OPTIMIZING MSME COMPETITIVENESS IN THE DIGITAL ERA THROUGH INNOVATION CAPABILITY, AND CUSTOMER RELATIONSHIP MANAGEMENT

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Abstract

The main aim of this research is to analyze the influence of innovation capability and customer relationship management on MSME competitiveness. This research uses a literature and field research design with a causal associative approach. This study uses a research instrument test consisting of validity and reliability tests. The quantitative analysis consists of a normality test, regression test, hypothesis test, correlation test, and coefficient of determination. The research results conclude that innovation capability and customer relationship management have a positive and significant effect on MSME competitiveness. The implications of this research state that the ability to create innovative products or services can differentiate a company from its competitors in the market. Innovation allows companies to offer something unique and added value to customers. With a deeper understanding of CRM, MSMEs can identify new opportunities, optimize marketing strategies, and increase customer retention to improve MSME performance, growth, and sustainability in an increasingly competitive business environment.

Keywords: Innovation Capability, Customer Relationship Management, MSME Competitiveness

Abstrak

Tujuan utama dari riset ini untuk menganalisis pengaruh innovation capability dan customer relationship management terhadap MSME competitiveness. Penelitian ini menggunakan desain penelitian kepustakaan dan lapangan dengan pendekatan asosiatif kausal. This study uses a research instrument test consisting of validity and reliability tests. The quantitative analysis consists of a normality test, regression test, hypothesis test, correlation test, and coefficient of determination. Hasil penelitian menyimpulkan menyimpulkan innovation capability dan customer relationship management berpengaruh positif dan signifikan terhadap MSME competitiveness. Implikasi penelitian ini menyebutkan kemampuan untuk menciptakan produk atau layanan yang inovatif dapat membedakan perusahaan dari pesaingnya di pasar. Inovasi memungkinkan perusahaan untuk menawarkan sesuatu yang unik dan bernilai tambah bagi pelanggan. Dengan pemahaman yang lebih mendalam tentang CRM, UMKM dapat mengidentifikasi peluang baru, mengoptimalkan strategi pemasaran, dan meningkatkan retensi pelanggan untuk meningkatkan kinerja, pertumbuhan, dan keberlanjutan UMKM dalam lingkungan bisnis yang semakin kompetitif.

Kata Kunci: Innovation Capability, Customer Relationship Management, MSME Competitiveness

History Article Received: 02 December 2023 Revised: 10 December 2023 Accepted: 14 December 2023
INTRODUCTION

MSME competitiveness is the factors or resources possessed by a business that differentiate it from its competitors (Halim, Grace, et al., 2021). For MSMEs, having competitiveness can be the key to success in winning competition and increasing market share (Halim, Sherly, et al., 2021). Some of the competitive advantages that MSMEs have are flexibility in adapting to market changes, speed in producing and providing products or services (Ali et al., 2020), the ability to provide personal and friendly service, better quality products or services than competitors (Purba et al., 2022), more affordable prices, and innovation in creating products or services that do not yet exist on the market (Julyanthry et al., 2021). MSME competitiveness is an advantage that differentiates MSMEs from their competitors and can enable companies to gain a larger market share and earn higher profits (Muhajirin et al., 2020). In the digital era and rapidly developing technology, many MSMEs have utilized technology to increase their competitive advantage (Laila & Sriminarti, 2022). MSMEs continue to improve their ability to utilize technology and other resources to strengthen their competitive advantage (Kussujian, et al., 2022). In this context, MSMEs can also utilize existing human resources and business networks to strengthen their competitive advantage (Sudirman et al., 2021).

