

Analysis of the Influence of Network Quality and Consumer Satisfaction on Indosat Ooredoo Internet Starter Pack Purchase Decisions, a Case Study on Adolescents in Balungtawun Village, Sukodadi District, Lamongan Regency

Rachmad Eka Pristiwadi¹, Abid Muhtarom², Mohammad Yaskun³

Management, Faculty of Economics, Lamongan Islamic University

Email: rachmadekapritiwadi@unisla.ac.id abid@unisla.ac.id m.yaskun@unisla.ac.id

Article Info	ABSTRACT
Keywords: Network Quality, Customer Satisfaction, And Purchase Decision..	This study aims to determine the influence of network quality and consumer satisfaction on the purchase decision of Indosat internet starter packs, both partially and simultaneously. In addition, this study also aims to find out the most dominant independent variables that affect purchasing decisions. This study used 100 samples from the adolescent population of Balungtawun Village with purposive sampling technique. The data collection method is carried out through the distribution of questionnaires or questionnaires to adolescent consumers who have purchased or used Indosat Ooredoo internet starter packs. The data analysis techniques used included validity test, reliability test, classical assumption test, multiple linear regression analysis, multiple correlation test, determination coefficient test, t test, and F test. Simultaneously, network quality and consumer satisfaction also have a significant effect on purchasing decisions. The most dominant variable that affects purchase decisions is network quality.
This is an open access article under the CC BY-NC license 	Corresponding Author: Rachmad Eka Pristiwadi Management, Faculty of Economics, Lamongan Islamic University rachmadekapritiwadi@unisla.ac.id

INTRODUCTION

The most dominant variable influencing purchasing decisions is network quality. The advancement of information technology today has a great influence on people's lives, especially in terms of communicating and conveying information. One form of information technology development is the presence of portable communication tools in the form of mobile phones or *mobile phones* which have the advantage of being easy to carry anywhere and can be used at any time by its users.

The development of features on mobile phones is also increasing, one of which is in terms of speed and internet network provided by various telecommunication service providers or *providers*. At first, the cost to access the internet was quite expensive because it still used regular credit. However, currently every provider continues to innovate by presenting internet quota in the form of starter packs, so that the cost of internet access becomes more affordable.

Currently, there are various types of mobile telecommunication operators in Indonesia, such as Telkomsel, Indosat, PT Excelcomindo Pratama (XL), Axis, Smartfren, and so on. The large selection of starter packs on the market provides freedom for consumers to choose a brand that suits their needs and desires. Therefore, not a few consumers have several starter pack brands or often change operators with the aim of getting relatively cheap prices and services that have their own advantages.

Indosat's network is not as extensive as Telkomsel, which has reached many remote areas. However, Indosat has another advantage, namely offering data packages at relatively low prices and quotas that can be used on various types of Indosat networks, both 2G, 3G, and 4G. Indosat Ooredoo's starter pack is also widely known among the public, especially teenagers. One of them is teenagers in Balungtawun Village, the majority of whom use Indosat starter packs.

The reason for choosing the location of this research is because Balungtawun Village has characteristics and problems that are in accordance with what the author wants to research. This research was conducted to find out the extent to which consumers are satisfied in using the Indosat starter pack, as well as to find out the level of network quality felt by users. In addition, the author also chose the location because Balungtawun Village is the author's residence, so that the author better understands the conditions and characteristics of the people in the area.

The purpose of this study is to find out consumer decisions in purchasing Indosat Ooredoo starter packs based on network quality and consumer satisfaction. Based on several relevant previous research references, the author is interested in conducting a research entitled "Analysis of the Influence of Network Quality and Consumer Satisfaction on Indosat Ooredoo Internet Starter Pack Purchase Decisions (Case Study on Adolescents in Balungtawun Village, Sukodadi District, Lamongan Regency)".

