How online media and technology innovation influence consumer’s purchase intention

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Abstract. This research experiment is to know how online media and technology innovation influence consumer’s purchase intention. The sample of this research were the students of UPI "yptk" Padang who followed the @Indonesia.Jersey Instagram. There were 100 respondents. The result of the research had the positive and significant influence of online media and technology innovation toward the consumer’s purchase intention. This research has contributed to increase sales with online marketing.

1. Introduction

Instagram is one of the online media that provides technology in the world of commerce that can increase the interest in buying consumers [1]. Initially Instagram was used as a medium that worked on communication tools, because there were Instagram technological innovations that developed into media for trade which could improve the Indonesian economy [2]. Besides that Instagram can also provide inspiration for its users and also provide space to increase creativity, because Instagram has many features that can make photos more beautiful, more artistic and more innovative. [3]. [4]. Social media applications are also considered as one of the mobile commerce applications. Social media applications that people often use to send instant messages; send information, photos, videos and news; Related to good interpersonal with people who are in their social environment [5]. For example, Facebook, Messenger, WhatsApp, and Twitter, are the most popular on the mobile devices they use. [7]. More recently, it has been discussed in full for technologies developed in social sciences, whether emerging from the basis of different disciplines, or in response to those accepted in studio adoption and diffusion. Part of this paper discusses alternative renewal for technology that can be used as part of the initial stage to address the problems needed above. These four discussions are labeled as social forms of technology, changes in economic innovation, technological systems and business opportunity strategies, as well as structural organizations. [8]. Moving from various media, marketers utilize online media to optimize the reach and frequency of exposure to influence consumers, interact and dialogue with them, and direct consumer attention to the synergistic effects of online media [9].

2. Material and Methods

This research examines followers online on the Jersey Indonesia Instagram. The data obtained through the distribution of questionnaires to UPI students who participated in the Jersey Indonesia Instagram totaling 100 respondents. In this study there are two independent variables, namely social media knowledge and technological innovation, and the dependent variable is consumer behavior. At present,
more and more companies are trying to identify the potential value of consumer data and then use customer knowledge to facilitate decision making [10]. User reviews are an important type of social media data. Reviews can not only be collected and analyzed independently of time and region but can also reflect consumer perceptions of the company's products or services. They are a source of important information about consumers. In the technological innovation of the modern world, there are several efforts and efforts in the social sciences that can be used to discuss in detail or explain the existence of highly sophisticated technological changes. Within the scope of individual or social contexts. This definition is also broadly meaningful including the work below, such as management, sociology, economics and communication. [8] Technological innovation is universally recognized as the main producer of economic progress, resulting in mild - and sometimes large - changes in technology, attitude, operating methods, and the demand pattern, which in turn can lead to resistance from the most affected parties [11]. In recent years, with the development of internet technology, various data have become available online.

3. Result and conclusion
The results of this study with several analyzes, namely multiple regression analysis, t test, and F test. The development of these results is strengthened by the theory [12] states, multiple linear regression analysis is needed to determine the regression coefficients and significance so that it can be used to answer the hypothesis. In general the formulation of multiple linear regression can be written as follows:

\[ Y = a + b_1X_1 + b_2X_2 + \ldots + e \]

According to [13], an instrument is declared valid if the instrument actually measures what should be measured and the method often used to find instrument validity is the moment product correlation between the scores of each question item with a total score so that it is referred to as inter-item total correlation. Reliability is accuracy or consistency or can be trusted. This means that the instrument to be used in the study will give the same results even though it is repeated and carried out by anyone and at any time [14].

Table 1. Multiple Regression Analysis of Social Media Variables (X1), Technology Innovation, (X2) and Consumer Buying Intention (Y)

| Coefficientsa | Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
|---------------|-------|-----------------------------|---------------------------|---|-----|
| Source: Primary data processed, 2018 |

In the coefficient table the regression equation is obtained as below:

\[ Y = 1.792 + 0.194 \times X_1 + 0.376 \times X_2 + e \]

the above equation explains that:

1. Constant of 1.792 means if the Social Media variable (X1), Technology Innovation (X2), then the consumer's purchase intention (Y) value is 1.792.
2. The regression coefficient of the Social Media variable (X1) is 0.194. That is, if Social Media experiences an increase of one (1) unit of weight with the Technological Innovation assumption ignored (0) then the purchase intention of the Consumer will increase by 0.194 units of weight.

3. Regression coefficient of Technology Innovation variable (X2) is 0.376. That is, if Technology Innovation increases by one (1) unit weight with Social Media (0) consumer purchase intention will increase by 0.376 weight units.

