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The Influence of Digital Platforms, Organizational Readiness and Innovation Culture on the Performance of MSMEs in the Fisheries and Maritime Sector

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ABSTRACT

MSME (micro, small and medium enterprises) actors in the fisheries and marine sectors in Indonesia are faced with increasing global competition. Business actors must be able to increase their competence and capacity for empowering technology and innovation. However, limited knowledge of utilizing digital access is a major obstacle, especially for MSME actors in the fisheries and marine sectors. Apart from that, the ability of MSME players to innovate products is still limited. This is proven based on the research innovation index in Indonesia, which has experienced a decline in relation to human resources, research, infrastructure, market updates, and business. A fairly low indicator relates to innovation capacity, which has an impact on an increasingly declining innovation culture. This research aims to analyze the influence of digital platforms, organizational readiness, and innovation culture on the performance of MSMEs in the fisheries and marine sectors in the city of Surabaya. The unit of analysis for this research is 30 MSME actors in the city of Surabaya. This research produced five (five) research hypotheses, which were processed and analyzed using a partial least squares approach. The results of this research show that digital platforms have a significant effect on organizational readiness and innovation culture, as well as innovation performance. Likewise, organizational readiness has a significant influence on innovation performance. However, innovation culture does not show significance for innovation performance.

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1. INTRODUCTION

In the current digital era, MSMEs (micro, small and medium enterprises) in Indonesia, especially in the maritime and fisheries sectors, are faced with increasing global competition. Maritime and fisheries MSMEs are sectors that

greatly contribute to the national economy. Therefore, MSMEs in this sector must be able to increase their competence and capacity to empower technology and innovation (Herustiati, 2020). However, business actors in the fisheries sector, such as fishery product

processing, face obstacles in moving towards digitalization to increase competitive advantage because they are faced with five (five) general problems, namely marketing, capital, human resource competency, limited mastery of technology, and management (Suherman, 2019). Apart from that, there are several other problems, such as financial problems, demand and supply, operational facilities and resources, and a limited ability to use digital platforms (Fachrizah, et al., 2020). Apart from that, the majority of Indonesian people purchase goods via digital platforms because of the efficiency of time and energy, cheaper product prices, and cheaper shipping costs (Tanip, 2023). MSME (micro, small and medium enterprises) players in the fisheries and marine sectors must be able to adapt to digital marketing and sales systems through digital platforms or commerce.Likewise, innovation in MSME products in Indonesia is still low. Based on several indicators of human resources, research, infrastructure, market, and business updates, Indonesia has experienced a decline in innovation since 2016 to become 50th in the world (BRIN, 2022). A fairly low indicator relates to innovation capacity, which has an impact on an increasingly declining innovation culture. Several factors cause this, namely the limited quality and quantity of innovators in Indonesia, in addition to the research ecosystem and infrastructure that are less supportive. Then, business actors are not yet able to manage their businesses optimally. This can be demonstrated by the minimal quality of human resources, limitations in understanding MSME business and financial management, limited access to capital, and MSME productivity (Tama, 2018). Therefore, MSME players need to improve and provide better changes to their business management, and the readiness of MSMEs to make better changes to their management is very necessary. Thus, organizational readiness is very necessary as a form of organizational attitude and action by preparing its resources to face change so that it can develop and be managed well.

This research is expected to make a major contribution to the development of MSMEs in the fisheries and marine sectors in Indonesia by predicting the role of digital platforms, organizational readiness, and innovation culture

in improving the innovation performance and productivity of MSMEs in the current era of digitalization. Therefore, MSME actors in the fisheries and marine sectors are very much needed to develop their knowledge of using digital technology and insight into product innovation. Thus, this research will collect data on MSMEs, especially in the fisheries and marine sectors in the city of Surabaya, as samples and research analysis units.includes: digital platform, organizational readiness, innovation culture, and innovation. Thus, this research aims to analyze the influence of digital platforms, organizational readiness, and innovation culture on innovation performance in MSMEs in the maritime and fisheries sectors. This research model was adopted from research by Nasir, Jun, and Yousaf (2022) and Khattak, Tabash, Yousaf, and Radulescu (2022).

