

The Impact of Distribution Channel Towards Sales Volume at PT. Domas Intiglass Perdana Tanjung Morawa

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Abstract

Besides having a good quality of product, the company has to know how to bring the product to the customers. It is useless if the company offers a good product but the customers are not able to obtain it easily and conveniently. To overcome that kind of problem, the company has to pay attention to the distribution channel. PT. Domas Intiglass Perdana Tanjung Morawa has an intermediatery (wholesaler) which is its subsidiary company to distribute the products. They got many complaints from the customers (retailers) such as there is a minimum amount of purchases, make delays in delivery, have a few types of products and lack of supporting service. The objective of this research is to assess the impact of distribution channel towards sales volume in the company as well as to determine how strong the impact between both of them. In conducting the research, the writer has chosen the descriptive study. To gather the data needed, the writer distributes questionnaires which consist of 10 questions to 52 samples. In this research, the writer used two variables, which is Distribution Channel (Variable X) and Sales Volume (Variable Y). Then the data will be tested and the results of the data are valid and reliable. The result for this study shown that there is impact of distribution channel towards sales volume at PT. Domas Intiglass Perdana Tanjung Morawa. It can be seen from the result of the test of determination which is 52.5%. It means the impact of distribution channel toward sales volume is as large as 52.5%. We can also see from the result of z hypothesis where $5.18 (z_{count}) > 1.96 (z_{table})$. This means the null hypothesis (H_0) is rejected. So the writer can conclude that the distribution channel has impact towards the sales volume at PT. Domas Intiglass Perdana Tanjung Morawa.

Keywords: Distribution Channel; Sales Volume

INTRODUCTION

Nowadays, in the globalization era, companies will competing with others companies to win the market share. Competition become unavoidable issue. Companies have to keep effective and efficient in their operation in order to survive. They can use marketing strategies to handle any problems that happened to them. The goal of the company will be disappeared, if they don't give attention to the threat of competitors. Marketing is one of an important part to achieve their goals. The success of a company in achieving its goals will depends on their marketing department to make good strategies and tactics. Good strategy and tactic can push continuous growth of the company. Marketing is the process of understanding customer wants and needs. The purpose of marketing is give satisfaction for customers by offering products or services that have good quality with the competitive price. In addition to serving a good product to the customer, the company need to know how to bring the product to the customer. This is useful to expand the business to all customers, especially to the potential customer. It is useless if the company has a good product, but customers are not able to obtain it easily and conveniently. In this case, the company should use good strategies on the product distribution.

Distribution (or place) is one of the seven elements of the marketing mix. Distribution in supply chain management refers to the process of distributing a product from one business to other businesses. It can be factory to supplier, supplier to retailer, or retailer to end customer. Distribution channel included the combination of elements that related to transportation, inventory and choosing the channel. These elements need to collaborate become one unity. Therefore, if one element has a bad arrangement, so it will give influence to whole activities. According to Accorda Ramadhini (2008, p.84): "The term of sales volume and distribution channel have correlation and must be used together because they are necessary for a company to reach its goals and satisfy customers". Distribution channel is a business activity that serves to accelerate the flow of goods from producer to consumer efficiently. Without a good distribution channel, the company will not achieve a good result in sales volume. When the company has a good distribution channel, there is no problem in providing products to the customer whenever it is needed by them. In this way, when customer demand is high and the company has a sufficient stock of product that can fulfill the demand, it will increase sales volume. So the company should determine the appropriate distribution channel for the product that they produced. The product must be arrived in the right amount and time to customers. Companies will get loss if they make a fault in the selection of distribution channel

In running the business, companies will face many problems. Every company has own problems without see what kind of business. This company also had some problems since the beginning. The one of problem in PT. Domas Intiglass Perdana was related to sales volume. It has been decreasing for the last 3 years. The decreasing sales volume was caused by bad distribution channel that used by this company. This company has an intermediatery (wholesaler) which is its subsidiary company to distribute the products. According to retailer's information, there is a minimum amount of purchases that offered by the wholesaler. Retailers want to order the products based on their needs without the minimum amount of purchases. Then, the wholesaler often make delays in deliveries. Retailers have to be patient to wait the product that caused by long time in delivery. Another problem is the diversity of products. The company only produce lenses, meanwhile the retailers also need a lens cleaner and contact lens to support their business. The last problem is lack of supporting service, such as credit payment and returns of broken products. Retailers have to pay in cash payment. The wholesaler also has a policy, which the purchased products can not be returned. All of those problems affect the sales volume of the company. So, in order to increase their sales volume, this company should improve their distribution channel.

METHODS

Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose. Research design is all process in planning and doing the research. A good research design is those that can result in a logical and systematic conclusion.

