THE EFFECT OF CUSTOMER PERCEPTION AND CUSOMER ATTITUDE TOWARDS MOBILE IN-APPLICATION ADVERTISING

PENGARUH PERSEPSI PELANGGAN DAN SIKAP PELANGGAN TERHADAP IKLAN APLIKASI SELULER

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Abstract: Advertising is very helpful for company to promote the product so they can reach more number of customers. Marketer have to be creative and following the trend to advertise their product and one of the advertising nowadays is in application on smartphone where in this era everyone are using a smartphone. This study aims to analyze the effect of customer perception and attitude towards mobile in-application advertising. This research is using quantitative research method and use multiple linear regression analysis. This research is using purposive sampling with 100 respondents as a sample. The result shows that customer perception and attitude have a positive relationship with mobile in-app advertising and significantly influenced mobile in-app advertising. So, it is better to the marketers to having some improvement in delivering the advertisement with the application of customer perceptions and attitudes elements.

Keyword: advertising, mobile in-app, consumer behavior, customer perception, customer attitude

Abstrak: *Iklan merupakan sarana yang sangat membantu bagi perusahaan dalam mempromosikan produk agar dapat menjangkau lebih banyak pelanggan. Dalam hal ini pemasar harus lebih kreatif dan harus mengikuti tren untuk dapat mnegiklankan produk mereka dan salah satu iklan yang ada saat ini yaitu iklan dalam aplikasi seluler dimana smartphone digunakan oleh setiap orang pada zaman ini. Penelitian ini bertujuan untuk menganalisa pengaruh persepsi dan sikap pelanggan terhadap iklan dalam aplikasi seluler. Penelitian ini adalah penelitian kuantitatif menggunakan Analisis Regresi Berganda. Penelitian ini menggunakan pengambilan sampel purposive dengan 100 responden sebagai sampel. Hasil dari penelitian ini menunjukan bahwa persepsi dan sikap pelanggan memiliki hubungan yang positif dan secara significat berpengaruh terhadap iklan dalam aplikasi seluler. Maka dari itu, akan lebih baik apabila pemasar melakukan beberapa perbaikan dalam menyajikan iklan dengan pengaplikasian elemen dari persepsi konsumer dan sikap konsumen.*

Kata Kunci: iklan, aplikasi di seluler, perilaku konsumen, persepsi pelanggan, sikap pelanggan

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INTRODUCTION

Research Background

In the modern age of digital era, advertising is growing rapidly with the development of technology. The development of the internet also make people lives become easy and simple, not just to find the information and media for communication but internet also can be used to run a business, promote a product or as media for advertising, and can be used for having fun. Now people spend a lot of time on using the internet. The majority of internet users are those at the age of 13-18 years old with the percentage of 75.50%, and following with 74.23% from 19-34 years old (APJII, 2017). Both of the percentage results are those who are in a range of young people age according to WHO which is 15-24 years old. Proven in everyday life we can see how the teenager to young adult people mostly addicted to the internet. However, the use of internet also supported by the development of technology which is smartphone. Advances in mobile technology have changed the business environment significantly. The use and development of smartphone nowadays makes people addicted to use it. That is why marketers see the big potential from this trend which is mobile application to promote and sell their product by doing in-application advertising.

In-application advertising is currently the fastest growing form of mobile advertising on the market. From the time of users spending their almost entire times of the day include their activities on mobile application, marketers try to reach out their customer by advertise their products or services through application or in-application advertising, which is advertising that appear in application while a user run the applications, but despite this, potential customers so far did not have the opportunity to signal their likes and dislikes with marketing activities via mobile application. This puts marketers at a high risk as they are unsure whether their marketing activities cause positive or negative reactions by the customer.

Research Objective

The research objectives are to identify the significant effect of:
1. Customer perception, customer attitude toward mobile in-application advertising simultaneously.
2. Customer perception toward mobile in-application advertising partially.
3. Customer attitude toward mobile in-application advertising partially.

