Easy Communication System as A Mediation of The Influence of Whatsapp Business on Consumer Purchase Intention on The Marketplace

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Abstract
Marketing using social media is a necessity in the era of industrial technology 4.0. This research problem is a business phenomenon and gap research. The purpose of this study is to analyze; 1. the direct influence of business WhatsApp on purchase intention in the marketplace. 2. the influence of business WhatsApp on the ease of communication system in the marketplace. Three, the influence of the ease of communication system on consumer purchase intentions in the marketplace. 4. the influence of business WhatsApp on purchase intentions on the marketplace mediated by the ease of communication systems on the marketplace. The unit of analysis of this research is Sri Rejeki, and Seruni SMEs, a sample of 60 consumers, accidental sampling technique, data collection using a questionnaire (google form), testing the validity and reliability of indicator statement items, data analysis technique used is path analysis with the SPSS program. The results show that WhatsApp Bisnis has no direct and insignificant effect on consumers’ purchase intentions. WhatsApp Business has a positive and significant effect on the ease of communication has a positive and significant effect on consumer purchase intentions. WhatsApp Business has a positive and significant effect on consumer purchase intentions mediated by the ease of communication system. The novelty of this research is to create an ease of communication system to increase consumer purchase intentions on the marketplace. Ease of communication is a mediation between the influence of WhatsApp business on purchase intentions on the marketplace so that the ease of communication is an important variable that needs to be improved so that consumers intend to use the marketplace in purchasing products. The ease of communication is related to the ease of using the application, the ease of alternative transactions, and the design of a simple order form. This is hope for consumers to use the marketplace. Contribution of marketplace training to MSMEs and community business actors.

Keywords: WhatsApp Business, ease of communication system, and consumer purchase intentions

INTRODUCTION
Marketing using social media is a necessity in the era of industrial technology 4.0. Social media is a medium that can help business people in promoting their products. WhatsApp Business is a chat application specifically for business people. WhatsApp is specifically made for individual business owners, Small and Medium Enterprises (SME) group businesses. WhatsApp Business can be an alternative to business-specific chat applications that are useful for business owners, which can be downloaded for free. This application helps many buyers to communicate with sellers

Currently, many business people are constrained by the emergence of the Covid 19 outbreak, but on the one hand, it is an opportunity for business people to be creative and innovative to create new ideas and methods to maintain their business. The role of technology helps the smooth running of the business,
especially applications that support online-based businesses such as web designing, online stores, etc. Consumer shopping habits have shifted from traditional ways of using applications to order products or services. These changes are not easily made by consumers.

Purchase intention is the behavior of consumers who want to buy a product or service and will do so shortly, and sometimes consumers tell other parties to realize their desires (Kotler & Armstrong, 2014).

The problem that arises is that there are no products or services available as well as business WhatsApp directly through the marketplace page for Seruni and Sri Rejeki business people. How is the consumer’s purchase intention on the pasa-pasai.com marketplace page after the business WhatsApp integration is carried out? It’s still quiet. In addition, there are contradictions in previous research explained by (Cham, Cheng, & Ng, 2020). Social media does not directly affect purchase intention. (Irshad, Ahmad, & Malik, 2020) stated that social media directly influences online purchase intentions. There is a contradiction in the results of the research; it is necessary to create an ease of system communication so that system communication, as a novelty in the developed model, needs to be studied scientifically.

The aims of this research are:
2. Analyzing the influence of business WhatsApp on the ease of communication system in the marketplace.
3. Analyzing the effect of the ease of communication system on consumer purchase intentions in the marketplace.
4. Analyzing the influence of business WhatsApp on purchase intentions on the marketplace mediated by the ease of communication systems on the marketplace.

