

Encouraging Traditional Market through Customer Satisfaction

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Abstract

Progress of village development is very dependent on the financial independence of the village. Financial independence is reflected in the amount of original village income. One source of original village income comes from market retribution. Market retribution revenue will increase if the market can develop properly. Customer satisfaction is the key to the success of a market. This study analyzes consumer satisfaction at Kembangsari Market, Srimartani Village, Bantul Regency, and the factors that influence satisfaction using a logistic regression model. The results showed that the level of consumer satisfaction was 72.71 percent. Factors that influence consumer satisfaction are easy-to-market accessibility, good product quality, and guarantees provided. Infrastructure factors and the responsibility of traders have not been able to increase customer satisfaction.

Keywords: *village market, consumer satisfaction index, logistics model*



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INTRODUCTION

The government has carried out developing an economic base in rural areas for a long time through various programs. However, these efforts have not been quite successful. One of the contributing factors is the high level of government intervention that hinders the creativity and innovation of rural communities in managing the rural economy. Economic, institutional systems and mechanisms are not effective and dependent on government assistance (Arifin et al., 2020). Learning from past experiences, a new approach can stimulate and drive the rural economy by establishing economic institutions that are fully managed by rural communities. This economic institution is no longer established based on government instructions. However, it must be based on the wishes of the village community, which departs from the potential, which will create demand in the market if appropriately managed so that the existence of this economic institution is not controlled by certain groups who have significant capital in the countryside. So the ownership of the institution by the village and jointly controlled where the main goal is to improve the economic standard of living of the community.

Srimartani Makmur BUMDes in Srimartani Village, Piyungan District, Bantul Regency is one of the BUMDes in the Special Region of Yogyakarta that has been managed quite well (Sofyani et al, 2019). This BUMDes was established on November 28, 2016, with six types of businesses managed, namely: village market management, display case for SME products marketed through village outlets, services (E-Warung, PPOB), integrated waste management, horticulture modern farmer laboratory, and clean water management supported by five employees consisting of 3 managers and two employees. Of the various business fields carried out by BUMDes Srimartani, the management of the village market contributes the

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most to the original income of Srimartani Village, with a target of IDR 35 million in 2021. On the other hand, customer satisfaction is the key to the sustainability of the market. Customers who are satisfied when shopping causes the market to continue to grow and accept market levies. This research was conducted to measure the level of consumer satisfaction and to determine the factors that influence the level of consumer satisfaction in the Kembanghari Market, Srimartani Village, Piyungan Bantul.

LITERATURE REVIEW

Increasing village independence is closely related to the village's ability to manage Village Original Income (PADes). The higher the village's ability to produce PADes, the greater the village's discretion to use the PADes by the aspirations, needs, and priorities of village development (Qurbani et al., 2020). In terms of increasing village income, it is hoped that the village can form a Village-Owned Enterprise, this formation is expected to contribute to village income so that it can improve the welfare of the village community, this is as stated in article 1 paragraph 2 of the Minister of Village Regulation Number 4 of 2015. Efforts that the village government can make to increase PADes are collecting village market levies. The collection is a method of taking or withdrawing in the form of taxes or contributions. Village retribution is a collection that legally becomes a village levy as payment for use or obtaining employment services. As stated in Law Number 6 of 2014 concerning Villages, collection can also help increase the village's original income. For pages revenue to continue to increase, reasonable village market management efforts are needed to increase the level of satisfaction of all users, both traders and consumers.

Traditional markets are direct buyer-seller transactions with the bargaining process. Most of them sell daily necessities such as food ingredients in vegetables, fruit, meat, fish, eggs, food, clothing, household utensils, and other necessities. In a retail business, such as in traditional markets, retaining customers is the main thing. By retaining customers, business continuity will be maintained (Tang & Yu, 2021; Park et al., 2019). Service quality is a level of excellence to meet consumer expectations and build loyalty (Rahantoknam et al., 2017). Consumer satisfaction is an evaluation of post-purchase, the suitability between perceptions of performance and expectations. If it doesn't fit, it will cause dissatisfaction. A satisfied customer will be a loyal customer for a long time (Yi & Nataraajan, 2018).

Several studies on consumer satisfaction have been carried out both on traditional markets (Rahantoknam et al., 2017; Kartikasari et al., 2018; Majiid et al., 2020), modern markets (Slack & Singh, 2020), and others such as industry retail (Kim et al., 2020); film industry (Tang & Yu, 2021); accommodation services (Othman et al., 2021), and aviation services (Park et al., 2019). Various studies show different approaches in analyzing consumer satisfaction. Rahantoknam et al. (2017) examined the relationship between consumer satisfaction and loyalty to the traditional fish market on the Indonesian island of Kei along with the development of modern markets. A similar study was conducted by Slack & Singh (2020) for the modern market in Fiji. Other studies focus on the importance of the marketing mix to maintain the existence of traditional markets (Kartikasari et al., 2018; Majiid et al., 2020; Intyas & Primyastanto, 2020).

