Factors Affecting Purchase Intention and Purchase Behaviour Electronic Products (Home Appliance) in Online Transaction

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Abstract: When the development is very rapid, and the increase in online sales is very high in several other places, but it is only with the electronics sector which does not experience an increase and focuses more on offline sales due to a lack of consumer confidence so that there is a lack of purchase intention for electronic goods (Home Appliance). Therefore, this study aims to study the effect of e-WOM, Social Media Marketing, Perceived Risk, Online Convenience, which will affect purchase intention, and in the end, purchase intention will increase Purchase Behavior. So that it can change buying behavior from consumers focusing on offline purchases to focusing on online sales using smartPLS to test the relationship between variables consisting of six hypotheses. The results of this study indicate that all hypotheses are accepted.

Keywords: e-WOM, Social Media Marketing, Perceived Risk, purchase intention, Purchase Behavior

1 Introduction

Online sales, especially on e-commerce platforms around the world, continue to experience a fairly high increase every year and are estimated to continue to increase to $4.206 billion in 2020 [1] (Statista.com, 2020). Indonesia is one of the countries that have the highest online shopping growth rate, according to data from [2] databooks.kata.data.co.id Indonesia leads the ranks of countries with 78% growth in 2018 due to the number of internet users in Indonesia, which is more than 100 million users, so that it is important to factor that drive the increase in online transactions.

But not with the sale of electronic goods, especially home apps, which are not as many sales compared to product categories according to data from [3] Hukumline.com in 2020, the purchase of electronic products can be seen in second from behind based on the category of best-selling products sold on the Shopee E-commerce platform so that it can be concluded that the public's lack of interest in buying electronic products online on the E-commerce platform compared to other product categories, electronics ranks penultimate because of a lack of trust in the product whether the item can be tried or not and works. This data is supported by the following data. The problem that arises is that buyers in electronic e-commerce products are less interested in online purchases and prefer to buy products offline. Therefore e-wom variables, social media marketing, perceived risk, online convenience to purchase behavior through mediation are determined. Purchase intention to measure what causes consumers to shop more often offline than online.

It is not easy to do online sales of electronic goods based on reset consumers prefer to shop for electronic equipment at retail (offline) due to several factors, one of which is because when shopping online they cannot try these goods, so that promotions on social media are less
targeted and range quite different prices. Therefore I use the theory of planned behavior. The theory states that there are three components of attitude, subjective norms, and perceived behavioral control, forming an individual's behavioral intention. Attitude towards the behavior, suggests that the attitude towards this behavior is determined by beliefs about the consequences of behavior or briefly called behavioral beliefs so that it can be related to the perceived risk variable in this case, while subjective norms are a person's perception of people. People who influence in their lives about whether or not to do certain behaviors. Therefore, for the subjective norm, the e-wom variable will be used. The problem that arises is that buyers in e-commerce of electronic products are less interested in online purchases and prefer to buy products offline. Therefore the variables of e-wom, social media marketing, perceived risk, online convenience on purchase behavior through purchase intention mediation are determined.

2 Literature Review

2.1 E-wom
Harrison Walker in Tariq et al. (2017) [4] eWOM is defined as "informal, person-to-person communication between perceived non-commercial communicators and recipients regarding a brand, product, organization, or service. Cong & Zheng (2017) [5] define E-WOM as a service or product information that involves a personal experience, comments, and also a view using the network. According to Serra-Cantallops et al. (2018) [6], E-WOM is closely related to reviews, recommendations, or opinions disseminated online.

2.2 Social Media Marketing
According to Dave Evans and Jake McKee (2010) [7], social media marketing is an attempt to attract customers to an online social situation where these customers naturally take their time. According to Santoso (2017) [8], social media marketing is a form of marketing that is used to create awareness, recognition, memory, and even action for a brand, product, business, individual, or group either directly or indirectly by using tools from the social web such as blogging, microblogging, and social networking. With the existence of social media marketing, it is easier for business actors to interact with their customers online. The costs incurred are not too large, and there is no time limit while connected to the internet. Social media plays a role when marketing company activities to form individual relationships with customers and provide companies with opportunities to access customers (Kelly et al., 2010) [9]

2.3 Perceived Risk
Perceived risk, according to Schierz et al. (2010) [10], is the expected loss. The larger the loss expectation file, the higher the level of risk the consumer will perceive. Laroche et al. (2005) [11] defined perceived risk as a negative insight into the unexpected and changeable outcomes of a purchased product. Ko et al. (2004) [12] defined the concept file of risk perception as the consumer's perception of change and its inverse result from buying a product or service. The concept includes two elements, namely doubt, and consequence. Indecision is defined as the likelihood of an unfavorable outcome, and the consequence is defined as the significance of the loss.

