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INNOVATION AND FIRM COMPETITIVENESS AS INTERVENING VARIABLES IN IMPROVING FINANCIAL PERFORMANCE OF MSMEs

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Abstract: Micro, small, and medium enterprises (MSMEs), especially those operating in the craft industry, often remain overlooked and receive minimal attention from researchers and policymakers even though they have an important role in increasing exports and employment in Indonesia. Nevertheless, craft MSMEs face significant challenges in maximizing innovation and enhancing competitiveness to improve financial performance. Hence, this study aims to investigate how innovation and firm competitiveness influence the financial performance of craft MSMEs. This study utilizes the SEM AMOS analysis tool with data from 403 business actors across three craft centers in West Java: Tasikmalaya, Majalengka, and Bandung. The findings reveal that product, process, and green innovation significantly influence and partially mediate the connection between entrepreneurial orientation and competitiveness. Competitiveness completely mediates the influence of product and green innovation on craft MSMEs' financial performance. Meanwhile, process innovation significantly impacts financial performance both directly and indirectly, emphasizing its importance in enhancing competitiveness and financial outcomes. Continuous improvement and innovation are crucial for boosting competitiveness and financial performance.

Keywords: Entrepreneurial Orientation, Product Innovation, Process Innovation, Green Innovation, Firm Competitiveness, Financial Performance

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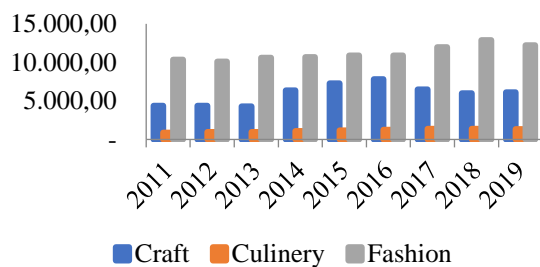
INTRODUCTION

MSMEs (Micro, Small, and Medium Enterprises) play a significant and vital role in helping to boost the national economy. Furthermore, the MSME businesses have a more important, strategic, and dominant role in extending and equalizing business possibilities, absorbing labor, and driving regional and national economic growth (Ikram et al., 2020). According to Figure 1, from 2011 to 2019, the craft industry stood as the second-largest contributor to exports in Indonesia within the creative economy sector, following the fashion industry. However, Figure 2 indicates that from 2010 to 2019, the craft industry ranked third in terms of its contribution to labor absorption within Indonesia's creative economy sector. In 2021, the creative economy contributed IDR 1300 trillion to national income, and 15% came from the crafts subsector (Kemenparekraf, 2021). However, despite their crucial role, craft MSMEs, especially in West Java, have yet to ascend the ladder due to their inability to maximize innovation and improve competitiveness. The study focused on West Java because it has 2801 MSMEs in the craft sector, contributing 18.46% of Indonesia's total 15,174 craft MSMEs. This province stands out as a center of the craft industry in Indonesia, particularly in the cities/districts of Tasikmalaya, Majalengka, and Bandung, the primary centers of the craft industry in West Java.

Crafts is a creative industry that upholds independence, creativity, and innovation. Craft in-

dustries with strong and consistent entrepreneurial orientation will develop stronger innovation capabilities. Innovation activities can include product and process innovation, as well as environmentally friendly innovation that focuses on environmentally friendly practices. Entrepreneurial orientation has been shown to have a good impact on maximizing innovation (Iqbal et al., 2021). A study by Muangmee et al. (2021) shows that green innovation is positively affected by entrepreneurial orientation. However, Yaskun and Sudarmiatin (2021) show that product innovation is not always influenced by entrepreneurial orientation. So AlfuLailah and Soehari (2020) concluded that entrepreneurial orientation has no significant impact on innovation. Dost et al. (2018) prove that entrepreneurial orientation plays a significant role in improving process innovation. Alshebami (2023) argues that entrepreneurial orientation can serve as an important resource and an important precursor for green innovation in micro and ultra-micro companies, allowing them to develop new green products and services. The success of innovation plays a crucial role in creating the competitiveness of craft MSMEs. The Resource Based Theory (RBT) approach is used to analyze the competitiveness of companies that are heterogeneous and influenced by various factors. Research has shown that product, process, marketing, and organizational innovations significantly improve a company's competitiveness (Chang, 2018; Kiveu et al., 2019; Tu and Wu, 2021; Wahyono, 2020).

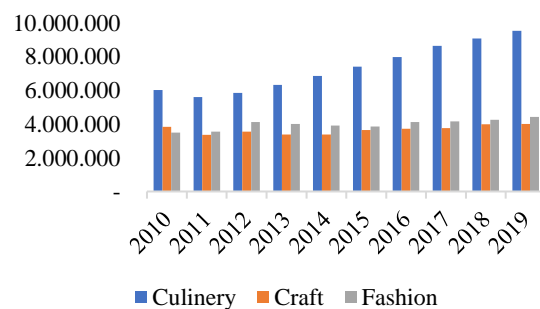
Export Contributors of Creative Economy in Indonesia 2011-2019 (US\$)



Source: Kemenparekraf (2021)

Figure 1. Contributors to Creative Economy Exports in Indonesia 2011-2019

Labor Absorption in Creative Economy Sectors 2010-2019



Source: Kemenparekraf (2021)

Figure 2. Labor Absorption in Creative Economy Sectors 2010-2019

A company's competitiveness that comes from implementing entrepreneurial orientation and innovation results in positive financial performance. Successful and increasing company performance is considered a competitive advantage over competitors. Organizations seek competitive advantage through comparative advantage of resources, which translates into superior financial performance. Conversely, comparative disadvantage leads to lower financial performance. Ultimately, the balance of resources leads to a balanced market position, affecting financial performance. Research has explored the relationship between corporate competitiveness and financial performance, finding that competitive advantage significantly influences financial performance (Le and Ikram, 2022; Madzimure, 2020). However, Wahyuni et al. (2020) concluded that competitive advantage does not have a significant impact on improving financial performance.

Recent empirical studies have explored the influence of entrepreneurial orientation on firm competitiveness via innovation and the connection between innovation and financial performance through competitiveness. Fadli et al. (2022) demonstrated that the link between entrepreneurial orientation and competitive advantage is mediated by innovation. Conversely, Baierle et al. (2020) found no significant impact of innovation practices on firm competitiveness. Lampe et al. (2020) discovered that innovation, risk-taking, proactivity, autonomy, and competitive aggressiveness (dimensions of entrepreneurial orientation) can contribute to project success and aid organizations in gaining competitive advantage. Product innovation is indirectly associated with market performance through competitive advantage (Dahana et al., 2021), while competitive advantage can act as a mediator between green innovation and firm performance (Novitasari and Agustia, 2023).

