

## Market and entrepreneurial orientations model to increase product innovation of culinary micro small medium enterprises in Indonesia

 Siska Ernawati Fatimah<sup>1</sup>,  Razana Juhaida Johari\*<sup>2</sup>,  Acep Komara<sup>3</sup>,  Soesanti Maulany<sup>4</sup>

<sup>1</sup>Management Study Program, Swadaya University Gunung Jati, Cirebon, Indonesia; siskaef@ugj.ac.id (S.E.F).

<sup>2</sup>Faculty of Accountancy, Universiti Teknologi MARA Shah Alam, Selangor, Malaysia; razana@uitm.edu.my (R.J.J.)

<sup>3</sup>Accounting Study Program, Swadaya University Gunung Jati, Cirebon, Indonesia; acepkomara75@gmail.com (A.K).

<sup>4</sup>Management Study Program, Swadaya University Gunung Jati, Cirebon, Indonesia; maulanysoesanty@gmail.com (S.M.).

**Abstract:** The objective of the article is to examine how market orientation and entrepreneurial orientation within an organization might bolster product innovation capabilities. By exploring these connections, the research aims to present a more comprehensive understanding of the research model and bridge existing limitations. This study employed a quantitative associative with a proportional-clustered-random-sampling technique. Data were collected through a questionnaire survey involving 400 respondents representing micro, small, and medium enterprises (MSMEs) and used structural equation modeling (SEM) to test hypotheses. The results indicated a significant impact of market and entrepreneurial orientations on product innovation with market orientation having a more dominant effect on product innovation than entrepreneurial orientation. A strong market orientation shows business players can absorb market knowledge for product innovation. Thus, MSME owners must swiftly digest this market information to plan future product developments, especially since some product types change rapidly during the product life cycle. The findings also show that the entrepreneurial approach has a poorer influence on product creation in MSMEs due to the necessity for competencies and risk-taking that the organization lacks. The Ministry of Cooperatives and MSME can use this input to design targeted programs to help MSME owners and creativity and invention to make distinctive things while being highly impacted by market demands. With its findings, the study augments our understanding of the product innovation position in Indonesian MSMEs and, illuminates MSMEs owners' next steps to sustain the competitiveness and operationalization of their businesses.

**Keywords:** *Entrepreneurial orientation, Market orientation, Product innovation, Structural equation modelling (SEM).*

### 1. Introduction

Nearly all business sectors have declined because of the COVID-19 epidemic, and this has also led many innovative start-ups company to be threatened by macroeconomic disruption (Emami et al., 2022). Indonesia has also been impacted by the global financial crisis due to COVID-19 which hampered investments and household consumption, causing Indonesia's economic downturn. Many firms lost revenue due to lower family spending due to lower purchasing power. Some businesses survived by laying off workers, but others had to close (Anoke et al., 2022).

Despite these sector-wide problems, optimistic opportunities exist for revitalizing the economy through MSMEs (Pozzo et al., 2023a). These companies are called SMEs. Under the Law of the Republic of Indonesia 2008 No. 20, micro-enterprises are productive businesses owned by individuals or individual entities, while small businesses are independent economic ventures carried out by individuals that are not subsidiaries, branches, or direct or indirect parts of medium or large enterprises. Medium enterprises are productive economic operations unrelated to small or large corporations. MSMEs are

crucial to Indonesia's economy since national growth is a result of regional growth. Small and medium-sized businesses boost regional economic growth.

The people's economy relies on MSMEs, which have grown 4.2% annually from 2016 to 2019, contributing 50% to Indonesia's GDP. However, the Ministry of Cooperatives and MSMEs reports a 57% drop in MSME product sales since the COVID-19 outbreak. Due to their flexibility and market adaptation, MSMEs are vital to the grassroots economy despite this income decline. Due to their simple bureaucratic frameworks, they can use local labor and raw materials to make consumer goods (Ighomereho et al., 2022).

Indonesia has several MSMEs across its areas. Java has roughly 16 million business owners, followed by Sumatra with 5 million and Sulawesi with 2 million. West Java has the most MSME owners in Indonesia. West Java has various agglomeration regions, notably Ciayumajakuning, which includes Cirebon City, Cirebon Regency, In-dramayu Regency, Majalengka Regency, and Kuningan Regency. The West Java Provincial Government designated Ciayumajakuning as a priority economic development zone in Regional Regulation No. 22 of 2010 on the Regional Spatial Plan of West Java Province. The Ciayumajakuning area is being developed to be a key hub that anticipates and accommodates adjacent expansion. As one of West Java's agglomeration zones, Ciayumajakuning needs to catch up to other regions in MSME owner growth. MSME owners are categorized into several sub-sectors, each with specific numerical figures as follows:

**Table 1.**  
Number of MSME owners in ciayumajakuning by business sector.

No	Business field	Number of business sector
1	Batik	3,248
2	Embroidery	1,364
3	Craft	77,758
4	Fashion	75,891
5	Convection	46,343
6	Culinary	334,707
7	Services/Others	395,937
Number of MSMEs		935,248

Source: Opendata.jabarprov.go.id (2021).

