



## The Influence Of Technology Orientation On Performance Is Mediated By Innovation In MSMEs Results From Melinjo Processing In Menes Banten

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### ABSTRACT

This study analyzes the role of mediation of innovation in the influence of, technological orientation on the performance of MSMEs melinjo in the village of Menes Pandeglang, Banten. This research uses quantitative methods and statistical analysis tools in the form of smartpls 4.0. This study used a sampling technique in the form of accidental sampling as many as 90 entrepreneurs who processed melinjo. The results of this study found that there was an mediating of innovation on influence of technology orientation on performance of MSMEs melinjo in the village of Menes Pandeglang, Banten. Other results explain that the no influence of technology orientation on performance in direct effect. This research focuses on the role of performance of MSMEs processed melinjo. In addition, the focus of this research is on the village of Menes, which is one of the villages in Pandeglang, Banten. The novelty in this study is that apart from the object of research, it is also a research model that has never been studied before.

### INTRODUCTION

The plantation sector still has very high potential in the future. Indonesia's vast territory is dominated by sea and land, making the plantation sector a favorite in the future. The plantation potential in Indonesia is estimated to reach \$1.14 billion (Suratman, 2021). Therefore, it is important for many parties to improve performance in the plantation sector throughout Indonesia, one of which is Pandeglang Regency.

Pandeglang Regency has abundant plantation potential in the future. One of them is the Menes area which is famous for producing Melinjo fruit. However, based on the results of pre-research, the indigenous people of Menes village have many problems, one of which is the performance of MSMEs from the melinjo business which does not grow from year to year.

Many literature review researching MSMEs. The importance of MSMEs today is because they contribute to national economic growth (GDP) of 61.1%. absorbing a workforce of 117 million workers (Indonesia, 2020). Significant performance growth provides great opportunities and potential for the industrial sector so that factors that influence performance must be identified to improve the sector's performance.

Several factors that influence performance come from within MSMEs using the Resource Base View (RBV) approach (Rianto et al., 2021). Internal resource factors owned by the organization become a competitive advantage for MSMEs to grow and compete in a dynamic market (Tarhini, 2018). One of the internal factors currently being considered is technology orientation. entrepreneurial orientation (Manahera et al., 2018; Ryadi & Yasa, 2016; Tarhini, 2018) and technology orientation (Aminu et al., n.d.; Tarhini, 2018) to learning orientation (Al-qarioti, 2015; Nisa et al., 2016; Oh, 2019).

This research focuses on MSMEs that produce processed melinjo from the plantation sector. This research is novel by considering women as the driving force of the family economy in Menes Pandeglang village, Banten.

## **LITERATURE REVIEW**

### **MSME Performance**

Performance is an important measuring tool in the success of a business (Rahayu & Usman, 2019). Measuring company performance has become a method for all stakeholders, such as business owners, investors, management, etc., who invest in an organization. Even non-profit organizations have started tracking company performance so they can deal with scarce resources (Rianto, 2021).

### **Technology Orientation**

Technology orientation is a company's ability and willingness to develop a technological mindset and utilize it in improving or developing products and services (Gatignon & Xuereb, 1997). In addition, technological orientation refers to the tendency to invest in monitoring and adopting technological innovations (Dviret al., 1993) and on the tendency of companies to frequently engage with new technologies (Sainio et al., 2012).

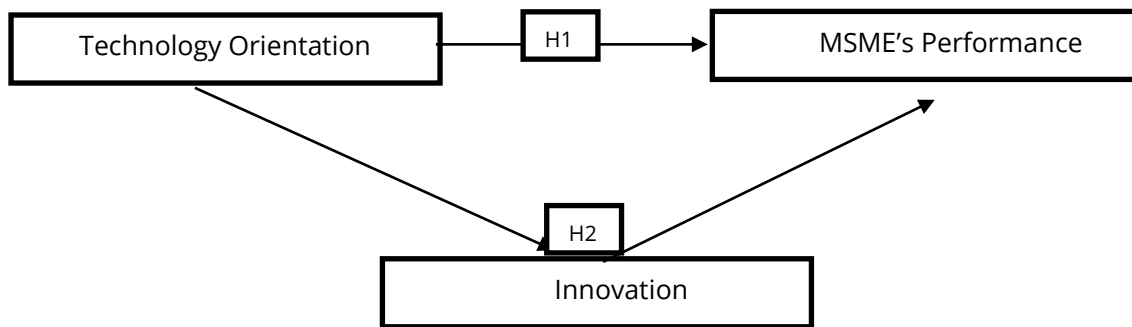
Technological orientation has been recognized as an important factor that has a positive influence on a company's long-term success because of the innovation it provides to the market. The basic premise of technology orientation is that consumers choose products with technological advantages (Gao et al., 2007; Hsu et al., 2014).

