THE INFLUENCE OF SOCIAL NETWORK ON CONSUMER PURCHASE INTENTION OF YOUNG GENERATION IN MANADO

by:

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ABSTRACT

Social network now is very prevalent in the society. Today, many small enterprises sell and promote their product through social network and also many people are likely to make an online purchase especially for young generation. Social network is play a vital role in increasing someone intention to buy a product. This research is designed because there are some factor in social network that influence someone purchase intention. The original purpose of this research is to know the influence of tie strength, network density, network centrality, and homophily on consumer purchase intention. This research is a quantitative research that associative with multiple linear regression analysis technique. The population in this research is the students of IBA program in Sam Ratulangi University, whereas 100 IBA students were conducted as the sample of respondent in this research. The result of this research shows that those tie strength, network density, and homophily has significant effect partially on consumer purchase intention while, network centrality has no significant effect partially on consumer purchase intention of young generation in Manado. Therefore, to increase consumer purchase intention of young generation in Manado these three factors should be considered intensively.

Keywords: social network, consumer purchase intention

INTRODUCTION

In this modern era, the internet is widely used as a tool of society to obtain information easily, quickly, and actual. Easy access of internet makes it users are increasing day by day. Indonesia has a population of 253.6 million people and 82 million of them are internet users. From the number of Internet users, 80 percent of them are aged 15 until 19 years. Not only as a place to obtain a lot of information but it also become a means of communication, with social networking sites, it easily to communicate remotely with face to face.

Social network services (SNS) is an online service, platform, or site that focuses on facilitating the building of social networks or social relations among people, for example to share interests, activities, backgrounds, or real life connections. Facebook, Twitter, Instagram, and path are the most popular social network now days. It is a place that used to be able to interact, and share with all the people who joined the social networking. How to join the social networking is easy, is to fill the online registration in accordance with their respective identities. After registration it will display a user profile that describes about them. The profile will be an interest so that we can interact and share with friends. Social network sites have three common elements, it allows individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Boyd and Ellison, 2008).

Social network is very prevalent in today's society especially for youth. With a wide range of sophistication and ease of communication in the offer made social networking users increase day by day. In business, social network is one effective tool for marketing. Marketing through social networking is very easy,
simply upload photos, write articles and add testimony would certainly be something very interesting to see and read by the social networking users. If they feel attract to the products that offered will surely arise their curiosity to try the product. Instagram is mostly used by some small enterprises for sell and promote their product because it is specified for sharing photos and videos. A number of businesses recognize the existence of social networking can boost the amount of sales of their business. This situation allows many people now days are prefer to do online shopping.

Along with the development of social network, it can be seen that social network has shown significant growth in society. For this reason, it is very interesting to know social network characteristic which are tie strength, network density, network centrality and homophily have a significant influence to consumer purchase intention of young generation in Manado.

Research Objectives
The objectives in this research are to find out the influence of:
1. Tie Strength, Network Density, Network Centrality, and Homophily on Consumer Purchase Intention of Young Generation in Manado simultaneously.
2. Tie Strength on Consumer Purchase Intention of Young Generation in Manado partially.
5. Homophily on Consumer Purchase Intention of Young Generation in Manado partially.

THEORETICAL REVIEW

Consumer Purchase Intention
Halim and Hameed (2005) explain purchase intention as the number of patrons that has a proposal to buy the products in future and make repetition purchases and contact again to the specific product. While, Kang and Jin (2011) explains purchase intention relating four behaviors of consumer including the undoubted plan to buy the product, thinking unequivocally to purchase the product, when someone contemplate to buy the product in the future, and to buy the specific product utterly.

Social Network
Margaret (2006) defined social network is the practice of expanding the number of one's business and or social contacts by making connections through individuals Social networking service (SNS) is an online service that focuses on building and reflecting social networks or social relations among people, SNS users can share their interests and activities in real time on social networking sites, and personal pages can represent each of them through a profile, social links.

Tie Strength
Granovetter (1973) Tie strength is a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding) and reciprocal services which characterize the tie In simple words, tie strength are people who always be there for you, help you and never resist your request like close friend and family. He left the precise definition of tie strength to future work, he did characterize two types of ties, strong and weak.

Network Density
Haythornthwaite (1996) defined network density is the degree to which the actors in a social network are connected to each other It can be measured by the number of existing contacts (ties) divided by the potential number of contacts among the network members (Cross and Parker, 2004).