Numerous studies have explored the influence of entrepreneurial orientation on firm competitiveness through innovation and the correlation between innovation and financial performance through competitiveness. However, there remains a gap in the literature regarding examining or comparing the specific innovations frequently undertaken by craftsmen and their relative impact on fostering competitiveness and enhancing firm performance. Therefore, this research aims to verify

the relationship between entrepreneurial orientation and firm competitiveness through various innovations (product innovation, process innovation, green innovation) and the relationship between various innovations and financial performance through competitiveness using the mediation model by applying SEM AMOS. In more depth and as an effort to provide novelty, this study uses micro and ultra-micro business scales, especially in West Java, which is a primary center of the craft industry in Indonesia that has not been widely researched. Thus, it is hoped that this research can have a significant impact on stakeholders and entrepreneurs as efforts for MSME businesses move up in class.

LITERATURE REVIEW

Resource Based Theory

Resource Based Theory (RBT) is based on organizational resources as a strategy to achieve competitive advantage. RBT evaluates and interprets an organization's internal resources, emphasizing resources and capabilities when developing strategies to establish a sustainable competitive advantage (Madhani, 2009). RBT underscores the criticality of effective resource management for organizational efficacy and efficiency (Wernerfelt, 1984). According to RBT, the judicious optimization of resources significantly enhances the likelihood of sustaining a competitive edge. Moreover, RBT underscores the significance of resource availability and aggregation in fostering firm growth, alongside the advantages of resource diversity in bolstering market competitiveness. Efficient handling of company resources fosters the emergence of competitive advantage. It offers distinct benefits, particularly for organizations with limited resources like crafts, by ensuring a more measured and prudent resource utilization for optimal outcomes. Additionally, Wernerfelt (1984) outlines how innovation can strategically harness a company's key resources to secure a competitive advantage within the framework of resource-based innovation theory.

Financial Performance

Financial performance reflects its management's effectiveness in efficiently managing the company's assets over a certain period (Kyengo et al., 2023; Rudianto, 2020). Companies require fi-

financial performance measurements to understand and evaluate the company's success based on the financial activities that have been conducted. A company's performance is measured by how successful they are in achieving financial goals and market orientation (Madzimure, 2020). Numerous companies rely on financial metrics to assess their performance and compare it with that of their competitors in the market. In this study, the items used to measure financial performance, as modified and adjusted by Xue et al. (2019), include sales, profits, revenues, and return on investment.

Firm Competitiveness

Hove et al. (2014) and Madzimure (2020) characterize business competitiveness as the capacity of a company to surpass its competitors through cost reduction and the expansion of commercial opportunities. Consequently, various benchmarks of competitive advantage, such as cost efficiency, rapid product development, enhanced value propositions, and expedited service delivery, are employed to gauge a company's competitive prowess. These factors synergistically enhance corporate performance (Hove et al., 2017). Companies' adept at swiftly identifying products, effectively marketing them, and perpetually innovating have the potential to emerge as market leaders, yielding substantial revenues (Canh et al., 2019; Madzimure, 2020). A company's competitiveness results from its business activities, including metrics like revenue and market share, which are validated by key external stakeholders such as customers and shareholders. This assessment places the company as the central focus of analysis, intricately woven into the broader macro-level framework of organizational characteristics (Chikán et al., 2022). The variable item "Firm Competitiveness," as modified and adapted by Hermundsdottir and Aspelund (2021) and Le and Ikram (2022), encompasses competitive advantage, gaining benefits to compete, significant outcomes, market competition, promotional warfare, and matching offers.

Product Innovation

Chang-Muñoz et al. (2021) define product innovation as introducing new products or services or significantly improving their characteristics or purposes, encompassing enhancements in tech-

nical features, components, materials, usability, or other functional aspects. Ramadani et al. (2019) defines it as introducing new goods or services to address external market needs or user requirements. Product innovation is further categorized into "introduction of new products for the company" or "introduction of new products to the market" (Dogbe et al., 2020; Fredyna et al., 2019; OECD, 2005). Product innovation will help protect companies from market threats and competitors (Hult et al., 2004; OECD, 2023). The items used in measuring product innovation, based on modifications from the study by Cho and Linderman (2020), include broad product innovation, product enhancement, competitive advantage through product innovation, excellence in introducing new products, and customer recognition.

Process Innovation

Process Innovation relates to implementing new developments concerning production forms, methods or procedures, and functional structures, as well as adopting changes in equipment and technology that support organizational development or production processes (Chang-Muñoz et al., 2021). Process innovation entails developing or enhancing business processes to boost efficiency, quality, and customer satisfaction. This could encompass alterations in task execution methods, adoption of new tools or technologies, refinement of staff roles or responsibilities, or enhancements in process outcomes or outputs. Generally, process innovation is viewed as a type of innovation that maintains product features while simultaneously reducing production costs per unit (Adner and Levinthal, 2001). The variable items of process innovation based on Cho and Linderman (2020), which were modified, include process improvement, competitive advantage through process innovation, excellence in new processes, and excellence in developing new products quickly.

Green Innovation

Green innovation is characterized by its positive impact on the ecological environment and its enhancement of environmental performance, primarily through advancements in company technologies and processes (Li et al., 2022). This form of innovation is inherently ecological and environmental, particularly emphasizing systemic appro-

aches, cultural shifts, and organizational frameworks (Schiederig et al., 2012). In a narrower context, environmental-friendly innovation pertains to developing environmentally friendly technologies and products. Research into new technologies and innovations focused on environmental friendliness demonstrates that it extends beyond the mere adoption of new tools and technologies; it also encompasses improvements in innovation performance, value addition, and societal benefits derived from technology utilization and product manufacturing (Dai et al., 2015). This research employs green innovation items as modified in the study by Xue et al. (2019), including green products to simplify production, green products to minimize damage, and new production techniques, procedures, tactics, and approaches.

Entrepreneurial Orientation

Entrepreneurial orientation (EO) is a term that discusses the mindset of companies engaged in new ventures and provides a useful framework for examining entrepreneurial activities (Lumpkin and Dess, 2015). Entrepreneurial orientation encompasses a company's style and business strategies, shaping its decisions, processes, characteristics, behaviors, and performance to adapt to its external environment (Fadda, 2018; Lumpkin and Dess, 1996). Drawing from prior research, Dess and Lumpkin (2005) and Fadda (2018) delineate five dimensions to describe Entrepreneurial Orientation: innovation, proactiveness, risk-taking, autonomy, and competitive aggressiveness. Among these dimensions, innovation holds paramount importance, serving as the cornerstone of Entrepreneurial Orientation. Innovation entails the contin-

uous adoption of creative processes to survive and thrive amidst competition, fostering a spirit of resilience to endure, rise above, and rebound from challenges. This innovation extends to developing new products, technologies, and services. The six items used to measure entrepreneurial orientation in this study are derived from the framework established by Nofiani et al. (2021): entrepreneurial behavior, dynamism, innovativeness, risk-taking, willingness to progress, and competitive aggressiveness.

HYPOTHESIS DEVELOPMENT

Entrepreneurial Orientation and Product Innovation

Since innovation is an intrinsic condition in entrepreneurship, the company's potential to launch new similarly successful items must be examined concurrently. Product innovation is a concept that is starting to receive attention from both researchers and practitioners because it refers to the level of innovation contained in each new product. Entrepreneurs with a high entrepreneurial orientation actively seek new ideas, technologies, and approaches, fostering a culture that encourages employees to think creatively and generate innovative solutions. Emphasis on this innovation naturally leads to a greater likelihood of product innovation. Fredyna et al. (2019) confirm the positive influence of entrepreneurial orientation on product innovation. Moreover, Majali et al. (2022) found that green product innovation was influenced by green entrepreneurial orientation. Based on this description, the first hypothesis is:

H1: Entrepreneurial orientation positively affects product innovation.