2.4 Online Convenience
Many people start building an online store because of the convenience it has coupled with online shopping, which can save time and effort compared to traditional shopping methods or shopping in real-time (Shanthi & Kannaiah, 2015) [13] Convenience is a feeling from
consumers about the simplicity, ease of use, and intuitiveness of a website (Srinivasan et al., 2002) [14]. Panse et al. (2019) [15] define convenience as ease of use for consumers to make a transaction at the right time/convenience. Jen-hung & Yi-chun (2010) [16] define convenience as saving time, physical effort, and mental effort. Convenience can also be a major reason in terms of motivation to do online shopping.

2.5 Purchase intention
Shah et al. (2012) [17] stated that "Purchase intention is a kind of decision-making that studies the reason to buy a particular brand by consumer." Purchase intention is one of the decisions made by consumers when they want to buy a product or service with a certain brand. A brand is an important thing that can influence consumer buying interest. This means that there are interesting things that emerge from the brand. According to Egorova et al. (2007) [18], "Purchase intention as a situation where consumers tend to buy a certain product in certain conditions." Consumers will buy a product when faced with a certain situation. The condition in question encourages the desire of consumers to use products in the form of goods or services in order to meet the needs of the goods or services needed. The purchase decision is a complex or complex process. Purchase intentions are generally related to consumer behavior, perceptions, and attitudes—the essence of consumers in accessing and evaluating specific products. According to Kotler and Keller (2016) [19], a purchase intention is a form of behavior by consumers who have a desire to buy a product based on the desire, experience of use, and desire for the product of a product.

2.6 Purchase Behavior
Purchase Behavioral can be defined as an intention that a person tries to carry out a buying behavior (Ajzen, 2005:110). According to Hanzaee & Rezaeyeh (2013) [20], purchase behavior is a conscious plan to do or not to do a buying behavior in the future. Satisfied consumers can lead to repeat purchases and positive word of mouth, which is part of behavioral intentions (Jalil et al., 2016)[21].

2.8 Conceptual Framework and Research Hypothesis
Research involving the E-WOM variable is considered important because information on services and products of a product that involves a personal experience, comments, and also a view using the network has a positive and significant influence on purchase intention (Chetna Kudeshia & Amresh Kumar, 2017) [22]. The advantages of various aspects and the ease of disseminating information and the ease of accessing an online forum so that in the study entitled eWOM through social networking sites and impact on purchase intention and brand image in Iran by Milad Farzin and Majid Fattahi (2018) [23] in this study explained eWOM has a positive and significant effect on purchase intention. According to Nuiser (2018) [24], eWOM also has a positive and significant effect on increasing; in this case, it is easier and more convenient to make purchase intentions. Therefore the hypothesis is:

H1: E-WOM has a positive and significant effect on purchase intentions.

According to (Gautam and Sharma 2017) [25], social media marketing has a positive influence on purchase intention. With the existence of social media marketing, it is easier for business actors to interact with their customers online. According to Ahmed and Zahid (2014) [26] social media marketing has a positive influence on purchase intention. According to (May & Meier 2018) [27], the existence of social media marketing helps encourage purchase intention so that it has a positive and significant influence. Therefore the hypothesis is:
H2: Social media marketing has a positive and significant effect on purchase intention.

(Park et al., 2015) [28]. Perceived risk is an expectation of loss to buyer's interest, so the higher the loss, the lower the purchase intention, so it can be concluded that the higher the perceived risk to purchase intention, the larger the loss expectation file, the higher the level of risk that will be felt by consumers. According to Kwek Choon Ling et al. (2011) [29], in a study entitled Perceived Risk, Perceived Technology, Online Trust for the Online Purchase Intention in Malaysia, found that perceived risk had a positive effect on purchase intention. Therefore the hypothesis is:
H3: Perceived risk has a positive and significant effect on purchase intention.

