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Analysis of Customer Satisfaction Measurement on Department Store Customers

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Abstract

This study aims to develop and test a customer satisfaction measurement tool that refers to Wilkie's theory (1994). This measurement tool consists of 10 items developed to evaluate customer satisfaction at Matahari Department Store. The research sample involved 177 randomly selected customers. The discrimination power test was conducted to ensure that each item has the ability to distinguish between satisfied and dissatisfied respondents. The results of the discrimination power test showed that the ten items passed the test with a qualified level of significance. However, the results of further analysis showed that the ten items did not fully describe the uniqueness of the measurement for respondents with the characteristics of Matahari Department Store customers. This indicates that although this measurement tool is effective in measuring satisfaction in general, adjustments or additions of more specific items are needed to capture the unique characteristics of customers at Matahari Department Store. This study contributes to the development of customer satisfaction measurement tools and offers insight into the importance of adjusting the measurement tool to the specific characteristics of target respondents.

Keywords: customer satisfaction, Matahari Department Store, customer characteristics

Introduction

Service quality is a customer perception consisting of customer assessments of the superiority of goods in meeting customer needs and desires (Ibrahim & Thawil, 2019). In this case, service refers to one or more attitudes and characteristics provided by the service owner in the form of convenience, speed, interpersonal relationships, skills, friendliness, and others when providing services that increase

customer satisfaction (Kholik et al., 2022). This phenomenon can develop and vary depending on the industry sector, geographic location, company culture, and changes in market trends. Customer satisfaction begins when customers evaluate the quality of the goods or services they receive based on the expectations that have been formed in their minds. Customers will feel satisfied when the quality meets or exceeds expectations (Afnina & Hastuti, 2018). Improving service quality by providing good, friendly, fast, precise and accurate service and improving the facilities provided will increase customer satisfaction and ultimately increase cus Measuring customer satisfaction variables is an important step in understanding how capable a company is in serving customers (Mulyapradana et al., 2020). The method that can be used to measure customer satisfaction variables is by providing questionnaires or direct interviews with customers. One method for collecting data used in measuring customer satisfaction variables is the customer satisfaction scale. According to Wilkie (in Hutabarat et al., 2016), there are 5 aspects of consumer satisfaction, namely expectations, performance, comparison, confirmation, and discrepancy. tomer loyalty (Dulkhatif et al., 2016).

Creating a customer satisfaction scale has an important urgency for companies because the customer satisfaction scale helps companies understand the extent to which customers are satisfied with the goods or services they offer. Understanding customer satisfaction well will allow companies to identify areas that need evaluation to improve customer service. Having a good corporate image and gaining customer trust are key factors in a company's success (Handayani & Ma'ruf, 2024). When the quality of service provided by the company makes a good and positive impression on customers, it is likely that customers will feel satisfied and loyal to the company (Sugiharto & Wijaya, 2020). Creating a customer satisfaction scale is crucial for companies to manage and improve relationships with their customers, considering the urgency that exists is very important.

The customer satisfaction scale is designed because it has the main objective of measuring customer satisfaction with goods, services, or experiences experienced by customers. For companies, creating customer satisfaction is very important, so companies must focus on providing good customer experiences, maintaining communication, providing responsive services, providing incentives or loyalty programs, and regularly evaluating customer needs and preferences (Handayani & Ma'ruf, 2024). Measuring customer satisfaction is very important for companies, because in this way the company's performance can be measured and evaluated to be improved. Companies can also find out if there are any deficiencies or weaknesses in the quality of the goods (goods or services) offered (Afnina & Hastuti, 2018). Thus, compiling a customer satisfaction scale can help companies understand and improve customer experience optimally, which will have a positive impact on the overall performance and success of the company.

