Performance Appraisal Based on Employees Competence in Procurement Services Unit (Case of Area Semarang)

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Abstract. Human resources is a company or organization major capital that gives company high effectiveness values. Performance appraisal is an important aspect of an effective human resource management. Employee appraisal can help the company to determine the working conditions of its employee. Employee performance appraisal based on competency has not been assessing especially by procurement service unit in Semarang City’s Government and Diponegoro University. Therefore, needs to be weighted criteria to determine employee performance appraisal assessment component which is more important or otherwise. There are 6 variables determined based on Spencer Competence. The purpose of this research is to get the weight criteria for competence with ANP method and get the employee’s performance appraisal using rating scale. Analytic Network Process (ANP) is one method that can be used to measure the competency criteria weights involves the relationship between criteria. From the results of the ANP weighting obtained weight for Achievement and Implementation competency (0.1651), Helping and Human Services competency (0.3848), Leadership competency (0.0314), Managerial competency (0.0718), Cognitive competency (0.2982), and Personal Effectiveness competency (0.0487). Based on an assessment of 31 employers of procurement service unit showed that 11 employers have very high performance, 9 employees have high performance while the other 11 employees have adequate performance.

1. Introduction
Performance is the result or the overall success rate of a person during a certain period in performing tasks compared to those possibilities, such as a standard work, the target or targets or criteria that have been determined in advance and have been agreed [1]. The performance assessment is basically a key factor in order to develop an effective and efficient organization. The performance assessment is the process of evaluating how well employees perform their jobs when compared to a standard set, and then communicate this information to employees [2].

Competence is the underlying characteristics of a person related to the effectiveness of the performance of the individual who has a causal relationship or a causal criterion referenced, effective, or primary or superior performance at work or in certain situations [3]. Spencer Competence is inside and forever exist in a person's personality and be able to predict the behavior and performance broadly in all situations and job tasks. According to Spencer, there are 20 factors needed in order to improve productivity performance [4]. There are six criteria in spencer competences dictionary : First, criteria for achievement and action consists of achievement orientation, concern for order, initative and information seeking indicators. Second, criteria for helping and human services consists of interpersonal understanding and customer service orientation indicators. Third, criteria for leadership consists of impact and influences and relationship building indicators. Fourth, criteria for managerial consists of
developing others, directiveness, teamwork, and team leadership indicators. Fifth, criteria for cognitive consists of analytical thinking, conceptual thinking, and expertise indicators. Lastly, criteria for personal effectiveness consists of self control, self confidence, flexibility, and organizational commitment indicators. An assessment of competency needs to be done objectively, based on the performance of the existing employees within the organization, with evidence of employee mastery of knowledge, skills, values and attitudes as a result of learning. A unit in charge of handling the procurement for the agency or company referred to by the Procurement Services Unit (ULP).

According to Article 1 point 8 Presidential Decree No. 4 of 2015, mentions that the Procurement Services Unit, called the ULP is an organizational unit functioning government implement the Goods/Services in K/L/D/I is a permanent, independent or attached to existing units (www.lkpp.go.id). Some of the Procurement Services Unit (ULP) in the city of Semarang there are engaged in government and education, including Semarang government and University of Diponegoro ULP.

Based on a preliminary study of the interview to the chairman of University of Diponegoro ULP and Semarang City Government ULP has done, each ULP has never been conducting a performance appraisal of the employees, especially in the working group (Pokja). Besides the performance of the working group were divided into working groups because in addition they are also working on other tasks in the directorate respectively, cause less than maximum performance. Therefore, it is important to know what are the competencies that can be used as criteria for performance appraisal, and to conduct performance assessment weighting criteria to identify the components which are more important votes or otherwise.

Employee performance appraisal system by using Analytical Network Process (ANP). ANP is a development from AHP method, ANP is used to determine the weighting of the competencies working group's members are drawn from the spencer competency and rating scale for working groups grading system and comprehensive [5].

2. Literature Review

Analytical Network Process (ANP)

ANP is a general theory relative measurement used to reduce the ratio of the scale ratio of the composite priority individuals who reflect the relative measurement of the effect of the elements interacting with regard to the control criterion.6 Methods ANP has two kinds of linkages in the elements (inner dependence), which occurs when an element in a component / cluster affects the other elements in the component/the same cluster, and the linkages between the different elements (outer dependence) which occurs when an element in an component/cluster affects the other elements in the component/cluster different. While the purpose of ANP is knowing the overall effect of all the elements [6].

3. Method

Participants

This study was conducted in March-July 2016. In this study, two-part questionnaire data collection questionnaire part 1 of the weighting pairwise comparisons between spencer competency criteria. First part questionnaire respondents in this study is the decision maker. Questionnaire section 2 concerning the performance assessment to all existing employees in the Procurement Services Unit (ULP) with the rating scale of respondents to the questionnaire part 2 in this study a minimum of 30 people because this study included minimum correlational study sample was 30 subjects [7].

