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**THE EFFECT OF DIGITAL TRANSFORMATION, BUSINESS  
INNOVATION MODELS, AND CREATIVITY ON MSME PERFORMANCE  
WITH COMPETITIVE ADVANTAGE AS INTERVENING VARIABLE**



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**Abstract**

The purpose of this study was to determine the effect of digital transformation, business innovation model, and creativity on MSME performance with a competitive advantage as an intervening variable. The research method used is quantitative research. The population was all MSMEs in the city of Malang. The sample is determined by the convenience sampling technique. In this study, researchers involved as many as 100 MSMEs in the city of Malang. Based on the research conducted, it was found that there was no influence between the digital transformation variables on performance. There is a significant positive effect between digital transformation variables on competitive advantage. There is a significant positive effect between the competitive advantage variables on performance. There is a significant positive effect between the variables of creativity on performance. There is a significant positive effect between the variables of creativity on competitive advantage. There is a significant positive effect between the variables of the business innovation model on performance. There is no effect between the variables of creativity on competitive advantage. There is a significant positive effect between the variables of digital transformational effect on performance mediated by competitive advantage. There is no influence between the variables of the effect of the business innovation model on performance mediated by competitive advantage. There is a significant positive effect between the variables. The influence of creativity on performance is mediated by competitive advantage.

**Keywords:** Digital Transformation, Model Business Innovation, MSME Performance, Competitive Advantage.

## INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are a group of businesses that play a significant role in the Indonesian economy, with the number of micro-entrepreneurs estimated to be primarily engaged in the informal sector; which is approximately more than 30.547.132 units in 2018 according to BPS data. Workers who are not successfully absorbed by the formal sector will switch to the informal sector. MSMEs are the foundation of the Indonesian economy, apart from their distribution throughout Indonesia, but also because of their central position due to many workers. The number of MSMEs in Indonesia which is 16.7 million units- is also huge and dominates various business sectors. MSMEs also have a significant contribution to economic growth. Still, in their development, they face multiple problems, including limited working capital, low human resources, and a lack of mastery of science and technology (Sucahyawati et al., 2019).

The problems faced by MSMEs in Indonesia are: 1) Low access to productive resources, MSMEs exporting only 0.13 (BPS, 2005); 2) The low quality of Human Resources, 64% of MSME actors only graduated from elementary school (Dumas et al., 2005); 3) The low productivity of SMEs is only 0.014% of significant productivity, and 56% of national productivity (BPS, 2005-2007); 4) Low competitiveness, Indonesian MSMEs are only 3.5 out of a maximum score of 10 (APEC, 2006).

Competitive advantage is also an important variable that is the main determining factor in improving the quality of SMEs (Novitasari & Zuraida, 2015). Mulyana & Sutapa (2014) findings explain that competition is not only on price and quality but is also accompanied by the development of creativity and technology. The research results by (Lestari et al., 2019) clearly state that increasing the competitive advantage of SMEs will result in better business performance. Exposure to phenomena and empirical studies shows that competitive advantage strongly affects performance.

Innovation can be used to achieve business performance (Christa & Kristinae, 2021). Customers generally want innovative products according to their wishes. By conducting a careful market orientation, the company will create innovative products and improve business performance. Based on the research results conducted by (Bamfo & Kraa, 2019), innovation can be used as a mediation between the influence of market orientation on business performance. The difference between this research and that

research is that there is a research development in adding a competitive advantage variable to mediate the effect of market orientation on business performance. It is because competitive advantage encourages MSMEs to stay afloat and gain profits. Competitive advantage also encourages MSME performance through achieving profits, developing sales, and increasing the number of consumers.

The research sample used is small and medium enterprises. If a company performs a market orientation, the business performance will also increase. It is because the market orientation that has been carried out can create a competitive advantage and will improve the company's business performance.

