IMPACT ON E-COMMERCE ADOPTION ON ENTREPRENEURIAL ORIENTATION AND MARKET ORIENTATION IN BUSINESS PERFORMANCE OF SMEs

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ABSTRACT

In the industrial ERA 4.0, changes digitally and physically are inevitable, as well as for small to medium enterprise (SMEs). The majority of SMEs in Jambi Province have not conducted digital technology as a marketing strategy for the expansion of its market share. The purpose of this research are: (1) analyzing the impact of entrepreneurial orientation on SME business performance, (2) analyzing the influence of market orientation with the e-commerce adoption towards SMES’s business Performance (3), interpreting the e-commerce adoption and market orientation impact to SME’s business performance. The research design uses the Mix method of qualitative and quantitative. The data is collected by primary and secondary data. The data analysis techniques uses Structural Equation Model (SEM) and ran by SmartPLS3 program. Samples of this study consist of 250 SMEs who have already used digital e-commerce technology in Jambi Province. The result of data processing indicates there is a significant influence between entrepreneurial orientation, market orientation and e-commerce adoption to SME’s business performance in Jambi Provinces. We believe that entrepreneurial orientation, market orientation and e-commerce adoption model in this study will have both managerial and academic positive implication. This study will have managerial implication for practitioners in Indonesia and other countries. Academic implications is also need for researcher who are interested in increasing SME’s business performance in term of e-commerce adoption.

Contribution/Originality: This study will have managerial implication not only for practitioners in Indonesia, but also those in other countries. This study contributes to existing literature of SME’s business performance, e-commerce adoption and marketing management. The result of this research is also need to support previous research in field of marketing, market orientation and entrepreneurship.

1. INTRODUCTION

Business performance is the bench mark for the success of businesses (Westerberg & Wincent, 2008). The orientation of entrepreneurship one of the factors that affect the business performance of SMES (Ginta, 2014; Octavia, Erifa, & Yuniarti, 2012). Mahmood and Hanafi (2013) found that entrepreneurial orientation and business environment are factors affecting business performance. Entrepreneurial orientation figure out the extent of an
organization to develop innovation activities, to take risks entry new markets, to come up with new products and services and look new opportunities in the market and move faster than their competitors (Soininen, Martikainen, Puimalainen, & Kyläheiko, 2012). An organization with strong entrepreneurial orientation has more resources allocated for innovation to gain competitive advantage related to daily activities (Bai & Ren, 2016; Ha, Lo, Mohamad, & Ramayah, 2018a). Entrepreneurial orientation has been described as an antecedent to growth business performance in organization. Other factors such as management skills and business strategy as well as environmental factors also become antecedent towards improving the business performance of Small and medium enterprises (SMEs). Many research results provide a conclusion to the difficulty of SMES to develop rapidly among others (1) The difficulty of market access, (2) Lack access to capital and banking, (3) Limitation of technological Mastery, (4) The difficulties of raw materials and (5) limitation of network. However, these limitations for some SMES are not a barrier to success in business. Based on interviews with some successful SMES, strong willingness to progress and innovation capability are some strong capital for SMEs to succeed.

The revolutionizing digital technology is the way businesses are conducting in worldwide. The impact of the information and communications technologies on businesses has been tremendous. The access digital technologies is being used physical and digital by businesses to share, communicate, collaborate, buy and sell products and services. One of application of the Internet that is grabbing attention in consumer is e-commerce. Iansiti and Lakhani (2014) that e-commerce as the process of buying and selling goods and services electronically through computerized business transactions. The development of such high technology today (the Era of Industrial Revolution 4.0) demands small and medium enterprises (SMEs) to be able to adapt to such changes and developments not only in the world but also in South East Asia region. Sutanonpaiboon and Perason (2015) found that organizational readiness is strongly and highly influences e-commerce adoption. In Thailand, managerial support and financial, logistical, and technological factors are weigh heavily in determining organization if an SME can pursue e-commerce adoption. SMEs in Singapore and Thailand contribute 49% and 38% of the nations’ GDP (Amin, Thurasamy, Aldakhil, & Kaswuri, 2016). In 2018, the number of SMEs in Indonesia reached 62.92 million business units or 99.92 percent of the total business units in the country. The SME’s contribution to GDP in Indonesia reached 60 percent as well as the man power absorption of 116, 73 million people or 97.02 percent of the total working force. More than 36 percent of SMEs in Indonesia are still offline and 37% only have very basic online capabilities such as computers or broadband access, just about 18 percent have intermediate online capabilities i.e. using Web or media Social. While less than one-tenth or 9-percent is an advanced online business with e-commerce capabilities (http://liputan6. 2019). The development of business in Jambi Province is still in dominance affected by Small Medium Enterprises (SMEs). In the year 2017, the number of SMEs in Jambi Province reached 19.27 percent of 11 regencies or cities.