LITERATURE REVIEW

Social Media

Social Media is a medium to socialize with each other and is done online, which allows humans to interact with each other without being limited by space and time. Social Commerce Intentions use affects Use Behavior (Sheikh, Yezheng, Islam, Hameed, & Khan, 2019); (Zafar, Qiu, & Shahzad, 2019) social media usages affect purchase risk. Trust toward retailers present on Social Media influences online purchase intentions (Irshad et al., 2020) (Król & Zdonek, 2020); social media that are often used are Facebook, YouTube, Instagram, Snapchat, Spotify, WhatsApp, Skype (Purwandari, Otmen, & Kumaralalita, 2019); (Suliswanto & Rofik, 2019). (Oppong, Singh, & Kujur, 2020) explains the use of social media, namely.
1. Using social media in business can increase productivity
2. Using social media makes it possible to complete business tasks faster
3. Using social media makes it easier to do business
4. Respond very quickly to changes in social media technology in the environment

One of the social media used by small businesses, namely WhatsApp Business, is a chat application specifically for business owners. Profiles on WhatsApp Business contain business information for business people. Starting from the name, address, business category, description, email, and website. During this covid 19, traditional ways of shopping consumers switched to using applications, for example, online shopping (Suparno, 2020) explains about online shopping.

1. Shopping online for real fun
2. The time spent online shopping is really fun
3. Enjoy online shopping for its own sake
4. During online shopping, consumers feel the thrill of hunting
5. When doing online shopping, consumers feel the sensation of adventure

Business WhatsApp is related to the ease of contacting the seller, the ease of sending messages, and the ease of interacting with the seller. Business people often use this application because it makes it easier to interact with many consumers. Ease of communication is inseparable from the ease of using the application, the convenience of alternative transactions, and the design of a simple order form in ordering products or services.

Purchase Intention

Purchase intention is the behavior of consumers who want to buy a product or service and will do so shortly, and sometimes consumers tell other parties to realize their desires (Kotler & Armstrong, 2014); (Peter & Olson, 2012) (Bianchi & Andrews, 2018) explains the indicators of purchase intention, namely

1. The consumer will plan to acquire the product or service directly through the retail brand’s Facebook page
2. Consumers expect to obtain products or services directly through a retail brand’s Facebook page
3. The consumer intends to obtain the product or service directly through the brand’s Facebook page

The relationship between the variables of this study

1. WhatsApp business influences purchase intentions in the marketplace (Cham et al., 2020); (Belanche, Cenjor, & Pérez-Rueda, 2019). Social media marketing does not directly affect purchase intentions (Irshad et al., 2020); social media directly affects Online Purchase intention
2. WhatsApp business influences ease of communication (Stocchi, Michaelidou, & Micevski, 2019) Mobile app object. (Stocchi et al., 2019); perceptions of the ease of use of the application on the ease of communication
3. Ease of communication influences purchase intention (Stocchi et al., 2019)); perceived ease of use of the application on purchase intention
4. WhatsApp business influences purchase intentions on the marketplace mediated by the ease of communication

This research is useful in developing marketplaces and consumer behavior theories related to business WhatsApp so that it can influence consumers’ purchase intentions in the pasa-pasai marketplace. Analyzing the influence of consumer intention to buy through a marketplace application, a model such as Figure 1 is made conceptual framework.
WhatsApp Business (X); Independence variable
Ease of communication system (Z); intervening variable
Purchase intention (Y); dependence variable

Hypothesis
1. WhatsApp Business has a direct effect on Consumer Purchase intention
2. WhatsApp Business affects the ease of communication
3. Ease of communication affects consumers' purchase intentions
4. WhatsApp Business has an effect on Consumer Purchase Intention mediated by the ease of communication

RESEARCH METHOD
The unit of analysis of this research is the consumers of two MSMEs, namely Seruni and Sri Rejeki. The number of samples is 60 consumers; the sampling technique uses accidental, conduct validity, and reliability testing. Hypothesis testing is done by using path analysis with the SPSS program to test the effect between variables. Data analysis is the descriptive and quantitative analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator/items Variable Operational</th>
<th>Loading Factor</th>
<th>Status</th>
</tr>
</thead>
</table>
| WhatsApp Business (Cham et al., 2020) | 1. Ease of contacting the cell  
2. Ease of sending messages  
3. Ease of interacting with the seller | 0,923  
0,959  
0,913 | Valid  
Valid  
Valid |

