The role of mediation of product innovation in improving enterprises orientation of marketing performance of tofu industry

Hendri Soekotjo⁎, Krido Eko Cahyono⁎, Novianto Eko Nugroho⁎, Rismawati⁎ and I Gede Putu Kawiana⁎

⁎Indonesia School of Economics (STIESIA), Surabaya, Indonesia
⁎Doctoral Program, Faculty of Economics and Business, State University of Malang, East Java, Indonesia
⁎Faculty of Business and Tourism Economics, University Hindu Indonesia

ABSTRACT

This study aims to analyze the influence of entrepreneurial orientation on marketing performance mediated by product innovation for making tofu and milk in Jombang district. Data were randomly obtained from 70 respondents from small businesses using research instruments in the form of questionnaires and technically analyzed using Partial Least Square (PLS). The results showed that entrepreneurial orientation positively and significantly influenced product innovation and marketing performance in making tofu milk in Jombang, East Java, Indonesia. Furthermore, this encourages small businesses to always develop variants products, minimize risks, expand the marketing area, increase performance, and compete in the food industry's production.

1. Introduction

During the Covid-19 Pandemic era, economic development experienced a significant decline in various business sectors, such as the food business, named tofu, in Jombang, East Java, Indonesia. Generally, the public is accustomed to eating tofu and tempeh. However, it is currently experiencing a decline in sales due to inadequate provision of the basic ingredients. Tofu, also known as Tahu, produced in Jombang, experienced a tremendous increase in sales in March due to the use of social media, such as WhatsApp and Facebook, to create awareness. This product, one of the leading e-commerce commodities, is packaged in plastic or boxes, with its content varying from 10 to 50 seeds. The raw material is soybean mixed with cow's milk, making it more delicious than the ordinary tofu. According to Hisano et al. (2018) and Ahen and Amankwah-Amoah (2018), small businesses need to be empowered to encourage production and develop human resources and technology. Jayaningrum and Sanawiri (2018) stated that the culinary field is currently experiencing a rapid increase due to the differences in price and quality, which had led to the development of new knowledge with numerous beneficial advantages. In addition, Purnama (2010) stated that the ability to read market opportunities and the creation of competitive products through diversification requires innovation and creativity supported by motivation and professional management. The increase in Tofu and Milk business is due to its promising opportunities, for instance it is daily consumed by people and does not require high investment in its management (Djayadiningrat, Sukaatmadja, & Yasa, 2017). According to Gholami and Birjandi (2016), entrepreneurial orientation generally identifies and implements opportunities, which includes a tendency to innovate and take aggressive risks towards competitors and relative to market opportunities that are proactively related to the concept of entrepreneurial orientation (Arief et al., 2013). The research carried out by Parkman et al. (2012) stated that entrepreneurial orientation can quickly introduce new products to the set target market. However, this is different from the research by Lekmat et
al. (2018), which stated that not all dimensions of entrepreneurial orientation can improve a business's performance, especially in the field of international marketing, which recommends the critical priority of proactive risk-taking to improve performance. Meanwhile, Buli (2017) reported that integrating the entrepreneurial orientation of innovation and market dimensions into SME operations in Ethiopia did not contribute to superior performance and failed to allow producers to thrive in an institutionally complex and economically volatile environment.