Online convenience is a feeling from consumers about the ease of online transactions that can provide savings in terms of time and energy for consumers. This is supported by research (Chang, 2016) [30]. Online convenience has a positive and significant influence on online purchase intention. According to (Sowmyanarayanan, et al., 2020) [31], a study entitled Beyond Kirana Stores: A Study on Consumer Purchase Intention for Buying Grocery Online found that online convenience has a positive and significant influence on online purchase intention. Therefore the hypothesis is:
H4: Online convenience has a positive and significant effect on purchase intention.

Purchase Behavioral can be defined as an intention that a person tries to carry out an online buying behavior. According to (Eyyup, at. Al, 2017) [32], Purchase Intention has a positive and significant influence on online Purchase Behavior. According to (Grecia at. al, 2020) [33] in a study entitled Bridge The Gap, Consumers Purchase Intention and Behavior Regarding Sustainable Clothing found that Purchase Intention has a positive and significant influence on online Purchase Behavior. Therefore the hypothesis is:
H5: Purchase intention has a positive and significant effect on Purchase Behavior.

Fig 1. Research Model

3 Methodology and Data Analysis

The method used in this study is a quantitative method used to test the hypothesis. This study collects data by distributing questionnaires to respondents. 127 respondents as a sample using sampling obtained using google form. The criteria for respondents who can fill out the
questionnaire are respondents who have shopped online for electronic products, especially home appliances in Indonesia. The first part of the questionnaire contains questions about whether the respondent has shopped for electronic products, especially home appliances online before or not. If they have never shopped for electronic products, especially home appliances online, there is no need to continue filling out the questionnaire. The second part of the questionnaire contains respondent profiles such as name, gender, age, and average monthly spending for online shopping. The third part of the questionnaire contains all the questions related to the variables. The Likert scale was used to measure all variables (measurements) ranging from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). The tests that will be carried out are validity test, reliability test, model fit test, and hypothesis testing using SmartPLS 3.0.

4 Research Result and Discussion

4.1 Validity and Reliability Test

Of the 127 respondents collected, it shows that most respondents have male gender with a total of 76 respondents (59.8%) while female sex only consists of 51 respondents (40.2%). Most of the respondents have 20 – 30 years, as many as 48.8% (62) respondents. The average monthly expenditure for online shopping is the majority of respondents who buy electronic products (home appliances) as much as Rp. 100,000 – Rp. 500,000 as much as 26%, Rp 500,000-Rp 1,000,000 as much as 24.4% Analysis of validity, reliability, and model fit was also carried out, which can be seen in the table below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement Code</th>
<th>Factor Loading</th>
<th>Validity Test AVE</th>
<th>Result</th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-WOM</td>
<td>EWOM1</td>
<td>0.838</td>
<td>Valid</td>
<td>0.625</td>
<td>Valid</td>
<td>0.833</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>EWOM2</td>
<td>0.786</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EWOM3</td>
<td>0.745</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
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<tr>
<td>Social Media</td>
<td>SM1</td>
<td>0.912</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>SM2</td>
<td>0.850</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SM3</td>
<td>0.818</td>
<td>Valid</td>
<td>0.638</td>
<td>Valid</td>
<td>0.854</td>
<td>0.897</td>
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<td></td>
<td>SM4</td>
<td>0.700</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SM5</td>
<td>0.691</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
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<tr>
<td>Perceived Risk</td>
<td>PR1</td>
<td>0.720</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PR2</td>
<td>0.820</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PR3</td>
<td>0.835</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
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<td></td>
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<tr>
<td></td>
<td>PR4</td>
<td>0.828</td>
<td>Valid</td>
<td>0.648</td>
<td>Valid</td>
<td>0.971</td>
<td>0.648</td>
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<tr>
<td></td>
<td>PR5</td>
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<td>Valid</td>
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<td>Valid</td>
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<td></td>
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<tr>
<td></td>
<td>PR6</td>
<td>0.826</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
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<tr>
<td>Online Convenience</td>
<td>OC1</td>
<td>0.826</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OC2</td>
<td>0.862</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OC3</td>
<td>0.757</td>
<td>Valid</td>
<td>0.704</td>
<td>Valid</td>
<td>0.916</td>
<td>0.935</td>
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<tr>
<td></td>
<td>OC4</td>
<td>0.852</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OC5</td>
<td>0.874</td>
<td>Valid</td>
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<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OC6</td>
<td>0.860</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>PI1</td>
<td>0.797</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>PI2</td>
<td>0.829</td>
<td>Valid</td>
<td>0.649</td>
<td>Valid</td>
<td>0.917</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PI3</td>
<td>0.846</td>
<td>Valid</td>
<td></td>
<td>Valid</td>
<td>0.890</td>
<td></td>
</tr>
</tbody>
</table>
The loading factor is a measure of validity that can be seen from the outer loading of an indicator that is said to have good reliability if the outer loading value is above 0.70 (Ghozalii, 2019). At the same time, the value of outer loading is still tolerated, which is more than 0.60, so that all these variables are reliable. AVE value greater than 0.5. So it can be concluded that all variables are valid. Composite reliability analysis was carried out to assess whether the variables were reliable or not. Variables are classified as reliable if the composite reliability value is greater than 0.7, so all these variables are said to be reliable.

