The Intensity of the Use of Social Media on Innovation and Performance in Jabodetabek (Indonesia) SMEs

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ABSTRACT

This era of globalization makes social media easily adopted by business people. Social media is currently widely used by Jabodetabek SMEs as a means of doing business in improving performance in Jabodetabek SMEs. This study looks at the effect of using Social Media on Innovation and Performance. To get the results of the research, questionnaires were distributed and interviews were conducted directly with SMEs in Jabodetabek. Distribution of questionnaires was conducted in January-March 2019 by means of online and offline deployment. The results of the respondents obtained as many as 98 respondents using the Slovin formula. The variables in this study are social media, innovation, and performance. Data analysis was carried out by qualitative and quantitative descriptive with SEM-PLS tools. The results of this study indicate that the intensity and effect of using social media on product performance innovations in SMEs in Jabodetabek show significant results.

Keywords: Media social, Innovation, Performance, SME

1. INTRODUCTION

Indonesia is an archipelago with a large numbers of occupations with the use of social media almost half of the population. According to data released by We Are Social and Hootsuite (2017) saying that the use of social media amounted to 130 million people from the total population of Indonesia at 265.4 million which means that as many as 49% of Indonesian people have used social media in their daily lives.

The Ministry of Cooperatives & SMEs (Kominfo) 2016, also stated that only 3.79 million SMEs used social media in marketing their products. Clearly, Kominfo stated that only about 9% of the total number of 59.2 million SMEs in Indonesia had integration and capability in e-commerce. This amount is certainly very small compared to the SME population in Indonesia.
One area in Indonesia that has a diverse number of SMEs is Jabodetabek. Jabodetabek is an acronym area from Jakarta, Bogor, Depok, Tanggerang, and Bekasi. Jabodetabek is a region that has a strong attraction because it is directly adjacent to the capital city of Indonesia. Being an urban area makes Jabodetabek the first choice for building and developing a business. This makes the Jabodetabek area the central region of the largest foreign exchange contributor to Indonesia, one of which is the development of quite large SMEs in Jabodetabek.

The existence of SMEs in the application of social media in business is a new trend that is quite popular. Through social media, SMEs can easily interact with buying and selling with customers. According to Heller & Parasnis (2011), social media is a marketing tool that can be customer relationship management and can be used to target something in the customer segment. Research conducted by Priambada (2017) says that the potential for using social media has great potential that can support the success of SMEs in Malang (Indonesia).

Seeing the positive impact of the use of social media that has been carried out by several of the studies above, the researchers are interested in seeing the extent to which the intensity of the use of social media towards innovation and performance in SMEs in Jabodetabek. This study has specific objectives, namely as follows:

1. Analyzing the intensity of social media use in SMEs in Jabodetabek.
2. Analyzing the relationship between social media on innovation and performance in SMEs in Jabodetabek.

2. LITERATURE REVIEW

2.1 Social Media

Social media is a communication technology that makes it easy for users to interact with each other. According to Puntoadi (2011), social media is a website-based feature that forms networks and allows users to interact in a community. Puntoadi also said that social media provides an opportunity to enter pre-existing communities and provides an opportunity to get direct feedback. Social media has many forms, including the most popular, namely youtube, facebook, twitter, Instagram, line, Google+, Facebook Messenger, WhatsApp, BBM. According to Puntoadi (2011) examples of social media such as Twitter, Facebook, Blog, and others.

2.2 Innovation

According to Ancok (2012), innovation is the result of implementing one's thinking to produce new products and services and according to Fontana (2011) innovation as a form of economic success is due to the introduction of new ways or collaboration between new and old ways of transforming technology which can then produce large and drastic changes in the comparison between the perceived value of consumers and the defined prices and benefits product produced.

2.3 Performance

Performance in an organization has a standard size that varies according to the policies implemented. According to Moeheriono (2009) defines performance as
the level of achievement of each program or policy implementation to be able to realize the goals, objectives, vision, and mission of the organization through the strategic planning process. Hakim (2006) also defines performance as the work achieved by employees who are adjusted for roles and tasks in the organization for a certain period of time, which is then connected to a certain measure of value or standard within the organization. This difference in the measurement standards for performance achievement determines the quality and quantity of each business actor.

