



# Analysis of the Effect of Service Provision and Consumer Motivation on Consumer Purchases in Phone Store (Case Study on Metta Cell Denai)

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## ARTICLE INFO

## ABSTRACT

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This study aims to determine the effect of services and motivation on purchase decision of Metta Cell. This type of research is explanatory research. The population in this study were all consumers of Metta Cell during the 2020 period, totaling 9,351 consumers. The sampling technique used is the Slovin technique with an error tolerance of 10% so that as many as 99 samples are obtained. In the study which will be distributed with questionnaires measured by a Likert scale. The data analysis used multiple linear regression analysis and the coefficient of determination as well as simultaneous test and partial test. The results showed that services and motivation partially or simultaneously have a positive and significant effect on purchase decision of Metta Cell. Based on the results of this study, the implications for management are to further improve services and motivation.

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## 1. Introduction

Mobile is a technology that develops rapidly from year to year. The need for communication tools such as mobile phones is always increasing from year to year. This is because the current consumption pattern of consumers who always want an ease in communication that can support their daily activities at work and other things. Therefore, nowadays many new brands are emerging in the competitive world of mobile phones that are competing with each other to create their superior products. Manufacturers are required not only to create products, but also to understand consumer wants and needs. This is needed by producers to be able to compete with other producers. Seeing this opportunity, many entrepreneurs in every place take the opportunity to start their business by opening various shops that sell cellphone products. For the city of Medan itself, there are lots of shops that sell cellphone products, such as one of the stores which has an address at Denai Medan, namely Metta Cell.

Metta Cell is one of the shops that sells cellphone products which has been established since 2012. Metta Cell initially opened its business on Jalan Tembung and experienced development so that the following year it immediately opened its second business on Jalan Denai No. 198A. The business of the two stores continued to run well until 2017, where the business owner stated that the business was getting quieter due to the increasingly rife competition happening everywhere, both online and around Denai Street. Store sales continue to decline every year where this is assessed because every consumer who comes always compares the products sold by the store with online stores so that consumers often say that the products sold by the store are expensive and in the end they don't make a purchase. In addition, there are also other reasons that resulted in a decrease in consumer purchasing decisions where the first is assessed because of the service from the store itself because the service is considered not good, such as the lack of friendliness or courtesy of the shop owner in serving consumers or the responsiveness is quite low because when the consumer arrives at the store In the shop, consumers are not served directly, but must wait for the owner who is inside to walk



out. In addition, sometimes the owner does not have a solution for the problems that are being experienced by consumers' cellphones that are in trouble. , Erafone, or directly to the official store directly so as to make the store increasingly quiet for consumers who make purchases of their products.

## 2. Method

### 2.1 Location and Time

The research was conducted at Metta Cell which is located at Jalan Denai No. 198A, Medan. The research time is planned from October 2021 to January 2022.

### 2.2 Population and Sample

The population in this study were all consumers of Metta Cell during the 2020 period, totaling 9,351 consumers. The sampling technique used is the Slovin technique with an error tolerance of 10% so that as many as 99 samples are obtained.

### 2.3 Data Collection Method

Collecting data through a questionnaire is done by asking questions to parties related to the problem. To assess respondents' responses, the author uses the Likert scale which uses several question items to measure individual behavior by responding to 5 choice points on each question item.

### 2.4 Validity and Reliability Test

The data obtained needs to be tested for its accuracy and reliability so that the results of data processing can be more precise and accurate. Therefore, it is necessary to know how high the validity and reliability of the measuring instrument (instrument) used.

Based on the research, each variable of the questionnaire item that was tested for validity, all the questionnaires had met the valid criteria and were eligible to be used as a questionnaire in further research. While in reliability test, all variable questionnaire item is reliable and can be used as research instrument.

## 3. Result and Analysis

### 3.1 Normality Test

The residual normality test is used to test whether the residual value resulting from the regression is normally distributed or not. A good regression model is to have residuals that are normally distributed. There is some method to do the normality test such as histogram graphic, normal probability plot of regression graphic and one sample Kolmogorov Smirnov statistic.

