



ANALYSIS OF SERVICE QUALITY USING SERVICE QUALITY (SERVQUAL) AND SWOT METHOD IN BORDER AREA (CASE STUDY: PT. JABABEKA MOROTAI)

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ABSTRACT

Pavilliun d'laha Resot Jababeka Morotai or commonly called PT. Jababeka Morotai which is managed by Jababeka group which is a company in the management of the first open industrial estate in Indonesia which is listed on the Jakarta and Surabaya stock exchanges since 1994. where the three main pillars in this company are land development, infrastructure, and entertainment venues and hospitality. PT. Jababeka Morotai so far, has never measured the level of visitor satisfaction in the hospitality field with Hotel Guests so that in improving the quality of service and also in overcoming complaints of hotel guests, it is still not carried out properly. Based on the above problems, this study uses the SERVQUAL method and SWOT analysis (strength, weakness, opportunities, Threat). The SERVQUAL method is a method used to find out the extent of differences in reality and expectations for the services received / felt by customers, SWOT is a way to systematically identify various factors in order to formulate a company strategy. The result of the study is the quality of service of the five dimensions of SERVQUAL, the perception value is 4.61 and the Expectation value is 4.32 with a positive gap value (0.28) so that it is considered good because it is in accordance with the level of expectations of consumers or guests. From SWOT, strategies are obtained which maintain prices, increase promotions, advertising, brochures and social media.

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1.1 INTRODUCTION

In the era of globalization that leads to the era of the industrial revolution, it is now realized that the paradigm in running a company's business places more emphasis on concepts and insights that prioritize customers. In this concept, customers are placed in an important position for companies engaged in the service industry. In the service industry, quality is very important for the company. Quality is a dynamic condition associated with products, services, people, processes and the environment that meet or exceed expectations. According to Tjiptono & Chandra (2012) the term quality contains various interpretations, because quality has a number of universal (same everywhere), cultural (depending on cultural value systems), social (formed by individual social class) levels. defect free. This manufacturing-based definition is less relevant for the service sector. Therefore the understanding of quality is then expanded into fitness for use and conformance to requirements. Service quality is influenced by two factors, namely expectations and perceived performance by consumers. Consumers will compare consumer expectations and the performance provided by the company in the form of providing satisfactory services. If expectations are met by the company's service, then the service said to have good quality and will be able to satisfy customers.

According to Witomo and Ramadhan, 2018. Morotai Island Regency is one of the small island areas that has high potential to be developed as a tourism area. Morotai Island has also been made into a tourism Special Economic Zone (KEK) established by President Susilo Bambang Yudoyono during the 2012 Morotai Sail. In addition, Morotai Island is one of the tourism development areas included in the 10 new Balis with the established concept of sustainable tourism. by the Ministry of Tourism. This is a potential for companies engaged in services.

Pavillion d'loha Resot Jababeka Morotai or commonly called PT. Jababeka Morotai which is managed by the jababeka group which is a company in managing the first open industrial area in Indonesia which has been listed on the Jakarta and Surabaya stock exchanges since 1994. where the three main

pillars in this company are land development, infrastructure, and entertainment venues and hotels. besides that, PT. Jababeka Morotai was appointed as the implementing entity for the Morotai development project by the Coordinating Ministry for Economic Affairs of the Republic of Indonesia and Morotai is included in Corridor Six of the Master Plan for the Acceleration and Expansion of Indonesian Economic Development (MP3EI).

Based on the description of the background above, this study aims to analyze the quality of service to hotel guests for the services provided by the Pavillion d'loha Resort Jababeka Morotai. while the benefits of this research are expected to provide a reference or description of the quality of service to PT. Jababeka Morotai and also to the local government of the island of Morotai regency.

2.1 Research Methods

This research was conducted at PT. Jababeka daloha resort, Morotai Island Regency, North Maluku. the focus of the research study is to measure the quality of service on the 5 dimensions of *Reliability*, *Assurances*, *Tangibles*, *Empathy*, and *Responsiveness* using the *SERVQUAL* and *SWOT methods*.

2.1. Type of Data

2.1.1. Primary Data

Primary data in this study were obtained directly from the object of research through direct observation, questionnaires and interviews with company owners and hotel guests.

2.1.2. Secondary Data

Secondary data is supporting data from primary data, namely data or sources obtained from reading materials. Secondary data in this study were obtained from company documentation data, and reference books, and other information related to research.