THEORETICAL REVIEW

Marketing

Marketing is the set of human activities directed at facilitating and consummating exchanges (Kotler, 2009:76). According to Cohen (2010), marketing is the process of getting a product or service from a company to its end customers from product development through to the final sale and post purchase support. The aim of marketing is to know and understand the customer so well that the product or service fits him and sells itself (Cohen, 2013:35).

Internet Marketing

E-marketing portrays company efforts to inform and communicate with buyers, and promote and sell its products and services over the internet (Kotler and Keller, 2009:98). Internet marketing or digital marketing is a form of direct marketing which links consumers with sellers electronically using interactive technologies like emails, websites, online forums and newsgroups, interactive television, mobile communications etcetera (Kotler and Armstrong, 2012:48).

Mobile Marketing

Mobile marketing defined as any marketing activity conducted through a ubiquitous network to which consumers are constantly connected using a personal mobile device. The mobile marketing is the extension of the internet marketing. Through this method, the companies can reach a large audience at a much less cost and can have an effective promotional activity.

Mobile Application

According to technopedia webpage, mobile application, most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer. Mobile

applications frequently serve to provide users with similar services to those accessed on PCs. Apps are generally small, individual software units with limited function.

In-Application Advertising

The term mobile in-app refers to advertisement that served specifically through smartphone devices. Mobile application advertising is a popular monetization strategy for application developers, in which application developers get paid to serve advertising on their application. According to Chen (2016), brands and agencies can no longer only focus on mobile web, because apps are growing rapidly and in-app advertising offers marketers a better opportunity to target the right audience at the right time.

Consumer Behavior

Consumer behavior is the actions and decision processes of people who purchase goods and services for personal consumption (Engel et. al, 1982).

Customer Perception

Consumer perception defined as a marketing concept that encompasses a customer's impression, awareness or consciousness about a company or its offerings (Madichie, 2012).

Customer Attitude

Attitude defines the manner an individual thinks feels and/or acts with respect to some aspects of things around him (Anyasor, 2016). Attitude is a learned predisposition to exhibit and act based on evaluation resulting in a feeling of like or dislike towards an object (Kotler & Keller, 2009:114). With regard to consumer behavior, Cant, Brink and Brijball (2006) emphasized that consumer attitudes may be an inner feeling of favourableness or unfavourableness towards a product/service offering and the 4ps. A fairly easy to understand definition is that attitudes represent what one likes and dislikes (Blackwell, Miniard and Engel, 2001), or the amount of positive and negative feelings one has towards an object (Schlenker, 1978).

Previous Research

Singla (2015) conduct a study about a study of consumer perception towards mobile advertising among smartphone users. The result showed that customer perception strongly influence mobile advertising.

Anyasor and Umedi (2017) studied about consumer perception of mobile advertising values and their attitudes towards mobile advertising in Anambra Statem Nigeria. The result indicate that the informativeness is the most inportant factors in mobile advertising followed by entertainment and credibility while the irritation is not really the important factors in mobile advertising from customer perception and the entaertainment, infromativeness and credibility have positive effect while the irritation have negative effect on customer attitude.

Raines (2014) conduct a study about in-app mobile advertising: investigating consumer attitudes towards pull-based mobile advertising amongst young adults in the UK. The result showed a negative attitude toward mobile in-app advertising, the irritation and entertainment are identified as the central drivers in attitude formation.

