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Absorptive Capacity, Knowledge Sharing, and Innovation Capability of Millennial Technopreneurs in Indonesia

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INFO ARTIKEL

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Abstract

In order to promote competitiveness and contribute to the economy of Indonesia, it is recommended that efforts be made to foster innovation capabilities and technological knowledge among millennial technopreneurs. This study investigated how absorptive capacity affects the relationship between knowledge-sharing and innovation capabilities among 60 millennial technopreneurs. The survey method was used to collect data via online Google Forms, and the analysis was conducted using moderated regression analysis (MRA). The results showed that knowledge is essential for improving innovation capabilities within organizations. In addition, absorptive capacity moderates the relationship between knowledge sharing and innovation capability, indicating that innovation capability can be enhanced through sharing information, effective practices, insights, experiences, preferences, and other forms of knowledge.

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INTRODUCTION

Knowledge is essential for improving organizational innovation capabilities (Zhao et al., 2020). Organizations that encourage collaboration between members in groups or companies tend to generate new ideas and develop new opportunities through innovation activities (Popescu et al., 2019). In organizations, experience, and creativity are exchanged and integrated with the knowledge of other individuals to develop processes and services over time.

The theory underlying this research is a resource-based view in explaining the internal resources owned by a company (Barney, 2002), including absorptive capacity and individual knowledge sharing to achieve innovation capabilities to compete. The success or failure of a company will be primarily determined by the company's internal strengths and weaknesses. Resources-based view theory

(RBV) provides a strong theory in supporting intellectual capital, including the ability to absorb and innovate organizations to bring competitive advantage (Paulus, 2018).

The research results of Kahle et al. (2020) found that innovation capability will increase if individuals in the organization share knowledge in the sense of sharing information, carrying out effective practices, and sharing experiences and preferences regarding the things being studied. Through knowledge sharing, there is great potential for knowledge stocks to work together to form new understanding and innovation within the organization. Research by Kurniawan et al. (2020) has explored the relationship between innovation and knowledge sharing and highlighted the role of knowledge sharing in improving a company's innovation capabilities. In another literature, Paoloni et al. (2020) found that sharing tacit and explicit knowledge increases innovation capabilities.

In several related studies (Liu, 2018; Popescu et al., 2019; Kurniawan et al., 2020), it was found that absorptive capacity can moderate the relationship between knowledge sharing and innovation capability. The ability of an organization or individual to learn, absorb, and apply new knowledge is characterized as absorptive capacity. Makhloufi et al. (2021) research results suggest that absorptive capacity can increase the association between information sharing and innovation capability, so the higher the absorptive capacity, the more significant the influence of knowledge sharing on innovation capability. As a result, absorptive capacity is critical for balancing the link between knowledge sharing and innovative capabilities.

Chatterjee et al. (2022) believe that since the person receiving the knowledge lacks absorptive capacity, the newly imparted knowledge may need to be applied more creatively. If the organization does not have sufficient creative capabilities, the new knowledge shared may have little impact on innovation capabilities (Al-Maroof et al., 2021). However, it should be remembered that knowledge sharing is generally considered an essential factor in building innovation capabilities (Wuryaningrat, 2013). Therefore, efforts to increase absorptive capacity, build a work culture that encourages knowledge sharing, and increase creative capabilities can improve the impact of knowledge sharing on innovation capabilities.

Due to the previous research, this research raises issues related to the ability to absorb organizational knowledge, which plays an important role and contributes to influencing reliable and quality human resources due to increasingly tight competitiveness and competition in the era of globalization, which demands continuous innovation (sustainability). This research takes the setting of millennial entrepreneurs in Indonesia to see whether their absorptive capacity can strengthen knowledge-sharing behavior with innovation capabilities.

Technopreneurs use technology to produce acceptable consumer innovations (Bon, 2010). They can move the wheels of the Indonesian economy by running business differently from other entrepreneurs and involving technology (Pratama et al., 2021). In Indonesia, the millennial generation is considered a generation that has its attitudes, values, and characteristics (Howe et al., 2007). They have a receptive attitude when facing something and are always open to innovation, so they quickly adapt to the digital world (Suradi et al., 2017). The results of research conducted by Paulus (2020) show that millennial technopreneurs in Indonesia tend to ignore knowledge acquisition and only focus on applying the knowledge they already have in building their business. This can affect their innovation capabilities. In this instance, to boost competitiveness and the nation's economic output, Indonesia's millennial technopreneurs must be given more significant opportunities to innovate and gain technological know-how. This

paper discusses the findings of a study that attempts to investigate how knowledge sharing affects innovation potential and the moderating effect of millennial technopreneurs' absorptive capacity in Indonesia.

