Impact of Entrepreneurial Capability on New Product Development and Marketing Performance

Andi Halang Lewa

1Hotel Management Study Program, Faculty of Humanities, Dian Nuswantoro University, Indonesia

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Abstract

This study departs from the problem of empirical contradictions in the findings of the study of the relationship between entrepreneurial capability and business performance. This study aims to examine and analyze the effect of Entrepreneurial capability on New Product Development which has an impact on Marketing performance. The population of this research is batik UMKM which is listed in the Map Report of the Batik Industry of the Industry and Trade Office of Central Java Province in 2013 and has criteria in accordance with the Law of the Republic of Indonesia no. 20 of 2008 non-exporter which refers to the distribution data of the number of SMEs in Central Java batik. The unit of analysis that will be used as respondents in this study is the owner or manager or owner and manager of batik SMEs in 3 (three) major areas of Central Java, namely Semarang, Pekalongan and Surakarta as many as 364 respondents. The analysis technique used in this study is Structural Equation Modeling, (SEM) with the AMOS/Amos Graph program. The results of the study indicate that the entrepreneurial capability has a positive and significant effect on new product development and marketing performance and new product development has a positive and significant effect on marketing performance.
INTRODUCTION

This study departs from the problem of empirical contradictions in the findings of the study of the relationship between entrepreneurial capability and business performance. Studies conducted by previous researchers prove that the role of entrepreneurial capability on business performance is found in different findings, making it interesting to be developed further. Some study findings have proven a strong relationship between entrepreneurial capability and business performance, (Bereket Mamo Buli, 2017), (Keh et al., 2007); (Wiklund & Shepherd, 2005), while other study findings do not support the relationship between entrepreneurial capability and business performance (Dhamayantie & Fauzan, 2017). This research gap still requires exploration of the company's entrepreneurial capabilities through relationships built on entrepreneurial capabilities which will ultimately affect the development of business performance. This problem is very important to study because it is useful for the development of marketing science related to the company's entrepreneurial capability in improving business performance. This study is expected to be able to explain the causes of differences or contradictions in the study of Entrepreneurship Capability studies on business performance and explain the efforts to develop the company's entrepreneurial capabilities on the performance of batik businesses on the scale of Micro, Small, Medium Enterprises (MSMEs), in Central Java. In addition to having the ability to absorb considerable human resources, SMEs have a significant role in national development. Batik is the art of drawing on cloth for clothing which is recognized by UNESCO as an intangible cultural heritage. Batik is fought for by the Indonesian nation as a cultural heritage and is used as the cultural identity of the Indonesian nation in the era of globalization.

Relationship of Entrepreneurship Capability and New Product Development

Research by Venkataraman (2000) defines entrepreneurship as an entrepreneur as an individual who finds, evaluates, and takes advantage of profitable opportunities. Entrepreneurs need to learn how to supply new ventures with resources, such as financial capital, qualified personnel, technology, strategic partnerships, and customers (Zimmerman & Zeitz, 2002). Research by Ahuja & Katila, (2004) shows that when entrepreneurs lack instant resources to carry out missions, they tend to seek new organizational routines, find new approaches by leveraging technology and develop resources through innovation. Abdullah et al., (2018) noted that more successful business owners pay particular attention to the quality and design of products or services and collaborate with similar companies. Venkataraman, (2000) in their study stated that entrepreneurial theories have focused on the creation and growth of businesses through identifying and exploiting opportunities by bringing new goods and services to market.

The research of Schildt & Keil, (2005) is consistent with the environment-based situational learning approach and entrepreneurship learning, especially with regard to how entrepreneurs utilize and develop technology relevant to the new product or business process being planned. Agbim et al., (2013) stated that entrepreneurship consists of entrepreneurs, entrepreneurs and companies. Entrepreneurs are individuals or groups of individuals who combine resources based on new ideas so that they can add new value / existing products and or add innovation in the services provided. Entrepreneurship is an entrepreneurial process in the development of entrepreneurship, while the company is a place to produce products / services that are delivered to the community. 

H1. Entrepreneurship Capability positive effect on New Product Development

Relationship of Entrepreneurship Capability and Marketing Performance

Research by Prabhu et al., (2012) showed that awareness, openness to experience, emotional stability, extraversion, and risk propensity were each positively related to the intention to become an entrepreneur. Consciousness, openness to experience, emotional stability and extraversion are each positively related to firm performance. Awareness and openness are positively related to company growth, respectively. Emotional stability is positively related to growth and profitability. Agbim et al., (2013) research shows that entrepreneurship development is the process of realizing innovative intentions by an individual or group of individuals either new or old companies through a network to acquire the necessary capabilities that will increase business success in the face of environmental uncertainty. Agbim et al., (2013) stated that to develop entrepreneurship through four dimensions: entrepreneurial intention; entrepreneurial network; entrepreneurial capability; and entrepreneurial success. Research by Roudini & Osman, (2012) provides information and evidence of the role of international
entrepreneurial capability on global company performance, namely that there is a strong relationship between the dimensions of entrepreneurial capability and global company performance.