### **Innovation**

Innovation is one of the important organizational elements that has a strong effect on the outcomes of an organization and can be defined as the tendency of an organization to implement new ideas, inventions and inventions that result in the development of new products or services, managerial strategies, procedures, work methods and technologies. (Iqbal et al., 2019).

Innovation capability is related to the "ability" to absorb, adapt, and transform certain technologies into certain management, operations, and transaction routines that can bring the company to an advantage. (Vasconcelos et al., 2021). Innovation is an organizational activity that is considered a focal point of strategy, an important element of resilience, and a source of competitive advantage (Marin-Idarraga & Fourth-Marín, 2019; Suryawan, 2020).

Based on the above phenomena, it can be concluded that the conceptual framework model makes it easier for researchers to identify variables in research (Rianto et al., 2021) as follows :

**Figure 1. Innovation**

### Hypothesis

A hypothesis is a temporary answer to developing a theory which will then be tested for its truth so that a conclusion can be drawn to answer the phenomenon in research (Rianto et al., 2022). Based on the conceptual research above, the following hypothesis can be concluded:

Orientation is the company's ability and willingness to develop a technological mindset and utilize it in improving or developing products and services (Gatignon & Xuereb, 1997). Technology orientation makes it easy for business actors to improve performance. Several studies explain that technology orientation has a significant influence on improving business performance. (Hutahayan, 2019; Isichei et al., 2020) (Masa'deh, 2018).

- H1. Technology orientation influences the performance of MSMEs

Innovation is an important part for business actors to be able to survive and develop their business. Several studies (Jose, 1997; Khalil & Mehmood, 2018; Shah & Ahmad, 2019) show that product innovation has a significant effect on the performance of MSMEs.

Apart from that, innovation is considered to play a role in mediating the relationship between orientation and performance (Nursal et al., 2022) (Arief & Rosiawan, 2009; Pratiwi & Fanani, 2019a).

- H2. Technology orientation influences performance mediated by innovation

### METHODS

This research uses a quantitative method where the analysis unit focused on this research is the melinjo perpetrators in Menes Pandeglang village - Banten. The population in this study is not known with certainty so the research sample uses an approach (Joseph F. Hair Jr. William C. Black & Anderson, 2014) where the number of indicators x number 5 so that the number of respondents in this study is 90 perpetrators.

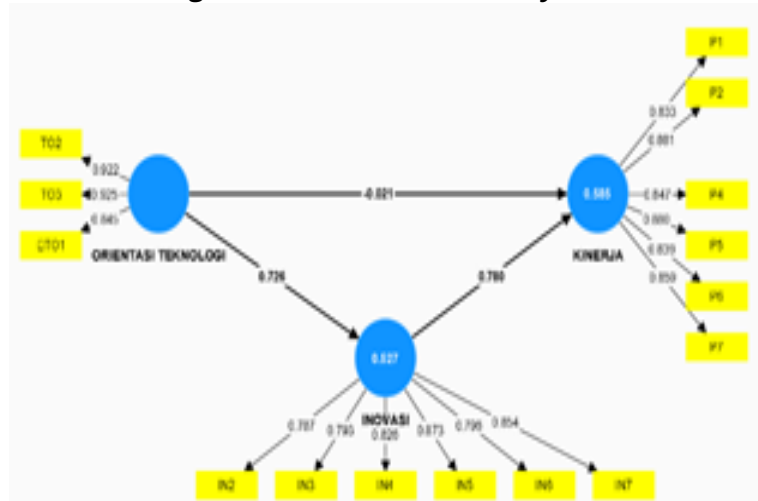
This research uses incidental sampling technique as a sampling technique in research. MSMEs processed melinjo. The instruments in this research were adopted from several previous studies. The technology orientation instrument was adopted from research (Tesa Asashi, 2017) with 4 statement items.

Innovation was adopted from research (Nursal et al., 2022) with 7 statement items and performance was adopted from research (Rianto et al., 2021) with 7 statement items. This research uses the SmartPLS 4.0 statistical tool using two analyses, namely the outer model by testing validity and reliability, while the inner model analysis is by testing the research hypothesis directly and indirectly.