(Kaleka & Morgan, 2017) states that competitive advantage can be met if customers get consistent differences in the products produced compared to competitors, where the differences are obtained from the results of market orientation by the company. So, in this study, it is necessary to include the competitive advantage variable as a mediator of the influence of market orientation on business performance.

Some experts also revealed that SMEs need the role of digital technology to increase performance and productivity (Papadopoulos et al, 2020). Technology has presented a significant role, namely digital technology in SMEs. Digital transformation is a term used in academia to describe the organizational change influenced by digital technology. Digital transformation occurs because of changes driven by technological developments in organizations and the environment. Referring to (Muditomo & Wahyudi, 2021), digital transformation and business innovation can change customer expectations and behavior, suppressing traditional companies and market disruptions. Changes in customer needs and behavior are also forcing companies and general administration to excel in digital transformation, so many business sectors require change and digital transformation is a process carried out by organizations or companies.

## **REVIEW OF LITERATURE**

### **Digital Transformation**

Digital transformation utilizes existing digital technologies such as virtualization technology, mobile computing, cloud computing, integration of all existing systems in the organization, and so on. Some interpret it as the impact obtained from the use of a

combination of digital innovations produced so that it causes changes to the structure, values, processes, positions, or ecosystems within the organization and the environment outside the organization. The literature review conducted by (Morakanyane et al., 2017) resulted in a conclusion on what digital transformation is. Morakanyane et al., (2017) say that digital transformation is an evolutionary process that relies on capabilities and digital technology to create or change business processes, operational processes, and customer experiences to create new value.

Digital transformation is a consequence of the era of disruption or better known as the Industrial Era 4.0, resulting in changes in business models, overhauling the existing business ecosystem into a new ecosystem that is more innovative, complex, and dynamic. In the conventional banking business for years, digital transformation means making significant changes in procedures, working methods, organizational structures, and business models to be more flexible in dealing with differences—Digital Transformation as measured by manifest variables as presented below by (Koloskova et al., 2020).

**Table 1**  
**Dimensions of Digital Transformation Indicator**

<b>Dimension</b>	<b>Indicator</b>
<b>Transformational Digital Resources</b>	Tracking & Tracing
	Paperless production
	IT/OT integration
	Digital shadow
<b>Information Systems</b>	Implementation of ERP
	Adaptive production and llogistics planning
	Document management system
	Electronic data interchange
	Systematic analysis of errors and scrap
	Analysis of production and quality data
	Condition monitoring
<b>Organizational structure &amp; culture</b>	Innovation community
	Operation meetings
	IT competence of the employees
	Process management
	Modern sales channels
	Data governance
	Lean management

Source: (Koloskova et al., 2020)

### **Business Innovation Model**

The term Business Model (BM) has been used in scientific discussions since the 1950s (Coluccia et al., 2021). After that, the concept of BM was used sporadically in a non-specific way. In 1975, Konczal suggested that BM, and business modeling, were tools to apply to management. However, business modeling is mainly understood as an operational activity related to system modeling (Coluccia et al., 2021). It wasn't until the 1990s that BM came to represent its structure and organization at the management level. The early literature on BMI focused on establishing the link between BM and innovation. Then researchers gradually turned their attention to the need for DBM innovation in companies. Recently, researchers aspire to develop guidelines that can help business practitioners make better use of this concept. Since there is no widely accepted definition of BMI, it is difficult for researchers to measure BMI in companies (Saebi et al., 2017). Therefore, it isn't easy to choose a definition to use in this study. However, Trapp (2014) suggests three ways for a researcher to operationalize BMI in a case study. It explains BMI by detailing the current (new) situation and circumstances compared to the old one, Explaining BMI with the help of a framework consisting of components that consist of different parts. has been determined, and Describes BMI based on an analysis of whether the activity is new or changed.

**Table 2**  
**Dimensions of Business Innovation Model Indicators**

<b>Dimension</b>	<b>Indicator</b>
<b>Company value proposition</b>	Ability to address new, underserved market segments and seize opportunities in emerging markets.
<b>Corporate value creation</b>	Improve employee capabilities through training, up-to-date knowledge, and adaptive competence.