As seen in Table 1, MSME owners are mostly in the culinary industry. Food and drinks are crucial for everyone, making this sector more robust during crises (Retnawati & Retnaningsih, 2020a). The culinary industry has grown due to technological advances. The market requires realistic food and beverage preparation, serving, and consumption. Snacks, drinks, side dishes, and bigger meals are available in food courts and traditional markets. Despite tremendous demand and crisis survival, success is not guaranteed. (Gwee & Giantari (2021) report that many restaurants close shortly. Business owners must understand the competitive culinary market to prevent insolvency. The culinary industry has huge market potential, but success demands continual work. Thus, MSME owners in this industry innovate to sustain business performance and stand out from the competition. These developments aim to differentiate them in the market (Anwar et al., 2022).

Growing competition requires culinary businesses to improve their marketing. To stay ahead of the competition and improve marketing effectiveness, culinary business owners must be able to innovate products (Ta'Amnha et al., 2023). According to (Ramírez-Solis et al., 2022), most culinary business owners tend to offer the same product with little improvement due to restricted knowledge and skill to produce products, and restricted production resources are the key causes of this issue. In addition to product innovation, business owners' competitive advantage might affect marketing performance. Several studies have demonstrated that competitive advantage can drive culinary business owners to innovate to increase marketing performance, but not at a sustainable level (Issau et al., 2022).

In this study, the researchers created a research model that intertwines causal links between variables based on empirical research gaps. This model shows how market orientation and entrepreneurial policies can boost product innovation. The research explores these links to improve understanding of the research model and overcome limitations. Ciayumajakuning in West Java is important for this research since it is a tourist attraction and strategic hub in Indonesia. A lively tourism site can boost its food business. The research seeks to identify MSMEs in this region whose owners influence product innovation through market orientation and entrepreneurship, which could improve public welfare and national economic progress. These findings can help the government support MSMEs countrywide to sustain business operations and boost economic growth. This research also helps MSME owners create strategic plans by identifying present difficulties and boosting future competitiveness.

The structure of the remainder of the article is as follows. The paper begins with a literature review and hypothesis development. After a detailed explanation of the research methodology, results and discussions follow. This paper concludes with the study's contributions and limitations as well as recommendations for future research.

## 2. Theoretical Framework and Hypotheses

### 2.1. Product Innovation

Maintaining product appeal requires imaginative innovations to preserve consumer loyalty and prevent them from switching to similar alternatives. An organization's competitiveness, growth, and marketing performance depend on innovation. Capitalist economist Joseph Alois Schumpeter coined creative destruction in entrepreneurship, which led to innovation and economic prosperity. He suggested that the economic framework is constantly restructured, replacing the old with the new. Development of product life cycle (PLC) ideas that can provide a time-based overview of conditions, product attributes, and market characteristics to guide product innovation planning, strategies, and marketing operations (Riswanto et al., 2020).

Market orientation and entrepreneurial orientation interact to encourage product innovation, and companies that pay more attention to it tend to have a higher success rate than the resulting product dynamic market characteristics of the import-export business. Market-oriented organizational behavior and entrepreneurial orientation will increase product innovation success (Q. Liu et al., 2022; Y. Liu & Wang, 2020). According to Kuratko and Hodgetts (2014), product innovation includes: Discovery is progressive, cumulative, and innovative company advancement. New products, processes, products/services, and technology are indicators. Development: It includes adjustments, complementing additions, process advancements, and novel ideas for existing products/services. Duplication: This copycats a product with unique improvements to beat competitors. Indicators include increasing competitor product functions and offering unique services (Pozzo et al., 2023a).

Product innovation helps companies meet customer wants, gain a competitive edge, and improve marketing (Sukaatmadja et al., 2021). Market orientation and entrepreneurial orientation influence a business's product innovation potential and those companies prioritizing these orientations typically generate creative products due to this symbiotic relationship (Issau et al., 2022).

### 2.2. Market Orientation

Market orientation involves an organization's ability to predict market needs and competitor landscapes and build lasting relationships with customers and stakeholders based on organizational culture and market behavior (Ferrerás-Méndez et al., 2022). Market orientation is to give higher value to customers by acquiring and disseminating customer and competition analysis knowledge throughout the organization. Market orientation encourages experimentation and ongoing process and system development. It involves creating market intelligence, disseminating it across departments, and responding to it across the organization. This method improves performance by uniting individual and departmental efforts (Liu & Wang, 2020) Market orientation consists of three sets of activities: market

intelligence generation based on current and future customer flows and needs, cross-departmental intelligence dissemination, and strategy development and implementation responsiveness from all organization components.

Market orientation is the best organizational culture for offering higher value to customers and sustaining outstanding business performance (Narver & Slater, 1990). In their study, Narver and Slater (1990) examined market orientation's behavioral aspects with three important indicators: (i) Customer orientation involves understanding target consumer behavior to continuously provide superior value, including ensuring consumer satisfaction, understanding their needs, enhancing product value, offering robust after-sales service, and nurturing sustainable relationships; (ii) Competitor orientation involves understanding the strengths, weaknesses, capabilities, and (iii) Potential synergies of existing and potential competitors (Ighomereho et al., 2022).