Street & Cameron, (2007) research shows that business performance or business success is determined by several factors, namely: individual characteristics and organizational characteristics. Velnampy Thirunavukkarasu, (2007) revealed that there is a positive relationship between owner/manager characteristics and business performance. Endi Sarwooko, (2013) found that entrepreneurial competence mediates the relationship between entrepreneurial characteristics and business performance and concludes that stronger entrepreneurial characteristics will lead to increased competency of SME owners and business performance. Don Y. & Erick W., (2001) also stated that experience, network development, number of business partners and desire of owners/managers have a positive impact on business growth. Yahaya et al., (2010) found that high entrepreneurial success was associated with high business operations skills, the ability to gain market share commensurate with size and ability, and skills to offer specialized services. Mahira, (2020) stated that small business owners/managers who have entrepreneurial values such as creativity, integrity and achievement are more likely to have superior performance in managing the organization than owners/managers without these values. Agbim et al., (2013) found that entrepreneurial characteristics have a strong impact on small business performance. K. C. Agbim & Oriarewo, Godday Orziemge, Zever, (2014) research is consistent with the results of previous studies that entrepreneurial characteristics (ie, age, gender, family background, creativity, education, experience and access to information) affect business performance. Watson, (2013) study shows that entrepreneurial characteristics (ie, family background, creativity, education, experience and access to information) affect business performance.

H2. Entrepreneurship Capability has a positive impact on Marketing Performance

Relationship of New Product Development and Marketing Performance

Li, (2005) revealed that manufacturing capabilities for new products will contribute to market performance by increasing customer satisfaction and improving customer relationships. Brian Walker et al., (2005) conducted a comparative study of the effect of product and process innovation on company performance, indicating that product innovation in particular has a positive effect on business performance, especially company growth. The results of research by Moatari-Kazerouni et al., (2014) state that the orientation of increasing new products has a positive effect and significant to growth as a larger dimension of business performance and profit compared to process improvement.

Yeh-Yun Lin & Yi-Ching Chen, (2007) revealed that product innovation is closely related to increasing company sales. Quinn Patton, (2011) suggest that adding product complexity can create greater profits if complexity is managed effectively. These results are in accordance with Mahmud et al., (2017) study which states that the development of new products can improve the marketing performance of SMEs. The results of research by Gunday et al., (2011) show that product innovation has a positive relationship with market performance with innovation performance as a mediator. The competitive advantage and performance of firms largely depend on their ability to create new and innovative products (Hall, 2013). Product differentiation is positively and significantly related to market effectiveness (Lisboa et al., 2011). The findings of Ruiz-Jiménez & Fuentes-Fuentes, (2016) show that there is a significant relationship between the ability to combine knowledge and product and process innovation and between product and process innovation and business performance.

H3. New Product Development positive effect on Marketing Performance

The importance of entrepreneurial skills in developing new products that support improving marketing performance is the main research in this study. This study will examine the direct and indirect effects of entrepreneurial capability on the development of new products that have an impact on marketing performance. In addition, this study also examines the mechanism of entrepreneurial capability as a determinant of new product development. Many previous literatures reveal the importance of entrepreneurial skills, new product development, and SME marketing performance. However, there is little evidence of the effect of entrepreneurial capability and new product development on marketing performance. Therefore, we try to identify new product development as a key variable in improving the performance of SMEs. In general, the research model is directly related to entrepreneurial capability on new product development and marketing performance. In addition, entrepreneurial ability is indirectly related to marketing performance through new product development.

Based on the research hypothesis, research empirical model projected in the following diagram model are proposed:
METHOD

The population of this research is batik UMKM which is listed in the Map Report of the Batik Industry of the Industry and Trade Office of Central Java Province in 2013 and has criteria in accordance with the Law of the Republic of Indonesia no. 20 of 2008 non-exporter which refers to the distribution data of the number of SMEs in Central Java batik. The unit of analysis that will be used as respondents in this study is the owner or manager or owner and manager of batik SMEs in 3 (three) major areas of Central Java, namely Semarang, Pekalongan and Surakarta. The data collection method uses purposive sampling with the following criteria: respondents are SMEs owners or managers who have been used as samples who have run their business for at least 3 (three) years who are responsible and know the overall management of SMEs, both regarding human resources, amount of capital, products produced, competencies possessed, performance achievements and entrepreneurial capabilities they have and the criteria for SMEs based on the Law of the Republic of Indonesia Number 20 of 2008.

