THE EFFECT OF EMPLOYEE ENGAGEMENT AND ORGANIZATION CULTURE ON COMPANY INNOVATION CAPABILITY

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Abstract
Innovation Capability is incredibly important for companies to survive and gain competitive advantages. Some researchers examined the influence of corporate culture on Innovation Capability and revealed that the culture of the adhocracy had a positive effect on the company's Innovation Capability (Ahmad, 1998; Barlow 1999). Besides, the ability of innovation was also influenced by how strong employee engagement in the company is (Gichohi, 2014). To see the influence of adhocracy organization culture and employee engagement towards innovation capability in Indonesia, research was conducted with State-Owned Enterprises (SOE) employees as the subjects, as their role in shifting the Indonesian economic sector. The research questionnaires were distributed to 300 SOE’s employees in some sectors with a rate of return of 69.3% or 208. Of the total questionnaires entered, 178 questionnaires were completed and could be processed. With 5% degree of accuracy and 95% significance level, the results of data processing showed that employee engagement has a positive effect on Innovation Capability proved to be significant with t count 6.942 at α = 0.001 while the research hypothesis of adhocracy culture had a positive effect on Innovation Capability was shown to be significant with t count 2.144 and α = 0.032.

Keywords: Employee Engagement, Organization Culture, Adhocracy, Innovation Capability

JEL Classification: D23, M14, O32

INTRODUCTION

Since 2016, Indonesia has entered the new economic era of South East Asia Economic Community (AEC) which provides a lot of expectation, opportunities, and challenges. The current significant challenge was the low productivity of Indonesia's current human resources. Based on the Human Development Index, Indonesia only reached 0.689 in 2014, ranked 110th out of 187 countries surveyed. The next challenge
was the low industrial competitiveness in Indonesia, especially the manufacturing sector compared to other South East Asia countries. Based on the 2016 Global Manufacturing Index, Indonesia ranked at 19\textsuperscript{th} with the index of 55.8.

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This figure was quite good globally but in the context of competition in South East Asia, it was quite alarming because it was lower than some South East Asia countries such as Singapore, Thailand, Malaysia, and Vietnam. Another measurement that is broader and more comprehensive was based on the Global Competitiveness Index issued by the World Economic Forum that ranked Indonesia at 34\textsuperscript{th} in 2015 which was lower than Malaysia, Thailand, and Singapore, even in 2016 this position dropped again to 37\textsuperscript{th}.

Based on the 2014 - 2015 Global Competitiveness Index, Indonesia reached an index of 4.57 out of 7 and ranked 34\textsuperscript{th} out of 144 countries. This position was better compared to the previous report in 2013-2014 which placed Indonesia in 38\textsuperscript{th} position. The index trend from 2011-2012 to 2014-2015 (Figure 1) showed Indonesia's Global Competitiveness Index continues to increase while Indonesia's ranking or position number kept decreasing which means it ranked higher than 4 years ago.

Figure 1. Indonesia Global Competitiveness Index Trend
This condition was quite encouraging because it indicated a significant improvement in competitiveness. However, when compared to other AEC countries, the index of other countries in the AEC turned out to be greater than Indonesia with a higher ranking.

Compared with South East Asia countries, Indonesia's Global Competitiveness Index was still below Malaysia and Thailand and very far below Singapore (ranked 2\textsuperscript{nd} in the world) while Malaysia ranked 20\textsuperscript{th}.

The Global Competitiveness Index was assessed based on three sub-indexes, namely Basic Requirement, Efficiency Enhancers, and Innovation & Communication Factors. For Indonesia, the lowest score was Innovation & Communication Factors of 4.2 on a scale of 7 which means that the ability of innovation and business sophistication in Indonesian companies was still low and need serious attention. Indonesia's lagging can be caused by many factors, one of those was the low capability of innovation and business engineering in Indonesian companies. This was evidenced by looking at the 2015 Global Innovation Index Report which placed Indonesia in 97\textsuperscript{th} place out of 141 companies with an index value of 29.79 from a maximum value of 100.

To improve national competitiveness, the capability of innovation must be increased in all companies which will have an impact on increasing national competitiveness. Innovation capability is important for companies to survive and gain competitive advantage and innovation capability is also an important determinant of business performance.

