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Human resource scorecard based human resource (HR) assessment system design

Ismail , H Nasution, and M T Sembiring

Industrial Engineering Department, Universitas Sumatera Utara, Indonesia.

Email: Ada_ismail2013@yahoo.co.id

Abstract. The performance appraisal system in the HR section of PT XYZ is still conventional based on attendance discipline indicators, timeliness of completion of tasks, the accuracy of the outcome of task completion, team work and initiative. The existing performance appraisal system has not been able to accommodate these HR capabilities. This study aims to design an HR performance assessment system with Human Resource Scorecard approach. The method used with Human Resource Scorecard approach is formulated based on vision, mission, corporate culture, business actors and business paradigm into 4 perspectives of Human Resource Scorecard namely financial, customer, internal business process and learning and growth. The performance criteria of lagging indicator and leading indicators are analyzed based on DOCS (Degree of Compliance to Standard). The results of the design are 11 HR strategy, 34 Key Performance Indicator (KPI), which consists of 14 lagging indicators and 20 leading indicator. The leading performance indicator measurement is 71% greater than the lagging indicator of 70.3%. The results of priority analysis of short-term human resource performance improvement with Analytical Hierarchy Process (AHP) approach result 4 proposals of lag indicator main priority and 1 main priority suggestion of lead indicator.

1. Introduction

Seeing the rapid development of the industrial world into the era of global competition, then one of the factors that determine a company has a high competitiveness is the intangible assets, such as human resources (HR). Therefore, human resources that have competence and high discipline are needed that can support the improvement of employee performance. The company's success is measured by the company's ability to achieve its expected goals in both growth and survival for both short and long term.

Human Resource Scorecard is used to measure HR contributions in the success of the company's strategy by using the Analytical Hierarchy Process (AHP) and Objectives Matrix (OMAX) methods, then analyzing the results with the Traffic Light System method [8, 7, 14]. In PT Bank XYZ, human resource performance measurement by using Human Resources Scorecard can assess the performance of activity factors (leading indicators) with the target factor (lagging indicator) to see the balance between the business with the target that has been achieved for each position [5]. In the oil and gas company, priority setting of strategic targets and Key Performance Indicator (KPI) is performed using Analytical Network Process (ANP) [6]. Human Resource Scorecard at PT JB is designed based on Fuzzy method [10]. Human Resource Measurement with Balanced Scorecard approach is based on innovation, learning and growth perspective [3]. HR balanced scorecard can be used as a tool to improve hospital performance, especially in the community sector in India. It is very common in India that hospitals still need a lot of information to provide minimum facilities [12]. The HR scorecard can be used to assess the extent to which the contribution of human resource functions to the success of the firm is due to the use of measures of success that can be monitored at any time by the management and management of the company [2]. The HR performance assessment should thoroughly assess the behavior or work of the assessed employees. The performance appraisal process should be able to identify performance standards, measure criteria used for conducting assessments, and provide



feedback to employees on their assessment results to improve future performance and improve performance that is not compliant with standards [13].

This research formulates strategic goals based on vision, mission, corporate culture, business actors and business paradigms into 4 Human Resource Scorecard perspectives first. Human Resources Scorecard is integrated with Analytical Hierarchy Process (AHP) which aims to determine the criteria weight and priority scale improvement of performance indicators. then analyzes performance assessments based on DOCS (Degree of Compliance to Standard) to assess the balance of target factors (lagging indicators) and activity factors (leading indicators).

2. Methods

The research method used is descriptive research conducted to obtain facts from the existing symptoms and seek information factually to get the truth [11]. The stages in the design of performance assessment systems based on Human Resource Scorecard are:

1. Develop an objective strategic map of human resources through Focus Group Discussion (FGD) with the company [1].
2. Developing Lagging and Leading performance indicators through Focus Group Discussion (FGD) with the company [4].
3. Measurement of HR performance by Analytical Hierarchy Process (AHP) method using weighted questionnaire [9].
4. Performance appraisal conducted by employees of the leadership of the HR department is considered to comprehensively comprehend the activities of the company both in terms of management and operational. In conducting HR performance analysis, this study uses performance criteria analysis based on DOCS (Degree of Compliance to Standard) for lagging indicators and leading indicators.

The flow chart in conducting this research so that it becomes a clear procedure or steps can be shown in Figure 1.