Figure 1. Conceptual framework
Ease of communication system (Stocchi et al., 2019) | Marketplace application design that makes it easy for consumers to communicate  
---|---  
1. ease of use of the application  
2. alternative transaction convenience  
3. simple order form design  
0.837 | Valid
Purchase intention on the marketplace (Cham et al., 2020) | easily Intention to use the marketplace application, shortly want to use the marketplace and notify other parties of the existence of the marketplace  
---|---  
1. want to use the Marketplace application  
2. Shortly using the marketplace  
3. will notify other parties there is a marketplace  
0.871 | Valid

Source: (primary data processed)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Composite Reliability</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>WhatsApp Business (X1)</td>
<td>0.924</td>
<td>0.952</td>
<td>Reliable</td>
</tr>
<tr>
<td>Ease of communication (Z)</td>
<td>0.673</td>
<td>0.816</td>
<td>Reliable</td>
</tr>
<tr>
<td>Purchase intention on the marketplace (Y)</td>
<td>0.773</td>
<td>0.869</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: (primary data processed)

In this research, validity and reliability were tested. The value of $r > 0.3$, then the research items are said to be valid. If Cronbach's alpha value $> 0.6$ is declared reliable. The composite reliability value is greater than the Cronbach alpha value, so it is recommended to use Composite Reliability to measure reliability.

FINDINGS AND DISCUSSION

Descriptive

Descriptive analysis is an analysis of the data presented in the form table, in this study related to the products sought by consumers in the marketplace, in addition to the exposure of consumer profiles related to gender, age, occupation, education, and income of consumers who visit the pasa-pasai market.com

<table>
<thead>
<tr>
<th>Product searched</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Culinary</td>
<td>13</td>
<td>21,7</td>
<td>21,7</td>
<td>21,7</td>
</tr>
<tr>
<td>Clothes</td>
<td>27</td>
<td>45,0</td>
<td>45,0</td>
<td>66,7</td>
</tr>
<tr>
<td>Education/training</td>
<td>16</td>
<td>26,7</td>
<td>26,7</td>
<td>93,3</td>
</tr>
</tbody>
</table>

Source: (primary data processed)
### Table 4. Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>37</td>
<td>61,7</td>
<td>61,7</td>
<td>61,7</td>
</tr>
<tr>
<td>Women</td>
<td>23</td>
<td>38,3</td>
<td>38,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Source: (primary data processed)

### Table 5. Age of consumer

<table>
<thead>
<tr>
<th>Age of consumers (Year)</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-18</td>
<td>5</td>
<td>8,3</td>
<td>8,3</td>
<td>8,3</td>
</tr>
<tr>
<td>19-23</td>
<td>23</td>
<td>38,3</td>
<td>38,3</td>
<td>46,7</td>
</tr>
<tr>
<td>24-26</td>
<td>2</td>
<td>3,3</td>
<td>3,3</td>
<td>50,0</td>
</tr>
<tr>
<td>27-29</td>
<td>2</td>
<td>3,3</td>
<td>3,3</td>
<td>53,3</td>
</tr>
<tr>
<td>&gt;30</td>
<td>28</td>
<td>46,7</td>
<td>46,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Source: (primary data processed)

### Table 5. Consumer education

<table>
<thead>
<tr>
<th>Consumer education</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>senior High School</td>
<td>43</td>
<td>71,7</td>
<td>71,7</td>
<td>71,7</td>
</tr>
<tr>
<td>Bachelor</td>
<td>16</td>
<td>26,7</td>
<td>26,7</td>
<td>98,3</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>1</td>
<td>1,7</td>
<td>1,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Source: (primary data processed)

