Does Learning Culture Impact Directly or Indirectly on Work Engagement in the Indonesia Oil Palm Industry?

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Abstract

Indonesia oil palm industry (IOPI) has become rapid growth industry and plays strategic role in global and domestic socio-economy. IOPI is facing many social, environmental and managerial issues. The employees with high score on learning agility and work engagement become the requirement. And developing organizational culture that promotes and supports learning process is a must for palm oil company in Indonesia. This study aims to explore the impact of learning culture on learning agility and work engagement. Does learning culture impact directly or indirectly on work engagement? The study was conducted on 73 respondents who are senior staffs, supervisors and junior managers from 28 companies in IOPI. Smart-PLS application was used for statistical data analysis in this study. The result explained that learning culture impacts indirectly (with path coefficient 0.142) and directly (with path coefficient 0.248) on work engagement. The development of organizational learning culture also impact directly on learning agility (with path coefficient 0.276). It is a strategic initiative for dealing with current and future business challenges.

Keywords: learning culture, agility, work engagement.

1. Introduction

IOPI was started from four seeds of Elaeis Guineensis which brought by Dr. Pryce to Bogor Botanical Garden in 1848. The Belgium company opened a first commercial oil palm plantation in Pulu Raja North Sumatra in 1911 (1). The development of IOPI had accelerated by utilizing NES model - Nucleus Estate and Smallholders or Plasma Inti Rakyat which funded by the World Bank (2). Through NES model, IOPI expand from North Sumatra to Riau, South Sumatra, Kalimantan and other regions in Indonesia. The plantation area increased from 300 thousand ha in 1980 to 10 million ha in 2014. The CPO production also increased from 700 thousand tons in 1980 to 29 million tons in 2014. The number of districts which involved as the center of the palm oil plantation also increased from only two districts in 1980 to become 190 districts in 2014 (3).

Now IOPI has become rapid growth industry. Based on membership data of GAPKI - the association of Indonesia oil palm companies which consists of cooperatives, private and state-owned companies. It was established in 1981 with 23 members and in 2016 the number of GAPKI becomes 644 organization (4). IOPI also plays strategic role in global and domestic social economy. Since 2006, Indonesia has become the biggest CPO and vegetable oil producer for the world. In 2014 Indonesia's production was 53 percent and, Malaysia only 33 percent (5). Based on RCA competitiveness index, CPO is in the second rank of top ten Indonesia commodity, which has the highest index since 2000 (6). CPO is also the main source of domestic income as non oil & gas export. The export value of palm oil has been increasing since 2008, while the export value of other non oil & gas commodity was going to decrease since 2012 (7). IOPI is one of three economic sectors that providing the largest opportunities for jobs and business besides service and mining industry (8). Oil palm plantation becomes developmental agent for the remote areas. The development of oil palm plantations in remote areas, it will trigger the emerging at least ten related economic sectors (5).

IOPI in recent years has become one of the interest issues to the world, because its’ revolutionary development which changing market competition of global vegetable oil. The various socio-economics and environment issues has been arisen associated with IOPI (1). (9) stated some of the challenges facing IOPI in the future, such: (1) negative stigma toward the progress of IOPI, (2) low productivity of plantation crops, (3) derivative products is not seriously developed, (4) increasing operational cost while CPO price tend to decline, (5) lack of human resources supply especially people who are competent in modern agricultural practices. Meanwhile (10) gave more attention on social and environmental challenges for IOPI in the future, such as (1) deforestation, (2) degradation of peat land, (3) habitat of endangered species, especially orangutans, (4) forest fires and (5) social conflicts on the land ownership. Besides environmental, social and business, increasingly unpredictable climate change is also a challenge that must be solved by IOPI. El Nino in 2015, which impact on forest fires in many places in Kalimantan and Sumatra. Then it causes water deficit which lead to lower production of CPO from Indonesia and Malaysia amounted to 3.6 million tons in 2015 and amounted to 9.4 million tons in 2016 (11).

For facing those problems and challenges in IOPI, the employee with the high level of work engagement and learning agility become an imperative. Since the global economic recession in early 2000s, work engagement has become important driver of organizational. Because work engagement directly affects individual and business outcomes such as retention, productivity, financial performance, and shareholder return (12). For anticipating business changes over the next 5 years, more than 60% of employers stressed the need for the employee to demonstrate an agile ap-
proach and having the following vital competencies such as: change orientation, adaptability, flexibility, critical thinking and resilience (13). Organizational effectiveness in the twenty-first century is dependent on blending culture, leadership, and systems for supporting dynamic capabilities and speedy decision making (14).