According to Killa (2014) and Setini et al. (2020), innovative efforts improve marketing performance by manufacturing consumers' needs for various Tahu products. Therefore, small businesses can manufacture products to increase the marketing performance of consumers. The Tahu or Tofu business requires the manufacturer to innovate strategies capable of boosting production while minimizing cost. Therefore, this study aims to explain the influence of entrepreneurial orientation on product innovation in improving marketing performance from the problems described. According to Núñez-Pomar et al. (2020), entrepreneurial orientation is accepting all kinds of risks associated with starting and running a business. Karim (2007) defined it as an innovative attitude, ready to assume all risks to understand the market environment and opportunities. Furthermore, it is a creative and innovative ability used as a basis, tips, and resources to look for opportunities to succeed (Sudarsono, 2015). According to Agustina (2013), an innovative attitude is an individual attitude, while Kohli at al. (2010) stated that market orientation is a culture that leads to increased business performance. Therefore, Djojobo and Tawas (2014) reported that product innovation is categorized as goods and services added to existing product lines. Research conducted by Cahyo and Harjanti (2013) indicated that there are three main dimensions of product innovation variables, including design, variants, and quality, with dimensions used to determine the functions and product packaging design. It is also used to determine the quality dimensions, control indicators, standards, and product development. Research conducted by Atalay et al. (2013) stated that one of the indicators of product innovation is the addition of variants. While Irawan (2015) reported that marketing performance is the result of the whole business, strategy, and performance that has been carried out by a company. According to Basuki and Rahmi (2014), company performance is a measure of success that can be measured at a certain time. Subsequently, Irawan (2015) reported that marketing performance results from all efforts, strategies, and performance carried out by the company. Furthermore, Halim et al. (2012) stated that it is the result of a strategy that has been achieved by the company in meeting consumers' needs. While Djojobo and Tawas (2014), Titahena et al. (2012), and Sari (2013) reported that measuring marketing performance includes profit and sales growth, as well as the marketing coverage and customer growth.

2. Literature review

2.1 Innovation

Product innovation is the manufacture and introduction of a good or service either as a new or an improved version of an older commodity. The development of the tofu processed product was an improved version of the previously processed product. According to studies, the survival of a business is dependent on the success of a new product, which requires effort, time, and ability to carry enormous risk. Setiawan (2012) stated that product innovation affects competitive advantage, and when it has added value for consumers, the manufacturing company experiences significant profit. Further, Hartini (2010) reported that product innovation is a new good or service introduced to meet market needs. This is similar to the Tofu product, which was previously sold with standard flavors, which was later innovated inline market demand, thereby making it the leading product. Tofu Milk is currently one of the leading product innovations from soybeans mixed with fresh cow's milk, making it a profitable commodity for the manufacturing company. Suendro (2010) stated that product innovation is developing and introducing a new good or service, which is also successfully marketed.

2.2 Entrepreneurial Orientation

Entrepreneurial orientation is a form of creativity and innovation used as the main basis, tips, and resources to analyze opportunities (Sudarsono, 2015). Entrepreneurial orientation refers to the processes, practices, and decision-making strategies, leading to new directions. It comprises of three aspects of entrepreneurship, namely always being innovative, acting proactively, and having the courage to take risks. According to Wiani (2013) and Ginberg (2011), entrepreneurial orientation is an individual tendency to be innovative and proactive with the ability to take risks to manage a business. Nuvriasari (2012) reported that entrepreneurial orientation is the ability to identify and exploit existing opportunities that have not been fully utilized. Benito et al. (2008) stated that entrepreneurial orientation is described as an innovative attitude that allows entrepreneurs to take risks and achieve the necessary understanding of a more proactive market opportunity.

2.3 Marketing Performance

Marketing performance is an activity carried out by traders in conducting a business venture (Toyib, 2017). According to Irawan (2015), it is the result of the overall effort, strategy, and performance of a company. Furthermore, Hasan (2010) reported that it is a market-oriented business with various benefits, including the ability to produce products or services that are in accordance with consumers' perceptions, more efficient than competitors, and explain the differences in the performance achieved by the company. According to Riani et al. (2015), Setini et al. (2020), and Yasa et al. (2020), marketing performance...
is an achievement that results from the impact of various roles that function in an organization. It is also an essential element of company performance, which can be seen from the marketing strategies.

2.4 Conceptual framework

Based on these variables' relationship, a research concept framework can be prepared, as shown in Fig. 1.

