



Innovation and Company Performance

Nursiah^{1*}, Jamaludin Kamrudin²

¹ Faculty of Economics and Business, Universitas Muhammadiyah Palu, Indonesia | Email: cianursiah275@gmail.com

² Faculty of Economics and Business, Universitas Muhammadiyah Mamuju, Indonesia | Email: Jamaludin_km@yahoo.co.id

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ABSTRACT

This paper aims to study and explain the influence of innovation on the performance of medium-sized companies in central Sulawesi by using sampling techniques and non-probability sampling, namely purposive sampling. Data processing uses path analysis. The research results show the influence of innovation directly and indirectly on company performance. This shows the importance of the medium-scale manufacturing industry to be innovative and produce high-quality products to improve company performance.

Corresponding Author:

Nursiah

Faculty of Economics and Business, Universitas Muhammadiyah Palu, Indonesia

*Email: cianursiah275@gmail.com

1. INTRODUCTION

Changes in the business environment, increasingly rapid competition, and the emergence of new competitors have changed the market dynamically. Rapid technological changes and product variations influence the development of all industries (1). The era of world free trade will reduce import duties between countries. The challenge that will be faced is opening regional and competition boundaries so that economic activity depends on free, open global competition. Only strong business actors will win and survive. Rapid technological advances and high levels of competition require companies to innovate products continuously, which will ultimately improve company performance (2).

Company performance is the main key to surviving in the global era. Many factors determine the performance of a company, one of which is innovation (3). Rapid technological progress and high levels of competition demand continuous innovation, which will ultimately improve company performance.

Innovation that is carried out continuously and based on strategy will guarantee the company will produce various innovative ways to meet consumer needs and desires with better value and satisfaction than its competitors have provided. It is natural for companies to utilize their resources to develop technology that can support sustainable innovation strategies. Furthermore, continuous innovation can contribute to the performance achieved by the company, as well as differentiate the company's products from those of its competitors (4).

Innovation is a potential resource for building competitive advantage for companies because innovation is an effective way of creating more excellent value, not just added value. Product innovation is one of the impacts of rapid technological change, and high product variations will determine organizational performance (5). Innovation is starting or introducing something new. Most researchers agree on a definition of innovation that includes new products and processes.

High innovation, both process innovation and product innovation, will increase the company's ability to create quality products. High product quality will increase the company's competitive advantage, which ultimately has an impact on company performance (6).

Innovation is a technological, managerial, and social process in which new ideas or concepts are first introduced to be put into practice in a culture (7). Innovation is a significant factor in industrial competition and is a powerful weapon to face competition (8), besides that, innovation is a key factor for company success (9).

The main focus of innovation is the creation of new ideas, which will be implemented into new products and processes. The main goal of the innovation process is to provide and channel better customer value. Innovation can be viewed as a structuralist approach and a process approach. The structuralist approach views innovation as a unit with fixed parameters, such as technology and management practices, while the process approach views innovation as a complex process that often involves various social groups in the organization (Swan et al., 1999). Innovation is an aspect of organizational culture that reflects openness to new ideas. On the other hand, innovation capability is the ability of an organization to adopt or implement new ideas, processes, and new products (5).

The level of innovation is measured using a continuum line measurement, where a low level of innovation describes an individual or unit in the organization as weak in adopting innovation. On the other hand, a high level of innovation describes a strong adoption position of the individual or team in the organization (10). An organization's propensity to adopt innovation is not constant for each type of innovation. In this case, various organizational characteristics interact together with various organizational dimensions to determine the likelihood of innovation adoption in the organization (11). Product innovation and process innovation are types of innovation that researchers widely use.

Based on the description above, this research aims to identify the influence of innovation on the performance of medium-scale manufacturing companies in Central Sulawesi.

2. THEORETICAL BASIS AND HYPOTHESIS

Product innovation is defined as a new product or service introduced to the market to meet market needs (12). Lukas & Farel (2000) differentiate product innovation into three basic categories: "product line extensions, new products, and unique to the world products. Product line extensions are relatively new to the market but not to the company. Mee to development is a relatively new product for the company but is fairly well-known in the market. New to the world product is a new product both for the company and for the market (13).