Hypothesis testing
Partial Hypothesis Testing (t Test)

Hypothesis 1 through hypothesis 3 in this study is supported if the significant value is $t < 5\%$. If the significant value is smaller than the level of significance ($\text{sig} < \alpha$) it means that there is a significant variable on the dependent variable partially. However, if the significant value is greater than the level of significance ($\text{sig} < \alpha$), it means that there is no significant difference between the independent variables and the dependent variable partially. Regression coefficients are used to determine the effect of Social Media variables, technological innovation on consumer buying intentions. The criteria used in this test are:

1. If a significant level of $t$ is greater than 0.05, it can be concluded that $H_0$ is accepted and $H_1$ is rejected.
2. If a significant level of $t$ is smaller than 0.05, it can be concluded that $H_0$ is rejected and $H_1$ is accepted.

Based on the results of the $T$ test, it can be seen the influence of the independent variables on the dependent are as follows:

freedom (df) $n-k-1$ which is $100-3-1 = 96$ (n is the number of respondents and k is the number of independent variables).

Then the results of the hypothesis are partially presented in the table below:

Table 2. Test Partially For All Independent Variables

| No | Independent Variables     | $t$ count | $t$ table | Sig. |
|----|---------------------------|-----------|-----------|------|
| 1  | Social media              | 2.693     | 1.6608    | 0.008|
| 2  | Technology Innovation     | 4.320     | 1.6608    | 0.000|

Source: Primary data processed, 2018

See from table presentation above, it can be concluded as follows:

a. $t_{count} < t_{table}$ (2.693 > 16608) with a significant level ($0.008 < 0.05$), meaning that it partially influences positively and significantly between Social Media and consumer purchase intention. Thus $H_0$ is rejected and $H_1$ is accepted.

b. $t_{count} < t_{table}$ (4.320 > 1.6608) with significant ($0.000 < 0.05$), meaning that it is partially influential and insignificant between Technological Innovation and Consumer purchase intention. Thus $H_0$ is accepted and $H_2$ is rejected.

Simultaneous Hypothesis Testing (F test)

The regression coefficient test is carried out together with the F test (Anova). This $t$ test is used as a determinant of whether the independent variable has a significant influence on the dependent variable. And also to see whether this regression model can be used to predict the dependent variable or vice versa. Significant value means having a relationship that can be seen and applied for participation (can be generalized). Testing is done by the F test (Anova). The F test uses a significant level of 0.05 (2-
4-sided test) with 95% freedom degrees, alpha = 5%, df 1 (number of variables-1) or 4 - 1 = 3, and df 2 (nk-1) or 100- 3-1 = 96, the results obtained for F are 2.70. The results of the simultaneous hypothesis test can be seen in the table below:

| Model     | Sum of Squares | Df  | Mean Square | F   | Sig. |
|-----------|----------------|-----|-------------|-----|------|
| Regression| 2183,304       | 3   | 727,768     | 282,062 | 0.000b |
| Residual  | 247,696        | 96  | 2,580       |      |      |
| Total     | 2431,000       | 99  |             |      |      |

a. Dependent Variable: Y  
b. Predictors: (Constant), X1, X2

Source: Primary data processed, 2018

See from table presentation above, it is obtained that sig is 0.000 <0.05. This figure shows that there are 282,062 > ftable 2.70. It can be concluded that Social Media and Technological Innovation have a positive and significant influence on consumers' purchase intention. Because from the test results f_count it is known that the calculated value is 282,062 > ftable of 2.70. Then from that H0 is rejected and H4 is accepted.

4. Conclusion and recommendation

Today's business has followed the changes in the revolutionary era that we are currently feeling up to revolution 5.0. In the future business strategy technology will hold the future business role. This revolution changes the way business people manage and manage their business more easily. This research is the input of business strategy formulation. Online media and technology must be properly accommodated and adopted and serious in business development [15]. Because life today is inseparable from social media. Recommendations for online media in the form of chat, comments on the social media column make it a benchmark for buyers to be interested in using / using the desired product. This research aims to look at the relationship of online media with technological innovations that companies use in strategies to influence consumers to buy their products. The result is that online media and technological innovation determine consumer buying intentions [16]. Because the advantages of online media and technological innovation are very complex in supporting the ease of this technology. Especially in small businesses that are inadequate in promotions such as television advertising. But media such as Instagram, which currently holds the role of advertising endors so that consumers are interested and other consumer comments support it as well. Its unique features are prominent in its technology, offering unlimited possibilities in processing and spreading the news [17].

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