Analysis of Employee Engagement in PT. Pupuk Kalimantan Timur, Indonesia

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Abstract. This research aims to rearrange employee engagement variables into the new constructs based on factor analysis method in PT. Pupuk Kalimantan Timur (PT. PKT). This company is a state-owned company in Indonesia that operated since 1977 and employs for about 2,500 employees. Using stratified random sampling and spread for about 384 questionnaires to employees in PT. PKT, gives a results that all the variables are valid, according to Pearson Correlation, with the results range from 0.618 to 0.90. Furthermore, Cronbach’s alpha also shows the acceptable range, means that all variables are reliable. At first, researchers identify eleven variables that influence the employee engagement; i.e. recognition & status, cash compensation & allowances, challenging work, learning opportunities, work/life balance, cooperation, work colleague, family friendliness, communication, performance & appraisal, and organization commitment (culture). In the end, there are only seven new factors: “Employee recognition”, “Interpersonal Support”, “Cash Compensation and Allowances”, “Work Motivation”, “Equal Opportunities”, “Corporate Culture”, and “Punishment”. This facts heading to the conclusion for the company to more concerned to recognize all of their employees, make a comfort work environment so that employee will improve their performance, giving a competitive compensation and allowances, make rewards so that they get motivated to do their best, an equal opportunities to all employee no discrimination, make a vision and mission that socialize to the employees, and make a clear regulation regarding punishment.

Keywords: Employee Engagement, Total Returns Theory, Development Dimensions International (DDI) Theory, PT. Pupuk Kalimantan Timur

1. Background

The challenge that most of companies face today is the competition to hire best employees and how to make them loyal to the company. According to Macey, Schneider, Barbera, and Young¹, engagement follows when employees have the capacity to engage, have a reason or the motivation to engage, have the freedom to engage, and know how to engage. In this research, researcher will focus on identify the variables that become the reasons or motivation of the employees to engage. Many previous studies mentioned that there are several motivational factors that influence the employee engagement in a company such as from cash compensation, non-cash benefits, fair treatment in office, fulfill their basic living needs, job security, regular rewards, creating an environment and culture to the employees to complete the tasks effectively and efficiently, etc.

However, studies about employee engagement that evaluate a company still a few. Most of the companies focus their research to improve the effectiveness of their productivity, how to increase their customer satisfaction or how to maximize their own profit. Whereas, employee engagement is one of the key aspects that influence the effectiveness of the productivity, customer satisfaction or profit maximization.

The majority types of company in Indonesia are either state-owned company or private-owned company. Compare to private-owned company that the main goals of business is for maximizing profit and reducing costs, state-owned company main goals is basically to fulfill the national consumption, giving an equal wealth to the stakeholders, and to achieve their own vision and mission. PT. Pupuk Kalimantan Timur (PT. PKT)² is one of state-owned company in Indonesia that operated in Bontang, East Kalimantan. Operated in fertilizer production, distribution and marketing PT. PKT supported by four ammonia plants and five urea plants that occupy a total of 493 hectares. First operated on 7 December 1977, now PT. PKT employs over 2,500 employees.

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This research is given a lot of benefits cause in the end it will provided a new arrangement of employee engagement variables into the new construct based on factor analysis and also conclusion and recommendation in order to improve employee engagement in PT. Pupuk Kalimantan Timur, Indonesia.

2. Conceptual Perspective

2.1. Total Returns Theory

According to Milkovich and Newman\(^3\), Total Returns Theory is the driver of employee engagement. The theory divided in to two main categories; total compensation and relational returns. Total compensation include cash compensation such as base pay, merit/cost of living, short-term and long-term incentives, and benefits such as income protection, work/life balance, and allowance. Base wage is the cash compensation that employee receive from employer. Base wage measured by the position where the employee work, also by the skills and value of the work that implement to the company. On the other hand, merit increases are given as increments to the base pay in recognition of past work behavior. Difference with merit pay, cost of living adjustments given by employer regardless of performance, the increase percentage will be equal to everyone. Last, short-term and long-term incentives as a variable pay that not increase the base wage pay, can suddenly change either increase or decline. At last, incentives are one-time payments, they don’t affect the overall labor costs so when the performance declines, employer do not have obligation to give the employee incentives.

Furthermore, there are also benefits that divided into three categories; income protection, work/life balance, and allowances. Income protection is one of the most common required. According to Milkovich and Newman\(^2\), in United States employers must pay into a fund that provides income replacement for workers who become disabled or unemployed. Employers also make half the contributions to social security. (Other half comes from employees’ deposit). While, work/life balance is rights to the employees for arrange their vacation plan, access to specific needs such as financial planning, drug counseling, referrals for child and elder care), and flexible work arrangements. Last, allowances commonly flexible and negotiable between the employer and employee, type of allowances such as housing, transportation, etc.