Apart from that, MSMEs also have competitive advantages in terms of access and use of information and communication technology (Basoeky et al., 2021), the ability to adapt to changes in regulations and government policies, as well as special skills possessed by business owners or employees that can differentiate products or services from competitors (Irwansyah et al., 2021). By having a competitive advantage, MSMEs can strengthen their position in the market and increase their business profits in a sustainable manner (Dutot & Bergeron, 2016). However, in the current digital era, quite a few MSME players are experiencing changes in terms of adapting to advances in information technology and the dynamics of social change in society (Silalahi et al., 2020). To face this change, we are required to be creative and innovative (Muniarti et al., 2021). Without starting with creativity, innovation will not be created because innovation is the development of creativity towards new things (Sundulusi et al., 2022). However, to innovate is not as easy as we imagine because carrying out innovation requires a set of knowledge and management skills that are different from daily business administration (Sudrartono et al., 2022). MSME competitiveness includes flexibility, innovation, personalization and social involvement. In an increasingly competitive era, MSMEs can take advantage of these advantages to continue to exist and develop in a very dynamic market (Hasan et al., 2021). MSMEs are an economic sector that is very important for a country's economic growth. One aspect that needs to be considered in improving business performance so that it is more optimal is considering aspects innovation capability (Indriyaningrum & Fachrunnisa, 2021).

Innovation can be a powerful selling point in a marketing strategy. Customers tend to be more interested in products or services that offer something new and useful (Leskovaar-Spacapan & Bastic, 2007); (Carrasco-Carvajal & Garcia-Perez-De-Lema, 2021). Business innovation in the industry 4.0 era provides opportunities for MSMEs to increase competitiveness and optimize business processes (Roxas & Chadee, 2016). The use of digital technology can help MSMEs increase efficiency and productivity, as well as expand markets by utilizing technology (Yu et al., 2017). Business innovation can also help MSMEs face
increasingly fierce competition by providing added value to the products or services offered (Zhang et al., 2018). MSMEs must be able to optimize human resources who have knowledge and skills in using the latest technology, apart from that, MSMEs also need to consider financial resources and support from the government and related institutions to be able to implement new business innovations (Carrasco-Carvajal & Garcia-Perez-De-Lema, 2021). MSMEs in various regions can also take advantage of various training and technology development programs facilitated by the government and related institutions to help MSMEs increase their competitiveness in the industry 4.0 era (Liu et al., 2020). The results of research examining innovation capability also show that innovation capability has a significant positive influence on MSME competitiveness (Carrasco-Carvajal & Garcia-Perez-De-Lema, 2021); (Sudirman et al., 2022). Therefore, based on several previous research results, we can develop a hypothesis:

**H1**: Innovation capability influences MSME competitiveness

Customer Relationship Management (CRM) is a strategic and technological approach designed to understand, manage, and improve interactions with customers (Bhat & Darzi, 2018). In a business context, CRM helps organizations, including Micro, Small and Medium Enterprises (MSMEs), to manage relationships with customers more effectively (Suharto, 2013). CRM systems bring together customer data from multiple sources, such as sales, customer service, and marketing, to provide a holistic understanding of customer behavior and preferences. By using CRM, MSMEs can track customer interactions, identify sales opportunities, and provide more personalized service (Özgener & Iraz, 2006). Additionally, CRM facilitates the automation of business processes, allowing sales and marketing teams to work more efficiently. By utilizing data analysis obtained from CRM, MSMEs can make smarter decisions, increase customer retention, and respond quickly to changes in the market (Komalasari & Nurmasari, 2020). Overall, CRM is not just a software tool, but rather a holistic approach that empowers MSMEs to build and maintain strong relationships with customers, which in turn supports long-term business growth and success. Several previous study results confirm that CRM has a significant influence on MSME competitiveness (Rosalina et al., 2017); (Guha et al., 2018). Therefore, based on several previous research results, we can develop a hypothesis:

**H2**: Customer relationship management influence on MSME competitiveness

**RESEARCH METHODS**

This research uses a literature and field research design with a causal associative approach, namely to see the relationship between several uncertain variables. (Sugiyono, 2015), mentions that causal design is useful for analyzing how one variable influences other variables, and is also useful in experimental research where the independent variable is treated in a controlled manner by the researcher to see its impact on the dependent variable directly. The sampling method used in this research is the convenience sampling method, where this technique was chosen because it is the fastest method due to time constraints and anyone who accidentally meets the researcher can be used as a sample if that person is deemed suitable as a data source. According to (Hair, 2014), if the population size is unknown thenThe sample size can be determined from 5-10 times the number of indicators
used in a single construct. This research uses 12 indicators from 3 existing variable dimensions, so the number of research samples obtained is 12 x 10 = 120 samples. This study uses a research instrument test consisting of validity and reliability tests. The quantitative analysis consists of a normality test, regression test, hypothesis test, correlation test, and coefficient of determination.