Hypotheses:

H₁: Entrepreneurial Organizations have a positive and significant effect on Product Innovation.
H₂: Entrepreneurial Organizations have a positive and significant effect on Marketing Performance.
H₃: Product innovations have a positive and significant impact on marketing performance.
H₄: Product innovation as mediation can influence Entrepreneurial Orientation to Marketing Performance.

3. Method

The research was carried out in Jombang, East Java, Indonesia, since it is where Milk Tofu is manufactured. Data were collected from 70 respondents that are business owners or managers of the milk tofu food industry sector through the proportional random sampling method. The collection process was conducted using questionnaires and technically analyzed using Partial Least Square (PLS). According to Siregar (2010), data collection methods follow systematic procedures and are also in accordance with the standard. In this study, the entrepreneurial orientation, product innovation, and marketing performance are the independent, mediating, and dependent variables, respectively. Indicators of entrepreneurial orientation consist of taking risks, flexibility, anticipation, and proactivity, which is associated with the introduction of new products and determining new target markets. Indicators of product innovation include product packaging design, variants, controlling product quality, and development. Marketing performance indicators consist of earnings, sales, marketing coverage, and market growth.

4. Results and discussion

4.1 Respondent Characteristics

The respondents in this study are categorized by gender and age with the results showing that the percentage of women and men is 57 and 43. In this study, age classification shows that respondents aged 17-24, 25-32, and above 33 years were 18, 25, and 57 percent.

Fig. 1. Framework

Fig. 2. Characteristics of the respondents

Source: Research Data Processing Results, 2020
Fig. 2 shows that small business actors that produce tofu are dominated by women with 43 respondents or 61.4 percent, while the men are 27 respondents or 38.6 percent. The age of the respondents that dominate shows that those above 33 years were 27 respondents or 38.6 percent with a slight difference from the ages of 25-32 years by 25 respondents or 35.7 percent. While those aged 17-24 years were 18 respondents or 25.7 percent.

4.2 Results of Analysis with PLS

The results of the Composite Reliability test tend to regulate, and measures construct reliability. Therefore, the composite reliability value needs to be above 0.7, while the Average Variance Extract (AVE) needs to be above 0.5. The three research variables' test results meet the composite reliability or a good level of reliability with a composite reliability value above 0.7, and an AVE value above 0.5 (PLS Output).

![Fig. 3. Path Diagram Model](image)

Data sources have been processed in 2020

**Table 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Composite Reliability</th>
<th>AVE</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Orientation (X)</td>
<td>0.860</td>
<td>0.469</td>
<td>Reliable</td>
</tr>
<tr>
<td>Product Innovation (Z)</td>
<td>0.929</td>
<td>0.387</td>
<td>Reliable</td>
</tr>
<tr>
<td>Marketing Performance (Y)</td>
<td>0.863</td>
<td>0.478</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: OutputPLS attachment 2020

4.3 Inner Model Testing

The inner model test results between the variable relationships in the study show that the hypothesis is partially carried out to determine the t-statistic and p-value in each of the influenced paths. The output is shown in Fig 4, with the direct effect intended directed to influence one variable and another.

![Fig. 4. Conceptual framework](image)

Note:  
- Significant path,  
- - - indirect line of path

The results of the Inner weight in Table 2, shows that there are three significant direct effects with a statistical value above 1.96, namely Entrepreneurial Orientation (X) on Marketing Performance (Y), Entrepreneurial Orientation (X) on Product Innovation (Z) and Product Innovation (Z) on Marketing Performance (Y).
The indirect effect is measured indirectly from one variable to another, using an intervening variable with the coefficient obtained from the two direct effects. When the two direct effect coefficients are significant, the indirect is also significant. When one or both of the direct effect coefficients are not significant, the indirect effect coefficient is also not significant. This study comprises of three direct effects, namely (1) the indirect effect of the Marketing Mix (X) on parents’ decision to choose school (Y) through Product Innovation (Z).