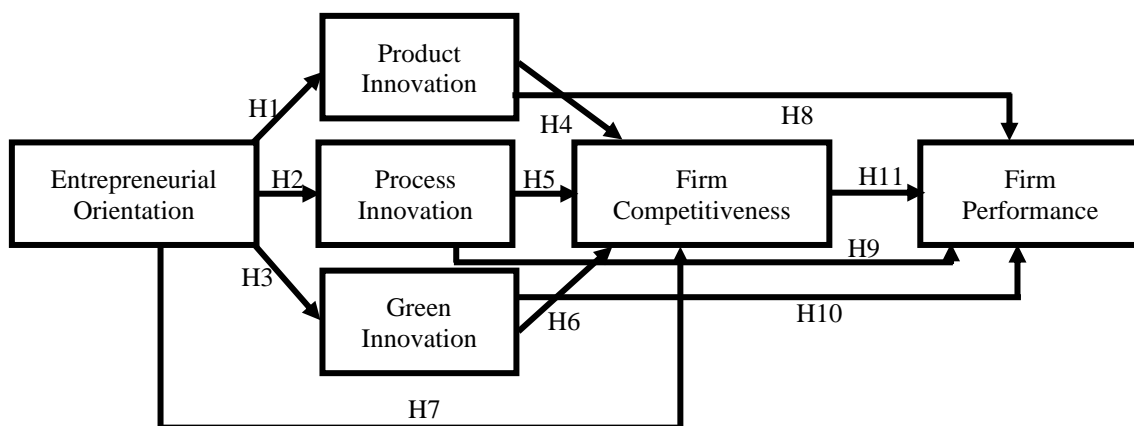


Figure 3. Research Framework

Entrepreneurial Orientation and Process Innovation

A dynamic, proactive attitude, wanting to be the first in the market, and innovation from business actors can provide positive benefits to process efficiency, which will later influence the competitiveness and even financial performance of craft MSMEs. In the context of process innovation, a proactive attitude involves developing processes or methods that are more efficient, effective, and innovative in carrying out business operations. Proactive companies are more likely to identify and accept new organizational technologies, methodologies, and business practices that lead to process improvements. An innovative attitude encourages business actors to think creatively and propose new solutions to increase value and simplify business processes in the organization. An entrepreneurial orientation encourages a focus on efficiency and effectiveness. Dost et al. (2018) prove that entrepreneurial orientation plays a significant role in improving process innovation. Moreover, when considering entrepreneurial proactiveness or intentions, higher levels of education significantly influence process innovation (Barzola-Iza et al., 2019).

H2: Entrepreneurial orientation positively affects process innovation.

Entrepreneurial Orientation and Green Innovation

Entrepreneurial orientation contributes to green innovation through the ability to read the market and utilize innovative resources, thereby providing competitive capabilities (Alshebami, 2023). Individuals with entrepreneurial orientation skills tend to operate in new ways. Empirical evidence shows a favorable association between entrepreneurial orientation and green innovation (Muangmee et al., 2021). Alshebami (2023) states that entrepreneurial orientation can serve as an essential resource and an important precursor for green innovation in micro and ultra-micro enterprises, enabling them to develop new environmentally friendly goods and services. This level of entrepreneurial orientation encourages the company's capacity to uncover fresh chances that may be leveraged amidst more strict market expectations in terms of environmental considerations (Ali et al., 2021).

H3: Entrepreneurial orientation positively affects green innovation.

Product Innovation and Firm Competitiveness

According to Chang-Muñoz et al. (2021), product innovation involves introducing a new product or service and significantly enhancing technical attributes, components, materials, simplicity of use, or other functional features. The creation of new products tailored to consumer needs will increase the competitiveness of micro and ultra-micro businesses. Wahyono (2020) found that product innovation influences the competitive advantage of small and medium firms manufacturing traditional food from Riau and Central Java. Chang (2018) found that product innovation significantly affects a company's competitiveness. Moreover, in the craft industry, the main value of this business is how unique the products offered are.

H4: Product innovation positively affects firm competitiveness.

Process Innovation and Firm Competitiveness

Process innovation aims to lower production or delivery costs per unit, elevate quality standards, and introduce new or significantly enhanced goods (Kiveu et al., 2019). According to Mercado-Caruso et al. (2020), organizations should prioritize establishing novel business processes or systems to thrive in competitive markets. Particularly within the craft industry, maintaining competitiveness necessitates adopting process innovation (Chirumalla, 2021). Kiveu et al. (2019) examined the influence of innovation on the competitiveness of micro and ultra-micro manufacturing companies in Nairobi, Kenya. They found that process innovation increased the competitiveness of companies. They explain that innovation is a vital practice that underpins the survival and competitiveness of businesses in a competitive global environment. Furthermore, Soesetio et al. (2024) also found that process innovation enhances companies' competitiveness.

H5: Process innovation positively affects firm competitiveness.

Green Innovation and Firm Competitiveness

Green innovation may help organizations overcome technology barriers, produce innovative goods, optimize management processes, and cre-

ate a positive internal and external environment for businesses, thereby comprehensively enhancing sustainable competitive advantages. Green innovation includes innovative technologies, goods, services, and business strategies that benefit the ecosystem (Rodrigues and Franco, 2023). Green innovation can help micro and ultra-micro businesses differentiate in the market, gain new clients, and develop firm competitiveness (Rodrigues and Franco, 2023). Green innovation has a positive impact on companies, such as improving and creating a good company image, increasing environmental performance, and thereby generating firm competitiveness (Tu and Wu, 2021).

H6 : Green innovation positively affects firm competitiveness.

Entrepreneurial Orientation and Firm Competitiveness

According to RBT, entrepreneurial orientation is a resource that helps a company outperform competitors and generate a market position through competitive advantage. Entrepreneurial orientation encompasses decision-making, practices, and processes that foster innovation and embrace three key aspects of entrepreneurship: risk-taking, proactive action, and continuous innovation. In practical terms, innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness can contribute to project success and help organizations gain corporate competitiveness (Lampe et al., 2020). A study by Lampe et al. (2020) concluded that entrepreneurial orientation positively affects competitive advantage.

H7 : Entrepreneurial orientation positively affects firm competitiveness.

Product Innovation and Financial Performance

Organizations today compete with many of the same products or services in the marketplace. Therefore, as a competitive strategy in the development of increasingly large companies, companies must continue to create new products/services or improve old ones/services. Product innovation involves companies or business actors refining and enhancing existing products to imbue them with new value. Consumer acceptance of these new products can greatly enhance the company's performance capabilities (Ogbeibu et al., 2020).

Innovation is the foundation of the future for companies, especially micro and ultra-micro businesses. Organizations that do not innovate will experience low performance, even failure. Growth and profitability will increase if this is managed effectively. YuSheng and Ibrahim (2020) prove that product innovation positively affects firm performance.

