

ANALYSIS OF THE EFFECT OF PRODUCT QUALITY, DISTRIBUTION CHANNELS, AND PERSONAL SELLING ON FISH SALES VOLUME AT PT LAUTAN PERSADA BELAWAN

Corri Satria Sihotang¹, Enda S. Padang², Jarungjung Hutagaol³

Fakultas Ekonomi Universitas Prima Indonesia Medan

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E-mail:

corrisihotang24@gmail.com
 endapadang17@gmail.com
 jarungjung13@gmail.com*

ABSTRACT

This study aims to determine how the influence of product quality, distribution channels, and personal selling on fish sales volume at PT Lautan Persada Belawan. This study uses the SPSS version 26 application. In this study the population used was all employees of PT Lautan Persada Belawan as many as 63 employees. The method used in this research is a quantitative approach. The results of this study product quality variables have a significant effect on sales volume with a significance of 0.000 and tcount 5.635. The distribution channel variable has a significant effect on sales volume with a significance of 0.000 and tcount of 4.120. The personal selling variable has a significant effect on sales volume with a significance of 0.005 and tcount of 2.889. Variables of product quality, distribution channels and personal selling simultaneously affect the volume of sales.

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1. INTRODUCTION

Marketing in a company plays a very important role, because marketing is one of the activities carried out to maintain the survival of the company, make developments on the company and to achieve the company's goal of achieving profit in increasing sales volume. PT. Lautan Persada is a company engaged in processing fresh fish into frozen fish. Especially the raw materials needed for small and medium enterprises. As for several types of products produced by this PT, namely Aso-aso fish or often called bloated fish, curried fish, tuna, selayang fish, sardines and many more. In this case, frozen fish packaging has several packages for export, namely Frozen, SKR, Ocean, Mabong and Wallet while for local packaging, plain box packaging is produced. In terms of its own durability, as long as it is in the refrigeration machine it can last for 2 years but this has never happened because the stock of goods is always selling well, while if it is already at the consumer, the durability depends on the consumer himself.

**Table 1. Sales data of PT. Lauta Persada Belawan
 Period January to December 2021**

Month	Sales targets	Achievement realization	Percentage
January	2,250,000,000	1,710,000,000	76%
February	2,250,000,000	2,115,000,000	94%

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March	2,250,000,000	1,710,000,000	76%
April	2,250,000,000	2,250,000,000	100%
May	2,250,000,000	1,845,000,000	82%
June	2,250,000,000	1,710,000,000	76%
July	2,250,000,000	3,060,000,000	136%
August	2,250,000,000	2,520,000,000	112%
September	2,250,000,000	1,980,000,000	88%
October	2,250,000,000	2,385,000,000	106%
November	2,250,000,000	1,710,000,000	76%
December	2,250,000,000	2,115,000,000	94%

Table 1. above can be seen sales at PT. Belawan Persada Ocean. The target set by the company from January 2021 to December 2021 is Rp. 2,250,000,000 per month and the highest percentage was achieved in July of 136% and the lowest percentage was in January of 76%. Product quality is a physical condition, nature, and function of a product, be it a product or service, based on a quality level that is adjusted to durability, reliability, accuracy, ease of operation, product repair and other product attributes with the aim of meeting satisfaction and needs. customer. Product quality is one of the keys to competition among business actors offered to consumers. Distribution channel is a marketing channel determined by the company in distributing or providing services related to goods to its customers. Personal Selling is a two-way and valued sales promotion more effective in marketing products, because the ultimate goal in a promotion is to make sales. Sales volume is the final result achieved by the company from the sale of products produced by the company.

