

Employee Performance Evaluation Using The AHP With Expert Choice Software (Case Study: PT. Kereta Api Indonesia)

Qoriani Widayati

Jl. Jend. A. Yani No. 12 Plaju, Palembang, Indonesia

E-mail: qoriani.ubd@gmail.com

Abstract

Performance measurement should be performed to determine the performance that can be achieved by every employee . Performance measurement is conducted by companies affected by several criteria , such as Integrity , Professional , Orientation Toward Safety , Innovation and Innovation Of Service . Performance measurement standards at PT Kereta Api Indonesia (PT KAI) using RAPI . And most recently using Competency Assessment Form (FPK) is conducted regularly every 6 months study aims to Finding criteria in performance assessment . To calculate performance measurements using AHP (Analytical Hierarchy Process) with the help of Expert Choice software . The conclusion is a comparative assessment between FPK and RAPI , FPK weight to 64.1 % and 35.9 % RAPI . Then the decision can be taken is the main criteria Itegritas FPK , orientation towards service , innovation , orientation towards Safety and Professional .

Keywords: Performance, AHP, Expert Choice, Employee

Introduction

The quality of human resources is one of the factors necessary to increase the productivity performance of an agency. It is therefore necessary human resources that have high competence as a skill or competence will be able to support an increase in employee performance.

Performance evaluation should be performed to determine the performance that can be achieved by every employee. With the performance evaluation process achievements every employee with excellent value, well, pretty or not can be known. Performance appraisal is important for every employee as useful for the company and to establish further policy actions.

For organizations or enterprises themselves, the results of the assessment and its role is very important in making decisions about various things, such as the identification of the needs of education and training programs, recruitment, selection, induction programs, placement, promotion, reward systems, and various other aspects of the resource management process human resources effectively. This is what causes the performance assessment team must be very clever to choose which employees they will choose in accordance with the criteria desired by the company.

PT KAI as a service company can not be separated from the variables existing performance appraisal above. Where the company has employees who have expertise in their respective fields. In the era of globalization is every employee at PT KAI is required to work as well as possible with the level of technical skills , conceptual skills , and interpersonal relationship skills of the employees . So it can keep track of and can anticipate competition from outside the company.

Performance measurement standards at PT KAI to use RAPI. And most recently using Competency Assessment Form (FPK) is done on a regular basis is once every 6 months , but in practice this is still not optimal because in doing Assessment there are procedures that have not been implemented properly . Based on the results of interviews with leaders can be seen that the procedure can be said to be happening at this time is still not optimal. Difficult because of the performance appraisal of employees of PT KAI is in the unit or different divisions especially those in areas far from the central office that led to the assessment team had difficulty in assessing and causing merely a subjective assessment.

Material and Methods

Research Method

In this research we used descriptive research because of the problem is being conscientious, this research based on the facts that occurred in the performance of employees at PT KAI

Data Collection Methods

In doing research to obtain data and information, the method used in the data collection process is done as follows:

1. Interview Method
2. In this method the activities carried out are done frequently asked questions directly related to the employee in the employee performance appraisal process. With this method the authors melakukan question and answer to the Human Resources Manager as an official employee performance evaluation.
3. Observation Method
In the method of data collection researchers conducted with direct observation and recording in order to study the problem lies there and here also made direct observations of the Human Resources Manager as an official employee performance appraisal.
4. Documentation Method
In this method the authors took data from PT KAI. The data obtained include the calculation of the employee's performance

Performance Measurement with the AHP method

Measurements on the performance needs to be done to find out if there are performance deviations during the implementation of the plan has been determined, or whether the performance can be carried out according to the schedule specified time, or whether the results of the performance has been as expected. Appropriate performance measurement can be done by:

1. Ensure that the desired customer requirements have been met,
2. Seek to create comparative performance standards,
3. Seek distance for people to monitor the level of performance,
4. Establish the importance of quality issues and determine what needs priority attention,
5. Avoid the consequences of poor quality,
6. Consider the use of resources,
7. Seek feedback to drive business improvement. Wibowo (2007:320).

Characteristics of performance measurement include: first, to accurately measure the performance of key variables. Second, including a comparative basis to help a better understanding of the performance levels shown. Third, collected and distributed by time. Fourth, it can be analyzed at the macro and micro, and the fifth is not easily manipulated to achieve the desired results.

