The effect of product quality and service quality on customer satisfaction in crocodile skin crafts industry

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Abstract. This research aimed to test and analyze the influence of product quality and service quality on customer satisfaction by submitting two research hypotheses. The number of respondents in this study was 120 respondents who were consumers of crocodile skin craftsmen in Merauke. This study uses data analysis techniques using SEM AMOS 22.0 for the development of research constructs and also hypothesis testing. From the results of data analysis that has been done, it can be concluded that the constructs formed can be accepted and then the results of the study show that the variable quality of the product and also the quality of service variables have a positive and significant effect on customer satisfaction.

1. Introduction

Small businesses or SMEs are the economic drivers of most countries around the world and a large number of economic activities are carried out by SMEs [1]. One of the drivers of finance in Indonesia is SMEs because SMEs are often considered capable of dealing with problems between groups of money and between business owners, and are able to afford a budget and spend new employment opportunities or jobs for the community that can increase their income [2]. The creative industry for processing crocodile skin in Merauke is developing quite rapidly. For the sake of freedom of existence of SMEs in very tight competition, competitors of SMEs in the creative industry processing crocodile skin are required to produce quality products.

All SMEs will certainly strive to make their customers satisfied with what they provide. A business is able to maintain its existence and even improve its business because the customers it owns have gained satisfaction by consuming its products. When the consumer is satisfied, the consumer tends to be loyal and may invite his partner to use the product we have. But actually consumers are not always satisfied with what is obtained, but at least a business has tried to give all the best in order to give satisfaction to consumers [3].

One assessment of consumers to decide whether or not to buy a product is seen from the quality of the product itself [4]. Consumer response after using the product determines that satisfaction. Whether after using it, the product can meet its expectations even more than expected or vice versa. [5] in his
research said that the Product Quality is at least formed from 3 indicators, namely Product Specific Advantages, Performance In Accordance With Specifications, Durability Is Quite Long.

A product can be said to be superior by consumers when a product is considered to have more value when compared to competing products. A product can be considered valuable when the benefits provided by the product are equivalent to what the consumer has sacrificed. In addition, a product is considered superior to competitors if the product gives satisfaction after using it [6].

Service quality can be known through the ability and performance of the sales force because it can be said that they are the spearhead of the success of a business. Where is the sales force who deals directly with the customers who come. Social competence must be owned by a salesperson. This serves to maintain good relations between producers and consumers. As well as technical competence as knowledge of products offered to consumers [7]. Service Quality was at least formed from 3 indicators namely Promised Service, Appropriate Appointments, Fast And Precise Service [4].

Then satisfaction can be said as feeling happy or not from the consumer after using a product and comparing the value given from the product from what is expected [6]. Consumer satisfaction is always an important indicator to get loyalty from a consumer. Consumers will not be loyal to a product when they do not get satisfaction when using the product. A research stated that Customer Satisfaction was at least formed from 3 indicators namely the Conformity of expectations, Overall satisfaction, and Word of mouth is positive [8].

2. Methods
This research was conducted on the creative industry of crocodile skin craftsmen in Merauke Regency, with a population of 120 people and the sampling technique used a sampling census. The use of sampling census in the study is due to the sample size for SEM analysis, which is between 100 and 200 respondents [9].

Questionnaires are given to consumers to obtain primary data which will then be processed and analyzed using AMOS 22.0 program assistance.

3. Results and discussions

3.1. Result

3.1.1. Validity. On the results of the research construct analysis with the help of Amos, it is known that the results of the validity calculation get a value above the predetermined standard value that is greater than 0.50 indicating that all constructs can be received with Product Quality details obtaining a value of 0.635, Service Quality obtaining a value amounting to 0.531, while Customer Satisfaction obtained a value of 0.550.

3.1.2. Reliability. On the results of the construct analysis of research with the help of Amos, it is known that the results of reliability calculations obtain values above the specified standard value which is greater than 0.70 which indicates that each construct produces good reliability with Product Quality details obtaining a value of 0.762, Service Quality obtains a value of 0.712, while Costumer Satisfaction has a value of 0.723.

