



# Innovation capability of MSMEs : do social capital, technological capital, customer capital, and social media networking matters?

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## ABSTRACT

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MSMEs or Micro Small and Medium Enterprises are the primary of national economic growth. In developing and advancing Indonesian MSMEs, support from various elements is certainly needed, starting from funding, licensing, protecting, and coaching to adequate logistics services. Including the ability to innovate which has an impact on increasing the potential of MSMEs. The development of MSMEs depends heavily on their capacity for innovation, which must be owned by MSME perpetrators if MSMEs are to remain competitive and profitable. In order to preserve its commercial worth, a MSME is also effect by elements related to intellectual capital. Therefore, the purpose of this study is to evaluate the impact of intellectual capital and social media networking on innovation capability. This study used MSMEs in the Banyumas, Brebes, and Cilacap Regencies of Central Java. SEM-PLS is the data analysis method applied in this study. Through improved innovation and business development, it is anticipated that this research will be able to strengthen MSMEs capabilities. According to the study's findings social capital, technological capital, customer capital, and social media networking all positively impact an organization's capacity for innovation.

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## 1. INTRODUCTION

The industrial structure of Indonesia is dominated by micro, small, and medium enterprises (Pratama et al., 2021). Micro, Small, and Medium Enterprises (MSMEs) play an essential role in the improvement of the national economy because they can be used to equalize the economic status of small people, reduce poverty, and earn foreign currency for the nation. The Coordinating Ministry for Economic Affairs of the Republic of Indonesia stated the contribution of MSMEs to the GDP is 60.5% and their employment rate is 96.9% of the national total. Therefore, MSMEs are important for economic growth.

In achieving good and quality MSMEs growth. MSMEs must achieve business feasibility, in which there are several factors including the ability to innovate to improve business. According to (Suroso et al., 2021) a business that strives to adopt an innovation strategy has proven effective in achieving the feasibility of a business. And according to the theory of organizational learning from Chris Argyris and Donald A. Schon, 1996 present a theoretically rigorous and elegant model of organizational learning that is undeniably useful in analyzing, understanding, and driving change in organizations. Then in business development, intellectual capital is also needed to create successful business value (Pratama et al., 2019). Among them are Social Capital, Technological Capital, and Customer Capital. In this digital era, social media is also an important factor in business as branding and increasing innovation insights, so Social Media Networking is needed in improving business.

In recent years, MSMEs continue to face numerous obstacles, including those associated with the development of innovation, technology, literacy, digital, branding, and others. In connection with these challenges, MSME perpetrators must understand the development of business activities to support business development and by increasing the ability to innovate to maintain and even improve quality so that MSMEs are able to be sustainable and to increase business value.

According to data on the number of MSMEs from the Central Java Statistics Agency, from 2019 to 2020, the growth of MSMEs is decreasing. In 2019 Banyumas district from 51,254 and in 2020 to 48,433. Brebes Regency in 2019 was 14,969 to 13,945 in 2020. Then in Cilacap Regency in 2019 it was 45,748 and in 2020 it was 44,669. Development MSMEs Central Java, especially in the Banyumas, Brebes, and Cilacap districts, have experienced a decline due to many factors, for example in 2020 experiencing the Covid-19 pandemic which has caused a decline in the number of MSMEs. According to the Ministry of Industry, the decline occurred in almost all business sectors such as textiles, food and beverages, transportation equipment industry, computers and electronic goods, optics, electrical equipment, and traditional medicine. Another problem is market affordability that has not touched the online sector. In fact, the existence of social distancing has made a shift in consumer behavior to online shopping so that producers must be able to facilitate changes in consumer behavior (Pratama et al., 2020). Therefore, the regional Office of Cooperative Trade, Small and Medium Enterprises (DPKUKM) seeks to restore MSMEs after the pandemic with various efforts, for example by conducting training for MSME perpetrators, facilitating social media as a medium for buying and selling and creativity so that MSMEs can continue to increase and maintain their business, facilitating associations and perpetrators in developing MSME innovations. Then the factors that effect the innovation capability of MSMEs can be through social capital, technological capital, customer capital, and social media networking.