H8 : Product innovation positively affects financial performance.

Process Innovation and Financial Performance

Dost et al. (2018) explain that process innovation is an application for carrying out a sequence of new operations while adding value. Process innovation can bring about improvements that lead to increased efficiency and speed. Process innovation can yield a myriad of benefits, including enhanced business performance, heightened customer satisfaction, and a competitive edge. This is achieved through cost and waste reduction, heightened productivity and efficiency, bolstered quality and consistency, enriched customer experience and loyalty, and the cultivation of innovation capabilities. Saleem and Ashfaque (2020) and Soesetio et al. (2024) corroborate these findings, illustrating a favorable link between process innovation and organizational prosperity in their studies.

H9 : Process innovation has a positive effect on financial performance.

Green Innovation and Financial Performance

Green innovation, entailing the development and integration of environmentally friendly technologies, processes, and products, holds considerable potential to influence the performance of craft MSMEs. Embracing green innovation allows these enterprises to differentiate themselves in the market. As consumer demand for environmentally friendly products rises, companies adopting green practices can tap into a growing segment of environmentally conscious customers. This shift can result in heightened sales and expanded market share. In summary, green innovation positively impacts craft MSMEs' performance (Zhang et al., 2019). While there may be initial investment and adaptation costs, the long-term benefits can result in a stronger and more resilient business.

H10 : Green innovation positively affects financial performance.

Firm Competitiveness and Financial Performance

Competitive businesses are more likely to achieve higher market share, profitability, and growth. They can adapt to changing market conditions, innovate, and meet customer demands effectively, contributing to better overall performance. Several studies have explored the impact of corporate competitiveness on financial performance. Findings by Madzimore (2020) underscore the pivotal role of firm competitiveness in enhancing financial performance. Especially in the context of craft businesses, the ability to offer products that buyers expect at low prices will mean many people will buy them. This will increase the sales value of the product.

H11: Firm competitiveness positively affects financial performance.

The Mediating Role of Innovation

Entrepreneurial orientation has an important role in increasing a company's competitiveness. Entrepreneurial orientation is a creative and innovative ability that serves as the foundation and resource for identifying possibilities for success. Entrepreneurial orientation is crucial in driving innovation and achieving success in the business environment. By cultivating a strong entrepreneurial orientation, companies can manage their resources effectively and encourage innovation within their organizations. A high level of innovation awareness is built from a high entrepreneurial orientation. Memon et al. (2019) state that "managers with a strong entrepreneurial spirit may carry out all types of innovations, recognizing that this will have a long-term influence on their firm." Individuals with an entrepreneurial orientation can also increase a company's competitiveness through product development (Al-Mamary and Alshallaqi, 2022). Entrepreneurial orientation contributes to innovation by enabling companies to adapt to market changes and utilize innovative resources, thereby increasing competitiveness.

H12: Product innovation mediates the relationship between entrepreneurial orientation and firm competitiveness.

H13: Process innovation mediates the relationship between entrepreneurial orientation and firm competitiveness.

H14: Green innovation mediates the relationship

between entrepreneurial orientation and firm competitiveness.

The Mediating Role of Firm Competitiveness

Companies with a high level of innovation increase their competitiveness, leading to increased company performance. Innovation in the food industry has a significant impact on competitiveness, especially for small businesses. Innovation can help companies adopt technology, create unique goods, optimize processes, and establish a healthy ecosystem for the company. It can also help companies attract new customers and improve their competitiveness and financial performance. Wahyono (2020) found that product innovation influences the competitive advantage of small and medium firms manufacturing traditional food from Riau and Central Java. Kiveu et al. (2019) examined the influence of innovation on the competitiveness of micro and ultra-micro manufacturing companies in Nairobi, Kenya. They found that process innovation increased the competitiveness of companies. Green Innovation can help micro and ultra-micro businesses differentiate themselves in the market, gain new clients, and develop the company's competitiveness (Rodrigues and Franco, 2023). Green innovation has a positive impact on companies, such as improving and creating a good company image, increasing environmental performance, and thereby generating firm competitiveness (Tu and Wu, 2021).

H15: Firm competitiveness mediates the relationship between product innovation and financial performance.

H16: Firm competitiveness mediates the relationship between process innovation and financial performance.

H17: Firm competitiveness mediates the relationship between green innovation and financial performance.

METHOD

The unit of analysis for this research is the owners and or workers of craft MSMEs in West Java, and the respondents are the owners and or managers of craft MSMEs. Based on Bank Indonesia Regulation No.14/22/PBI/2012, which refers to Law (UU) No. 20 of 2008, a business is classified as micro-scale if it has assets of less than 50 million or a maximum sale of 300 million.

Table 1. Variable Operational Definition

Variables	Question Items
Financial Performance (FP) (Le and Ikram, 2022; Xue et al., 2019)	“Our total sales are very high” (FP1)
	“Our profit rate is very high” (FP2)
	“Our income is very high” (FP3)
	“Our return on investment is very high” (FP4)
Firm Competitiveness (FC) (Hermundsdottir and Aspelund, 2021; Le and Ikram, 2022)	“Our company has gained a strategic competitive advantage over our competitors” (FC1)
	“Our company has gained benefits that allow us to compete in the marketplace more effectively” (FC2)
	“Our company has succeeded in achieving strategically important results” (FC3)
	“Within our company, we find that competition in the markets in which we operate is very strong” (FC4)
	“In our company, we find that there are many promotional wars in the markets where we operate” (FC5)
	“In our company, we find it easy to match the offers provided by competing companies in the market” (FC6)
Product Innovation (PI) (Cho and Linderman, 2020)	“Our firm has developed several product developments during the previous three years” (PI1)
	“Our firm has made major product enhancements during the last three years” (PI2)
	“Our firm maintains a competitive edge through superior product innovation” (PI3)
	“Our firm tends to be ahead of the competitors in introducing new and improved products or services” (PI4)
	“Customers recognize us for our amazing product innovation” (PI5)
Process Innovation (RI) (Cho and Linderman, 2020)	“Our organization has made considerable process improvements during the previous three years” (RI1)
	“Our firm tends to preserve a competitive edge through more extensive process innovation than our competitors” (RI2)
	“In general, our firm tends to be ahead of our rivals in adopting new or considerably better procedures to manufacture goods or services” (RI3)
	“Our firm has a stronger capacity to produce new items or services in a shorter period than our competitors” (RI4)
Green Innovation (GI) (Xue et al., 2019)	“Our firm regularly adopts new techniques to produce new green products, simplifying production and packaging” (GI1)
	“Our firm regularly adopts new talents to build new green goods to reduce waste harm” (GI2)
	“Our firm routinely uses the most recent production procedures to reduce waste” (GI3)
	“Our firm routinely updates measures to decrease the emissions of dangerous chemicals or garbage efficiently” (GI4)
	“Our firm often creates innovative techniques to keep all key stakeholders up to date on topics concerning green innovation throughout decision-making” (GI5)
Entrepreneurial Orientation (EO) (Nofiani et al., 2021)	“Entrepreneurial behavior is a major principle” (EO1)
	“People are very dynamic” (EO2)
	“Innovation is emphasized above anything else” (EO3)
	“People are willing to take risks” (EO4)
	“The will for continuous progress is the shared foundation” (EO5)
	“People want to always be first in the market” (EO6)