2.2. Data Processing and Analysis Methods

Data Processing Techniques

a. Validity Test

If $r_{count} > r_{table}$ then the question is declared valid and if the opposite applies

the question is declared invalid and is not included in the next calculation. Validity test using *SPSS Statistics 26 software*

b. Reliability Test

The method used to measure reliability using the *Cronbach Alpha*. An instrument is said to be reliable if *the reliability value is > 0.600*.. Reliability Test using *SPSS Statistics 26 software*.

Data Analysis

a. Servqual method (Service Quality)

One of the methods used to assess a service quality is the *Service Quality* (Servqual) method. SERVQUAL is built on a comparison of two main factors, namely the customer's perception of the actual service they receive (*perceived service*) with the service that is actually expected (*expected service*).method *service quality* because it sees a service quality through 5, reliability,dimensions, responsiveness*tangibles, namely* assurance*is used,* and*empathy*. (Rindang Rayo Ranas, 2013). Testing in the servqual model is carried out with the help of *SPSS Statistics 26 software*. The steps are (Firdian, 2012).

1. Look for the perceived value or performance of each variable and the score of the expected value or importance of each variable.
2. Add up the expected values and perceptions of each variable for all respondents, then calculate the average.

$$\bar{X} = \frac{\sum xi}{n} \text{ and } \bar{Y} = \frac{\sum yi}{n} \dots\dots\dots (2)$$

description :

$\bar{X}$: The average score of the level of satisfaction/reality.

$\bar{Y}$:Average score of importance/expectation level

n : Number of respondents.

3. Calculate the gap between the average perceived value and the average expected value..

$$NSi = \bar{X}_i - \bar{Y}_i \dots\dots\dots (3)$$

Where:

NSi = Servqual (*gap*) value of the i-variable

4. Calculating the average gap of each variable

$$\bar{NSi} = \frac{\sum NSi}{Ai} \dots\dots\dots (4)$$

Where:

$\bar{NSi}$ = Average servqual value (*gap*) of the ith variable

Ai = Number of attributes of the ith variable

5. Add up the results of calculating the satisfaction value of each dimension and then conclude with the provisions, the negative satisfaction value (<0) indicates a gap between customer expectations and perceptions, otherwise a positive satisfaction value (>0) indicates service quality exceeds the level of customer satisfaction. Meanwhile, if the satisfaction value is equal to zero (= 0) it indicates that the quality of service is in accordance with customer expectations.

c. SWOT Method

SWOT method is a systematic identification of various factors to formulate corporate strategy. SWOT analysis is based on logic that can maximize strengths and opportunities, but can simultaneously minimize weaknesses and threats. (Freddy Rangkuti, 2011).

3.1 Results and Discussion

3.1. Data Validity Testing

In this study, data testing was carried out using *Statistical Product and Service Solutions (SPSS)* version 26. The data that has been collected is then tested for validity and reliability. The result of the calculation will be obtained by calculating of r for each question item which will then be compared with the value of r table . For *degrees of freedom* (df) = $n - 2$. The number of samples (n) = 20, the calculated df is $20 - 2 = 18$, r Table = 0.4438. If r Table < r Count then the attribute proposed is valid.

X4.16	0.613	0.4438	Valid
X4.17	0.751	0.4438	Valid
X4.18	0.800	0.4438	Valid
X4.19	0.879	0.4438	Valid
X4.20	0.665	0.4438	Valid
X4.21	0.625	0.4438	Valid
X5.22	0.787	0.4438	Valid
X5.23	0.797	0.4438	Valid
X5.24	0.782	0.4438	Valid
X5.25	0.787	0.4438	Valid

Source: Primary data processed (2022),

Tabel 1. Validity Test

Attribute	koef. Validitas		Description
	r Count	r Table	
X1.1	0.783	0.4438	Valid
X1.2	0.643	0.4438	Valid
X1.3	0.483	0.4438	Valid
X1.4	0.526	0.4438	Valid
X1.5	0.772	0.4438	Valid
X1.6	0.784	0.4438	Valid
X2.7	0.869	0.4438	Valid
X2.8	0.785	0.4438	Valid
X2.9	0.857	0.4438	Valid
X2.10	0.639	0.4438	Valid
X2.11	0.755	0.4438	Valid
X3.12	0.572	0.4438	Valid
X3.13	0.849	0.4438	Valid
X3.14	0.737	0.4438	Valid
X3.15	0.796	0.4438	Valid