With globalization, increasingly competitive markets, a volatile economic climate and demands for constant change, the company expect their employees to put an extra efforts, generate innovative ideas while simultaneously pursuing efficiency and increasing demand for work flexibility (15). The learning-agile organizations are capable in anticipating the changes better than the others. The company with high level of employee’s learning agility outperform their competitors consistently in: customer satisfaction, profitability, market share and revenue growth (16). And close to 25 percent of the Fortune 100 and 50 of the Fortune 500 use learning agility as a means to identify leadership potential for internal and external candidates. Because it is a predictor of future executive success (17). Based on those reasons this study aims to examine: (1) the impact of learning culture on learning agility and work engagement (2) the impact of learning agility on work engagement and (3) mediating role of learning agility in the relationship between learning culture and work engagement.

2. Literature Review

2.1 Work Engagement

Work engagement make employees experience a sense of attachment towards the work, investing themselves in the work as a whole. They are more likely to stay longer, perform 20% higher than their team and say positive words about the company frequently (18). Although it is partially overlaps with other job related behaviors (such as job involvement or organizational citizenship behavior) and other job attitudes (such as commitment or job satisfaction), work engagement has its own construct autonomy and validity (19). Work engagement is the concept of employee well-being which combine pleasure and activation which makes it different from other concept such as: work satisfaction, work-addicted and work burn out (20,21). Work engagement is the positive antithesis of work burn-out. People with high level work engagement experience an effective and energetic sense of connection with the work. they perceived their work as challenging instead of stressful one (22).

Schaufeli, Salanova, Gonzalez-Roma, & Bakker (2002) defined work engagement as work-related, fulfilling and positive state of mind that is characterized by absorption, dedication, and vigor. Schaufeli (2012) explained that absorption is being happily and fully concentrated in doing the work. Vigor is having high levels of energy, being resilient mentally while doing work, and persistence even in the dealing with difficulties. Dedication is strongly involved in doing work and experiencing a sense of enthusiasm, significance. Shuck (2010) has conducted empirical research and concluded that job fit, affective commitment, and psychological climate were significantly related to work engagement and then work engagement was significantly related to both discretionary effort and intention to turnover. Ponsignon et al. (2015) also have proved empirically that all the perceived high-involvement HR practices positively related to work engagement, which in turn predicted their learning goal orientation. HR practice consists of empowerment, competence development, information sharing, recognition and pair reward. Wollard & Shuck (2011) has identified 42 antecedents or drivers of work engagement which are grouped into two categories: individual antecedents and organizational antecedent. Eleven of the 21 individual antecedents and thirteen of the 21 organizational antecedents were reported with empirical evidence. Some of individual antecedents were coping style, curiosity, optimism, willingness to direct personal energy, and value congruence. Some of organizational antecedents were supportive organizational culture, positive workplace climate, opportunities for learning and authentic corporate culture (Wollard & Shuck, 2011). This study argues that learning agility as a construct may be categorized as individual antecedent and learning culture is as organizational antecedent. Based on those explanation, this study make hypotheses that learning agility and learning culture may impact significantly and positively on work engagement.

H2: Learning Agility will impact on Work Engagement positively and significantly

H3: Learning Culture will impact on Work Engagement positively and significantly

2.2 Learning Agility

The rapid, on-going change become a pressure for individual, team and organization to master new skills more rapidly, more often and with much greater impact than ever before. It requires learning agility which is an ability to respond incredibly and quickly to change, ensuring the minimum gap between the identified need and the deployed learning deployed (28). Companies with higher level learning agile of the executives produced 25% higher profit margins compared with peer companies (29). Based on global research by Center for Creative Leadership and Korn/Ferry International for more than 20 years explain that people with high score in learning agility are get promoted faster and more often than their peer, recognized as having the most potential for advancement and achieve greater success after promotion (17). The employee of today and tomorrow must be agile leaders. They must be resourceful in the face of change, and above all, able to learn from experience. People with this ability perform well under first-time, challenging conditions (17). They are also comfortable to deal with ambiguity and complexity, clever to solve problem, do not accept the status quo, have wide interests, change approach easily, learn new functions easily and performs well under new, first-time conditions (29).

