A STUDY OF MSME INNOVATION PERFORMANCE IN THE DIGITAL TRANSFORMATION ERA

Lina Anatan, Nur

ABSTRACT

Objective: This research was conducted to examine the role of organizational factors (decentralization and absorptive capacity) and network factors (relational and cognitive) on the MSMEs’ innovation performance which is measured by the institutionalization of knowledge transfer in the digital transformation era.

Method: To investigate the issue, this study use a quantitative approach involved 213 MSMEs, data were collected through a survey, and samples were selected based on purposive sampling. The hypothesis testing is conducted using multiple regression analysis.

Result: The study found that absorptive capacity, relational networks, and cognitive networks influence the MSMEs’ innovation performance, while decentralization is not. Considering that the majority of MSMEs involved in this study are micro and small businesses, statements related to the implementation of company decentralization where each unit within a company has its authority in deciding the creation and development of knowledge are irrelevant.

Implication: Knowledge transfer activities from universities to MSMEs are needed to improve MSMEs innovation in the digital transformation era which triggered MSMEs in Indonesia to transform businesses and adopt digital technology, while at the same time MSMEs digital literacy is still quite low, meanwhile, the propriety of resources is limited.

Originality/Value: This study is expected to provide a significant contribution to explaining factors influencing the MSMEs’ innovation performance.

Keywords: organizational factors, network factors, innovation performance, MSME.

UM ESTUDO DO DESEMPENHO DA INOVAÇÃO MSME NA ERA DA TRANSFORMAÇÃO DIGITAL

RESUMO

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Objetivo: Esta pesquisa foi realizada para examinar o papel dos fatores organizacionais (descentralização e capacidade de absorção) e fatores de rede (relacionais e cognitivos) no desempenho de inovação das MPMES, que é medido pela institucionalização da transferência de conhecimento na era da transformação digital.

Método: Para investigar o problema, este estudo utilizou uma abordagem quantitativa envolvendo 213 MPMES, os dados foram coletados através de um levantamento e as amostras foram selecionadas com base em amostragem objetiva. O teste de hipóteses é realizado usando análise de regressão múltipla.

Resultado: O estudo constatou que a capacidade de absorção, as redes relacionais e as redes cognitivas influenciam o desempenho de inovação das MPMES, enquanto a descentralização não. Considerando que a maioria das MPMES envolvidas neste estudo são micro e pequenas empresas, as declarações relacionadas com a implementação da descentralização da empresa, em que cada unidade dentro de uma empresa tem sua autoridade para decidir a criação e desenvolvimento de conhecimento são irrelevantes.

Implicação: As atividades de transferência de conhecimentos das universidades para as MPMES são necessárias para melhorar a inovação das MPMES na era da transformação digital, o que levou as MPMES na Indonésia a transformar as empresas e a adotar a tecnologia digital, ao mesmo tempo que a alfabetização digital das MPMES é ainda bastante reduzida, enquanto a propriedade dos recursos é limitada.

Originalidade/valor: Espera-se que este estudo contribua significativamente para explicar os fatores que influenciam o desempenho de inovação das MPMES.

Keywords: fatores organizacionais, fatores de rede, desempenho de inovação, MSME.

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Palabras clave: factores organizacionales, factores de red, desempeño en innovación, MIPYE.

1 INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have a significant contribution to Indonesia’s Gross Domestic Product (GDP), employee absorption, and increased economic growth. In 2020, when the economy slumped due to the Covid-19 pandemic, MSMEs continue to play the role as a pillar of the Indonesian economy by contributing to 61.7%, namely 8,573.89 trillion and employment reaching 97% and reaching 60.4% of total investment. As the backbone of the Indonesian economy, MSMEs also absorb the largest amount of credit, reaching more than IDR 1 trillion (bkpm.go.id).

Despite having an important role in the Indonesian economy, MSMEs still face many internal and external problems. Internal problems relate to various functional areas such as finance, operations, marketing, and human resources. MSMEs in Indonesia are considered to have limited knowledge in managing finances, innovating products and processes, and limited understanding regarding branding, customer relationship management, and how to manage human resource practices properly and correctly (Susanti, 2020; Ayodya, 2020).