2. LITERATURE REVIEW

This research involves several research variables seen in Figure 1, including: digital platform, organizational readiness, innovation culture and innovation performance. The digital platform is an important aspect for the sustainability of business organizations in environmental and technological challenges (Cenamor, 2019). In addition, a digital platform can be defined as a business model that involves producers and users interacting with each other to create shared value (Still, 2017). Meanwhile, organizational readiness is the level of employee readiness to change for reasonable reasons to achieve organizational goals (Kirrane, 2017). Then, innovation culture is part of the basic values, assumptions, and deep beliefs that an organization shares with its members (Castro, 2013). Meanwhile, innovation performance is an innovative capability that has an impact on organization's success in producing products and services and facilitating administrative processes in creating value to gain a competitive advantage (Chen, 2009). Then, Innovation performance is an important component of a company's success because it covers several factors including: environmental and social impacts of business processes, fostering employee creativity, and collaborating with customers, supply chain partners, and other commercial partners to design and develop innovative products and services (Al-Sharif, Ali, Jaharuddin, & Abdulsamad, 2023) (Susanty, 2019).

Meanwhile, this research model was adopted from research (Nasir, Jun, & Yousaf, 2022) and (Khattak & Tabash, 2022). The research (Nasir, Jun, & Yousaf, 2022) aims to investigate how digital platform capabilities, capabilities, improvisational organizational readiness influence innovation performance in MSMEs. Meanwhile, this research involves several research variables (Nasir, Jun, & Yousaf, 2022), namely the influence of digital platforms on innovation performance. Then, research (Khattak, Tabash, Yousaf, & Radulescu, 2022) aims investigate digital platforms, frugal innovation, and innovation culture in MSMEs. However, this research only involves several research variables (Khattak, Tabash, Yousaf, & Radulescu, 2022), namely the influence of digital platforms on innovation culture and the influence of innovation culture on innovation performance.

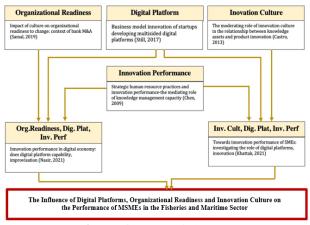


Figure 1. State of the art

Therefore, this research develops a research model from previous research. Figure 2 shows the conceptual model of this research which produces several research hypotheses, which involve several research variables, including: Digital Platform (DP), Organizational Readiness (OR), Innovation Culture (IC) and Innovation Performance (IP).

H 1: Digital Platform has a significant effect on Innovation Performance in MSMEs in the fisheries and marine sector.

Digital platforms provide a basis for

integrating information from various resource parties (Jun, 2021). This helps foster innovative ideas and make changes to the organization's core processes and products (Zeng S. X., 2010). Organizations with organized digital platforms are more likely to produce new ideas, plan and conduct creative activities, and can increase the organization's innovation performance (Jun, 2021). In addition, digital platforms provide SMEs with a channel of resources and technical support compared to large companies, and SMEs have greater strategic flexibility and offer direct and valuable interactions (L. Mei, 2019). This enables small and medium-sized enterprises to take advantage of the architectural and technical characteristics of digital platforms to acquire and integrate critical resources (Jiang, Yang, & Gai, 2023). Thus, this research formulates a hypothesis regarding significant influence of digital platforms on innovation performance in MSMEs in the fisheries and marine sectors.

H 2: Digital Platform has a significant effect on Organizational Readiness in MSMEs in the fisheries and marine sector.