Market orientation promotes sustainable competitiveness and revenues, improving organizational performance. In their early stages, MSMEs frequently have fundamental structural complexity and simplistic strategy development. All small organization members should obtain and share market information (Cho & Lee, 2020). Thus, this study uses Narver & Slater's (1990) market behavior orientation measurement dimensions, which better fit MSME-sized enterprises (Ighomereho et al., 2022). Market-oriented businesses can respond quickly and accurately to market conditions when strategic policy is considered. Market orientation involves taking new or different actions in response to market situations, which can lead to product innovation (Issau et al., 2022). Product innovations that resonate with the market result from accurate market orientation (Ta'Amnha et al., 2023). Strongly market-oriented companies will continue to investigate customer wants and preferences and offer innovative products and superior services to outperform their competition (M Fadhli Nursal et al., 2022a). Consequently, the formulated hypothesis, based on relevant literature findings, is as follows:

*H1: There is a significant effect of market orientation on product innovation.*

### 2.3. Entrepreneurship Orientation

Entrepreneurial orientation, a crucial aspect of strategic orientation in shaping organizational marketing policies, is closely linked to organizational culture. This strategic approach supports visionary decision-making in business implementation (Pozzo et al., 2023a). Described as a learning mechanism fostering exploratory behavior in innovation, entrepreneurial orientation involves risk-taking in the product innovation process. Moreover, it establishes an embedded organizational culture that drives innovation, especially in presenting novel and more advanced products amid market turbulence (Nuvriasari et al., 2020).

Entrepreneurial orientation is the foundation for an organization's marketing strategy, fostering successful product innovation. Its effectiveness relies on a supportive organizational culture and market characteristics. Entrepreneurial orientation in this case also plays an important role as a tangible manifestation of the participation of the entrepreneurial spirit in a marketing strategic policy planning process that has previously been discussed in the concept of entrepreneurial marketing. Entrepreneurship is an amalgamation of several disciplinary concepts such as sociology, economics, psychology and management, where the nature of entrepreneurship itself can be defined in terms of risk takers, policy makers, organizational designers and innovators. So that entrepreneurial orientation is an organizational behavior that applies the concept and nature of entrepreneurship in every strategic policy planning (Fitriati et al., 2020).

Entrepreneurial orientation is an organization's strategic resource with the potential to generate competitive advantage. The potential of entrepreneurial orientation and its impact on business performance depends on the extent of the role of entrepreneurial orientation as a driving component for an organization's ability to innovate which includes the characteristics of innovation, risk-taking and proactive attitude in it. In addition, entrepreneurial orientation is an important corporate behavior for improving performance and competitive advantage by continuing to innovate to meet the needs of

potential consumers, engage in new exploration, support new ideas, test and simulate creativity in it to produce product and service innovations.

Lumpkin & Dess also give their view that entrepreneurial orientation is a perspective of strategy choice that refers to the processes, practices, and decision-making activities that lead to the act of launching a new venture, either by a new company, an existing company or through exploration of the internal level of the company and is the basic idea of the concept of entrepreneurship (Bezić & Šlogar, 2020a). These perspectives are outlined in the dimensions of measurement and indicators tailored to this research context: (i) Innovativeness: This dimension reflects involvement in product or service innovation, gauged through indicators like creative ability, experimentation with new products or services, technological leadership, and introducing novel processes. (ii) Risk-taking: This aspect encompasses bold actions in exploring the unknown, characterized by borrowing substantial amounts, allocating significant resources in uncertain environments, making decisions in uncertain circumstances, and taking actions involving uncertain risks. (iii) Proactiveness: This reflects individuals' freedom in creative thinking and action to solve diverse problems (Isichei et al., 2020).

The concept of entrepreneurial marketing, reflecting the transformation of the MSME sector from traditional marketing approaches, constitutes a factor in strategic policy orientation. Entrepreneurial orientation, a key antecedent in the research model's development, influences how businesses enhance their innovative capabilities in creating new products and advancing existing ones in the market. Entrepreneurial orientation fosters exploratory behavior in seeking risks during product innovation (Aydin, 2020). Additionally, underscore entrepreneurial orientation as integral to embedded organizational culture, fostering innovation (Isichei et al., 2020). Therefore, the formulated hypothesis, based on relevant literature, is as follows:

*H<sub>1</sub>: There is a significant effect of entrepreneurial orientation on product innovation*

### 3. Method

#### 3.1. Population and Sample

The population in this research consisted of 334,707 MSME owners in the culinary business category in Ciayumajakuning, Indonesia. The method used was the proportional-clustered-random-sampling method in which every individual in the population has an equal chance of being a research sample, while cluster proportional can mean that the number of samples of each research cluster corresponds to its proportions. Furthermore, the samples, which are the respondents, are selected using the Slovin formula. Based on these calculations, the minimum sample size used was 400 respondents.

#### 3.2. Data Analysis Method

The research method is a vital tool in problem-solving and achieving research objectives. This research employed a quantitative research method, employing a survey among selected MSME owners. Data quality was evaluated through instrument analysis (validity and reliability tests) and a normality test. Validity testing employed the Pearson-product-moment correlation coefficient, while reliability was assessed using Cronbach's Alpha coefficient. The normality test conducted using the one-sample Kolmogorov-Smirnov test established a confidence level of 5%. The research employed a quantitative associative method, integrating descriptive and verification analyses. Descriptive analysis was performed using IBM SPSS Version 25 software, while verificative analysis was employed. The relationships between variables in this research were carried out using the Structural Equation Modeling (SEM) analysis tool with the help of LISREL (Linear Structural Relations) software version 8.80. This software was chosen because it is the most representative research data analysis tool as described in the research method and is easy to apply to the SEM research model.

