

Human Resource Strategy, Innovation, Competitive Advantages in The Manufacturing Industry

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Abstract

This research aims to analyze human resource strategies affecting innovations impacting competitive advantages in manufacturing companies in Indonesia. This study is a quantitative study with a sample number of 150 companies. The result of this study is that human resource strategies have an effect on innovation but innovation has no effect on competitive advantage. The latest findings in this study that for manufacturing companies it will be difficult to innovate because the manufacturing company in Cikarang is a company that assembles its products from products from the country.

Keywords: HR strategy; innovation; organization; competitive advantage

Introduction

Human resource development is one of the work programs implemented by Indonesian President Joko Widodo. Human resources (HR) are a key factor of the development of a country and nation if it wants to become a great country and nation. Therefore, the government always budgets a large amount of funds in human resource investment so that human resources become superior human beings and, in the future, can win global competition with other countries.

The impact of innovation on organizational performance is positive and then mediated through HR policies and HR outcomes (Katou, 2008). In the development of the company must invest human resources in order for the company to develop and develop. The company realizes that human resources are assets that will be beneficial to the company in the future. Human resources that will innovate and be creative in advancing the company in very fast competition (Kearns, 2010). The company expects human resources to issue innovation ideas in the face of the changing industrial revolution in the field of technology and information that causes the life cycle of companies and products very quickly.

All companies have a vision and mission of the company. In running the company, the HR Department must prepare human resources in supporting the implementation of the company's vision and mission. At the beginning in making HR planning, job analysis, recruitment, selection until finally the employee leaves or retires. The changes that occur today certainly greatly affect the pattern of human resource strategies. Current technological and informational changes that change organizational behavior patterns including employee behavior (Kim, 2016).

HR strategy is part of the company's strategy. Strategies are usually made in the long run. Companies in Indonesia also implement the company's strategy to keep the company

afloat (Boxall, 2003). The authors argue that more research needs to concentrate on the indirect relationship between HR practices and organizational innovation. Because knowledge is within the individual and given the role of HR practice in influencing individual attitudes and behaviors, it is believed that HR practices have a significant and positive relationship to organizational innovation through knowledge management.

Based on pre-survey researchers from various sources that there is an inequality or competency gap due to changes in technology and information. Challenges are getting tougher and heavier due to business competition and changing consumer behavior. In recent years, more and more manufacturers have had to make mass customizations that result in productivity equivalent to mass production, even for ultra-high-mix manufacturing, with low volume. Therefore, some Japanese companies have begun to harness their power, by integrating advanced technologies such as the Internet of Things (IoT), big data, and Artificial Intelligence (AI).

The first thing that happened to the manufacturing industry during the fourth industrial revolution was the increase in efficiency in various aspects of the manufacturing industry thanks to the help of increasingly advanced technology. The new tools allow manufacturing industry companies to create and test a product in a virtual world before it is actually made. Simulation of making this product will of course streamline time in the manufacturing industry.

The manufacturing industry sector is advised to increase breakthroughs amid intense competition with business actors in the Asian region. Innovation through the use of technology and the efficiency of production processes is the key to strengthening the competitiveness of the manufacturing industry in the country.

"If you want innovation, technology, even though there must be disruption there. Indeed, it will be more efficient to use technology and be the only way," explained Samuel Asset

Management Economist, Lana Soelistianingsih.

Over the past two years, the contribution of the manufacturing industry sector to national GDP has indeed continued to decline. Data from the Central Statistics Agency (BPS) said that in 2018, this sector only contributed 19.82 percent to Gross Domestic Product (GDP) of Rp14,837 trillion. While in the previous year the manufacturing industry accounted for 21.22 percent of Indonesia's GDP of Rp13,588 trillion.

Based on previous research (Wang et al., 2011) in his research analyzing competitive advantage which includes technological innovation and human resources, the researcher is interested in that research and applying/analyzing it in manufacturing companies as a gap or difference of this research. This research aims to know and analyze manufacturing companies with strong human resource strategies will have higher organizational innovations. Knowing and analyzing manufacturing companies with strong human resource strategies will have higher process innovation. Knowing and analyzing manufacturing companies with strong process innovations will have a higher competitive advantage. Knowing and analyzing manufacturing companies with strong organizational innovations will have a higher competitive advantage. Knowing and analyzing manufacturing companies with strong human resource strategies will have a higher competitive advantage.