Tabel 2. Definition of Operational Variable

Variable	Definition	Indicator
Product quality (X1)	Product quality is something that needs to get the main attention of the company or producer, considering that the quality of a product is closely related to the problem of customer satisfaction which is the goal of marketing activities carried out by the company. Source: Assauri (2014: 211)	<ol style="list-style-type: none"> 1. Performance relates to the basic operating characteristics of a product 2. Durability (durability) which means how long or the life of the product in question lasts before the product must be replaced
Channel Distribution (X2)	Distribution channel is a marketing channel determined by the company in distributing or providing services related to goods to its customers.	<ol style="list-style-type: none"> 1. Place 2. Time 3. Form
Personal Selling (X3)	Personal selling is the oldest and most important method that is not easily repeated, can create two ways of communication between different ideas between sellers and buyers Source: Alma (2016:185)	<ol style="list-style-type: none"> 1. customer identification 2. looking for information 3. Product knowledge 4. Handling Complaints 5. Providing Solutions 6. Ability Sale 7. Special Offer

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According to Sujarweni (2015:68) that the research hypothesis is a temporary answer to the research objectives derived from the framework that has been made. The hypotheses in this study are as follows:

H1: Product quality affects the sales volume of fish at PT. Belawan Persada Ocean

H2: Distribution Channels affect the volume of fish sales at PT. Belawan Persada Ocean

H3: Personal Selling affects the sales volume of fish at PT. Belawan Persada Ocean

H4: Product Quality, Distribution Channels, and Personal Selling affect the sales volume of fish at PT. Belawan Persada Ocean

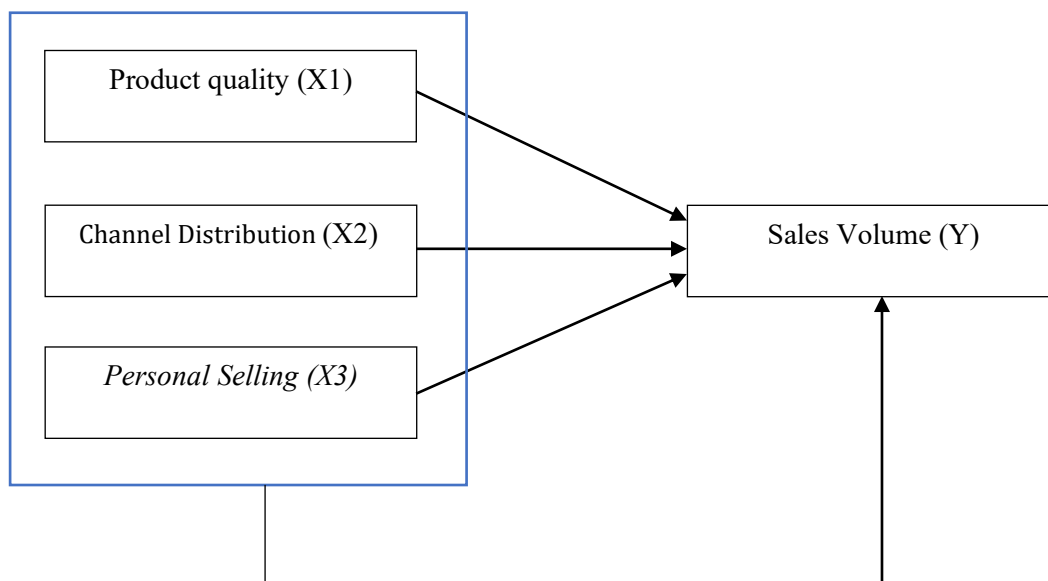


Figure 1. Conceptual Framework

2. METHOD

2.1 The Place and time of research

This research was conducted at PT Lautan Persada Belawan, Jl. Gabion Perikanan, Perum. Prasarana Prasarana Perikanan Samudera Belawan Kel. Bagan Deli, Medan Belawan District. The time the research was carried out began in April 2021 and is planned to be completed in October 2021

2.2 Analysis Method

This The approach in this research is a quantitative approach. According to Sujarweni (2015:39) The quantitative approach focuses on the symptoms that have certain characteristics in human life which are called variables. In this study, the researcher used a quantitative descriptive research method. According to Sugiyono (2017:29), descriptive statistics are statistics that function to describe or provide an overview of the object under study through sample or population data as it is, without analyzing and making applicable conclusions. The nature of the research used is descriptive, namely research that describes certain objects and explains things related to or systematically describes facts or characteristics

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of certain populations in certain fields in a factual and accurate manner. According to Sugiyono (2017: 80), the population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population in this study amounted to 63 customers. According to Sugiyono (2018: 131), the sample is part of the number and characteristics possessed by the population.