#### 3.3. Variable Measurement

The variables were measured using a research questionnaire. The narrative questionnaire of the instrument was designed using a Likert Scale assessment. Furthermore, respondents' answers were

divided into five scores, namely Strongly Disagree (1), Disagree (2), Moderately Agree (3), Agree (4), and Strongly Agree (5). The following dimensions and indicators are used to measure the variables:

- i. Market Orientation  
Measurement of market orientation through several behavioral dimensions of Narver & Slater (1990) in (Solano Acosta et al., 2018) was developed into several measurement indicators, which include: (1) customer orientation, (2) competitor orientation, and (3) coordination between functions. These were developed into 15 statement items.
- ii. Entrepreneurship Orientation  
The measurement dimensions and indicators developed by Lumpkin & Dess in (Bezić & Šlogar, 2020b) for the research context include (1) innovativeness, (2) risk-taking, (3) proactiveness, (4) competitive aggressiveness, and (5) Autonomy. Furthermore, these were developed into 19 statement items.
- iii. Product Innovation  
The dimensions of product innovation measurement, according to (Kuntka Donald, 2016), and the development of indicators include (1) discovery, (2) development as a continuation of existing products/services, (3) duplication, and (4) synthesis. The measurement indicators were developed into 16 statement items.

#### 4. Result

Respondents in this research consist of MSME owners in the culinary sector across the Ciayumajakuning area, covers Cirebon City, Cirebon Regency, Indramayu Regency, Majalengka Regency, and Kuningan Regency. Predominantly, women between the ages of 41-50 participate, with an average educational level of Senior High School and 4-7 years of business experience. Ciayumajakuning culinary business owners are dominated by women because in general women have business skills in helping the fulfillment of family or household economic life in accordance with their roles and abilities, where micro MSME owners with a cottage industry scale with the main goal orientation to help fulfill life and improve family economic standards. In general, MSME owners in the culinary sector in Ciayumajakuning are generation X, where in that age range generally business owners have families, however, generation Y (millennials) with an age range under 40 years have also been interested in becoming MSME owners in the culinary sector. The presence of generation Y is expected to provide innovation and change for the better, in addition, culinary MSME owners in Ciayumajakuning are also dominated with senior school.

This dominance is because the majority of MSME owners in the Ciayumajakuning area are generation X who have families, where in this generation most are high school graduates. In this generation, not a few become MSME owners with the motive of helping the fulfillment of life and improving the family's economic level. In addition to the dominance of generation X, not a few MSME owners in the culinary sector have received education up to the bachelor. This indicates that in general, MSME business owners in the culinary sector in Ciayumajakuning have a fairly good level of education. However, the level of education is not necessarily in line with the ability or entrepreneurial spirit of a business actor, there are still many other owners that influence, indicating that MSMEs in the culinary sector have run quite consistently. In other words, MSMEs in the culinary sector are able to survive for quite a long time, however, from the perspective of the level of business development, it is still relatively not optimal in creating performance growth.

The instrument testing results on the three variables established their validity, indicating that they are reliable for further analysis, with scores of 0.850 for market orientation, 0.928 for entrepreneurial orientation, and 0.865 for product innovation, exceeding the Cronbach's Alpha threshold of  $> 0.7$ . Moreover, the normality test, indicated by the Asymp value parameter Sig, revealed the variables' significance values of 0.115 for market orientation, 0.146 for entrepreneurial orientation, and 0.127 for product innovation. These values, exceeding 0.05, confirm that the variables are normally distributed. After an analysis of data quality through validity, reliability and normality testing, which proves that

the data obtained is representative to be used as research data, it is continued to proceed to the verification analysis stage on the entire research model in accordance with the research hypothesis. The research calculates the extent of market orientation's direct impact on product innovation, its indirect effect through entrepreneurial orientation, the direct influence of entrepreneurial orientation on product innovation, and its indirect impact through market orientation in the following manner:

**Table 2.**  
Magnitude of effect.

Variable	Direct effect	Indirect effect		Total effect
		Market orientations	Entrepreneurial orientations	
Market orientations	0.370	-	0.114	0.484
Entrepreneurial orientations	0.139	0.114	-	0.253
Total effect on product innovation				0.737

Table 2 displays the direct effect of market orientation on product innovation at 37%, with an additional 11.4% through its indirect impact via entrepreneurial orientation, totaling 48.4%. Meanwhile, the direct influence of entrepreneurial orientation on product innovation stands at 13.9%, coupled with an indirect impact of 11.4% through market orientation, totaling 25.3%. These calculations indicate that market orientation has a more dominant effect on product innovation than entrepreneurial orientation. Combined, the total effect of both market and entrepreneurial orientations on product innovation amounts to 73.7%.