Network Centrality
Freeman (1978) gives argument that a person who is in a position that permits direct contact with many others should begin to see himself/herself and be seen by those others as a major channel of information, and he/she is likely to develop a sense of being in the mainstream of information flow in the network.
Homophily

Rogers (1987) stated that homophily explains group composition in terms of the similarity of members’ characteristic: the extent to which pairs of individuals are similar in terms of certain attributes, such as gender, age, education, or lifestyle

Previous Research

Shin, et.al (2011) examined how the characteristics of online social network structure can impact consumer purchase intention through network involvement found that Strong ties with friends can increase their affective involvement to the network. And network density, network centrality and homophily can both increase SNS users’ affective involvement and cognitive involvement to the online social network, both of which can increase their purchase intention to the recommended deals by their friends in SNS. Zhang and Lee (2013) found that Relationship and Entertainment has positive influence on purchase intention Shin, et.al (2010) found that, the characteristics of the social networking integration service as convenience, personalization, and social surveillance will increase customer satisfaction and directly affect the customer’s purchase intention.

Conceptual Framework

![Figure 1. Conceptual framework](source)

Research Hypothesis

The hypotheses of this research are:

H1: Tie Strength, Network Density, Network Centrality and Homophily are predicted influence Consumer Purchase Intention of Young Generation in Manado simultaneously.

H2: Tie Strength is predicted influence Consumer Purchase Intention of Young Generation in Manado partially.

H3: Network Density is predicted influence Consumer Purchase Intention of Young Generation in Manado partially.

H4: Network Centrality is predicted influence Consumer Purchase Intention of Young Generation in Manado partially.

H5: Homophily influence is predicted Consumer Purchase Intention of Young Generation in Manado partially.

RESEARCH METHOD

Type of Research

This research is quantitative research method using causal type of research. This type of research determines if one variable causes another variable to occur or change. This research will investigate the influence of tie strength, network density, network centrality, and homophily on consumer purchase intention of young generation in Manado.
**Place and Time of Research**

This research was conducted in International Business Administration program, Faculty of Economic and Business, Sam Ratulangi University during the period July-September 2014.

**Population and Sample**

The population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran & Bougie, 2009:262). The population of this research is University Student of IBA in Manado who is an active user of social network. Sample is a subset of the population (Sekaran and Bougie, 2009:263). This research is based on Simple Random Sampling technique of Probability Sampling Method. 100 IBA students were conducted as the sample in this research.

**Data Collection Method**

The data used in this research is primary data. The primary data obtained from the questionnaires distributed to IBA students as the respondents in this research. Questionnaires are distributed to respondents so they can respond directly on the questionnaire.

**Operational Definition of Research Variables**

The general explanations about variables in this current study are stated as follows:

1. Tie Strength (X1) the level of intensity of the social relationship between consumers (Steffes, 2008).
2. Network Density (X2) is how many or how big the network that IBA student have in their personal social network (Cross and Parker, 2004).
3. Network Centrality (X3) is the degree of individual in central position to connect with other (Freeman, 1978).
4. Homophily (X4) is a condition in which people tends to associate with people who have similarity with them (Mark N, 1998).
5. Consumer Purchase Intention (Y) is a condition in which people has not made a purchase but just have a plan or intention to make a purchase of a product (Spears and Singh, 2004)

**Data Analysis Method**

**Validity and Reliability**

Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure. To analyze the validity of questionnaire, Pearson Product Moment is used. The instrument will valid if the instrument is able to fill the requirement in validity test. Validity for each variable is good where the values are above minimum level of 0.30. Reliability test is established by testing for both consistency and stability of the answer of questions. 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, the questionnaire is reliable if the value of Cronbach’s Alpha more than 0.6 (Sekaran & Bougie, 2009:162).