Thereby, as a guide to define the following performance measures Armstrong and Baron, 1998:282 in Wibowo (2007:324):

- a. Dimensions should be related to outcomes and behaviors that can be observed,
- b. The result must be within the control of the team or individual, based on agreed targets,
- c. Competencies are behavioral requirements must be defined and was agreed,
- d. The data must be available for measurement,
- e. Size must be objective.

Analytical Hierarchy Process (AHP)

Analytical hierarchy process is a functional hierarchy with the main input of human perception. The existence of a hierarchy allows the complex problem solved or not structured in sub-sub-problems, and makes them into a form of hierarchy. In a settlement with AHP there are several principles that must be understood, among others (Kusrini, 2007:133):

1. making hierarchy
Understand complex systems by breaking an advanced bias supporting elements, arrange the elements in the hierarchy and combine or synthesize.

2. Assessment criteria and alternatives

Criteria and alternatives is done by pairwise comparison. According to Saaty (1998), to assess the importance of the elements used comparative quantitative scale of 1 to 9

Table 1 paired comparison rating scales

Rating	Definition
1	Equally likely occurrence
3	Moderately likely occurrence
5	Strongly likely occurrence
7	Very strongly likely occurrence
9	Extremely strongly likely occurrence
2,4,6,8	Intermediate value
Reciprocals of the above	If for criterion x, option A has a rating of one of the above when compared to option B (RXAB), then option B has the reciprocal rating when compared to option A (RXBA)

3. *Synthesis of priority*

And alternatives for each criterion, pair wise comparisons need to be done. Comparison of the relative values of all alternative criteria adapted to bias the judgment has been determined to produce weight and priority. Weights and priorities calculated by manipulating the matrix or through the completion of mathematical equations.

5. *Logical Consistency*

Consistency has two meanings. First, similar objects can be grouped according to the uniformity and relevance. Second, regarding the level of relations between objects which are based on certain criteria.

Amborowati (2012) *Analytical Hierarchy Process* (AHP) is a superior method to select the activity that competes or many alternatives based on certain criteria. Criteria can be quantitative or qualitative, and even quantitative criteria dealt with fondness structure decisions rather than by number.

Structure of an AHP model is a model of a best tree. There is a single destination at the top of the tree that represents the purpose of decision-making problems. One hundred percent of the weight of the decision and at this point. Directly below is the objective criteria indicating the point of the leaf, both qualitatively and quantitatively. Weight goal should be divided between the points criteria based on rating.

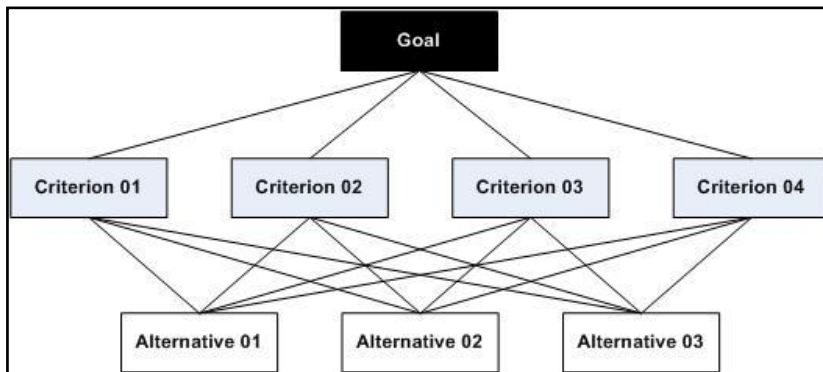


Figure 1 AHP hierarchy

Weighting of each criterion is 100% divided by the weight of the points criteria based on rating. Each alternative compared to each criterion. From the results of research on a number of criteria that can be used, namely: Integrity, Professional, Orientation to Safety, Innovation and Innovation of the Ministry. The following table lists the criteria used