Literature Review

MSDM Strategy

Dessler (2015) defines HR Management Strategy as follows: Strategic Human Resource Management is the linking of Human Resource Management with strategic roles and objectives in order to improve business performance and develop organizational cultures and foster innovation and flexibility. Barney, revealed that: A strategic approach to HRM seeks to provide competitive advantage proactively through its human resources. Resources confer enduring competitive advantage to a firm to the extent that they remain scarce or hard to duplicate, have no direct substitutes and enable companies to pursue opportunities. Lado and Wilson (1994) reveal that: The resource-based view posits that human and organizational resources are more than physical, technical or financial resources, can provide a HRM with sustained competitive advantage because they are particularly difficult to emulate.

The pattern of relationships and interactions between humans is increasingly varied and more complex, so this will lead to increasingly complex problems and higher intensity. At this level, strategy placement is very important as a starting point in overcoming all these problems. According to (Kenneth, 2005) suggests strategy is a process of evaluating the strengths and weaknesses of the company/organization compared to the opportunities and threats that exist in the environment faced and decide on product market strategies that adapt the capabilities of the company/organization to environmental opportunities. The development of this innovation requires contributions from each individual. In the perspective of organizational psychology, these activities are called innovative work behavioral (Janssen, 2000).

Organizational Innovation

Innovation is one of the influential aspects in the development of an organization. Some organizations, be it private sector organizations or public sector organizations such as government organizations, strive to find innovations. Innovation according to Said is interpreted as a planned change by introducing technology and the use of new equipment within the scope of agencies.

Etymologically innovative is a person's efforts by utilizing thoughts, imagination skills, various stimulants, and the individuals that surround him in producing new products, both for himself and his environment. Innovative Work Behavior (IWB) is an individual behavior that aims to reach the stage of recognition or attempting to introduce new and useful ideas, processes, products or procedures in work, groups or innovative work behaviors defined as the creation, introduction, and application of new ideas or ideas in work, groups, or organizations to improve the performance of individual roles, group, or organization (Janssen, 2000)

The development of this innovation requires contributions from each individual. It is therefore important to understand about the individual activities that lead to innovation. In the perspective of organizational psychology, these activities are called innovative work behavior or innovative behavior. (Anderson, De Dreu, and Nijstad, 2004) explains that Organizational Psychology emphasizes innovation on an individual perspective, including individual and contextual characteristics that affect the success of an innovation.

Innovation Process Innovation typology is a process that is complex and cannot be considered simple just by showing the existence of something new. However, the new thing needs to involve other aspects in the context of public sector organizations or government organizations that include political processes, policies, quotas, and so on. An innovation is said to be successful if the innovation is the creation and implementation of new processes, products, services, and service methods that are the result of development in terms of efficiency and effectiveness or quality of service. (Mulgan & Albury 2004). This Innovation Process innovation refers to the continuous renewal of quality and the combination of changes, procedures, policies, and organizations needed by organizations in making innovations. (Grandiose, 2008).

Innovation Process

Resource-based theory holds that companies gain competitive advantage and good financial performance by owning, mastering and leveraging important strategic assets. Resource Based Theory discusses the ownership of corporate resources and how companies manage those resources (Barney & Clark, 2007). Effective and efficient resource management by companies can create a competitive advantage so that it can produce destructive value. According to Chen (2005), the resource in question must have VRIN (Valuable, Rare, Imperfect Imitability, and Non-Substitution) criteria. The explanation of the characteristics of VRIN is as follows: Valuable that is, the company's resources are said to be valuable if it provides positive value and strategic value for the company so that it can be utilized to reach market opportunities. Rare or unique in question is difficult to find, own, and utilized by competitors so it requires a large cost and a long time to obtain it, or requires a large capital investment to have it. Imperfect Imitability (difficult to imitate or imperfect impersonation) means a resource that is difficult to replicate or

when imitated the result is not perfect, making it difficult to propagate or imitate. That is, companies that have these resources can create product and service innovations needed by consumers without competitors who have the same resources. There is substitution or no substitute is a resource that cannot be replaced with another resource. The characteristics of VRIN can be used to create added value for an enterprise. According to resources-based theory, intellectual capital as one of the keys for a company to create value added and increase the company's financial work. (Barney & Clark, 2007).

Competitive Advantage

In the study (Bertan & Alkaya, 2020) environmental innovation was observed to be a variable that explains the best credible advantages, followed by production innovation and product innovation. Innovation is seen as an important factor that stimulates value creation and underpins the competitiveness of companies in today's highly dynamic and complex environment (Ranjit, 2004).