**Multiple Regression Analysis Method**

The method of research used in this study is multiple regression analysis. Multiple regression analysis is the process of calculating a coefficient of multiple determination and regression equation using two or more independent variables and one dependent variable (Sekaran & Bougie, 2009:348). The equation model of multiple regression analysis used in this research can be formulated as shown below:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e \]

Where:

- \( Y \) = Consumer Purchase Intention (Dependent Variable)
- \( \alpha \) = The constant, when all the independent variable equal to 0
- \( X_1 \) = Tie Strength (Independent Variable)
- \( X_2 \) = Network Density (Independent Variable)
- \( X_3 \) = Network Centrality (Independent Variable)
- \( X_4 \) = Homophily (Independent Variable)
- \( \beta \) = The slope for each Independent Variable
- \( e \) = Error
RESULT AND DISCUSSION

Validity and Reliability

Validity test is used to know whether the instrument is valid or not. The instrument is valid if the value of variable is positive and more than 0.3 (r > 0.3). The result of tie strength (X₁) is 0.870, network density (X₂) is 0.881, network centrality (X₃) is 0.743 and homophily (X₄) is 0.733. It means that all the indicators are valid. Reliability test is used to check the consistency of the measurement instrument. The reliability test in this research using Alpha Cronbach, that will show the instrument is reliable if the coefficient value is more than 0.6. The value of Cronbach Alpha is 0.939 which is more than 0.6. Therefore, the measurement instruments used for this research are reliable.

Classical Assumption

Multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tie Strength</td>
<td>.255</td>
<td>3.921</td>
</tr>
<tr>
<td>Network Density</td>
<td>.277</td>
<td>3.611</td>
</tr>
<tr>
<td>Network Centrality</td>
<td>.365</td>
<td>2.741</td>
</tr>
<tr>
<td>Homophily</td>
<td>.467</td>
<td>2.143</td>
</tr>
</tbody>
</table>

Table 1 shows that the Tolerance value of tie strength is 0.255; network density is 0.277; network centrality is 0.365, and homophily is 0.467 meaning the tolerance value of each variable is more than 0.2. The VIF value of tie strength is 3.921; network density is 3.611, network centrality is 2.741, and homophily is 2.143 meaning the VIF value of each variable is less than 10. Since all the tolerance values are more than 0.2 and VIF value of each independent variable is less than 10, this research is free from multicollinearity.

Heteroscedasticity

The Figure 2 shows that the pattern of points is spreading. The points are spreading above and below of zero point in ordinate. It proves that there is no heteroscedasticity in this regression model.

Figure 2. Heteroscedasticity Result

Source: SPSS data analysis, 2014
Normality

Figure 3 shows that the data spreads near the diagonal line and follow the direction of diagonal line. Therefore, the normality test is accomplished.

Multiple Regression Analysis

Table 2. Multiple Regression Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.964</td>
<td></td>
<td>2.188</td>
</tr>
<tr>
<td></td>
<td>X₁</td>
<td>.386</td>
<td>.086</td>
<td>.343</td>
</tr>
<tr>
<td></td>
<td>X₂</td>
<td>.509</td>
<td>.079</td>
<td>.471</td>
</tr>
<tr>
<td></td>
<td>X₃</td>
<td>.017</td>
<td>.070</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>X₄</td>
<td>.214</td>
<td>.067</td>
<td>.181</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Consumer Purchase Intention

Source: SPSS data analysis, 2014

The calculation is conducted by using the SPSS software. The computerized calculation ensures the accuracy of the analysis. From the result in table 3, the multiple regression model can be defined as:

\[ Y = 2.109 + 0.386X₁ + 0.509X₂ + 0.017X₃ + 0.214X₄ \]

From the multiple linear regression equation above, it can inform the interpretation as follows:

1) Constant value of 2.109 means that if the variables in this research of Variable X₁, X₂, X₃ and X₄ simultaneously increased by one scale or one unit will increase the Y at 2.109 point.

2) Coefficient value of 0.386 means that if the variables in this research of X₁ increased by one scale or one unit, it will improve and increase Y at 0.386.

3) Coefficient value of 0.509 means that if the variables in this research of X₂ increased by one scale or one unit, it will improve and increase Y at 0.509.

4) Coefficient value of 0.017 means that if the variables in this research of X₃ increased by one scale or one unit, it will improve and increase Y at 0.017.

5) Coefficient value of 0.214 means that if the variables in this research of X₄ increased by one scale or one unit, it will improve and increase Y at 0.214.

Multiple Regression Coefficient of Correlation & Determination

Table 3. Table R and R²

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.926²</td>
<td>.858</td>
<td>.852</td>
<td>1.378</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), H, ND, NC, TS

Source: SPSS data analysis, 2014

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The coefficient of correlation (R) measures if there is significant relationship between the four independent variables with dependent variable, the value of R is 0.926 which proves that the relationship among independents and dependent variable is very strong. The coefficient of determination (R²) measures how far the ability of a model in explaining variation of dependent variable. The value of R² is 0.858 shows the linear relationship in this model is able to explain the Consumer Purchase Intention (Y) for 85.8% while the rest 14.2% is explained by other factors not discussed in this research.