Source: Trapp (2014)

## Performance

Nadeak et al., (2021) states that performance means work or work performance. However, it should also be understood that performance is not just the result of work or work performance but also includes how the work process occurs. Wibowo, Wahyu Hidayat, (2020) performance is an abbreviation of work energy kinetics whose equivalent in English is performance. Performance is the output produced by the functions or indicators of a job or a profession within a specific time. Sidik & Sutoyo (2020) results from work that has a strong relationship with organizational strategic objectives, customer satisfaction, and contributing to the economy.

**Table 3**  
**Dimensions and Performance Indicators**

<b>Dimension</b>	<b>Indicator</b>
<b>Work quality</b>	Work neatness
	Work ability
	Cleanliness of the workplace
	Office facilities
<b>Working Quantity</b>	Speed of completing work
	Target finish the job
<b>Cooperation</b>	Collaboration
	Work togetherness
<b>Responsibility</b>	Job satisfaction
	Work result
	Facilities and infrastructure
<b>Initiative</b>	Independence

Source: (Sidik & Sutoyo, 2020)

## Creativity

In general, creativity is defined as presenting new perspectives to generate new and meaningful ideas. Creativity can also mean employees use their diverse skills, abilities, knowledge, views, and experiences to create new ideas for decision making, problem-solving, and task completion in an efficient manner (Tamba, et al., 2020). Meanwhile, according to Smith in (Riansyah, 2018) creativity is a person's ability to create something different, either in the form of results that can be assessed or in the form of ideas (actions that produce new and different copyrighted works).

Employee creativity can be interpreted as central to the long-term survival of an organization because employees can generate new and potentially valuable ideas for creating unique and/or improving existing products, services, processes, and routines (Astuti et al., 2019). According to (Ruzikna, 2018), employee creativity is defined as the production of ideas, products, or procedures that are new or original and have potential benefits for an organization. In some studies, creativity is considered a personal characteristic with features covering a wide area of interest and a high level of energy (Mittal & Dhar, 2015). Creativity is essential for organizations because creative contributions can help organizations become more efficient and responsive to opportunities and help organizations adapt to change, grow, and compete in the business environment. The dimensions and indicators of creativity according to (Ranjan et al., 2018) are written in the following table.

**Table 4**  
**Dimensions and Indicators of Creativity**

<b>Dimension</b>	<b>Indicator</b>
<b>Curiosity</b>	Curiosity to try new things
	Desire to find useful information
<b>Optimistic</b>	Optimism about the products offered
	Optimism about ability
<b>Flexible</b>	Level of adaptation to change
	Accepting input from outside
<b>Looking for a solution</b>	Looking for solutions in solving problems
	Best solution implemented
<b>Imagining</b>	Imagination level to advance business
	Often uses imagination
<b>Dare to take risks</b>	Happy to challenge
	Accept the possibility of failure

Source: Ranjan et al. (2018)

### **Competitive Advantage**

Competitive advantage is a specific activity developed by a company to be superior to competitors. It is done through cost leadership, differentiation, and focus. The company's desire to increase competitiveness to excel with its competitors is undoubtedly needed in an

industrial environment to create a competitive advantage. In a technical implementation, many companies start their strategy by maximizing the functional departments of their companies (Nuraini, 2021). The initial idea in creating a competitive advantage starts with developing business development procedures that the company will carry out. The company will analyze what the company's goals are and what policies the company takes to achieve its goals (Okoisama et al., 2017).

Competitive advantage is the capability a business possesses in a strategy to get more profit than its competitors in similar industries. The competitive advantage strategy implemented by the company has an impact on the company itself, which will have the expertise to learn more quickly in reading market conditions than its competitors and be able to implement the right marketing plan (Distanont & Khongmalai, 2020).