After calculating the magnitude of the influence of market and entrepreneurial orientations on product innovation directly and indirectly, the following analysis stage is simultaneous hypothesis testing. Simultaneous hypothesis testing is intended to determine the significance level of the influence of market and entrepreneurial orientations on product innovation. The effect of market orientation ( $\xi_1$ ) and entrepreneurial orientation ( $\xi_2$ ) on product innovation ( $\eta_1$ ), as per the structural model equation described in the research method, is formulated in the equation:  $\eta_1 = \xi_1\xi_1 + \xi_4\xi_2 + \zeta_1$ . The processing of research data using LISREL 8.80 software yields the subsequent structural equation calculation output:

$$PI = 0.608*MO + 0.373*EO, \text{ Errorvar.} = 0.264, R^2 = 0.736$$

(0.0578)	(0.0526)	(0.0461)
10.506	7.092	5.735

From the results of the equation above, it can be explained that product innovation is positively influenced by market orientation with a path coefficient ( $\gamma_1$ ) of 0.608 and entrepreneurial orientation with a path coefficient ( $\gamma_4$ ) of 0.373; and an error magnitude ( $\zeta_1$ ) of 0.264. The magnitude of the total influence ( $R^2$ ) in the research model was 0.736. The coefficient of the market orientation path to product innovation ( $\gamma_1$ ) of 0.608 can mean that market orientation contributes to the improvement of overall product innovation. While the coefficient of entrepreneurial orientation path to product innovation ( $\gamma_4$ ) of 0.373 can be interpreted that entrepreneurial orientation contributes less than market orientation to increasing overall product innovation. The assumption of the analysis is fulfilled by the statistical probability error rate of the research model is very low, where the error probability value is smaller than the set significance level of 5% or obtained p-value ( $\zeta_1$ ) = 0.0461 < 0.05, meaning that Market Orientation and Entrepreneurial Orientation have a significant effect on Product Innovation.

In addition, the design of simultaneous hypothesis testing in research methods, simultaneous hypothesis testing is carried out using the F test with the following calculations:

$$F_{values} = \frac{(400 - 2 - 1) 0.736}{3 (1 - 0.736)} = 363.929$$

From the equation results above, it is evident that product innovation is positively influenced by market orientation with a path coefficient ( $\gamma_1$ ) of 0.608 and entrepreneurial orientation with a path coefficient ( $\gamma_4$ ) of 0.373, along with an error magnitude ( $\zeta_1$ ) of 0.264. The total influence magnitude ( $R^2$ ) in the research model amounts to 0.736.

The path coefficient ( $\gamma_1$ ) of 0.608 for market orientation suggests its substantial contribution to product innovation enhancement. Conversely, the path coefficient ( $\gamma_4$ ) of 0.373 for entrepreneurial orientation indicates a relatively lesser contribution compared to market orientation in advancing overall product innovation. The analysis assumption holds due to the statistical probability error rate of the research model being remarkably low. The obtained p-value ( $\zeta_1$ ) = 0.0461 < 0.05, indicating a significant effect of Market Orientation and Entrepreneurial Orientation on Product Innovation. Additionally, the research methodology incorporates simultaneous hypothesis testing using the F-test, calculated as follows (Table 3):

**Table 3.**  
Hypothesis testing.

	<b>Co-efficient value</b>	<b>t<sub>count</sub></b>	<b>t<sub>table</sub></b>	<b>Result</b>
Hypothesis 1	0.608	10.506	1.966	Accepted
Hypothesis 2	0.373	7.092	1.966	Accepted

The comparison between t-count and t-table values within sub-structure research model 1 demonstrated that the values of t-count ( $\gamma_1$ ) and ( $\gamma_4$ ) exceed the t-table values. Consequently, both H1 and H2 are accepted, affirming that market and entrepreneurial orientations significantly impact product innovation. Further research supports the notion that these orientations play a pivotal role in fostering breakthroughs in product innovation (Dahana & Nur Khusniyah Indrawati Mugiono, 2021). Innovating becomes a challenge for owners as it manifests their entrepreneurial orientation behavior. It aligns with findings by (Dahana & Nur Khusniyah Indrawati Mugiono, 2021), emphasizing that a robust entrepreneurial orientation, paired with strong market orientation behavior, drives product innovation success.

In the culinary sector of Ciayumajakuning, market orientation has a more significant influence than entrepreneurial orientation on the product innovation of MSME owners. However, considering the substantial indirect influence, it indicates the interrelated nature of the market and entrepreneurial orientations (Staniewski & Awruk, 2019). Any alterations in one variable condition may consequently impact the condition of the other variable ((Thongpanich, 2023)Cindera Fatikha et al., 2021).

These results further solidify that market orientation is a critical precursor for significantly enhancing product innovation capabilities. A robust market orientation signifies the business owners' adeptness in absorbing market information, which is crucial for effective product development (Salim et al., 2020). This market information must be processed promptly to plan new product innovations, particularly to adapt to the rapid changes in some product types within the PLC phases. Market-oriented allows business owners to align product innovations more closely with market needs and desires (Dahana & Nur Khusniyah Indrawati Mugiono, 2021).

In addition, the research concurs that entrepreneurial orientation significantly influences product innovation, driving organizations to adopt innovative behaviors. It also sheds light on the weaker impact of entrepreneurial orientation on product innovation within the MSME sector due to the need for competencies and risk-taking capabilities not readily available in the organization. Analysis reveals that market orientation's influence surpasses that of entrepreneurial orientation. It implies that human resources within the culinary MSME sub-sector in Ciayumajakuning need more creativity and



innovation elements in creating innovative products (entrepreneurial orientation needs to be higher) while being significantly influenced by market demands.