4.2 Hypothesis Test

**Table 2.** R-square

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intention</td>
<td>0.968</td>
</tr>
<tr>
<td>Purchase Behaviour</td>
<td>0.593</td>
</tr>
</tbody>
</table>

**Table 3.** VIF Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Purchase Behaviour</th>
<th>Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-WOM</td>
<td>1.831</td>
<td></td>
</tr>
<tr>
<td>Online Convenience</td>
<td>3.873</td>
<td></td>
</tr>
<tr>
<td>Purchase Behaviour</td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Risk</td>
<td>4.878</td>
<td></td>
</tr>
<tr>
<td>Social Media Marketing</td>
<td></td>
<td>2.019</td>
</tr>
</tbody>
</table>

**Table 4.** Direct Path Coefficients Result

<table>
<thead>
<tr>
<th>No</th>
<th>Hypothesis</th>
<th>T-Value (&gt;1.96)</th>
<th>P-Value (&lt;0.05)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EW → PI</td>
<td>1.985</td>
<td>0.048</td>
<td>accepted</td>
</tr>
<tr>
<td>2</td>
<td>SM → PI</td>
<td>5.042</td>
<td>0.000</td>
<td>accepted</td>
</tr>
<tr>
<td>3</td>
<td>PR → PI</td>
<td>23.749</td>
<td>0.000</td>
<td>accepted</td>
</tr>
<tr>
<td>4</td>
<td>OC → PI</td>
<td>2.872</td>
<td>0.004</td>
<td>accepted</td>
</tr>
<tr>
<td>5</td>
<td>PI → PB</td>
<td>11.221</td>
<td>0.000</td>
<td>accepted</td>
</tr>
</tbody>
</table>

It can be seen that the value of the purchase intention variable R-square is 0.968, and purchase behavior is 0.593. So the bias is that the influence of E-WOM, online convenience,
perceived risk, and social media marketing variables is moderate 9.68%, and the effect of purchase intention on purchase behavior is moderate at 59.3%. All variables have an AVE value greater than 0.5. So it can be concluded that all variables are valid. All variable results meet the requirements, namely T-Value (>1.96) and P-Value (<0.05) so that all variables are accepted.

4.3 Discussion

Effect of E-WOM on Purchase Intention

Based on the results of the above test, there is a significant influence between the E-WOM variables on purchase intention. So from this study, the first hypothesis states that E-WOM has a positive and significant effect on purchase intention. The results of this study are in line with the results of previous research conducted by (Chetna Kudeshia & Amresh Kumar, 2017) [22], which showed that there was a positive and significant influence between E-WOM on purchase intention on a brand. And research from Milad Farzin and Majid Fattahi (2018) [23] shows that there is a positive and significant effect of E-WOM on purchase intention. From these findings, it can be interpreted that E-WOM conducted in research at one of the universities in Iran is an important factor in building a purchase intention.

So it can be assumed that the increase in E-WOM, can also increase consumer buying interest by reading reviews so consumers can know more about the specifications, characteristics, and benefits of the product so as to increase purchase interest.

Effect of Social Media Marketing on Purchase Intention

Based on the results of the above test, there is a significant influence between social media marketing variables on purchase intention. So from this study, the hypothesis is that social media marketing has a positive and significant influence on purchase intention. The results of this study are in accordance with the results of previous research conducted by Vikas Gautam and Vikram Sharma (2017) [25], which showed that there was a positive and significant influence between social media marketing on purchase intention in this study. And research from Ahmed and Zahid (2014) [26] shows that there is a positive and significant influence between social media marketing on purchase intention in this study. From these findings, it can be interpreted that social media marketing carried out in the banking sector is an important factor in building a purchase intention.