Previous research relevant to this research was conducted by Dzikrulloh, Muhtarom, Sulaeman, and Santoso (2022) from the Faculty of Economics and Business, Lamongan Islamic University (UNISLA) which researched the influence of *marketing mix* (4P) on purchase decisions with consumer satisfaction as a mediating variable in MSME businesses. The results of the study show that consumer satisfaction has an important role in influencing consumer purchasing decisions. Consumers who have a positive experience with a product or service tend to show higher levels of purchasing decisions. The findings reinforce that consumer satisfaction is one of the factors that determine purchasing behavior. In relation to this study, consumer satisfaction is seen as a variable that can influence the purchase decision of Indosat Ooredoo's internet starter pack, in addition to the network quality factor that is directly felt by users. Thus, this study builds on previous research by adding network quality variables as factors that are estimated to affect consumer purchasing decisions.

Literature Review and Problem Statement

Literature Review

The development of information and communication technology has encouraged people to increasingly rely on internet services in their daily activities. The internet is not only

used for communication, but also for finding information, entertainment, education, and economic activities. This condition makes the need for internet starter packs increasing, especially among teenagers who have a fairly high level of internet use.

One of the factors that can influence consumers' decision to buy an internet starter pack is the quality of the network. Network quality is an important consideration because consumers need stable, fast, and easily accessible internet services in various locations. A good network will provide convenience for users in accessing the internet, both for social media, learning, entertainment, and communication. If the quality of the network received is in accordance with consumer expectations, then it can encourage consumers to make purchases or reuse the product.

In addition to network quality, consumer satisfaction is also an important factor in determining purchasing decisions. Consumer satisfaction arises when the product or service received is in accordance with consumer expectations. Satisfied consumers tend to have a positive assessment of a product, which can influence the decision to buy back or recommend the product to others. In the context of internet starter packs, consumer satisfaction can be influenced by the package price, number of quotas, network quality, ease of use, and services provided by the provider.

Purchasing decisions are the process when consumers make choices for a product based on their needs, desires, experiences, and information. In choosing an internet starter pack, consumers usually consider several things, such as price, network quality, number of quotas, active period, and previous user experience. Therefore, network quality and consumer satisfaction are closely related to the purchase decision of an internet starter pack.

Indosat Ooredoo is one of the providers that is widely used by the community, including teenagers in Balungtawun Village. Although Indosat's network coverage is not completely as evenly distributed as some other providers, Indosat has advantages in terms of relatively affordable package prices and diverse internet quota options. This is a special attraction for consumers, especially teenagers who need internet access at a more economical cost. Thus, it is necessary to conduct research to find out the extent to which network quality and consumer satisfaction affect the purchase decision of Indosat Ooredoo's internet starter pack.

Problem Statement

The large selection of internet starter packs on the market gives consumers freedom in determining the products to be used. Each provider offers different advantages, both in terms of price, number of quotas, active period, and network quality. This competition makes consumers more selective in choosing internet starter packs that suit their needs.

For teenagers in Balungtawun Village, the Indosat Ooredoo internet starter pack is quite widely used because it is considered to have affordable package prices and attractive quota options. However, network quality is one of the things that still needs to be considered because a less stable network can affect the convenience of consumers in using internet services. In addition, the level of consumer satisfaction also needs to be known because satisfaction can be the basis for consumers to make purchasing decisions.

Based on these problems, the formulation of the problem in this study is as follows:

1. Does network quality partially affect the decision to purchase Indosat Ooredoo internet starter packs for adolescents in Balungkawun Village?
2. Does consumer satisfaction have a partial effect on the decision to purchase Indosat Ooredoo internet starter packs for adolescents in Balungkawun Village?
3. Does network quality and consumer satisfaction simultaneously affect the decision to purchase Indosat Ooredoo internet starter packs for adolescents in Balungkawun Village?

Which variable is the most dominant influence on the decision to purchase Indosat Ooredoo internet starter packs in adolescents in Balungkawun Village?

Based on the formulation of the problem, this study is important to determine the influence of network quality and consumer satisfaction on the purchase decision of Indosat Ooredoo internet starter pack. The results of this study are expected to provide an overview of the factors that consumers consider, especially teenagers, in choosing an internet starter pack.

METHOD

The type of research used in this study is quantitative research. Quantitative research is research whose research data is in the form of numbers and analysis using statistics. The population in this study is the Raw Material Inventory at UD. R&D HANDICRAFT LAMONGAN and the sample in this study is raw material data at UD. R&D HANDICRAFT LAMONGAN January – December 2021. The data types are primary and secondary data. The data of this research was obtained from *library research and field research*.