Tabel 2. Expected Validity test Results

Attribute	koef. Validitas		Description
	r Count	r Table	
X1.1	0.739	0.4438	Valid
X1.2	0.456	0.4438	Valid
X1.3	0.808	0.4438	Valid
X1.4	0.544	0.4438	Valid
X1.5	0.537	0.4438	Valid
X1.6	0.660	0.4438	Valid
X2.7	0.901	0.4438	Valid
X2.8	0.797	0.4438	Valid
X2.9	0.642	0.4438	Valid
X2.10	0.683	0.4438	Valid
X2.11	0.822	0.4438	Valid
X3.12	0.612	0.4438	Valid
X3.13	0.874	0.4438	Valid
X3.14	0.637	0.4438	Valid
X3.15	0.626	0.4438	Valid

X4.16	0.679	0.4438	Valid
X4.17	0.762	0.4438	Valid
X4.18	0.679	0.4438	Valid
X4.19	0.854	0.4438	Valid
X4.20	0.808	0.4438	Valid
X4.21	0.798	0.4438	Valid
X5.22	0.734	0.4438	Valid
X5.23	0.520	0.4438	Valid
X5.24	0.520	0.4438	Valid
X5.25	0.858	0.4438	Valid

Source: Primary data processed (2022),

Based on the results of the validity test in the data table above, perceptions and expectations are known after comparing the r calculated value with the r table value = 0.4438, then all the attributes of expectations and perceptions are declared valid, because all the calculated r values are greater than the r table values.

3.2. Data Reliability Testing

3.2. Tabel 3. Perception Reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
0.920	25

Tabel 4. Reliability Test Results Expected

Reliability Statistics	
Cronbach's Alpha	N of Items
0.935	25

Based on the table above, on the results of the reliability test of Perceptions and Expectations, (Sakaran in Winarno 2017) states that reliability less than 0.6 is not good, while 0.7 is acceptable and above 0.8 is good. Testing the reliability of the

results of the questionnaire was carried out to ascertain whether the questionnaire was consistent in measuring the same symptom. For the results of the *Output Reliability Statistics* using the *Cronbach's Alpha technique*, value *Cronbach's Alpha* from the processing of perception data obtained a value of 0.920 and the Hope data obtained a value of 0.935.

Tabel 5. The average value of the Perception Gap

No	Attribute	Average
1	The appearance of all employees and staff is uniform, neat and polite	4.65
2	The physical environment (waiting room, toilet, front office) is clean, tidy and comfortable	4.65
3	The interior arrangement at the D'loha Pavilion Resort PT. Jababeka Morotai is very organized and tidy	4.75
4	The guest rooms and in-room facilities provided by Pavilion D'loha Resort PT. Jababeka Morotai	4.35
5	The cleanliness of the guest rooms and facilities at Pavilion D'loha Resort PT. Jababeka Morotai	4.70
6	Parking and valet parking services are available	4.65
7	Reservations or reservations are handled properly	4.60
8	Employees provide services in accordance with what was promised	4.70
9	Service of goods or baggage customers	4.70
10	The ability of employees to maintain attitude and maintain cleanliness towards customers	4.55
11	Readiness of employees to serve customers	4.65
12	Employees provide fast and accurate service to every customer	4.60
13	The speed of employees in carrying out repair and maintenance services	4.25
14	Reliability of employees in understanding customer needs	4.60
15	Employees and staff pay attention to customer complaints	4.55

16	Guarantee of security or a sense of comfort felt by customers	4.65
17	Cleanliness of eating and drinking utensils	4.55
18	Guarantee of the taste of halal food, and presentation by the chef of the Pavilion D'loha Resort Restaurant PT. Jababeka Morotai	4.60
19	Wide parking area that is safe for vehicles	4.65
20	The behavior of employees and staff instills a sense of trust and security in customers	4.45
21	Guarantee of privacy while at Pavilion D'loha Resort PT. Jababeka Morotai	4.75
22	Openness of employees in receiving criticism and suggestions from customers	4.60
23	Employees provide the same service to all customers	4.70
24	The ability of employees and staff to communicate with guests	4.70
25	Employees and staff provide information that is easy for guests to understand	4.60