According to Kietzmann et al. (2011), social media defines its function as:

a. The identity that goes beyond where the user introduces himself.
b. Presence is about where social media users will know the existence of others.
c. Sharing that exceeds where social media becomes a place to exchange, gather and receive content.
d. The relationship is the extent to which social media becomes the link between one another.
e. Groups that need social media that can form a community of users.
f. Conversation means which media can make users communicate
g. A reputation that is just where social media can become informed about the social status of other users.

3. RESEARCH METHODS
3.1. Data and samples
Primary data in this study were obtained from the dissemination and interviews of all respondents in SMEs in Jabodetabek. Secondary data was obtained from studying various writings from books, journals, and the internet. The determination of the sample in this study uses the Slovin formula with an error rate of 10%. As for SMEs, which is my research, it is engaged in the culinary field. Jabodetabek Trade and SME Office of 6843 SMEs. Determination of SME sample size using the Slovin formula as follows:

\[
 n = \frac{N}{1 + Ne^2} = \frac{6843}{1 + 6843 (0.1)^2} = 98.55 = 98
\]

Information:
- \( n \) = sample
- \( N \) = population
- \( e \) = error Sampling

3.2. Measurement Variable
According to Mulyanto and Wulandari (2010) the variables that are the center of attention because they reflect the main problem of the research so that by observing several dependent variables it can easily be known research problems. In this study innovation and performance are dependent variables. Performance measurement aims to see whether SMEs experience improved performance. The measurement of innovation according to Tidd et al. 2009, namely product innovation. Performance measurement according to Narver and Slater (1988), namely sales volume.

According to Mulyanto and Wulandari (2010) variables that influence or cause changes in either positive or negative changes are independent variables (independent variables). Social media becomes an independent variable. According to Scuotto et al. (2017a), social media can be measured through social media platforms.

3.3. Research Model
This study uses qualitative and quantitative descriptive analysis with SEM PLS tools. With the conceptual model as in Figure 2.

Hypothesis 1: Social media has an influence on innovation in SMEs in Jabodetabek.
Hypothesis 2: Social media has an influence on the performance of SMEs in Jabodetabek.
Hypothesis 3: Innovation has an influence on the performance of SMEs in Jabodetabek.
Hypothesis 4: Social media has an influence on the performance of SMEs in Jabodetabek through innovation mediation.
4. RESULT AND DISCUSSION

4.1 Characteristics of Respondents

Respondents in this study were SMEs in Jabodetabek in the field of culinary business. Table 3 below will show the results of each respondent characteristic obtained.

<table>
<thead>
<tr>
<th>No.</th>
<th>Characteristics of Respondents</th>
<th>Total</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>52</td>
<td>53.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>46</td>
<td>46.9</td>
</tr>
<tr>
<td>2.</td>
<td>Age (Year):</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17-25</td>
<td>64</td>
<td>65.3</td>
</tr>
<tr>
<td></td>
<td>26-35</td>
<td>29</td>
<td>29.6</td>
</tr>
<tr>
<td></td>
<td>36-45</td>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td>3.</td>
<td>Last education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary school</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Junior high school</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>13</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>Diploma I-III</td>
<td>31</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>51</td>
<td>52.0</td>
</tr>
<tr>
<td>4.</td>
<td>Previous work:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lecturer</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Private employees</td>
<td>82</td>
<td>83.7</td>
</tr>
<tr>
<td></td>
<td>Housekeeping</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Processed by the Author (2019)

Based on Table 3 the characteristics of the respondents above indicate that the characteristics of the male sex are greater with a percentage of 53.1% and characteristics of female sex with a percentage of 46.9%. The age of the respondents is the most among the age of 17-25 years with a percentage reaching 65.3% which means more than half the number of respondents in this study. Based on the education level of respondents in this study, half of the number of respondents with a percentage of 51% S1 graduates, then based on the type of work, the majority of respondents in this study were private employees with a percentage of 83.7%. In this study, the minimum effort for SMEs was 1 year. In Table 4 below, the highest percentage of SME businesses is 1-5 years with a percentage of 73.4%.