Innovation itself was increasingly widespread not only limited to innovations in the field of R&D or technology but also develop in various fields. In the business world, Innovation Capability was influenced by various factors. An important factor that has been of concern to academics and researchers was the employee engagement and organizational culture especially the adhocracy organizational culture. Some researchers examined the influence of corporate culture on Innovation Capability and revealed that the culture of the adhocracy had a positive effect on the company's Innovation Capability (Ahmad, 1998; Barlow 1999; Edward et al. (2002); Martins and Martins (2002); Vincent et al. (2004). Also, the Capability of innovation was also influenced by the strong influence of employee engagement in the company. Gichohi (2014) conducted a study on the role of employee engagement in strengthening creativity and innovation.

This study examined whether employee engagement has a positive influence on the innovation capabilities of companies in Indonesia and whether the adhocracy culture has a positive influence on the capability of innovation in Indonesia.

LITERATURE REVIEW

Employee engagement is an important issue that is increasingly popular because it had been linked to labor productivity and company performance (Young, 2012). Studies from Perrin’s Global Workforce (Perrin, 2003) used the definition of employee engagement as a willingness and ability of employees to help companies in achieving success, especially by providing voluntary efforts continuously. Based on these studies, engagement was influenced by many factors that involve emotional and rational factors towards work and overall experience.
The Gallup organization-defined employee engagement as engagement and enthusiasm to work. Gallup, as followed by Dernovek (2008) equated Employee Engagement with positive employee emotions and positive employee commitment.

Many previous empirical studies issued literature on the correlation between employee engagement and innovation. Experts stated that employee engagement is the key to innovation and competitiveness. Katz and Kahn (1978) have identified that employee engagement leads to innovative behavior where employees go beyond the role of individuals to collaborate with colleagues, make suggestions for improving the organization, and work to improve the position of the organization in the external environment. According to Gichohi, (2014), employee engagement encouraged an important role for creativity and innovation in the workplace. This behavior motivated them to work more than their duties that generate creativity and innovation in the organization.

Gallup Consulting revealed that in the world-class companies, employees who were categorized as very engaged, reached 67% not engaged 26% while those included in the actively disengaged category were only 7%. While for companies, the average number of employees included in the engaged category was only 33%, not engaged 49% and actively challenged by 18%. Thus, to become a world-class company, the company must have employees with high levels of engagement.

Employee engagement is an encouragement from employees to work and contribute beyond the requested job description. Another noteworthy boost that comes from outside the individual employee in the form of organizational culture or corporate culture is a set of values developed and shared with each employee in the company's organizational environment.

Organizational culture is the whole of beliefs, expectations, norms, and values that are shared with all employees (Cerović et al, 2011). Abu-Jarad et al. (2010: 34) defines that almost all authors agree. According to them, organizational culture refers to something holistic, historically determined (by the founders or leaders), related to things studied by anthropologists (such as rituals and symbols), socially constructed (created and maintained by a group of people who together form an organization), easy to implement and difficult to change. To recognize organizational culture, cultural mapping needs to be done which describes the values and culture of what is happening or something to be developed by the company.

Mapping organizational culture was done by various methods. Cameron and Quinn (2006) make 4 quadrants related to an organizational culture that distinguish the two dimensions, namely: Internal focus and integration vs. External focus and differentiation; Stability and control vs. Flexibility and discretion.

From these two dimensions, a graph was made to represents both dimensions. At the left side of the graph, the organization was centered internally and on the right, externally centered. The top of the graph represented flexibility and discretion while at the bottom it described stability and control.
Four Types of Culture
Based on the competing values framework approach developed by Cameron and Quinn (2006), organizational culture can be mapped into 4 categories, namely:

1. **Clan Culture**
   This work environment is a work environment that allows socializing. Everyone has similarities and environment as in a family. Executives are seen as mentors or even as fathers. Organizations are guarded together with commitment and tradition. There is considerable involvement. The emphasis of the organization is the development of a strong, durable and bonded workforce with moral ties. Success is seen as the success of meeting customer needs and paying attention to others. Organizations encourage teamwork, participation, and consensus.

2. **Adhocracy Culture**
   This is an energetic and creative work environment. Employees take risks while leaders are also innovators and risk-takers. Experiments and innovations are binding in organizations. Competitiveness is emphasized and the long-term goal is to grow and create new resources. The availability of new products or services is seen as a success. The organization encourages each to act liberal.