Simultaneous hypothesis testing results show that market and entrepreneurial orientations significantly affect product innovation. Hence, the research concludes that these orientations positively and significantly impact product innovation simultaneously. Moreover, the significant magnitude of the indirect influence of market and entrepreneurial orientations on innovation suggests their close relationship, affecting each other's effectiveness. Market orientation reflects marketing strategies based on customers and competitors, while entrepreneurial orientation focuses more on identifying and exploiting market opportunities (Retnawati & Retnaningsih, 2020b).

The research results further support the idea that market and entrepreneurial orientation jointly explain robust integration for breakthrough product innovation. The challenge for innovators lies in aligning their entrepreneurial behavior with market needs and desires to actualize successful product innovations. Affirm that strong market orientation enhances the success of product innovation when accompanied by robust entrepreneurial orientation (M Fadhli Nursal et al., 2022b). In the culinary MSMEs of Ciayumajakuning, the research illuminates the overwhelming influence of market orientation over entrepreneurial orientation in driving product innovation. It highlights a market-driven approach within the culinary MSME sector, indicating that market dynamics significantly influence product innovation (Pozzo et al., 2023b).

While this approach might work effectively in less complex market, it also underscores the limited ability of MSME owners to innovate incrementally or radically in culinary products. It is compounded by a reluctance to take risks in environments with low new environmental uncertainty. Notably, there is scarce evidence of discovering new culinary products beyond existing developments (Lamidi, 2021). Failure to address this issue fundamentally may lead to market saturation, indicative of a decline phase in the Product Life Cycle (PLC). Owners or managers in such scenarios should initiate mental model changes, fostering a learning orientation as a strategic orientation. Alternatively, they might need to reorient goals and strategies or change existing business practices. Such changes can propel organizations toward continued growth (scaling up) and success in product innovation (So et al., 2020), potentially moving toward market-driving strategies

## 5. Conclusions

Market orientation exhibits direct and indirect positive and partially significant impacts on product innovation. Specifically, its direct influence on product innovation is more prominent than its indirect effect within the MSME research locus on the assisted culinary sub-sector in the Ciayumajakuning area. Entrepreneurial orientation also shows a positive and partially significant direct and indirect effect on product innovation. However, its direct impact on product innovation holds more dominance. The simultaneous positive and significant effect of market and entrepreneurial orientations on product innovation is evident, with market orientation exerting a more dominant role than entrepreneurial orientation.

To increase the influence of market orientation and entrepreneurial orientation on product innovation, the results show that market orientation has a greater influence than entrepreneurial orientation, therefore it is necessary to increase the entrepreneurial orientation factor more intensively to maintain the continuity of innovation to be well maintained. To further increase its influence on product innovation, efforts to increase the influence of market orientation on product innovation by asking for feedback or feedback from information that has been received by all functions, both individuals and groups in the form of suggestions or input about consumers and the market to be able to improve product innovation. From the feedback obtained, a selection of which inputs are feasible to implement. Thus, it is expected to create a better level of innovation capability, and efforts to increase the influence of entrepreneurial orientation on product innovation by giving balanced responsibilities and authorities, meaning that high responsibility is accompanied by high authority as well. Next is the provision of fair rewards and punishments. With these alternative solutions, it is hoped that it will

provoke even higher creativity, and will subsequently have an impact on increasing the influence of entrepreneurial orientation on product innovation.

This research acknowledges certain limitations that could open doors for future research exploration. Primarily, this research focused solely on market and entrepreneurial orientations, potentially overlooking other owners, such as competitors' products and unique services, which influence product innovation. Therefore, future research could explore including organizational learning capabilities within a more comprehensive framework of product innovation capability. That might involve organizational phase changes, transitioning from internal resource utilization to embracing innovation driven by external conditions.

From a technical and operational perspective, implementing these concepts could involve urging early-stage business owners to pursue rapid and fundamental incremental or additional innovations. That might encompass practical and appealing product packaging innovations, preservation strategies to prolong shelf life, and innovations tackling environmental concerns. However, the implementation should be tailored to the optimal capacity of the internal MSME. Moreover, in the context of product innovation within MSMEs in the culinary sub-sector of the Ciayumajakuning region, additional suggestions include developing complementary products to address the shortcomings of existing products. It could involve improving existing weaknesses by creating complementary products that cover these deficiencies, enhancing pre-existing processes through shared experiences and discussions among business owners, seeking appropriate new technology through collaboration with competent academics, and coordinating with the local government to explore potential support mechanisms.

