# ANALYSIS OF ADVERTISEMENT TOOLS FOR MARKETING TOWARDS CUSTOMER BUYING BEHAVIOR FROM TELKOMSEL IN MANADO 

ANALISIS MEDIA IKLAN UNTUK PEMASARAN TERHADAP PERILAKU<br>PEMBELIAN KONSUMEN PADA TELKOMSEL DI MANADO

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#### Abstract

Companies are trying to sell their products with the best advertisement, because they want to increase the number of sales. This study is conducted in Telkomsel Manado city. Telkomsel is one of the largest company of sim card for cellular phone in Indonesia. The study aims to analyze the advertisement tools for marketing towards customer buying behavior with case study Telkomsel, partially and simultaneously. Also, to determine the importance from any significant influence of television, billboards, magazines, newspaper, radio, and internet on customer buying behavior of $t$-sel users. This is a quantitatitive research. The method that used in this reasearch is multiple regression. 100 costumers of Telkomsel Manado were surveyed as respondents. The research comes to results is all independent variables has effected to dependent variables but the variable that mostly influence dependent variable was magazine and news paper.


Keywords: Advertisement Tools, Customer Buying Behaviour.


#### Abstract

ABSTRAK

Perusahaan mencoba untuk menjual produk mereka dengan iklan terbaik, karena mereka ingin meningkatkan jumlah penjualan. Penelitian ini dilakukan di Telkomsel, Kota Manad.. Telkomsel merupakan salah satu perusahaan kartu sim terbesar untuk telepon seluler di Indonesia. Penelitian ini bertujuan untuk menganalisis iklan pemasaran terhadap perilaku pembelian pelanggan di Telkomsel Manado secara parsial dan simultan. Juga, untuk menentukan pentingnya dari setiap pengaruh yang signifikan dari televisi, papan reklame, majalah, koran, radio, dan internet pada perilaku pembelian pelanggan pengguna $t$-sel. Penelitian ini merupakan penelitian quantitatitive. Metode yang digunakan dalam reasearch ini adalah regresi berganda. 100 pelanggan Telkomsel Manado disurvei sebagai responden. Hasil penelitian adalah semua variabel independen berpengaruh terhadap variabel dependen, tetapi variabel yang sebagian besar mempengaruhi variabel dependen adalah majalah dan surat kabar.


Kata Kunci: Alat Iklan, Perilaku Pembelian Pelanggan.
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## 1. INTRODUCTION

## Research Background

Advertising is a very important part of the promotion of the recognition process will be something of goods and services through advertising we can know the type, brand, and in order to shear the product. People know the first time through radio advertisements and started there on television and now the ad has been very rapidly developed into various types of advertising. On the other hand also the development of sophisticated mobile phone is not in doubt again, the competition between brands of mobile phone almost daily.

Mobile Phone is an electronic telecommunications device with the same basic capability with up to conventional fixed line telephone, but can be brought everywhere and does not need to be connected to the telephone network using a cable. Smartphone is a cellular telephone with builtin applications and Internet access. In addition to digital voice service, modern smartphone provide text messaging, e-mail, web browsing, video camera, MP3 player, video playback and calling. In addition to their built-in functions, smartphone run myriad free and paid applications, turning the once single-minded cellphone into a mobile personal computer. The development of the smartphone has increased significant, and also the production of the Smartphone. This competition makes the companies of sim card are trying to get a lot of users. One common marketing strategy is to promote the product with a good advertisement. This strategy is how the sim card companies trying to make a good advertisement. So the company can get a lot of attention from their customer by seeing the advertisement. This strategy is the most strategy that demands with the companies, because Advertisement usually can catch a lot of attention from the customer. The advertisement is demands by consumer thus create purchasing power of consumers in product choice. Consumers who enjoy these products may cause a sense of satisfaction. Expectancy for a company is to have satisfied consumers to their products. For the company that has a satisfy consumer is a one of their goals. Advertisement in a company's product sales are expected to create satisfied consumers to its products.

## Research Objectives

The objectives of this research are to analyze the influence of:

1. Significant influence of television on customer buying behavior of Telkomsel in Manado.
2. Significant influence of billboards on customer buying behavior of Telkomsel in Manado.
3. Significant influence of magazine on customer buying behavior of Telkomsel in Manado.
4. Significant influence of newspaper on customer buying behavior of Telkomsel in Manado.
5. Significant influence of radio on customer buying behavior of Telkomsel in Manado.
6. Significant influence of internet on customer buying behavior of Telkomsel in Manado.