The external problems of MSMEs in Indonesia can be identified based on financial, bureaucratic, and infrastructure aspects. These problems include the difficulty in obtaining access to funding and capital since there are still many un-bankable MSMEs (Damayanti 2019; Utami & Sujarweni, 2020). Bureaucratic problems are related to aspects of legality and business licenses owned by MSMEs. There are still many MSMEs that do not have an awareness of legality in running a business which leads to the vulnerability of MSMEs in facing business legality problems. Regarding bureaucracy, infrastructure support and mastery of digital technology also need attention (Ayodya, 2020).

During the Covid-19 pandemic in Indonesia, MSMEs faced several specific problems which included a decrease in the level of ability or purchasing power of consumers, problems with funding and financial management, a lack of skills and competence in human resources to adapt to the changes, lack of innovation and digital
literacy, difficulties in increasing market share, and problems with business legality and business licenses (Bahtiar, 2021; Chatriana, 2021). Apart from the Covid-19 Pandemic, it is undeniable that the Industrial Revolution 4.0 also has an important role in driving digital-sharing business transformation for MSMEs in Indonesia.

Adiningsih (2019) identified several opportunities and challenges that arose due to the Industrial Revolution 4.0 which were considered relevant to the demands for transformation from a high-touch economy to a low-touch economy due to the Covid-19 Pandemic. A low-touch economy can be defined as an economic condition with the main characteristics of minimizing touch and interaction between humans to ensure shared health and safety. Not only does the change in interaction patterns between individuals, the low-touch economy also encourages permanent transitions in business activities (De Mey & De Ridder, 2020). Several opportunities arise due to digital-based business transformation including the emergence of new digital start-ups, e-commerce, financial technology, and various on-demand services. Meanwhile, the challenges are more related to the digital gap, human resources, regulations related to the formation of start-ups, and disruptive innovation in various aspects of human life (Adiningsih, 2019).

Even though many problems and challenges must be overcome, MSMEs can take advantage of the opportunities. The increase in the number of MSMEs that have carried out digital transformation compared to before the Covid-19 Pandemic shows that MSMEs can take the opportunity (bkpm.go.id). The imposition of Large-Scale Social Restrictions and Social Distancing has triggered MSMEs to carry out digital-based transformation caused by a change in consumption patterns for goods and consumer services. The number of MSMEs that adopted digital technology has indeed increased, however, the data shows that this number is still very low compared to the total number of MSMEs operating in Indonesia.

Data from the Ministry of Cooperatives and SMEs (Small and Medium Entrepreneurs) shows that by 2022, only 26.5% of MSMEs have utilized digital technology by selling online, or around 17.25 million MSMEs. The low adoption of digital technology by MSMEs is caused by their low level of digital literacy and limited resources (Ayodya, 2020; Jelita, 2021; Kurniadi, 2021). To overcome this problem, MSMEs need to have access to resources from other parties such as a university (Anatan, 2023). Access to resources from universities can be conducted through knowledge transfer activities from universities to MSMEs through university and MSMEs
partnerships. In this partnership, universities act as transferors or parties who transfer knowledge to MSMEs, while MSMEs act as transferees or parties who receive the transferred knowledge.

According to the knowledge-based view (KBV), a resource that has an important role in achieving competitive advantage and winning the competition is knowledge (Pereira & Bamel, 2021). Knowledge is a company resource for improving performance and achieving a competitive advantage of a company (Ogotu et al., 2023). Limitations in mastering knowledge as the company's main resource will become an obstacle to achieving competitive advantage and improving organizational performance. To overcome these limitations, MSMEs might develop partnerships with universities as knowledge-producing higher education institutions. Knowledge transfer activities from universities to MSMEs through universities-to-MSMEs partnerships are motivated by the interest in obtaining the resources and knowledge needed by MSMEs however cannot be produced independently by MSMEs (Anatan, 2023; Anatan & Nur, 2023).