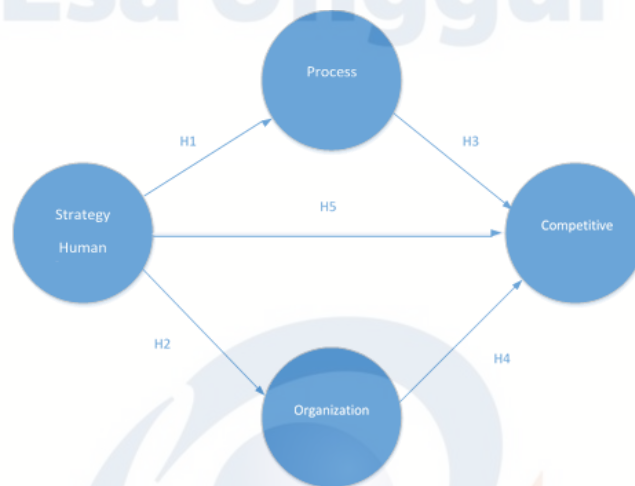


Figure 1. Conceptual Framework

Method

Types of Research

This research is designed using descriptive methods with a quantitative approach. Statistical methods of description are used to explain phenomena that occur regarding research data. Quantitative approaches are used to explain the influence of free variables on variables tied to this study.

Conceptual & Operational Definition of Variables

Human Resource Management Strategy is a planning that is owned on a wide scale and integrated in order to achieve the mission and objectives of the organization by creating competitive advantages to overcome environmental changes that occur in the future.

Innovation is the performance of employees who increase can be seen from the improvement of achievements on the success of the organization that can achieve the goals of the organization that has been.

Competitive advantage is how the output of the company/organization can remain attractive in the market and able to face the battle in competition, and achieve the ultimate goal, as well as the company's ability to survive.

Population & Sample

Population is defined as a generalization area consisting of objects / subjects that have certain qualities and characteristics applied by researchers to be studied and then drawn conclusions. (Sekaran & Bougie, 2016) The population in this study is a manufacturing company in the MM 2100 Cibitung Area totaling 150 companies.

The sample is part of that population. But in this study, all the populations used for sampling amounted to 150 companies that would represent companies were production managers or HR managers.

Data Collection Methods

Interview, which is a way of collecting data by conducting communication directly or indirectly through the medium of communication with competent parties. Questionnaire is a technique for collecting data through a list of questions or statements that have been prepared.

Data Analysis Methods

Validity Test shows the extent to which a measuring instrument measures what it wants to measure. Validity tests are useful for determining how carefully a tool performs its size function. A high validity measuring tool means that it has a small error variant, thus giving confidence that the data collected is reliable data.

Reliability test is an index that shows the extent to which a measuring instrument is trusted or reliable. Reliability shows the consistency of the measuring instrument in measuring the same symptoms.

Hypothesis Test Based on calculations through confirmatory analysis and structural equation model SEM analysis model to analyze the data in this study used The Structural Equation Modelling (SEM) of LISREL This model is a set of statistical techniques that allow testing a series of relatively complex relationships. The advantage of SEM application in management research is its ability to confirm the dimensions of a concept or factor and its ability to measure theoretically existing relationships. After the model is analyzed

through confirmatory factors, each indicator in the fit model can be used to define the latent construct, so that the full structural equation model (SEM) can be analyzed.

Research Results

Validity Test

In this study, researchers used the SPSS program to test the validity of the questions that had been compiled in the questionnaire. Here is an explanation of the results of the validity test conducted on each research variable

Variable	Corrected Item-Total Correlation	t table	Result
X1.1	0,554	0,361	Valid
X1.2	0,554	0,361	Valid

Table 1. Human Resource Management Strategy

Table 1 indicates that the person correlation value is greater than the value r table $N = 30$, which is 0.361. This

indicates that for human resource management strategy variables with 2 indicators the question indicates valid.

Variable	Corrected Item-Total Correlation	t table	Result
X2.1	0,407	0,361	Valid
X2.2	0,558	0,361	Valid
X2.3	0,441	0,361	Valid

Table 2. Innovation Process

Table 2 shows that the person correlation value is greater than the value r table $N = 30$, which is 0.361. This indicates

that for the innovation process variable with 3 indicators the question indicates valid.

Variable	Corrected Item-Total Correlation	t table	Result
X3.1	0,462	0,361	Valid
X3.2	0,553	0,361	Valid
X3.3	0,541	0,361	Valid

Table 3. Organizational Innovation

Table 3 shows that the person's correlation value is greater than the value r table $N = 30$, which is 0.361. This indicates

that for the Organizational Innovation variable with 3 indicators the question indicates valid.

