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INNOVATION MANAGEMENT MODEL TO IMPROVE CORPORATE INNOVATION PERFORMANCE

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ABSTRACT

Entering the industrial era 4.0, technology continues to develop and is used to improve company performance. This emphasizes the occurrence of disruption between companies which is mainly driven using this technology. Previous studies have emphasized the importance of innovation to overcome this condition. Astra Group as one of the conglomerate groups in Indonesia has understood and implemented this consistently and persistently. For this reason, the innovation management model in this group is important to be investigated further to provide understanding and scientific contributions related to innovation management in corporations. From the literature, at least three important factors were found in the management of innovation, namely 1) managerial capabilities, 2) adhocracy culture, and 3) knowledge sharing on innovation capabilities and performance in this group. The findings may contribute to an opportunity for researchers to confirm this model in future research.

Keywords: *Innovation Performance, Innovation Capability, Managerial Capability, Adhocracy Culture, Knowledge Sharing*

1. INTRODUCTION

In this highly disruptive era triggered by the Industrial Revolution 4.0, all companies must face fierce competition and uncertainty to be able to win the competition in this increasingly competitive market. The existing market for one need will be contested by many companies both existing in the market for a long time and new ones that are trying to get customers from the existing market.

New companies tend to be agile in meeting increasingly varied and rapidly changing customer demands. On the other hand, long-standing companies tend to be slower to respond to the market due to the bureaucracy that exists in the company (Jaruzelski et al., 2015). Eastman Kodak (photography industry), Nokia (mobile phone industry), and several other examples have shown that a company's failure to adapt to technological change will become irrelevant, lose customers, and may eventually disappear from the market (Baxter et al., 2023). In addition, as the company grows, the company will usually be more complex to manage, and bureaucratic thus will further reduce risky decisions which can certainly lead to losing its existence in the market.

A Harvard Business Review (HBR) article citing one survey states that the average life of companies in Japan and Europe is only 12.5 years and multinational companies in the Fortune 500 only range from 40-50 years. This shows the vulnerability of companies in anticipating fast-moving markets (De Geus, 1997). Meanwhile, several innovative start-ups have grown and developed into unicorns with a market capitalization value of more than one billion US dollars. Amazon in the United States, Alibaba in China, and GoTo (Gojek Tokopedia) in Indonesia have

shown how these companies can see opportunities that exist in the market and innovatively offer products and services that are acceptable to the market.

As is the case with these companies in various parts of the world, companies in Indonesia also face the same challenges, namely rapid changes in customer behavior and increasingly fierce competition in winning competition in the market, especially during the pandemic. This makes innovation capabilities a key factor in being able to answer these challenges, especially because it is one of the keys to adapting to changes that occur in every era. Innovation received in the market is an answer to market and customer needs (Tempo.co, 2021).

According to previous research, innovation is essential to the country's economic growth by providing benefits to customers, businesses, and the economy as a whole (Cornell University et al., 2017). More specifically, innovation is a fundamental element by which a company can improve its performance and implement the development of new services, products, and processes to maintain its competitive level in the market (Damanpour, 1991).

Although many companies realize this, not a few fails to ensure this innovation movement can continue to run which therefore makes it difficult for companies to continue to survive (Pisano, 2015). In addition, companies that can innovate quickly and encourage innovation on a large scale are also believed to be able to support and advance the 2030 SDGs target, namely achieving sustainable growth (Young & Woods, 2019).

According to (Smith et al., 2008), the company's ability to develop organizational capabilities in developing and managing innovation in the long term is referred to as innovation capability. Innovation capabilities will become increasingly essential to winning the competition in today's fast-paced era of change. Therefore, innovation performance, especially in companies in Indonesia, is one of the important things in responding to changing market and customer needs. Although important, not many companies have the consistency and persistence in overseeing this movement like the Astra Group since 1982. This can be seen from the good innovation performance in this group. Until 2022, there have been 14,540,084 innovation projects recorded since 1982. Of this number, in 2022 alone there have been 1,463,885 projects. With the number of Astra people as many as 198,203, this innovation ratio reaches 7.38 projects produced by an Astra person (Astra, 2022).

The performance of this innovation is displayed so well by the Astra group which is certainly based on good innovation capabilities. The performance of this innovation is not only running in a short time but innovation in this business group can run consistently and persistently in the long term.

Through a systematic literature review from Mendoza-Silva, 2020, the driving factors of this innovation capability include leadership, organizational culture, and knowledge management. In exploring the potential novelty in this proposal, a deepening of the three main constructs listed in the systematic literature review mentioned above was carried out.