Sigurdsson et. al (2017) conduct a study about factors affecting attitudes and behavioral intention towards in-app mobilw advertisement. The results indicate the factors such as perceived entertainment, credibility, and information significantly improves attitudes toward mobile in-app advertising.
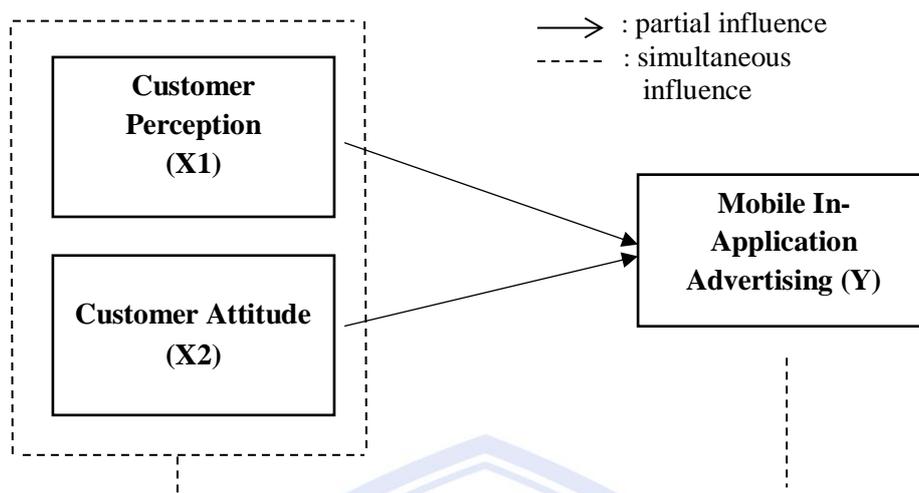
Conceptual Framework

Figure 1. Conceptual Framework
Source: Data Processed (2019)

Research Hypothesis

H_1: Customer perception and customer attitude influence mobile in-application advertising simultaneously
H_2: Customer perception influence mobile in-application advertising partially
H_3: Customer Attitude influence mobile in-application advertising partially

RESEARCH METHOD

Research Approach

This research uses quantitative approach. Quantitative approach emphasizes objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Causal analysis is a research conducted to establish cause-and-effect relationship among variables. This is undertaken to find out the effect of Customer Perception (X1), Customer Attitude (X2) in Mobile In-app Advertising (Y) on young users in Manado.

Population, Sample, and Sampling Technique

The population in this research is people who are experienced with mobile in-application advertising which are young people in the range of age 15-24 years old in order to know their perspective with in-application advertising. Sample method that can be used for this research is purposive sampling method with the sample size of the research will be 100 respondents.

Data Collection Method

This research analyzes the primary data to gather the information. The primary data of this study were taken from the questionnaires. The questionnaires were distributed to respondents so they can respond directly on the questionnaires.

Operational Definition of Research Variables
Table 1. Variable Definition

No.	Variable	Definition	Indicator
1.	Customer Perception (X_1)	Customer Perception define as customer's impression, awareness or consciousness about a company or its offerings.	-Performance -Aesthetic -Sensation -Interpretation
2.	Customer Attitude (X_2)	Consumer attitude basically comprises of beliefs towards, feelings towards and behavioral intentions towards some objects.	-Entertainment -Credibility -Informativeness -Irritation

3.	Mobile In-App Advertising (Y)	In-App advertising is advertising appears within an application, in which app developers get paid to serve advertisements within their mobile app.	-Ads value -Ads information -Ads Message -Message structure -Positivity -View Ability -Understanding

Source: Author's Note, 2019

Validity and Reliability

Validity test is to see the validity of the questions, the researcher use Validity test. It is used to see whether the questions within the questionnaire are valid and in-line with the research. Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests. Reliability test is established by testing for both consistency and stability of the answer question.

Multiple Linear Regression

Multiple linear regression is the suitable method of analysis when research problem consist of a single metric dependent variable estimated to be related to two or more metric independent variables. Multiple linear regression are used to express the effect of independent variables and the dependent variable. The formula of multiple linear regression in general as follows:

$$Y = \alpha + \beta1X1 + \beta2X2 + \varepsilon$$

Description:
Y = Dependent Variable (Mobile In-application Ads)
X1 = Customer Perception
X2 = Customer Attitude
β1, β2 = the regression coefficient of each variable
ε = Error

RESULT AND DISCUSSION

Result
Validity and Reliability

Customer Perception (X1), Customer Attitude (X2), and Mobile In-app Advertising (Y) have a higher value than the rtable value that is 0.3. The significant level of each indicator of variables is below than significant level of 5% or 0.05. It means that every indicator in questionnaire in this research is valid and can be used for further analysis. The variable is reliable because the value of Cronbach's Alpha is 0,815 bigger than 0.7.