Process innovation describes changes in the way an organization produces the final products and services of a company (11). Process innovation is a suggestion to improve quality and also save costs. This reflects that adopting an innovation process is recognized as increasing production efficiency and the quality of the products produced.

Product quality is achieved through continuous innovation. For sustainable innovation to occur, high management commitment to quality is required, including increased product quality supervision, so zero defects or near-zero errors arise. Customers see product quality from the product's durability, product design, and the benefits or function of the product itself, so if a company measures the quality of the products it produces, apart from looking at it technically, it can also be seen from the customer's attitude towards product quality. The more positive the consumer response, the higher the rate.

Company innovation, both process innovation and product innovation, will influence sustainable innovation. With product innovation and process innovation, various product designs will be created, thereby increasing choices and the benefits or value received by customers, ultimately improving product quality according to customer expectations. Company innovation determines the company's ability to create products according to specifications set by customers. The higher the company's creation, the higher the conformity of the products produced by the company compared to the specifications set by customers. So, this research formulates the following hypothesis:

H1: Product innovation influences sustainable innovation.

H2: Process innovation influences sustainable innovation.

2.1. Innovation and Company Performance

Assessing how well the company's activities and processes are fundamental in increasing profitability, so it is necessary to use performance measures designed to determine how well the final results are achieved. With performance measurement, evaluation can be done by comparing the specified performance with the actual one. From the results of this comparison, management can find out how considerable deviations have occurred and how much progress has been achieved and not achieved so that action can be taken to overcome them.

Company performance is a business organization's achievement, which can be seen from the results. These performance results are less accurate if only seen from one dimension. Researchers agree that more than measuring business performance is required to use a single measure. (14)(15). In research Jaworski & Kohli (1993) as well as Chang (1998) Company performance is measured by overall business performance compared to last year and overall performance compared to its main competitors (15)(16), while in research

Slater & Narver (2000) business performance is measured by profitability compared to predetermined targets (17).

In performance measurement, there are two perspectives, namely, the subjective concept and the objective concept. In Asian business culture, information about company performance is usually a company secret, so companies are reluctant to provide performance data. Jaworski & Kohli (1993) prove the strong relationship between objective measurements and subjective responses (15). There are many variations of dimensions used in research. Some of these dimensions, among others, were proposed by (18)(19)(20)(21).

Walker & Ruekert (1987) put forward three dimensions in measuring a company's performance, namely effectiveness, efficiency and adaptiveness (20). According to Ranchod (2004) effectiveness, efficiency, and adaptivity are the three main marketing attributes used in performance measurement (21). As for the antecedent variables in this study related to marketing strategy, these three dimensions are used in performance measurement. Apart from these considerations, these performance measurement dimensions are relatively widely used in measuring the performance of small and medium companies (22). Ranchod (2004) argued that these three dimensions are key to complementary performance measurements, so they must be measured together (21).

Process innovation will increase efficiency in the production process, thereby minimizing company costs in production, such as complaint costs and return costs. Reducing costs with relatively the same product quality means increasing company profits, in this case, company performance. With the following hypothesis formulation:

H3: Product innovation influences company performance.

H4: Process innovation influences company performance.

Changes in innovation can be made through small changes in technology, such as simple product improvements and minimal product line improvements, but with the addition of better performance, innovation carried out continuously can produce something unique or sustainable use of technology can create product groups and able to shape consumption patterns in the market (23).