## 2. THEORETICAL FRAMEWORK

## Marketing

Kotler and Amstrong (2008:4) define marketing is managing profitable customer relationship. Furthermore, marketing is the process by which companies create value for customers and build strong customer relationships in order to capture value from customers in return. Kotler, at.al (2009:5) broadly defined that "marketing deals with identifying and meeting human and social needs. In social definitions, marketing is a social process by which individuals and group obtain what they need and want through creating, offering, and freely exchanging products and services of value with others.
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## Advertising

According to Mc Daniel, Lamb, Hair. (2010, p. 554) advertisement is defined as any form of impersonal, paid communication in which the sponsor or company is identified.

## Sales Promotion

The International Chamber of Commerce (ICC) defines sales promotion as: "Marketing devices and techniques which are used to make goods and services more attractive by providing some additional benefit, whether in cash or in kind, or the expectation of such a benefit ". (Boddewyn and Leardi, 1989, p. 365) Smith (1998) has described that there are three main categories of SP: Consumer promotions (premiums, gifts, competitions and prizes, e.g. on the back of breakfast cereal boxes); Trade promotions (point-of-sale materials, free pens and special terms, diaries, competition prizes); Sales force promotions including incentive and motivation schemes.

## Consumer Buying Behavior

The advertisers Goals is to get enough relevant market data to Develop accurate profiles of buyers-to-find the common group (and symbols) for communications this involves the study of consumer buying behavior that is the study of the ways of buying and disposing of goods, services, ideas or experiences by the individuals, groups and organizations in order to satisfy their needs and wants, (Kotler and Keller, 2011). The principal aim of consumer behavior analysis is to explain why consumers act in particular ways under certain circumstances. It tries to determine the factors that influence consumer behavior, especially the economic, social and psychological aspects that can indicate the most favored marketing mix that management should select. Consumer behavior analysis helps to determine the direction that consumer behavior is likely to make and to give preferred trends in product development, and attributes of alternatives communication method.

## 3. RESEARCH METHOD

## Type of Research

The purpose of this research is to know the impact of advertising towards customer buying behavior. This research is causal type. Causal since the purpose is to determine if one or more variables cause another variable to occur or change. This research is a quantitative method since using questionnaire as a tool to gather data and analysis.

## Place and Time of Research

The study was conducted in Manado and will be implemented on Telkomsel users. That field is a perfect location to do this research and find if advertising have impact for customer buying behavior. This research regarding the Telkomsel users as respondents from April - October 2015 and the survey started on May 2015

## Conceptual Framework

The figures below show the correlation between television, billboards, magazines, news-paper, radio, internet towards customer buying behavior in conceptual framework.
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Figure 1. Conceptual Framework Source : Data Processed, 2015

The disconnected dashes is the simultaneous impact of Telkomsel users. Television (X1), billboards (X2), magazines (X3), newspaper (X4), radio (X5), and internet (X6) on Customer buying behavior (Y).

## Data Collection Method Primary Data

Primary data refer to information obtained first-hand by the researcher on the variables of interest for the specific purpose of the study. Individual provide information when interviewed, administered questionnaires, or observed. Group depth interviews, or focus groups, are the other rich source of primary data (Sekaran and Bougie 2009). The primary data used in this research is the questionnaire that has been distributed to the users of Telkomsel in Manado.

## Population and Sample

Population is the entire group of people, events or things of interest that the researcher wishes to investigate. (Sekaran and Bougie 2009). The population in this research is the users of Telkomsel in Manado. According to Sekaran and Bougie (2009) sample is a subset of a population that comprises some members selected from it. The sample in this research is the Telkomsel users. The samples taken are 100 respondents. Hair et al (1998) mention that the ratio should never fall below five observations for each independent variable, but to avoid making the result specific to the sample, at least $15-20$ respondents per variable is desirable ratio. Since there were six variables in this research, the sample of 100 respondents gave a ratio.