Small and medium enterprises (SMEs) play a significant and important role in the economic development of many countries all over the world. The growth opportunities for SMEs are increased as globalization era has reduce economies of scale (Razavi & AbAziz, 2017). SME is organizations that involve the overall economic factors demanding to be more flexible, adaptive and innovative, so that SMEs have a great opportunity to use e-commerce (Ha, Lo, Mohamad, & Ramayah, 2018b; Rao, Mets, & Monge, 2003). Furthermore, Abebe (2014) researched that SMEs who involved entrepreneurial orientation in its organization are better able to improve their business performance through the ability to adopt e-commerce and digital technology. Contrary with this, business performance increasing is not only affected by e-commerce adoption but also affected by social media usage (Raphael, Thomas, & George, 2017) and social commerce benefits (Ludwig & France, 2016).

In fact it is showed that SMEs ability to use internet technology is still weak and become one of the factors why many SMEs avoid the use the e-commerce strategy. The majority of small business enterprises have not benefited from the development of digital technology. Moreover, the economic potential of SMEs in Indonesia is very large.
The way of government programs to introduce SMEs with online transactions has not been balanced with intensive mentoring to SMEs to be able to adopt e-commerce as a marketing channel strategy.

Another factor that need to be considered is that not all SMEs products can be marketed through e-commerce especially for products that are damaged quickly and not durable if they have to be marketed to a remote sales location. Based on the existence of liability of smallness, SMEs have to cope with additional constraints of size and limited resources in comparison with large and established firms (Hyytinen, Pajarinen, & Rouvinen, 2015). In addition, privacy and security factors also need to be considered (Juste & Milyung, 2016). The most important thing to note is the company's image and brand, as a key factor in the success of utilizing Internet media (Jahanshahi, Zhang, & Brem, 2013). The following researched by Shemi and Procter (2018); Sullivan and Kim (2018); Ghobakhloo, Arias-Aranda, and Benitez-Amado (2011) for SMES there are most important factor to increase sales by using e-commerce is trust and commitment as well as innovation in addition to trust. The country's culture is also an important factor in the utilization of e-commerce (Hallikainen & Laukkanen, 2018).

The global economy continues to conduct a massive transformation in technology so SMEs must also adapt to the changes. The involvement of SME digitally can increase economic growth by 2 percent. In fact, predictable can have a revenue growth of between 23 percent-80 percent if skilled utilizing digital technology. Currently, SMEs who use Internet services close to 4 million, while in 2020 the government aims to become 8 million SMES. Moreover, the growth of internet users in Indonesia is huge about 143, 26 million in 2016. It is predict in 2030, Indonesia will become the fifth economic power after China, the United States, India and Japan when the digital economy is applied. This fact suggests that the use of e-commerce could increase SME’s revenues, but these opportunities have not been utilized by SMEs as they are still faced with various obstacles or weaknesses.

This research will answer the major research problem i.e. whether utilizing digital technology using e-commerce can improve SMEs business performance. Furthermore, this paper also will discuss how the impact of entrepreneurial orientation on SME's business performance through e-commerce adoption by SMEs as a marketing strategy is and how the impact market orientation on SME business performance in Jambi Province, Indonesia.

2. RESEARCH METHODOLOGY

The development of business in Jambi Province is still in dominance affected by Small Medium Enterprises (SMEs). The location of the research is in Jambi Province. The population in this research is small and medium enterprises that have been utilizing digital e-commerce technology in Jambi Province. Because the number of SME in Jambi Province was not detected clearly, the Samples of the research is 250 SMEs. The method designed is combining a qualitative and quantitative approach. Qualitative approaches is getting by Focus Group Discussion (FGD) and literature studies. Quantitative approach was used through surveys and interviews. The interview was based on short questionnaire. Each respondents was asked about their own characteristic. Next questions is more specific in advance about each variables and its dimension and indicators. A quantitative approach was used to analyze the relationship model between entrepreneurial orientation, e-commerce implementation and SME business performance. The development of business in Jambi Province is still in dominance affected by Small Medium Enterprises (SMEs).