Product quality is the conformity of the product with the specifications or standards set by the customer, in this case, the customer's expectations. The higher the accordance with specifications, the higher the product or service quality. Customer satisfaction will be higher, too. High customer satisfaction will have an impact on customer retention, which will ultimately improve company performance. Quality is an essential factor that determines company performance (24). High product quality shows that the product meets what customers want. If the product meets customer desires, sales volume will increase, and complaints will be lower, improving company performance. Thus, the final hypothesis to be studied is:

H5: sustainable innovation influences company performance

3. RESEARCH METHODS

This research is survey research. The population of this research is medium-scale manufacturing companies in Central Sulawesi. Company data is based on the company directory issued by the Department of Industry of Central Sulawesi. The respondents were company managers. For companies with more than one manager, the average score of all managers is used. Using a computer program's help, all research instruments are valid, as is the composite reliability. The analysis technique used is path analysis. This aims to see the influence of exogenous variables (independent variables) on mediator/intervening variables and endogenous variables (dependent variables).

3.1. Variable Measurement

Product innovation, as the level of company innovation in product design and additional product attributes, is measured by three statement items, namely the amount of research carried out by the company related to product development, the number of new product creations, and the company's leadership in developing new products. Process innovation, as the level of company innovation in the production process, is measured by three statement items: continuous improvement in the production process, allocation of research funds to improve the production process, and frequency of company training related to improving the production process. Sustainable innovation is measured by three statement items: developing new products, investing in product development, and maintaining unique product development.

Performance is the result achieved by the company in financial and non-financial aspects when compared with the standards or targets set by the company. This measurement is seen in marketing performance and product performance. All variables in this research were measured using a Likert scale.

3.2. Research Framework or Model

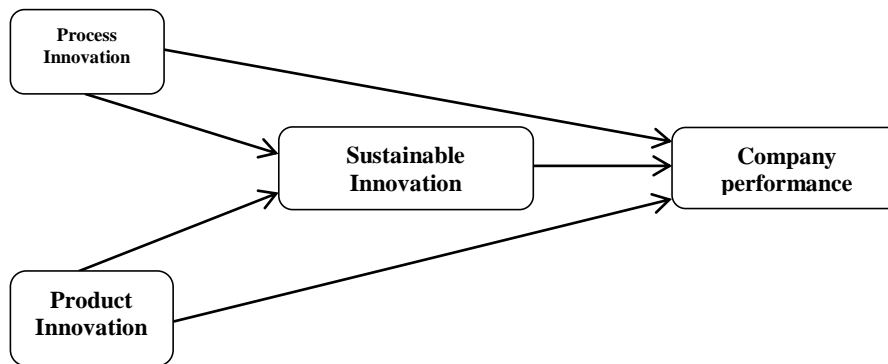


Figure 1. Research Framework

4. RESULTS AND DISCUSSION

The influence of process innovation on sustainable innovation is 0.256 or 25.6%, and product innovation on sustainable innovation is 0.273 or 27.3%. This value shows that both product innovation and process innovation affect sustainable innovation, meaning that the better the process innovation and innovation products in the medium-scale manufacturing industry in Central Sulawesi Province, the more sustainable innovation is also increasingly developing. The influence of process innovation on company performance is 0.145 or 13.5%, and product innovation on company performance is 0.161 or 16.1%. This value shows that process innovation and product innovation directly affect company performance. This means that the better the process innovation and product innovation in the medium-scale manufacturing industry in Central Sulawesi Province, the better the company's performance.

Furthermore, the effect of sustainable innovation on company performance is 0.199 or 19.9%. This value shows that sustainable innovation impacts company performance, meaning that the better the sustainable innovation in the medium-scale manufacturing industry in Central Sulawesi Province, the better the company's performance. Meanwhile, the indirect effect of process innovation on company performance is 0.195 or 19.5%, and product innovation on company performance is 0.201 or 20.1%. This value shows that process innovation and product innovation have an indirect effect on company performance. This indicates that the existence of intervening variables can strengthen variable relationships.