## Definition of Research Variables

1. Television. Television is one of the media liaisons who so greatly needed by the world today, one of the functions of the television is as a tool to deliver advertising of a product as well as Telkomsel. Telkomsel use television advertising to promote their products so known by the mobile phone users. Telkomsel television advertising spend is not only one but also a different type is according to the type of product. They are not one but various anyway.
2. Billboards. Billboard is a huge advertising that is everywhere when we walk or drive we always encounter billboards. Easy billboards in the encounter will make us the unintentional reading an ad, Telkomsel in this case also does the same thing. Telkomsel advertising billboards that are everywhere and easy to meet is about the type of products
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they have, but more likely on the internet package from Telkomsel they highlight every billboards advertising.
3. Magazine. Magazine is one of the print media that presents news or information weekly, monthly, or yearly. Magazine is also an appropriate target to be advertising information, and it is done by Telkomsel. Almost all the leading magazine in Indonesia has containing ads about products on offer by Telkomsel.
4. News - paper. Same as magazines, newspaper also is one of the most print media containing about daily information from a country or region in Manado itself. There are various types of news paper that can meet every morning and most loyal newspaper in Manado always contains advertisements of Telkomsel.
5. Radio. Radio is a medium that can be heard anywhere and anytime. With the changing times, we could hear the radio through the internet system. Radio is also a media campaign that is suitable for Telkomsel. Telkomsel even in Manado themselves often use the radio to work together, such as radio Memora handing Tekomsel toll free at any randomly selected audience.
6. Internet. The Internet is a worldwide network of human beings can communicate quickly and accurately simply through finger range. This is a very modern development of the world is going on at this time. Internet also is an excellent medium to become an advertising medium with so many internet users. We often see advertisements contained in an internet site that we are open, Telkomsel also has such advertising to reach Internet users in order Introducing product that they have.
7. Customer buying behavior. Mental processes, emotional and physical activity of people who buy and use the goods and services to meet the specific needs and desires. This will be measured how much people buy and use products from Telkomsel.

## Data Analysis Method <br> Validity and Reliability Test

The reliability of a measure is established by testing for both consistency and stability. Consistency indicates how well the items measuring a concept hang together as a set, Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another (Sekaran and Bougie 2009). Since reliable scales are not necessarily valid, researchers also need to be concerned about validity. It assesses whether a scale measures what is supposed to be measured. Thus validity is a measure of accuracy in measurement (Hair et, al 2010).

## Multiple Regression Analysis Method

The output from a regression exercise is a "fitted regression model."

$$
Y \mathbf{i}=\beta 0+\beta 1(x 1) \mathbf{i}+\beta 2(x 2) \mathbf{i}+\beta 3(x 3) i+\ldots+\beta K(x K) i+\varepsilon i
$$

Many statistical summaries are also produced. These are R2, standard error of estimate, t statistics for the b's, an F statistic for the whole regression, leverage values, path coefficients, and on and on and on and ...... This work is generally done by a computer program, and we'll give a separate document listing and explaining the output.

## Heteroscedasticity

Heteroscedasticity implies that the variances (i.e. - the dispersion around the expected mean of zero) of the residuals are not constant, but that they are different for different observations. This causes a problem: if the variances are unequal, then the relative reliability of each observation
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(used in the regression analysis) is unequal. The larger the variance, the lower should be the importance (or weight) attached to that observation (Gupta 2000).

## Normality

Normality test aims to test the regression model whether the dependent variable with several independent variables has a normal distribution or not (Malhotra 2007).

## Multicollinearity

The purpose is to test the assumption of multicollinearity in the regression model whether there is a correlation between the independent variables which are television (X1), billboards (X2), magazines (X3), news-paper (X4), radio (X5), internet (X6). A good regression model should be free from the problem of multicollinearity (Malhotra 2007).

## Hypothesis Testing F-Test (Simultaneously)

F- Test is to know whether the independent variables influence simultaneously the dependent variable. Used by multiple f test with formula:

$$
\mathrm{F}=\frac{b_{1} \Sigma_{1} Y-b_{2} \Sigma_{2} Y-b_{3} \Sigma X_{3} Y-b_{4} \Sigma X_{4} Y / k-1}{Y^{2} b_{1} \Sigma X_{1} Y-b_{2} \Sigma X_{2} Y-b_{3} \Sigma X_{3} Y-b_{4} \Sigma X_{4} Y / n-k}
$$

Notes: $\mathrm{k}=$ Variables $\mathrm{n}=$ Sample size
$F$ test is used to determine if the independent variables jointly have a significant effect on the dependent variable, or to determine whether the regression model can be used to predict the dependent variable or not. Significant means the relationship occurs can apply to the population. The significant level is $5 \%$. Formulation of hypotheses simultaneously:

Ho : $b_{1}, b_{2}, \ldots \quad=0$ (television, billboards, magazine, news-paper, radio, internet don't simultaneously influence customer buying behavior).
Ha : $\mathrm{b}_{1}, \mathrm{~b}_{2}, \ldots \quad \neq 0$ (television, billboards, magazine, news-paper, radio, internet simultaneously influence customer buying behavior).
Criteria of acceptance and rejection of Hypothesis (Ho) :
If $\mathrm{F}_{\text {count }} \leq \mathrm{F}_{\text {tablel }}(\mathrm{n}-\mathrm{k}-1) \mathrm{H}_{\mathrm{o}}$ accepted and it means $\mathrm{X}_{1}, \mathrm{X}_{2}, \ldots$ does not influence on Y and
if $\mathrm{F}_{\text {count }}>\mathrm{F}_{\text {table }}(\mathrm{n}-\mathrm{k}-1) \mathrm{H}_{0}$ rejected, it means all together $\mathrm{X}_{1}, \mathrm{X}_{2}, \ldots$ does influence on Y

## T-Test (Partially)

T - test is used to test the partial of each variable. T test has positive and significant effect if the results of the T count is greater than T table ( T count> T table) or the probability of error is less than 5\%.