Table 1. Reliability and validity test

| Variable & Indicator          | Source       | Std. Loading | Construct Reliability | Convergent Validity |
|------------------------------|--------------|--------------|-----------------------|---------------------|
| Product Quality              | (Iwu, 2010)  | .865         | .762                  | .635                |
| Product Specific Advantage   | [5]          | .865         |                       |                     |
Performance in Accordance with Specification.

Durability is Quate Long

Service Quality (Jahanshahi et al., 2011) [4]

Promised Service

Appropriate Appointments

Fast and Precise Service

Customer Satisfaction (Liu & Leach, 2001) [8]

Conformity of Expectation

Overall Satisfaction

Word of Mouth is Positive

Testing the full model used Amos, it is expected that each construct has a minimum value of 0.50 while the value of the critical ratio has a value above 1.96. And then, each construct formed can be accepted with a significance below 0.05. The result of testing showed that each indicator was taken. The reliability of each construct can be measured using a CR with a minimum standard of ≥0.70 and produce excellent reliability. The result showed Entrepreneurship Marketing had a value of 0.805, and Marketing performance had a value of 0.740. Meanwhile, the validation of the construct was measured using the AVE with a minimum standard of ≥0.50 and expected to produce acceptable validation. As a result, Entrepreneurship Marketing had a value of 0.614 and 0.585 for Marketing.

3.1.3. Full model test

![Full model test diagram]

Table 2. The full model feasibility results

| Goodness of Fit Index | Cut of Value | Analysis Results | Model Evaluation |
|-----------------------|--------------|------------------|------------------|
| Chi Square            | $X^2_{\text{count}} < X^2_{\text{table}} (146,567)$ | 37.230            | Fit              |
| Probability           | ≥ 0.05       | 0.055            | Fit              |
| GFI                   | ≥ 0.90       | 0.936            | Fit              |
| AGFI                  | ≥ 0.90       | 0.884            | Marginal         |
| TLI                   | ≥ 0.95       | 0.932            | Marginal         |
| CFI                   | ≥ 0.95       | 0.953            | Fit              |
| RMSEA                 | ≤ 0.08       | 0.064            | Fit              |

Figure 1. Full model test

Table 2. The full model feasibility results
From the feasibility test on the full model, it is known that the chi-square scores 37.230 where the value is below or smaller than X² table, which is 146.567, while the probability in this study is 0.055 where the value is greater than the standard value of 0.05. This value indicates that H₀ in this study is acceptable. Then the GFI value gets a result of 0.936 where the value is greater than the specified standard which is ≥0.90. The CFI value is 0.953 where the value is greater than the specified standard, which is ≥0.95. The RMSEA value gets a result of 0.064 where the value is smaller than the specified standard which is ≤0.08. Then the AGFI value and also the TLI which each yield below the standard value, namely AGFI produces a value of 0.884 below the standard value of ≥0.90 and TLI produces a value of 0.932 below the standard value of ≥0.95, but these results can still be accepted marginal. The results obtained from the full model feasibility test identify that the research construct proposed for this study is acceptable.

| Relationship Hypothesis | Estimate | S.E  | C.R  | P   | Conclusion |
|-------------------------|----------|------|------|-----|------------|
| Product Quality → Customer Satisfaction | .193     | .085 | 2.27 | .023 | Accepted   |
| Service Quality → Customer Satisfaction | .289     | .112 | 2.586| .010| Accepted   |

| Goodness of Fit | Result |
|-----------------|--------|
| Chi Square      | 37.230 |
| Probability     | 0.055  |
| GFI             | 0.936  |
| AGFI            | 0.884  |
| TLI             | 0.932  |
| CFI             | 0.953  |
| RMSEA           | 0.064  |