RESULT AND DISCUSSION

1. Data and Analysis Techniques

Initial data screening obtained by 364 respondents was then carried out manually by examining each respondent’s answer, whether the respondent’s answers were consistent or not, and carried out using simple statistical tools, so that the resulting data in the right amount for further analysis was 325 data. The analytical technique used in this research is Structural Equation Modeling (SEM) with the AMOS/Amos Graph program. According to Ferdinand, (2014) this technique is intended as a group of statistical testing techniques that make it possible to test a relatively complex set of relationships/models. The innovation of this analytical technique is in management studies, because of its ability to study structural models and measurement models at the same time.

Analysis with SEM can confirm several indicators/dimensions of a concept/construct and can measure the theoretical relationship between variables. This study will analyze the influence between variables, where there are several dependent variables and the dependent variable can be an independent variable for other dependent variables. This technique is used because it has a complicated relationship between variables. The use of SEM with AMOS software is predicted to be able to assess the desired findings in this study. The model has been formulated as shown in the figure to perform the first analysis on the measurement model to test unidimensionality. The indicator that formulates the construct is by looking at the parameter findings based on goodness of fit. The measurement model will produce convergent validity to test these indicators, whether they are valid or not in measuring what is to be measured and the significance of the indicators needs to be checked, whether these indicators have the same dimensions in formulating latent variables. Validity is discriminatory to test the relationship between two constructs so that correlation numbers will be found to be used as guidelines in treating constructs as independent variables or dependent variables.
Model Feasibility Test

The results of the analysis of the full structural model of SEM analysis using the AMOS 22.0 program are presented in the following table:

<table>
<thead>
<tr>
<th>Goodness of fit</th>
<th>Cut off Value</th>
<th>Results Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$ – Chi-Square</td>
<td>81,38 (df = 62 ; $\alpha = 0.05$)</td>
<td>71,343</td>
<td>$\chi^2 = 71,343$ lower than 81,38</td>
</tr>
<tr>
<td>$\chi^2$ – Significance Probability</td>
<td>$\geq 0.05$</td>
<td>0.195</td>
<td>Fit</td>
</tr>
<tr>
<td>Relative $\chi^2$ (CMIN/DF)</td>
<td>$\leq 2.00$</td>
<td>1.151</td>
<td>Fit</td>
</tr>
<tr>
<td>GFI</td>
<td>$\geq 0.90$</td>
<td>0.968</td>
<td>Fit</td>
</tr>
<tr>
<td>TLI</td>
<td>$\geq 0.95$</td>
<td>0.994</td>
<td>Fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>$\geq 0.90$</td>
<td>0.952</td>
<td>Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.95$</td>
<td>0.995</td>
<td>Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$\leq 0.08$</td>
<td>0.022</td>
<td>Fit</td>
</tr>
</tbody>
</table>

Source: Processed primary data (2021)

The statistical index for the feasibility of the Root Mean Square Error Approximation (RMSEA) model, which is related to the random error prediction value of the RMSEA value of 0.022 generated by the model is smaller than the limit number of 0.08 and the AGFI of 0.952. This shows that the prediction error of the model is small. The next model's feasibility index is the incremental fit index which includes the Tucker Lewis Index (TLI), GFI and Comparative Index (CFI). All three are index numbers that do not depend much on the size of the sample. The results of the analysis show that the index values for the three measures are above 0.95 which indicates that the concept of the model under study is fit and good.

Model Full SEM Marketing Performance

![Diagram](Image)

Figure 2. Results of Full SEM Model Analysis
Table 2. Regression Weights: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPD &lt;--</td>
<td>EC</td>
<td>.548</td>
<td>.075</td>
<td>7.314 ***</td>
<td>par_12</td>
</tr>
<tr>
<td>MP &lt;--</td>
<td>EC</td>
<td>.326</td>
<td>.067</td>
<td>4.852 ***</td>
<td>par_10</td>
</tr>
<tr>
<td>MP &lt;--</td>
<td>NPD</td>
<td>.342</td>
<td>.062</td>
<td>5.510 ***</td>
<td>par_11</td>
</tr>
</tbody>
</table>

Table 3. Standardized Regression Weights: (Group number 1 - Default model)