On the other hand, relational returns can be determined such as recognition & status, employment security, challenging work, and learning opportunities. Recognition can be seen as praise or amazed feelings, award (employee of the year), certificate, symbolize goods (rings, charter, etc), or stock owned program. Employee security can be define as a secure feelings that company would not be bankrupt in the future, the employee will have stable future career. One of employees consideration, while determine whether they want to work in a particular company or not, is about challenge in their work. A last category in relational returns is learning opportunities. Learning opportunities not only study in university in higher education such as, master degree or doctoral program but also in-house training, workshop, seminar, etc.

2.2. Employee Engagement by Development Dimensions International (DDI)

According Bernthal\(^4\), Employee feels engage when they find individual meaning, motivation in their work, receive positive interpersonal support and efficient work environment. Furthermore, Bernthal conclude those elements into several dimensions: individual value, focused work, and interpersonal support. Individual value is when employees feel engaged when they are able to make a unique contribution, get motivate while doing their job, experience empowerment, have fair treatment and have opportunities for personal growth. While, focused work is when employees more feel engaged when they have clear direction, performance accountability and efficient work environment. Furthermore, employees need to get inform from their colleges or from their supervisor about the consequence if they perform below standard or in other words punishment for poor performance. Lastly, interpersonal support is when employees feel engaged when they work in a safe and cooperative environment. “Safe” can be defined as an environment where employees can trust each other. All of them have the same vision and mission while working in the company. Furthermore, cooperative environment divided into three categories: cooperation with management, colleagues, and family friendliness.

3. Method
Total Returns Theory and Employee Engagement by Development Dimensions International (DDI) Theory are the main instruments to measure the factors in employee engagement. In this research, there are two main objectives. First, to rearrange employee engagement variables into the new construct based on factor analysis. Second, to provide conclusion and recommendation in order to improve employee engagement in PT. PKT, Indonesia.

In this research, researchers used questionnaire that consist of 33 questions that represent 11 different variables (i.e. recognition & status, cash compensation & allowances, challenging work, learning opportunities, work/life balance, cooperation, work colleague, family friendliness, communication, performance & appraisal, organization commitment/culture) and can be measured on a five-point Likert-type scale. The questionnaire also includes data profile of the respondents such as job position, age, sex, education background, and period of employed.

This paper first introduced the phenomenon of one of big companies in Indonesia regarding employee engagement, identified the possibility of motivation behind employee based on two conceptual perspectives. Moreover, researchers present the method and analysis and finally discuss the findings. In the end, there will be conclusion and recommendations for the company, other companies in Indonesia, and further researchers.

3.1. The Sample

Researchers implement the techniques of stratified random sampling. Each job position will be taken with the same proportion of the total sub population (job position). In order to calculate the sample, researchers choose to use Slovin Formula 5, with confidence level of 95% or in other words giving an error tolerance of 0.05.

<table>
<thead>
<tr>
<th>Job Position</th>
<th>Population</th>
<th>Percentage</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Manager</td>
<td>35</td>
<td>1.32%</td>
<td>5</td>
</tr>
<tr>
<td>Manager</td>
<td>136</td>
<td>5.14%</td>
<td>18</td>
</tr>
<tr>
<td>Supervisor</td>
<td>271</td>
<td>10.24%</td>
<td>36</td>
</tr>
<tr>
<td>Shift Supervisor</td>
<td>608</td>
<td>22.98%</td>
<td>80</td>
</tr>
<tr>
<td>Head of Team</td>
<td>679</td>
<td>25.66%</td>
<td>89</td>
</tr>
<tr>
<td>Trainee</td>
<td>917</td>
<td>34.66%</td>
<td>121</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>2646</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>348</strong></td>
</tr>
</tbody>
</table>

4. Data Analysis

The eleven factors that consist of thirty-three variables were analyzed using factor analysis. This method is to identify relations among big numbers of factors and in the end will be extract into new factors 6. First, researchers examine the validity that based on Pearson Correlation (one-tailed) in order to measure the legitimate of questionnaire. The results range for all variables are 0.618 to 0.90, means that all the variables are valid. Moreover, Cronbach’s alpha was computed for each factor. The alpha coefficient ranged from 0.751 to 0.849.

Second, researchers computed the value of Kaiser-Meyer-Olkin of sampling adequacy, which gave 0.92. It is indicates that the data were appropriate for factor analysis. Furthermore, the Barlett’s Test of Sprechity was significant (p = 0.000) which explained that the correlation matrix was suitable for factoring.