Source: Primary data processed (2022),

Tabel 6. Average Expected Value

No	Attribute	Average
1	The appearance of all employees and staff is uniform, neat and polite	4.50
2	The physical environment (waiting room, toilet, front office) is clean, tidy and comfortable	4.40
3	The interior arrangement at the D'loha Pavilion Resort PT. Jababeka Morotai is very organized and tidy	4.35
4	The guest rooms and in-room facilities provided by Pavilion D'loha Resort PT. Jababeka Morotai	3.30

5	The cleanliness of the guest rooms and facilities at Pavilion D'loha Resort PT. Jababeka Morotai	4.45
6	Parking and valet parking services are available	4.50
7	Reservations or reservations are handled properly	4.45
8	Employees provide services in accordance with what was promised	4.35
9	Service of goods or baggage customers	4.35
10	The ability of employees to maintain attitude and maintain cleanliness towards customers	4.45
11	Readiness of employees to serve customers	4.30
12	Employees provide fast and accurate service to every customer	4.30
13	The speed of employees in carrying out repair and maintenance services	4.00
14	Reliability of employees in understanding customer needs	4.10
15	Employees and staff pay attention to customer complaints	4.30
16	Guarantee of security or a sense of comfort felt by customers	4.45
17	Cleanliness of eating and drinking utensils	4.40
18	Guarantee of the taste of halal food, and presentation by the chef of the Pavilion D'loha Resort Restaurant PT. Jababeka Morotai	4.35
19	Wide parking area that is safe for vehicles	4.20
20	The behavior of employees and staff instills a sense of trust and security in customers	4.30
21	Guarantee of privacy while at Pavilion D'loha Resort PT. Jababeka Morotai	4.60
22	Openness of employees in receiving criticism and suggestions from customers	4.35
23	Employees provide the same service to all customers	4.50

24	The ability of employees and staff to communicate with guests	4.40
25	Employees and staff provide information that is easy for guests to understand	4.45

Source: Primary data processed (2022),

Tabel 7. Gap Value of Each Attribute

No	Atribut	Gap	Rank
1	The appearance of all employees and staff is uniform, neat and polite	0.15	1
2	The physical environment (waiting room, toilet, front office) is clean, tidy and comfortable	0.25	2
3	The interior arrangement at the D'loha Pavilion Resort PT. Jababeka Morotai is very organized and tidy	0.40	3
4	The guest rooms and in-room facilities provided by Pavilion D'loha Resort PT. Jababeka Morotai	1.05	4
5	The cleanliness of the guest rooms and facilities at Pavilion D'loha Resort PT. Jababeka Morotai	0.25	5
6	Parking and valet parking services are available	0.15	6
7	Reservations or reservations are handled properly	0.15	7
8	Employees provide services in accordance with what was promised	0.35	8
9	Service of goods or baggage customers	0.35	9

10	The ability of employees to maintain attitude and maintain cleanliness towards customers	0.10	10
11	Readiness of employees to serve customers	0.35	11
12	Employees provide fast and accurate service to every customer	-0.30	12
13	The speed of employees in carrying out repair and maintenance services	-0.25	13
14	Reliability of employees in understanding customer needs	-0.50	14
15	Employees and staff pay attention to customer complaints	-0.25	15
16	Guarantee of security or a sense of comfort felt by customers	0.20	16
17	Cleanliness of eating and drinking utensils	0.15	17
18	Guarantee of the taste of halal food, and presentation by the chef of the Pavilion D'loha Resort Restaurant PT. Jababeka Morotai	0.25	18
19	Wide parking area that is safe for vehicles	0.45	19
20	The behavior of employees and staff instills a sense of trust and security in customers	0.15	20
21	Guarantee of privacy while at Pavilion D'loha Resort PT. Jababeka Morotai	0.15	21
22	Openness of employees in receiving criticism and suggestions from customers	0.25	22
23	Employees provide the same service to all customers	0.20	23

24	The ability of employees and staff to communicate with guests	0.30	24
25	Employees and staff provide information that is easy for guests to understand	0.15	25

Source: Primary data processed (2022),

Tabel 8. Gap Value for Each Dimension

No	Dimensi	Nilai Servqual (Gap) Per dimensi	Rank
1	Assurance (D)	0.23	1
2	Empathy (E)	0.23	2
3	Reliability (B)	0.26	3
4	Responsive (C)	0.33	4
5	Tangible (A)	0.38	5

Sumber : Data Primer diolah (2022),

After data processing, then it can be determined that a negative satisfaction value (<0) indicates a gap between expectations and perceptions, conversely if a positive satisfaction value (> 0) indicates service quality exceeds the level of customer satisfaction. If the satisfaction value is appropriate ($= 0$) it indicates the quality of service is in line with expectations.