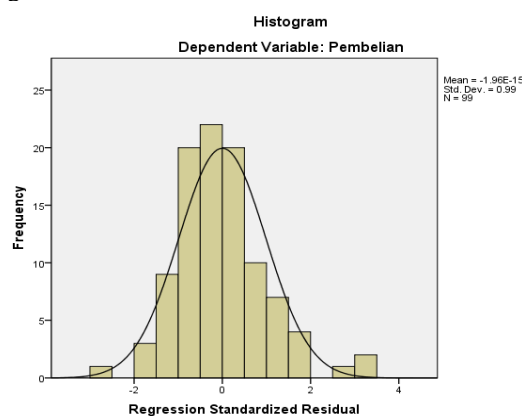
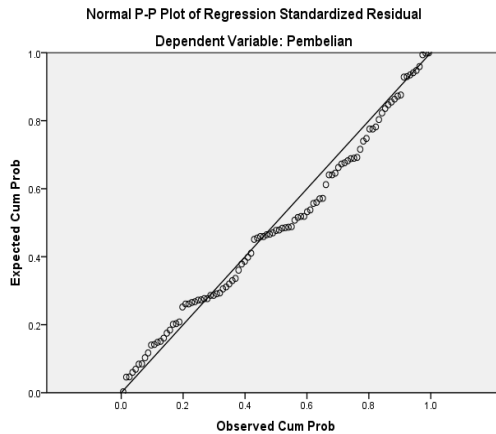


Fig 1. Histogram Graphic

Based on the picture above, it can be seen that the line forming a bell, not going left or right. This shows that the data is normally distributed and meets the assumptions of normality.



**Fig 2.** Normal Probability Plot of Regression Graphic

Based on the picture above, it shows that the data (dots) spreads around the diagonal line and follows the diagonal line. So from this figure it is concluded that the regression model residuals are normally distributed.

**Table 1**  
**One-Sample Kolmogorov Smirnov Test**

		Unstandardized Residual
N		99
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	2.31268519
Most Extreme Differences	Absolute	.084
	Positive	.084
	Negative	-.058
Kolmogorov-Smirnov Z		.836
Asymp. Sig. (2-tailed)		.487

a. Test distribution is Normal.

b. Calculated from data.

Source: Research Result, 2021

Based on the table above, the results of the Kolmogorov-Smirnov normality test prove that the significant value is greater than 0.05, namely 0.487, it can be concluded that the data is classified as normally distributed.

**3.2 Multicollinearity Test**

Multicollinearity is a condition in the regression model where there is a perfect or near perfect correlation between independent variables where a good regression model should not have a perfect or nearly perfect correlation between the independent variables. The commonly used test method is to look at the Tolerance and Variance Inflation Factor (VIF) values in the regression model where the VIF value is less than 10 and has a Tolerance value of more than 0.1.

**TABLE 2**  
**Multicollinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Services	.991	1.009
Motivation	.991	1.009

a. Dependent Variable: Purchase Decision

Source: Research Result, 2021

Based on the table above show that all the variables have a tolerance value more than 0.1 and VIF value less than 10 which can be concluded that there is no problem found in multicollinearity test.



### 3.3 Heteroscedasticity Test

Heteroscedasticity is a condition where in the regression model there is an inequality of variants from the residuals from one observation to another where a good regression model does not occur heteroscedasticity.

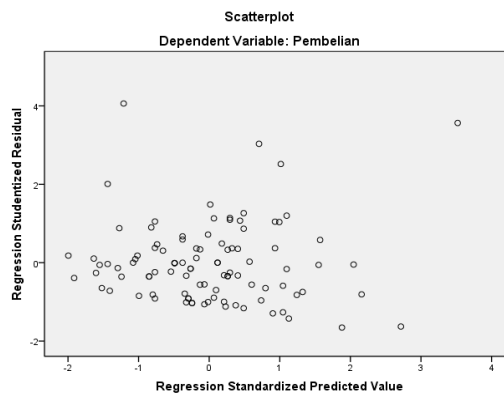


Fig 3. Scatterplot Graphic

Based on the scatterplot graph presented, it can be seen that the dots spread randomly and do not form a clear pattern and are spread either above or below zero on the Y axis. This means that there is no heteroscedasticity in the regression model, so the regression model can be used to predict purchase decision based on the input of the independent variable.

### 3.4 Multiple Linear Regression Analysis

Multiple regression analysis is an analysis to determine whether there is a significant influence between two or more independent variables on one independent variable.

Table 3  
Multiple Linear Regression Analysis Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	7.297	3.588		2.034	.045		
Services	.540	.078	.548	6.923	.000	.991	1.009
Motivation	.258	.075	.273	3.450	.001	.991	1.009

a. Dependent Variable: Purchase Decision  
Source: Research Result, 2021

$$\text{Purchase Decision} = 7,297 + 0,540 \text{ Services} + 0,258 \text{ Motivation} + e \quad (1)$$

Based on the above equation, then: Constant (a) = 7.297. This means that if the independent variable, namely services and motivation is 0, then the Purchase Decision at Metta Cell is 7.297. Where if there is an improvement in services, there will be an increase in Purchase Decision by 0.540. Likewise with motivation where if there is an improvement in the motivation, the Purchase Decision will increase by 0.258.