3. **Market Culture**
   This is a results-based organization that emphasizes the completion of work and completing various things. Everyone is competitive and concentrates on goals. The leaders are strong drivers (hard drivers), actively produce something (producer) and at the same time as competitors. They are people who are strong and have high expectations. The importance of victory keeps the organization united. Reputation and success are the most important things. Long-term focus on competitor activities and achievement of goals is the most important thing. Market penetration and stock are definitions of success. Competitive prices and market leadership are keys while the organizational style is based on competition.
4. Hierarchy Culture

This culture is a structured and formal work environment. The procedure determines what the employees do. The leaders are proud of efficiency-based coordination. Keeping the organization functioning properly is very crucial. The formula, rules, and policies for unifying the organization remain intact. The ultimate goal is stability and results, together with the completion of efficient and smooth tasks. The character of success is reliable delivery, smooth planning, and low cost. Human resource management must ensure work and predicted values. Every company has all four types of organizations but not necessarily distributed. One type of organization will be more dominant than the other types. In some studies, the organizational culture that provided the strongest atmosphere to foster Innovation Capability was the culture of the adhocracy organization. Dasanayaka (2009) proved in his research that the dominant adhocracy culture has a very strong affiliation with the ability of innovation.

Innovation capability itself is defined as "a comprehensive set of characteristics of an organization to support and facilitate innovation strategies" (Burgelman et al., 2004). The Capability of innovation consists of the ability to create and bring the possibility of new technologies through economic practice. The terminology includes a series of activities ranging from "the capability to find, innovate, and improve the technology that exists outside of design" (Kim, 1997).

Innovation Capability influences organizational performance in various ways. The company in general can obtain and maintain competitiveness (Akman and Yılmaz, 2008). In particular, the innovation Capability is related to strategic excellence. For example, Shan and Zhang (2009) see that maintained competitiveness can be obtained by increasing the capability of innovation continues in the company. The innovation Capability is also related to the potential of organizations to turn new ideas into commercial and community values. (Terzirovski, 2007).

METHODS

The research sample was State-Owned Enterprises (SOE’s) employees throughout Indonesia. Out of a total of 119 SOE’s, 300 questionnaires were distributed to respondents from 62 SOE’s. The total questionnaires returned were 208 (69.3%) while those that could be processed were 178 respondents (85.6% of those received). Respondents consisted of 76% of men and 24% of women with the most age (25%) between 46 and 50 years.

Most of the respondents (45%) represented companies between 500 and 5000 employees. Based on revenue, 34% represent companies with revenues between 500 billion to 5 trillion per year. Based on assets, the largest respondents (32%) represented the company with assets between 500 billion and 5 trillion.

The employee engagement measurement uses an instrument in the form of a questionnaire from Gallup which consists of 12 questions representing 4 dimensions of Employee Engagement namely Basic Need, Management Support, Teamwork, and Learning & Growth. Respondents then chose the most suitable answer for each question that measures Employee Engagement with a Likert scale from 1 to 5 (Augustine and Kristaung, 2013)
Organizational Culture Measurement uses the Organizational Culture Assessment Instrument (OCAI) instrument developed by Cameron and Quinn (1999). Respondents were asked to choose the conditions that best suited the company for the 6 dimensions of organizational culture, namely: Dominant Characteristics, Organizational Leadership, Employee Management, Organizational Adhesive, Strategic Emphasis, and Success Criteria. For each dimension, the respondent must give a score from 0 to 100 in the style of the Clan organization, the Adhocracy, Market, and Hierarchy with a total score of 100 types. From the questionnaire, the Adhocracy scores were taken for statistical processing.

Innovation Capability Measurement used the instrument developed by Baark (2011) consists of Learning Capability, R&D Capability, Resource Allocation Capability, Manufacturing Capability, Marketing Capability, Organizing Capability, until Strategic Capability. Referred to the previous researches, a research framework was developed which is shown in Figure 3.

![Figure 3. Conceptual Framework](image)

By the research objectives, the research hypotheses are as follows:

Hypothesis 1: Employee Engagement has a positive influence on Corporate Innovation Capabilities.

Hypothesis 2: Adhocracy Culture has a positive influence on the Company's Innovation Capability.