RESULTS AND DISCUSSION

Validity and Reliability Test

Table 1. Validity Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Corrected items - Total correlation</th>
<th>N of Items</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Capability</td>
<td>0.550</td>
<td>3</td>
<td>Valid</td>
</tr>
<tr>
<td>Customer Relationship</td>
<td>0.625</td>
<td>5</td>
<td>Valid</td>
</tr>
<tr>
<td>MSME competitiveness</td>
<td>0.610</td>
<td>4</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Processed SPSS Data (2023)

Based on the validity test of table 1 above, it is concluded that all indicators in the study have a value above 0.30, the measurement items used in this research are valid. Next, a reliability experiment is carried out to measure the measurement items on the questionnaire items that describe the indicators of the variables. A questionnaire is reliable if a person's response to a question does not change or is normal from time to time.

Table 2. Reliability Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Capability</td>
<td>0.788</td>
<td>3</td>
<td>Reliable</td>
</tr>
<tr>
<td>Customer Relationship</td>
<td>0.856</td>
<td>5</td>
<td>Reliable</td>
</tr>
<tr>
<td>MSME competitiveness</td>
<td>0.840</td>
<td>4</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Processed SPSS Data (2023)

Based on the results of the reliability experiment shown in table 2 above, it proves that all indicators have a Cronbach alpha value for each instrument > 0.60, so it can be concluded that all the instruments used are reliable.

Multiple Regression Test

Table 3. Multiple Regression Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>t-count</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Capability</td>
<td>4.410</td>
<td>1.901</td>
<td>2.889</td>
</tr>
<tr>
<td>Customer Relationship</td>
<td>.192</td>
<td>0.057</td>
<td>4.220</td>
</tr>
<tr>
<td>Management</td>
<td>.134</td>
<td>0.070</td>
<td>3.701</td>
</tr>
</tbody>
</table>

Source: Processed SPSS Data (2023)
The results of the multiple linear regression above, the equation model is obtained: 

\[ y = 4.410 + 0.192X_1 + 0.134X_2, \]

which means that innovation capability, and customer relationship management positively affect MSME competitiveness. Based on these equations, it can be explained as follows:

1. The constant value of 4.410 can be interpreted if the variables of innovation capability, and customer relationship management are considered zero, then the value of MSME competitiveness will be in the range of values of 4.410.
2. The value of the beta coefficient on the innovation capability variable is 0.192, which means that every change in the innovation capability variable by one unit will result in a change in MSME competitiveness of 0.192 units with the assumption that the other variables are at a constant value.
3. The beta coefficient value on the customer relationship management variable is 0.134, which means that every change in the customer relationship management variable by one unit will result in a change in MSME competitiveness of 0.134 units with the assumption that the other variables are at a constant value.

**Simultaneous and Partial Hypothesis Testing**

To examine the variable binding simultaneously, experiment F is used. Simultaneous hypothesis testing attempts to analyze whether the variables of innovation capability, and customer relationship management can simultaneously influence MSME competitiveness.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>129,780</td>
<td>2</td>
<td>17,150</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>245,451</td>
<td>117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>408,183</td>
<td>119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed SPSS Data (2023)

Based on the results of the simultaneous test analysis in table 5, the $F_{count}$ value is 17,150 > from $F_{table}$ with (0.05; 2 vs 117) of 3.07 or with a significant 0.000 < 0.05, it can be interpreted as innovation capability, and customer relationship management affects MSME competitiveness simultaneously. Subsequently, a partial test was conducted to partially analyze the effect of innovation capability, and customer relationship management on MSME competitiveness. Based on the results of data analysis in table 3, the results of the t-test in this study are as follows:

1. Innovation capability has a significant level of 0.000 < 0.05, meaning that the innovation capability has a significant effect on MSME competitiveness.
2. Customer relationship management obtained a significant level of 0.000 < 0.05, meaning that customer relationship management significantly influences MSME competitiveness.