The first deepening of Kyrgidou & Spyropoulou, 2013, where one aspect of leadership that has a positive relationship with innovation capabilities is managerial capabilities. With these managerial capabilities, an opportunity can be identified and developed (Ucbasaran et al., 2008) and a company can develop products and services that are to market needs (Ardichvili et al., 2003).

The second deepening is carried out on the dimensions of organizational culture. One of the main references in corporate organizational culture is the approach of Robert E. Quinn & Kim S. Cameron, 2011. In this reference, organizational culture is divided into 4 types, namely adhocracy, clan, market, and hierarchy. The four types of culture are divided into 2 dimensions, namely the stability dimension – flexibility and the internal–external of the organization. Among the four types, the culture that most appropriately encourages the innovation process is the culture of adhocracy (Valencia et al., 2010; Yeşil & Doğan, 2019).

The last deepening is carried out in knowledge management. Based on various previous studies, knowledge management has an important role in the process and results of innovation. Management itself according to (Chen et al., 2010) is divided into 2 main things, namely knowledge creation and knowledge sharing. This Knowledge Sharing factor has a positive correlation with innovation capabilities (Chang et al., 2017; H. F. Lin, 2007; Podrug et al., 2017)

However, the integrated relationship between these three factors, namely managerial capabilities, adhocracy culture, and knowledge sharing on innovation capabilities and performance, is not yet fully understood. Therefore, measuring the influence of these three factors on innovation performance through innovation capabilities in companies, especially in the Astra group, is crucial for the development of the group's competitive advantage in this rapidly changing era. In a broader context, the relationship between these factors can be a reference for the development of innovation capabilities for companies in Indonesia in general, which will lead to innovation performance that lasts for a long time.

2. RESEARCH METHOD

The literature review that has been carried out is used as a basis for building a theoretical framework where this theoretical model includes the factors needed to improve innovation capability and performance, including 1) managerial capabilities, 2) adhocracy culture, and 3) knowledge-sharing as shown in Figure 1.

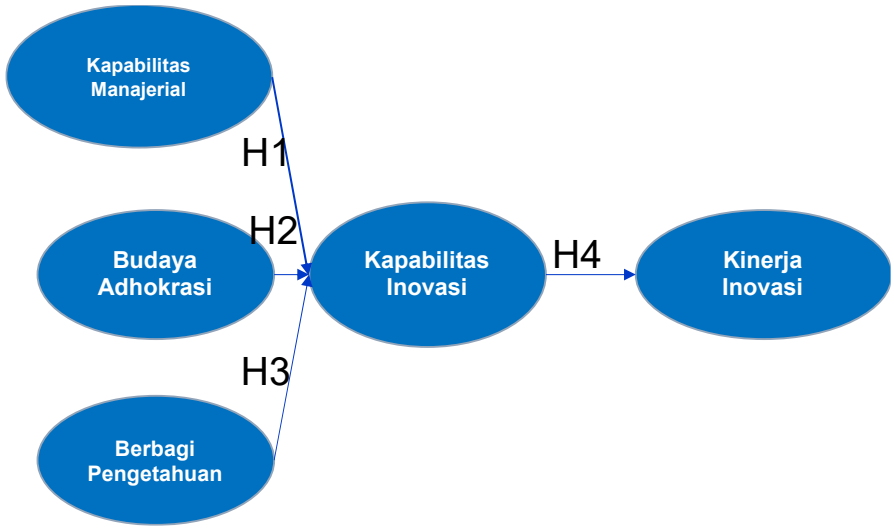

Figure 1. Conceptual Model
Source: authors' own elaboration

Figure 1 above shows that innovation performance can be improved through innovation capabilities. Meanwhile, to drive this innovation capability requires managerial capabilities, a culture of adhocracy, and knowledge sharing.

Relationship between Managerial Capability (KM) and Innovation Capability (KAI)
This high capability can help companies turn ideas into opportunities (Ardichvili et al., 2003). In addition, with this capability, the company can ensure that new products and practices implemented can be supported by the company's functional units and aligned with the company's overall strategic orientation (Hultink & Robben, 1995).

Managerial capabilities can also mobilize functions within the organization to be involved in new product development (Song & Parry, 1996). Thus, managerial capabilities are said to be a control mechanism that is communicated and passed on to employees to contribute to success in building innovation capabilities.