Based on Table 8. Shows that the value of service quality ($= 0$). This means that the quality of service is in accordance with the level of consumer expectations. However, if you look at the table, to further improve service, the *Assurance dimension (D)* is the dimension with the smallest value of 0.23, *rank* needs to be a top priority for improving service quality, then followed by *rank* 2 and so on for improvement. service quality.

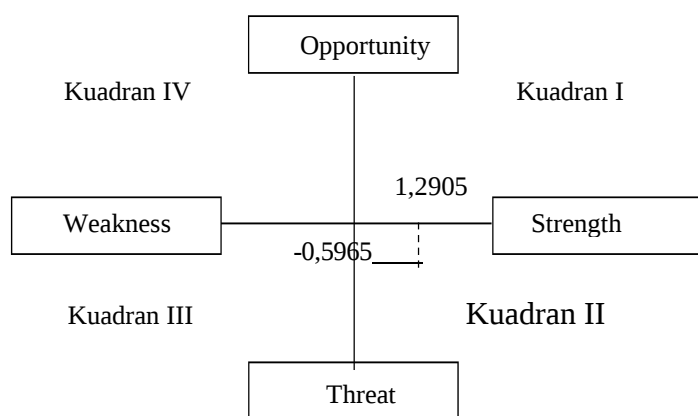
Weakness			
Parking lot	0.09	3	0.27
Employee knowledge of the menu	0.06	3	0.18
Patience and persistence	0.09	3	0.27
Total	1.00		4.21

Tabel 9. Weight Value IFAS

Factor Internal	Bobot	Rating	Skor
Strength			
The appearance of all employees and staff is uniform, neat and polite	0.09	5	0.45
The physical environment (waiting room, toilet, front office) is clean, tidy and comfortable	0.06	4	0.24
The interior arrangement at the D'loha Pavilion Resort PT. Jababeka Morotai is very organized and tidy	0.09	5	0.45
The guest rooms and in-room facilities provided by Pavilion D'loha Resort PT. Jababeka Morotai	0.06	4	0.24
The cleanliness of the guest rooms and facilities at Pavilion D'loha Resort PT. Jababeka Morotai	0.09	5	0.45
Employees provide fast and accurate service to every customer	0.06	4	0.24
The ability of employees to maintain attitude and maintain cleanliness towards customers	0.09	5	0.45
Employees provide services in accordance with what was promised	0.06	4	0.24
Guarantee of the taste of halal food, and presentation by the chef of the Pavilion D'loha Resort Restaurant PT. Jababeka Morotai	0.09	5	0.45
Guarantee of security or a sense of comfort felt by customers	0.06	4	0.24

Tabel 10. Weight Value *EFAS*

Factor Eksternal	Bobot	Rati ng	Skor
Opportunities			
There is a comfortable lounge	0.08	5	0.42
Resort Jababeka has been known by the community first	0.17	4	0.67
Marketing through flyers and social media	0.17	5	0.83
Threats			
Increasingly fierce competition	0.21	3	0.63
Government regulations	0.17	3	0.50
The price of staying is very expensive	0.21	3	0.63
Total	1.00		3.67

Quadrant Position *SWOT*

Gambar 2. SWOT Quadrant

From the results of these calculations it can be seen that the position of PT. Jababeka Daloha Resort is in the SWOT quadrant, namely in quadrant II: even though it faces various threats, this company still has internal strength. The strategy that must be set is to use strength to take advantage of long-term opportunities by way of a diversification strategy.

Tabel 11. Matrix *SWOT*

IFAS	<i>Strength</i>	<i>Weakness</i>
	- Attractive Menu Appearance - Comfort, cleanliness, neatness of the place - Neat appearance and friendliness of employees. - Service Speed - Accuracy of the Menu Presented - Ease of Payment - Employees are Friendly - Employees Willing to Help	- Parking lot - Employee knowledge of the menu - Patience and persistence
EFAS	Opportunities	Threats
	- There is a comfortable lounge - Resort Jababeka has been known by the community first - Marketing through flyers and social media	- Increasingly fierce competition. - Government regulations regarding taxes impede business development. - More intensive competitor marketing. - The price of staying is very expensive

4.1 Conclusions and Suggestions

4.1. Conclusion

Based on the evaluation results on the analysis of service quality using *Servqual* and *Swot* shows that the quality of service at PT. Jababeka Daloha Resort in 5 (five) dimensions namely Tangible, Reliability, Responsive, Assurance,

Empathy is included in the good category because it is in accordance with the level of expectations of consumers.

