Learning Culture, Empowerment, Cyber Skill Competence And Self-Engagement

S.R.M. Indah Permata Sari¹, Maruf Akbar², Mahmuddin Yassin³

¹Doctoral Program, Human Resources Management, State University of Jakarta Indonesia
And Directorate General of Defense Potential Ministry of Defense RI
²Lecturer, State University of Jakarta, Indonesia
³Lecturer, State University of Jakarta, Indonesia

Abstract:
This study aims at determining the effect of learning culture, empowerment, and cyber skill competence on the employee’s self-engagement. The research used a quantitative approach with survey method and path analysis applied in testing the hypothesis. The research was conducted at Directorate General of Defense Potential with a sample of 150 employees selected through simple random sampling. The research found: (1) there is a positive direct effect of learning culture on self-engagement, (2) there is a positive direct effect of empowerment on self-engagement, (3) there is a positive direct effect of cyber skill competence on self-engagement, (4) there is a positive direct effect of learning culture on cyber skill competence, (5) there is a positive direct effect of empowerment on cyber skill competence, and (6) there is a positive direct effect of learning culture on empowerment. The conclusion showed that learning culture, empowerment, and cyber skill competence are important determinants to increase the employee’s self-engagement at Directorate General of Defense Potential Ministry of Defense RI.

Keywords: learning culture, empowerment, cyber skill competency, and self-engagement.

Introduction
The efforts which are needed to develop human resources in an organization or company is with employee development. It is basically an activity in preparing employees to be able to adapt to the changes that occur so expected to contribute productively in the achievement of corporate goals without ignoring its own interests. In other words, personnel development focuses on improving employee performance and career. As an effort for employee development, the organization must be able to maintain a sense of "engagement" of each employee. Engagement of this employee is one of the main strengths in achieving organizational goals. Engagement is considered as the key to elevating organizations to a higher level and achieving goals. One is "Self-Engagement" in which engagement is a key and important component in a person. Because every employee is expected to develop that is by developing the competence they have, develop the culture of learning, especially to something new, and seeks to engage actively in the empowerment of employees.

Employee engagement is very desirable for every organization/company, because then the employee will be fully responsible for the work given by the leadership. This is a real challenge for companies to keep employees accountable for their work and to provide human assets into the company's operations. (Urban, 2017) Therefore, it needs attention from the agency in an effort to increase the sense of attachment of employees to each task given.

The importance of employee engagement is not only in private companies, but also in state enterprises (BUMN), government agencies, even in organizations. High employee engagement makes a person highly motivated in work and committed, enthusiastic, and passionate. (Agustian, 2012) A person who has Employee engagement, then the person has a feeling that his existence becomes meaningful in an organization / company for life and can improve the performance of the company or organization where they are. Self-engagement in every task is an advantage for the organization, in this case the Ministry of Defense especially the Directorate General of Defense Potential of RI. One
of the tasks in the directorate is related to cyber. Sharma (2017) states that employees who engage in their work experience possess strong resolve and taste in their efforts and contribute their best efforts to achieve organizational goals. Thus, every agency would expect employees they have to have engagement, an engagement, commitment, a desire to contribute in the agency and a sense of belonging to work.

Cyber skills is one of the special skills that human resources must have in the field of cyber which is one of that includes the mastery of information security (cyber security). That is, to keep no break-ins against the information system. Ministry of Defense RI should be able to manage human resources appropriately with attention to self-engagement of employees, conducive learning culture atmosphere, competence, and ability of employees in the hope of becoming a quality human resources and perform well. Based on the results of observations made, has found as many as 55% of employees who do not have a sense of "self-engagement". This is evidenced from the informal interview, that there are still employees who seem to delay the job, especially if they get the task associated with cyber. Employees feel that the work which related to the cyber is not part of their duties so that they are not concern yet to learn about cyber, whereas self-engagement of employees is very important for the institution. If employees do not have a high self-engagement, then the employee will only perform the task with no serious, will have an adverse effect on institutions.