The first factor that affects innovation capability is social capital. According to organizational learning theory, social capital can facilitate the exchange of knowledge and innovation between organizational members. By having a strong and trusting network, organizations can more easily share relevant knowledge and information, develop more creative solutions, and produce better innovations (Innayah et al., 2021). MSMEs in Banyumas, Brebes and Cilacap need Social Capital because it provides network facilities that can enable opportunities in business growth. Organizational learning capabilities can be used in all organizations and managerial practices that facilitate the learning process (Chiva et al., 2007). According to (WU & Sivalogathan, 2013) an organization or business that has high social capital will make the business more competitive so that high Social Capital can increase the ability of business perpetrators to identify new trends, develop innovation capability, and can identify risks (Innayah et al., 2020). Based on research (WU & Sivalogathan, 2013) social capital has a positive effect on innovation capability. Other research conducted by (Yeşil & Doğan, 2021) (Mursid et al.,

2018) also shows the same results that social capital has a positive effect on innovation capability. Meanwhile, research conducted by (Chou et al., 2006) (Knack & Keefer, 1997) and (Dakhli & De Clercq, 2004) shows the results that social capital has a negative effect on innovation capability.

The second factor that affects innovation capability is technological capital. In organizational learning theory, organizations need to learn and develop their technological capability to stay relevant and compete in a changing business environment. MSMEs in Banyumas, Brebes and Cilacap need technological capital because this technological capital provides access to effective information and communication facilities. Meanwhile, in this area, access to effective information for MSMEs is still minimal. So technological capital is needed to maximize the innovation capability and progress of MSMEs. According to (Chiva & Alegre, 2005), it is necessary to maximize the use of organizational learning in organizations efficiently so that the organization can develop and maximize its innovation and technology. According to (Gupta & Malhotra, 2013), technology plays a significant role in facilitating the commercialization of innovation, which has the potential to transform underdeveloped markets into high potential business markets (Foroudi et al., 2016). Based on research (Oh & Teo, 2010) shows that technological capital has a positive effect on innovation capability. Other research conducted by (Ryu et al., 2021) (Barkat et al., 2018) also shows the same result that technological capital has a positive effect on innovation capability. Meanwhile, research conducted by (Griliches & Mairesse, 1984) shows that technological capital has a negative effect on innovation capability.

The third factor that affects innovation capability is customer capital. According to organizational learning theory, customer capital can provide valuable input and feedback, and be a source of inspiration for innovation. Then by understanding customers well, organizations can identify opportunities to improve their products or services, develop more relevant solutions, and strengthen relationships with customers (Chiva & Alegre, 2005). MSMEs in Banyumas, Brebes and Cilacap need customer capital to increase customer trust and opportunities for customer desires. MSME perpetrators there are generally still unfamiliar with customer desires. So, with customer capital, it is hoped that it can increase customer interest and increase the innovation of MSME perpetrators. According to (Duffy, 1998) customer capital can make companies more customer and make it possible to quickly identify customer preferences, thereby facilitating the innovation capacity of businesses and allowing customer capital to respond more effectively to market shocks (Gourio & Rudanko, 2014). Based on research (Jahanshahi et al., 2019) shows that customer capital has a positive effect on innovation capability. Other research conducted by (Gupta & Malhotra, 2013) (Nengah et al., 2021) also shows the same results that customer capital has a positive effect on innovation capability.

The fourth factor that affects innovation capability is social media networking. In organizational learning theory, social media networking acts as an effective means to support the organizational learning process related to innovation (Gomes & Wojahn, 2017). MSMEs perpetrators need to implement efficient and effective social media networking to win the competition and develop MSMEs products or services (Pratama et al., 2023). MSMEs in Banyumas, Brebes and Cilacap need social media networks because they increase information, find out customer interests so that they can improve MSME capabilities. This is related to MSMEs in the area because facilities or social media are still underutilized, so this social media networking can encourage MSMEs to become better. According to (Pratono, 2018) social media networking is an open source online platform based on ties that come from individuals to collectives so that business perpetrators can seek and transfer knowledge by involving various users without geographical restrictions so that it can increase the innovation capability of business perpetrators. According to research by (Latifah et al., 2022), (Scuotto, 2016), and

(Hitchen et al., 2017) social media networking has a positive effect on innovation capability. And the results of (Puteri, 2018) indicate that social media networking has a negative effect on innovation capability.