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### References

- [1] Anoke, F., Ngozi, N. H., Uchekukwu, E. S., & Joyce, I. (2022). Entrepreneurial Marketing And SMEs Growth In Post Covid-19 Era In Awka, Anambra State, Nigeria. *International Journal of Financial, Accounting, and Management*, 4(2), 115–127. <https://doi.org/10.35912/ijfam.v4i2.833>
- [2] Anwar, M., Clauss, T., & Issah, W. B. (2022). Entrepreneurial orientation and new venture performance in emerging markets: the mediating role of opportunity recognition. *Review of Managerial Science*, 16(3), 769–796. <https://doi.org/10.1007/s11846-021-00457-w>
- [3] Aydin, H. (2020). Market orientation and product innovation: the mediating role of technological capability. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-10-2019-0274>
- [4] Bezić, H., & Šlogar, H. (2020a). the Relationship Between Innovative Orientations and Business Performance in Companies. *Ekonomika Misao i Praksa*, 29(1), 57–76.
- [5] Bezić, H., & Šlogar, H. (2020b). the Relationship Between Innovative Orientations and Business Performance in Companies. *Ekonomika Misao i Praksa*, 29(1), 57–76.
- [6] Cho, Y. H., & Lee, J. H. (2020). A study on the effects of entrepreneurial orientation and learning orientation on financial performance: Focusing on mediating effects of market orientation. *Sustainability (Switzerland)*, 12(11), 1–19. <https://doi.org/10.3390/su12114594>
- [7] Dahana, R. N., & Nur Khusniyah Indrawati Mugiono. (2021). Competitive Advantage To Mediate the Influence of Product Innovation and Entrepreneurial Orientation on Marketing Performance in Small and Medium Industry. *Jurnal Aplikasi Manajemen*, 19(2), 413–423. <https://doi.org/10.21776/ub.jam.2021.019.02.17>
- [8] Emami, A., Ashourizadeh, S., Sheikhi, S., & Rexhepi, G. (2022). Entrepreneurial propensity for market analysis in the time of COVID-19: benefits from individual entrepreneurial orientation and opportunity confidence. *Review of Managerial Science*, 16(8), 2413–2439. <https://doi.org/10.1007/s11846-021-00499-0>
- [9] Ferreras-Méndez, J. L., Llopis, O., & Alegre, J. (2022). Speeding up new product development through entrepreneurial orientation in SMEs: The moderating role of ambidexterity. *Industrial Marketing Management*, 102(January), 240–251. <https://doi.org/10.1016/j.indmarman.2022.01.015>
- [10] Fitriati, T. K., Purwana, D., & Buchdadi, A. D. (2020). The role of innovation in improving small medium enterprise (SME) performance. *International Journal of Innovation, Creativity and Change*, 11(2), 232–250.
- [11] Gwee, L., & Giantari, I. G. A. K. (2021). the Role of Competitive Advantage Mediates the Effect of Innovation on Business Performance. *American Journal of Humanities and Social Sciences Research*, 5(1), 222–230.