In doing this research, the writer needs to determine the number of people to be used as sample from the population in the company. Population is a group of individuals or items that share one or more characteristics from which data can be gathered and analyzed. It can also be defined as including all people or items with the characteristic one wish to understand. In here, the population of this research is 52 optics/retailers. There are 52 people as representatives of each optic/retailer. Menurut Arikunto (2006, p.134), "Apabila populasi penelitian berjumlah kurang dari 100, maka sampel yang

diambil adalah semuanya. Namun, apabila populasi penelitian berjumlah lebih dari 100, maka sampel dapat diambil antara 10- 15% atau 20-25% atau lebih". According to Arikunto (2006, p.134), "If the subject research is less than 100, it is better to take all the samples, so that the research is considered as population research. But, if the subject research is more than 100, then we can get about 10-15% or 20-25% or more of population". Sample in general is a representative part or a single item from a larger whole or group especially when presented for inspection or shown as evidence of quality while in research it means a limited number of observations selected from a population on a systematic or random basis, which (upon mathematical manipulation) yield generalizations about the population. In here, the writer uses Arikunto's theory. So, in the end, the number of samples are 52 people. To determine which respondents to be used, the writer has decided to use Census Sampling as the sampling method. A census sampling is a way of collecting data where all the elements of the population investigated one by one. Data obtained as a result of processing census data is the actual data or often called parameters.

Normality Test

Normality test is to know whether data distribution is in normal distribution or not. Normality test is done with using Kolmogorov-Smirnov test. To do Kolmogorov-Smirnov, the writer uses the SPSS program. In this testing, the criteria used to take decision is: a. If the significant value > 0.05, then the data distribution is normal. b. If the significant value < 0.05, then the data distribution is not normal.

Coefficient of Correlation

Correlation method is the research method that analyzes the qualitative and quantitative data and the rightness of data will be measured by the coefficient of correlation. To find the correlation, the writer uses Pearson Correlation Formula:

Where: = Coefficient of Correlation between variable X and Y
n = total number of sample
X = independent variable (distribution channel)
Y = dependent variable (sales volume)

The interpretation of the r value is: -1.00 = perfect negative correlation
-0.99 ≤ ≤ -0.70 = strong negative correlation
-0.69 ≤ ≤ -0.50 = medium negative correlation
-0.49 ≤ ≤ -0.01 = weak negative correlation
0 = no correlation
+0.01 ≤ ≤ +0.49 = weak positive correlation
+0.50 ≤ ≤ +0.69 = medium positive correlation
+0.70 ≤ ≤ +0.99 = strong positive correlation
1.00 = perfect positive correlation

Determination Coefficient

Analysis After the coefficient of the correlation being formulated, to find out the effect or influence of the independent variable (variable X) toward dependent variable (variable Y), the writer uses the formula below:

$$D = r^2 \cdot 100\%$$

Where: D = coefficient of determination
r = coefficient of correlation between variable X and Y
The higher percentage of this determination, it means that the greater the variable X influence Variable Y.

The Analysis of Regression

The regression analysis is tested in order to identify how much percentage of the value of variable Y will be determined by the value of variable X. In this research analysis, the writer will use Linear Regression formula:

$$y = a + bx$$

Where: y = the value of independent variable (distribution channel) x = the value of dependent variable (sales volume) Whereas the value of „a“ an Regression coefficient „b“ is determined by using the formula below:

Where: x = the value of dependent variable (sales volume) y = the value of independent variable (distribution channel) n = number of respondents a = Constanta b = regression coefficient

Test of Hypothesis

The objective of hypothesis is to test the result for which hypothesis will be accepted or rejected in this research between the null hypothesis (H_0) and the alternative hypothesis (H_a). The statistical measure used in this research is the z-test formula. The writer uses z-test formula because the sample is more than 30.

Where: z = test statistic r = correlation value n = number of samples.

The result of z-test will be compared with the value in z-table. The circumstances dealing with comparison is as following: $z < -z$ table Null hypothesis (H_0) is rejected $z > +z$ table Null hypothesis (H_0) is rejected $-z$ table $< z < +z$ table Null hypothesis (H_0) is not rejected If the value of the z falls between $-z$ table and $+z$ table, the null hypothesis (H_0) will not be rejected or it means null hypothesis will be accepted and alternative hypothesis will be rejected. But, if the value of z is less than $-z$ table or more than $+z$ table, the null hypothesis (H_0) will be rejected and the alternative hypothesis (H_A) will be accepted

RESULTS AND DISCUSSION

Normality test

Normality test is used to determine whether data collected are normal distribution or not. The writer uses formula developed by Kolmogorov-Smirnov. Below is the result of normality test for variable X and Y.