### Table 3
**Indirect Effect test results**

<table>
<thead>
<tr>
<th>Entrepreneurial orientation → Product Innovation → Marketing Performance</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>PValues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.246</td>
<td>0.250</td>
<td>0.068</td>
<td>3.589</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: OutputPLS appendix. Data processing 2020

The indirect effect of marketing orientation on performance through product innovation is shown in Table 4. From the results of manual calculations in Table 3, it can be seen that the indirect effect of marketing orientation on performance through product innovation obtained a coefficient value of 0.246 because all variables have a significant effect.

### 4.4 Sobel test

In this Sobel test, the indirect influence of the entrepreneurial variable (X) on marketing performance (Y) is mediated by product innovation (Z). When Z's calculated value is greater than 1.96 with a confidence level of 95 percent, the mediator delivers significant value, which mediates the relationship between entrepreneurial orientations on performance marketing.

### 5. Discussion

#### 5.1 Marketing orientation influences product innovation

The results of the Inner Model analysis show that there is a significant direct effect between entrepreneurial orientation (X) in increasing product innovation (Z), with a path coefficient of 0.565 and a t-statistic greater than 1.96. These results show that there is sufficient evidence, which empirically accepts the hypothesis that the stronger the entrepreneurial orientation, the greater the innovation of products produced. The path coefficient with a positive sign means a unidirectional relationship between entrepreneurial orientation and product innovation. Therefore, the stronger the entrepreneurial orientation, the higher the capability of the resulting product innovation.

Empirical research that supports the results of this study includes those conducted by Hafeezz et al. (2012), Parkman et al. (2012), Galindo, and Picazo (2013), Suyanto (2014), and Wang et al. (2015). These studies state a positive and significant influence between entrepreneurial orientation variables on marketing performance, which is reflected in proactive, innovative, and courageous attitudes to take risks on product innovation. Meanwhile, business development's ability on entrepreneurial orientation is reflected in indicators of anticipation, flexibility, proactive, innovative, and courage to take high risks, which impact the company's ability to innovate the products it manufactures.

The research results show that entrepreneurial orientation is measured by seven indicators, with a risk-taking indicator as to the lowest average value. This is because small businesses in the food sector are not courageous enough to take risks, therefore, these entrepreneurs need to be always provided with training, understanding, and knowledge to develop their business further using risk management. Furthermore, tofu manufacturers have not found a formula to anticipate the expiring date issued to assist them from producing more than the required daily number of products.

#### 5.2 Marketing orientation affects marketing performance

The results of the Inner Model analysis show that there is a direct and significant influence between marketing orientation, which can influence performance, at a path coefficient of 0.275 and a t-statistic greater than 1.96, to compare the results to the entrepreneurial orientation leading to better marketing performance. Therefore, there is a direct and significant influence between entrepreneurial orientations on marketing performance.

The results of this study are supported by the previous research conducted by Ellis (2006) stated that quantitative evidence is entrepreneurial orientation capable of determining high marketing performance. This is because entrepreneurs have a high degree of orientation with competitive advantages in three ways, namely product and service quality and product innovation. In addition, Mahmud (2011) stated that entrepreneurial orientation has a positive and significant effect on marketing performance, while Titahena et al. (2012) reported that it has a positive and significant effect on marketing performance.
Business actors have advantages in customer knowledge, and this is used as a source to create products that are in accordance with consumers' desired requirements and needs.

The test results produce descriptions of research variables on marketing performance, therefore, from the results of the analysis of the four marketing indicators, it can be seen that the lowest average value shows that the owner of the tofu milk business is still unable to expand the business. However, entrepreneurs experience an increase in their profits monthly due to a rise in these products' sales with an increase in consumers' numbers. Since its introduction to the community, this product has captured many consumers' minds due to the delicious taste, which is different compared to ordinary tofu, thereby making consumers feel a different sensation.

5.3 Product Innovation on Marketing Performance

From the Inner Model analysis results, a significant direct effect was found between Product Innovation (Z) on Marketing Performance (Y) with a path coefficient of 0.435 and a t-statistic greater than the value of 1.96. The identification of this study's results stated that product innovation is getting better, thereby leading to better marketing performance. This means that there is a significant influence between product innovations on marketing performance.