**Hypothesis Testing**

**F-Test**

F-test is used to determine the whole effect of all independent variables to dependent variable. This test is done by comparing the F<sub>count</sub> with F<sub>table</sub>. If F<sub>count</sub> is higher than F<sub>table</sub>, H<sub>0</sub> is rejected and H<sub>1</sub> is accepted.

Table 4. F-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1088.508</td>
<td>4</td>
<td>272.127</td>
<td>143.302</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>180.402</td>
<td>95</td>
<td>1.899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1268.910</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y. b. Predictors: (Constant), X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub>

*Source: SPSS data analysis, 2014*

The coefficient of determination (R²) is 0.858 which proves that the relationship among independents and dependent variable is very strong. The coefficient of determination (R²) measures how far the ability of a model in explaining variation of dependent variable. The value of R² is 0.858 shows the linear relationship in this model is able to explain the Consumer Purchase Intention (Y) for 85.8% while the rest 14.2% is explained by other factors not discussed in this research.

**T-test**

T-test is used to determine the partial effect of each independent variable to dependent variable. T-test value is obtained by comparing value of T<sub>count</sub> with T<sub>table</sub>. If T<sub>count</sub> is higher than T<sub>table</sub>, then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted.

Table 5. T-test

<table>
<thead>
<tr>
<th>Model</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.188</td>
<td>.031</td>
</tr>
<tr>
<td>Tie Strength</td>
<td>4.482</td>
<td>.000</td>
</tr>
<tr>
<td>Network Density</td>
<td>6.410</td>
<td>.000</td>
</tr>
<tr>
<td>Network Centrality</td>
<td>.236</td>
<td>.814</td>
</tr>
<tr>
<td>Homophily</td>
<td>3.196</td>
<td>.002</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Consumer Purchase Intention

*Source: SPSS data analysis, 2014*

The partial influence for each independent variable will be explained as follows:

1. **Tie Strength (X<sub>1</sub>) on Consumer Purchase Intention (Y)**
   The hypothesis is reject H<sub>0</sub> and accept H<sub>1</sub> if T<sub>count</sub> > T<sub>table</sub> or accept H<sub>0</sub> and reject H<sub>1</sub> if T<sub>count</sub> < T<sub>table</sub>. In Table 5 the T<sub>count</sub> of tie strength (X<sub>1</sub>) is 4.482. Comparing T<sub>count</sub> with T<sub>table</sub>: 4.482 > 1.984. Since the T<sub>count</sub> is greater than T<sub>table</sub>, H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. Therefore, tie strength has a significant influence on consumer purchase intention.

2. **Network Density (X<sub>2</sub>) on Consumer Purchase Intention (Y)**
   The hypothesis is reject H<sub>0</sub> and accept H<sub>1</sub> if T<sub>count</sub> > T<sub>table</sub> or accept H<sub>0</sub> and reject H<sub>1</sub> if T<sub>count</sub> < T<sub>table</sub>. In Table 5 the T<sub>count</sub> of network density (X<sub>2</sub>) is 6.41. Comparing T<sub>count</sub> with T<sub>table</sub>: 6.41 > 1.984. Since the T<sub>count</sub> is greater than T<sub>table</sub>, H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. Therefore, network density has a significant influence on consumer purchase intention.
3. Network Centrality ($X_3$) on Consumer Purchase Intention ($Y$)
   The hypothesis is reject $H_0$ and accept $H_1$ if $T_{count} > T_{table}$ or accept $H_0$ and reject $H_1$ if $T_{count} < T_{table}$. In Table 5 the $T_{count}$ of network density ($X_3$) is 0.236. Comparing $T_{count}$ with $T_{table}$, 0.236 < 1.984. Since the $T_{count}$ is less than $T_{table}$, $H_0$ is accepted and $H_1$ is rejected. Therefore, network centrality has no significant influence on consumer purchase intention.