One of the approaches in improving employees' attitudes in cyber field is by preparing a condition of learning culture so that employees will learn to develop information about cyber, preparation for empowerment done by leadership by sending employees to attend seminar or workshop about cyber. Likewise, in terms of increasing the competence of cyber skills of employees must be considered so as to increase the sense of self-attachment in employees as the value and potential of human resources within the organization. Therefore, the purpose of this approach as a picture and encourage the organization to concern for the increase of employee competence in an effort to improve self-attachment. Culture is one factor that can affect employee engagement in a company. The next factor that causes low self-engagement is empowerment. The results of Stander and Rothmann's work (2010) show that employee engagement and empowerment are important in change and performance improvement. With the empowerment is expected to increase employee motivation in an effort to bind them in work. Based on the information, the empowerment of employees in the Directorate General of Defense Potential has not been fully functioning properly. This is demonstrated by the fact that employees have not been given an opportunity to expand their involvement in employment, employees have not been given the opportunity to participate in policy-making related to cyber, still uneven in terms of delegation of employees, leaders have not seen employees as strategic partners, feedback on every task completed, and has not involved employees in setting policies, especially related to cyber.

Another factor that causes low self-engagement is the lack of cyber skill competence. The existence of cyber-crime phenomenon requires the leadership to pay more attention to the importance of increasing the competence of cyber skills to enhance the confidentiality of information to be maintained. Based on preliminary observations, the competence of employees of the Directorate General of Defense Potential has not been fully qualified in cyber field. This is evidenced by the lack of employees who have sufficient knowledge about cyber, there are employees who do not have a "motive" to develop competence, employees are still not able to adapt to increasingly sophisticated technology, employees tend to be in a "comfort zone" and monotonous in every work.

**Literature Review**

**Employee Engagement**

Employee engagement is one of the main strengths to achieve organizational goals and the key to elevating organizations to a higher level and achieving goals. Further, this research will discuss about the theoretical review of the four variables above. Departing from the term "employee engagement" introduced by Gallup, engagement is defined as an employee's "attachment" (in an employee's) sense to the working environment or the company he or she works in. Colquitt, et al (2013: 169), says "Employees who are" engaged "and" energies into their job." When viewed from the outside, employees who have attachments will devote a lot of energy to their work, struggle, and take the initiative to complete work. However, if viewed from within, then bound employees are more inclined to focus concentration and attention on their work, so it sometimes becomes unreasonable. The employees involved are interested in the task but sometimes they forget the time. Furthermore, Macleod and Clarke (2009: 4), says about employee
engagement as follows: *Employee engagement is the difference that makes the difference— and could make all the difference as we face the realities of globalized competition and of the millions of graduates and even more skilled and committed workers that China, India and other economies are producing each year.*

Furthermore, Robbins and Coulter (2016: 466) define “employee engagement as when employees are connected to, satisfied with, and enthusiastic about their jobs.” Employee engagement is closely related to their work, if they do not have a sense of being tied to work then they will be very unconcerned and lack the energy spirit to complete the job. Thus it can be synthesized that self-engagement is a positive feeling that employees have with full meaning and enthusiasm towards a given task at work, with indicators that are: persistent in the face of adversity, earnestness in work, pride of work, interest in work, and enthusiasm for work.

**Culture**

Each organization has a culture that is different from each other, the variety and type varies. The organizational culture differences are related to the organizational dimension characteristics. One is learning culture. The proper way should be given so that employees can be kind to the work environment, in this case the employee can act actively as a problem solver and learner. Learning culture encourages employees to ask questions, share successes and lessons, and to disseminate and generate ideas. Noe, et.al (2014) says that “learning culture – a culture in which learning is rewarded, promoted, supported by managers and organizational objectives.” This culture can be reflected in the performance management system and employee salary structure as well as awards for knowledge sharing. Learning culture creates conditions in which, the leadership encourages flexibility and experimentation for its employees.