RESEARCH METHODS

This study employed a quantitative methodology, specifically utilizing a survey instrument, to examine the perspectives of young entrepreneurs (often referred to as millennials) that employ technology in their business operations. The focus of the investigation was on information sharing, absorptive capacity, and innovative capability. The researchers employed purposive and snowball selection techniques to select the research sample in a non-probabilistic way (Cooper & Schindler, 2011). The primary data is self-reported utilizing an online survey administered by the 60 respondents using a Google Form.

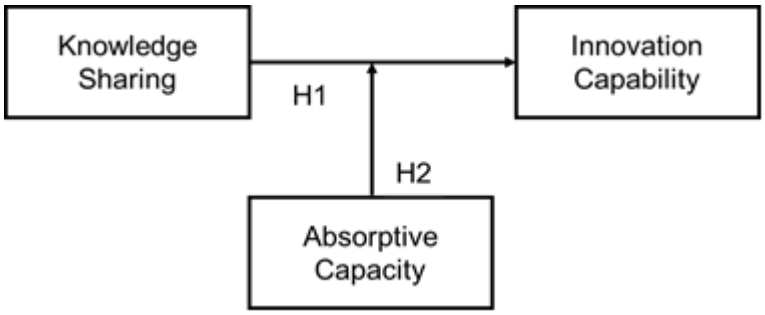

Figure 1. Research Model

RESULT

In this research, data analysis begins with testing the validity and reliability of the construct. The research instrument is a questionnaire consisting of three parts to measure the variables of knowledge sharing, absorption capacity, and innovation ability. A Likert scale with five categories was used to measure all instrument items, which was a development of previous research by Kulkarni et al. (2006 and 2007), Zahra and George (2002), and Calantone et al. (2002) for each variable measured. The research instrument was tested using validity and reliability tests. The validity test consists of face validity, content validity, and factor analysis (CFA) using the principal component analysis extraction method, as described by Hair et al. (2010). Reliability testing was conducted by looking at internal consistency using Cronbach's alpha by SekaranB & Bougie (2016). The validity test results show that all items have loading values above 0.5.

Table 2. Validity and Reliability Analysis

Variabel	Code Item	CFA Factor *Loading*	*Reliability Cronbach Alpha*
Knowledge Sharing	KS1	.874	.867
	KS2	.842	
	KS3	.858	
	KS4	.830	
	KS5	.614	
Absorptive	AC1	.583	.771

Capacity	AC2	.606	
	AC3	.669	
	AC4	.799	
	AC5	.721	
	AC6	.725	
	IC1	.750	
	IC2	.684	
Innovation Capability	IC3	.693	.767
	IC4	.775	
	IC5	.697	

Source: Research Data

Table 2 shows the results of the reliability test, where the Cronbach Alpha value for each research variable is more significant than 0.60. Therefore, each item in the research variable is considered reliable, with a Cronbach Alpha coefficient between 0.767 and 0.867.

Tabel 1. Respondent Data

	Description	Amount	Percentage (%)
E-Commerce Facilities	Not	25	41.7
	Yes	35	58.3
	Total	**60**	**100.0**
Media Information Technology	Smartphone	25	41.7
	Smartphone & Laptop	20	33.3
	Smartphone,Laptop, Computer & Tablet	15	25
	Total	**60**	**100.0**
Electronic Promotion Facility	Social Media	30	50
	Online Chat	20	33.3
	Marketplace	10	16.7
	Total	**60**	**100.0**
Type of Business Field	Cosmetic	10	16.7
	Retail	6	10
	Furniture	8	13.3
	Health	2	3.3
	Culinary	5	8.3
	Reseller	15	25
	Fashion	10	16.7
	Spareparts	4	6.7
	Total	**60**	**100.0**

Source: Research Data

There are still many millennials who have yet to use e-commerce facilities (applications) in this research, and only 35 (58.3%) of the 60 respondents used e-commerce facilities. The information technology media most widely used by millennial entrepreneurs in this research is smartphones (41.7%). This is because almost everyone now has smartphones, making it helpful and more accessible for millennial entrepreneurs to run their businesses. In addition, a subset of participants utilizes various information technology platforms in conjunction with smartphones. Specifically, 20 respondents (33.3%) employ a combination of smartphones and other media, while 15 respondents (25%) utilize smartphones, laptops, computers, and tablets to facilitate their business operations. This finding

aligns with the outcomes of the national socio-economic survey (Susenas), which indicates that the utilization of cellular phones demonstrates the superiority of the millennial generation over preceding generations in both urban and rural regions (www.kemenpppa.go.id, 2018). Besides that, many millennials feel that social media is used to connect, search for product information, and promote products to consumers (kompasiana.com, 2023). This is under data from respondents to this research, which shows that as many as 50% use social media as a promotional facility compared to online chat (33.3%) and marketplace (16.7%). Apart from that, cosmetics and fashion are trends (16% each) and the choice of young people today. Hence, research data shows that the synergy between fashion and cosmetics exists because of its rapid development (tempo.co, 2023).