The analysis tool is SEM program by using the software PLS (partial least square). The measurement of SEM with Smart PLS is using outer model and inner model. Evaluation of structural models or inner models aims to predict the relationship between latent variables by looking at the magnitude of the variance percentage described by looking at the value of R-Square and the T-statistics value in table Path Coefficients. Completely the proposed model of our study is explaining in the Figure 1:
Figure 1 illustrated a business performance model developed based on previous research results. Mahmood and Hanafi (2013) stated that entrepreneurial orientation could affect the company's business performance. Mazzarol (2015) found that there was an e-commerce, e-business and e-marketing relationship to the increase in SMES. Octavia et al. (2012) States market orientation and entrepreneurial orientation can improve business performance for SMES. Not only a direct relationship, but there is also an indirect relationship. Entrepreneurial orientation is becoming a driving factor in the emergence of market-oriented cultures Octavia et al. (2012) and can also foster interest in marketing its business online. Thus market orientation is a variable between the entrepreneurial orientation and business performance relationships. Some of the empirical testing results became the basis for building a research model and subsequent testing was conducted with SEM analysis.

3. FINDING AND DISCUSSION

Respondents in group studies became divided into several segments. 42 percent of respondents were less than 31 years old. The average level of education is 46 percent for senior high school level. 55.2 percent of respondents had more than 10 years of business experience. A total of 56.4 percent of current respondent's job positions are owner and business founder. The type of business is 60.4 percent respondent is in fashion business and most of the employees are average about 5-10 people.

To test the validity of the convergent, the condition used for initial check of the loading score is to meet the 0.6 level which is considered partially significant. Based on the results of the outer loading, the entire indicator of e-commerce utilization is above the value of 0.6 which means that the indicator has a partial valid and significant value. Furthermore the whole indicator of business performance variables and entrepreneurial orientation variables are also Above the value of 0.6 which means partial both of these variables have a valid and significant value. From eleven indicators of the market orientation variable, there are eight partially valid and significant variable indicators among them while three variable indicators showed partial significance criteria. These indicators have marginal value because they are below the value of 0.6. This means that there is no correlation between the three indicators and the construction of the research.

The value of average variance extracted (AVE) describes the validity of adequate convergent meaning. The single latent variable is able to explain more than half of the variants of the indicator. The AVE score must be above the 0.5 value and the Communality > 0.5 and the redundancy is approaching 1.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>AVE</th>
<th>Communality Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Commerce adoption</td>
<td>0.646</td>
<td>0.646</td>
</tr>
<tr>
<td>Business Performance</td>
<td>0.606</td>
<td>0.606</td>
</tr>
<tr>
<td>Entrepreneurial Orientation</td>
<td>0.527</td>
<td>0.527</td>
</tr>
<tr>
<td>Market Orientation</td>
<td>0.384</td>
<td>0.384</td>
</tr>
</tbody>
</table>
Based on the information in the Table 1, three variables namely e-commerce adoption, Business Performance and entrepreneurship Orientation have AVE value score above 0.5. This means that all three variables meet the defined measurement criteria. While the market orientation variable has a value below 0.5 which is 0.384. The proposed model lacked the support of primary data, although the model had been compiled based on empirical studies of some previous research results. The cut off point results indicate that the model is marginal. Testing and analysis of the next group of respondents needs to be done.

The value of communality on all the construction must be above 0.5 which will reinforce the test result. The results showed three variables of this research, namely e-commerce adoption, Business Performance and entrepreneurship Orientation has a communality value above 0.5 which means the three meet measurement criteria. While the market orientation variable has a marginal value that is 0.5. There should be further testing of the variables in the next study. The study of literature is also need in order to dig many information related to the research.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>0.942</td>
<td>0.931</td>
</tr>
<tr>
<td>Business Performance</td>
<td>0.884</td>
<td>0.835</td>
</tr>
<tr>
<td>Entrepreneurial Orientation</td>
<td>0.908</td>
<td>0.886</td>
</tr>
<tr>
<td>Market Orientation</td>
<td>0.870</td>
<td>0.836</td>
</tr>
</tbody>
</table>

Research construct stated in Table 2 is reliable if composite reliability value is above 0.7. Based on the data, it can be observed that all variables suit to measurement value.