Result of Multiple Linear Regression Analysis
Table 2.
Multiple Linear Regression Result

Coefficients[a]					
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	4.529	2.206		2.054	.043
	Customer Perception (X1)	.891	.116	.597	7.712	.000
	Customer Attitude (X2)	.385	.146	.204	2.631	.010
a. Dependent Variable: Mobile In-App Ads						

Source: SPSS Output, 2019

Multiple regression analysis is used to determine the effect of the independent variables on dependent variable. The multiple linear regression equation cab be interpreted as follows:

1. Constant value of 4.529 means that in a condition of ceteris paribus, if all independent variables equal to zero, then Mobile In-App Ads (Y) as dependent variable will be 4.529.
2. X_1' s coefficient value of 0.891 means that if there is one unit increase in Customer Perception (X_1) then the Mobile In-App Ads (Y) will decrease by 0.891.
3. X_2's coefficient value of 0.385 means that if there is one unit increase in Customer Attitude (X_2) then the Mobile In-App Ads (Y) will improve and increase by 0.385.

Testing the Goodness of fit: Coefficient of Multiple Correlation (R) and Coefficient of Determination (R^2)
Table 3. Result of R and R^2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652[a]	.425	.413	3.147

a. Predictors: (Constant), Customer Attitude (X2), Customer Perception (X1)
b. Dependent Variable: Mobile In-App Ads
Source: Data processed, 2019

The coefficient correlation (R) is 0.652 it means there is a strong relationship between independent variables with dependent variable. Coefficient of determination (R^2) is 0.425 which shows that the variation of all independent variable explains 42.5% of variation in Mobile In-App Ads (Y), while the remaining 57.5% is explained by other factors outside the model or not discussed in this research.

Multicollinearity
Table 4. Multicollinearity Statistics

Model	Collinearity Statistics		Status
	Tolerance	VIF	
Customer Perception	0.988	1.012	No multicollinearity
Customer Attitude	0.988	1.012	No multicollinearity

Source: Data Processed, 2019

As like the characteristic, there is no multicollinearity if the tolerance value > 0.100 and VIF value < 10. Table 4 shows the tolerance value of Customer Perception (X1) and Customer Attitude (X2) both are 0.908 or above 0.100 and the VIF value of Customer Perception (X1) and Customer Attitude (X2) both are 1.012 or below 10 which means that there is no multicollinearity in this research.
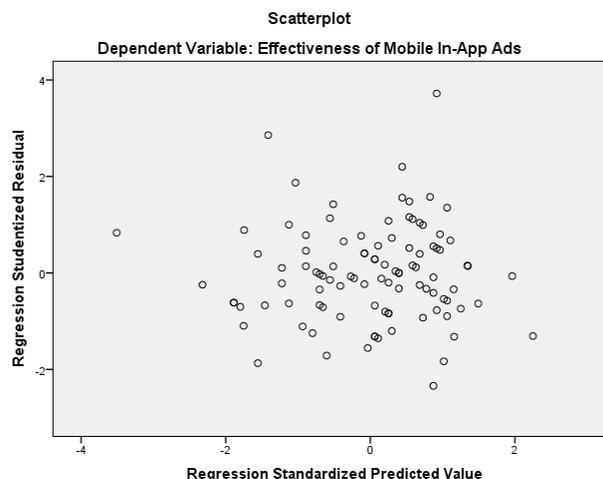
Heteroscedasticity

Figure 2. Heteroscedasticity Test
Source: Data processed, 2019

Figure 2. shows that the plots are spreading above and below the number zero (0) in the Y axis and also the plots does not form any pattern . This proves that there is no heteroscedasticity in this regression.
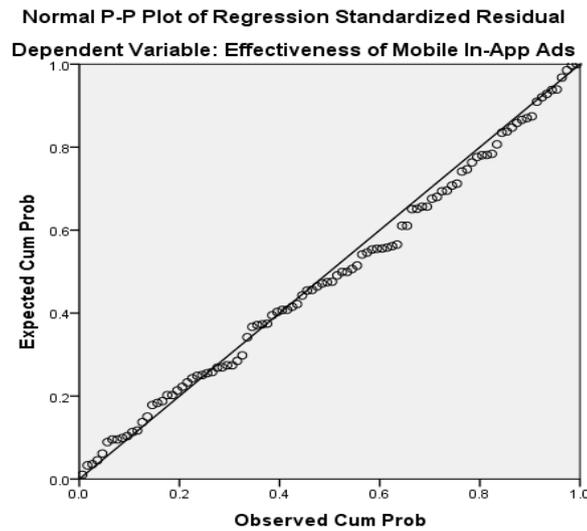
Normality