Digital platforms represent a company's ability to adapt to new technology by combining internal and external resources to increase organizational readiness for achieving innovation performance (Fairchild, 2016). Organizational readiness has the ability to utilize, achieve, and apply higher competitive advantages through digital platforms by implementing frugal innovation (Sanchez & Zuntini, 2018). Thus, this research formulates a hypothesis regarding the positive influence of digital platforms on organizational readiness in MSMEs in the fisheries and marine sectors.

H 3: Digital Platform has a significant effect on Innovation Culture in MSMEs in the fisheries and marine sector.

Previous research revealed that digital platforms contribute significantly to the creation of an innovation culture by providing important knowledge and information (Khattak, Tabash, Yousaf, & Radulescu, 2022). Meanwhile, digital platforms enable organizations to obtain valuable knowledge and information from various internal and

external sources (Yunis, 2018). Therefore, organizations that have superior technological resources to communicate with external partners can increase the organization's innovation culture (Fitzgerald, 2014). Thus, this research formulates a hypothesis regarding the positive influence of digital platforms on organizational reading innovation culture in MSMEs in the fisheries and marine sectors.

H 4: Organizational Readiness has a significant effect on Innovation Performance in MSMEs in the fisheries and marine sector.

There are two main types of organizational readiness, namely psychological readiness and structural readiness (Tsou, 2015). company's structural readiness is internal, and the ability to accept change and provide a background for adopting the latest technology is the main requirement for improving innovation performance (Forés & Camisón, 2016). Organizational readiness is a key factor in increasing innovation performance. In addition, organizational readiness helps support actual management in achieving goals by utilizing internal and external resources to overcome innovation performance through organizational readiness (Nasir, Jun, & Yousaf, 2022). Thus, this research formulates a hypothesis regarding the positive influence of organizational readiness on innovation performance in MSMEs in the fisheries and marine sectors.

H 5: Innovation Culture has a significant effect on Innovation Performance in MSMEs in the fisheries and marine sector.

Innovation culture creates an environment where organizational members can explore new possibilities and develop and implement new ways of running the company (Lijauco, 2020). Innovation culture allows companies to explore and use knowledge and information to achieve innovation efficiency and effectiveness, thereby increasing innovation performance (Aksoy H., 2015). Thus, this research formulates a hypothesis regarding the positive influence of innovation culture on innovation performance in MSMEs in the fisheries and marine sectors.

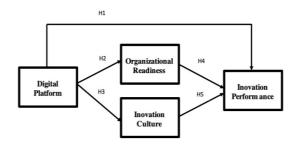


Figure 2. Research conceptual model

3. RESEARCH METHOD

This research went through several stages, namely, the first stage produced a research topic and title that began with identifying problems in the fisheries and marine MSME sectors, thereby producing research objectives and limitations. Second stage: develop a research model, which begins with creating a research state of the art to produce a research hypothesis. Next, the third stage is determining the research sample, namely MSME actors operating in the fisheries and marine sectors of the city of Surabaya.

Purposive sampling technique could be a strategy for deciding tests with certain contemplations based on predetermined criteria (Sugiyono, 2015). The criteria for this inquire about are MSME on-screen characters within the fisheries segment within the city of Surabaya. In the interim, a sensible test estimate in a think about is at least 30 inquire about tests (Roscoe, 1975). Thus, this investigate utilized a test of 30 MSME performing actors within the fisheries division within the city of Surabaya. Then, the process of collecting data on business actors in the fisheries and marine sector was carried out for one month, from November 1 2022 to November 30 2022. through research questionnaires obtained by operationalizing research variables, which include: digital platform, organizational readiness, innovation and innovation performance. Meanwhile, the research questionnaire consists of two parts: the first part includes demographic data (gender, education, and digital platform users), and the second part relates to the research variables to be tested. Then, the questionnaire that has been prepared must go through a validity and reliability testing process, as well as improvements to question items that are still incorrect. Then, each question in the questionnaire was measured

based on a Likert scale with a scale of "1" (strongly disagree) to a scale of "5" (strongly disagree). Next, in the fourth stage, data analysis and processing were carried out using a demographic descriptive statistical approach and the partial least squares approach to produce descriptive data and significance values for the research hypothesis.