**Table 5**  
**Competitive Advantage Dimensions and Indicators**

<b>Dimension</b>	<b>Indicator</b>
<b>Financial and economic capabilities</b>	With the same specifications the price of the product/project is cheaper than competitors will increase the competitive advantage. The project offers consumers a cheaper and easier payment platform.
<b>Ability to create strategic products</b>	Products have special characteristics that are difficult for competitors to imitate. The company offers higher quality products than its competitors.
<b>Technology and process capabilities</b>	The company has modern technology-based equipment in project construction thereby increasing its competitive advantage. The buildings produced by the company adopt modern technology.
<b>Organizational skills</b>	Companies move quickly in developing new products compared to competitors. The company and employees work together well and responsibly.

Source: (Yang et al., 2018)

## RESEARCH METHOD

### Research Design

The research approach used in this research is quantitative. Quantitative research methods aim to test the established hypotheses. The quantitative method is in the form of numbers derived from measurements using a scale on the variables in the study. The population in this study were all MSMEs in the city of Malang. The Convenience Sampling technique determines the sample. The researchers involved 100 MSMEs in the town of Malang. Analysis of the data used Path analysis.

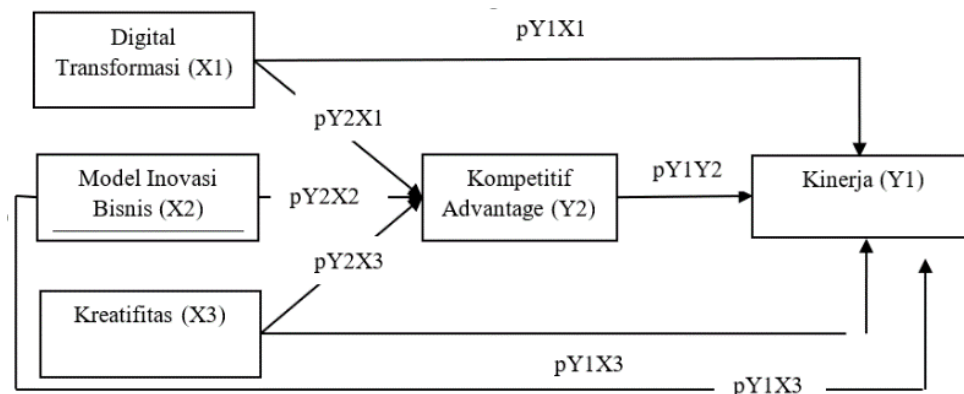
### Path Diagram Analysis and Structural Equations

In path analysis, before the researcher analyzes a study, the researcher first makes a path diagram that presents the problem in an image and determines the structural equation that states the relationship between the variables on the path diagram. Carrasco, (2010) states path diagrams can be used to calculate the direct and indirect effects of the Independent variable on a dependent variable. These effects are reflected in the so-called path coefficients, where mathematically path analysis follows a structural model.

### Path Chart

The first step in path analysis is to design a path diagram according to the hypothesis developed in the study. Based on the research title, the path analysis model in this study can be described as follows:

**Figure 2**  
**Path Chart**



Source: Researcher's Data

### Hypothesis

- H1 : There is an effect of digital transformation on competitive advantage
- H2 : There is an effect of business innovation model on competitive advantage
- H3 : There is an effect of creativity on competitive advantage
- H4 : There is an effect of digital transformation on performance
- H5 : There is an effect of business innovation model on performance
- H6 : There is an effect of creativity on performance
- H7 : There is an effect of competitive advantage on performance
- H8 : There is a digital transformation effect on performance through competitive advantage
- H9 : There is an effect of business innovation model on performance through competitive advantage
- H10 : There is an influence of creativity on performance through competitive advantage

### Structural Equation

According to Juliandi, (2018) the structural equation is an equation that states the relationship between variables in the existing path diagram. Based on the path diagram in Figure 3.1 above, it can be formulated into a structural equation, namely: Equation of the first sub-structure path

$$Y1 = \alpha + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \varepsilon$$

$$Y2 = \alpha + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \beta_1 Y1 + \varepsilon$$

Description:

X1 = Digital Transformation

X2 = Business Innovation Model

X3 = Creativity

Y1 = Competitive Advantage

Y2 = MSME Performance

$\alpha$  = constant

$\beta_1 X123$  = Digital Transformation Path Coefficients, Business Innovation Models, And Creativity against Competitive Advantage.