Cultural of learning is a culture oriented to the promotion and facilitated learning of the employees. Leaders should be able to create an atmosphere of learning culture as part of the organizational culture in the agency. This is in accordance with those defined by Schmitz, et.al (2014) that A learning culture as a culture oriented towards the promotion and facilitation of learning by its employees. It encourages the sharing and spreading of what is learned, aiming at the development and success of the organization.

So that with a learning culture it can encourage employees to share and disseminate something learned, aiming at the development and success of an organization. Armstrong (2010) says “learning culture is one that promotes learning because it is recognized by top management, line managers and employees generally as an essential organizational process to which they are committed and in which they engage continuously.” This means that learning culture is one component to promoting learning as it is recognized by top management, line managers and employees, as an important organizational process in which they are committed and engaged continuously. On the basis of some concepts that have been described, it can be synthesized learning culture is a learning-oriented culture and encourage employees to improve knowledge, competence, and performance, with indicators that are: have perception, form motivation, ownership of the organization, skills in analyzing culture, and cooperation.

**Empowerment**

Empowerment is the involvement of employees who really mean. Empowerment can simply be interpreted as an activity done to make something more capable and have power or strength. Griffin (2013), says that empowerment is “the process of enabling workers to set their own work goals, make decisions, and solve problems within their sphere of responsibility and authority.” Thus, empowerment is a process by which employees set themselves what is the goal of their performance, make decisions, and solve problems within their scope of responsibility and authority. According to Luthans (2011) said that “empowerment is recognizing and releasing into the organization the power that people have in their wealth of useful knowledge and internal motivation.” This means that empowerment is the power of someone who possesses a wealth of knowledge so that it can be useful and motivate internally and recognize and release into the organization. Williams (2011) says “Empowerment is a feeling of intrinsic motivation, in which workers perceive their work to have meaning and perceive themselves to be competent, to have an impact, and to be capable of self-determination.” Thus, if the leadership wants employees to have strong expectations, then the leadership must empower employees to make decisions. By doing this it can motivate employees to take an active role rather than passively in each job.
On the basis of some conceptual that has been described, it can be synthesized that empowerment is the process of giving authority to employees throughout the organization to make important decisions and be responsible for the decisions taken, with the following indicators: clear authority, responsibility, trust, delegation, and support for employees.

**Competence**

Competence is a person's ability to apply the knowledge and skills possessed by each employee, as one of support to be able to perform duties and responsibilities effectively, so as to achieve professional quality performance standard. Furthermore, according to Mathis and Jackson (2008) said that, “competencies are individual capabilities that can be linked to enhanced performance by individuals or teams.” In Mathis’s opinion, competence is an individual ability that can be attributed to performance that can be enhanced by an individual or team. In addition, according to Jackson and his friends (2003), the definition of competence is, “the term competency to refer to the knowledge, skills, personality characteristic, and attitudes that make it possible for employees to perform work tasks and roles.” In that opinion, competence is a knowledge, skill, characteristic, personality, and attitude that enables employees to perform tasks and job roles.

Based on the theory of taxonomy of Bloom according to Arikunto (2015) there are three domains or major domains in education are: first cognitive is an activity related to thinking through the process of recognition, understanding, application, analysis, synthesis and evaluation; second, psychomotor domains or skills that are closely related to work that fundamentally need to distinguish between skill and abilities; the three affective domains that are closely related to attitudes or values.

Thus, the ability of cyber skill to be synthesized is the ability to perform or perform a job or task in the field of cyber based on skills and knowledge and supported by work attitude demanded by the work, with the following indicators (1) knowledge, (2) understanding, (3) application, (4) analysis, and (5) synthesis.