Table 1. Measurement model

Construct	Cronbach'	CR	AVE
	s Alpha		
Digital Platform	0.843	0.891	0.676
(DP)			
Innovation Culture	0.959	0.970	0.890
(IC)			
Innovation	0.819	0.884	0.663
Performance (IP)			
Organizational	0.933	0.953	0.834
Readiness (OR)			

4. RESULT AND DISCUSSION

The unit of analysis for this research is MSME actors in the fisheries and marine sector in Surabaya, with a sample size of 30 business actors. As many as 82% of business actors have used digital platforms to market their products. Most of the business actors have completed high school level education, as much as 79%.

 Table 2. Demographic profiles and descriptive statistics

 of respondents

Characteristic	Freq	%	
Gender			
Male	13	46	
Female	17	54	
Education			
High school	22	79	
Junior HS	6	21	
Bachelor's degree	2	7	
Platform Digital			
Never	7	18	
Ever	23	82	

This research aims to test the variables that have been formed into research hypotheses. Several hypotheses were declared significant based on statistical t values. The results of the hypothesis testing research can be seen in Table 3.

Table 3. Structural model

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Path	T Statistics	Comment		
DP -> IC	3.562	Significant		
DP -> IP	11.365	Significant		
DP -> OR	6.605	Significant		
IC -> IP	0.139	Not Significant		
OR -> IP	2.124	Significant		

Analysis of the research model uses a partial least squares approach, with a level of reliability based on the Cronbach alpha coefficient and composite reliability (CR) at the level of 0.70 (Wu, 2015). Additionally, convergent validity is acceptable if the mean-variance extracted (AVE) level and item loadings are 0.50 or higher (J. F. Hair, 1995). Then, in the accepted hypothesis test, it shows significance = 5% and shows a statistical value greater than 2.0. In Table 1, it can be seen that this research variable produces a CR composite reliability value greater than 0.70 and a Cronbach alpha greater than 0.70. This explains why the reliability of the construction model of this research is acceptable. In addition, the AVE value for the construct is greater than 0.50, meaning that the question item can be declared valid.

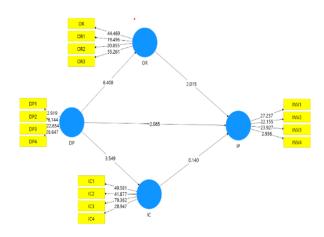


Figure 3. Standardized path coefficients

H 1 : Digital Platform has a significant effect on Innovation Performance in MSMEs in the fisheries and marine sector.

The results of Hypothesis 1 show that digital platforms have a significant effect on innovation performance with a significance value on the t-statistic of 11.365. Previous research has shown a significant relationship between digital platforms and Innovation Performance (Jiang et al., 2023). To achieve transformative digital economic performance, all types of businesses need alternative dynamic capabilities, the most important of which is digital platforms (Cenamor, 2019); (Nasir, Jun, & Yousaf, 2022). Meanwhile, in this research, the role of digital platforms in

exchanging information between customers and providing connections to business partners will have an impact on the innovation performance of MSMEs, including the ease of expanding the range of products and services, optimizing the development of new products or services, and cost efficiency in product development. or new services.

H 2: Digital Platform has a significant effect on Organizational Readiness in MSMEs in the fisheries and marine sector.

The results of Hypothesis 2 show that digital platforms have a significant effect on organizational readiness, with a significance value in the t-statistic of 6.605. Digital platforms enable companies to adapt digital-based innovations to digital technology and ICT systems, thus providing space for organizational readiness (Cenamor, 2019). In addition, in this research, the existence of a digital platform can have an impact on the organization's willingness to try new ideas, concerns about new changes, and the ability of organizational members to quickly adapt to program changes.