RESEARCH METHOD

This study calculates and analyzes the level of consumer satisfaction and the factors that influence it. Data were collected through questionnaires to 100 respondents, who were consumers of the Kembanghari Market, Srimartani Piyungan Village, Bantul. Respondents answered questions using a Likert scale of 1-5, with the number 1 indicating very dissatisfied for the satisfaction aspect or very unimportant for the exciting aspect; and number 5 indicates very very satisfied for the satisfaction aspect

or very important for the exciting aspect. The analytical tools used include 1) the calculation of the consumer satisfaction index and 2) the logistic regression model.

Consumer Satisfaction Index

This index measures the level of customer satisfaction by considering the importance and performance of the measured service quality attributes. This method includes the following stages (Stratford, 2007):

1. Calculating the importance weighting factors, namely changing the average value of the importance level into a percentage number of the total average value of the importance level for all tested attributes, obtaining the total importance weighting factor 100%.
2. Calculating the weighted score, which is the multiplication value between the averages of performance/satisfaction of each attribute with the importance weighting factor of each attribute.
3. Calculating the weighted total adds up the weighted scores of all service quality attributes.
4. Calculating the satisfaction index, the total weighted divided by the full scale used (this study uses a maximum scale of 5), then multiplied by 100%.

Logistics Regression Model

The regression model is a binary response variable regression model that involves a logit transformation. Binary data is data that has only two possible outcomes. In general, both outcomes are denoted by $Y=1$ (success) and $Y=0$ (failure) with probabilities of p and $q=1-p$, respectively. Ordinary regression analysis cannot model the relationship between binary response variables and several predictor variables. One approach that can be used to overcome this problem is logistic regression analysis. The logistic regression model can be written as follows (Gujarati & Porter, 2009; Gujarati, 2012):

$$\text{Logit}(p_i) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki}; -\infty \leq \text{Logit}(p_i) \leq \infty$$

Estimation of parameters in logistic regression is done by using the maximum likelihood method. The method predicts the coefficient by maximizing the likelihood function and requires that the data follow a specific distribution. In binary logistic regression, each observation follows a Bernoulli distribution to determine the likelihood function.

FINDINGS AND DISCUSSION

Analysis of Consumer Satisfaction Levels

In measuring the level of consumer satisfaction at the Kembang Sari Market, 18 attributes are used, including attributes of accessibility, product condition, physical market condition, responsibility, and guarantee. The level of consumer satisfaction of the Kembang Sari village market is included in the satisfied category, at 72.71 percent. Although consumers are satisfied when shopping, this level of satisfaction still needs to be improved. When viewed from the performance level of each attribute, the lowest performance relates to physical facilities, such as unsanitary toilets, lack of handwashing facilities with soap, limited parking space, little suggestion boxes. In addition, the cleanliness of the market and the arrangement of traders according to the trade group need to be the attention of market managers.

Table 1. Consumer Satisfaction Level

No	Attribute	Average	Importance Weighting Factors (%)	Average Performance Level	Weighted Score	CSIEach Attribute
1	Completeness of goods	4.36	5.68	3.81	0.2163	0.0433
2	Quality of goods	4.45	5.80	3.84	0.2228	0.0446
3	Competitive prices	3.65	4.76	3.91	0.1862	0.0372
4	Accuracy of size	4.03	5.25	3.83	0.2011	0.0402
5	Arrangement of kiosks/Los neatly	4.26	5.55	3.55	0.1971	0.0394
6	Accuracy of size	4.13	5.38	3.83	0.2059	0.0412
7	Arrangement of kiosks/Los according to groups of goods	4.32	5.63	3.57	0.2008	0.0402
8	Traders inform the condition of goods for sale	4.21	5.49	3.62	0.1987	0.0397
9	Friendly traders	4.44	5.79	3.94	0.2281	0.0456
10	Fast service	4.30	5.60	3.85	0.2156	0.0431
11	Customer complaint service	4.29	5.59	3.72	0.2080	0.0416
12	Good market building	4.28	5.58	3.76	0.2096	0.0419
13	Market cleanliness	4.51	5.88	3.56	0.2092	0.0418
14	Handwashing area with soap	4.33	5.65	3.2	0.1807	0.0361A mple
15	Parking space	4.37	5.69	3.1	0.1763	0.0353
16	Clean toilet facilities	4.41	5.74	3.28	0.1884	0.0377
17	Market safety	4.45	5.79	3.97	0.2300	0.0460
18	Availability of suggestion boxes	3.96	5.16	3.11	0.1605	0.0321
Total		76.74	100	65.45	3.6354	0.7271
Consumer Satisfaction Index (%)		72.71				