This research shows the practical implications that innovation capabilities have an important role in MSMEs and for MSME perpetrators in developing these MSMEs to be better. Then innovation capabilities will be better if influenced by other factors such as intellectual capital and social media networking to improve MSME capabilities. Then the theoretical essence of this research is to examine more deeply the influence of innovation capability with intellectual capital and social media networking on the growth of MSMEs. More specifically, it is hoped that this research can provide a theoretical contribution to the development of MSMEs, especially in Central Java.

This research develops research from (Harjanti & Noerchoidah, 2017) regarding the development of the effect of social capital on innovation capability. This study adds an independent variable in the form of customer capital which aims to identify opportunities to improve products or services and strengthen relationships with customers. Then technological capital to develop technological capability to stay relevant and compete in a changing business environment. In addition to incorporating social media networking variables in an effort to develop and expand the organization's social networking. That way a business can identify innovation opportunities more optimally, design and develop new solutions, test and implement innovations, and manage the innovation process effectively in MSMEs. Then in previous research social capital was identified only from trust, networks and norms, so this research adds elements of cohesiveness and altruism to social capital. Then this research also has a wider reach because it occupies three districts in the Central Java region so it can influence social capital norms.

## 2. RESEARCH METHOD

### 2.1 Sample

According to data from the Central Java Province Office of Small and Medium Enterprises Cooperatives, the population of MSMEs in Banyumas, Brebes and Cilacap Regencies is 19,044 units in 2023, of which in Banyumas Regency there are 8551 units, Cilacap Regency 2107 units, and Brebes Regency 8386 units. This research uses quantitative research with primary data and uses samples of MSME perpetrators in 3 Central Java districts, namely Banyumas, Brebes and Cilacap. Then to calculate the sample adequacy of this study using the Slovin technique proposed by Slovin (1960). The Slovin formula for calculating the sample size is as follows:

$$\begin{aligned} n &= \frac{N}{1+N(e)^2} \\ &= \frac{19,044}{1+19,044(0,1)^2} \\ &= \frac{19,044}{191,44} \\ &= 99,47 \end{aligned}$$

Description: n = sample size N = population size e = allowable error rate Based on the sample size calculation calculated using the Slovin technique above, the sample size is 100 people. The number of respondents is considered representative to obtain writing data that reflects the state of the population with the number of respondents taken through google forms as many as 200 MSME perpetrators.

## 2.2 Sampling technique

The sampling technique used was Accidental Sampling. Accidental sampling is determining samples based on chance, namely MSME perpetrators who happen to meet researchers and are used as samples. And MSME perpetrators who are met by chance are suitable as data sources.

## 2.3 Statistical Testing

This study tests four hypotheses using partial regression analysis (Partial Least Square/PLS). Using SmartPLS 3.0, each hypothesis will be analyzed to determine the relationship between variables. This study employs measurement model testing (outer model), structural model testing (inner model), and hypothesis testing for its test analysis.

## 2.4 Variable Operationalization

This study employs four independent variables in Innovation Capability (Y): social capital (X1), technological capital (X2), customer capital (X3), and social media networking (X4). The measured variables are translated into multiple indicators, with sub-indicators for each indicator. The sub-indicator serves as a starting point for the compilation of instrument items in the form of questionnaire statements. Indicators used to create the research questionnaire are displayed in the following table 1.