Table 2. Respondent Characteristics

Respondent Characteristics		Frequency	Percentage
Gender	Man	276	68.49
	Woman	127	31.51
Age	Less than 24 years	10	2.48
	24 - 33 years	161	39.95
	34 - 43 years	192	47.64
	44 - 53 years	38	9.43
	More than 53 years	2	0.50
Education	Elementary School	5	1.24
	Junior High School	33	8.19
	Senior High School	171	42.43
	Higher Education (Diploma/S1/S2/S3)	194	48.14

Source: data processed (2023)

The selected business units are owners of assets of less than IDR 50,000,000. Moreover, numerous craftsmen belong to an even smaller asset category, with assets totaling less than 9 million. Therefore, the micro and ultra-micro business sample selection was based on a practical size determined by the median total assets, set at 9 million. West Java was selected due to data from the Ministry of Tourism and Creative Economy of the Republic of Indonesia, indicating that West Java holds the highest distribution of craft business units in Indonesia at 18.33% (Kemenperin, 2022). According to the Center for Crafts and Batik (BBKB) of the Ministry of Industry of the Republic of Indonesia, the population of craft MSMEs in West Java was 15,174 companies.

Based on a precision level of 5% and a confidence level of 95% from a population of more than 15,000, the minimum sample size is 390. Therefore, researchers surveyed 496 craft MSMEs with status as workers and craft business owners based on the criteria: location affordability, existence of industrial clusters, time, and cost. Therefore, researchers only surveyed three cities/districts in West Java with nine types of craft industries. From the 496 data collected, 403 valid data were selected based on the completeness, the data's validity, and the results of limited confirmation of the questionnaire that had been filled in with facts in the field. The analytical tool used by the SEM AMOS undergoes the stages of validity,

reliability, goodness of fit, and intermeditation testing by comparing the partial mediation model to the full mediation model (Setiawan and Ferdinand, 2021).

RESULTS

Respondent Characteristics

Owners of craft MSMEs are the owners of companies that also produce or make crafts. Most of the owners of craft MSME businesses in West Java are men, with 276 respondents. The youngest business owner is 23 years old, and most are between 34 and 43 years old. Only a small proportion are over 53 years old, only 0.5 percent. The education of micro and ultra-micro business owners was that some only graduated from elementary school, and the highest level of education was tertiary education (Diploma/S1/S2/S3)—as many as 194 respondents.

Confirmatory Factor Analysis

The results of the overall confirmatory factor analysis show that all items have a loading factor greater than 0.5 (loading factor > 0.5). The Lambda coefficient or loading factor value for each research variable is valid.

Reliability

The reliability test revealed that all six research variables demonstrated construct reliability (CR) values ≥ 0.7 and average variance extracted

(AVE) ≥ 0.5 . These findings indicate that the research items are dependable measures of the investigated variables. Furthermore, the analysis of Confirmatory Factor Analysis (CFA), Average Extract Variance (AVE), and Construct Reliability (CR) corroborates the reliability of all items used to measure the variables in the study.

Goodness of Fit

The goodness of fit model yielded satisfactory results in accordance with recommended standards. The Chi-Square value is 450.581, with a P-value of 0.087 (≥ 0.05), indicating a fair fit. Additionally, the GFI index is 0.935, AGFI is 0.922, and TLI is 0.995, all meeting the SEM recommendation of ≥ 0.90 . The RMSEA value of 0.015 is ≤ 0.08 , and the CMIN/DF ratio of 1.096 is below 2.00. These findings support the feasibility of hypothesis testing and warrant further model analysis.

sis.

Structural Equation Model

Table 3 presents a summary of the significance test results for both direct and total influences among variables. Notably, entrepreneurial orientation significantly influences product innovation, process innovation, and green innovation. Similarly, product, process, and green innovation significantly impact firm competitiveness. The influence of entrepreneurial orientation on firm competitiveness is also significant, as confirmed by the mediation test, indicating a direct effect. However, the direct influence of the product innovation and green innovation on financial performance is not significant, whereas the direct effect of process innovation on financial performance is significant. Moreover, the impact of firm competitiveness on financial performance is significant.