If $T_{\text {count }} \leq T_{\text {table }}$ and then Ho will be accepted it means that there is significant influence between each independent variable and the dependent variable. Mean while if $\mathrm{T}_{\text {count }}>\mathrm{T}_{\text {table }}$ then Ho will be rejected, it means that there is no significant influence of each independent variable and the dependent variable.
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## 4. RESULT AND DISCUSSION

## Data Analysis <br> Validity Test

Table 1. $\mathrm{X}_{1}$ (Television) Correlations

|  | X1.1 | X1.2 | X1.TOTAL |  |
| :--- | :--- | ---: | ---: | ---: |
|  | Pearson Correlation | 1 | -.169 | $.638\left(^{* *}\right)$ |
|  | Sig. (1-tailed) |  | .215 | .000 |
|  | N | 24 | 24 | 24 |
|  | Pearson Correlation | -.169 | 1 | $.651\left(^{* *}\right)$ |
|  | Sig. (1-tailed) | .215 |  | .000 |
|  | N | 24 | 24 |  |
|  | Pearson Correlation | $.638\left(^{* *}\right)$ | $.651\left(^{* *}\right)$ | 1 |
| Sig. (1-tailed) | .000 | .000 |  |  |
| N | 24 | 24 | 24 |  |

** Correlation is significant at the 0.01 level (1-tailed).
Source: Processed Data, 2015

From the table above shows the validity test of variable $\mathrm{X}_{1}$. indicators. The table shows the total number for $X_{1.1}$ is 0.638 , and $X_{1.2} 0.651$. All the indicators are above 0.3 means that the indicators are valid.

Table 2. $\mathrm{X}_{2}$ (Billboards) Correlations

|  |  | X2.1 | X2.2 | X2.TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| X2.1 | Pearson Correlation | 1 | -.373(*) | .714(**) |
|  | Sig. (1-tailed) |  | . 036 | . 000 |
|  | N | 24 | 24 | 24 |
| X2.2 | Pearson Correlation | -.373(*) | 1 | .383(*) |
|  | Sig. (1-tailed) | . 036 |  | . 032 |
|  | N | 24 | 24 | 24 |
| X2.TOTAL | Pearson Correlation | .714(**) | .383(*) | 1 |
|  | Sig. (1-tailed) | . 000 | . 032 |  |
|  | N | 24 | 24 | 24 |

** Correlation is significant at the 0.01 level (1-tailed).
Source: Processed Data, 2015.

From the table above shows the validity test of variable $X_{2}$ indicators. The table shows the total number for $\mathrm{X}_{2.1}$ is 0.714 , and $\mathrm{X}_{2.2} 0.383$. All the indicators are above 0.3 means that the indicators are valid.

Table 3. $\mathrm{X}_{3}$ (Magazine) Correlations

|  |  | X3.1 | X3.2 | X3.TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| X3.1 | Pearson Correlation | 1 | -. 236 | .568(**) |
|  | Sig. (2-tailed) |  | . 266 | . 004 |
|  | N | 24 | 24 | 24 |
| X3.2 | Pearson Correlation | -. 236 | 1 | .666(**) |
|  | Sig. (2-tailed) | . 266 |  | . 000 |
|  | N | 24 | 24 | 24 |
| X3.TOTAL | Pearson Correlation | .568(**) | .666(**) | 1 |
|  | Sig. (2-tailed) | . 004 | . 000 |  |
|  | N | 24 | 24 | 24 |

** Correlation is significant at the 0.01 level (1-tailed).
Source: Processed Data, 2015
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From the table above shows the validity test of variable $X_{3}$ indicators. The table shows the total number for $X_{3.1}$ is 0.568 , and $X_{3.2} 0.666$ All the indicators are above 0.3 means that the indicators are valid.