This research is conducted to examine the factors that influence the innovation performance of MSMEs as measured by the institutionalization of knowledge transfer. The institutionalization of knowledge transfer is an innovative activity or outcome resulting from the process of transferring knowledge from universities to MSMEs. The ability of MSMEs to institutionalize knowledge transfer activities obtained from universities will determine the success of MSMEs in improving their performance and competitiveness of MSMEs that occurs. Factors influencing the MSMEs' innovation performance in this study were identified based on organizational factors, including decentralization and absorptive capacity, and network factors including, relational and cognitive (Steinmo & Rasmussen, 2018; Yao et al., 2023). The consideration for selecting variables is based on several studies related to the transfer of knowledge from university to industry based on a knowledge-based view (KBV). Research questions to be tested in this study include:

1. Does decentralization affect MSME innovation performance as measured by the institutionalization of knowledge transfer?
2. Does absorptive capacity affect MSME innovation performance as measured by the institutionalization of knowledge transfer?
3. Does the relational dimension influence MSME innovation performance as measured by the institutionalization of knowledge transfer?
4. Does the cognitive dimension influence MSME innovation performance as measured by the institutionalization of knowledge transfer?

2 LITERATURE REVIEW

Research on knowledge transfer from universities to MSMEs in Indonesia was carried out by Ilmaniarti and Putro (2018) who identified organizational culture, organizational structure, beliefs, motivation, and worker behavior as determinants knowledge transfer activities from universities to MSMEs success. Ratnawati (2019) also conducted a study on related issues to prove that the partnership strategy between universities and MSMEs through knowledge transfer activities has a significant impact on MSME performance.

Other studies conducted in other countries include a study conducted by Kustiningsih et al. (2022) and Chandra et al. (2023) which identified absorptive capacity and a combination of capabilities influencing the transfer of knowledge from universities to MSMEs. Organizational culture, sender, receiver, organizational support, general objective, conflict of interest, personality, and trust are identified as antecedent factors of knowledge transfer from universities to MSMEs. Meanwhile, Al-Jabri and Al-Busaidi (2018) identified the sender, recipient, nature of knowledge, inter-organizational dynamics, risk, and trust as antecedent factors of knowledge transfer from universities to MSMEs.

Previous studies have also tested the impact of knowledge transfer activities from universities to MSMEs in terms of consequences. Several of these studies focus on the impact on the growth and profitability of MSMEs, innovation performance, and competitive advantage (Apa et al., 2020; Vesperi et al., 2021). The results of the study show that knowledge transfer activities from universities to MSMEs do have a significant influence on the growth and profitability, innovation performance, and competitive advantage of MSMEs.
2.1 HYPOTHESIS DEVELOPMENT

2.1.1 Decentralization

Decentralization can be explained as a condition in which each unit within an organization or company has the autonomy to develop and create activities, in this case, access to external knowledge through knowledge transfer activities from university to industry. Conceptually, it can be concluded that the level of autonomy possessed by each unit within the company is positively related to the development and creation of knowledge (Darvishmotevali, 2019; Muluk, 2021). It means that the higher the level of autonomy, the higher the level of creation and development of external knowledge obtained from knowledge transfer activities from universities.

Previous empirical studies provide reasons and evidence that decentralization will be better than centralization. In a centralized organization, there is a tendency that company leaders to reject activity proposals submitted by units, and decisions are determined by the leadership. In contrast, decentralized organizations have decision-making authority so they will be more flexible, more adaptive, and more innovative in responding to changes and making decisions than centralized companies (Xi, 2019; Cuillier, 2022). To determine decisions on the creation, development, use, and acquisition of knowledge because each unit has the freedom in making decisions needed to adapt to the company's internal and external environment. Decentralization will affect the company's success in institutionalizing the transfer of knowledge obtained from external parties into innovative outcomes that benefit the company. This study is supported by other findings which prove that the more decentralized a company is, the more it will have a positive impact on the creation and development of knowledge in the company (Darvishmotevali, 2019; Eklund & Kapoor, 2023). Based on the findings of previous studies, this research developed the following hypothesis:

Hypothesis 1: Decentralization influences MSME innovation performance as measured by the institutionalization of knowledge transfer
2.1.2 Absorption Capacity