**Coefficient of Determination Test**

The coefficient of determination is used to measure how far the ability of a model to explain the variation of the dependent variable. The results of the determination test in this study can be explained in Table 5 below:
Table 5. Coefficient of Determination Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.714a</td>
<td>.509</td>
<td>.488</td>
<td>1,425</td>
</tr>
</tbody>
</table>

Source: Processed SPSS Data (2023)

Based on the results of the data analysis in table 6 above, the coefficient of determination value is 0.508, which means that the level of MSME competitiveness of 50.9% can be explained by innovation capability, and customer relationship management, while other factors can explain the remaining 49.1% not discussed in this study.

CONCLUSIONS AND SUGGESTIONS

Conclusion

The results of this research conclude that innovation capability has a positive and significant effect on MSME competitiveness. Innovation capability, or the ability to innovate, has a positive and significant impact on business performance because innovation plays a key role in maintaining a company's competitiveness and growth. The business environment is always changing, and companies need to be able to adapt quickly. The ability to innovate allows companies to respond more flexibly to market changes, consumer trends and new technologies. The ability to create innovative products or services can differentiate a company from its competitors in the market. Innovation allows companies to offer something unique and added value to customers. Innovation is not only related to products or services, but can also be implemented in a company's internal processes and operations. Innovations in operational efficiency can lead to cost savings and increased productivity. Innovative products or services can meet customer needs and expectations in a better way. This can increase customer satisfaction and build customer loyalty. Companies known as innovative places have greater attraction for top talent. Employees who feel they have the opportunity to contribute to innovation tend to be more productive and involved to increase business competitiveness.

The results of this research conclude that customer relationship management has a positive and significant effect on MSME competitiveness. Implementing a customer relationship management (CRM) system can provide great benefits for micro, small, and medium enterprises (MSME). By utilizing CRM, businesses can be more effective in establishing relationships with their customers. CRM allows companies to collect and analyze customer data. With a better understanding of customer preferences, needs, and behavior, MSMEs can tailor their products and services more accurately, increasing customer satisfaction, and ultimately increasing their competitiveness. Additionally, more personalized interactions with customers through CRM can strengthen business relationships, build loyalty, and help MSMEs stay relevant in a competitive market. In the context of Micro, Small and Medium Enterprises (MSMEs), the implementation of Customer Relationship Management (CRM) has a very important role in strengthening relationships with customers and increasing business competitiveness. CRM is not just a technology tool, it is also a business strategy that helps MSMEs better understand customer needs and preferences. CRM
allows companies to collect and analyze customer data. With a better understanding of customer preferences, needs, and behavior, MSMEs can tailor their products and services more accurately, increasing customer satisfaction, and ultimately increasing their competitiveness.

**Suggestion**

To improve the innovation capabilities of MSMEs, it is best to encourage collaboration between MSMEs, both with fellow MSMEs and with large companies, research institutions or technology startups. Develop a professional network to share ideas and experiences with other business people. To increase competitiveness and optimize market potential, it is important for Micro, Small and Medium Enterprises (MSMEs) to provide access and training related to the use of digital platforms and e-commerce. By providing access to these platforms, MSMEs can expand their market reach through online exposure and reach a wider range of customers. Additionally, providing training on the use of digital platforms and e-commerce will equip business owners and employees with the knowledge and skills necessary to manage online operations effectively. This not only helps MSMEs in increasing their visibility in the digital world, but also opens the door to increased sales, better market understanding and faster adaptation to changing consumer trends. Thus, investing in access and training can be a strategic step that helps MSMEs compete effectively in the digital economy era.

**REFERENCE**