Table 4. $\mathrm{X}_{4}$ (News Paper) Correlation

|  |  | X4.1 | X4.2 | X4.TOTAL |
| :--- | :--- | ---: | ---: | ---: | ---: |
| X4.1 | Pearson Correlation | 1 | -.084 | $.676\left(^{* *}\right)$ |
|  | Sig. (2-tailed) |  | .698 | .000 |
|  | N | -.084 | 24 | 24 |
| X4.2 | Pearson Correlation | .698 | 1 | $.678\left(^{* *}\right)$ |
|  | Sig. (2-tailed) | 24 | .000 |  |
|  | N | $.676\left(^{* *}\right)$ | $.6780^{* *)}$ | 24 |
| X4.TOTAL | Pearson Correlation | .000 | .000 | 1 |
|  | Sig. (2-tailed) | 24 | 24 | 24 |

** Correlation is significant at the 0.01 level (1-tailed).
Source: Processed Data, 2015.
From the table above shows the validity test of variable $X_{4}$ indicators. The table shows the total number for $\mathrm{X}_{4.1}$ is 0.676 , and $\mathrm{X}_{4.2} 0.678$. All the indicators are above 0.3 means that the indicators are valid.

Table 5. $\mathrm{X}_{5}$ (Radio) Correlations

|  |  | X5.1 | X5.2 | X5.TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| X5.1 | Pearson Correlation | 1 | -.583(**) | .567(**) |
|  | Sig. (1-tailed) |  | . 001 | . 002 |
|  | N | 24 | 24 | 24 |
| X5.2 | Pearson Correlation | -.583(**) | 1 | . 338 |
|  | Sig. (1-tailed) | . 001 |  | . 053 |
|  | N | 24 | 24 | 24 |
| X5.TOTAL | Pearson Correlation | .567(**) | . 338 | 1 |
|  | Sig. (1-tailed) | . 002 | . 053 |  |
|  | N | 24 | 24 | 24 |

** Correlation is significant at the 0.01 level (1-tailed). Source: Processed Data, 2015

From the table above shows the validity test of variable $\mathrm{X}_{5}$ indicators. The table shows the total number for $X_{5.1}$ is 0.567 , and $X_{5.2} 0.338$. All the indicators are above 0.3 means that the indicators are valid.

Table 6. $\mathrm{X}_{6}$ (Internet) Correlations

|  |  | X6.1 | X6.2 | X6.TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| X6.1 | Pearson Correlation | 1 | .646(**) | .894(**) |
|  | Sig. (1-tailed) |  | . 000 | . 000 |
|  | N | 24 | 24 | 24 |
| X6.2 | Pearson Correlation | .646(**) | 1 | .920(**) |
|  | Sig. (1-tailed) | . 000 |  | . 000 |
|  | N | 24 | 24 | 24 |
| X6.TOTAL | Pearson Correlation | .894(**) | .920(**) | 1 |
|  | Sig. (1-tailed) | . 000 | . 000 |  |
|  | N | 24 | 24 | 24 |

** Correlation is significant at the 0.01 level (1-tailed).

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\text { Source: Processed Data, } 2015
$$

From the table above shows the validity test of variable $X_{6}$ indicators. The table shows the total number for $X_{6.1}$ is 0,894 and $X_{6.2} 0.920$. All the indicators are above 0.3 means that the indicators are valid.

Table 7. Y (Customer Buying Behavior) Correlations

|  |  | Y. 1 | Y. 2 | Y. 3 | Y. 4 | Y. 5 | Y.TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y. 1 | Pearson Correlation | 1 | . 296 | . 052 | -.348(*) | -. 217 | . 340 |
|  | Sig. (1-tailed) |  | . 080 | . 404 | . 048 | . 154 | . 052 |
|  | N | 24 | 24 | 24 | 24 | 24 | 24 |
| Y. 2 | Pearson Correlation | . 296 | 1 | . 317 | -.465(*) | . 188 | .655(**) |
|  | Sig. (1-tailed) | . 080 |  | . 066 | . 011 | . 190 | . 000 |
|  | N | 24 | 24 | 24 | 24 | 24 | 24 |
| Y. 3 | Pearson Correlation | . 052 | . 317 | 1 | -. 236 | -. 052 | .586(**) |
|  | Sig. (1-tailed) | . 404 | . 066 |  | . 133 | . 404 | . 001 |
|  | N | 24 | 24 | 24 | 24 | 24 | 24 |
| Y. 4 | Pearson Correlation | -.348(*) | -.465(*) | -. 236 | 1 | -. 158 | . 000 |
|  | Sig. (1-tailed) | . 048 | . 011 | . 133 |  | . 230 | . 500 |
|  | N | 24 | 24 | 24 | 24 | 24 | 24 |
| Y. 5 | Pearson Correlation | -. 217 | . 188 | -. 052 | -. 158 | 1 | . 340 |
|  | Sig. (1-tailed) | . 154 | . 190 | . 404 | . 230 |  | . 052 |
|  | N | 24 | 24 | 24 | 24 | 24 | 24 |
| Y.TOTAL | Pearson Correlation | . 340 | .655(**) | .586(**) | . 000 | . 340 | 1 |
|  | Sig. (1-tailed) | . 052 | . 000 | . 001 | . 500 | . 052 |  |
|  | N | 24 | 24 | 24 | 24 | 24 | 24 |

* Correlation is significant at the 0.05 level (1-tailed).
** Correlation is significant at the 0.01 level ( 1 -tailed).
Source: Processed Data, 2015

From the table above shows the validity test of variable Y indicators. The table shows the total number for $\mathrm{Y}_{1}$ is $0.340, \mathrm{Y}_{2}$ is $0.655, \mathrm{Y}_{3} 0.586, \mathrm{Y}_{4} 0.500$ and Y 0.340 . All the indicators are above 0.3 means that the indicators are valid.