On the basis of several theoretical studies and as above, the research hypothesis is proposed as follows: (1) there is a direct positive influence of learning culture on self-engagement. (2) There is a positive direct influence of empowerment on cyber skill competence. (3) There is a positive direct influence of cyber skill competence on self-engagement. (4) There is a positive direct effect of learning culture on cyber skill competence. (5) There is a positive direct effect of empowerment on cyber skills competence, and (6) there is a direct positive influence Culture learning on empowerment.

**Research Methodology**

The research used quantitative approach with survey method and path analysis applied in testing hypothesis. This research was conducted at the Directorate General of Defense Potential of the Ministry of Defense of the Republic of Indonesia in November 2015 - April 2016. The data collection used questionnaire instruments designed for self-engagement (Y) variables, learning culture (X1), and empowerment (X2) while for the cyber skill competency variable (X3) using the test instrument. Instrument development for each variable is presented starting from conceptual definition, operational definition, instrument grid, instrument validity test, and reliability calculation. Survey results and tests will be processed using path analysis method using Microsoft Excel 2010 and SPSS v.22 software, which will then generate the level of influence of the independent variable to the dependent variable to verify the hypothesis.

**Results**

Based on the results of data processing using SPSS, can be seen in the table below

**Table 1. Summary of Hypothesis Testing Results**

<table>
<thead>
<tr>
<th>Equation Model 1</th>
<th>Unstandardized Coefficient B</th>
<th>Std. Error</th>
<th>Standarized Coefficient Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>40, 763</td>
<td>11, 078</td>
<td></td>
<td>3,6</td>
<td>.0</td>
</tr>
<tr>
<td>Learning Culture (X1)</td>
<td>.23 6</td>
<td>.06 6</td>
<td>.264</td>
<td>3,6</td>
<td>.0</td>
</tr>
<tr>
<td>Empowerment (X2)</td>
<td>.31 4</td>
<td>.08 9</td>
<td>.259</td>
<td>3,5</td>
<td>.0</td>
</tr>
<tr>
<td>Cyber-skill competence (X3)</td>
<td>.39 7</td>
<td>.12 3</td>
<td>.241</td>
<td>3,2</td>
<td>.0</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Self Engagement (Y)

Based on the calculation and testing of the path coefficient obtained calculation and test results, namely the influence between the variables as follows: in table 1, it can be seen that Learning
culture has a direct positive effect on Self-Engagement obtained by coefficient $p_{31}$ path of 0.264 with a $t_{\text{count}}$ of 3.61, while $t_{\text{table}}$ of 2.61 ($\alpha = 0.01$), because $t_{\text{count}} > t_{\text{table}}$ (dk = 146, $\alpha = 0.01$), then H0 is rejected. The results of this hypothesis test show that there is a direct positive influence of learning culture to Self-Engagement. (2) empowerment has positive direct effect to self-engagement obtained by coefficient of $p_{31}$ line equal to 0.259 with $t_{\text{count}}$ equal to 3.54, while $t_{\text{table}}$ equal to 2.61 at $\alpha = 0.01$, because $t_{\text{count}} > t_{\text{table}}$ (dk = 146, $\alpha = 0.01$), then H0 is rejected. The result of this hypothesis test shows that there is a positive direct effect of cyber skill competence to Empowerment has positive direct effect to the competence of cyber skills obtained by $p_{32}$ line coefficient of 0.234 with $t_{\text{count}}$ of 2.97, while $t_{\text{table}}$ is 2.61 ($\alpha = 0.01$), because $t_{\text{count}} > t_{\text{table}}$ (dk = 147, $\alpha = 0.01$), then H0 is rejected, which means that empowerment has a direct positive effect on cyber skill competence.