In this study, the free variable used was the Raw Material Inventory from January 2021-December 2021 at UD. R&D Handicraft Lamongan. The bound variable used is to increase the results of the production process. The research methods used are *EOQ, Ordering Cost, Holding Cost, Safety Stock, Re Order Point*. The research method used in this study is quantitative descriptive, where the data is in the form of numbers and the analysis uses statistics. The population used was teenagers from Balungkawun village. The sample used was 100 respondents by distributing questionnaires to teenagers who had bought or used Indosat ooredoo starter packs. This study uses *purposive sampling techniques* and the collection of data sources obtained through primary data, namely original data from the location and from secondary data from interviews and questionnaires of respondents. The analysis of the research data used validity test, reliability test, classical assumption test, multiple linear regression test, multiple correlation test, determination coefficient test, t test, and f test.

RESULTS AND DISCUSSION

Data Analysis Results

Validity Test

Table 1. Validity Test Results

Variabel	Item	r count	R table	Remarks
Network Quality	X1.1	0,89	0,196	Valid

Variabel	Item	r count	R table	Remarks
Consumer Satisfaction	X1.2	0,853	0,196	Valid
	X1.3	0,801	0,196	Valid
	X2.1	0,791	0,196	Valid
	X2.2	0,733	0,196	Valid
	X2.3	0,859	0,196	Valid
Purchase Decision	Y.1	0,747	0,196	Valid
	Y.2	0,666	0,196	Valid
	Y.3	0,787	0,196	Valid
	Y.4	0,726	0,196	Valid
	Y.5	0,785	0,196	Valid

Source : Output of SPSS 26.0 validity test, year 2022

From the table above, it is known that all indicators used have a correlation coefficient of more than r in the table of 0.196 which means that all items are proven to be valid.

Reliability Test

Table 2 Reliability Test Results

Variabel	Cronbach Alpha	Reliability Standards	Remarks
Network quality	0,806	0,60	Reliabel
Consumer Satisfaction	0,702	0,60	Reliabel
Purchase Decision	0,790	0,60	Reliabel

Source : Output of SPSS 26.0 reliability test in 2022

From the table above, it shows that the *Cronbach Alpha* value for each study variable is greater than 0.60. Thus, it is concluded that all of these research instruments are reliable.

Classic Assumption Test

Normality Test

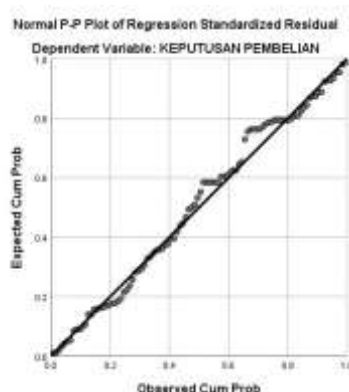


Figure 1. Plot Probability Graph

Source : SPSS 26.0 output, year 2022

From the normal Probability *Plot image* above, it can be seen that the distribution of data follows a normal line, therefore it can be concluded that the data is distributed normally and has met the classical assumption test so that it is suitable for use.

Multicollinearity Test

Table 3 Multicollinearity Test Results

Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance VIF
1	(Constant)	4.421	1.521		2.906	.005	
	KUALITAS JARINGAN	.689	.153	.408	4.492	.000	.596 1.678
	KEPUASAN KONSUMEN	.574	.134	.391	4.296	.000	.596 1.678

a. Dependent Variable: KEPUTUSAN PEMBELIAN

Source : SPSS 26.0 output, year 2022

The test results of the Network quality variable (X1) and the Consumer Satisfaction variable (X2) the VIF value was $1.678 < 10$ and *the tolerance* value of both was $0.596 > 0.1$. Therefore, it can be concluded that this regression model does not occur multicollinearity or is free of multicollinearity, and this study is feasible to use.