Absorptive capacity in the context of this study refers to the conceptual definition provided by Cohen & Levinthal (1990) that means the company's ability to recognize, assimilate and apply external knowledge obtained from other organizations through knowledge transfer activities. This definition refers to the knowledge-based view (KBV) by Grant et al. (1996) that defined absorptive capacity as the success of the learning process in a company that is obtained through knowledge transfer activities is largely determined by how good or not the absorption capacity of the company is. The company's success in institutionalizing the transfer of knowledge obtained from external sources is also influenced by the similarity of perceptions that the company has with its alliance partners, in this case, the university. The common perception in this case relates to basic knowledge and specific knowledge in knowledge transfer activities. Previous empirical studies have proven that absorptive capacity is an important facilitator in inter-organizational knowledge transfer activities, both at unit and company levels (Mikhailov & Reichert, 2019; Sancho-Zamora et al., 2022). Based on the findings of previous studies, this study developed the following hypothesis:

Hypothesis 2: Absorptive capacity influences MSME innovation performance as measured by the institutionalization of knowledge transfer.

2.1.3 Relational Dimension

The relational dimension is one of the network factors that will be tested in this study and focuses on the aspect of trust which has been shown to have a significant positive effect on innovation performance (Panneti et al., 2020; Wu et al., 2020; Laasonen, 2022). This condition can be explained as follows, the higher the trust a company has in its partners, in this case, the university as a transferor of knowledge that the company will accept, the higher the commitment and desire of the company to institutionalize their knowledge transfer activities.

Even though many studies prove the positive effect of the relational dimension on innovation performance as measured by the institutionalization of knowledge transfer, research findings also prove the opposite. The studies conducted by Mejia-Morelos et al. (2020) and Wang et al. (2021), concluded that a high level of relational can trigger
collective blindness and can hinder the process of institutionalizing knowledge transfer. Based on these findings, it can be concluded that there are inconsistencies in the findings on the effect of trust on the institutionalization of knowledge transfer. Nonetheless, in general, it can be proven that in the relational dimension, it is associated with an increase in knowledge transfer (Wang et al. (2021). It shows that relation is a factor that has an important influence on the success of the institutionalization of knowledge transfer, so the following hypothesis is developed:

Hypothesis 3: The relational dimension influences MSME innovation performance as measured by the institutionalization of knowledge transfer

2.1.4 Cognitive Dimension

Sanchez-García (2023) defines the cognitive dimension as a concept developed by a business through social networks. The cognitive dimension relates to the members' perception of language, norms, codes, values, and objectives shared, promotes interaction between the network nodes, and leads to increases in the network’s effectiveness. The cognitive component demonstrates how to build and cultivate productive social interactions within a specific network or social context [34]. Cognitive dimensions are based on two aspects including shared goals and shared cultures (Inkpen & Tsang, 2005; Alyahya et al., 2020). Shared goals can be defined as the degree to which an organization can share common understandings and approaches to achieving network tasks and outcomes. This condition is influenced by various types of networks, tasks, and outcomes. The concept of shared goals in this study refers to a study conducted by Inkpen and Tsang (2005) which used the concept of shared visions to explain the concept of shared goals. Shared visions are efforts taken to realize the collective goals and aspirations of members of the organization. Shared visions have a role in helping alliance partners in this study, namely universities, to integrate knowledge within the partnership so that in this study the following hypotheses were developed:

Hypothesis 4: Cognitive dimension influences MSMEs innovation performance as measured by the institutionalization of knowledge transfer
3 METHODOLOGY

3.1 POPULATION AND SAMPLE

The research population includes all MSMEs operating in Indonesia. Data were collected using survey method and the sample was determined using the purposive sampling method, with the criteria that MSMEs have at least once collaborated with universities in terms of knowledge transfer.

3.2 MEASUREMENTS

The decentralization instrument adopts Tsai's (2002) measurement which consists of three questions. The absorption capacity instrument adopted by the measurement of Minbaeva et al. (2003) consists of eight items about workability and motivation. The relational dimension adopts Inkpen and Tsang's (2005) measurement which focuses on trust and consists of three questions. The cognitive dimension adopts measurements from Inkpen and Tsang's (2005) study which includes shared goals and shared cultures and consists of four questions. The institutionalization of knowledge transfer activities consists of eight question items adopted from Santoro & Gopalakrishnan (2000). All measurements variables in this study use a Likert scale of 1-7, scale 1 = strongly disagree, and scale 7 = strongly agree.