4. Homophily ($X_4$) on Consumer Purchase Intention ($Y$)
   The hypothesis is reject $H_0$ and accept $H_1$ if $T_{count} > T_{table}$ or accept $H_0$ and reject $H_1$ if $T_{count} < T_{table}$. In Table 5 the $T_{count}$ of network density ($X_4$) is 3.196. Comparing $T_{count}$ with $T_{table}$, 3.196 > 1.984. Since the $T_{count}$ is greater than $T_{table}$, $H_0$ is rejected and $H_1$ is accepted. Therefore, homophily has a significant influence on consumer purchase intention.

Discussion
   The research is collected data from 100 respondents that were categorized by gender, age, batch, time accessing social network, and tool for accessing social network. The data is taken from the IBA program students in Faculty of economic and business in Manado. The result shows those tie strength, network density, and homophily has positive influence on consumer purchase intention while, network centrality has no positive influence on consumer purchase intention. Based on the hypothesis testing by using F-test and T-test, it is proven that there is linear relationship between independents and dependent variable simultaneously and partially.

Tie Strength on Consumer Purchase Intention
   Tie strength is explains the strength of relationship between the respondents and his or her friends. IBA students mostly agree that their intention can increase when they got good quality information about a product from the trust informant. Good quality information in this case, the detail information about a product the respondents got from the informant. Trust informant such as friend, and family will make the respondents no doubt to have a purchase intention of a product. The respondents also show that, their purchase intention increase by the frequency of seeing a product in their social network and also most of them tend have a purchase intention on a product which is match with their hobby and give benefit for them. It is supported with previous study by Shin, et.al (2011) which explored that, tie strength has a big role to increase consumer purchase intention.

Network Density on Consumer Purchase Intention
   High density in network density is good because the respondents show the more they have contacts on their social network it makes them got information very fast. Based on previous research by Shin, et.al (2011), it found that network density has positive influence on consumer purchase intention. The researcher finds that network density as the dominant influence compares with the other variables that influence consumer purchase intention of young generation in Manado. This factor should be a serious concern for marketers to increase consumer purchase intention.

Network Centrality on Consumer Purchase Intention
   Network centrality is the central position of respondents to connect with other. The respondents show that, the degree centrality can not influence their purchase intention. They assume that they tend more like to follow their own perception, than influenced by other person just by seeing the degree of the informant. The negative sign (effect) of the coefficient is contradicting with the previous research. Shin, et.al (2011) explore that network centrality has a positive influence on consumer purchase intention which is network centrality can increase consumer purchase intention. The researcher finds that network centrality has no positive influence on consumer purchase intention.

Homophily on Consumer Purchase Intention
   Homophily show that people tends to associate with other who have the similarity characteristic with them. The results of this research demonstrate the respondents tend to associate or makes friend with people who have the similarity with them. By doing so, make it easier for someone to mutually influence one another.
The result also show, purchase intention of respondents increase when their close friend or family who has the same hobby with them give recommendation to buy a product. This positive sign is similar with the previous research Shin, et.al (2011) found that homophily can increase consumer purchase intention. The researcher found that, homophily is important because now days people tend to be more easily influenced by people who have similarity with them. Through this mutually influence it can increase purchase intention of a person. That is why Homophily has positive influence on consumer purchase intention of young generation in Manado.

CONCLUSION AND RECOMMENDATION

Conclusion

The final conclusions in this research are:
1. Tie strength, network density, network centrality and homophily has significant influence on consumer purchase intention simultaneously
2. Tie strength has a significant influence on consumer purchase intention
3. Network density has a significant influence on consumer purchase intention partially
4. Network Centrality has no significant influence on consumer purchase intention partially
5. Homophily has a significant influence on consumer purchase intention partially

Recommendation

If marketers want to sell or promote their product using social network, these four factors must be a good reference in order to realize that purpose. The following are recommendations as input that hopefully can be useful as suggestions:
1. Since the result show that, Network Density has the most significant influence towards Consumer Purchase Intention of young generation in Manado, the researcher suggest to pay attention on this factor in order to increase Consumer Purchase Intention. The marketers can use this opportunities in order to promote their product to all contacts they have in their personal social network.
2. The marketers can take the opportunities in order to promote or sell their product to their close friend, family, and people who has strong tie with them.
3. Since the result shows that, they who have similarity tend to influence each other. The marketers have opportunity to promote or sell their product to some communities that have similarity.
4. The researcher is much recommended to everyone to use Social Network as an easiest tool for selling or promoting their product. Because, through Social Network, it easy to increase Consumer Purchase Intention.

REFERENCE


Prycilia N. Korompis, F. Tumewu. The Influence of...