$\beta_{1Y1}$  = Path Coefficient of Competitive Advantage versus Competitive Advantage

**Path Coefficient**

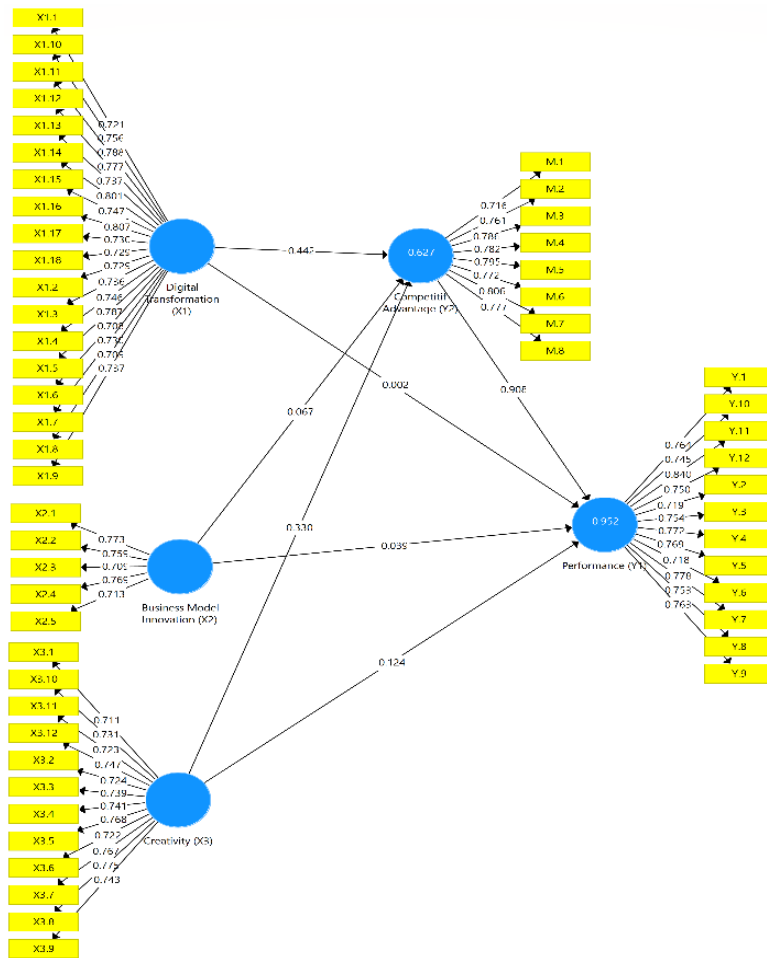
To obtain the path coefficient value of each independent variable, first the correlation between variables is calculated using the Pearson Product Moment correlation formula as follows:

$$r_{XY} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X^2)\}\{N\sum Y^2 - (\sum Y^2)\}}}$$

**RESULTS AND DISCUSSION**

**Outer Model Analysis**

**Figure 3**  
**Outer Model Results**



### Validity Test

Validity test is used to measure the validity or validity of a questionnaire. In this research, validity testing is carried out using convergent validity and AVE. The instrument is declared valid if the AVE value is  $> 0.05$  and the outer loading value is ( $> 0.6$ ).