Table 1. Variable Operationalization

Variables	Indicator
X1 : Social Capital (Khalique et al., 2015)	SC1 : Structural
	SC2 : Relational
	SC3 : Cognitive
X2 : Technological Capital (Khalique et al., 2015)	TC1 : IT Knowledge
	TC 2 : Research budget & protection rights
X2 : Customer Capital (Khalique et al., 2015)	CC 1 : Customer satisfaction & loyalty
	CC 2: Network
X4 : Social Media Networking (Latifah et al., 2022)	SMN 1: Business relationships established
	SMN 2: Communication with business partners
	SMN 3: Product development
	SMN 4: Contribution to business decision making
Y : Innovation Capability (Prakasa et al., 2022)	IC1 : Innovative product
	IC2 : Innovative process
	IC3 : Innovative behavior
	IC1 : Innovative resource

## 3. RESULTS AND DISCUSSIONS

### 3.1 General Description of MSME Respondents

This research is aimed at MSME perpetrators around the Central Java Province area. This questionnaire collected as many as 200 respondents, therefore data can be obtained regarding the characteristics of respondents such as: gender, age of business owner, religion, place of business, age of business, business criteria, ownership structure, monthly turnover, sector / type of business, and number of employees.

The majority of respondents in this study (52.5%) were male. The remaining 47.5% are female. The majority of business proprietors are between the ages of 26 and 35 (30% of the total). The religion of business proprietors is dominated by Islam, with 198 individuals (99.1%), followed by Christianity and Confucianism. Afterwards, 137 units (68.5%) were removed from Banyumas, 34 units (17%) were removed from Brebes, and 29 units (14.5%) were removed from Cilacap. The age of the business is dominated by the age of 2-5 years, which accounts for 89 units (44.5%). Grouping MSMEs based on

Law Number 20 of 2008, the maximum annual sales or turnover of micro businesses is 300 million. Meanwhile, for small businesses, the annual turnover is more than 300 million, but does not exceed 2.5 billion. Medium businesses have an annual turnover range of above 2.5 billion to the highest figure reaching 50 billion. Micro business criteria, which accounts for 124 units (62%), small, which accounts for 61 units (30.5%), and medium, which accounts for 15 units (7.5%). In terms of ownership structure, 86.5% of the units are privately owned, while the remaining units are family businesses, limited liability partnerships, and limited liability corporations. Monthly revenue is dominated by salaries under Rp 500,000 (34%), and salaries between Rp 500,000 and Rp 10,000,000 (33%). The remainder of the business sector is comprised of cosmetic fashion, wholesale and retail businesses, services, stores, event organizers, the automotive industry, and livestock. Moreover, 127 units (63.5% of MSMEs) have two to three employees, sixty units (30%) have one employee, and thirteen units (6.5%) have four to five employees.

### 3.2 Measurement Model Test (Outer Model)

#### a. Convergent Validity

Convergent validity is a measure used to assess the extent to which statements on each latent variable can be understood by respondents. A commonly used criterion for convergent validity is a loading factor greater than 0.7.