This research includes correlational because it is used to investigate the relationship between the measurement results of two different variables. Correlational research objective is to determine the level or degree of relationship between a pair of variables [8].
Study Design

The main steps undertaken in decision-making with ANP namely, designing ANP framework of the existing problems. ANP is a combination of the network criteria and sub-criteria that control the interaction with the network effects of the criteria and sub-criteria. ANP to design a framework needs to be done identifying elements and grouping elements in the same component.

The second step is to collect data through questionnaires pairwise comparisons. ANP in the number of respondents in the questionnaire is not used as a basis to determine the validity, but respondents who are experts in the field of the issues raised can determine the validity of the questionnaire results. ANP questions in the questionnaire form pairwise comparisons between elements in the component to determine which of the two elements has a dominant influence and how big the difference is.

This study used superdecision software to determine the weight of each criterion in the performance appraisal. In the super decision software data entered is the result of a pairwise comparison value using the formula of the geometric mean. Geometric mean is the average obtained by multiplying all of the data in a sample group, then root square with the amount of data, the results of the calculation of the geometric mean would turn into one value to then be included in data processing using Analytical Network Process (ANP) with superdecision software.

Calculation Formulas geometric mean for paired comparisons questionnaire, are shown in formula 1:

\[ g_{ij} = \sqrt[|m|]{\prod_{i=1}^{m} x_i} \]  

Formula explanation:
- \( g \) = geometric mean
- \( m \) = total sample
- \( \prod \) = equal to \( \Sigma \) where \( \Sigma \) is used to sum while \( \Pi \) is used for multiplication.
- \( x_i \) = sample value

Source: Sudjana [10]

The next step is to test the consistency. Consistency test is performed to determine the consistency of the answers to questionnaires filled out by respondents, a pairwise comparison matrix will be consistent when the CR value below 0.1. Tolerance to the consistency to 10% indicates adjustments to improve the consistency of comparison.

After the index value consistency across all criteria, sub-criteria and indicators is below 0.1 then continue at the stage of final weight calculation. The calculation of the final weights obtained by multiplying the value of the criteria, sub-criteria and indicators. Then to get the value of the performance of the employee, the values contained in the questionnaire part two questionnaires multiplied by the employee's performance appraisal final weight of each criterion.

After all the results of multiplying the final weight value and add it all for all the criteria that will be the final value of each employee. After obtaining the value of the calculation of the employee's performance. The resulting scores will be converted in accordance with the scale of the existing value to determine whether the employee's performance is at the standard rate is high or low. The scale of the performance appraisal can be seen in Table 1.

| No | Value | Category                  | Value interval |
|----|-------|---------------------------|----------------|
| 1  | A     | Very high performance     | 4,20 ≤ n ≤ 5,00 |
| 2  | B     | High performance          | 3,40 ≤ n ≤ 4,20 |
| 3  | C     | Appropriate standard performance | 2,60 ≤ n ≤ 3,40 |
| 4  | D     | Low performance           | 1,80 ≤ n ≤ 2,60 |
| 5  | E     | Non-effective performance  | 1 ≤ n ≤ 1,80   |

Source: Waryanto dan Milafati [11]
4. Result and Discussion

Based on the results of data processing by ANP obtained weight value of each competency criteria for performance appraisal criteria of achievement and action of 0.17 (17%) helping and human services criteria of 0.38 (38%) leadership criteria of 0.03 (3%) managerial criteria of 0.07 (7%) cognitive criteria of 0.3 (30%) and the criteria of personal effectiveness of 0.05 (5%).

Helping and human services criteria is the most important factor in carrying out their duties as members of the working group (WG) ULP required to meet the demand of 'customers' in which the user is a customer. In undergoing the work as the working group not only understand the technical problem of providing goods/services, but how to be an organizational unit that serves the public in providing goods and services and is responsible for utilizing the public funds available to help the performance of the institutions in which the ULP is attached.

The second most important criterion is cognitive. Because a working group is required to have a certificate of procurement to be involved in the selection process of providers. Each working group shall have the skills and ability to understand the procurement documents for procurement of each work package for a diverse background of technical competence. Each member of the working group is expected to dominate certain fields professionally, diversity element of skill can make the working group as a unit strong and complete. As a working group should be in accordance with the characteristics of the work undertaken. Suppose in the procurement of buildings, working group members are assigned are expected to have expertise in the techniques of building or civil engineering, or in the procurement of equipment hospitals expertise required is knowledge of the types of existing tools, in addition to the ability to know which providers that have the potential to meet the existing demand.

The third most important criteria are achievement and action. This marks on some kind of job competence proactive spirit of achievement and has an important position in the employee's performance. This factor is a factor that must be owned working group members to do the job as assess the qualifications of providers of goods/services and evaluate the administrative, technical and price of the bids. For example in doing their jobs working groups are expected to perform a variety of approaches such as marketing, supply chain. How to plan a supply of goods / services, anyone can follow and be able to compete as a provider and how to deal with the risk incurred. These criteria also ranks third on Nurmianto’s [12] research, especially in the competence and proactive spirit of achievement. This marks on some kind of job competence proactive spirit of achievement and has an important position in the employee's performance.