RESULT

Data processing was done using Amos version 18 software with Structural Equation Modelling methods. The initial stage is to test the validity of both construct validity and convergence validity performed on the research variables. The construct validity test was measuring whether the construct (indicator) was able or not to reflect its latent variables. The results meet the criteria, namely the value of Critical Ratio (CR) > 1.96 with Probability (P) < 0.05 for all latent variables. Test Validity with Convergent Validity Test was testing the construct (indicator) whether it had a high variance proportion or not. It fulfilled the criteria if "Loading Factor" or "Standardized Loading Estimate" > 0.5 (Augustine and Kristaung, 2013). The result was all indicators exceed 0.5 unless two Culture Adhocracy indicators (below 0.5) so that they were
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excluded from processing data. Reliability Test with Construct Reliability Test, which was testing the reliability and consistency of data. It fulfilled the criteria if Construct Reliability > 0.7. Reliability of measurement testing was done using Construct Reliability results in the CR values for each variable as follows: Employee Engagement 0.88, Adhocracy Culture 0.78 and Innovation Capability 0.95. Thus all CRs were above 0.7, which means that the research instrument meets the required reliability requirements.

DISCUSSION

To test the suitability of the model, the goodness of fit was used to evaluate generally the degree of compatibility between the data and the model. This study used an incremental match test method (Hair et al., 2014) with Adjusted Goodness Fit of Index (AGFI), Tucker Lewis Index (TLI), Normed Fit Index (NFI), Comparative Fit Index (CFI), Incremental Fit Index (IFI), and Relative Fit Index (RFI). The results of data processing in table 2 showed that of the 6 match indicators, 4 gave good results and 2 marginal which means that there was a match between the model and the actual data.

Table 2. Goodness of Fit

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<tr>
<td>TLI</td>
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<tr>
<td>RFI</td>
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Hypothesis 1: Employee Engagement has a positive influence on Corporate Innovation Capabilities.

The statistical test produced a t-test value of 6.942 greater than t table 1.96 with \( \alpha = 0.032 \) which is smaller than <0.05. It can be concluded that Employee Engagement has a significant positive effect on the company's Innovation Capability. The results of this study prove that SOE employees with a higher level of engagement will influence the company's higher Innovation Capability. This result is in line with the results of Gichohi (2014) who found that employee engagement strengthened creativity and innovation capabilities of the company. Likewise, this study is consistent with what Rao found (2016) that there is a strong relationship between employee engagement and organizational innovation.

This study implies that state-owned enterprises need to strive to increase employee engagement to improve the company's innovation capabilities. It is quite clear that employees with high engagement are those who have a willingness to work more than requested. They will make a stronger contribution to the company's innovation capabilities in various aspects ranging from learning capability, R&D capabilities to the ability to make the most appropriate corporate strategy.

Hypothesis 2: Adhocracy Culture has a positive influence on the Company's Innovation Capability.

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The statistical test produces a t-test value of 2.144 greater than t table 1.96 with \( \alpha = 0.0001 \) which is smaller than <0.05. These results proved that the Adhocracy Culture has a positive effect on the company's Innovation Capability. The results of this study were in line with the results of the research of Yesil and Kaya (2012) which prove that the corporate culture with the Adhocracy type has a significant positive influence on the ability of innovation. The results of this study were also in line with Dasanayaka (2009) who found that companies with a dominant Adhocracy culture have a higher frequency of innovation.

This study implies that state-owned companies need to evaluate whether the existing typical culture is far from the adhocracy culture or has an adhocracy culture in the company. Shifting corporate culture into a more dominant in adhocracy culture is expected that the company's innovative capabilities will increase so that it can have higher competitiveness.

CONCLUSION

To improve the competitiveness of companies in facing the South East Asian free trade market, companies in Indonesia, especially SOEs, need to improve their innovation capabilities by creating factors to drive higher innovation capabilities. By increasing employee engagement, it is expected that the ability of innovation will grow because employee engagement has a positive influence on the company's innovation capabilities. Also, state-owned companies need to map the current corporate culture whether it will lead to the strengthening of the adhocracy culture because the adhocracy culture is a typical culture that is most suitable for the growth and development of innovation. A high combination of employee engagement in the atmosphere of the adhocracy culture will further encourage companies to have stronger innovation capabilities.

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