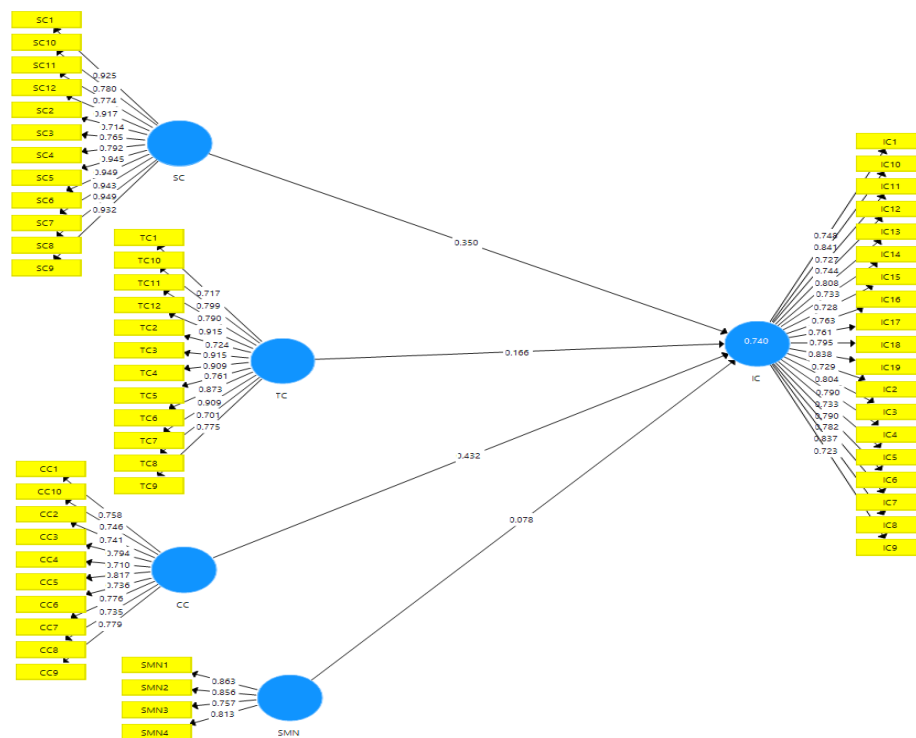


Figure 1. Outer Model Algorithm Results  
Source : processed data (2023)

Figure 1. is the result of the outer model algorithm utilizing the application SmartPLS version 3.0. Right blue circle indicates that the dependent variable has an R-square value of 0.74, indicating that social capital, technological capital, customer capital, and social media networking factors effect 74% of the diversity of innovation capability forms. The remaining 26% is effect by factors outside the analyzed variables. The loading factor value corresponds to the direction of the arrow that proceeds from

each variable to each indicator. Social capital, technological capital, customer capital, social media networking, and innovation capability variables are deemed valid if the loading factor value is greater than or equal to 0.70.

b. Discriminant Validity and Average Variance Extracted (AVE)

To ensure that each concept of each latent model is distinct from other variables, discriminant validity is assessed.

Table 2. Discriminant Validity and Average Variance Extracted (AVE)

	CC	IC	SC	SMN	TC	AVE
Social Capital	0,760					0,578
Customer Capital	0,787	0,773				0,598
Technological Capital	0,653	0,756	0,870			0,757
Social Media Networking	0,148	0,220	0,140	0,823		0,678
Innovation Capability	0,690	0,716	0,681	0,173	0,820	0,672

*Source : processed data (2023)*

The discriminant validity is adequate if the AVE value is greater than 0.5. The Fornell-Lacker test is used as the discriminant validity test. The AVE values for all of these variables are greater than 0.5, as shown in the table 2. Consequently, it can be stated that all variables possess Discriminant Validity.

c. Composite Reability

The composite reliability test was administered to evaluate the dependability of the variables used in the research.

Table 3. Composite Reliability

	Composite Reliability
Social Capital	0,974
Technological Capital	0,961
Customer Capital	0,932
Social Media Networking	0,894
Innovation Capability	0,966

*Source : processed data (2023)*

The composite reliability values of social capital, technological capital, customer capital, social media networking, and innovation capability are greater than 0.7 according to Table 3. Therefore, all of these variables are deemed reliable.

### 3.3 Structural Model Test (Inner Model)

a. SRMR

SRMR is Standardized Root Mean Square Residual. This value is a measure of model fit, namely the difference between the data correlation matrix and the estimated model correlation matrix.

Table 4. SRMR

	Estimated Model
SRMR	0,074

*Source : processed data (2023)*

SRMR values below 0.08 indicate a fit model. SRMR values between 0.08 – 0.10 indicate an acceptable fit model. According to the information in table 4. The model estimation result is 0.074, which means the model has acceptable fit.

b. Q-Square

The Q-square value is also used to determine the goodness of the model, where the higher the Q-Square value indicates that the structural model fits better.

Table 5. Q-Square

Variable	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
Social Capital	2400,000	2400,000	
Technological Capital	2400,000	2400,000	
Customer Capital	2000,000	2000,000	
Social Media Networking	800,000	800,000	
Innovation Capability	3800,000	2188,579	0,424

Source : processed data (2023)

A Q-square value above 0 states that the model has predictive relevance. The Q-square interpretation values qualitatively are 0 (low effect), 0.25 (moderate effect), and 0.50 (high effect). According to the information in table 5. The Q-square value of the Innovation Capability variable is  $0.424 > 0.25$  (moderate prediction accuracy).

c. R-Square

Adjusted R Square provides an overview for evaluating an exogenous construct's capacity to explain endogenous constructs.