**Table 6**  
**Validity Test Results**

Variable	Indicator	AVE	Outer Loading	Description
<b>Digital Transformation X1</b>	X1.1	0.561	0.076	Valid
	X1.2		0.057	Valid
	X1.3		0.072	Valid
	X1.4		0.069	Valid
	X1.5		0.072	Valid
	X1.6		0.059	Valid
	X1.7		0.071	Valid
	X1.8		0.072	Valid
	X1.9		0.074	Valid
	X1.10		0.080	Valid
	X1.11		0.069	Valid
	X1.12		0.065	Valid
	X1.13		0.082	Valid
	X1.14		0.087	Valid
	X1.15		0.085	Valid
	X1.16		0.083	Valid
	X1.17		0.082	Valid
	X1.18		0.079	Valid
<b>Business Innovation Model X2</b>	X2.1	0.555	0.299	Valid
	X2.2		0.274	Valid
	X2.3		0.241	Valid
	X2.4		0.271	Valid
	X2.5		0.253	Valid
<b>Creativity X3</b>	X3.1	0.549	0.094	Valid
	X3.2		0.101	Valid

	X3.3		0.101	Valid
	X3.4		0.118	Valid
	X3.5		0.127	Valid
	X3.6		0.125	Valid
	X3.7		0.105	Valid
	X3.8		0.106	Valid
	X3.9		0.108	Valid
	X3.10		0.103	Valid
	X3.11		0.126	Valid
	X1.12		0.136	Valid
<b>Performance Y</b>	Y.1	0.579	0.106	Valid
	Y.2		0.103	Valid
	Y.3		0.102	Valid
	Y.4		0.112	Valid
	Y.5		0.116	Valid
	Y.6		0.104	Valid
	Y.7		0.112	Valid
	Y.8		0.108	Valid
	Y.9		0.114	Valid
	Y.10		0.113	Valid
	Y.11		0.120	Valid
	Y.12		0.102	Valid
<b>Competitive Advantage M</b>	M.1	0.600	0.156	Valid
	M.2		0.165	Valid
	M.3		0.160	Valid
	M.4		0.160	Valid
	M.5		0.163	Valid
	M.6		0.159	Valid
	M.7		0.166	Valid
	M.8		0.161	Valid

### Reliability Test

Researchers used two reliability tests, namely the Cronbach Alpha test and the Composite Reliability test. Cronbach Alpha measures the lowest value (lower-bound) reliability. The data is declared good if the data has a Cronbach alpha value > 0.7. Meanwhile, composite reliability measures the actual reliability value of a variable. Data is declared to have high reliability if it has a composite reliability score >0.7.

**Table 7**  
**Reliability Test Results**

<b>Variable</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>
Digital Transformation (X1)	0.954	0.958
Performance (Y)	0.934	0.943
Competitive Advantage (M)	0.905	0.923
Creativity (X3)	0.925	0.936
Business Innovation Model (X2)	0.800	0.862

### R-Square Test

The R-Square coefficient determination (R-Square) test is used to measure how much other variables influence the endogenous variable. Based on the data analysis carried out through the use of the smartPLS program, the R-Square value is obtained as shown in the following table:

**Table 8**  
**R-Square Test**

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Performance (Y1)</b>	0.952	0.950
<b>Competitive Advantage M</b>	0.627	0.615

Based on the test results, the r-square score for Performance is 0.952, which means that Digital Transformation influences performance, creativity, business innovation models, competitive advantage by 95.2% and 4.8% others are influenced by variables that have not been explained in this study. The r-square score for competitive advantage is 0.627, which means that digital transformation, creativity, and business innovation models affect 62.7% and 37.3% others are influenced by variables that have not been explained in this study.