Learning agility is defined as the eagerness and ability to learn from experience, and apply the learning speedy and flexibly to perform under first-time situation successfully (30,31). For differentiating learning agility from learning ability, Derne, Ashford, & Myers (2012) revised the definition of learning agility by considering two psychological process such as perceptual speed and flexible cognition. Learning agility is defined as ability to understand the situation quickly and generate idea or insight flexibly as learning process both in and across experiences (32). Learning agility is reflected into for dimension, such as people agility, mental agility, change agility and result agility (16). Learning agility model which was developed by (33) explain that learning agility was influenced by individual differences and contextual-environmental factors. Individual differences consist of learning orientation, (meta) cognitive ability and openness to experience. Contextual-environmental factors consist of experience characteristics and culture climate for learning (33). Juhi, Pa’wan, Milah, & Hansaram (2012) has proved that learning agility is a predictor for leadership spirit. And job & organizational engagement are drivers of learning agility (35). So that’s why this study want to explore the impact of learning culture on learning agility and then learning agility impacts on work engagement.

H1: Learning Culture will impact on Learning Agility positively and significantly

H2: Learning Agility will impact on Work Engagement positively and significantly

2.3 Learning Culture

Organizational culture and structure are the factors which affect behavior of individuals and groups within an organization (36). The organizational culture becomes the invisible force that, like gravity, shapes all interactions within the universe that the organization exists (14). It is considered important because it drives both
positive and negative outcomes. The commitment to the organization and its goals, job satisfaction and ethical behavior, stress and turnover are all related to organizational culture (37). Culture is deep rooted into the daily routines of a particular organization and it is the way the organizational reality is being shaped (38). The culture is a set of value systems, behavior standards and opinions which are unique for each organization. It is apparent in behavior, mutual interaction, self-understanding and understanding of surroundings (39). Organizational culture consists of norms and shared values that inform employees about how they should behave, think, feel and perceive in relation to organizational problems & challenges (40). Norms influence employee behavior to ensure unit survival and to increase the coordination and predictability of members’ actions toward desirable organizational ends (41). The company promotes and values individual learning through culture turns into group learning or organizational learning and in so doing can contribute to organizational success (42). Learning culture can be described as an organizational culture that facilitates individual and collective learning in organization in order to contribute to organizational development and performance(43). Learning culture is reflected into two dimension: internal integration and external adaptation (44).

Rebelo & Gomes (2017) conducted research in 107 Portuguese firms and made conclusion that learning culture impact on total quality management, organizational profitability and customer satisfaction positively and significantly Islam, Khan, & Bukhari (2016) conducted research on 412 Malay-Chinese employee who are working for insurance companies in Malaysia. They made conclusion that learning culture and psychological empowerment have positive and significant impact on affective commitment and organizational citizenship behavior and negatively on turnover intention. Research in 245 different work units of the public sector organization in Finland have proved that ethical organizational culture are associated with individual work engagement (47). Organizational culture is the antecedent of work engagement (48,49). Perceived organizational culture influence positively on employee engagement (50). Based on those empirical research, this study make hypotheses that learning culture has a positive and significant impact on learning agility and work engagement.

**H1**: Learning Culture will impact on Learning Agility positively and significantly.

**H3**: Learning Culture will impact on Work Engagement positively and significantly.

### 3. Methodology

#### 3.1 Sample

Sample size of this study is 73 respondents from 28 companies of oil palm plantation in Kalimantan, Indonesia. Based on membership data of GAPKI in October 2017, members of GAPKI is 682 organizations which 616 organization are private companies and 296 companies are located in Kalimantan. According to Hair, Hult, Ringle, & Sarstedt (2014) the recommended sample size is 52 respondents for the model with an endogenous construct has 2 arrows directed, 0.05 significance level, 80% statistical power and minimum $R^2 = 0.25$. The sample size of this research is 73 respondents. That is more than recommended sample size. The sample is only 9% of the population. Data were collected using self-registered questionnaire which delivered directly, via email or via social media. Profile of the respondent is men (52%) and women (48%), dominated by Gen-Y or millenial with year of birth in 1980’s and 1990’s (95%), mostly high bachelor or undergraduate degree (49%), working for company with and number of employees less than 500 people (63%).