The fourth most important criterion is managerial. Competence of teamwork is one of the most important elements in the management, because cooperation is the efforts of a group of people to achieve the same goal. It is just like the study of Maulani [13], where the managerial criteria is ranked fourth, the competence of teamwork is one of the most important elements in the management, because cooperation is the efforts of a group of people to achieve the same goal.

The purpose of teamwork is to deal with various problems to be solved and require compactness in employee performance. In doing his job, working groups formed in the odd numbered teams. Jobs working groups divided every member fairly and each individual has the right to decide independently. Therefore the decision of the working group must be the decision of at least half the members of the working group are odd numbered members.

The fifth most important criteria is personal effectiveness. On these criteria are competence self-control, confidence, flexibility, and commitment to the organization. This criterion is the nature and the basic attitude which must be owned by an employee to do the job. The criteria with the lowest weight is leadership. On these criteria are competence to organize awareness and establish a working relationship. As a working group member of ULP capabilities such as lead and coordinate the existing work on the ULP is not needed.

The results of the performance appraisal is obtained by multiplying the final weights obtained from the ANP criteria with a value rating scale for employees based on these criteria. Furthermore, the sum of the value of competences has calculated its weight in order to obtain a value for the overall employee competence criteria. After obtaining the value of the calculation of the employee's performance. The
resulting scores will be converted in accordance with the scale of values to determine the level of employee performance. Value of employee performance can be seen in Table 2.

| No | Participant | Total Score | Value Scale | Explanation          |
|----|-------------|-------------|-------------|----------------------|
| 1  | R1          | 4.71        | A           | Very High Performance|
| 2  | R2          | 3.27        | C           | Standart Performance |
| 3  | R3          | 3.12        | C           | Standart Performance |
| 4  | R4          | 3.91        | B           | High Performance     |
| 5  | R5          | 4.53        | A           | Very High Performance|
| 6  | R6          | 4.05        | B           | High Performance     |
| 7  | R7          | 3.10        | C           | Standart Performance |
| 8  | R8          | 4.93        | A           | Very High Performance|
| 9  | R9          | 4.74        | A           | Very High Performance|
| 10 | R10         | 4.04        | B           | High Performance     |
| 11 | R11         | 4.00        | B           | High Performance     |
| 12 | R12         | 3.16        | C           | Standart Performance |
| 13 | R13         | 3.38        | C           | Standart Performance |
| 14 | R14         | 4.03        | B           | High Performance     |
| 15 | R15         | 4.75        | A           | Very High Performance|
| 16 | R16         | 3.33        | C           | Standart Performance |
| 17 | R17         | 3.28        | C           | Standart Performance |
| 18 | R18         | 3.96        | B           | High Performance     |
| 19 | R19         | 4.72        | A           | Very High Performance|
| 20 | R20         | 4.72        | A           | Very High Performance|
| 21 | R21         | 4.25        | A           | Very High Performance|
| 22 | R22         | 4.06        | B           | High Performance     |
| 23 | R23         | 4.78        | A           | Very High Performance|
| 24 | R24         | 4.32        | A           | Very High Performance|
| 25 | R25         | 4.39        | A           | Very High Performance|
| 26 | R26         | 3.38        | C           | Standart Performance |
| 27 | R27         | 3.20        | C           | Standart Performance |
| 28 | R28         | 3.15        | C           | Standart Performance |
| 29 | R29         | 3.78        | B           | High Performance     |
| 30 | R30         | 3.39        | C           | Standart Performance |
| 31 | R31         | 3.84        | B           | High Performance     |

5. Conclusion

Based on this research can be concluded:

1. Weighting is done by Analytical Network Process (ANP) using software superdecision, of weighting performed helping and human services a top priority criteria in employee performance with a weight of 0.38. Criteria second priority is the Cognitive and weighs 0.30. The third is the criterion Achievement and Action with weights of 0.17. Fourth is the Managerial criteria with
weights of 0.07. Next is the Personal Effectiveness criteria with a weight of 0.05. Criteria for the leadership to the lowest priority with a weight of 0.03

2. The performance assessment is done by using the rating scale questionnaire with 31 respondents. Respondents are members of the working group of the Procurement Services Unit (ULP) and Semarang City Government Procurement Service Unit (ULP) Diponegoro University. The results of the assessment working group members have a range of ratings between 3.10 up to 4.93 on a scale of 1.00 up to 5.00. From the results of the assessment are categorized into grading scale, with the yield 11 working group members currently on the scale of values A (Very High Performance), 9 members of the working group are on a scale of grades B (High Performance) and 11 members of the working group are on a scale of grades C (Standard Performance).

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