H 3 : Digital Platform has a significant effect on Innovation Culture in MSMEs in the fisheries and marine sector.

The results of Hypothesis 3 show that digital platforms have a significant effect on innovation culture, with a significance value on the t-statistic of 3.562. Previous research proposed a direct impact of digital platforms on innovation culture. This shows that digital platforms provide infrastructure that supports innovation activities at an organizational level, which contributes to helping improve innovation culture. In addition, digital platforms provide a basic foundation for the development of a culture that supports innovation activities (Fitzgerald, 2014). Thus, digital platforms play an important role in forming an innovation culture. In this research, the role of digital platforms in providing connections and exchanging information with partners has a quite positive influence on supporting a culture of respect for creativity and innovation, as well as sharing knowledge with MSMEs.

H 4: Organizational Readiness has a significant effect on Innovation Performance in MSMEs in the fisheries and marine sector.

The results of Hypothesis 4 show that organizational readiness has a significant effect on innovation performance, with a significance value on the t-statistic of 2.124. Previous research confirms that organizational readiness represents the tendency to adapt to new technology and improve organizational performance (Yudina, 2019). This organizational readiness allows companies to quickly adapt, store, formalize, and share information to meet innovation performance goals (Ojala, 2018). In addition, higher-level organizations make it possible to achieve optimal innovation performance (Binsaeed & Grigorescu, 2023). The role of organizational readiness in adapting to new changes in using digital technology will have an impact on the ability to expand the range of products and services, as well as product development, which is implied in innovation performance.

H 5: Innovation Culture has a significant effect on Innovation Performance in MSMEs in the fisheries and marine sector

The results of Hypothesis 5 show that innovation culture has no significant effect with a t-statistic of 0.139, meaning that the results of Hypothesis 4 are rejected because it produces a significance value smaller than 2. However, previous research shows that organizations with an innovation culture in the workplace are more likely to continue implementing innovation activities improve their innovation performance (Aksoy, 2017) (Khattak, Tabash, Yousaf, & Radulescu, 2022). However, this research shows that innovation culture does not show any influence on innovation performance. This is due to organizational culture factors in MSMEs in the fisheries and marine sectors related to innovation and creativity, which are still limited, and awareness of sharing knowledge is still low. This has an impact on organizational innovation performance for MSMEs in the fisheries and marine sectors. However, this research shows that innovation effect on culture has no innovation performance. This is caused by

organizational culture of MSMEs in the fisheries and marine sectors, which is related to innovation and creativity but is still limited, and awareness of sharing knowledge is still low. This has implications for the innovation performance of MSME organizations in the fisheries and marine sectors.

5. CONCLUSION

The results of this research conclude that digital platforms have a significant influence innovation culture and innovation performance, as well as organizational readiness. Then, Organizational readiness produces a significant influence on innovation performance. However, innovation culture shows an insignificant influence on innovation performance among MSMEs in the fisheries and maritime sectors. Therefore, the role of digital platforms is very necessary for MSME players, because they can increase innovation performance through expanding the range of services and creating innovative products. Besides that, digital platforms have a significant influence on organizational readiness. The role of digital platforms in organizational readiness, including readiness to accept new ideas and new changes, has a significant influence on MSMEs in the fisheries and marine sectors. After that, digital platforms showed a significant influence on innovation culture. The role of digital platforms in innovation culture in appreciating creativity innovation and encouraging employees to share knowledge has resulted in a significant impact on MSMEs in the fisheries and marine sectors. Apart from that, organizational readiness has a significant influence on innovation performance. Organizational readiness factors such as readiness and adapting quickly to new changes have had a quite good impact on innovation performance in MSMEs in the fisheries and marine sectors. However. Innovation culture does not show a significant influence on innovation performance. This is due to limited knowledge regarding innovation culture, such as how to gain knowledge and improve one's own performance, as well as working in teams.

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