Table 6. R-Square

	R Square	R Square Adjusted
Innovation Capability	0,740	0,735

Source : processed data (2023)

According to the information in table 6. The adjusted R-square value is 0.735%. This value indicates that social capital, customer capital, technological capital, and social media networking effect innovation capability by 73.5%, with the remaining 26.5% effect by variables outside the scope of this study.

d. f Square

In this study, the value of f square indicates the extent of the effect of endogenous variables on exogenous variables. The criterion values of f<sup>2</sup> for f-square are 0.002, 0.15, and 0.35, indicating that the latent variable predictor has a minor, moderate, and substantial effect at the structural level, respectively.

Table 7. f Square

	Innovation Capability
Customer Capital	0,332
Social Capital	0,222
Social Media Networking	0,023
Technological Capital	0,045

Source : processed data (2023)

According to table 7, social media networking and technological capital have a minor effect on innovation capability, whereas social capital and customer capital have a significant effect on innovation capability.

### 3.4 Hypothesis Testing

Research can be declared significant if P-Values  $<0.05$  and declared significant if  $t\text{-table} > 1.96$ . All relationships are said to have a positive direction if the original sample (O) value shows a positive value, while hypotheses that have a negative direction, the original (O) value shows a negative value.

Table 8. Hypothesis Testing Results

	Direct Effect	Original sample (O)	Sample Mean (M)	Std.Deviation (STEDV)	t Statistic (10/STDVI)	P values
H1	SC -> IC	0,350	0,350	0,056	6,251	0,000
H2	TC -> IC	0,166	0,161	0,056	2,967	0,003
H3	CC -> IC	0,432	0,434	0,054	7,941	0,000
H4	SMN -> IC	0,078	0,077	0,037	2,090	0,037

Source : processed data (2023)

#### a. First Hypothesis Testing Results

In organizational learning theory, good relationships between organizational members, high levels of trust, and strong social networks enable knowledge exchange, collaboration, and support that support overall organizational learning so that social capital can create innovation capability. In addition, according to the bootstrapping experiments conducted between social capital and innovation capability, social capital has a positive effect on innovation capability with a P value or statistical significance of  $0.000 < 0.05$ . According to research (Wacquant, 1992) and (Gulati et al., 2005) Social Capital is used to increase knowledge about learning, economic knowledge, understanding the strengths and status of individuals (Wacquant, 1992) and is the key to creativity and business strategy in order to increase business people's innovation capability. The relationship between social capital and innovation capability also plays a significant role in facilitating the learning process within an organization. Good business-to-employee relationships, high levels of trust, and robust social networks facilitate knowledge exchange, collaboration, and support, thereby fostering organizational learning and innovation capability. According to research (WU & Sivalogathan, 2013) (Yeşil & Doğan, 2021) (Mursid et al., 2018), social capital has a positive impact on innovation capability.

#### b. Second Hypothesis Testing Results

According to the organizational learning theory, the use of appropriate technology can facilitate access to information, effective communication, and improved collaboration in collecting, storing, and disseminating knowledge, thereby facilitating innovation capability through technological capital. And based on the results of the bootstrapping test between customer capital and innovation capability, customer capital has a positive impact on innovation capability with a P value of  $0.003 < 0.05$ . According to research (Foroudi et al., 2016), technology plays a crucial role in facilitating innovation capability, which have the potential to transform underdeveloped markets into high-potential business markets, and technological development can increase the diffusion of innovation capability in the form of new services and service operations. This is also in line with the organizational learning theory that Technological capital, such as technological systems and infrastructure owned by the organization, can support and accelerate the organizational learning process. Appropriate use of technology can facilitate access to information, effective communication, and better collaboration in collecting, storing, and distributing knowledge so as to facilitate innovation capability. This is also in line with research (Oh & Teo, 2010) (Ryu et al., 2021) (Barkat et al., 2018) which shows that technological capital has a positive effect on innovation capability.