Cronbach’s alpha real test observed that overall variables of this research got the measurement criteria for the reliability test. It can be said that the entire variables in the study met the criteria of the reliability composite value of > 0.7. So it concluded that the research construct has good reliability. Moreover, those all variables met the score of reliability. The higher the score, the greater the degree to which the firm is entrepreneurial orientated (Covin & Slevin, 1986). The lower the score, the greater the degree to which a firm is conservative oriented.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Original Sample</th>
<th>St deviation</th>
<th>T Stat</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC → BP</td>
<td>0.275</td>
<td>0.123</td>
<td>2.232</td>
<td>Supported</td>
</tr>
<tr>
<td>MO → EC</td>
<td>0.744</td>
<td>0.039</td>
<td>18.841</td>
<td>Supported</td>
</tr>
<tr>
<td>EO → BP</td>
<td>0.474</td>
<td>0.065</td>
<td>7.245</td>
<td>Supported</td>
</tr>
<tr>
<td>EO → MO</td>
<td>0.693</td>
<td>0.059</td>
<td>17.334</td>
<td>Supported</td>
</tr>
<tr>
<td>MO → BP</td>
<td>0.512</td>
<td>0.128</td>
<td>3.978</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The standard deviation of the entire variables is less than 1 (see Table 3). It describes the respondents have a varied assessment of the entrepreneurial orientation (EO), market orientation (MO) and e-commerce (EC) adoption to business performance (BP) of SMEs in Jambi Province. The regression construct with formative to evaluate the outer model showed significance value of T-statistics above 1.96. The following model in Figure 2 will describe the result:
Computer technology is also used for sales, one of the internet facilities to make online sales known as e-commerce terms. Online sales or e-commerce is an application and business process that connects stores and consumers through electronic transactions and can assist the store in marketing the maximum product. Based on the research results there is a positive influence of e-commerce variables on business performance, a positive value of 2.232 on the e-commerce variable means that if e-commerce significantly related to business performance.

E-commerce is not merely a mechanism of selling goods or services through the Internet media, but more on a business transformation that changes the ways companies in conducting its business activities. By utilizing e-commerce information about the products or services, SMEs generate can be conveyed widely. In SMEs, adoption of e-commerce also has an impact on the increase of sales turnover and can facilitate consumers in accessing products and prices. Mazzarol (2015) researched that digital technology, specifically information and communications technologies (ICT), and their application to e-commerce, e-business and e-marketing have had a significant impact on business at a global level. In this system has several advantages that there is information about the types of SMEs and products sold and information that can be accessed quickly and accurately so that the buying and selling process will be easier. The results of this study showed a positive influence between e-commerce with the improvement of business performance so that it is highly recommended for SMEs who have not used e-commerce to apply this technology to its business. For SMEs who are currently using e-commerce should be further improved the service to improve the performance of the business more optimally. Need assistance to SME actors in the utilization of digital technology. Thus, Mazzarol (2015) suggested that the ability for ICT adoption and use to have a significant influence on an SME’s performance and competitiveness is likely to depend on the firm’s ability to adequately train employees in the use of such systems.

The entrepreneurial orientation and its relationship to business performance has been an interesting topic of research in decades. Richard, Wu, and Chadwick (2009) reviewed that prior studies have empirically examined the independent effect of entrepreneurial orientation on performance, its contingent relationships with the external...
environment and organizational factors such as strategy, strategic processes, financial resources and knowledge based resources. Lumpkin and Dess (1996); Maa, Guo, and Shenc (2018) and Oluwatoyin et al. (2018) defined entrepreneurial orientation as a process, training and decision-making action that leads to the way something new. The results showed there was a positive influence of an entrepreneurial orientation variable towards business performance variables. A positive value of 7.245 in the entrepreneurial orientation variable gives meaning that entrepreneurial orientation significantly related to business performance. Previous empirical research also supports the premise of a positive relationship between entrepreneurial and business performance. In line with the research results of Octavia (2006) which stated entrepreneurial orientation and market orientation have a positive relationship to organizational performance. Al Mamun, Kumar, Ibrahim, and Bin (2017) reviewed entrepreneurial activities lead to the discovery of potential opportunities and initiating economic function by forming a new venture. The role of entrepreneurship becomes an important component of economic development and is significantly important by using many ways such as: identifying and exploring business, updating a business or creating new business.