Based on multiple linear regression analysis and Moderated Regression Analysis (MRA) presented in Table 3, it was found that the value of the knowledge sharing coefficient (X1) has a calculated t of 5.524 at a significance level of 5% ($p<0.05$), which indicates that there is a significant influence statistically significant between the knowledge sharing variable (X1) and innovation ability (Y). In addition, the calculated t-moderation coefficient is 3.166 at a significance level of 5% ($p<0.05$), indicating that the moderating variable (X3), namely the interaction between knowledge sharing and absorptive capacity, has a statistically significant effect on innovation capability (Y), So it can be concluded that the results of this moderation strengthen the relationship between knowledge sharing and innovation capability.

Table 3. Moderation Regression Analysis

	T Statistics	***P Value***	***Information***
Knowledge Sharing -> Innovation Capability	5.524	0.007*	Accepted
Absorptive Capacity x Knowledge Sharing -> Innovation Capability	3.166	0.002*	Accepted

R *Square*: Innovation Capability = 0.636 (63.6%)
Sig.5%*
Source: Research Data

The Goodness of Fit test used the coefficient of determination (R2 Square) criteria. An R2 value of 0.636 was obtained, which means that 63.6% of the innovation capability variable is influenced by variables consisting of knowledge sharing and absorptive capacity. In comparison, 36.4% of the innovation capability variable is influenced by other variables outside the variables studied. An R2 value of more than 0.5 indicates that the regression model fits well.

DISCUSSION

Regression analysis carried out and research hypothesis testing, it was found that knowledge sharing has a positive and significant influence on innovation capabilities. The data processing results of respondents' answers also show that the knowledge-sharing variable has a positive and significant influence on innovation capability, thus proving that knowledge is essential in increasing an organization's innovation capability. The experience and creativity of individuals in organizations can be used to build new processes, services, and products by sharing and integrating with the knowledge of other individuals (Sensuse et al., 2015). Previous research conducted by Darr et al. (1995), Santos et al. (2019), and Matarazzo et al. (2021) also found that organizations that encourage knowledge

sharing between their members tend to have the ability to generate new ideas and develop new opportunities through innovation activities. Therefore, knowledge sharing is considered the main requirement for creating change, according to the theory proposed by Paulus and Wardhani (2018).

Apart from the research results regarding the positive and significant influence of knowledge sharing on innovation capability, another finding is that absorptive capacity moderates the relationship between knowledge sharing and innovation capability. This aligns with previous research by Ryu et al. (2021), which shows that innovation capabilities can be increased through knowledge sharing, namely by sharing information, effective practices, insights, experiences, preferences, and things learned. Additionally, Fan et al. (2021) also stated that knowledge sharing impacts the absorptive capacity of organizational members because, through sharing knowledge, great potential will be formed from the knowledge individuals possess to create new understanding and innovation. Therefore, these findings suggest that knowledge-sharing and absorptive capacity both play an essential role in enhancing the innovation capability of an organization.

Based on the research data analysis, knowledge is an essential factor in increasing an organization's innovation capabilities. Organizations that encourage their members to contribute to sharing knowledge can generate new ideas and develop new opportunities through innovation activities (Paulus, 2018). In this research, millennial technopreneurs who are research subjects have shown that they can share knowledge within the organization well so that their experience and creativity can be integrated with the knowledge of other individuals in the organization to develop processes and services over time (Kir & Erdogan, 2021).

CONCLUSION

The results of this research also show that innovation capability will increase if individuals in the organization share knowledge in the sense of sharing information, effective practices, insights, experiences, preferences, and things learned. Knowledge sharing by millennial technopreneurs in the research sample also influences members' absorptive capacity in their organizations (Sensuse et al., 2015). In this case, knowledge sharing can form a sizeable potential stock of knowledge possessed by the millennial generation to work together to form new understanding and innovation in their organizations (Fan et al., 2021).

Therefore, the ability to absorb knowledge by millennial technopreneurs needs to be improved to increase competitiveness and competition in an era of increasingly tight globalization, as well as to demand continuous innovation in technology-based business development.

Several implications that can be used as references by millennial technopreneurs who are the subject of research include: Millennial technopreneurs need to prioritize knowledge management to improve their innovation capabilities sustainably through sharing, discussion, or transfer of knowledge through techniques and methods such as sharing information, documents, and solutions online (Ryu et al., 2021). Millennials must try quickly and intensively to identify and obtain the knowledge needed for their operational activities through information and documents obtained from the external environment (Al-Maroof et al., 2021). The organization's ability to review, synthesize, and integrate previously owned knowledge with knowledge obtained from external sources needs to be improved in order to develop and improve routines and improve existing competencies or create new ones (Bon, 2010). Millennial entrepreneurs must be open to new ideas and have the will and sufficient resources to try new ideas (Depositario et al.,

2011). They are looking for new ways of doing things and being creative in operational methods to introduce something new and unique to the target market that their competitors have never had or cannot imitate.

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