3.3 VALIDITY AND RELIABILITY TESTING

To find out how well the instrument was used, in this case, the questionnaire, it is necessary to test the reliability and validity. Validity testing was carried out using Pearson Correlation by comparing the calculated R values and R tables and considering the significance value, while reliability testing was carried out using Cronbach Alpha. The rule of thumb value for the Cronbach Alpha value must be greater than 0.6 (Hair, et al., 1998).
3.4 DATA ANALYSIS METHOD

Data analysis techniques to test the hypothesis in this study using Multiple Regression Analysis. Before testing the hypothesis, the model has been tested to ensure that the research model is free from violations of classical assumptions which include heteroscedasticity, normality, and multicollinearity.

4 FINDINGS

4.1 RESPONDENT AND PROFILE

Research data collection was carried out for five months from June to October 2022 through an online survey method of 550 prospective respondents with a return rate of 38.73%. Based on respondent and business profile data, it can be summarized that the majority of MSME business actors are women (54%), the status of the majority is as owners (79.9%), the majority of businesses are culinary businesses (49.3%), most of the length of business is 0-5 years (48.8%), the majority of the number of employees is 0-10 workers (77.5%), the majority of performance has increased in the last 5 years by 40.9%. The majority of respondents answered assets owned under IDR 50 million (63.4%), and the majority answered a maximum turnover of IDR 300 million (76.3%).

4.2 VALIDITY AND RELIABILITY TESTING

The results of testing the validity and reliability of the instruments used in this study are summarized in Table 1. The results of the validity test analysis show the homogeneity of the items for each variable as follows: decentralization (0.166-0.720), absorptive capacity (0.357-0.887), relational dimension (0.783-0.844), cognitive dimension (0.213-0.481), and institutionalization of knowledge transfer (0.573-0.830). While the results of reliability testing using Cronbach Alpha ranged from 0.684 to 0.867.
### Table 1

*Chronbach’s Alpha and Item Homogeneity*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Item</th>
<th>Item Excluded</th>
<th>Cronbach’s Alpha</th>
<th>Item Homogeneity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralization (DC)</td>
<td>3</td>
<td>0</td>
<td>0.648</td>
<td>0.166-0.720</td>
</tr>
<tr>
<td>Absorptive Capacity (AC)</td>
<td>8</td>
<td>1</td>
<td>0.842</td>
<td>0.357-0.887</td>
</tr>
<tr>
<td>Relational Dimension (RD)</td>
<td>3</td>
<td>1</td>
<td>0.783</td>
<td>0.783-0.844</td>
</tr>
<tr>
<td>Cognitive Dimension (CD)</td>
<td>4</td>
<td>0</td>
<td>0.741</td>
<td>0.213-0.481</td>
</tr>
<tr>
<td>KT Institutionalization (KTI)</td>
<td>8</td>
<td>0</td>
<td>0.867</td>
<td>0.573-0.830</td>
</tr>
</tbody>
</table>

Source: Data Processed

### 4.3 DESCRIPTIVE STATISTICS

Table 2 shows the average respondents’ answers to each question item in the research variables which include decentralization, absorptive capacity, relational dimension, cognitive dimension, and knowledge transfer institutionalization.

### Table 2

*Descriptive Statistic*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralization (DC)</td>
<td>2.79-4.24</td>
</tr>
<tr>
<td>Absorptive Capacity (AC)</td>
<td>4.71-6.22</td>
</tr>
<tr>
<td>Relational Dimension (RD)</td>
<td>5.62-6.03</td>
</tr>
<tr>
<td>Cognitive Dimension (CD)</td>
<td>4.79-5.17</td>
</tr>
<tr>
<td>KT Institutionalization (KTI)</td>
<td>4.03-4.64</td>
</tr>
</tbody>
</table>

Source: Data Processed

### 4.4 HYPOTHESES TESTING

Multiple regression was used to test hypothesis 1 (decentralization affects MSMEs innovation performance as measured by the institutionalization of knowledge transfer), hypothesis 2 (absorptive capacity affects MSME innovation performance as measured by the institutionalization of knowledge transfer), hypothesis 3 (relational dimension affects MSME innovation performance as measured by the institutionalization of knowledge transfer), and hypothesis 4 (cognitive dimensions affect the innovation performance of SMEs as measured based on the institutionalization of knowledge transfer).