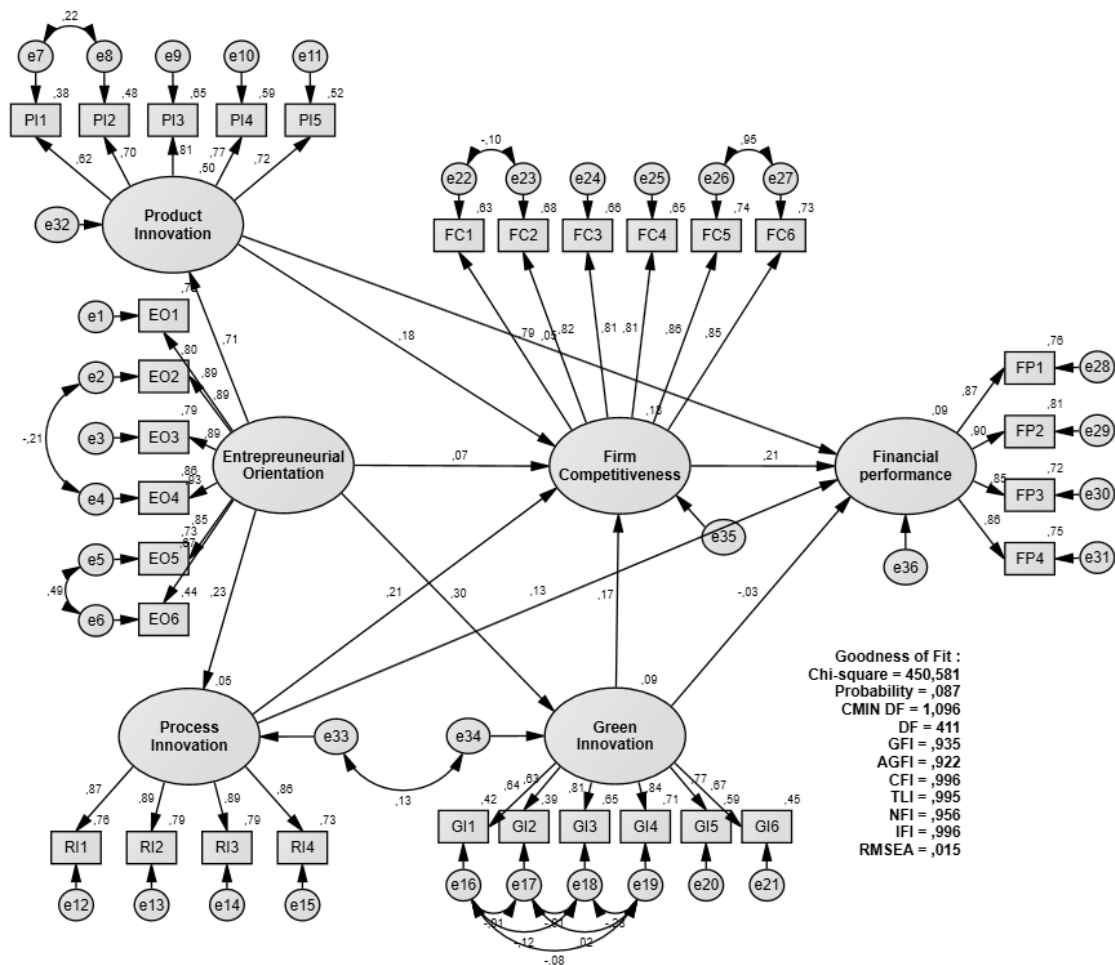


Figure 4. Structural Equation Model

Table 3. Summary of Direct Effect

No	Test	Coefficient	Sig.	Conclusion
1	EO → PI	0.531	0.000	Significant
2	EO → RI	0.199	0.000	Significant
3	EO → GI	0.250	0.000	Significant
4	PI → FC	0.214	0.032	Significant
5	RI → FC	0.219	0.000	Significant
6	GI → FC	0.186	0.002	Significant
7	EO → FC	0.070	0.332	Significant
8	FC → FP	0.266	0.000	Significant
9	PI → FP	0.053	0.369	Not Significant
10	RI → FP	0.132	0.016	Significant
11	GI → FP	-0.027	0.636	Not Significant

Source: data processed (2023)

Table 4. Summary of Direct, Indirect, and Total Effects of Mediation

No	Test	Coefficient			Different of chi-square	Conclusion
		Direct	Indirect	Total		
1	EO → PI → FC	0.070	0.114	0.184	0.000	Partial Mediation
2	EO → RI → FC	0.070	0.044	0.114	0.000	Partial Mediation
3	EO → GI → FC	0.070	0.047	0.117	0.000	Partial Mediation
4	PI → FC → FP	0.053	0.057	0.110	0.415	Full Mediation
5	RI → FC → FP	0.132	0.058	0.190	0.015	Partial Mediation
6	GI → FC → FP	-0.027	0.049	0.022	1.000	Full Mediation

Source: data processed (2023)

Table 5 presents model difference tests to examine the direct, indirect, and total effects among variables. A summary of these tests is provided in Table 4. The results of the indirect effect show that product innovation, process innovation, and green innovation do not act as full mediators between entrepreneurial orientation and firm competitiveness because the difference in the chi-square

value is < 0.05 . Meanwhile, firm competitiveness fully mediates the product innovation and green innovation variables on financial performance because the difference of the chi-square value is ≥ 0.05 . Furthermore, firm competitiveness acts as a partial mediator between process innovation and financial performance because the difference in the chi-square value is ≤ 0.05 .

Table 5. Model Difference Test for Mediation

Mediation Model	Standardized regression			Chi-square	df	P value
	EO → PI	PI → FC	EO → FC			
Model 1 EO → PI → FC	0.713	0.274		429.936	117	0.000
Model 2 EO → PI → FC	0.709	0.149	0.156	425.885	116	0.000
Difference of chi-square first model				4.051	1	0.000
Model 1 EO → RI → FC	EO → RI	RI → FC	EO → FC	438.550	102	0.000
Model 2 EO → RI → FC	0.229	0.243		420.040	101	0.000
Model 2 EO → RI → FC	0.225	0.191	0.218			
Difference of chi-square second model				18.51	1	0.000
Model 1 EO → GI → FC	EO → GI	GI → FC	EO → FC	441.843	133	0.000
Model 2 EO → GI → FC	0.313	0.298		428.359	132	0.000
Model 2 EO → GI → FC	0.305	0.233	0.190			
Difference of chi-square third model				13.484	1	0.000
Model 1 PI → FC → FP	PI → FC	FC → FP	PI → FP	86.185	86	0.474
Model 2 PI → FC → FP	0.306	0.260		85.523	85	0.464
Model 2 PI → FC → FP	0.305	0.244	0.047			
Difference of chi-square fourth model				0.662	1	0.415
Model 1 RI → FC → FP	RI → FC	FC → FP	RI → FP	97.047	74	0.037
Model 2 RI → FC → FP	0.285	0.262		91.201	73	0.073
Model 2 RI → FC → FP	0.282	0.221	0.132			
Difference of chi-square fifth model				5.546	1	0.015
Model 1 GI → FC → FP	GI → FC	FC → FP	GI → FP	100.522	95	0.330
Model 2 GI → FC → FP	0.279	0.258		100.522	94	0.304
Model 2 GI → FC → FP	0.279	0.258	0.000			
Difference of chi-square sixth model				0	1	1.000

Source: data processed (2023)

DISCUSSION

Entrepreneurial Orientation and Product Innovation

Entrepreneurial orientation significantly and positively impacts product innovation. Notably, the coefficient indicating the effect of entrepreneurial orientation on product innovation is the highest among process and green innovations. This suggests that craft businesses engage in product innovation more frequently compared to process and green innovations due to their shorter and easier implementation processes. Entrepreneurs with high entrepreneurial orientation actively seek new ideas, technologies, and approaches, fostering a culture that encourages employees to think creatively and generate innovative solutions. Emphasizing innovation naturally leads to higher levels of product innovation.

Entrepreneurial orientation plays an important role in product innovation in craft MSMEs in West Java. This orientation, characterized by dynamic nature, innovation, risk-taking, and competitive aggressiveness, allows a business to differentiate itself from competitors. Entrepreneurs with a high entrepreneurial orientation actively seek new ideas, technologies, and approaches, cultivating a culture that encourages creative thinking and innovative solutions. This emphasis on innovation leads to a higher likelihood of product innovation. Product innovation is a fast and easy process driven by customer needs and preferences. Businesses can collect customer feedback to understand what needs to be improved. The results of this research support the previous research from Majali et al. (2022), which confirms the positive influence of entrepreneurial orientation on product innovation.

Entrepreneurial Orientation and Process Innovation

Entrepreneurial orientation has a significant impact on MSMEs' craft business process innovation. Entrepreneurial orientation drives a focus on efficiency and effectiveness. In the context of process innovation, a proactive attitude involves developing processes or methods that are more efficient, effective, and innovative in conducting business operations. Proactive companies are more likely to identify and adopt new organizational technologies, methodologies, and business practices that lead to process improvements. An innova-

tive attitude encourages entrepreneurs to think creatively and propose new solutions to enhance value and streamline business processes within the organization.

Organizations with high entrepreneurial orientation are more inclined to invest in process innovations that enhance efficiency, reduce costs, and improve overall operational effectiveness. Innovative entrepreneurs, for example, may upgrade their equipment, such as using sanding machines for process efficiency or abandoning sandpaper. These results align with Barzola-Iza et al. (2019). Additionally, Dost et al. (2018) demonstrate that entrepreneurial orientation plays a significant role in enhancing process innovation.