### 3.2 Measurement & Procedure

This study utilized Organizational Learning Culture Questionnaire which developed by Rebelo & Gomes (2011) for measuring Learning Culture. This construct is reflected into two dimension: Internal Integration and External Adaptation. The questionnaire uses a 5-point Likert-scale and consist of 12 items which are 8 items (IN1, IN2, IN3, IN4, IN5, IN6, IN7, IN8) for measuring Internal Adaptation and 4 items (EX1, EX2, EX3, EX4) for External Adaptation. Utrecht Work Engagement Scale or UWES-17 developed by Seppälä et al. (2009) is adopted for measuring Work Engagement. For this study it is only 12 items used Those are DE01 DE02, DE03 DE04 for measuring Dedication. AB01, AB02, AB03, AB04 for measuring Absorption. And VI01, VI02, VI03, VI04 for measuring Vigor Learning Agility Self-Assessment which developed by Gravett & Caldwell (2016) is adopted for measuring Leading Agility construct. This study used only 16 items. Those are RA01, RA02, RA03, RA04 for measuring Result Agility. PA01, PA02, PA03, PA04 for measuring People Agility. CA01, CA02, CA03, CA04 for measuring Change Agility. MA01, MA02, MA03, MA04 for measuring Mental Agility. Research model is structured on second order which the all dimension are treated as latent variables. Then the collected data were analyzed by using SmartPLS version 3.0.

### 4. Findings

#### 4.1 Measurement Model

Measurement model is shown in Fig.. Based on calculation used Smart PLS, all the items with loading factor less than 0.600 was removed from the model. Those removed items are AB03, DE01, VI03, VI04, CA01, CA04, MA01, MA04, PA03, PA04, RA04, IN01, IN02, IN03, IN04 and IN05. The loading factors of measurement model is listed in Table 1. Based on parameters in Table 1 and Table 2, validity and reliability of measurement model can be analyzed. For the validity analyses this study convergent and discriminant validity. Convergent validity is based on the average variance extracted (AVE). AVE value of whole constructs is more than 0.500. It means that measurement model has good convergent validity. Discriminant validity is analyzed by using number in Table 2. The diagonally bold numbers are square root of AVE. They are higher than other listed numbers, it means measurement model has good discriminant validity. For reliability analyses this study uses internal consistency and composite reliability. Internal consistency reliability is expressed by Cronbach’s Alpha. Ideally value of composite reliability and Cronbach’s Alpha are more than 0.708. But according to rule of thumb (51), for exploratory research, if a construct or items has loading factor or Cronbach’s Alpha or composite reliability between 0.6 to 0.7, the construct or items is still allowed to be used in the model. Table 1 shows that Cronbach’s Alpha of Vigor, Mental Agility and People Agility are less than 0.6. But composite reliability of all dimension are higher than 0.60. It means that the model are good in composite reliability but lack of internal consistency reliability for some dimensions. Generally measurement model of this study is valid and reliable for modeling learning culture, learning agility and work engagement.

#### 4.2 Structural Model

The result of structural model analysis are (1) VIF Inner Model: Learning Culture – Work Engagement is 1.080. Learning Agility -Work Engagement is 1.080, and Learning Culture – Learning Agility is 1.000. All VIF values are less than 5. Those indicate that there is no colinearity problem in the structural model. (2) Table 3 shows the outer path coefficient of the construct and its dimensions. Learning Culture has score on Internal Integration (0.847) and on External Adaptation (0.881). Learning Agility
construct has the highest score on Result Agility (0.881) and the lowest score on Mental Agility (0.653). Work Engagement construct has the highest one on Dedication (0.875) and the lowest score of path coefficient on Vigor (0.807). All the loading factors are higher than 0.6.

Table 1: Validity & Reliability

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Outer Cronbach's Composite</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Agility</td>
<td>CA02 0.831 CA03 0.872 CA04 0.622</td>
<td>0.841</td>
</tr>
<tr>
<td>Mental Agility</td>
<td>MA02 0.777 MA03 0.872</td>
<td>0.683</td>
</tr>
<tr>
<td>People Agility</td>
<td>PA01 0.831 PA02 0.778 PA03 0.756</td>
<td>0.647</td>
</tr>
<tr>
<td>Result Agility</td>
<td>RA01 0.752 RA02 0.703 RA03 0.759</td>
<td>0.566</td>
</tr>
</tbody>
</table>

Learning Culture has positive and significant impact on Learning Agility and also impact directly and indirectly on Work Engagement. The indirect impact with loading factor is 0.155. Q2 of all constructs and dimensions are higher than zero, those indicate that the structural model has adequate predictive relevance.