4.2. Suggestions

Recommendations proposals to further improve the company's performance PT. Jababeka Daloha Resort are as follows:

- a. Maintaining more affordable rental prices compared to its competitors.
- b. Further enhancing marketing through advertising, brochures and social media (Online) as well as highlighting the characteristics of PT. Jababeka daloha resort.
- c. Increase more promotions to potential customers or guests.
- d. To further improve service, start from the *Assurance dimension (D)* where the dimension with *rank* needs to be a top priority for improving service quality then followed by *rank* 2 and so on for further service quality improvement

Reference

- Anandita, et al. 2015. Analysis of the Influence of Trust, Security, Quality of Service, and Perception of Risk on Purchase Decisions Through Social Networking Sites. *Journal of Economics and Entrepreneurship*. Vol. 15 No 2 June 2015: 203 – 210.
- Daryanto and Ismanto Setyobudi, 2014 *Consumers and Excellent Service*. Yogyakarta. Gava Media.
- Firdian, Endy et al. (2012). Application of the Servqual and Six Sigma Methods in Analyzing the Service Quality of PT. PLN (Persero) Network Service Unit (UPJ) Dinoyo Malang. *Journal of Science and Engineering* Volume 13 Number 3.
- Kotler, Philip and Kevin Lane Keller. 2016. *Marketing Management* 15th, Global Edition Pearson Education Inc
- Muhammad febrio sulthon, didi sumanhuji 2020., Analysis of customer satisfaction for designing marketing strategies Using the servqual and swot methods at Kedai xyz, *Journal of Industry and Technology Management* (Juminten) Vol. 01, No. 01, Pg. 141 – 150.
- Nuryani, Ayu Rahma Putri. 2014. Analysis of Service Quality on Consumer Satisfaction Using the Servqual Method (Case Study at ria Djenaka Coffe House & Resto Malang). *Journal of Agricultural Industry Technology*.
- Parasuraman., A. 2014., *The Behavioral Consequences of Service Quality*. New Jersey: Prentice Hall.
- Rambat Lupiyoadi., 2013., *Service Marketing Management, Consumer Protection Law*. Jakarta: Sinar Graphics.
- Rahman at. al. (2014) Integration of SERVQUAL and KANO Model Into QFD To Improve Quality of Simulation-Based Training on Project Management *International Journal of Basic and Applied Science*, Vol. 02, No. 03, Jan 2014, pp. 59-72
- Rangkuti, Freddy. 2011. *Techniques for Dissecting SWOT Analysis Business Cases for Calculating Weights, Ratings, and OCAI*. Publisher PT. Scholastic Library.
- Ranas, Rindang Rayo. 2013. Analysis and Improvement of Hotel Services Using Servqual and Cartesian Diagrams (Case Study at Hotel Kombokarno). *Journal of Business Studies* Volume 14, Number 2.
- Separdi Haja, et al. (2015). Analysis of PDAM
- Tjiptono, Fandy and Gregory Chandra. 2012. *Strategic Marketing*. Yogyakarta.
- Tjiptono, Fandy. (2014). *Marketing services principles of application, research*. ANDI: Yogyakarta
- Winarno, Heru and Absor. 2014. Service Quality Analysis using the Service Quality (SERVQUAL) and Importance Performance Analysis (IPA) methods at PT Media Purna Engineering. *Journal of Industrial and Logistics Management*, 1(2), 67-77
- Steph Ellen, eHow Blog, 2010; dengan rujukan *Principles and Methods of Research*; Ariola et al. (eds.); 2006
- Winarno, Heru dan Absor. 2014. Analisis Kualitas Pelayanan dengan metode Service Quality (SERVQUAL) dan

Importance Performance Analysis (IPA) Pada PT Media Purna Engineering. *Jurnal Manajemen Industri dan Logistik*, 1(2), 67-77

Witomo, M, C dan Ramadhan, A. 2018. Potensi Ekonomi Pariwisata Kabupaten Pulau Morotai. *Jurnal Sosial Ekonomi Kelautan dan Perikanan*, ejournal-balitbang.kkp.go.id. vol 13, No 1, 2018.