Logistics Regression Analysis

Based on logistic model regression results, the factors that affect the level of consumer satisfaction (Y) are accessibility factors (X1), product quality (X2), and guarantees (X5). The regression coefficients of the three variables show a positive number, meaning that consumer satisfaction will increase if there is an increase in accessibility, product quality, and assurance. The variables of physical infrastructure (X3) and responsibility (X4) have a positive regression coefficient but have no statistical effect on consumer satisfaction. This happens because the quality of the available physical facilities is still low, and the responsibility of traders in serving consumers is still not optimal.

Table 2. Logistics Model Regression Results

Dependent Variable: Y
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)
Sample: 1 100
Included observations: 100
Convergence achieved after six iterations
Coefficient covariance computed using observed Hessian

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-17.81791	4.407169	-4.042937	0.0001
X1	1.898860	0.634227	2.993974	0.0028
X2	1.327798	0.669975	1.981861	0.0475
X3	0.581708	0.432796	1.344072	0.1789
X4	1.077907	0.681512	1.581642	0.1137
X5	2.127696	0.923449	2.304076	0.0212
McFadden R-squared	0.501022	Mean dependent var		0.670000
S.D. dependent var	0.472582	S.E. of regression		0.320405
Akaike info criterion	0.752882	Sum squared resid		9.649971
Schwarz criterion	0.909193	Log-likelihood		-31.64412
Hannan-Quinn criteria.	0.816144	Deviance		63.28823
Restr. deviance	126.8357	Restr. log-likelihood		-63.41786
LR statistic	63.54749	Avg. log-likelihood		-0.316441
Prob(LR statistic)	0.000000			
Obs with Dep=0	33	Total obs		100
Obs with Dep=1	67			

The logistic regression model suitability test (Table 3) determines whether the model fits or does not significantly differ between the observations with model predictions. Based on the test results, it can be interpreted that H0 that the model is appropriate can be accepted at = 5% because P-value >. The conclusion is that the model fits or there is no significant difference between the observations and the predictions of the model.

Table 3. Test Results

Goodness-of-Fit Evaluation for Binary Specification

Andrews and Hosmer-Lemeshow Tests

Equation: EQ01_LOGIT

Grouping based upon predicted risk (randomize ties)

	Quantile of Risk		Dep=0		Dep=1		Total Obs	H-L Value
	Low	High	Actual	Expect	Actual	Expect		
1	0.0001	0.0376	10	9.86084	0	0.13916	10	0.14113
2	0.0602	0.2939	9	8.60312	1	1.39688	10	0.13107
3	0.2998	0.4294	6	6.10735	4	3.89265	10	0.00485
4	0.4346	0.7375	3	3.59011	7	6.40989	10	0.15132
5	0.7811	0.8341	0	1.73664	10	8.26336	10	2.10161
6	0.8341	0.8341	2	1.65935	8	8.34065	10	0.08385
7	0.8341	0.9457	2	1.04110	8	8.95890	10	0.98584
8	0.9494	0.9836	1	0.33605	9	9.66395	10	1.35741
9	0.9869	0.9985	0	0.05416	10	9.94584	10	0.05446
1	0.9985	0.9991	0	0.01129	10	9.98871	10	0.01130
	Total		33	33.0000	67	67.0000	100	5.02283
H-L Statistic			5.0228		Prob. Chi-Sq(8)		0.7551	
Andrews Statistic			35.3716		Prob. Chi-Sq(10)		0.0001	

CONCLUSION AND FURTHER RESEARCH

In order to optimize the source of the village's original revenue sourced from market levies, it is necessary to take the following steps. First, to improve market management, it should be directed to a physical arrangement, which is accompanied by improving the quality of market management by increasing the human resources of market managers—second, guiding traders so that they can provide excellent service to consumers. Third, continuously evaluate and monitor the implementation of market management based on good corporate governance.

Further research can expand the study with respondents covering all stakeholders, including consumers, traders, managers, local governments, and the surrounding community. The development of research variables is also still very open, as well as the analytical tools used. The linkage between the management of the market and increased revenue village can also be a fascinating topic.

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