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPD &lt;--</td>
<td>EC</td>
</tr>
<tr>
<td>MP &lt;--</td>
<td>EC</td>
</tr>
<tr>
<td>MP &lt;--</td>
<td>NPD</td>
</tr>
<tr>
<td>Y1 &lt;--</td>
<td>MP</td>
</tr>
<tr>
<td>Y2 &lt;--</td>
<td>MP</td>
</tr>
<tr>
<td>Y3 &lt;--</td>
<td>MP</td>
</tr>
<tr>
<td>Y4 &lt;--</td>
<td>MP</td>
</tr>
<tr>
<td>Y5 &lt;--</td>
<td>MP</td>
</tr>
<tr>
<td>Z1 &lt;--</td>
<td>NPD</td>
</tr>
<tr>
<td>Z2 &lt;--</td>
<td>NPD</td>
</tr>
<tr>
<td>Z3 &lt;--</td>
<td>NPD</td>
</tr>
<tr>
<td>Z4 &lt;--</td>
<td>NPD</td>
</tr>
<tr>
<td>X33 &lt;--</td>
<td>EC</td>
</tr>
<tr>
<td>X32 &lt;--</td>
<td>EC</td>
</tr>
<tr>
<td>X31 &lt;--</td>
<td>EC</td>
</tr>
<tr>
<td>X35 &lt;--</td>
<td>EC</td>
</tr>
</tbody>
</table>

Parameter Interpretation Results from Research Model

Results Data processing to test 3 (three) hypotheses was carried out with AMOS 22.00 as presented in the following table:

Table 4. Parameter Assessment Results from Full Model

<table>
<thead>
<tr>
<th>Hubungan Kausalitas</th>
<th>Estimate</th>
<th>S.E.</th>
<th>Critical Ratio</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Capability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Product Development</td>
<td>.548</td>
<td>.075</td>
<td>7.314 ***</td>
<td>par_12</td>
<td></td>
</tr>
<tr>
<td>Marketing Performance</td>
<td>.326</td>
<td>.067</td>
<td>4.852 ***</td>
<td>par_10</td>
<td></td>
</tr>
<tr>
<td>New Product Development</td>
<td>.342</td>
<td>.062</td>
<td>5.510 **</td>
<td>par_11</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data analysis results, 2021
The structure of the causality relationship equation if it is presented in standardized form is as follows:

\[
\begin{align*}
\text{NPD} &= 0.507 \times \text{EC} + \delta_1 \quad \ldots \ldots \quad (P^{***}) \\
\text{MP} &= 0.344 \times \text{EC} + 0.390 \times \text{NPD} + \delta_2 \\
&\quad (P^{***}) \\
&\quad (\text{Sig}) \\
&\quad (\text{Sig})
\end{align*}
\]

Description:
- EC = Entrepreneurial Capability
- NPD = New Product Development
- MP = Marketing Performance

CONCLUSION AND RECOMMENDATION

The results of multiple regression analysis show that the entrepreneurial capability variable has a positive and significant effect on New Product Development. With good entrepreneurial skills, you will be able to combine resources based on new ideas so that you can add new value to existing products and add new product innovations or in the services provided to consumers. In addition, the Entrepreneurial Capability variable has a positive and significant impact on the company’s performance in batik SMEs. Most of the batik MSMEs in Central Java, they have strong entrepreneurial and creative abilities in their business so that they can survive until they can achieve their goals. These results mean that the better the entrepreneurial capabilities of batik MSMEs in Central Java, such as (1) finding new ideas, (2) anticipating changing market needs, (3) being proactive in seeking market information, (4) having the courage to launch new products. Then, the company’s performance will also be better. Strong entrepreneurial skills will help companies to have the skills to find new ideas, anticipate market changes. Proactively seeking market information and daring to introduce new products will be able to improve their Marketing Performance.

The results of SEM analysis show that New Product Development has a significant influence on company performance in small and medium batik businesses in Central Java, with higher New Product Development owned by the owner, it can help companies to develop technology, have company quality and standards, so that can produce superior regional batik motifs, nuanced patterns of dynamic cultural blends, explore the advantages of regional identity symbols of origin and produce superior local cultural identity distinctive motifs so that through this process, small and medium enterprises are proven to be able to improve their marketing performance, able to develop technology as a tool to advance its business and have good quality and standards so that it can survive in its business.

CONCLUSION

Based on the analysis and discussion of the data, the conclusions of this study are as follows: Improving the performance of MSMEs in Central Java cannot be separated from the ability of entrepreneurs to carry out New Product Development. However, the understanding of MSME actors in implementing their entrepreneurial abilities still needs to be improved. The results of the hypothesis test show that entrepreneurial ability has a significant and positive effect on New Product Development. Entrepreneurial ability has a significant and positive effect on marketing performance. New Product Development has a significant and positive effect on the Company’s marketing performance.

RECOMMENDATION

1. For the owner, entrepreneurial ability is a variable that can significantly improve New Product Development and company marketing performance. Therefore, the owner must be able to find new ideas, anticipate changing market needs, proactively seek market information, and dare to launch new products in order to add new value to existing products and add new product innovations so as to improve the company’s marketing performance.

2. For further researchers, there are still several factors that are thought to affect marketing performance but cannot be included by the researcher. Therefore, it is recommended for further researchers to add other variables that are also one of the determining factors in improving the company’s marketing performance, such as the ability to innovate, or the ability to isolate products.
REFERENCES