Table 3.
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Product quality	63	8.00	20.00	15.8889	3.22846
Distribution channel	63	9.00	15.00	13.9841	1.67998
Personal Selling	63	8.00	20.00	15.7302	3.00648
Sales Volume	63	8.00	20.00	15.9841	3.24033
Valid N (listwise)	63				

Source: SPSS Output Results (2022)

From the results of the output table above, based on the answers of 63 respondents, the results of the measurement of the Product Quality variable (X1) have a minimum number of 8, a maximum value of 20, an average of 15.8889 and a standard deviation of 3.22846. Distribution Channel (X2) with a minimum score of 9, a maximum value of 15, an average of 13.9841 and a standard deviation of 1.67998. Personal Selling (X3) a minimum value of 8, a maximum of 20, an average of 15.7302 and a standard deviation of 3.00648. Sales Volume (Y) a minimum value of 8, a maximum of 20, an average of 15.9841 and a standard deviation of 3.24033.

Table 4. Validity Test

Questions one	Product quality (X1)		Distribution channel (X2)		Personal Selling (X3)		Sales Volume (Y)	
	Pearson Correlation	Significant fish	Pearson Correlation	Significant fish	Pearson Correlation	Significant fish	Pearson Correlation	Significant fish
1	0.824	0.05	0.818	0.05	0.787	0.05	0.87	0.05
2	0.892	0.05	0.763	0.05	0.603	0.05	0.858	0.05
3	0.831	0.05	0.874	0.05	0.766	0.05	0.895	0.05
4	0.775	0.05	-	-	0.81	0.05	0.867	0.05

From the table above, it is known that the variables of product quality, distribution channel, personal selling and sales volume with a significant value below 0.05 and Pearson correlation above 0.3 and declared valid.

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Table 5. Reliability Test Results

Variable	Corrected Item- Total Correlation	Criteria	N of items	Information
Product quality	0.849	0.6	4	Reliable
Distribution channel	0.745	0.6	3	Reliable
Personal Selling	0.727	0.6	4	Reliable
Sales Volume	0.894	0.6	4	Reliable

Table 6. Normality Test One-Sample Kolmogorov-Smirnov Test

		Unstandardiz ed Residual	
N		63	
Normal Parameters ^{a,b}	mean	.0000000	
	Std. Deviation	1.08126374	
Most Extreme Differences	Absolute	.099	
	Positive	.055	
	negative	-.099	
Test Statistics		.099	
asymp. Sig. (2-tailed) ^c		.200 ^d	
Monte Carlo Sig. (2- tailed) ^e	Sig.	.135	
	99% Confidence interval	Lower Bound	.126
		Upper Bound	.143

**Test distribution is Normal. Calculated from data. Source:
SPSS Output Results (2022)**

Based on the data in Table 3.4, it can be seen that the data is normally distributed with a statistical test value of 0.099 because the Asympy.Sig (2-tailed) value is 0.200 where this figure is above the 0.05 or 5% significance level. or asympy.sig (2-tailed) value 0.05 thus the value of Asympy.Sig > 0.05 (0.200 > 0.05).