Table 2 explanation of Criteria

Criteria	Behavioral indicators
integrity	<ol style="list-style-type: none"> 1. Honest in words and actions, ememberikan information based on the data available and the fact that there was, dare to admit a mistake to say what is right 2. Consistent in thought, words and behaviors, implementing decisions or agreements have been made 3. Fair in treating others, gave the fair valuation based on facts and not picky 4. Dedicated to the company, working wholeheartedly to complete the task and willing to do more for the betterment of the company 5. Trustworthy in carrying out appointments and tasks, job implement and comply with applicable regulations, even when not under supervision
professional	<ol style="list-style-type: none"> 1. Understanding the basic knowledge conceptually and technically on the functions and responsibilities 2. Have extensive knowledge and insight related to the functions, duties and responsibilities 3. Apply the concepts and technical knowledge in carrying out the functions, duties and responsibilities 4. Understanding the relationship between the functions, duties and responsibilities with other functions within the company 5. Understanding the linkages between the functions, duties and responsibilities with the interests of the company and the community
Safety Oriented	<ol style="list-style-type: none"> 1. Understanding the regulatory agencies, systems and procedures relating to the duties and responsibilities 2. Understanding the rules and regulations regarding safety 3. Work based on the official rules, systems, procedures and safety rules that apply 4. Show concern for the creation of a safe working environment and safe 5. Maintain the security of company assets nkemungkinan damage, loss and other losses.
innovation	<ol style="list-style-type: none"> 1. Propose ideas / new approaches related to expertise 2. Make improvements that will be useful in the workplace

	3. Implement innovative change related to workplace 4. Memeiliki extensive knowledge relating to their work 5. Proposed the idea / approach is most relevant to their work
Service Innovation	1. Looking for information about customer needs 2. Shows attention to the needs, problems and customer complaints 3. Provide information to customers about the progress or obstacles in the process of problem solving 4. Provide clear and detailed information about products, systems and procedures to increase customer awareness about what they expect 5. Accommodate a request or complaint to the right people and make sure it is handled properly

Result and Discussion

Assessment Criteria Hierarchy

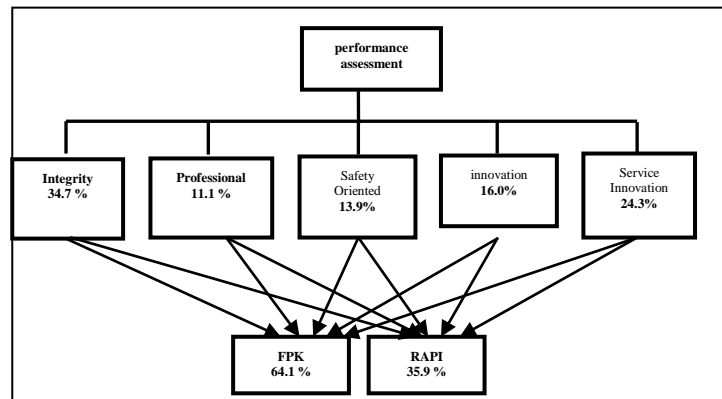


Figure 2 Assessment Criteria Hierarchy

Processing Results Data with Expert Choice

Table 3 Results of processing Criteria

Criteria	weight	method of Assessment	weight
integrity	0.347	FPK	0.750
		RAPI	0.250
Service Innovation	0.243	FPK	0.667
		RAPI	0.333
innovation	0.160	FPK	0.250
		RAPI	0.750
Safety Oriented	0.139	FPK	0.750
		RAPI	0.250
Profesional	0.111	FPK	0.667
		RAPI	0.333

Processing of the results obtained using expert choice then the weight ratio between the assessment and the RAPI FPK, FPK weight to 64.1% and 35.9% RAPI. Then the decision can be taken for the performance assessment is the main criterion FPK with Integrity, professional, Innovation, Safety oriented and service innovation.