### Table 4.5 Consumer jobs

<table>
<thead>
<tr>
<th>Consumer Jobs</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>4</td>
<td>6,7</td>
<td>6,7</td>
<td>6,7</td>
</tr>
<tr>
<td>College student</td>
<td>22</td>
<td>36,7</td>
<td>36,7</td>
<td>43,3</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Government employees</th>
<th>21</th>
<th>35,0</th>
<th>35,0</th>
<th>78,3</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-employed</td>
<td>3</td>
<td>5,0</td>
<td>5,0</td>
<td>83,3</td>
</tr>
<tr>
<td>entrepreneur</td>
<td>4</td>
<td>6,7</td>
<td>6,7</td>
<td>90,0</td>
</tr>
<tr>
<td>other</td>
<td>6</td>
<td>10,0</td>
<td>10,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Source: (primary data processed)

Table 4.6 Consumer Income

<table>
<thead>
<tr>
<th>Consumer Income (Million)</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid &lt; 5</td>
<td>52</td>
<td>86,7</td>
<td>86,7</td>
</tr>
<tr>
<td>5 &lt; 7,5</td>
<td>5</td>
<td>8,3</td>
<td>95,0</td>
</tr>
<tr>
<td>7,5&lt; 10</td>
<td>2</td>
<td>3,3</td>
<td>98,3</td>
</tr>
<tr>
<td>&gt;10</td>
<td>1</td>
<td>1,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100,0</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Source: (primary data processed)

Descriptive consumer profiles can be concluded, namely the various demands that consumers want in this market, especially clothing products, education/training, culinary, and others such as household appliances. This request is the target market that will be offered by market-market business players. The results of research using path analysis with the SPSS program are as follows

Quantitative analysis

<table>
<thead>
<tr>
<th>Search Variable</th>
<th>Predictor</th>
<th>Path Coefficient</th>
<th>Sig</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Y</td>
<td>0,037</td>
<td>0.835</td>
<td>Not Significant</td>
</tr>
<tr>
<td>X</td>
<td>Z</td>
<td>0,764</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Z</td>
<td>Y</td>
<td>0,473</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Based on the results of data processing, it can be discussed testing the test of the influence between variables, namely as follows
Hypothesis Testing

Hypothesis testing: There are four tests as follows: First hypothesis testing; Business WhatsApp affects marketplace purchase intention

Hypothesis testing 1:

Based on Table 4.7, it shows that WhatsApp business does not directly affect purchase intention on the marketplace, the path coefficient = 0.037, (Sig = 0. 0.835 ) > 0.05. WhatsApp Bisnis has no significant effect on purchase intention in the marketplace (H1 is not proven). In other words, business WhatsApp is related to the ease of contacting the seller, the ease of sending messages, and the ease of interacting with the seller. The existence of business WhatsApp can be ignored by consumers.

Hypothesis testing 2:

Based on Table 4.7, it shows that WhatsApp business affects the ease of system communication in the marketplace, the path coefficient= 0.767, ((Sig = 0.000) < 0.05). WhatsApp Bisnis has a significant effect on the ease of system communication in the marketplace (proven H2). In other words, business WhatsApp is related to the ease of contacting the seller, the ease of sending messages, and the ease of interacting with the seller. This can improve system communication easier on the pasa-pasai.com marketplace

Hypothesis testing 3:

Based on Table 4.7 shows that the ease of system communication affects purchase intentions in the pasa-pasai.com marketplace, the path coefficient = 0.473 (Sig = 0.010 ) <0.05. The ease of system communication has a significant effect on the purchase intention of the pasa-pasai.com marketplace (H3 is proven). In other words, the ease of communication is related to the ease of using the application, the ease of alternative transactions, and the design of a simple order form. This can increase purchase intentions on the pasa-pasai.com marketplace,

Hypothesis testing 4:

To determine the ease of communication is mediation or not, the path coefficient of each variable can be considered. In this case, WhatsApp business does not have a direct and insignificant effect; automatically, the ease of system communication in the model is mediation or can be calculated using the following method.