Literature Review

According to Zeithaml & Bitner (1996) satisfaction is a customer's impression of a good or service, whether the good or service used has met the customer's needs and expectations. Customer satisfaction according to Kotlr and Keller (2008) refers to feelings or how much happiness or disappointment a customer gets after getting the goods or services used compared to the customer's previous expectations or expectations (Handayani & Ma'ruf, 2024). Supranto (2013) states that indicators of customer satisfaction are smiling and saying good things (Afnina & Hastuti, 2018). Satisfaction itself is a customer's assessment of how special the goods or services used can meet the customer's needs or expectations (Gunardi & Erdiansyah, 2019). Wilkie (1994) defines customer satisfaction as a positive emotional response given by customers to the experience of using the goods or services provided. According to Wilkie (1994) there are five aspects of the

customer satisfaction scale, namely expectations, performance, comparison, confirmation, and discrepancy.

There are five aspects of the customer satisfaction scale according to Wilkie (1994), including:

1) Expectations, customers have expectations of the goods or services they will buy. When making a purchase, customers have expectations that they form so that they hope that the goods or services they get will be in accordance with their needs, hopes, and desires. This customer satisfaction is highly dependent on customer perceptions and expectations.

2) Performance, is the customer's experience of the results of the goods or services they use without being influenced by customer expectations. While using goods or services, customers will realize their real usefulness and accept these results as an important dimension for them to consider in repeat purchases.

3) Comparison, this aspect is the process of comparing expectations with real results for the goods or services purchased. Customers will assess whether the goods or services they buy are in accordance with their expectations or hopes or not.

4) Confirmation or disconfirmation, customers have expectations that are influenced by the experiences of others and their own experiences from using the brand of goods or services. The experiences of others influence customers in comparing whether expectations and real results are the same or different. Confirmation occurs when expectations match actual results. Discrepancy occurs when expectations are higher or lower than actual results. Customers are satisfied when actual results are higher than their expectations.

5) Discrepancy, is a comparison of how big the difference is between results and expectations. When negative disconfirmations occur or results are far below expectations, it will cause dissatisfaction. If positive disconfirmations or results are far above expectations, it will cause satisfaction. When customers are satisfied

with goods or services, they are likely to use the same goods or services, and when customers are not satisfied, they will usually complain to the company.

According to Zeithaml & Bitner (1996), there are factors that influence customer satisfaction, namely:

a) Service quality

Systems, technology, and humans are three determinants of service quality. In companies engaged in the service sector, service quality is very important for the company. Service quality has five dimensions, namely, reliability, responsiveness, assurance, tangibles, and empathy.

b) Quality of Goods

Good quality of goods will certainly provide satisfaction to customers. If the quality of goods with quality of service is given to customers, then it will affect customer perception and allow customers to return to buy or use the company's services. There are eight dimensions of product quality, namely performance, features, reliability, durability, service, aesthetics, according to specifications, and quality of acceptance.

c) Price

Another factor in customer satisfaction is price, because buyers usually see price as a measure of the quality of an item. Customers often assume that high prices will produce high quality goods, and vice versa

d) Situational and personal factors

In addition to service quality, product quality, and price, the situation or environment and personal are also factors in customer satisfaction because these factors have an influence, such as customer conditions and experiences, or customer emotions.

Research Methods

There were 177 respondents who were willing to fill out the questionnaire involved in this study. The criteria for the selected respondents were having purchased clothes at the Matahari Department Store, and domiciled in Bekasi. The respondents were given a customer satisfaction measurement scale consisting of 10 items. The measurement used is a Likert scale model with five answer choices. The data collected from the measurements were analyzed using the discriminatory power and confirmatory analysis approach. Discriminatory power is used to eliminate uncorrelated items, while confirmatory analysis is used to identify the most relevant items.

Tabel 1. *Blue Print* Customer Satisfaction Scale

No	Aspek	Indikator	Aitem
1	*expectations*	- Product expectations	1. I am interested in buying clothes at Matahari because it looks fashionable
		- Expectations from the post-use of store service services	2. I am interested in coming to Matahari because of the many employees who help
2	*performance*	- Quality of store service	3. I am satisfied with the service provided by the Matahari store
		- The quality of the purchased product	4. I love the clothes I bought at Matahari
3	*comparison*	- Expectation alignment with results	5. I feel satisfied because the clothes I bought at Matahari look good when I wear them
		- Product accuracy in meeting needs	6. I feel satisfied with the clothes I bought at Matahari