## Reliability Test

Table 8. Reliability Statistics

| No |  | Variables | Cronbach's Alpha |
| :--- | :--- | :--- | :--- |
| 1 | $X_{1}$ Television | .674 |  |
| 2 | $X_{2}$ Billboards | .640 |  |
| 3 | $X_{3}$ Magazine | .635 |  |
| 4 | $X_{4}$ News-Paper | .716 |  |
| 5 | $X_{5}$ Radio | .636 |  |
| 5 | $X_{6}$ Internet | .896 |  |
| 7 | Y Customer buying behavior | .872 |  |
| Source: Processed Data, 2015 |  |  |  |

From the table above shows the Cronbach's Alpha > 0.6, indicated that all research instrument indicator of variable are reliable.

## Testing of Classical Assumption

## Heteroscedasticity Test

A good regression model is free from the case of Heteroscedasticity. Basis for decision-making of a regression model said to be happening Heteroscedasticity if there is no clear pattern, and the point spread above and below the number 0 (zero) on the Y axis, does not occur Heteroscedasticity. Figure below will explain the test results as follows:

Scatterplot


Graph 1. Heteroscedasticity Test
Source: Processed Data, 2015

Based on the graph above it can be seen that there is no established pattern, in other words the graph describing the plot spread above and below the number 0 (zero) on the Y-axis. This proves that the independent variable Television, billboards, magazines, newspaper, radio, and internet are free of Heteroscedasticity.

## Multicollinearity Test

The purpose was to test the assumption of multicollinearity in the regression model to test whether there is a correlation between the independent variables, named television, billboards, magazines, newspaper, radio, and internet. A good regression model should be free from the problem of multicollinearity and there is no correlation between the independent variables.

Table 9. Multicollinearity Test Coefficients (a)

| Model |  | Collinearity Statistics |  |
| :--- | :--- | :--- | :--- |
|  |  | Tolerance |  |
| 1 | (Constant) |  | VIF |
|  | $\mathrm{X}_{1}$ | .144 | 1.815 |
| $\mathrm{X}_{2}$ | .133 | 1.026 |  |
| $\mathrm{X}_{3}$ | .178 | 5.622 |  |
|  | $\mathrm{X}_{4}$ | .455 | 4.135 |
| $\mathrm{X}_{5}$ | .286 | 4.945 |  |
|  | $\mathrm{X}_{6}$ | .237 | 2.564 |

a Dependent Variable: Y
Source: Processed Data, 2015

Table above shows the calculation of Multicollinearity. Moreover, it can be known through the VIF and tolerance, whereby if the value of VIF and tolerance to be around the number <10 then
the regression model id free from multicollinearity. Based on the results in the table above can be seen by SPSS output does not occur because the symptoms of multicollinearity VIF value of Television, billboards, magazines, newspaper, radio, and internet was below numbers < 10 or has a value of $1.815,1.026,5.622,4.135,4.945$, and 2.564 this means that there is no connection between the independent variables. Thus, multicollinearity assumptions are met (free of multicollinearity).

## Autocorrelation Test

To find a free autocorrelation regression model can be tested on the following criteria:
D-W Value $\mathrm{k}-1, \mathrm{n}-\mathrm{k}=3$ Variable $-1=2,100$ respondents -3 variable $=97$
D-W Value $\leq \mathrm{dL}(1.6275)=$ Positive Autocorrelation
D-W Value between dL (1.6275) until dU (1.7116) = No Definition
D-W Value between dU (1.7116) until 4-dU $(2.2884)=$ No Autocorrelation
D-W Value between 4-dU (2.2884) until 4-dL (2.3725) = No Definition
D-W Value $\geq 4$-dL (2.3725) $=$ Negative Autocorrelation
Table 10. Autocorrelation Test Model Summary(b)

| Model | R | R Square | Adjusted R <br> Square | Std. Error of the <br> Estimate | Durbin-Watson |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | $.870(\mathrm{a})$ | .757 | .747 | .27414 | 1.852 |

a Predictors: (Constant), $\mathrm{X}_{4}, \mathrm{X}_{2}, \mathrm{X}_{1}, \mathrm{X}_{3}, \mathrm{X}_{5}, \mathrm{X}_{6}$
b Dependent Variable: Y

## Source: Processed Data, 2015

Based on the output table in the appendix autocorrelation, test using Durbin-Watson rate of 1,852 which is in the free area autocorrelation, so the regression model Television, billboards, magazines, newspaper, radio, and internet on customer buying behavior is free from autocorrelation.