Entrepreneurial Orientation and Green Innovation

Entrepreneurial orientation has a positive influence on green innovation in craft MSMEs. Alshebami (2023) argues that entrepreneurial orientation can serve as a crucial resource and precursor for green innovation in micro and ultra-micro enterprises, enabling them to develop new environmentally friendly goods and services. This level of entrepreneurial orientation enhances the company's ability to identify new opportunities amidst increasing market demands for environmental concerns (Ali et al., 2021). Thus, entrepreneurial orientation has been shown to impact green innovation internally within micro and ultra-micro enterprises (Peake et al., 2019).

Entrepreneurial orientation is vital in fostering green innovation within companies, facilitating a keen understanding of market dynamics and the strategic utilization of innovative resources. This proactive approach empowers organizations to adapt to evolving environmental demands and enhances their competitive edge in the market landscape. This orientation encourages the development of environmentally friendly goods and services, enabling companies to find new opportunities amidst tight market demand. Entrepreneurial orientation contributes to green innovation through the ability to read the market and utilize innovative resources, thereby providing competitive capabilities (Alshebami, 2023). Empirical evidence suggests a beneficial relationship between entrepreneurial orientation and green innovation (Muangmee et al., 2021).

Product Innovation and Firm Competitiveness

The investigation results reveal that product innovation significantly and positively impacts firm competitiveness. This indicates that companies incorporating high levels of product innovation tailored to current consumer demands and preferences gain a competitive edge. Craft MSME businesses belong to the creative industry; hence, innovation becomes an integral and inseparable part of their operations. Successful product innovations, informed by market research and focused on enhancing product quality as per consumer needs, establish and sustain the competitiveness of businesses. This ensures a continuous supply of craft products born out of creativity and perseverance, which serve as unique resources for artisans and are difficult for others to replicate.

Crafts, especially micro and ultra-micro businesses, are creative industries that rely on market research to perfect their products. For example, making rattan baskets for religious events such as Ramadan, Eid al-Fitr, or Chinese New Year shows the importance of product innovation in ensuring the competitiveness. Product innovation in craft MSMEs in West Java includes design updates, improving material quality, and transitioning from supply to demand. Successful product developers deeply understand consumer needs, conduct thorough market analysis, and engage in intensive customer interactions. The uniqueness of craft industry products also contributes to competitiveness. These results support Wahyono (2020), who discovered that product innovation influences the competitive advantage of small and medium firms manufacturing traditional food from Riau and Central Java. Furthermore, Chang (2018) also identified that product innovation significantly and positively affects competitive advantage.

Process Innovation and Firm Competitiveness

Process innovation has a significant and positive impact on competitiveness creation and is the primary driving force influencing competitiveness based on total effect. Process innovation is vital for businesses across industries, including the craft sector. It involves refining or creating business processes to boost efficiency, quality, and customer satisfaction. The goals of process innovation include improving operational efficiency, cutting production costs, enhancing quality, and in-

roducing new or significantly enhanced goods (Kiveu et al., 2019).

Craft MSMEs in West Java apply process innovation to increase competitiveness. Process innovation is very important for businesses, especially those that operate from home and do not yet have financial recording systems, efficient production processes, and effective marketing. Examples of process innovation include modern tools for sanding wood, social media, and the use of machine-cutting tools. These innovations increase operational efficiency, reduce unit costs, improve quality, and save costs and time. Process innovation is one type of innovation that is needed to maintain the competitiveness of the craft industry (Chirumalla, 2021). These findings corroborate with Soesetio et al. (2024), who discovered that process innovation enhances companies' competitiveness.

Green Innovation and Firm Competitiveness

The investigation results indicate that green innovation significantly and positively influences firm competitiveness, suggesting that companies implementing high levels of green innovation gain a competitive edge. Green innovation encompasses innovative technologies, products, services, and business strategies that benefit the ecosystem (Rodrigues and Franco, 2023). Green innovation should present an opportunity for micro and ultra-micro businesses because, on a smaller scale, they have unintended impacts on the environment locally and globally. Therefore, the implementation of green innovation will have a positive impact on the performance of craft MSMEs.

Green or environmentally friendly innovation aims to contribute to ecological sustainability by minimizing pollution, emissions, energy consumption, and recycling. Even though the costs are higher, this can create a competitive advantage and differentiate the business in the market. Examples of environmentally friendly innovations in craft MSMEs include minimizing waste, using wooden nails instead of iron nails, and using ropes made from tree bark. These results support Tu and Wu (2021), who show that environmentally friendly or green innovation positively affects firm competitiveness. Green innovation can help MSMEs differentiate themselves in the market, acquire new clients, and enhance company competitiveness (Rodrigues and Franco, 2023).

Entrepreneurial Orientation and Firm Competitiveness

This study unveils that entrepreneurial orientation has a significant impact on a company's competitiveness, aligning with the resource-based view theory (RBT). Entrepreneurial orientation is considered a resource that enables companies to outperform competitors and achieve market position through competitive advantage. Hence, enhancing entrepreneurial orientation will be accompanied by increased business competitiveness.

This result shows that MSME craft companies have entrepreneurial behavior, dynamic attitudes, innovative attitudes, risk-taking attitudes, willingness to progress, and highly competitive aggressiveness. Companies with a strong entrepreneurial orientation are more likely to implement innovation more effectively. Entrepreneurship is a prerequisite for individuals to be innovative and proactive and dare to take risks. It involves decision-making, practices, and processes that lead to new input, with three aspects: daring to take risks, acting proactively, and always being innovative. The results of this research are strengthened by Pratono et al. (2019), which conclude that entrepreneurial orientation has a positive and significant effect on competitive advantage.

Product Innovation and Financial Performance

Product innovation does not directly impact the financial performance of craft MSMEs but rather exerts an indirect influence by enhancing the company's competitiveness. The absence of a direct effect of product innovation on the performance of such businesses may stem from various factors. Product innovation can entail significant costs, particularly for micro and ultra-micro businesses with limited resources. Secondly, introducing new products may not necessarily enhance financial performance if the innovation fails to foster competitiveness for craft MSMEs.

Suppose craft MSMEs are unable to create competitive advantages from new products. In that case, the innovations carried out will be meaningless and will not improve the performance of micro and ultra-micro businesses. In short, although product innovation is generally a valuable strategy for business growth and improving performance, if the innovation cannot create competitiveness,

then good financial performance cannot be achieved because the company's competitiveness has a significant effect on financial performance (Le and Ikram, 2022; Madzimore, 2020).

Process Innovation and Financial Performance

Process innovation significantly affects the financial performance of craft MSMEs, exerting a direct influence. It stands out as a pivotal factor driving such enterprises' performance within the craft industry. Furthermore, process innovation emerges as the most influential among various innovation types in terms of its overall effect on financial performance. According to the theory of innovation-driven profits, entrepreneurs stand to achieve greater profitability by successfully introducing innovations. Process innovation plays a vital role in enhancing product quality. By improving the quality of their goods, craft businesses can command higher prices in the market, fostering increased customer satisfaction and loyalty.

Besides that, process innovation can speed up production cycles, reduce waiting times, and enable craft MSME businesses to market their products more quickly. Process innovation can generate cost savings by optimizing resource utilization, enabling micro and ultra-micro businesses to remain competitive in pricing and investing in growth or expansion. Implementing efficient and well-organized processes can make the work environment more pleasant for employees. Happier and more motivated workers will be more productive, contributing to better overall performance. In their research, Saleem and Ashfaq (2020) and Soesetio et al. (2024) found a good relationship between process innovation and firm performance.