3. RELUST AND DISCUSSION

3.1 Heteroscedasticity Test

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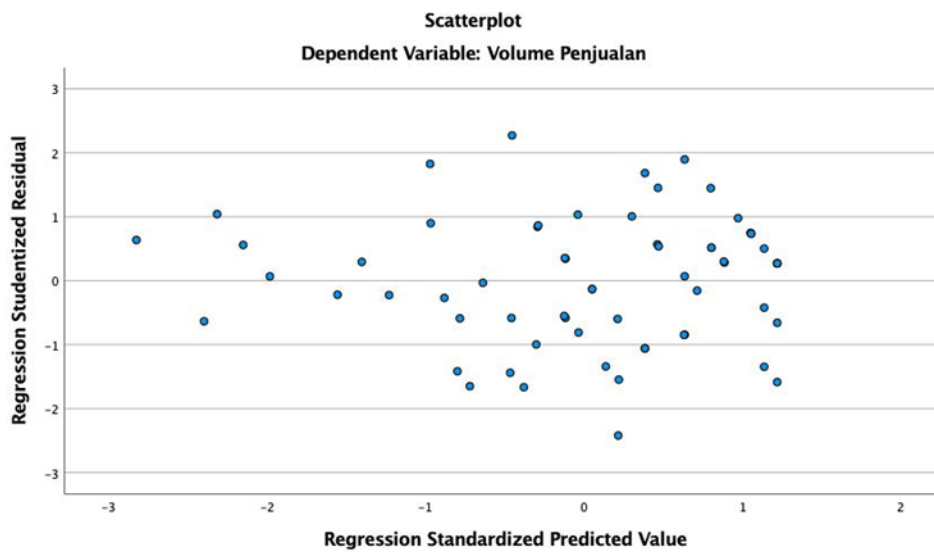


Figure 2. Scaterrplot

Source: SPSS Output Results

Based on the data in Picture 2 it is known that the points spread randomly and do not form a certain clear pattern and are spread both above and below zero on the Y axis. This does not occur heteroscedasticity in the regression model, so the research regression model is feasible to use to predict the effect of product quality, distribution channels, and personal selling on sales volume as independent variables.

3.2 Multiple Linear Regression

Table 7. Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
		B	Std. Error	Beta	Tolerance	VIF
1	(Constant)	- 3,509	1,228			
	Product quality	. 514	. 091	. 513	. 228	4.384
	Distribution channel	. 527	. 128	. 273	. 430	2,327
	Personal Selling	. 251	. 087	. 233	. 290	3,454

a. Dependent Variable: Sales Volume

Source: SPSS Output Results (2021)

$Y = -2.509 + 0.514 \text{ Product Quality} + 0.527 \text{ Distribution Channel} + 0.251 \text{ Personal Selling} + e$ As for the explanation of the multiple linear regression equation in Table 7 as follows:

a. Constant Value

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The constant value is -2.509, this indicates that if the independent variable (X) in the form of product quality, distribution channels, and personal selling is in a constant state, the sales volume variable (Y) is -2.509.

b. Product Quality Regression Coefficient (X1)

The value of the X1 regression coefficient is 0.514, meaning that if there is an increase or addition to X1 while the variables X2 and X3 are constant, then the value of Y will also increase, and vice versa. This means that if the quality of the product increases by 1 unit while the other independent variables remain, the sales volume also increases by 0.514 units, and vice versa.

c. Distribution Channel Regression Coefficient (X2)

X2 regression coefficient value of 0.527 means that if there is an increase or addition to X2 while the variables X1 and X3 are constant, then the value of Y will also increase, and vice versa. This means that if the distribution channel increases by 1 unit while the other independent variables remain, the sales volume also increases by 0.527 units, and vice versa.

d. Personal Selling Regression Coefficient (X3)

X3 regression coefficient value of 0.251 means that if there is an increase or addition to X3 while the variables X1 and X2 are constant, then the value of Y will also increase, and vice versa. This means that if personal selling increases by 1 unit while other independent variables remain, the sales volume also increases by 0.251 units, and vice versa.