Variable	Corrected Item-Total Correlation	t table	Result
X3.1	0,649	0,361	Valid
X3.2	0,649	0,361	Valid

Table 4. Competitive Advantages

Table 4 shows that the person correlation value is greater than the value r table $N = 30$, which is 0.361. This indicates that for the advantage variable competes with the 2 indicators the question indicates valid.

Uji Reliability

In this study obtained the results of the rehabilitation test as follows:

GENERAL MANAGEMENT

Variable	Cronbach's Alpha	Result
Human Resource Management Strategy	0,713	Reliabel
Process Innovation	0,638	Reliabel
Organizational Innovation	0,628	Reliabel
Competitive Advantages	0,777	Reliabel

Table 5. Reliability Test

In table 5 it can be known that the test results of 30 respondents, cronbach Alpha coefficient of human resource strategy variables of 0.713; innovation process variable of 0.638; organizational innovation variables of 0.628 and competitive advantages of 0.777. From these results, it can be

concluded that all variables in this pre-test study are declared reliable or trustworthy because they have a Cronbach Alpha coefficient value above 0.6 which is a condition of a data said to be reliable.

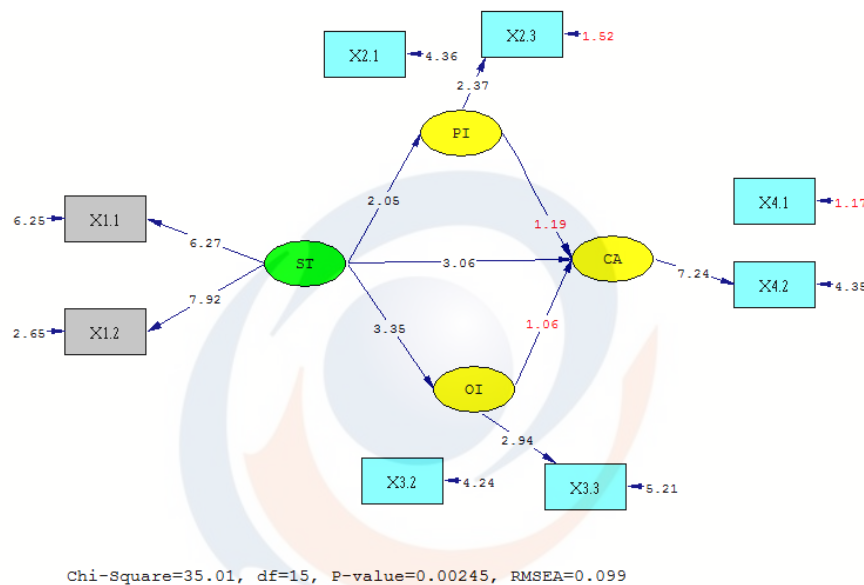


Figure 2. Structural Model

Hypothesis	t statistics	t value	Result
H1: MSDM strategy affects the innovation process	2.05	1.96	Accepted
H2: MSDM strategy affects organizational innovation	3.35	1.96	Accepted
H3: The innovation process affects competitive advantage	1.19	1.96	Rejected
H4: Organizational innovation affects competitive advantage.	1.09	1.96	Rejected
H5: Strategy affects competitive advantage.	3.06	1.96	Accepted

Table 6. Hypothesis Results

THE MSDM strategy has an effect on the Innovation Process. MSDM strategy has an effect on Organizational Innovation. The innovation process has no effect on competitive advantage. Organizational innovation has no effect on competitive advantage. THE MSDM strategy affects competitive advantage.

Conclusion

The MSDM strategy affects the Innovation Process. The right HR strategy will produce good employee quality. From the

recruitment to the employee working in the company or organization. Employees who have high performance management, high commitment management and high engagement management will carry out the innovation process in carrying out their work.

Msdm strategy affects Organizational Innovation. Organizational innovation can happen if all its employees understand the importance of innovation. If all employees are able to carry out innovation and are given space for innovation, the organization will innovate many things, especially in the face of market changes and employee management.

The Organizational Innovation and Innovation Process has no effect on competitive advantage. In many literatures that the process of innovation affects the advantage of competition. However, this study has no effect because innovation is influenced by many factors and companies in manufacturing usually only assemble and work ordered according to rules or operational standards. Innovation is carried out most in its parent company.

THE MSDM strategy affects competitive advantage. The company must have a good MSDM strategy so that the company is able to compete and has an advantage over other companies. Employees who have competence in the company or organization will be able to make the company more advanced. Employees are assets.

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