Regression weight testing on the full model aims to determine the relationship between the variables used in this study. A relationship is said to be significantly seen from the results of the critical ratio (CR) which has a value above the specified standard, namely ≥1.96 and a probability (P) result that has a value below the specified standard, namely ≤0.05. In this study, it is known that the relationship between Product Quality variables to Customer Satisfaction obtained a CR value of 2.270 and a P-value of 0.023. Then the relationship between Service Quality and Customer Satisfaction obtained a CR value of 2.586 and a P-value of 0.010. From these results, it can be seen that the two hypotheses have a significant relationship.

|                      | Estimate |
|----------------------|----------|
| CS 1                 | CS 0.662 |
| CS 2                 | CS 0.713 |
| CS 3                 | CS 0.672 |
| SQ 3                 | SQ 0.686 |
| SQ 2                 | SQ 0.732 |
| SQ 1                 | SQ 0.596 |
| PQ 1                 | PQ 0.865 |
| PQ 2                 | PQ 0.735 |
| PQ 3                 | PQ 0.535 |
Finally, the standardized loading factor test shows the results of each indicator above the standard value of > 0.5. From these results, it is known that all indicators in this study are valid and ideal for measuring the construct.

3.2. Discussion

3.2.1. Relationship between product quality and customer satisfaction. From the test results, it is known that Product Quality has a positive and significant influence on Customer Satisfaction. These results reinforce the results of research conducted by [4,6,10]. A product can be said to be of quality or not to be seen from the point of view of a consumer rather than the point of view of a product manufacturer. Manufacturers can say that the products they produce are of good quality. But in the end, consumers are the ones who have more experience or have used the product that judges whether the quality of the product is good or bad. A consumer will say that a product has a quality when the benefits they feel are proportional to the expectations or sacrifices they give to be able to own the product. So a product quality can be assumed as a consumer acknowledgment of the superiority of the product that we have as a whole, both in terms of design, durability, or conformity of functions to specifications.

Consumer response after using the product determines that satisfaction. Whether after using it, the product can meet its expectations even more than expected or vice versa. Therefore it can be said that customer satisfaction can increase with improvements or improvements in product quality.

3.2.2. Relationship between service quality and customer satisfaction. From the test results, it is known that Service Quality has a positive and significant influence on Customer Satisfaction. The findings reinforce the results of research conducted by [6,10]. Service quality is more difficult to understand when compared to product quality. The difficult understanding of service quality and product quality is due to the different performance of both qualities. Service quality cannot be raised through production in the factory such as the quality of the product. The quality of service between one employee and another employee can often be different. This is what causes service quality to be more difficult to test so it is difficult to standardize as is done on the product.

A salesperson plays an important role in providing quality services to customers. Because they are the ones who directly deal with consumers. Salespeople must be able to have social and technical competencies. This social competence can function as the ability to maintain good relations between the seller and the buyer so that it will bring loyalty to their products within the consumer. Then technical competencies are more directed at the knowledge of salespeople about the products they offer including the materials, specifications, advantages, and durability of these products. Therefore it can be said that customer satisfaction can increase with improvements or improvements in product quality.

4. Conclusion

From the results and discussion conclusions can be drawn, namely:

1. There is a positive and significant influence between the Product Quality variable on the Customer Satisfaction variable. This indicates that the increasing or high quality of a product will increase customer satisfaction. Therefore, the improvement or improvement of crocodile leather handicraft products needs to be done and also the use of technology can help improve the quality of these products.

2. There is a positive and significant influence between Service Value variables on the Customer Satisfaction variable. This indicates that the increasing or high quality of service will increase customer satisfaction. Improvement of services can be done by increasing social competence and
technical competence. Increasing social competence can be done by handling complaints or ordering from consumers quickly and precisely. Then technical competence can be done by providing information to salespeople about the specifications of the products they will sell. In addition to improving both competencies, improving service quality can also be done by training salespeople on how to do good and right services and how to deal with customers with different characteristics between one customer and another customer. In addition, the service when the consumer fixes the stitches that are removed or repainting must be informed for the length of time the work is done and the repairs must be completed according to the initial information. So that consumers will not repeatedly come just to check the product.

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