## Normality Test

Testing the normality assumption is to test whether the regression model, the independent variable television, billboards, magazines, newspaper, radio, and internet on customer buying behavior has a normal distribution or not. Regression model is good if the data distribution is normal or near normal, if the data is spread around the diagonal line and follow the direction of the diagonal line, then the regression fulfill the normality assumption.

Normal P-P Plot of Regression Standardized Residual


Graph 2. Normality Test
Source: Processed Data, 2015

From the graph above it can be seen that the points spread and spread around the diagonal line in the direction diagonal lines. This proves that the model Regression of Television $\left(\mathrm{X}_{1}\right)$, billboards $\left(\mathrm{X}_{2}\right)$, magazines $\left(\mathrm{X}_{3}\right)$, newspaper $\left(\mathrm{X}_{4}\right)$, radio $\left(\mathrm{X}_{5}\right)$, and internet $\left(\mathrm{X}_{6}\right)$ on customer buying behavior $(\mathrm{Y})$ in test normality assumption was met. Simultaneously Test of television $\left(\mathbf{X}_{1}\right)$, billboards $\left(\mathbf{X}_{2}\right)$, magazines $\left(\mathbf{X}_{3}\right)$, newspaper $\left(\mathbf{X}_{4}\right)$, radio $\left(\mathbf{X}_{5}\right)$, and internet $\left(\mathbf{X}_{6}\right)$ on customer buying behavior (Y). Simultaneous testing conducted to determine Television, billboards, magazines, newspaper, radio, and internet on customer buying behavior hypothesis test is carried out simultaneously by using F numbers in the table below. Testing is done by comparing the number of significant level of calculation results with significance level 0.05 (5\%) with the following criteria:

If $\mathrm{F}_{\text {count }}(\mathrm{sig}) \geq 0.05$ then Ho is accepted and Ha rejected
If $\mathrm{F}_{\text {count }}(\mathrm{sig})<0,05$ then Ho is rejected and Ha accepted
Table 11. ANOVA(b)

| Model |  | Sum of Squares | df | Mean Square |  | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Regression | . 741 |  | 6 | . 124 | 5.964 | .002(a) |
|  | Residual | . 352 |  | 17 | . 021 |  |  |
|  | Total | 1.093 |  | 23 |  |  |  |

a Predictors: (Constant), X6, X2, X3, X1, X5, X4
b Dependent Variable: Y
Source: Processed Data, 2015

Value of 5.964 of $\mathrm{F}_{\text {Count }}$ significant 0.000 . Because the sig $<0.05$ means the confidence of this prediction is above $95 \%$ and the probability of this prediction error is below $5 \%$ which is 0.000 . Therefore $\mathrm{H}_{0}$ is rejected and accepting $\mathrm{H}_{\mathrm{a}}$. Thus, the formulation of the hypothesis that between Television $\left(\mathrm{X}_{1}\right)$, billboards $\left(\mathrm{X}_{2}\right)$, magazines $\left(\mathrm{X}_{3}\right)$, newspaper $\left(\mathrm{X}_{4}\right)$, radio $\left(\mathrm{X}_{5}\right)$, and internet $\left(\mathrm{X}_{6}\right)$ on customer buying behavior (Y), accepted.

Partially Test of Television $\left(\mathrm{X}_{1}\right)$, billboards $\left(\mathrm{X}_{2}\right)$, magazines $\left(\mathrm{X}_{3}\right)$, newspaper $\left(\mathrm{X}_{4}\right)$, radio $\left(\mathrm{X}_{5}\right)$, and internet $\left(\mathrm{X}_{6}\right)$ on customer buying behavior $(\mathrm{Y})$.

- $t_{\text {count }} \leq \mathrm{t}_{\text {tabel }}(0,05)$, then $\mathrm{H}_{0}$ is accepted and rejecting $\mathrm{H}_{\mathrm{a}}$.
- $t_{\text {count }}>t_{\text {tabel }}(0,05)$, then $H_{0}$ is rejected and accepting $H_{a}$.

