problem is interpreted as a result so that the cause can then be rooted in the form of a diagram. The problem must clearly describe both the nature of the problem and the process.
- b. Determine the main cause category. The leading causes of problems are grouped into categories so that determining the root causes of problems can be structured. Within the scope of Industrial Engineering, the 5M category is usually used: Man, Method, Machine, Material, Milieu/Environment.
- c. Identification of the causes of the problem by rooting the problem through brainstorming. Each major category has causes that need to be explained by rooting the problem.
- d. Diagram analysis. Analyzing can help in identifying causes that require further investigation. Further investigation is required if there are multiple branches in the root cause. The cause of the problem that appears repeatedly can potentially be the root of the problem.

2.2.11. Interrelationship Diagram

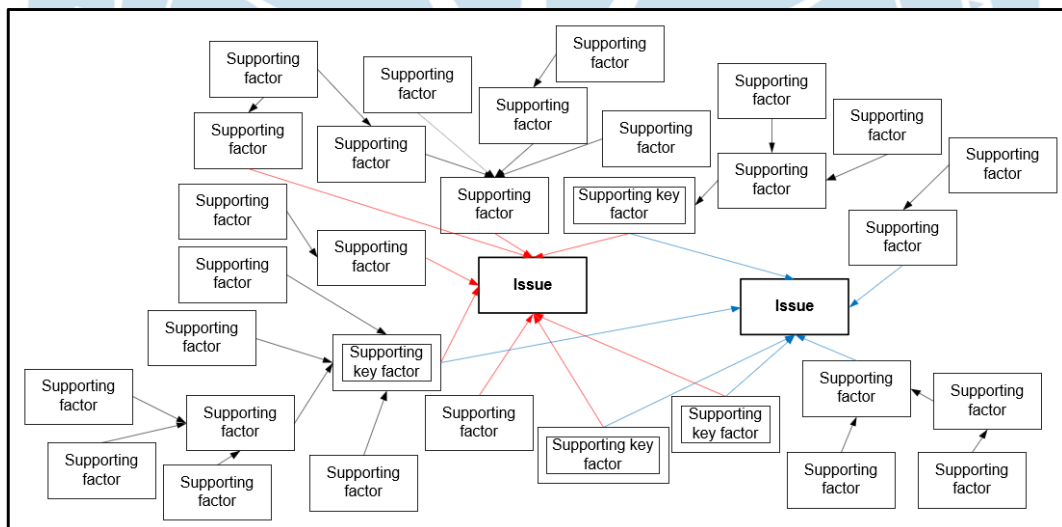


Figure 2.4. Interrelationship Diagram

Interrelationship diagrams are one of many tools for analyzing problems related to quality control. An interrelationship diagram is a tool for solving problems with complex causal relationships. Its purpose is to help decipher and find interrelated logical relationships between the causes and effects of a problem (Aziza & Setiaji, 2020). From the definition, it can be seen that using interrelationship diagrams can lead to finding out the dominant root causes that cause a problem to occur in the analyzed system.