## Hypothesis Test

**Table 9**  
**Hypothesis Test Results**

<b>Hypothesis</b>	<b>Original Sample (O)</b>	<b>T Statistics ((O/STDEV))</b>	<b>P Values</b>
Digital Transformation (X1) -> Performance (Y)	0.002	0.056	0.955
Digital Transformation (X1) -> Competitive Advantage (M)	0.442	2.969	0.003
Competitive Advantage (M) -> Performance (Y1)	0.908	36.620	0.000
Creativity (X3) -> Performance (Y1)	0.124	2.974	0.003
Creativity (X3) -> Competitive Advantage (M)	0.330	2.990	0.003
Business Innovation Model (X2) -> Performance (Y)	0.339	3.107	0.002
Business Innovation Model (X2) -> Competitive Advantage (M)	0.067	0.554	0.580

### **The Effect of Digital Transformation on Performance**

The results of testing the hypothesis of the effect of digital transformation X1 on Y performance obtained a positive beta score ( $p = 0.002$ ) with p values of 0.955 ( $p < 0.05$ ) with a t statistic of 0.056 ( $p > 1.96$ ), indicating that there is no influence between digital transformation variables on performance. The digital transformation of MSMEs does not affect the performance of MSME employees. This shows that other factors affect performance. However, digital transformation is not included in the influencing factors. Research by (Wicaksono & Rahmawati, 2020) also reveals that there is an influence of digital transformation on the performance of MSMEs.

### **The Effect of Digital Transformation on Competitive Advantage**

The results of testing the hypothesis of the effect of digital transformation X1 on competitive advantage M obtained a positive beta score ( $p = 0.442$ ) with p values of 0.003 ( $p < 0.05$ ) with a t statistic of 2.969 ( $p > 1.96$ ) indicating that there is a significant positive effect between the digital transformation variables on competitive advantage. The better the digital transformation formed by MSMEs, the higher the competitive advantage. Competitive advantage is an activity that helps the company's development so that it can be superior to competitors. This ability needs to be accompanied by digital transformation to follow developments in the industrial era 4.0. Digital transformation will help create the development of MSMEs to be superior to other competitors. The result is in line with the research conducted (Rakhmadani et al., 2020).

### **The Effect of Competitive Advantage on Performance**

The results of hypothesis testing the effect of competitive advantage M on Performance Y obtained a positive beta score ( $\beta = 0.908$ ) with p values 0.000 ( $p < 0.05$ ) with a t statistic of 36,620 ( $p > 1.96$ ), indicating that there is a significant positive effect between the variables competitive advantage on performance. The better the competitive advantage of MSMEs, the higher the employee's performance. One of the factors that can improve the performance of MSME employees is to do a competitive advantage. When MSMEs develop their businesses to be superior to competitors, employee performance also needs to be improved. The result is supported by findings (Narastika & Yasa, 2017).

### **The Effect of Creativity on Performance**

The results of testing the hypothesis of the influence of creativity X3 on performance Y obtained a positive beta score ( $\beta = 0.124$ ) with p values of 0.003 ( $p < 0.05$ ) with a t statistic of 2.974 ( $p > 1.96$ ), indicating that there is a significant positive effect between the variables of creativity on performance. The higher the MSME creativity, the higher the employee performance. The invention of superiors and managers will affect the performance of MSME employees. If leaders are creative in seeking innovation for the advantage of MSMEs, employee performance will also increase. In Utaminingsih, (2016)'s research also revealed that there is an influence between the creativity variable on the performance of MSMEs.

### **The Effect of Creativity on Competitive Advantage**

The results of testing the hypothesis of the effect of creativity X3 on competitive advantage M obtained a positive beta score ( $\beta = 0.330$ ) with p values of 0.003 ( $p < 0.05$ ) with a t statistic of 2.990 ( $p > 1.96$ ), indicating that there is a significant positive effect between the variables of creativity on competitive advantage. The higher the creativity of SMEs, the higher the competitive advantage. The invention possessed by MSMEs can increase the benefits of competing with competitors. Creativity means using diverse skills, abilities, knowledge, views, and experiences to generate new ideas for decision-making, problem-solving, and task completion in an efficient manner (Mulyadi et al., 2016). It will ultimately be able to create a competitive advantage by developing a business according to the objectives.