Table 2. Summary of Hypothesis Testing Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>96, 366</td>
<td>6,711</td>
<td>14, 359</td>
<td>0.00</td>
</tr>
<tr>
<td>Learning Culture (X1)</td>
<td>0.16</td>
<td>0.059</td>
<td>2.8, 41</td>
<td>0.00</td>
</tr>
<tr>
<td>Empowerment (X2)</td>
<td>0.17</td>
<td>0.058</td>
<td>3, 227</td>
<td>0.28</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Empowerment (X2)

In table 2, it can be seen that the learning culture has a direct positive effect on the competence of cyber skills with the value obtained by $p_{31}$ line coefficient of 0.238 with a $t_{\text{count}}$ of 3.02, while $t_{\text{table}}$ is 2.61 ($\alpha = 0.01$), because $t_{\text{count}} > t_{\text{table}}$ (dk = 147, $\alpha = 0.01$), then H0 is rejected which means that learning culture has a direct positive effect on competence of cyber skill. (5) Empowerment has positive direct effect to the competence of cyber skills obtained by $p_{32}$ line coefficient of 0.234 with $t_{\text{count}}$ of 2.97, while $t_{\text{table}}$ is 2.61 ($\alpha = 0.01$), because $t_{\text{count}} > t_{\text{table}}$ (dk = 147, $\alpha = 0.01$), then H0 is rejected, which means that empowerment has a direct positive effect on cyber skill competence.

Table 3. Summary of Hypothesis Testing Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-</td>
<td>7.34</td>
<td>8, 14, 324</td>
<td>-1.949</td>
</tr>
<tr>
<td>Learning Culture (X1)</td>
<td>0.13</td>
<td>0.043</td>
<td>3, 227</td>
<td>3.016</td>
</tr>
<tr>
<td>Empowerment (X2)</td>
<td>0.17</td>
<td>0.058</td>
<td>3, 227</td>
<td>2.969</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Cyber-skill competence (X3)

In table 3 above, it can be seen that learning culture has a positive direct effect on empowerment with value obtained by coefficient of $p_{21}$ line equal to 0.227 with $t_{\text{count}}$ 2.84, while $t_{\text{table}}$ is 2.61 ($\alpha = 0.01$), because $t_{\text{count}} > t_{\text{table}}$ (dk = 148, $\alpha = 0.01$), then H0 is rejected, which means that learning culture has a direct positive effect on Empowerment.

Discussion

Based on the results of research conducted, described the research discussion as follows:

First, the first hypothesis analysis resulted in the finding that learning culture had a direct positive effect on self-engagement. As Albrecht says that the most obvious behavior of engagement is the effort of that person. The person engaged involves working hard, working, and being fully engaged in the job. They focus on what they do by exerting their energies. Then also McBain's research suggests that organizational culture as one of the drivers of employee engagement. Thus, the better and conducive cultural learning in the agency then it can improve self-engagement of employees of the Directorate General of Defense Potential.

Second, the second hypothesis analysis resulted in the finding that empowerment had a direct positive effect on self-engagement. Noe, et al says that "Employee empowerment means giving employees the responsibility and authority to make decisions about all aspects of product development or customer service”. Empowerment is considered able to grow and increase the creativity of employees,
while creativity itself is the foundation for the growth of innovation. Therefore, empowerment is seen as an important part in order to ensure the survival of the organization in a competitive environment. Similar to what Patti and Kumar said about "employee engagement is an empowerment related to the role of management." The results of this study have relevance to the results of research that has been found that is about the employee's attachment to work or tasks that are influenced by the existence of employee empowerment so that it can reduce the desire to quit the job. (Albrecht and Andreetta, 2011) Employees who are empowered or also given an opportunity to be actively involved in policy making is one form of business that employees feel attached to. Thus, the more empowered employees can increase self-engagement employees of the Directorate General of Defense Potential.