It can also improve the relationship between the company's activities and the success of new products by assisting the company in assigning appropriate employees to manage the new product development process and maintain adequate and specialized production processes. This is certainly very important in a highly competitive market era because managerial capabilities can guide the introduction of new products promptly and increase their likelihood of success (Kyrgidou & Spyropoulou, 2013). Based on the above study, it can be hypothesized that:

H1 – Managerial Capability (KM) has a positive and significant effect on Innovation Capability (KAI).

The Relationship between Adhocracy Culture (BA) and Innovation Capability (KAI)
According to (Yeşil & Doğan, 2019), organizations that must learn when dealing with the market solving problems with external challenges, and uniting all elements of the organization related to correct problem solving are said to be organizations that have a good organizational culture.

Organizational culture is defined as the shared basic assumption that the organization learns when facing the environment and solves problems from external adaptation and internal integration that are taught to new members as the correct way to solve problems.

Of the four types of culture defined by Robert E. Quinn & Kim S. Cameron, 2011, adhocracy culture values innovation, creativity, entrepreneurial spirit, and adaptability which have a positive correlation with the innovation capabilities of the company. Likewise, according to Valencia et al., 2010 which has also proven that the culture of adhocracy has a positive influence on product innovation. Therefore, the conjectures that can be built are as follows:
H2 – Adhocracy Culture (BA) has a positive and significant effect on Innovation Capability (KAI).

Knowledge Sharing (BP) and Innovation Capability (KAI) Relationships
Information-sharing practices have a positive influence on innovation capabilities (R. J. Lin et al., 2010; Podrug et al., 2017). On the other hand, employees' willingness to share and collect knowledge is proven to enable companies to improve their innovation capabilities (Podrug et al., 2017). While Chang et al., 2017 also assert that knowledge sharing has a positive influence on innovation capabilities. Thus, the hypotheses that can be drawn are as follows:
H3 – Knowledge Sharing (BP) has a positive and significant influence on Innovation Capability (KAI).

The Effect of Innovation Capability (KAI) on Innovation Performance (IP)

Previous studies have shown that innovation initiatives can only happen when companies can innovate. The stronger the company's innovation capabilities, the more effective its innovation performance (Mir et al., 2016). From the study, a positive correlation can be seen between innovation capability and innovation performance.

Yeşil & Doğan, 2019 also found the same thing that innovation capabilities consisting of learning, strategic, and organizational capabilities are proven to increase innovation. Other findings also support the claim that innovations made up of organizations, processes, and products in manufacturing companies have a positive and significant impact on innovation performance (Gunday et al., 2011). Here are the hypotheses that can be built, namely:
H4 – Innovation Capability (IP) has a positive and significant effect on Innovation Performance (KAI).

3. RESULTS AND DISCUSSIONS

The framework proposed in the previous section leaves some challenges and future direction through the proposed methodology as depicted in the following figure.

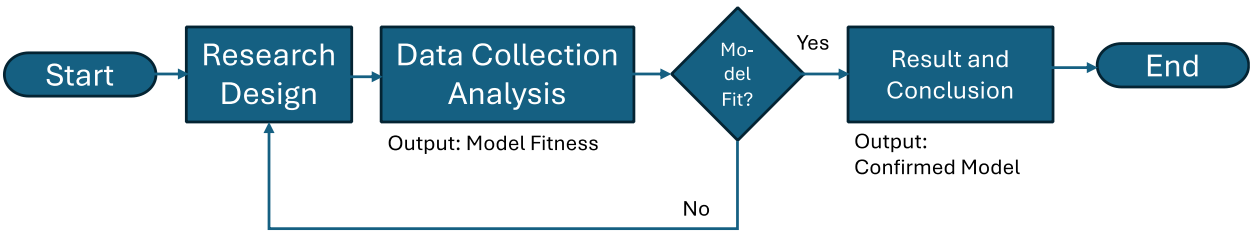

Figure 2. Proposed Methodology
Source: authors' own elaboration

From Figure 2, several steps are needed to be taken by the researcher. First, he needs to construct a research design. Second, he needs to get respondents to confirm the former model. Third, it requires an appropriate methodology to be used to build a valid model through model fitness test to guide the organization such as PLS-SEM. Fourth, the result and conclusion should be presented to show how the fit model can explain the model is in place in a corporation as the confirmed model. Thus, by deploying this subsequent research, this proposed model can be properly confirmed as a contribution to the knowledge of the innovation management field.

4. CONCLUSION AND RECOMMENDATIONS

Previous literature reviews have provided some insights that can be used to build models for companies to be guided in managing innovation in their organizations. This research has become the foundation for subsequent research to develop a good innovation management model as a basis for companies to develop innovation activities in their organizations.

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