### **The Influence of Business Innovation Models on Performance**

The results of hypothesis testing the effect of business innovation model X2 on Y performance obtained a positive beta score ( $p = 0.339$ ) with p values of 0.002 ( $p < 0.05$ ) with a t statistic of 3.107 ( $p > 1.96$ ), indicating that there is a significant positive influence between the variables of the business innovation model on performance. The better the MSME business innovation model, the higher the performance of MSME employees. These results are in line with research conducted by (Purwanto et al., 2020).

### **The Effect of Business Innovation Models on Competitive Advantage**

The results of hypothesis testing the effect of business innovation model X2 on competitive advantage M obtained a positive beta score ( $p = 0.067$ ) with p values of 0.003 ( $p < 0.05$ ) with a t statistic of 2.990 ( $p > 1.96$ ), indicating that there is no influence between the variables creativity on competitive advantage. The MSME business innovation model does not affect its competitive advantage. It shows that other factors affect competitive advantage. However, the business innovation model is not included in the influencing factors. These findings are supported by the results of (Wijaya, 2017).

### **The Effect of Digital Transformation on The Performance Mediated by Competitive Advantage**

The results of hypothesis testing the effect of digital transformation X1 on Y performance mediated by competitive advantage M obtained a positive beta score ( $p = 0.402$ ) with p values of 0.003 ( $p < 0.05$ ) with a t statistic of 2.955 ( $p > 1.96$ ) indicating that there is a significant positive effect between variables the effect of digital transformation on the performance mediated by competitive advantage. The better the digital transformation of MSMEs, the better the employee performance will be; this is also reinforced by the mediation of the competitive advantage variable. This result is in line with (Wicaksono & Rahmawati, 2020).

### **The Effect of Business Innovation Model toward The Performance Mediated by Competitive Advantage**

The results of hypothesis testing the influence of the X2 business innovation model on Y performance mediated by competitive advantage M obtained a positive beta score ( $p = 0.061$ ) with p values 0.579 ( $p < 0.05$ ) with a t statistic of 0.555 ( $p > 1.96$ ) indicating that there is no influence between variables. The MSME business innovation model mediated

by competitive advantage does not affect the performance of MSME employees. These findings are in line with research by (Devara & Sulistyawati, 2019).

### **The Effect of Creativity toward The Performance Mediated by Competitive Advantage**

The results of hypothesis testing the effect of creativity X3 on Y performance mediated by competitive advantage M obtained a positive beta score ( $p = 0.300$ ) with p values of 0.003 ( $p < 0.05$ ) with a t statistic of 3.014 ( $p > 1.96$ ) indicating that there is a significant positive effect between the variables creativity on performance mediated by competitive advantage. The better the MSME creativity, the better the employee performance; this is also reinforced by the mediation of the competitive advantage variable. The research is supported by the results of study conducted by (Hidayat et al., 2018), which states that there is an influence between creativity to performance.

### **CONCLUSION**

Based on the research that has been done on MSMEs, it can be concluded that the r-square score for performance is 0.952, which means that performance is influenced by digital transformation, business innovation models, creativity, and 95.2% competitive advantage. The r-square score for competitive advantage is 0.627, which means that digital transformation, business innovation model, and creativity affect competitive advantage by 62.7%. There is no influence between digital transformation variables on performance and there is a significant positive effect between digital transformation variables on competitive advantage.

In addition, there is a significant positive effect between the competitive advantage variables on performance and a significant positive effect between the variables of creativity on performance. Between the variables of creativity on competitive advantage, there is a significant positive effect and there is a significant positive effect between the variables of the business innovation model on performance.

There is no effect between the variables of creativity on competitive advantage but there is a significant positive effect between the variables of digital transformational effect on performance mediated by competitive advantage. Meanwhile, between the variables of the Effect of business innovation model on performance mediated by competitive

advantage, there is no influence. However, there is a significant positive effect between the variables and the impact of creativity on performance is mediated by competitive advantage.

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