Table 12. Coefficients(a)

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | B | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error | Beta |  | Std. Error |
| 1 | (Constant) | 2.747 | . 847 |  | 3.243 | . 005 |
|  | X1 | -. 144 | . 112 | -. 216 | -1.287 | . 215 |
|  | X2 | . 133 | . 092 | . 237 | 1.450 | . 165 |
|  | X3 | . 445 | . 090 | . 813 | 4.945 | . 000 |
|  | X4 | . 286 | . 112 | . 453 | 2.564 | . 020 |
|  | X5 | . 010 | . 148 | . 012 | . 070 | . 945 |
|  | X6 | -. 337 | . 086 | -. 767 | -3.929 | . 001 |

a Dependent Variable: Y
Source: Processed Data, 2015

Based on the calculations in the table above, the interpretation as follows:

1. $t_{\text {count }}$ for Television $\left(\mathrm{X}_{1}\right)-1.287$ less than the value of $1.660 \mathrm{t}_{\mathrm{table}}$ means Television $\left(\mathrm{X}_{1}\right)$ partial not influence on customer buying behavior (Y).
2. $t_{\text {count }}$ for Billboards $\left(\mathrm{X}_{2}\right) 1.450$ less than the value of $1.660 \mathrm{t}_{\text {table }}$ means Bllboards $\left(\mathrm{X}_{2}\right)$ partial not influence on customer buying behavior (Y) .
3. $\mathrm{t}_{\text {count }}$ for Magazine $\left(\mathrm{X}_{3}\right) 4.945$ greater than the value of $1.660 \mathrm{t}_{\text {table }}$ means Magazine $\left(\mathrm{X}_{3}\right)$ partial have influence on customer buying behavior (Y).
4. $t_{\text {count }}$ for News-Paper $\left(\mathrm{X}_{4}\right) 2.564$ greater than the value of $1.660 \mathrm{t}_{\text {table }}$ means News-Paper $\left(\mathrm{X}_{4}\right)$ partial have influence on customer buying behavior $(\mathrm{Y})$.
5. $t_{\text {count }}$ for Radio ( $\mathrm{X}_{5}$ ) 0.070 less than the value of $1.660 \mathrm{t}_{\text {table }}$ means Radio $\left(\mathrm{X}_{5}\right)$ partial not influence on customer buying behavior (Y).
6. $t_{\text {count }}$ for Internet $\left(\mathrm{X}_{6}\right)-3.929$ less than the value of $1.660 t_{\text {table }}$ means Internet $\left(\mathrm{X}_{6}\right)$ partial not influence on customer buying behavior (Y).

## Discussion

Some regression results indicate that television, billboards, magazine, newspaper, radio, and the Internet has a significant impact on the buying behavior of customers towards Telkomsel, this result occurs because some of the respondents are interested in purchasing a product Telkomsel because the ads they see and know about Telkomsel products derived from television, billboards, magazine, newspaper, radio, and internet. Although the presentation of the impact that television, radio and the internet showed a significant influence is compared with other variables, but it does not mean that all respondents have the same perception, some respondents indicated that they do not purchase the product Telkomsel to see advertisements on television, billboards, magazine, newspaper, radio, and internet. In general, the results confirm that consumers who use Telkomsel is not only influenced by television commercials, billboards, magazine, newspaper, radio, and the Internet but also by a variety of influences and desires of others.This study proves that the respondents / consumers in Manado have an affinity with Telkomsel products they use to view the media, of several variable, there are variables that most influence customer buying behavior of Telkomsel are magazine and news paper.Consumers in Manado very often use the media as a filler activity every day it makes very concerned Manado consumer advertising of a product one of them is Telkomsel. the type of ads that will greatly affect the Manado Consumers who do not or who have used the product Telkomsel to try a variety of other promotions.

## 5. CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

There are seven constructive findings that can be concluded from the overall result in this research, which are listed as follow:

1. Television, billboards, magazines, newspaper, radio, and internet have significant influence on customer buying behavior towards Telkomsel products simultaneously.
2. Televisions have not significant influence on consumer perception towards customer buying behavior partially.
3. Billboards have not significant influence on consumer perception towards customer buying behavior partially.
4. Magazines have significant influence on consumer perception towards customer buying behavior partially.
5. Newspapers have significant influence on consumer perception towards customer buying behavior partially.
6. Radios have not significant influence on consumer perception towards customer buying behavior partially.
7. Internets have not significant influence on consumer perception towards customer buying behavior partially.

## Recommendations

There are two practical recommendations that can be concluded from the overall result in this research, which are listed as follow:

1. Marketers of products Telkomsel should consider the importance of advertising and the media type that they used, on with it in advanced.
2. The other hand, marketers of Telkomsel product should also evaluate other important factors that influence consumer buying behavior, regarding the continuity of Telkomsel's products in the future.

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