- [12] Ighomereho, S. O., Afolabi, S. T., Agada, S. A., & Ojo, A. A. (2022). Market and entrepreneurial orientations as predictors of small and medium enterprises' performance in the COVID-19 era. *Innovative Marketing*, 18(2), 161–173. [https://doi.org/10.21511/im.18\(2\).2022.14](https://doi.org/10.21511/im.18(2).2022.14)
- [13] Isichei, E. E., Emmanuel Agbaeze, K., & Odiba, M. O. (2020). Entrepreneurial orientation and performance in SMEs: The mediating role of structural infrastructure capability. *International Journal of Emerging Markets*, 15(6), 1219–1241. <https://doi.org/10.1108/IJOEM-08-2019-0671>
- [14] Issau, K., Soni, S., & Acquah, I. S. K. (2022). Ghanaian SMEs' perspective on the interrelationship between market and entrepreneurial orientations. *Revista de Gestao*, 29(2), 139–157. <https://doi.org/10.1108/REGE-03-2021-0038>
- [15] Kuntka Donald, H. Fnid. rkk A. O. D. F. (2016). Entrepreneurship: Theory/Process/Practice. In *Journal of Chemical Information and Modeling* (Vol. 53, Issue 9).
- [16] Lamidi, M. D. R. (2021). The Effect of Digital Marketing and Financial Inclusion on Business Sustainability through Marketing Performance Culinary Msme's in Surakarta. *Journal of Economics, Finance And Management Studies*, 04(06), 716–723. <https://doi.org/10.47191/jefms/v4-i6-06>
- [17] Liu, Q., Qu, X., Wang, D., Abbas, J., & Mubeen, R. (2022). Product Market Competition and Firm Performance: Business Survival Through Innovation and Entrepreneurial Orientation Amid COVID-19 Financial Crisis. *Frontiers in Psychology*, 12(March), 1–12. <https://doi.org/10.3389/fpsyg.2021.790923>
- [18] Liu, Y., & Wang, M. (2020). Entrepreneurial orientation, new product development and firm performance: the moderating role of legitimacy in Chinese high-tech SMEs. *European Journal of Innovation Management*, 71772027. <https://doi.org/10.1108/EJIM-05-2020-0204>
- [19] M Fadhli Nursal, Muhammad Richo Rianto, & Eri Bukhari. (2022a). The Influence of Market Orientation, Entrepreneurial Orientation, Knowledge Management and Learning Organization on Performance Mediated by Innovation in Culinary SME's in Bekasi. *East Asian Journal of Multidisciplinary Research*, 1(8), 1691–1702. <https://doi.org/10.55927/eajmr.v1i8.1266>
- [20] M Fadhli Nursal, Muhammad Richo Rianto, & Eri Bukhari. (2022b). The Influence of Market Orientation, Entrepreneurial Orientation, Knowledge Management and Learning Organization on Performance Mediated by Innovation in Culinary SME's in Bekasi. *East Asian Journal of Multidisciplinary Research*, 1(8), 1691–1702. <https://doi.org/10.55927/eajmr.v1i8.1266>
- [21] Nuvriyari, A., Ishak, A., Hidayat, A., Mustafa, Z., Haryono, S., Islam, U., Yogyakarta, I., & Yogyakarta, U. M. (2020). The Effect of Market and Entrepreneurship Orientation on SME's Business Performance: The Role of Entrepreneurial Marketing in Indonesian Batik Industries. *European Journal of Business and Management*, 12(5), 29–37. <https://doi.org/10.7176/ejbm/12-5-04>
- [22] Pozzo, D. N., Roa, I. G., Beleño, C. A. G., Orfale, H. J., Gomez, A. J. R., & Guerrero, V. C. (2023a). The impact of entrepreneurial orientation on innovation performance: A study on micro, small and medium-sized enterprises (MSMEs) in the Colombian Caribbean. *Procedia Computer Science*, 224, 502–506. <https://doi.org/10.1016/j.procs.2023.09.072>
- [23] Pozzo, D. N., Roa, I. G., Beleño, C. A. G., Orfale, H. J., Gomez, A. J. R., & Guerrero, V. C. (2023b). The impact of entrepreneurial orientation on innovation performance: A study on micro, small and medium-sized enterprises (MSMEs) in the Colombian Caribbean. *Procedia Computer Science*, 224, 502–506. <https://doi.org/10.1016/j.procs.2023.09.072>
- [24] Ramírez-Solis, E. R., Llonch-Andreu, J., & Malpica-Romero, A. D. (2022). Relational capital and strategic orientations as antecedents of innovation: evidence from Mexican SMEs. *Journal of Innovation and Entrepreneurship*, 11(1). <https://doi.org/10.1186/s13731-022-00235-2>
- [25] Retnawati, B. B., & Retnaningsih, CH. (2020a). *Role of Entrepreneurial Orientation and Market Orientation on Competitive Advantage Through Marketing Performance: The Study at Marine-Based Food Processing Industry in Central Java*. 135(Aicmbs 2019), 66–71. <https://doi.org/10.2991/aebmr.k.200410.011>
- [26] Retnawati, B. B., & Retnaningsih, CH. (2020b). *Role of Entrepreneurial Orientation and Market Orientation on Competitive Advantage Through Marketing Performance: The Study at Marine-Based Food Processing Industry in Central Java*. 135(Aicmbs 2019), 66–71. <https://doi.org/10.2991/aebmr.k.200410.011>
- [27] Riswanto, A., Rasto, Hendrayati, H., Saparudin, M., Abidin, A. Z., & Eka, A. P. B. (2020). The role of innovativeness-based market orientation on marketing performance of small and medium-sized enterprises in a developing country. *Management Science Letters*, 10(9), 1947–1952. <https://doi.org/10.5267/j.msl.2020.2.019>
- [28] Salim, M., Saputra, F. E., Hayu, R. S., & Febliansa, M. R. (2020). Marketing performance of bread and cake small and medium business with competitive advantage as moderating variable. *Management Science Letters*, 11(4), 1421–1428. <https://doi.org/10.5267/j.msl.2020.10.024>
- [29] So, I. G., Ridwan, A., Simamora, B. H., Aryanto, R., Sandi, A., Nurhayati, M., Kim, M., Park, M. J., Wang, L. Y., Huang, J. H., Saraih, U. N., Zin Aris, A. Z., Abdul Mutalib, S., Tunku Ahmad, T. S., Abdullah, S., Harith Amlus, M., San, L. B., Khuong, M. N., Al Ayyubi, W. U., ... Rusdarti. (2020). Effect of Entrepreneurship Education, Family Environment and Self-Efficacy on Students Entrepreneurship Intention. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 11(3), 183–200. <https://doi.org/10.12973/ijem.5.3.305>

- [30] Solano Acosta, A., Herrero Crespo, Á., & Collado Agudo, J. (2018). Effect of market orientation, network capability and entrepreneurial orientation on international performance of small and medium enterprises (SMEs). *International Business Review*, 27(6), 1128–1140. <https://doi.org/10.1016/j.ibusrev.2018.04.004>
- [31] Staniewski, M. W., & Awruk, K. (2019). Entrepreneurial success and achievement motivation – A preliminary report on a validation study of the questionnaire of entrepreneurial success. *Journal of Business Research*, 101(June 2018), 433–440. <https://doi.org/10.1016/j.jbusres.2019.01.073>
- [32] Ta'Amnha, M. A., Magableh, I. K., Asad, M., & Al-Qudah, S. (2023). Open innovation: The missing link between synergetic effect of entrepreneurial orientation and knowledge management over product innovation performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4), 100147. <https://doi.org/10.1016/j.joitmc.2023.100147>
- [33] Thongpanich, P. (2023). *Creative Writing on Tourism in Chiang Rai After COVID-19: Application of Creative Nonfiction on Senior Projects*. Atlantis Press SARL. [https://doi.org/10.2991/978-2-38476-028-2\\_3](https://doi.org/10.2991/978-2-38476-028-2_3)