			Because it uses quality materials
4	*confirmation/ disconfirmation*	- The service obtained is better than expected	7. The employees at the Matahari store were very helpful in finding the clothes I wanted
		- Make a repurchase	8. i wants to return to the sun again to buy another model of clothes
5	*discrepancy*	- Performance comparison with expectations	9. I feel satisfied because the products and services I want are the same as the reality I get
		- Conformity level	10. I am satisfied with the service provided before and after I make a purchase

Results and Discussion

The results obtained from this study show that the customer satisfaction measuring tool made, consisting of 10 items, has successfully passed the discrimination power test. This indicates that the ten items are able to identify the level of customer satisfaction at Matahari Department Store well. However, further analysis revealed that while these measuring tools were effective in distinguishing between satisfied and dissatisfied customers, these ten items did not fully reflect the unique characteristics of Department Store Matahari's customers. In other words, although this measuring tool has good discriminatory

validity, it has not been able to capture Specifically, the unique attributes possessed by Matahari's department store customers.

Tabel 2. Uji Korelasi

Variable		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	Total
1. V1	Pearson's r	—										
	p-value	—										
2. V2	Pearson's r	0.470***	—									
	p-value	< .001	—									
3. V3	Pearson's r	0.529***	0.587***	—								
	p-value	< .001	< .001	—								
4. V4	Pearson's r	0.557***	0.311***	0.454***	—							
	p-value	< .001	< .001	< .001	—							
5. V5	Pearson's r	0.470***	0.324***	0.499***	0.709***	—						
	p-value	< .001	< .001	< .001	< .001	—						
6. V6	Pearson's r	0.570***	0.444***	0.547***	0.630***	0.591***	—					
	p-value	< .001	< .001	< .001	< .001	< .001	—					
7. V7	Pearson's r	0.282***	0.490***	0.507***	0.430***	0.394***	0.472***	—				
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	—				
8. V8	Pearson's r	0.607***	0.366***	0.486***	0.665***	0.617***	0.566***	0.394***	—			
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—			
9. V9	Pearson's r	0.535***	0.510***	0.627***	0.483***	0.504***	0.533***	0.524***	0.539***	—		
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—		
10. V10	Pearson's r	0.471***	0.595***	0.714***	0.464***	0.451***	0.528***	0.600***	0.483***	0.648***	—	
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—	
11. Total	Pearson's r	0.740***	0.685***	0.791***	0.757***	0.738***	0.779***	0.676***	0.768***	0.782***	0.790***	—
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	< .001	—

* p < .05, ** p < .01, *** p < .001

Based on the table above after the correlation test was carried out, with the basic principle of significant correlation * p < .05, * p < .01, ** p < .001, it can be seen that there is a significant correlation to measure customer satisfaction in department stores. According to Sumarsid (2017) Pearson correlation, having the minimum requirement for an instrument to be considered valid is if the r value ≥ 0.3. So the research table above shows that the correlation of all variables is said to be valid.

Table.3 Statistics of Consistency of Customer Satisfaction Scale

Estimate	Cronbach's α
Point estimate	0.912
95% CI lower bound	0.891
95% CI upper bound	0.930

Data was obtained from the results of the measurement involving 170 respondents.

The consistency statistics of the customer satisfaction scale, measured using Cronbach's α coefficient, resulted in a point estimate value of 0.912. This indicates that items on this scale have a high correlation with each other in measuring the concept of customer satisfaction. In addition, the 95% confidence interval (CI) for Cronbach's α shows a lower bound of 0.891 and a lower upper bound of 0.930. This interval reinforces the belief that the internal consistency aesthetics obtained are accurate and stable, and indicates that this scale has excellent reliability in the context of customer satisfaction measurement.