The results of the multiple regression tests are summarized in Table 3 and all violations of the classical assumptions such as normality, heteroscedasticity, and multicollinearity have been tested using normal probability plots, scatter plot diagrams, and VIF values respectively. Based on the results of hypothesis testing using multiple
linear regression, the partial test results show that three hypotheses are supported and one hypothesis is not supported.

**Table 3**

*Results of Hypotheses Testing*

<table>
<thead>
<tr>
<th>Model</th>
<th>Stand. β</th>
<th>Stand. Error</th>
<th>t</th>
<th>Sig</th>
<th>F</th>
<th>Sig</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td>.648</td>
<td>-2.597</td>
<td>0.219</td>
<td>23.240</td>
<td>.000</td>
<td>.309</td>
</tr>
<tr>
<td>Decentralization (DC)</td>
<td>-.066</td>
<td>.049</td>
<td>.762</td>
<td>.447</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorptive Capacity (AC)</td>
<td>.430</td>
<td>.089</td>
<td>5.444</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relational Dimension (RD)</td>
<td>-.219</td>
<td>.084</td>
<td>-2.636</td>
<td>.009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Dimension (CD)</td>
<td>465</td>
<td>.058</td>
<td>6.753</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data Processed

The three hypotheses supported are hypothesis 2 (Absorptive capacity influences MSME innovation performance as measured by the institutionalization of knowledge transfer with a value of t = 5.444 and a significance of .000), hypothesis 3 (the relational dimension influences MSME innovation performance as measured by the institutionalization of knowledge transfer with a value of t = -2.636 and a significance of .009), and hypothesis 4 (cognitive dimension influences the innovation performance of MSME innovations as measured based on the institutionalization of knowledge transfer with a value of t = 6/753 and a significance of .000). While the hypothesis that is not supported is hypothesis 1 (Decentralization affects the innovation performance of MSMEs as measured by the institutionalization of knowledge transfer with a value of t = -0.762 and a significance of .447).

The results of simultaneous hypothesis testing show that decentralization, absorption capacity, relational dimension, and cognitive dimension simultaneously have a significant influence on the innovation performance of MSMEs as measured based on the institutionalization of knowledge transfer with an F value = 23.240 and a significance of .000). The adjusted R-value in this study is .309. This value means that 30.9% of MSMEs’ innovation performance as measured by the institutionalization of knowledge transfer can be explained by the four factors tested in this study, namely company decentralization, absorptive capacity, relational dimension, and cognitive dimension. Meanwhile, as much as 69.1% is explained by factors outside the research model.

In this study, respondents were also requested to identify the types of knowledge transfer obtained by MSMEs from universities which were identified in eight categories. The collaboration includes individual consultation with researchers with certain expertise.
or professors, informal forums and workshops, cooperative education programs, collaboration through broker associations, and contracts. research, research collaboration projects between partners, and university and industry research consortiums. research grants, and donations for research and development.

Based on the results of the research it can be concluded that the majority of respondents answered that the form or type of knowledge transfer obtained from universities was in the form of informal forums or workshops, MSMEs consultations with researchers who have certain expertise or professors, and grants research in which the MSMEs act as research partners for universities to obtain funding from both their internal and external institutions, one of which is from the Government.

Respondents in this study were also requested to identify their motivations for collaboration or involvement in knowledge transfer activities from universities to MSMEs which were classified into several motivations including gaining access to financial support from alliance partners, obtaining technology and knowledge support from alliance partners, and obtaining tacit knowledge and technology know-how from alliance partners, using facilities and resources provided by alliance partners, publication, and obtaining patents and licenses.

The results of the study show that getting access to financial support is the main motivation for MSMEs, although in practice the transfer of knowledge they get is mostly in the form of explicit and tacit knowledge transfers to improve the competency and capability of MSMEs in managing their business considering that there are still many internal problems such as those related to the management of financial functional areas, operations, marketing, and human resources.