In the SMEs context, the entrepreneurial orientation demonstrates a strong connection to SMEs performance. This is because SMEs have the ability to respond quickly to threats and business opportunities. This capability becomes the primary capital of SMEs to continuously maintain and improve its performance. Theoretical link between entrepreneurial and business performance can be inferred from the literature (Richard et al., 2009).

In addition, SMEs are very creative looking for existing market opportunities so that they can continue to survive in a variety of conditions. This advantage is not owned by large corporations. Thus it can be said that SMEs are able to survive in business competition when having entrepreneurial behavior such as proactive or able to quickly respond to threats and take advantage of available market opportunities. Then, dare to take risks on the business odds. Lastly, continue to innovate on the products and services provided to customers. Therefore, the behavioral orientation of entrepreneurship (autonomy, persistence, risky courage, competitive courage and innovation) is what affects the company's performance.

Market orientation is a business perspective that makes consumers a focus of attention in the whole Company's activities, Cravens and Piercy (2006). This is in line with the opinions of Kohli and Jaworski (1990) that the market orientation is: (i) studying market developments; (ii) sharing information with all members of the company; and (iii) adapting the market changes that occurred. Moreover Ardito, Messeni Petruzzelli, and Albino (2015) and Boohene (2018) discovered that there are two main strategic orientations can be distinguished in the literature. It consist of technology orientation and market orientation. It means that market orientation and its technology have relationship on business performance.

Data processing results indicate a positive influence between market orientation to business performance. A positive value of 3.978 in the market orientation means that market orientation variable significantly related to business performance. Some research results have proved to be a strong link between performance market orientation (Matsuno, Mentzer, & Özsomer, 2002). The results of the study that tested the causal relationship between market orientation and the organizational performance concluded that the market orientation has an influence on organizational performance (Kohli & Jaworski, 1990; Matsuno et al., 2002). The research results of Ahmedova (2015) also found a significant influence on the marketing orientation of the company's financial performance.

Any firm and company starting an e-commerce should first understand market orientation on its customer and competitors. It needs for company to benchmark itself against similar company in order to be differentiate and gain loyal customer. In SMEs, market orientation provides a better understanding of the environment. SMEs that adopt market orientation can meet the needs of customers in a better way (Gainer & Padanyi, 2005). The characteristics of companies that implement market orientation can be seen from how much they understand to meet the needs of current and future customers and use their ability to offer solutions that are superior to the needs.
of Competitors (Slater & Narver, 2000). The capability of SMEs to understand customers, competitors, to perform good coordination among overall management functions in order to gain profit can make SMEs able to achieve maximum business performance. Moreover, Aziz and Omar (2013) reviewed that market orientation is important to firms because of its positive association with performance and it is seen as a form of innovative behavior among SMEs. Those all empirical studies have supported this research so that all hypotheses in this study completely prove.

4. CONCLUSION AND SUGGESTION

This research answered the major research problem i.e. whether entrepreneurial orientation, market orientation and utilizing digital technology using e-commerce can improve SMEs business performance. It concluded that Entrepreneurial orientation, market orientation and e-commerce adoption have a significant influence in the improvement of SMEs business performance. Entrepreneurial orientation and market orientation is a business perspective that makes consumers as focus attention in the whole organization activities including SMEs in Jambi province, Indonesia. To implement entrepreneurial orientation and market orientation by e-commerce adoption will improve the business performance of SMEs in Jambi Province.

SMEs in Jambi Province must be managed well and increased its competitiveness. SMEs should be strengthened for entrepreneurial-oriented and market-oriented as well as e-commerce-adopted so as to have a culture to understand the needs of customers and transmit to everyone who is in the company to also be oriented to customers. Longitudinal studies would help to explain better the casual relationship between entrepreneurial orientation, market orientation. E-commerce adoption and business performance. There must be a role of governments, academics and related institutions to assist SMES in adapting to the utilization of technology. There should be programs that are geared towards reinforcement from the technological side. The Program is not only related to providing equipment, technical and management assistance, but also strengthening the motivation in the SMEs entrepreneurs to develop in particular orientation to the wishes shown by the market.

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