### c. Third Hypothesis Testing Results

In organizational learning theory, a business that is able to learn from customers, collect feedback, and respond quickly can improve their products and services in accordance with customer expectations can develop innovation capability to increase customer trust so that customer capital affects and improves innovation capability. From the tests carried out in the bootstrapping test between customer capital and innovation capability, it shows that customer capital has a positive effect on innovation capability with a P value or significance of  $0.000 < 0.05$ . Based on research (Gupta & Malhotra, 2013) innovation capability can encourage corporate reputation and customer loyalty and reflect reputation as a collective assessment made as an evaluation to increase innovation capability. Customer capital is also related to organizational relationships or organizational learning with customers so that they can understand customer needs and preferences and create innovation capability. This is in line with research (Jahanshahi et al., 2019) (Gupta & Malhotra, 2013) (Nengah et al., 2021) which shows that customer capital has a positive effect on innovation capability.

### d. Fourth Hypothesis Testing Results

According to organizational learning theory, social media networking can boost an organization's capacity for innovation by allowing users to engage with consumers, build networks, share information, get feedback, and learn about market trends and customer demands. Additionally, with a P value or significance level of  $0.037 < 0.05$ , the bootstrapping tests between social capital and innovation capability show that social capital has a positive effect on innovation capability. Research based (Pratono, 2018). Because social media networking is founded on relationships between individuals and groups, business perpetrators can seek out and share knowledge by involving many users, regardless of where they are located, which increases their capacity for creativity. Research by (Latifah et al., 2022), (Scuotto, 2016) (Hitchen et al., 2017) indicates that social media networking has a favorable effect on an individual's capacity for invention.

## 4. CONCLUSION

This research leads to the conclusion that Social Capital has a positive effect on Innovation Capability. In the organizational learning theory, social capital can increase innovation capability by facilitating the exchange of knowledge, information, and experience between individuals and groups. Then, Technological Capital has a positive effect on Innovation Capability. In organizational learning theory, the use of appropriate technology can improve access to information, communication, and collaboration in accumulating, storing, and disseminating knowledge in order to foster innovation capability. Customer Capital effects Innovation Capability positively. According to the organizational learning theory, customer capital is also associated with the organization's relationship with customers and a comprehensive comprehension of customer preferences and needs. Then Social Media Networking effects Innovation Capability positively. According to the organizational learning theory, social media networking is crucial to innovation capability. Organizations can use social media platforms to interact with customers, develop networks, share knowledge, obtain feedback, and gain insight into market trends and customer requirements. So it can be concluded that Social Capital, Technology Capital, Customer Capital and Social Media Networking are matters of the innovation capability of MSME players.

It can be seen from the phenomenon that occurred in the development of MSMEs in Central Java, particularly in the Banyumas, Brebes, and Cilacap districts, which experienced a decline due to a number of factors, such as in 2020 experiencing the Covid-19 pandemic, which led to a decrease in the number of MSMEs, and MSMEs still face challenges related to the development of innovation, technology, literacy,

digital, branding, and others. The research has implications for MSME perpetrators and government, particularly in the Banyumas, Brebes, and Cilacap Regencies, who can grow their businesses by enhancing their innovation capability, such as by increasing the creativity of MSMEs and holding outreach for MSMEs in these areas. It is anticipated that this research will increase the competitiveness of MSMEs by enhancing their innovation and business development capability. It is hoped that the contribution of this research can provide information as a basis for consideration of thought to decision makers for MSME perpetrators to increase income and carry out business development. And one of the limitations of this study is researchers only look at the perspective of the situation of MSMEs in Banyumas, Brebes and Cilacap in Central Java so that suggestions for further research using a larger and more evenly distributed population and sample, as well as variables intellectual capital that are more diverse than those used in this research such as human capital, spiritual capital, and structural capital.

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