Heteroscedasticity Test

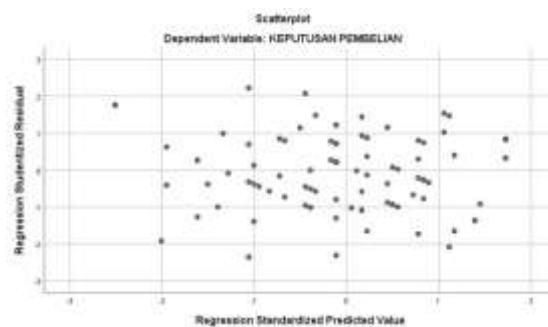


Figure 2. Scatterplot

Source : SPSS 26.0 output, year 2022

From Figure 2 of the Scatterplot above, it can be seen that the data is spread randomly, does not show a certain pattern, so it can be concluded that heteroscedasticity does not occur.

Multiple Regression Analysis

Table 4. Multiple Linear Regression Test Results

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	4.421	1.521		.005
	KUALITAS JARINGAN	.689	.153	.408	.000
	KEPUASAN KONSUMEN	.574	.134	.391	.000

a. Dependent Variable: KEPUTUSAN PEMBELIAN

Source : SPSS 26.0 output, year 2022

A regression equation is known as follows:

$$= 4.421 + 0.689X_1 + 0.574X_2$$

From the multiple linear regression equation, it can be interpreted that:

- Y = a bound variable whose value will be estimated by the independent variable.
- a = 4.421 is a constant, which means that the decision to purchase Indosat Ooredoo internet for the first time in Balungtawun village will be constant of 4.421 due to the influence of the network quality variable (X_1).
- b_1 = 0.689 is the magnitude of the contribution of the network quality variable (X_1) affecting the purchase decision variable (Y). Coefficients b_1 of 0.689 with a positive sign, this means that if the network quality variable is increased by 1 unit, the decision to purchase the first Indosat Ooredoo internet in Balungtawun village (Y) will increase by 0.689 assuming that other variables are not studied in this study or other variables that affect are considered constant ($a, X_2 = 0$).
- b_2 = 0.574 is the amount of contribution of the consumer satisfaction variable (X_2) affecting the purchase decision variable (Y). Coefficients b_2 of 0.574 with a positive sign, it is interpreted that if the consumer satisfaction variable is increased by 1 unit, it will affect the decision to purchase the first Indosat Ooredoo internet in Balungtawun village (Y) by 0.574 assuming that other variables are not studied in this study or other variables that affect are considered constant ($a, X_1 = 0$).

Multiple Correlation Analysis

Table 5. Multiple Correlation Test Results

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.723 ^a	.522	.512	1.992	.522	53.021	2	97	.000

a. Predictors: (Constant), KEPUASAN KONSUMEN, KUALITAS JARINGAN

Source : SPSS 26.0 output, year 2022

From the results of the multiple correlation test above, it is known that the significance value of < 0.00 is said to be a correlation between variables, and the value of $R = 0.723$, so it can be concluded that the correlation between the variables of network quality (X_1) and consumer satisfaction (X_2) on the purchase decision has a strong relationship.

Determination Test (R^2)

Table 6. Determination Coefficient Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.723 ^a	.522	.512	1.992

a. Predictors: (Constant), KEPUASAN KONSUMEN, KUALITAS JARINGAN

Source : SPSS 26.0 output, year 2022

Based on the table of determination test results above, it can be seen that the R² value is 0.522 which means 52.2% indicates the percentage influence of independent variables (network quality and consumer satisfaction) on bound variables (purchase decisions). While the remaining 47.8% was influenced by other variables outside of this study, such as package price, brand, promotion, and buying interest.

Uji Hypothesis

T test

Table 7. Hypothesis Test Results (t-Test)

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	4.421	1.521		2.906
	KUALITAS JARINGAN	.689	.153	.408	4.492
	KEPUASAN KONSUMEN	.574	.134	.391	4.296

a. Dependent Variable: KEPUTUSAN PEMBELIAN

Source : SPSS 26.0 output, year 2022

From the results of the hypothesis test above, it can be seen that:

The Effect of Network Quality on Purchase Decisions

The results of the t-test for the network quality variable (X1) on the purchase decision (Y) were obtained with a significant level of $0.000 < 0.05$ and t-count of 4.492 and t-table of 1.985. Therefore, from the data, t-calculate > t-table ($4.492 > 1.985$) or $H_0 : \beta_2 \neq 0$ which means H₀ is rejected and H₁ is accepted. Therefore, it can be concluded that partially network quality variables have a significant effect on purchasing decisions.