So it can be assumed that the increase in social media marketing, can also increase consumer buying interest by way of notification with social media can increase consumer knowledge about the product more easily and practically so that consumers are more interested in the product, thereby increasing purchase interest.

Effect of Perceived Risk on Purchase Intention

Based on the results of the above test, there is a significant influence between perceived risk variables on purchase intention. This study has a hypothesis which states that perceived risk has a negative and significant effect on purchase intention. The results of this study are in accordance with the results of this study, the same as the research conducted by Ariffin et al. (2018) [34], which showed that there was a negative and significant influence between perceived risk and purchase intention in this study as well as research from Bhukya, and Singh (2018) [35] which shows that there is a negative and significant influence between perceived risk and purchase intention in this study.

So it can be assumed that the increase in perceived risk, it can reduce consumer buying interest due to the higher risk of buying electronic goods purchased online, the product does not
match the initial description, or the product is damaged/defective during the trip so that these things cause doubts. In the minds of consumers, the higher the perceived risk of eating is inversely proportional to the demand for the purchase will be lower.

**Effect of Online Convenience on Purchase Intention**

Based on the results of the above test, there is a significant influence between online convenience variables on purchase intention. This study has a hypothesis which states that online convenience has a negative and significant effect on purchase intention.

After conducting interviews with informants regarding the convenience of online shopping, which affects an intention to buy food, according to the informant, if the appearance of a website or application is attractive, the resource person focuses more on the appearance and features of the web/application which is attractive so that it overrides the purchase intention because it is too comfortable. With the appearance or features of these features, so that online convenience has a negative and significant influence on purchase intention.

**Effect of Purchase Intention on Purchase Behavior**

Based on the results of the above test, there is a significant influence between the purchase intention variables on purchase behavior. So from this study, the hypothesis states that purchase intention is to have a positive and significant influence on purchase behavior. The results of this study are in accordance with the results of previous studies conducted by Grecia et al. (2020)[33], which shows that there is a purchase intention that has a positive and significant influence on purchase behavior in this study. Rausch and Kopplin (2020) [36] show that there is purchase intention to have a positive and significant influence on purchase behavior in this study. From these findings, it can be interpreted that asking for purchase of a product is an important factor in building buying behavior.

So it can be assumed that the increase in purchase intention can also increase consumer purchase behavior by making purchases online. It will increase a consumer’s habit of making purchases online, so that increasing purchase intensity will also increase the behavior/habits of these consumers to shop.

**5 Implication and Suggestions for Future Research**

The results of research and analysis conducted by researchers provide several managerial implications which are expected to be useful for the electronics industry, especially home appliances in Indonesia, especially on websites/sites or online applications:

- **E-WOM to increase purchase intention:** by providing online education and guidance as well as improving the quality of the product so that consumers can review the product properly in online forums such as in reviews one-commers or other discussion forums. So that if the product gets a good review from the web/online application, consumers will no longer hesitate to buy the electronic product online and increase purchase interest.

- **Social media marketing to increase purchase intention:** by doing marketing through social media such as Instagram, Youtube, Facebook, Twitter, and recently are booming, namely TikTok by exploring marketing through social media which. In fact, electronic products rarely do marketing through social media and still mostly use television and banners on the highway, which is one-way marketing with using social media such as Instagram, YouTube, Instagram, Facebook, Twitter, and TikTok, consumers can interact directly such as commenting, and the seller can answer questions in the minds of these consumers so that they educate and promote their electronic products and besides that, by using social media such as
Facebook ads and Instagram ads, we can knowing algorithms and insights in the form of data from consumers so that we can be more accurate in making the most appropriate approach to these consumers so that using social media can increase the purchase intention of an electronic product.

Purchase intention to increase purchase behavior: with increased interest in buying food, it will automatically increase the habits of these consumers who used to still buy electronic products offline and then can change their habits to switch to buying products online. To increase buyer interest, e-wom and social media marketing can increase, so that purchase intentions increase, thereby increasing purchase behavior.

Based on the results of the research that has been done, the researcher provides several suggestions for further research: It is hoped that more respondents can be added so that the results obtained are more accurate. Differences from the point of view of different industries, It is expected to add other variables that can affect Purchase Behavior because there are 41% of other variables that can affect this variable.

References