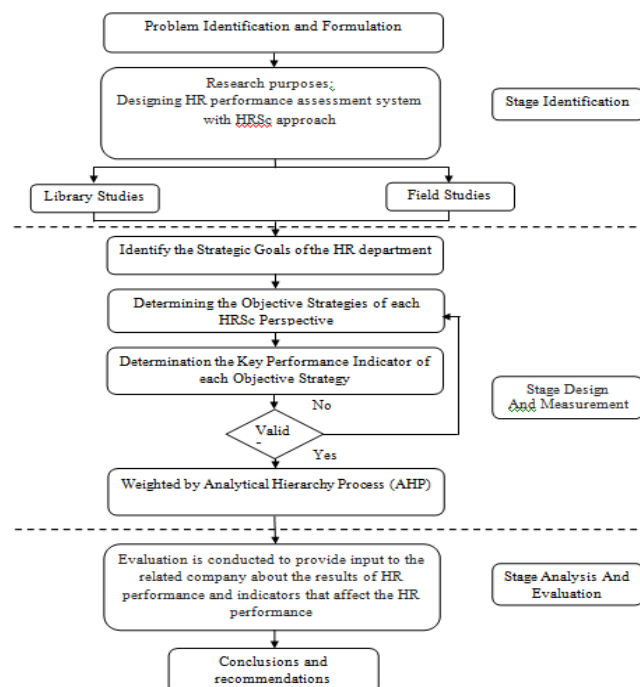


Figure 1. Research Flow Chart

3. Results and Discussions

3.1 Human Resources Performance Measurement

This performance measurement is carried out by employees who are part of the HR department who are considered to comprehensively understand the company's activities both in terms of management and operations. Performance assessment results for employee implementing HR section can be seen in table 1 and table 2 below:

Table 1. Lagging Performance Indicators

No	KPI	Weight (%)	Actual Performance	Performance Index	Top Performance	GAP
	(1)	(2)	(3)	(4) = (2) x (3)	(5) = (2) x value 5	(6) = $\frac{[(4) - (5)]}{(5)} \times 100$
1	Financial					
	Reduce the cost of HR management	12.5%	3	37.5	62.5	
	Increase employee productivity	12.5%	3	37.5	62.5	
2	Customer					
	Increase employee competence	6.9%	4	27.6	34.5	
	Increase employee satisfaction	2.8%	4	11.2	14	
	Improve employee discipline	7.6%	3	22.8	38	
	Increase employee responsibilities	7.6%	3	22.8	38	
3	Internal Bussines Process					
	Improve the correspondence process	4.2%	3	12.6	21	
	Implement a transparent performance appraisal system	4.2%	3	12.6	21	
	Improve employee welfare	4.1%	5	20.5	20.5	
	Minimize work accidents	3.2%	5	16	16	
	Improve occupational health	5.1%	5	25.5	25.5	
	Improving K3 supervision of employees	4.1%	4	16.4	20.5	

4	Learning and Growth				
	Improve training in accordance with the training need analysis	12.5%	3	37.5	62.5
	Improving employee commitment to corporate culture	12.5%	4	50	62.5
	Total	100%		350.5	499
	DOCS (Degree Of Compliance to Standard) = 70.3%				

The result of performance appraisal for lagging indicator to employee of HR department based on DOCS (Degree of Compliance to Standard) reached 70.3%. Shows that performance is still in good category.

Table 2. Leading Performance Indicators

No	KPI	Weight (%)	Actual Performance	Performance Index	Top Performance	GAP
	(1)	(2)	(3)	(4) = (2) x (3)	(5) = (2) x value 5	(6) = ((4) – (5))/((5)) 100
1	Financial					
	Conduct training cost savings	1.5%	3	4.5	7.5	
	Make cost savings overtime	1.7%	3	5.1	8.5	
	Timely completion of results and time	15.7%	3	47.1	78.5	
	Sorting out jobs with priority scale	6%	4	24	30	
2	Customer					
	Create training according to training need analysis	3.5%	3	10.5	17.5	
	Decreases the service error rate	7.7%	4	30.8	38.5	
	Create employee attendance report	6%	5	30	30	
	Provide reward and punishment for absenteeism	7.7%	4	30.8	38.5	
3	Internal Bussines Process					
	Improve employee skills	3.4%	4	13.6	17	
	Increase innovation in service process	3.1%	3	9.3	15.5	

	Create a performance appraisal report with an integrated information system	6.2%	3	18.6	31
	Creating regular reports jamsostek	0.8%	5	4	4
	Perform regular K3 testing	3.1%	5	15.5	15.5
	Carry out K3 training for employees	3.3%	4	13.2	16.5
	Carry out regular sports activities	1.1%	5	5.5	5.5
	Reduce overtime hours	0.7%	5	3.5	3.5
	Conduct regular K3 inspections at the company	3.3%	4	13.2	16.5
4	<i>Learning and Growth</i>				
	Reporting employee training needs	3.2%	3	9.6	16
	Provide punishment to non-trainees	4.5%	3	13.5	22.5
	Conducting socialization about corporate culture	9.7%	3	29.1	48.5
	Aligning corporate culture and performance appraisal systems	7.6%	3	22.8	38
	Total	100%		354.2	499
	<i>DOCS (Degree Of Compliance to Standard) = 71%</i>				
					-29

The result of performance appraisal for the leading indicator of the HR executing employee based on the DOCS (Degree of Compliance to Standard) is 71%. Shows that performance is still in good category.