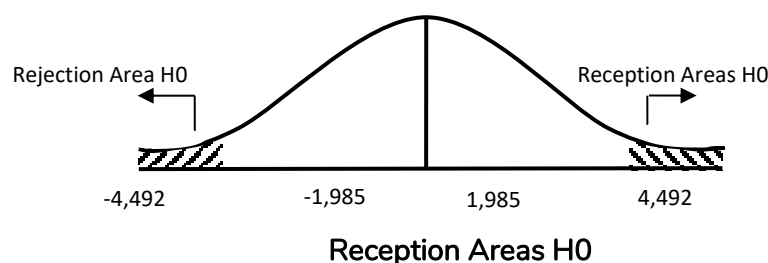


Figure 3. Acceptance and rejection areas of the t-test (network quality)

The Influence of Consumer Satisfaction on Purchase Decisions

The results of the t-test for the consumer satisfaction variable (X2) on the purchase decision (Y) were obtained with a significant level of $0.000 < 0.05$ and t-count of 4.296 and t-table of 1.985. Therefore, from the data, t-calculate > t-table ($4.296 > 1.985$) or $H_0 : \beta_2 \neq 0$ which means that H₀ is rejected and H₁ is accepted. Therefore, it can be concluded that partially consumer satisfaction variables have a significant effect on purchasing decisions.

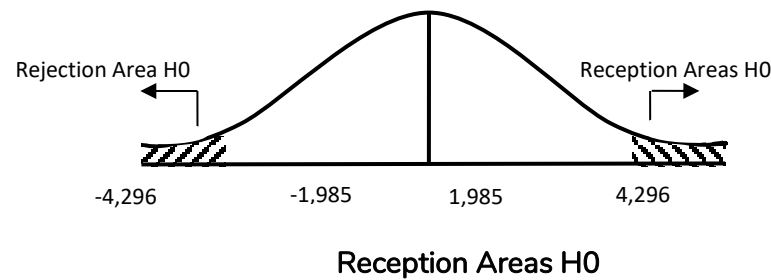


Figure 4. Acceptance and rejection areas of the t-test (consumer satisfaction)

Table 8. Simultaneous Hypothesis Test Results (F Test)

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	F
1	Regression	420.627	2	210.313	53.021
	Residual	384.763	97	3.967	
	Total	805.390	99		

a. Dependent Variable: KEPUTUSAN PEMBELIAN
b. Predictors: (Constant), KEPUASAN KONSUMEN, KUALITAS JARINGAN

Source : SPSS 26.0 output, year 2022

Table 5.14 above shows that the significant value is $0.00 < 0.05$, while the F-value is calculated $> F\text{-table}$ ($53.021 > 3.09$). Therefore, it can be concluded that H_a is accepted ($H_a : \beta_1 = \beta_2 \neq 0$) which means that the variables of network quality and consumer satisfaction together have a significant effect simultaneously on the purchase decision.

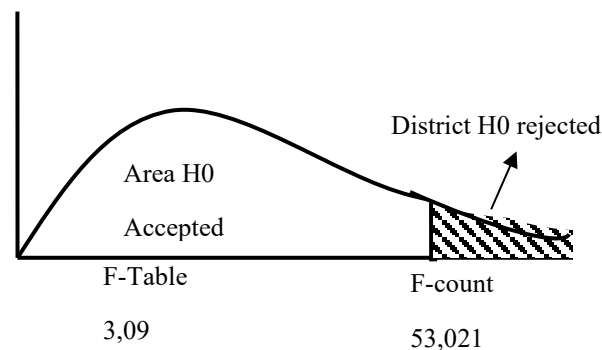


Figure 5. Acceptance and rejection areas

Dominant Test

The dominant test aims to find out one of the independent variables that has a greater influence on the bound variable. It can be seen in the table of the results of the *Standardized Coefficients Beta* linear regression test which shows a network quality value of $0.408 >$ a consumer satisfaction value of 0.391 . Therefore, it can be concluded that the most dominant network quality variable (X_1) affects the purchase decision.