Figure 3. Normality Test
Source: Data processed, 2019

Figure 3. shows that the dots are spreading near to the diagonal line and follow the direction of the diagonal line. Therefore, the normality test is accepted which means the data of this research is normally distributed.

Hypothesis Testing
f-test
Table 5. Simultaneous Test (f-test Output)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	709.817	2	354.909	35.826	.000[b]
	Residual	960.933	97	9.907		
	Total	1670.750	99			

a. Dependent Variable: Mobile In-App Ads
b. Predictors: (Constant), Customer Attitude (X2), Customer Perception (X1)
Source: Data processed, 2019

Table 5. shows the value of F_{count} is 35.826. The F_{table} is F= (k;n-k) or F_{table} = (2;100-2) F_{table} = (2;98). Based on the F table value the F Table of (2;98) is 3.09. The result is F_{count} (35.826) > F_{table} (3.09). Therefore, since F_{count} is greater than F_{table}, Hypothesis 1 is accepted which means the independent variables simultaneously influence the dependent variable significantly.

t-test
Table 6. Partial Test (t-test output)

Variable	t-count	t-table	Description
Customer Perception (X1)	7.712	1.984	Accepted
Customer Attitude (X2)	2.631	1.984	Accepted

Source: Data processed, 2019

Table 6. shows both of the variables are accepted. With the value of t_{count} x1 = 7.712 > value of t_{table} x1 = 1.984 and value of t_{count} x2 = 2.631 > value of t_{table} x2 = 1.984 means both variables are accepted and both variables have a significant effect on variable Y.

Discussion

The independent variables are customer perception and customer attitude that affect mobile in-app advertising as dependent variables. The result from hypothesis test about customer perception shows that it have a positive relationship and have a significant effect on mobile in-app advertising. The data collected was done by some of test and the result shows that the data of variable X1(Customer Perception) is accepted. The previous research from Singla (2015) showed the result that customer perception is strongly influence mobile advertising. The result of the customer attitude also shows that it have a positive relationship and have a significant effect on mobile in-ap advertising. The previous research from Sigurdsson et. al, (2017) showed that the indicator of entertainment, and information significantly improve attitudes toward in-app advertising.

CONCLUSION AND RECOMMENDATION

Conclusion

After examining the findings and discussing the result, the conclusions based on this research can be formulated as follows:
1. Customer perception and customer attitude influence the mobile in-application simultaneously.
2. Customer perception influence the mobile in-application advertising partially.
3. Customer attitude influence the mobile in-application advertising partially.

Recommendation

Many companies can use mobile advertising to stimulate about their product and services. Here the advertisers can create various types of appeal in the customer's mind that will help to pursue. Thus, advertisements should be delivered in a manner so that it appears to be entertaining in smartphones. So the outcomes of this effort will be very much helpful to designing on the integrating marketing communication or promotional mix because mobile advertising is the most cost effective and new tools for the promoter. Marketers need to ensure that messages are sent to consumers at a reasonable time during the day based on consumers' preference. Advertising content, format, and structure must be accurate, attractive and accepted by the target audience or receiver of mobile advertisers. Messages should be sent in suitable amount so as to avoid interruption and disturbance to consumers. Information content of the advertisement should be reasonably maintained. With regard to the fairly positive perceptions of the entertainment value, marketers need to look at ways of increasing the entertainment as well as the level of pleasurable experience that can be derived from mobile advertising. Those clarified mobile advertising and communications decisions help to improve advertising efficiency resulting with high sales volume and strong customer relationship. For the further research, researcher can improve the number of respondents with their demographic variation.

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