Implementation results of the Expert Choice

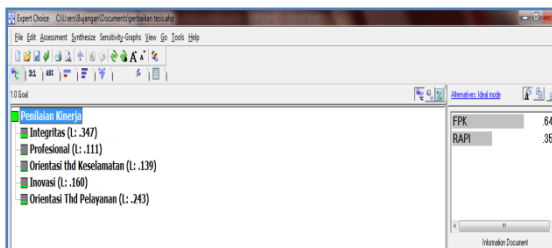


Figure 3 The weight of each criteria

From the picture above that the assessment obtained by using FPK has a greater weight is 0.641 compared with NEAT which obtained a weighting of 0.359. Of the weighting in the expert choice to display the chart as follows

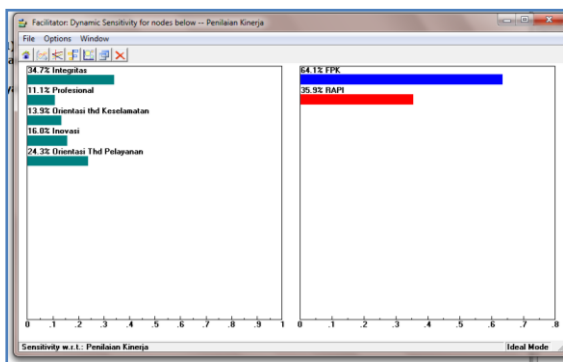


Figure 4 Dynamic graph

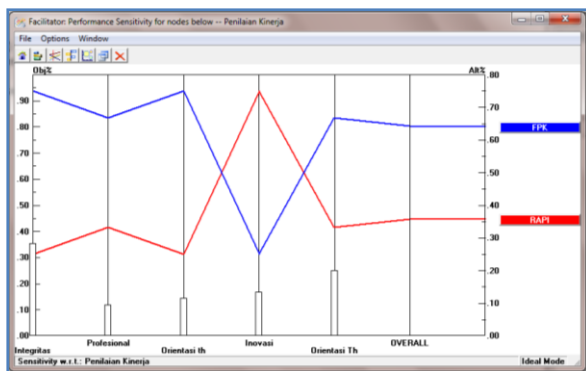


Figure 4 Performance graph

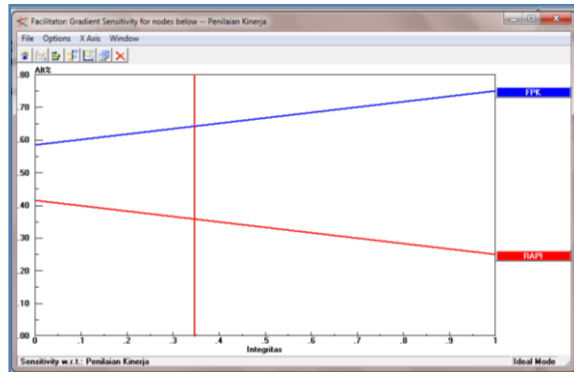


Figure 5 Head to Head Graph

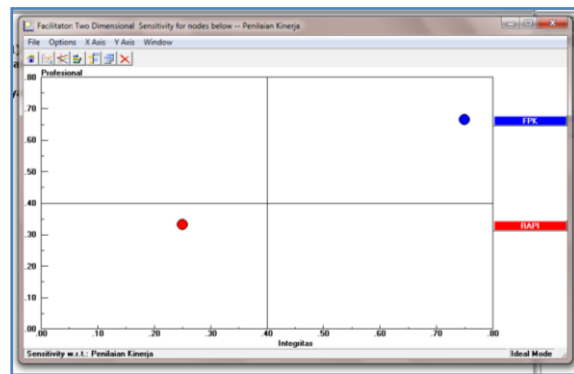


Figure 6 2D graph

Conclusion

The conclusion is the comparison between the assessment Form Performance Assessment (FPK) and RAPI, FPK weight to 64.1% and 35.9% RAPI. Then the decision can be taken is the main criteria Integrity FPK, professional, Innovation, Safety oriented and service innovation.

References

- Amborowati, Armadyah.n.d. *Sistem penunjang keputusan pemilihan Perumahan dengan metode ahp menggunakan Expert choice*. http://p3m.amikom.ac.id/.../04%20-20AMIKOM_Yogyakarta... (diakses 2 maret 2012).
- Kristanto, Andri. 2008. *Perancangan Sistem Informasi dan Aplikasinya*. Gava Media, Yogyakarta.
- Kusrini, 2007. *Konsep dan Aplikasi Sistem Pendukung Keputusan*. Andi, Yogyakarta.
- Wibowo. 2007. *Manajemen Kinerja*, PT Rajagrafindo Persada. Jakarta.
- Wirawan.2009. *Evaluasi Kinerja Sumber Daya Manusia*, Salemba Empat, Jakarta.