Table.4 Statistical Reliability If Aitem Is Discriminated Against

	If item dropped
Item	**Cronbach's α**
V1	0.905
V2	0.909
V3	0.900
V4	0.903
V5	0.904
V6	0.901
V7	0.909
V8	0.903
V9	0.901
V10	0.900

If a measuring instrument has a reliability coefficient value that is close to the number 1, then the measuring tool can be said to be reliable, the reliability number is considered satisfactory enough if > 0.6 (more than enough), > 0.7 (good enough) and > 0.8 (good) if it is less than < 0.5 then the tool is not reliable (Azwar, 2012). The reliability results in this study can be said to be reliable, meaning that all items are consistent because they have a value of more than > 0.6 with a point estimate of 0.912.

Table 5. Chi-squared Test Calculation Results

	Value	**df**	**p**
Model	181.095	35	< .001

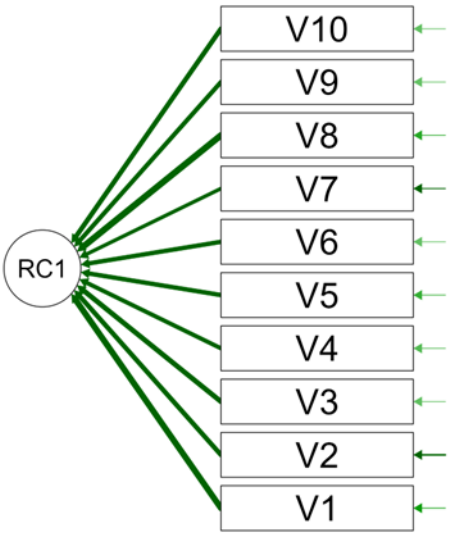
The Chi-Squared value is a traditional measure to evaluate the overall fit of the model and assess the magnitude of the difference between the sample and the installed covariance matrix (Hu & Bentler, 1999). A good fit model will give insignificant results at the threshold of 0.05 (Barrett, 2007). The low Chi-squared relative to df with a p-value of insignificant ($p > 0.05$). In the researcher's table above, it shows that chi-squared is quite significant because the p value < 0.05, which is with a value of 0.01.

Table 6. Component Loadings RC1 & Uniqueness

	RC1	Uniqueness
V8	0.720	0.338
V1	0.701	0.380
V3	0.642	0.249
V10	0.631	0.246
V2	0.625	0.447
V5	0.610	0.315
V9	0.610	0.239
V6	0.608	0.242
V4	0.597	0.267
V7	0.565	0.406

Note. Applied rotation method is promax.

Fig.1 Path Diagram 10 Measurement Items



From the RC1 Path Diagram, it can be seen that there are two measurement items whose strength is not optimal to measure Customer Satisfaction in the Service Quality phenomenon. However, there are eight measurement items that already have the appropriate strength to measure Customer Satisfaction, namely item 8 (repurchase), item 1 (expectations for products), item 3 (store service quality), item 10 (level of conformity), item 2 (expectations after using services), item 5 (conformity of expectations with results), item 9 (performance comparison with expectations), and item 6 (product accuracy in meeting needs).

In the context of Structural Equation Modeling (SEM), a uniqueness value of only 0.6 for the observed variable indicates that 60% of the variance in the variable is not explained by the proposed factor model. This means that most variances of variables are unique and not related to other factors in the model (Jolliffe, 2014). In the research table above, it shows that all uniqueness values are below 0.6 or < 0.6, meaning that the variance of the researcher's variables does not have a relationship with other factors in the model, so that the measuring tools contained

in the measurement of this measuring tool cannot be used properly even though they get good correlation and reliability values.

Table.7 Measurement Fit Indicator

Metric	Value
Root mean square error of approximation (RMSEA)	0.149
RMSEA 90% CI lower bound	0.127
RMSEA 90% CI upper bound	0.172
RMSEA p-value	1.367×10^{-12}
Standardized root mean square residual (SRMR)	0.068
Hoelter's critical N (α = .05)	51.986
Hoelter's critical N (α = .01)	59.706
Goodness of fit index (GFI)	0.974
McDonald fit index (MFI)	0.678
Expected cross validation index (ECVI)	1.318