Third, observed the anti-image correlation. From variable one until thirty-three, the range is 0.842 to 0.964. It means that all the variables have a strong correlation each other.

Fourth, researchers performed a principal axis factoring with a varimax rotation. This step done, in order to see the factor after rotation. From this step, all variables examined by eigenvalues over, all variables that below 1 would be eliminated. At the end, only seven factors remaining that have been made extracted
explained 64.053 per cent of the total variance. Below this statement, there will be brief explanation about the new factors.

**TABLE 2: Employee Engagement – Principal Components Factor Analysis**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Variable</th>
<th>Construct</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Recognition</td>
<td>- Recognition and Status</td>
<td>Equal Opportunities</td>
<td>- Learning Opportunities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Work/Life Balance</td>
</tr>
<tr>
<td>Interpersonal Support</td>
<td>- Cooperation</td>
<td>Corporate Culture</td>
<td>- Communication</td>
</tr>
<tr>
<td></td>
<td>- Work Colleague</td>
<td></td>
<td>- Organization Commitment</td>
</tr>
<tr>
<td></td>
<td>- Family Friendliness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Compensation and allowances</td>
<td>- Cash Compensation and allowances</td>
<td>Punishment</td>
<td>- Organization Commitment</td>
</tr>
<tr>
<td>Work Motivation</td>
<td>- Challenging Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Performance &amp; Appraisal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The first factor labeled as “employee recognition” represent 36.713 per cent of total variance. In other words, this factor plays the highest role in employee engagement factor. The factor explains about employee that needs to get status, rewards, and achievements either from their supervisor or colleague. Compare to the previous factors there is no difference.

The second factor explains 6.009 per cent of the total variance, and labeled as “Interpersonal Support”. This factor represents the employee’s tendency to have a cooperative work environment. Compare, to the previous factors, this factor is combination between cooperation, work colleague, and family friendliness. While the previous factors, each of the factors stands as different factors.

The third factor, “Cash compensation and allowances”, explains 5.511 per cent of the total variance. All of the variables are based on the same factor that is “Cash compensation and allowances”. This factor expresses the engagement pretty much influence by compensation and allowances that given by the company. Compare to the previous factor there is no difference.

The fourth factor, marked as “Work motivation”, explains 4.801 per cent of total variance. This factor shows that employee feels more engaged if there is internal motivation such as rewards, opportunity to grow, and opportunity to learn in order to encourage them to give their best performance. Compare to the previous factors, this new factor is combination between challenge in work and performance and appraisal.

The fifth factor, “Equal opportunities”, explains 3.966 per cent of total variance. In general, it explains that engagement influence by the management culture whether they gives the same opportunity to all of the employees regarding learning opportunities, cooperation between colleague and supervisor, and equality to balance between the work life and social life or not. The previous factors identified that there is two differences factors; learning opportunity and work/life balance while in the new factor it compress into one factor called equal opportunities.

The sixth factor, “Corporate Culture”, explains 3.640 per cent of total variance. The statements in the questionnaire is commonly discuss about the workflow within the company, whether the communication is less distraction or not, the employee know what they should do, and the team efficient to use sources and time while doing the project. Compare to the previous factor, the new factor is combination between organizational commitment (culture) and communication.

The last factor, “Punishment”, explains 3.413 per cent of total variance. The statement in the questionnaire is regarding the management regulation to give warning or punishment to the employees if the employees having low performance. Compare to the previous factor, this factor is part of organizational commitment (culture).

5. Conclusion and Recommendation
In this research, there are seven main factors that explaining the employee engagement in PT. PKT, Indonesia. First, “Employee recognition”, holding the majority of all factors for about 36.713 per cent, means that engagement highly influenced by the employee that need recognition from supervisor and their colleague. Second, “Interpersonal Support”, employee feels more engaged if in they work in a cooperative work environment where between the employee and management has the same goals. Third, “Cash compensation and allowances”, this factor expresses that an engagement can achieve if the management gives competitive compensation to their employees. Fourth, “Work motivation”, it means that employees need internal motivation to encourage them give their best performance. Fifth, “Equal Opportunities”, means that employee will feels more engaged when the company give an equal opportunities for training, less hierarchical power, and no discrimination. Sixth, “Corporate Culture”, employee will feel more engaged when the workflow in the management clear and easily to be understand. The last factor is “Punishment”, employee feels more engaged when the management regulation is clear regarding to give warning or punishment.

In order to improve the engagement level of their employees, PT. PKT Indonesia should more concern to factors that mentioned above. This recommendation also can implement to other state-owned company in Indonesia. For further researcher, it is preferable to add another variables from the external factors so that the results will have a wider scope. Also, there are a lot of motivational or employee engagement theories that can be use as the instrument for questionnaire.

6. References