Research results from Setiawan (2012) stated that product innovation affects competitive advantage due to its ability to take the product one step further than competitors. Product development is also an effective strategy to determine the success and survival of a business. Furthermore, Voss & Voss (2012) and Setini et al. (2020) stated that applying new technology is a determining factor in developing new products. Therefore, one of the advantages of product technology is that it increases consumers' buying interest. The existence of technology development can accelerate the development of products with applied technology that can affect their excellence.

The innovation of tofu processed products applied in the tofu industry centers on increasing increase its composition with other processed ingredients, namely in the form of tofu milk and cheese produced by entrepreneurs, and based on the description test with the lowest value. In addition, innovations by adding basic materials are also carried out by replacing them with production machines. Product innovation is one of the product advancements used to enhance existing goods and services that are competitive. Products with existing advantages are seen as added value for consumers, therefore, in developing new products, an effective strategy is also a determinant of success for survival, which requires effort, time, ability, and the magnitude of the risk and cost of failure.

5.4 Product Innovation has mediation between Entrepreneurial Orientation and Marketing Performance

The results of the calculation and indirect effect testing obtained a coefficient of 0.246 between entrepreneurial orientation (X) and marketing performance (Y) through product innovation (Z). Therefore, there is a significant indirect effect between entrepreneurial orientations on marketing performance mediated by product innovation, this means that the proposed hypothesis can be accepted. The Sobel test results, found that product innovation is significantly mediated by entrepreneurial orientation. This means that each entrepreneur's entrepreneurial orientation has an impact on the ability to innovate and improve marketing performance in the food sector.

This research is supported by a previous study carried out by Ndubisi and Iftikhar (2012) with innovations that are able to provide mediation in taking all risks where entrepreneurial orientation indicators improve marketing performance. Hafeez et al. (2012) found that product innovation mediates the relationship between entrepreneurial orientation, business resources, and company performance. Meanwhile, Parkman et al. (2012) stated that entrepreneurial orientation towards performance is mediated by innovation, thereby leading to product success and competitive advantage. Furthermore, Djayadiningrat, Sukmaatmadja, & Yasa (2017), from the results of their research, were able to innovate and mediate entrepreneurial orientation towards the performance of study products conducted on small businesses in the food industry.

6. Conclusions and suggestions

In conclusion, entrepreneurial orientation has a positive and significant effect on product innovation. This means that the higher the level of entrepreneurial orientation owned by entrepreneurs and managers of small tofu small businesses, the greater their ability to increase innovation. Entrepreneurial orientation has a positive and significant effect on improving marketing performance. In addition, the level of business orientation has a high level of marketing, while product innovation also has a positive and significant effect on marketing performance, therefore, the more innovating the processed products, the greater the marketing performance in the tofu and milk industry sector in Jombang, East Java. Product innovation can significantly influence the effect of entrepreneurial orientation on marketing performance, which means that small businesses' entrepreneurial orientation impacts on improving marketing performance in making tofu milk in Jombang. Therefore, tofu milk entrepreneurs in Jombang, East Java are advised to further increase their business risks and increase their business opportunities.

Suggestions that can be given to the government are to pay attention to businesses' movement on the micro scale because the data obtained from them are numerous and far different from the medium and large-scale industries. Micro and small enterprises are able to assist in advancing the regional economy, furthermore, businesses are advised to add variables to the independent and mediation and to expand their research in order to provide perfect results from previous studies.

This research was carried out to encourage small businesses to succeed, especially those in the food industry sector, irrespective of the competition by increasing the amount of production, product variants, and improving quality. This study is limited
to the research instruments distributed to respondents Jombang, East Java because not all Tofu industries can provide information or fill in the instruments. Limitations were also found in the use of variables, namely entrepreneurial orientation variables, marketing performance, and product innovation.

References


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