RMSEA is an absolute fit index that assesses how far the hypothesized model is from the perfect model (Xia & Yang, 2019). The application of RMSEA, CFI, and, TLI is highly dependent on a number of boundary criteria. Previous research by Brown & Cudeck (1993) (in Xia & Yang, 2019) said that an RMSEA value of < 0.05 indicating a "close fit" and a < of 0.08 indicating a "good fit" of reasonable model fits. In the RMSEA researcher table above, it shows that the value obtained is greater than 0.08 or RMSEA = 0.149 > 0.08, meaning that the model has a poor fit (marginal fit). Standardized RMR (SRMR) has a value ranging from 0 to 1.0 with the corresponding model obtaining a value of less than 0.05 (Byrne, 1998), but a value with a height of 0.08 is considered acceptable (Hu & Bentler, 1999). In the SRMR researcher table above, it shows an acceptable value with a result of 0.068. GFI

(good of fit index) is a general rule of thumb that is recommended for the feasibility of a model with a GFI value greater than 0.90 and a maximum value of 1. A GFI value of ≥ 0.90 is a good fit, while a GFI ≤ ≤ 0.90 is called a marginal fit (Efendi & Purnomo, 2012). The GFI researcher table above shows the results of good fit with a value of 0.974 or GFI ≥ 0.90.

Based on the results of the correlation test with the basic principle of significant correlation (* p < .05, ** p < .01, *** p < .001), it can be seen that there is a significant correlation in measuring customer satisfaction. According to Sumarsid (2017), Pearson correlation has a minimum requirement in a measuring instrument to be considered valid, namely if the r value ≥ 0.3. This study shows that the correlation of all items is eligible so that it can be said to be valid. If a measuring instrument has a reliability coefficient value that is close to 1, then the measuring instrument can be said to be reliable. According to Azwar (2012), reliability is considered quite satisfactory if > 0.6 (more than enough), > 0.7 (good enough), and > 0.8 (good). In this study, the reliability results showed a very good value with an estimate point of 0.912 which means that all items are consistent.

Chi-squared is a measurement to evaluate the suitability of the model as a whole and to assess the magnitude of the difference between the sample and the colarious matrix used (Hu & Bentler, 1999). A good fit model will give insignificant results at the threshold of 0.05 (Barrett, 2007). In this study, the chi-squared value showed significance with a p < 0.05 (0.01), which means the model had a good fit even though it was not perfect. In the RC1 Path Diagram, it shows that there are two measurement items whose strength is not optimal to measure Customer Satisfaction in the Service Quality phenomenon, and there are eight measurement items that have appropriate strengths, namely item 8 (repurchase), item 1 (expectations for products), item 3 (store service quality), item 10 (level of conformity), item 2 (expectations after using services), Item 5 (Matching

expectations with results), Item 9 (Comparison of performance with expectations), and Item 6 (Product accuracy in meeting needs).

In the context of Structural Equation Modelin (SEM), the uniqueness value indicates that most of the items are not related to other factors in the model (Jolliffe, 2014). In this study, all items have a uniqueness value below 0.6 which means that the items do not have the relationship of other factors in the model, so this measuring tool cannot be used properly even though it has good correlation and reliability values. Other model compatibility indices such as RSMEA showed poor values (0.149 > 0.08), indicating poor item compatibility. The SRMR showed an acceptable value (0.068), and the GFI showed a good result (0.974), indicating that this model has a good fit overall. Thus, overall this measuring tool cannot be used optimally because there are still some weaknesses when tested.

Conclusion

Based on the results of the correlation test with the basic principle of significant correlation, the customer satisfaction measure shows a significant correlation for all items, the customer satisfaction measure shows a significant correlation for all items, meets the validity requirements with a ≥ value of 0.3 in accordance with the Sumarsid standard. The reliability coefficient reached 0.912, indicating that this measuring tool is very reliable, consistent with the reliability criteria according to Azwar. Describing the chi-squared value shows a significant model conformity ($p < 0.05$), there are ten items whose strength is not optimal in measuring customer satisfaction related to service quality. An RSMEA value of 0.149 indicates a poor match, although a GFI index of 0.974 indicates an overall good match. The suggestion for future researchers is to consider adding specific items to capture the characteristics of Matahari's Department Store customers, and to test the measuring instrument with a larger and more diverse sample to obtain more representative results.

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