### 3.5 Coefficient Determination

Analysis of determination or also called R Square symbolized by R<sup>2</sup> is used to determine the magnitude of the influence of the independent variable (X) together on the dependent variable (Y) where the smaller the coefficient of determination, this means the effect of the independent variable (X) on the dependent variable (Y) is getting weaker. Conversely, if the coefficient of determination is closer to number 1, then the effect of the independent variable on the dependent variable is getting stronger. Thus, if coefficient determination is 0, this indicates that there is no percentage contribution of influence given by the independent variable to the dependent variable. However, if the coefficient of determination is 1, then there is a contribution that the independent variable gives to the dependent variable is perfect.

**Table 4**  
Coefficient Determination Test  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.635 <sup>a</sup>	.404	.391	2.337

a. Predictors: (Constant), Motivation, Services

b. Dependent Variable: Purchase Decision

Source: Research Result, 2021

Based on the table above, the value of the R Square coefficient of determination is 0.404. This shows that the variable ability of services and motivation explains the effect on Purchase Decision at Metta Cell by 40,4%. While the remaining 59,6% is the influence of other independent variables not examined in this study such as price, product quality and others.

### 3.6 Simultaneous Hypothesis Test (F Test)

F test or regression coefficient test is used to determine whether simultaneously the independent variable has a significant effect on the dependent variable. In this case, to find out whether simultaneously the independent variable has a significant effect on the dependent variable or not. The test uses a significance level of 5%. The criteria for evaluating the hypothesis in this F test are:

$H_0$  Accepted if:  $F_{count} < F_{table}$ ,

$H_a$  Accepted if:  $F_{count} > F_{table}$

**Table 5**  
ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	355.017	2	177.509	32.511	.000 <sup>a</sup>
	Residual	524.154	96	5.460		
	Total	879.172	98			

a. Predictors: (Constant), Motivation, Services

b. Dependent Variable: Purchase Decision

Source: Research Result, 2021

Based on the table above, it is found that the value of  $F_{table}$  (3.09) and significant  $\alpha = 5\%$  (0.05), namely  $F_{count}$  (32.511) and sig.a (0.000a). This indicates that the results of the study accept  $H_a$  and reject  $H_0$ . Comparison between  $F_{count}$  and  $F_{table}$  can prove that simultaneously services and motivation have a significant effect on Purchase Decision at Metta Cell.

### 3.7 Partially Hypothesis Test (t Test)

The t test or partial regression coefficient test is used to determine whether partially the independent variable has a significant effect on the dependent variable or not. In this case, to find out whether partially the independent variable has a significant effect on the dependent variable or not. The test uses a significance level of 0.05 and a two-sided test. The criteria for evaluating the hypothesis in this t test are:

$H_0$  Accepted if:  $t_{count} < t_{table}$

$H_a$  Accepted if:  $t_{count} > t_{table}$

**Table 6**  
Coefficient Test

Model		t	Sig.
1	(Constant)	2.034	.045
	Services	6.923	.000
	Motivation	3.450	.001

a. Dependent Variable: Purchase Decision

Source: Research Result, 2021

Based on the table above, it can be concluded that services and motivation partially have a positive and significant effect on Purchase Decision at Metta Cell which can be seen at the  $t_{count}$  is greater than  $t_{table}$  (1,984) and the significant is less than 0,05.



#### 4. Conclusion

The conclusions that researchers can draw from the results of this study are as follows:

- a. The results of the partial test calculation obtained that work discipline has a positive and significant influence on Purchase Decision at Metta Cell can be seen from the  $t_{count}$  value of  $6.923 > t_{table}$  of 1.984 and a significant value of  $0.000 < 0.05$ .
- b. The results of the partial test calculation obtained that motivation has a negative and significant influence on Purchase Decision at Metta Cell can be seen from the  $t_{count}$  value of  $6.923 > t_{table}$  of 1.984 and a significant value of  $0.01 < 0.05$ .
- c. The results of the test calculation together obtained that services and motivation have a positive and significant influence on Purchase Decision with the value of  $F_{table}$  (3.09) and significant  $\alpha = 5\%$  (0.05), namely  $F_{count}$  (32.511) and sig.a (0.000a). This indicates that the results of the study accept  $H_a$  and reject  $H_0$ . Comparison between  $F_{count}$  and  $F_{table}$  can prove that simultaneously services and motivation have a significant effect on Purchase Decision at Metta Cell.
- d. The value of the R Square coefficient of determination is 0.404. This shows that the variable ability of services and motivation explains the effect on Purchase Decision at Metta Cell by 40,4%. While the remaining 59,6% is the influence of other independent variables not examined in this study such as price, product quality and others.

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