**RESULTS**

The first stage in this research was testing the outer model. The outer model in this research refers to (Beckett et al., 2017) with the condition that the loading factor value is > 0.7. So in this research there are several values of outer loading that do not meet the requirements in the research which are shown in the following figure:

**Figure 2 Outer Model Validity Test**



The same thing is also used in reliability tests where according to (Beckett et al., 2017) the reference nail used is Cronbach's alpha > 0.7 and AVE value > 0.5. Based on the results of this research, it can be concluded that the Cronbach's alpha and AVE values have met the requirements in the research as shown in bold below:

**Tabel 1 Outer Model Reliability Test**

|                     | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|---------------------|------------------|-------------------------------|-------------------------------|----------------------------------|
| INOVASI             | <b>0.904</b>     | <b>0.908</b>                  | <b>0.926</b>                  | <b>0.676</b>                     |
| KINERJA             | <b>0.927</b>     | <b>0.930</b>                  | <b>0.943</b>                  | <b>0.734</b>                     |
| ORIENTASI TEKNOLOGI | <b>0.879</b>     | <b>0.880</b>                  | <b>0.926</b>                  | <b>0.806</b>                     |

The second stage in this research is to test the inner model. This test is intended to conclude the influence between the dependent and independent variables in the research.

Based on the results of the inner model test, the direct influence can be shown in table 2 as follows:

**Tabel 2 Inner Model Direct Effect**

|                                | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics ( O /STDEV) | P values     |
|--------------------------------|---------------------|-----------------|----------------------------|--------------------------|--------------|
| INOVASI -> KINERJA             | 0.780               | 0.785           | 0.116                      | 6.699                    | <b>0.000</b> |
| ORIENTASI TEKNOLOGI -> INOVASI | 0.726               | 0.728           | 0.050                      | 14.424                   | <b>0.000</b> |
| ORIENTASI TEKNOLOGI -> KINERJA | -0.021              | -0.030          | 0.144                      | 0.143                    | <b>0.886</b> |

The results of the inner model show that the influence of orientation and performance of MSMEs has no effect as indicated by a p-value of 0.886 > 0.05. Based on these results, hypothesis 1 is rejected. The original sample results showed - 0.021, which means that the higher the technology orientation, the lower the performance of MSMEs. However, this result cannot be used as a reference because the p-value does not meet the requirements for accepting a hypothesis.

**Tabel 4 Inner model Indirect Effect**

|                                | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|--------------------------------|---------------------|-----------------|----------------------------|------------------------|----------|
| ORIENTASI TEKNOLOGI -> KINERJA | 0.566               | 0.574           | 0.107                      | 5.302                  | 0.000    |

The indirect influence in this research is shown in the results of the table above with the results of the inner model path analysis test which proves that hypothesis 2 is accepted where the p value is  $0.000 < 0.05$  so that technology orientation has an influence on performance mediated by innovation in MSMEs. Based on these findings, it can be concluded that the mediating role of innovation is full mediation.

## DISCUSSION

The research found and strengthened previous findings that there is no direct influence between technology orientation and performance, where this research is in line with research (Tahini, 2018) that technology will directly make things difficult for MSMEs because the costs of developing technology and adopting and implementing it require large resources. . Apart from that, this research also found that technological orientation influences innovation, where this research is in line with research (Boateng, 2022a; Widiarta et al., 2020a) where with an orientation towards technology, MSMEs are always looking for new ways, including technology, to improve their performance.

Indirect influence in this study found that there was an indirect influence between technology orientation. The full mediation seen in the results of this research shows the importance of innovation in technology to improve the performance of MSMEs. This research is in line with previous research (Boateng, 2022b; Pratiwi & Fanani, 2019b; Widiarta et al., 2020b) regarding the phenomenon in the field where melinjo business actors utilize technology to increase sales.

Apart from that, the media WhatsApp, Facebook and Instagram are alternative choices for MSME players to become product promotion media with a wider coverage. The e-commerce option also offers convenience in transactions in product sales. Easy accessibility and convenience also play a major role in digital transactions.

## CONCLUSION

Based on the results of this research, several findings can be concluded that there is no direct influence between technological orientation on the performance of Melionjo MSMEs in Menes Pandegelang village, Banten. Meanwhile, the role of innovation mediation has a full influence on the relationship between technology orientation and the performance of Melionjo MSMEs in Menes Pandegelang village, Banten.

This research also further strengthens previous research and findings regarding the indirect influence of technology orientation on the performance of Melionjo MSMEs in Menes Pandegelang village, Banten, which is mediated by innovation.

## SUGGESTION

This research is of course still far from perfect. This research is limited to the technology orientation variable on MSME performance which is mediated by innovation. This research also has a limited number of respondents of 90 respondents using the Hair et al approach. The limitation of this research is that it only uses a quantitative approach as a research design.

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