**Third**, the third hypothesis analysis resulted in the finding that the competence of cyber skills had a direct positive effect on Self Engagement. May et al. says, “engagement, as self-employment and expression physically, cognitively, and emotionally during role performances. Attempted to measure engagement as three separate cognitive, emotional, and physical factors.” Engagement to work as a positive psychological construct, to measure attachment there are three separate factors such as cognitive, emotional, and physical factors. In attachment, it is usually associated with increased competence on performance outcomes, and contributes to the assignment of individuals to their work. Similar with what is said by Raynal & Rieunier in Mihaela that the competence is “a set of potential behaviors (cognitive, affective and psychomotor) which allow the individual to profess a complex activity efficiently.” It means that competence is a set of potential behaviors (cognitive, affective, and psychomotor) so that employees perform their duties efficiently. Thus, in the presence of competence can affect a person's behavior to be more tied to the task being done. Employees are more confident to do things because they have competencies associated with the task given. Thus, the increased competence of cyber skills can increase self-engagement of employees of the Directorate General of Defense Potential.

**Fourth**, the fourth hypothesis analysis provide findings that the learning culture has a direct positive effect on the competence of cyber skills. Employees should be able to do things with their knowledge and use that knowledge to create new knowledge. (Çınar and Karcıoğlu, 2015) Leaders should be able to prepare a condition of learning culture in the work environment, so that employees can search, assess, and represent new information quickly, including in this case related to the cyber world. As Ahmad et al. that learning culture also means how to have knowledge in the learning and teaching ecosystem. They know that learning is as natural and biologically driven as breathing and they cultivate community potential through learning opportunities. Thus, with the learning culture affect the increase in employee competence, especially related to cyber skills. Thus, the increasing work culture in the agency can improve the competence of cyber skill of employees of the Directorate General of Defense Potential.

**Fifth**, the fifth hypothesis analysis resulted in the finding that empowerment directly affects the competence of cyber skill. Luthans who says that: "empowerment is recognizing and releasing into the organization." This means that empowerment is the power of a person who possesses a wealth of knowledge that can be useful and motivate internally and recognize and release into the organization. Thus, the increased employee empowerment can increase the competence of cyber skills of the Directorate General of Defense Potential.

**Sixth**, the sixth hypothesis analysis provide findings that the learning culture has a direct positive effect on empowerment. Reynolds says that learning culture as a 'growth medium' will encourage employees to commit. A learning culture based on open communication and flexibility enables employees to participate in improving the abilities of individuals. This culture contributes to encouraging psychological empowerment. The learning culture created by the organization, is able to develop the existing competencies so that employees feel like empowered by the organization. Daft states that there are four elements that allow employees to act freely in completing the task. Thus, the increasing atmosphere of learning culture in the agency then it can improve self-engagement of employees of the Directorate General of Defense Potential.

**Conclusion**

On the basis of the findings above, it can be concluded that: (1) Culture of learning has a direct positive effect on self-engagement, which gives meaning that the improvement of learning culture will give effect to the increase of employee self-engagement at Directorate General of Defense Potential of Ministry of Defense of the RI. (2)
Empowerment has a direct positive effect on self-engagement, which gives meaning that the improvement of empowerment will give effect to the increase of employee self-engagement to Directorate General of Defense Potential of Ministry of Defense of RI. (3) The competence of cyber skill has a direct positive effect on self-engagement, which gives meaning that the competence of cyber skill will give effect to the increase of employee self-engagement to Directorate General of Defense Potential of Ministry of Defense of RI. (4) Culture of learning has a direct positive effect on the competence of cyber skills, which gives meaning that the improvement of learning culture will give impact of cyber skill enhancement on staff of Directorate General of Defense Potential of Ministry of Defense of RI. (5) Empowerment has a direct positive effect on the competence of cyber skills, which gives meaning that the improvement of employee empowerment will give impact of cyber skill enhancement on staff of Directorate General of Defense Potential of Ministry of Defense of RI. (6) Culture of learning has a direct positive effect on empowerment, which gives meaning that improvement of learning culture will give impact of increasing empowerment to the employees of Directorate General of Defense Potential of Ministry of Defense of RI.

References


[17] Pati, Surya Prakash, dan Pankaj Kumar, “Employee Engagement: Role of Self-Efficacy,
Organizational Support & Supervisor Support.  