		Distribution	
		Channel	Sales Volume
N		52	52
Normal Parameters ^a	Mean	20.98	20.73
	Std. Deviation	2.330	2.179
Most Extreme Differences	Absolute	.115	.137
	Positive	.105	.112
	Negative	-.115	-.137
Kolmogorov-Smirnov Z		.826	.985
Asymp. Sig. (2-tailed)		.502	.286

From the table above, we can conclude that the data are distributed normally because the significant value of variable X (0.502) and variable Y (0.286) are greater than 0.05

Coefficient of Correlation

The test of correlation coefficient is to examine the relationship level of two variables. The writer uses the correlation to measure the relationship between independent variable (distribution channel) and dependent variable (sales volume).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.525	.516	1.517

The result shows that the correlation between distribution channel and sales volume is 0.725, which is strong positive correlation. It means that the distribution channel has strong positive correlation to sales volume at PT. Domas Intiglass Perdana.

Coefficient of Determination

After the writer got the Coefficient of Correlation, it can then be used to measure how far the effect of distribution channel towards the sales volume by using "Coefficient of Determination" formula. From the calculation above, the writer obtained the result of coefficient of determination of as much as 52.5 which means that the effect of the distribution channel towards sales volume is affected by 52.5%. The results show that the effect of distribution channel towards sales volume is 52.5% and the rest of 47.5% is affected by other factors that are not explained in this research.

Regression Analysis

Regression analysis is used to determine how the pattern of the relationship between distribution channel and sales volume. SPSS analysis results support the following:

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	6.511	1.923		3.385	.001
	Distribution channel	.678	.091	.725	7.438	.000

From the results above we can combine them in the Regression Equation:

$$y = a + bx \longrightarrow y = 6.511 + 0.678x$$

From the regression equation $y = 6.511 + 0.678x$, it shows that the impact of 1 % in the distribution channel can increase or decrease by 0.678 of sales volume.

TEST OF HYPOTHESIS

The next step is to find the significant level of impact between distribution channel towards sales volume. Below are the null hypothesis and the alternative hypothesis: H_0 : Distribution channel does not have impact towards the sales volume at PT. Domas Intiglass Perdana Tanjung Morawa. H_a : Distribution channel has impact towards the sales volume at PT. Domas Intiglass Perdana Tanjung Morawa. In order to measure the significant level of impact between distribution channel and sales volume, it can be calculated by using z test. From the calculation above, the Zcount result is 5.18. The significance of error is 5% then the Ztable is 1.96. Because the result of Zcount is higher than Ztable, it means that the Null Hypothesis (H_0) will be rejected, and the Alternative Hypothesis (H_a) will be accepted.

The writer analyzed the results as follows: 1) Mean, median and mode of variable X show that most of respondents' answer are agree about the distribution channel and mean, median, and mode of variable Y show that most of the respondents' answer are agree about the sales volume. 2) Based on the Validity test, the score from question number 1 until number 10 show a range from 0.698 to 0.877 which means all of the questions are valid. 3) Based on the Reliability test, the results of variable X and Y are 0.857 and 0.810 which are greater than 0.632 (r-table). Thus the data are reliable. 4) Based on the Normality test, the results of variable X and Y are 0.502 and 0.286 which are greater than 0.05. Thus the data are distributed normally. 5) Based on the Coefficient of correlation test, the writer gets the result of 0.725. It means that the relationship between variable X (Distribution channel) and variable Y (Sales volume) is strong. 6) From the calculation of determination, the result is 52.5%. It means that there is 52.5% impact of variable X (Distribution channel) towards variable Y (Sales volume) and the other 47.5% is influenced by other factors. 7) The regression data is $Y = 6.511 + 0.678X$, which means that with every 1 unit added to X, value of Y will increase as much as 0.678 or it can be said that it has positive relationship (when X increase, Y also increase). 8) From the calculation of hypothesis test, the result of Zcount is 5.18 which is greater than Ztable which is 1.96 with the significance of error 5%. Therefore due to Zcount higher than Ztable then the Hypothesis Null (H_0) will be rejected and Hypothesis Alternative (H_a) will be accepted.

CONCLUSION

After conducting the research and data analysis that is done at PT. Domas Intiglass Perdana, the conclusion that can be drawn in this research is: Distribution channel has impact towards the sales volume at PT. Domas Intiglass Perdana Tanjung Morawa. It is based on the overall analysis in this study that shows distribution channel can give impact on company's sales volume. It shows that distribution channel and sales volume has strong positive correlation. Therefore, the H_0 (Null Hypothesis) will be rejected and H_a (Alternative Hypothesis) will be accepted. The accepted hypothesis is: "Distribution channel has impact towards the sales volume at PT. Domas Intiglass Perdana Tanjung Morawa". So, the writer can conclude that the right distribution channel can help company to increase sales volume.

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