4.3 Discussion

Learning Culture has positive impact on learning agility and work engagement directly and simultaneously. Learning culture promotes and facilitates the employees to learn, share and disseminate the knowledge all over the organization for achieving organizational successes. By developing learning culture in the organization through both internal integration and external adaptation process make the employees become more engaged and more agile in learning ability.

Engaged employee has more positive, fulfilling, work-related state of mind. They will be fully connected physically, cognitively and emotionally with the roles of job at the company (53). The stronger learning culture, the bigger pleasant state of total immersion employees experience in their work. It is characterized by time passing quickly and being unable to detach oneself from the job (Schaufler, 2013). The stronger learning culture, the deeper involvement of the employees in their work. It accompanied by feelings of significance and enthusiasm and, by a sense of inspiration and pride of the work (Schaufler, 2013). The stronger of learning culture, the bigger willingness to invest effort in their job. It is not being easily fatigued, and more persistence in the facing the difficulties (Schaufler, 2013).

The employees with the high level on learning agility are able to master new skills more rapidly, more often and with much greater impact than ever. They are also able to respond incredibly and quickly to change (28). The stronger learning culture, the higher ability of the employees to understand the situation quickly and generate idea or insight flexibly (32). The stronger learning culture in organization, the more eager and able the employees to dealing with diversity of people, the complexity of changes, the volatility

Learning culture strongly influences the employees’ positive attitude and engagement. The positive attitude included employees’ strong self-confidence, high job satisfaction and willingness to work hard, which is designed and facilitated organizational learning. The positive attitude is driven by the organizational learning culture, the bigger willingness to invest effort in their job. By developing learning culture in the organization through both internal integration and external adaptation process make the employees become more engaged and more agile in learning ability.

The employee’s work engagement is a reflective, active, and comprehensive view of employees’ passion towards their work, job involvement, and commitment. The employees with high engagement in work are more committed, invested, and dedicated to their jobs. The stronger learning culture, the bigger willingness to invest effort in their job. By developing learning culture in the organization through both internal integration and external adaptation process make the employees become more engaged and more agile in learning ability.

Table 4: Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path Coefficient</th>
<th>t-Statistics</th>
<th>p-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Learning Culture -&gt; Learning Agility</td>
<td>0.780</td>
<td>2.151</td>
<td>0.032</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: Learning Agility -&gt; Work Engagement</td>
<td>0.514</td>
<td>4.635</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Learning Culture -&gt; Work Engagement</td>
<td>0.284</td>
<td>1.977</td>
<td>0.048</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Figure 1: Measurement Model
of result, and the ambiguity of mental burden related to the changing (16).

4.4 Limitation & Future Research

This study is an exploratory research that aims to explore, not to confirm the theory. This research just want to make prediction about the structural model of learning culture, learning agility and work engagement. For the future research this study suggest some recommendation, such as: (1) using a larger size of sample. More than 300 respondents with involving more than 100 companies of oil palm plantation in Indonesia. And it may be better for modeling and statistical analysis to utilize Covariance Based SEM with LISREL or AMOS application. (2) using probabilistic sampling methods such as stratified random or cluster sampling in order the result of study could be more relevant to make generalized conclusion about IOPI, (3) improving internal consistency reliability or Cronbach’s Alpha of several dimension such as vigor, people agility and mental agility.

5. Conclusions

Learning culture - through processes of internal integration and external adaptation has positive impact directly on work engagement and learning agility. By developing learning culture in the organization, it could engaging the employee better and also enhancing their learning agility. Finally it could organizational intervention for strengthening the adaptability of human resource of the company in Indonesia oil palm industry in dealing with social, environmental and business challenges.

References

[45] Reveo TM, Gomes AD. The OLC Questionnaire : A Measure to Confirm the Theory. This research just want to make prediction about the structural model of learning culture, learning agility and work engagement. For the future research this study suggest some recommendation, such as: (1) using a larger size of sample. More than 300 respondents with involving more than 100 companies of oil palm plantation in Indonesia. And it may be better for modeling and statistical analysis to utilize Covariance Based SEM with LISREL or AMOS application. (2) using probabilistic sampling methods such as stratified random or cluster sampling in order the result of study could be more relevant to make generalized conclusion about IOPI, (3) improving internal consistency reliability or Cronbach’s Alpha of several dimension such as vigor, people agility and mental agility.