Table 4 Duration of Business

<table>
<thead>
<tr>
<th>No</th>
<th>Duration of Business</th>
<th>Number of SMEs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-2 year</td>
<td>36</td>
<td>36.7</td>
</tr>
<tr>
<td>2</td>
<td>3-5 year</td>
<td>36</td>
<td>36.7</td>
</tr>
<tr>
<td>3</td>
<td>6-8 year</td>
<td>14</td>
<td>14.3</td>
</tr>
<tr>
<td>4</td>
<td>More than 8 year</td>
<td>12</td>
<td>12.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>98</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Processed by the Author (2019)

Figure 3 below illustrates the results of the characterization of social media usage in business per day. Social media users in the business as much as 76.50% Jabodetabek SME owners use social media for businesses around 1-8 hours/day. Based on Table 5, the characteristic increase in turnover after using social media in this study is still relatively small. The biggest increase in turnover was felt in the percentage between 9-10% reaching 46.9%. The increase in turnover should be maximized by the frequent use of social media in every business transaction.

Table 5 Increase in turnover after using Social Media

<table>
<thead>
<tr>
<th>No</th>
<th>Increased Turnover</th>
<th>Number of SMEs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-3%</td>
<td>10</td>
<td>10.2</td>
</tr>
<tr>
<td>2</td>
<td>4-6%</td>
<td>25</td>
<td>25.5</td>
</tr>
<tr>
<td>3</td>
<td>7-8%</td>
<td>17</td>
<td>17.3</td>
</tr>
<tr>
<td>4</td>
<td>9-10%</td>
<td>46</td>
<td>46.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>98</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Processed by the Author (2019)
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According to Ghozali (2008), indicators are stated to fulfill validity and reliability if the value of outer loading (≥ 0.5), Composite Reliability (≥ 0.6), Average Variance Reliability (≥ 0.5), and the value of Cross Loading (≥ 0.7). In this study, there are several indicators on social media that meet standard loading factors (X1.1, X1.5, X1.6), innovations (X2.1, X2.3, X2.4, X2.5) and performance (Y2.1, Y2.2, Y2.3, Y2.4), composite reliability values for social media (0.886), innovation (0.799), and performance (0.927). Reliability average variance value of social media value (0.575), innovation (0.661), and performance (0.761), and finally cross loading value for social media (0.889), innovation (0.880), and performance (0.921).

Figure 4 shows the results of the analysis of the loading factor, composite reliability, AVE and cross loading values that have met the measurement requirements or standards in the criteria of each variable, so it can be concluded that all indicators are good and said to be valid.

Analysis of SEM-PLS Intensity of Social Media Usage on Innovation and Performance SMEs in Jabodetabek

Inner model evaluation

Table 6 Results of path coefficients

<table>
<thead>
<tr>
<th>No</th>
<th>Variabel Laten</th>
<th>Original Sample (O)</th>
<th>Standard Error (STERR)</th>
<th>T-Statistic (O/STERR)</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Social Media&gt; Innovation</td>
<td>0.415</td>
<td>0.442</td>
<td>4.403</td>
<td>Significant</td>
</tr>
<tr>
<td>2</td>
<td>Social media&gt; Performance</td>
<td>0.066</td>
<td>0.078</td>
<td>0.571</td>
<td>Significant</td>
</tr>
<tr>
<td>3</td>
<td>Innovations&gt; Performance</td>
<td>0.558</td>
<td>0.550</td>
<td>4.703</td>
<td>Significant</td>
</tr>
<tr>
<td>4</td>
<td>Social media&gt; Innovation&gt; Performance</td>
<td>0.231</td>
<td>0.242</td>
<td>3.300</td>
<td>Non Significant</td>
</tr>
</tbody>
</table>

Source: Primary Data, processed (2019)

Description: * T-Statistics (|O|/STERR) > T-table at alpha 10% (> 1.96) Accept the hypothesis
* T-Statistics (|O|/STERR) < T-table at alpha 5% (> 1.96) Reject the hypothesis

Hypothesis testing

Hypothesis testing is done to answer the research objectives. To answer the hypothesis a bootstrapping technique is performed in the path coefficient results in Table 6:

Hypothesis 1: Social media has an influence on innovation in SMEs in Jabodetabek.