CONCLUSION

1. There is a partial relationship between network quality variables and consumer satisfaction, this can be evidenced by a t-calculated value greater than the t-table. It can be seen that the results of the t-test for the network quality variable (X_1) on the purchase decision (Y) obtained the results of the significance level of $0.00 < 0.05$ and t-count of 4.492 and t-table of 1.985. From the data, the t-calculated value of $> t\text{-table}$ ($4.492 > 1.985$) was obtained, then H_0 was rejected and H_1 was accepted. Therefore, it can be concluded that partially network quality variables have a significant effect on the purchase decision of the indosat ooredoo internet starter pack. Meanwhile, the effect of the consumer satisfaction variable (X_2) on the purchase decision (Y) obtained the results of the significance level of $0.00 < 0.05$ and t-count of 4.296 and t-table of 1.985. From the data, the t-calculated value of the t-table $>$ ($4.296 > 1.985$) was obtained, which means that H_0 was rejected and H_1 was accepted. Therefore, it can be concluded that partially the consumer satisfaction variable has a significant effect on the purchase decision of Indosat Ooredoo's internet starter pack.
2. Simultaneously or together, there is a significant relationship between network quality variables and consumer satisfaction on purchase decisions. It can be proven by the results of the analysis of the F test, data was obtained which showed that the significance value was $0.00 < 0.05$, while the f-calculated value was 53.021 and the f-table was 3.09. From this data, the f-calculated value $>$ f-table ($53.021 > 3.09$) was obtained, so it can be concluded that the variables of network quality and consumer satisfaction simultaneously (together) have a significant effect on the purchase decision of the Indosat Ooredoo internet starter pack.
3. Based on the variables of network quality and consumer satisfaction, the most dominant influence on purchasing decisions is network quality, this is evidenced by the results of the analysis on the t-test in the *Standardized Coefficient column* in a linear regression model. The results of the hypothesis test analysis between variables X_1 and X_2 against variable Y were obtained results that showed that the network quality variable (X_1) had the highest value of 0.408.

REFERENCES

- Alma, Buchari. 2010. *Introduction to Business*. Issue 14. Alfabeta, Bandung.
- Assauri, Sofjan. 2012. *Strategic Marketing Sustaining Lifetime Customer Value*. Raja Grafindo Persada, Jakarta.
- DeNatra, (2021). *OpenSID application*. OpenDesa. Lamongan.
- Dzikrulloh, A., Muhtarom, A., Sulaeman, M. M., & Santoso, M. H. B. (2022). *The Effect of Marketing Mix (4P) on Purchase Decisions Mediated by Consumer Satisfaction in MSME Businesses*. EKOMBIS REVIEW: Scientific Journal of Economics and Business.
- J. Paul Petter Jerry C Olson. 2013. *Consumer Behavior and Marketing Strategy*. Volume 1. Erlangga, Jakarta.

- Ministry of Communication and Information of the Republic of Indonesia. (2014). *98 Percent of Children and Adolescents Know the Internet*, Kominfo, Jakarta.
- Kotler and Keller. 2012. *Marketing Management*. Issue 12. Erlangga, Jakarta.
- Kotler, Philip and Armstrong, Gary. 2014. *Marketing Principles*. Issue 12. Volume 1. Erlangga, Jakarta.
- Kotler, Philip and Kevin Lane Keller. 2016. *Marketing Management*. Issue 15. Erlangga, Jakarta.
- Kotler, Philip and Armstrong, Gary. 2012. *Principles of Marketing*. Issue 15. Volume 1. Erlangga, Jakarta.
- Tjiptono, Fandi. 2012. *Marketing Strategy*. Edition 3. No, Yogyakarta.
- Scott, Fandy. 2014. *Service Marketing*. Edition 1. No. Yogyakarta.
- Sangadji. 2013. *Consumer Behavior: A Practical Approach Accompanied: A Collection of Research Journals*. No, Yogyakarta.
- Sudaryono. 2016. *Marketing Management*. Andi Publisher, Yogyakarta.
- Waode, Shaleha. 2014. *The Influence of Product Features, Price, Network, and Promotion on AS Prepaid Card Purchase Decisions in Management Students Class of 2011-2013 Haluoleo University*. Kendari: Haluoleo University.