3.3 Coefficient of Determination *Adjusted (R2)*

Table 8. Coefficient of Determination Test *Adjusted (R2)*

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.943 ^a	.889	.883	1.10841	1,954
a. Predictors: (Constant), Personal Selling, Distribution Channels, Product Quality					
b. Dependent Variable: Sales Volume					

Based on the data in Table 8 it is known that the value of *Adjusted R Square* namely 0.883 or adjusted $R^2 \times 100\%$ is 88.30%, meaning that the independent variables of research in the form of product quality, distribution channels and personal selling have a major influence in explaining the sales volume of 88.30% while the remaining 11.70% is influenced by other factors outside this research.

Table 9. F Test Statistics Results (Simultaneous) ANOVA^a

Sum of

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Model		Squares	df	Mean Square	F	Sig.
1	Regression	578,498	3	192.833	156,956	.000 ^b
	Residual	72,486	59	1,229		
	Total	650,984	62			

a. Dependent Variable: Sales Volume

b. Predictors: (Constant), Personal Selling, Distribution Channels, Product Quality

Based on the data in Table 3.8, it can be described the simultaneous influence of all independent variables on sales volume (Y) where the F value of product quality (X1), distribution channel (X2) and personal selling (X3) is 156.956 and the Ftable value is 2,76 with the provision that the value of Fcount > Ftable (156.956 > 2.76) and sig value < 0.05 (0.000 < 0.05), so it is stated that product quality, distribution channels and personal selling simultaneously have a significant effect on fish sales volume at PT Lautan Persada Belawan.

Table 10. T-Test Statistics Results (Partial)

		Coefficients ^a		Collinearity Statistics	
Model		T	Sig.	Tolerance	VIF
1	(Constant)	- 2.858	.006		
	Product quality	5.635	.000	.228	4.384
	Distribution channel	4.120	.000	.430	2,327
	Personal Selling	2,889	.005	.290	3,454

a. Dependent Variable: Sales Volume

Source: SPSS Output Results (2022)

Based on the data in Table 3.9, it can be explained partially the effect of each independent variable on the dependent variable, as follows:

1. The results of the partial effect of product quality (X1) on sales volume

(Y) where the tcount value of product quality (X1) is 5.635 and the ttable value is 1.99962 with the provision that the value of tcount > ttable (5.635 > 1.99962) and sig value < 0.05 (0.000 < 0.05), so it is stated that product quality partially has a significant effect on fish sales volume at PT Lautan Persada Belawan.

2. The results of the partial influence of distribution channels (X2) on sales volume

(Y) where the value of tcount distribution channel (X2) is 4.120 and the value of ttable is 1.99962 provided that the value of tcount > ttable (4.120 > 1.99962) and the value of sig < 0.05 (0.000 < 0.05), so it is stated that the distribution channel partially significant effect on the volume of fish sales at PT Lautan Persada Belawan.

3. The results of the partial influence of personal selling (X3) on sales volume

(Y) where the personal selling t-value (X3) is 2.889 and the t-table value is 1.99962 with the provision that the tcount > ttable (2.889 > 1.99962) and the sig value < 0.05 (0.005 <

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0.05), so it is stated that personal selling partially has a significant effect on the volume of fish sales at PT Lautan Persada Belawan.

4. CONCLUSION

Based on the results of the t test, it states that the product quality variable (X1) partially has a significant effect on the volume of fish sales at PT Lautan Persada Belawan with a sig value < 0.05 ($0.000 < 0.05$). Based on the results of the t test, it states that the distribution channel variable (X2) partially has a significant effect on the volume of fish sales at PT Lautan Persada Belawan with a sig value < 0.05 ($0.000 < 0.05$). Based on the results of the t test, it states that the personal selling variable (X3) partially has a significant effect on the volume of fish sales at PT Lautan Persada Belawan with a sig value < 0.05 ($0.005 < 0.05$). Based on the results of the F test, it states that the product quality variable (X1), distribution channel variable (X2) and personal selling variable (X3) simultaneously have a significant effect on fish sales volume at PT Lautan Persada Belawan with a sig value < 0.05 ($0.000 < 0.05$).

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