In the value of the path coefficient in table 6, the t-statistic value is 4.5497 with a value greater than 1.96 which states that social media has an influence on innovation in SMEs in Jabodetabek. The results of this
hypothesis are supported by research conducted by Ahmad et al. 2018 which states that the use of social media is able to create an innovation that attracts customers. In this case, through social media, SMEs are able to create an innovative atmosphere which is then applied in running their business.

**Hypothesis 2.** Social media has an influence on the performance of SMEs in Jabodetabek.

In the value of the path coefficient in table 6, the t-statistic value is 0.554 which is smaller than 1.96 which states that social media has no influence on the performance of SMEs in Jabodetabek. This shows that the use of social media in SMEs in Jabodetabek is still low. SMEs still use social media as a trend, and the application of information obtained by SMEs in Jabodetabek on social media still cannot be applied.

**Hypothesis 3.** Innovation has an influence on the performance of SMEs in Jabodetabek.

In the value of the path coefficient in table 6, the t-statistic value is 4.517 with a value greater than 1.96 which states that innovation has an influence on the performance of SMEs in Jabodetabek. The results of this hypothesis are supported by Bueno and Ordonez (2004) that innovation is the most important determinant of the success of the company in achieving its performance. The created innovation will be a competitive value for SMEs in Jabodetabek to compete and improve the quality of the products produced.

**Hypothesis 4:** Social media has an influence on the performance of SMEs in Jabodetabek through innovation mediation.

In the value of path coefficient in table 6, the t-statistic value is 3.816 with a value greater than 1.96 which states that social media has an influence on performance through mediating innovation in SMEs in Jabodetabek. This result is in line with the research conducted by Hanna et al. (2011) who said that social media can be used as a suitable tool to be able to influence current customers and have the potential to improve and make changes in products or the creation of new products that include customers. SMEs in Jabodetabek have made innovations such as modifying old products by looking at market trends. The relationships that exist between social media users, in this context are customers and buyers, can to produces product innovations that can increase purchases and customer satisfaction for the products received.

**5. CONCLUSION**

Based on the results of the analysis in this study conducted on SMEs in Jabodetabek, that SMEs in Jabodetabek, in this case, SMEs in the culinary field based on the length of daily use of social media in SMEs in Jabodetabek are still fairly low, where users are only around 8 hours per day. Social media, which is a tool for interaction that knows no time and is appropriate, should be used more. In connection, the use of social media carried out by SMEs in Jabodetabek, in this case, affects the turnover earned by these SMEs. In this case, the increase in SME turnover in Jabodetabek is not more than 10% per year. Through social media, SMEs can easily find information and collaborate to produce competitive products.

In this study also, social media has an influence on performance if innovations are carried out through products that will be produced. The innovation carried out by SMEs will produce new products, namely products that differentiate with competitors, and will certainly be able to attract customers. In this case, SMEs in Jabodetabek is expected to be more open in using social media so that the information obtained is broader. Information obtained by SMEs will certainly affect the style and manner of SMEs to produce new products. Innovation is the most important key to improving the performance of SMEs.

**6. SUGGESTIONS**

Based on the conclusions above, the suggestion that the researcher can convey is that
the use of social media in terms of improving performance cannot work if there are no innovations done, therefore SME customers are expected through social media to create varied innovations that attract the performance of SMEs. In this case, SMEs must increase the use of social media. Increased use of social media can be done by using social media specifically for businesses because the use of special social media accounts for this business will automatically increase the operating hours of SMEs in terms of online transactions. Through social media accounts, especially businesses, incoming messages will be automatically answered by the machine, so the transaction process can run 24 hours. Further researchers can add references from books and journals that support research. It is hoped that further research will be more detailed regarding the impact of social media on the performance of SMEs. In addition, additional analysis is also needed to obtain a greater impact on knowledge creation, innovation and performance in SMEs.

REFERENCES

- [Internet] We Are Social. 2017. Digital in 2017; Southeast Asia. A Study of Internet, Social media, and Mobile use Throughout the Region.
- [Internet]. Kementerian Koperasi dan UKM. 2008. UU RI No 20 Tahun 2008.
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