5 DISCUSSION

The results of testing hypothesis 1 that decentralization affects the innovation performance of MSMEs as measured by the institutionalization of knowledge transfer in this study are not supported considering that the majority of MSMEs involved in this study are small businesses with a workforce of between 0-10 people which means that the work is managed by MSME’s owners own or have 1-10 workers, with 0-5 years of service. With the size of MSMEs that categorize into micro and small scale, statements related to the implementation of company decentralization where each unit within a
A company has its authority in deciding the creation and development of knowledge are irrelevant. In the case of micro and small-scale MSMEs, a company structure that is centralized to the leadership or business owner is often the choice in MSME management. This explains why hypothesis 1 which states that decentralization affects the innovation performance of MSMEs as measured by the institutionalization of knowledge transfer in this study is not supported.

Research hypothesis 2, which states that absorptive capacity affects the innovation performance of MSMEs as measured by the institutionalization of knowledge transfer in this study is supported. This result is consistent with the findings of previous studies that tested the related hypothesis. The results of this study also support the knowledge-based view which states that the success or failure of a company's learning process through external knowledge transfer activities has an impact on a company's innovation performance as measured through the institutionalization of knowledge transfer is largely determined by how good the company's absorption capacity is.

Hypothesis 3 which states that the relational dimension affects the innovation performance of SMEs as measured by the institutionalization of knowledge transfer in this study is supported. In this study, the relational dimension emphasizes trust in cooperation partners, in this case, the university. Trust is the main capital in developing partnerships with companies or organizations which will ultimately affect the commitment and success of a partnership. The results of this study support the findings of previous research that the higher the trust of MSMEs in university partners as transferors of knowledge transferred to MSMEs, the higher the commitment and desire of MSMEs to institutionalize knowledge transfer activities which of course have an impact on the higher innovation performance of MSMEs.

Hypothesis 4 which states that the cognitive dimension affects the innovation performance of MSMEs as measured by the institutionalization of knowledge transfer in this study is supported. The results of testing the hypothesis support the findings of previous research that the cognitive dimension measured based on shared goals and shared vision in this study will have a significant influence on the innovation performance of companies as measured based on the institutionalization of knowledge transfer obtained from universities. When MSMEs and university partners have shared goals and shared visions, each member involved in the collaboration will have the same perception of how they should interact with each other so that the knowledge that has been
transferred from the university to MSMEs can be implemented properly and improve their innovation performance. MSMEs.

6 CONCLUSION, LIMITATIONS, AND FUTURE SUGGESTIONS

The results of hypothesis testing show there are three supported research hypotheses:

1. Hypothesis 2 (Absorptive capacity influences MSMEs innovation performance as measured by the institutionalization of knowledge transfer);
2. Hypothesis 3 (The relational dimension influences MSMEs innovation performance as measured by the institutionalization of knowledge transfer);
3. Hypothesis 4 (The cognitive dimension affects the innovation performance of MSME as measured by the institutionalization of knowledge transfer).

While 1 other hypothesis is not supported, namely: Hypothesis 1 ((Decentralization influences MSMEs innovation performance as measured by the institutionalization of knowledge transfer). It can be concluded simultaneously that decentralization, absorptive capacity, relational dimensions, and cognitive dimensions affect the innovation performance of MSMEs as measured based on the institutionalization of knowledge transfer.

The researcher admits that there are still some limitations in this study including the research sample involving several types of industries so that control for industrial effects may be needed, as well as demographic variables such as the length of operation or age of MSMEs and the size of MSMEs which in this study are seen based on the number of workers. Another weakness relates to the measurement of MSMEs' innovation performance based on the institutionalization of knowledge transfer, namely how MSMEs implement the transfer of knowledge obtained from universities in innovative outcomes which will later affect the performance and competitiveness of MSMEs which has not been carried out in this study. To evaluate the innovation performance of MSMEs, this study uses the perceptual method so that there may be bias in the measurement of these variables.

Based on the results of the adjusted R2 test in this study, the results were quite small, namely 0.309, so it can be concluded that there are still many factors outside the model that affect the innovation performance of MSMEs, which in this study are
measured based on the institutionalization of knowledge transfer. In the research that will be suggested to include other antecedent variables such as the adoption of information and communication technology, leadership style, work environment, and positive intentions of employees towards conducted knowledge transfer activities.

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