Green Innovation and Financial Performance

Green innovation does not directly affect the financial performance of craft MSMEs; its impact is mediated through the company's competitiveness. Several factors may contribute to the absence of influence of green innovation on the performance of craft MSMEs. First, implementing eco-friendly innovations often requires large costs related to eco-friendly materials, sustainable production processes, or eco-certification. Second, optimizing environmentally friendly innovation will not necessarily improve financial performan-

ce if the innovation carried out does not create business competitiveness.

Suppose craft MSMEs are unable to create competitive advantages through environmentally friendly innovation. In that case, the innovation efforts become meaningless and will not enhance the performance of micro and ultra-micro enterprises. In short, while environmentally friendly innovation generally serves as a valuable strategy for business growth and performance improvement, if such innovation fails to create competitiveness, then good financial performance cannot be achieved because company competitiveness significantly influences financial performance (Le and Ikram, 2022; Madzimure, 2020).

Firm Competitiveness and Financial Performance

Data analysis results indicate a positive relationship between firm competitiveness and the financial performance of craft MSMEs. With the highest total effect value, competitiveness emerges as the most influential factor in these businesses' financial performance. This underscores the significance of enhancing financial performance through competitiveness, with process innovation playing a pivotal role in driving both competitiveness and financial outcomes.

Meanwhile, product innovation and green innovation can also improve financial performance if the innovation is successful, meaning that if product innovation and green innovation can create competitiveness, company performance will increase. The results support Madzimure (2020), which states that firm competitiveness has a significant effect on financial performance. A company's competitiveness is formulated from various criteria: "low prices, better quality, good delivery service, and being able to match supply to demand" (Cho and Linderman, 2020). Especially in the context of craft businesses, the ability to offer products that buyers expect at low prices will mean many people will buy them. This will increase the sales value of the product.

Mediating Role of Innovation

Product innovation, process innovation, and green innovation have been shown to partially mediate the relationship between entrepreneurial orientation and the competitiveness of MSME craft

companies. This partial mediation suggests that entrepreneurial orientation can directly influence the competitiveness of such businesses, with some of its impact being mediated by various innovations. A study by Lampe et al. (2020) discovered a positive and significant effect of entrepreneurial orientation on competitive advantage.

Companies with a strong entrepreneurial orientation are more likely to implement innovation more effectively. Entrepreneurship is a prerequisite for individuals to be innovative and proactive and dare to take risks. It involves decision-making, practices, and processes that lead to new input, with three aspects: daring to take risks, acting proactively, and always being innovative. Memon et al. (2019) state that "managers with a strong entrepreneurial spirit may carry out all types of innovations, recognizing that this will have a long-term influence on their firm." Individuals with an entrepreneurial orientation can also increase a company's competitiveness through product development (Al-Mamary and Alshallaqi, 2022). Entrepreneurial orientation contributes to innovation by enabling companies to adapt to market changes and utilize innovative resources, thereby increasing competitiveness.

Mediating Role of Firm Competitiveness

Product innovation and green innovation do not have a direct impact on the financial performance of craft MSMEs but indirectly have an impact on the company's competitiveness. Product and environmentally friendly innovation can incur high costs, especially for businesses with limited resources. In addition, optimizing product innovation and environmental friendliness will not necessarily improve financial performance if it does not create competitiveness. In conclusion, although product innovation is a valuable strategy for business growth and performance improvement, micro and ultra-micro businesses need to create competitiveness to achieve good financial performance because firm competitiveness has a significant effect on the financial performance of micro and ultra-micro scale craft businesses (Le and Ikram, 2022; Madzimure, 2020). Organizations seek competitive advantage in the marketplace by gaining a comparative advantage in resources, which translates into superior financial performance.

Conversely, process innovation significant-

ly impacts the financial performance of micro and ultra-micro businesses within the craft industry. This type of innovation centers on streamlining and optimizing production processes, enhancing efficiency, minimizing waste, and cutting production costs. Consequently, it boosts profit margins and improves financial performance. Additionally, process innovation can enhance product quality, elevate customer satisfaction and loyalty, expedite production cycles, diminish wait times, and facilitate swifter product marketing. Lee et al. (2019) affirms the positive correlation between process innovation and firm performance.

IMPLICATIONS

This study has implications theoretically. The basis of this study is resource-based view theory (RBT). Entrepreneurial orientation can enrich the resources of craft MSMEs and increase their ability to produce innovation. The skills possessed by each business actor become the main resource for producing handicraft products, increasing process efficiency, and implementing environmentally friendly products and processes. This becomes a tangible or intangible company resource. With these resources, craftsmen can create innovation, competitiveness, and positive profits.

Practically, this research has several implications. First, management science researchers can use this information to research home-based micro and ultra-micro, very small, or ultra-micro businesses, advise owners on implementing various innovations for competitiveness and performance, and provide government services for continuity. Business development of craft MSMEs, such as the formation of craftsmen's associations or cooperatives. Second, MSME craft business owners can implement and improve process innovation and the company's business scale to improve the company's financial performance.

RECOMMENDATIONS

It is recommended that owners of craft MSMEs implement and improve process innovation and company business scale to improve the company's financial performance. Process innovation takes the form of choosing to use more modern production equipment, which can shorten the completion time of the production process and produce higher quality products with a high level

of accuracy in terms of size, volume, and shape. Think about and try to implement alternative work specialization options for the stages of the work completion process so that the same output standard is obtained in each product completion process. This study is limited to using only MSME samples. Therefore, for future research, researchers can use smaller samples, especially micro and ultra-micro, because many ultra-micro enterprises still receive less attention from policymakers.

Because this research was conducted in West Java, Indonesia, it is possible that the results cannot be applied to other provinces or regions. This can happen because each region has cultural characteristics, and the types of products produced are different from each other. Because this research only involves craft MSME businesses, these findings cannot be applied to other MSME businesses from various categories other than those studied.

CONCLUSIONS

This study concludes that entrepreneurial orientation has a significant impact on product, process, and green innovation in craft MSMEs. Craftsmen with creative attitudes and traits who dare to take risks are flexible, anticipatory, and proactive and are more likely to innovate. Product innovation increases business competitiveness because companies that consistently innovate products create competitive advantages. On the other hand, process innovation increases business competitiveness by improving production processes and maximizing social media marketing. Green innovation helps generate distinctive goods, enhance management processes, and create a favorable internal and external environment, ultimately boosting long-term competitive advantage. However, product, process, and environmentally friendly innovation do not fully mediate the relationship between entrepreneurial orientation and business competitiveness. The financial performance of these businesses is not significantly influenced by product and green innovation. In contrast, the direct benefits of process innovation, such as increased productivity, improved product quality, and reduced costs and time, play a more significant role in determining financial success. A company's competitiveness also plays an important role in the business's financial performance. Re-

search shows that firm competitiveness fully mediates the impact of product and green innovation on financial performance, while firm competitiveness variables partially mediate process innovation.

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