Determination Coefficient (R square)
Ease of communication (R21) = 0.583
Purchase intention on the marketplace (R22) = 0.252

The indirect influence of WhatsApp business on purchase intention through ease of communication is 0.764 x 0.473 = 0.361. This number is greater than 0.037 (direct influence of WhatsApp business on purchase intention), so it can be stated that ease of communication is an intervention variable. That is, communication can increase the influence of WhatsApp business on purchase intention. To see the fit model, as follows

\[ P_{E1} = 1 - 0.583 = 0.417 = 0.6457 \]
\[ P_{E12} = 1 - 0.252 = 0.748 = 0.8649 \]
The coefficient of the total determinant is as follows

\[ R_m^2 = 1 - (Pe_1 \times Pe_2)^2 = 1 - (0.6457)^2 \times (0.8649)^2 \]
\[ = 1 - 0.41 \times 0.75 \]
\[ = 0.70 \]

\[ R_m^2 = 70.00\% \], where WhatsApp Business and ease of communication have contributed 70.00% to purchase intention on the marketplace, the remaining 30% is influenced by other variables that cannot be detected by the hierarchical model.

**Discussion**

The first hypothesis testing shows that WhatsApp business does not directly affect the purchase intention in the marketplace. This means that WhatsApp is a business but does not affect the intention to purchase/use the pasa-pasai.com marketplace. WhatsApp Business provides convenience or not, and this is ignored by consumers. This study supports the theory and previous research, namely (Cham et al., 2020); (Nelson, Moore, & Swanson, 2019). Social media marketing does not directly affect purchase intention. The reason why business WhatsApp does not affect purchase intentions on the marketplace is that business WhatsApp has not been integrated with the pasa-pasai.com.

Testing the second hypothesis shows that business WhatsApp affects the ease of system communication in the marketplace. This means that WhatsApp is related to the ease of contacting the seller, the ease of sending messages, and the ease of interacting with the seller, which will increase the ease of system communication, the better. The results of this study support research (Stocchi et al., 2019): Objects on mobile apps show that social media affects perceptions of the ease of using applications.

Testing the third hypothesis shows that the ease of system communication affects purchase intentions in the pasa-pasai.com marketplace. In other words, the ease of system communication is related to the ease of using the application, the ease of alternative transactions, and the design of a simple order form. This can increase purchase intentions on the pasa-pasai.com marketplace. The results of this study support research (Stocchi et al., 2019): Objects on the mobile app show the ease of system communication affects purchase intentions on the pasa-pasai.com marketplace.

Fourth hypothesis testing; To determine the ease of communication as mediation or not, the path of each variable can be considered. In this case, the influence of business WhatsApp does not have a significant direct effect; automatically, the ease of communication in the model is mediation, so that the ease of system communication is an important variable that needs to be created in the marketplace. It is proven that the ease of system communication must be created so that it can create consumer purchase intentions in the marketplace. The ease of communication designed on the marketplace provides convenience so that consumers intend to buy/use the marketplace. The results of this study support research (Stocchi et al., 2019): Objects on the mobile app show the ease of system communication related to easier application use, the ease of alternative transactions, and the design of a simple order form. positively related to purchase intention on the marketplace pasa-pasai.com.

**CONCLUSION AND FUTURE RESEARCH**

**Conclusion**

1. WhatsApp Business has no direct and insignificant effect on consumer purchase intentions. This means WhatsApp Business can be repaired
2. WhatsApp Business has a positive and significant effect on the ease of system communication on the pasa-pasai.com marketplace
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3. Ease of system communication has a positive and significant effect on consumer purchase intentions on the pasa-pasai.com marketplace

4. WhatsApp Business has a positive and significant effect on consumer purchase intentions mediated by the ease of system communication, meaning that the existence of WhatsApp Business can increase consumer purchase intentions if it is supported by system communication regarding easy-to-use applications, providing easy alternative transactions, simple order forms.

Suggestions
Ease of communication is a mediation between the influence of business WhatsApp on purchase intentions on the marketplace so that the ease of system communication is an important variable that needs to be considered so that consumers intend to buy/use the marketplace in purchasing products. The ease of communicating the system is related to the ease of using the application. Alternative ease of transactions and simple order form design. This is hope for consumers to use the marketplace. Further researchers can develop better models because there are still opportunities; in this case, they can add risk handling variables, trust variables in the marketplace.

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