Table 1. Results of Regression Weights

| Independent Variable | Dependent Variable | Estimate | Nature of Relationship | Decision |
|------------------------|------------------------|----------|------------------------|----------|
| Process Innovation | Sustainable Innovation | 0,256 | Direct | Sig. |
| Product Innovation | Sustainable Innovation | 0,273 | Direct | Sig. |
| Process Innovation | Company performance | 0,145 | Direct | Sig. |
| Product Innovation | Company performance | 0,161 | Direct | Sig. |
| Sustainable Innovation | Company performance | 0,199 | Direct | Sig. |
| Process Innovation | Company performance | 0,195 | Indirect | Sig. |
| Product Innovation | Company performance | 0,201 | Indirect | Sig. |

Based on Table 1, the results of this study prove that product innovation and process innovation have a significant effect on sustainable innovation. This can be interpreted as meaning that changes in product and process innovation will impact changes in sustainable innovation. A positive estimated value means that the two variables have a unidirectional relationship. The higher the product and process innovation, the higher the sustainable innovation. What is meant by product innovation in this study is the company's openness and ability to create new products. High corporate innovation implies the company is open to new ideas and has increased capabilities in implementing and creating something new. Companies that are open to new ideas or ideas will make it easier for the company to adapt to environmental changes, such as adapting to changes in product standards set by customers. Likewise, the company's ability to modify new products and implement new ideas in business will increase customer satisfaction, which can be seen from the low level of complaints and the low level of defective or rejected products. Thus, the higher the company's openness and ability in product innovation and process innovation, the higher the quality of the products produced by the company.

The results of this study confirm the results of Flynn (1994) research, which proves that innovation is an essential basis for companies to develop product quality (25). This aligns with the theory that sustainable innovation brings consequences for accepting changes or ideas, processes, or the use of technology that can bring about changes in output, which is accepted as something new and unique. Sustainable innovation must be based on a developed innovation strategy by the company. In increasing or improving innovation, companies need information on the quality of existing products. Meanwhile, to get quality products, continuous company innovation is required.

Process innovation and product innovation influence company performance. This can be interpreted as meaning that changes in product innovation and process innovation impact changes in company performance. This is because competitors cannot quickly imitate the product innovations produced by the company, as well as process innovations. As a result, the company's product innovation is considered unique, impacting the company's profitability and growth.

The results of this study are that innovation significantly affects company performance. Innovation skills also have a direct impact on marketing performance. Likewise, the study of Hurley & Hult (1998), which argues that innovation acts as a mediator between market orientation and company performance, can be proven in this study (5).

The results of this study prove that sustainable innovation has a significant effect on company performance. This can mean that product quality changes will impact company performance. A positive estimated value indicates a unidirectional relationship. The higher the sustainable innovation, the higher the company's performance. Low complaints will have an impact on customer satisfaction, which will ultimately create customer loyalty. The higher customer loyalty will reduce the company's promotional costs and increase sales volume. High customer loyalty means high customer retention. This will increase market share, ultimately increasing company profits and sales.

This research aligns with the results of Wahyudiono (2011), which shows that sustainable innovation has a direct, positive, and significant effect on company performance (26). This finding means that sustainable innovation drives company performance. The higher the sustainable innovation, the more the company's performance results will increase. The company's performance resulting from its creation will depend on the opportunities its external environment provides. The higher the innovation the company offers customers, the more customers will be able to get what they need, increasing customer satisfaction. Increased customer satisfaction will make customers continuously interested in the company's products. Customer interest will increase company sales. This will create an increase in company performance. Sustainable innovation is an advantage possessed by producers to develop new products or services that are not easily imitated by others so that they can compete and improve company performance.

5. CONCLUSION AND SUGGESTION

This research concludes that company innovation directly influences company performance and significantly affects sustainable innovation. Meanwhile, sustainable innovation has a significant influence on company performance. Thus, sustainable innovation becomes an essential mediating variable in the relationship between company innovation and performance, so it is necessary to carry out exploratory research on what kind of corporate innovation the company needs so that it improves performance.

The population of this research is limited to medium-scale manufacturing companies in Central Sulawesi, so it is necessary to carry out further research with a broader scope or across industries to explain better the causal relationship between company innovation and company performance in various sectors.

The unit of analysis for this research is medium-scale manufacturing companies, so it is necessary to conduct further research on large companies or include company size as a moderator variable to explain better the causal relationship between company innovation and superior company performance.

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