3.2 Gap Lag Indicator and Lead Indicator

This method aims to evaluate the difference between the employee's current performance position and the desired employee performance position or the expected upper management level. This results in the development of specific strategies and resource allocations to close the gap. In the gap analysis it is necessary to pay attention to the minimum demands that must be met by employees and these values are determined by the management [4].

Performance criteria analysis is based on DOCS (Degree of Compliance to Standard) for lagging indicators and leading indicators. The results of leading performance indicator performance is greater than lagging indicator. However, this is not a long-term problem because the performance balance is formed close to balanced conditions because both are in the good category. The following is a figure 2 depicting the HR performance balance.

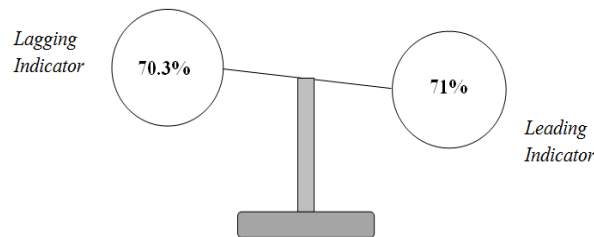


Figure 2. Balance of HR Performance

If the lagging indicator performance is far better than the performance of leading indicators, this indicates that the achievement of lagging indicators is more based on luck or chance, because the achievement is not accompanied by the achievement of good leading indicator performance. The company can not continue to depend on the luck factor, because not always the luck factor will accompany any activity undertaken. Therefore, if this condition occurs then the company must improve the performance of the process to support the outcome of the expected results by the company.

If the performance of leading indicators is much better than the performance of lagging means the process to achieve the expected results has not been on target, because lagging indicator is poor or below the target. Conditions like this also harm the company, because this means that the process undertaken by the company to achieve the target company was in vain because the end result is expected by the company can not be achieved. Therefore, the company must think about the right process of the target to be done so that the final result is achieved well.

3.3 Priority of Human Resources Performance Improvement

The survey results made reducing HR management costs, increasing employee productivity, improving training in accordance with need analysis training and increasing employee commitment to the corporate culture, topping the list with a weight of 0.125. This shows that the survey results are in line with the company's short-term company goals in an effort to increase HR efficiency in all fields in 2018. Here is a figure 3 that illustrates the priority of the lagging indicator.

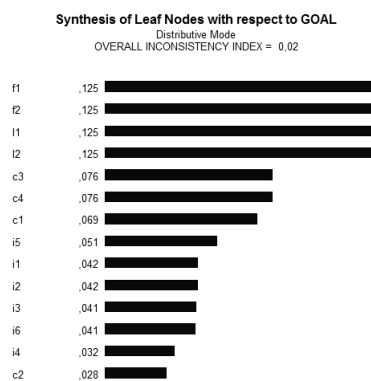


Figure 3. Priority Lagging Indicators

The results of the survey made the completion of the exact tasks of the results and time occupied the top priority with a weight of 0.157. This shows that the survey results are in line with the efforts that must be done by employees in an effort to reduce the costs of HR management, increase employee productivity, then can improve training in accordance with training need analysis and increase employee commitment to the corporate culture to achieve efficiency in all fields in 2018. Here is a figure 4 that illustrates the priority of the leading indicator.

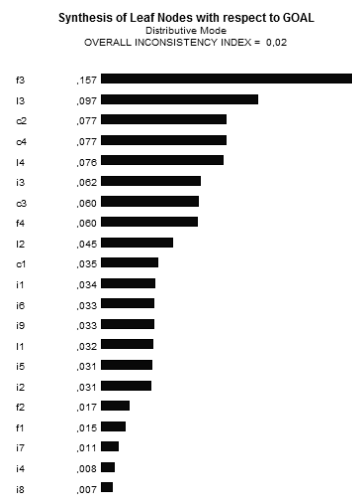


Figure 4. Priority Leading Indicators

4. Conclusions

The results of the HR performance assessment system design with the Human Resource Scorecard approach to the HR section of PT XYZ are 11 HR strategies, 34 Key Performance Indicators (KPI), which consist of 14 lagging indicators and 20 leading indicators. The results of leading performance indicator measurement is 71% greater than the lagging indicator of 70.3%. The performance criteria interval based on DOCS percentage are: 85% - 100% = very good, 69% - 84% = good, 53% - 68% = moderate, 37% - 52% = bad, 1% - 36% = very bad. However, this is not a long-term problem because the performance balance is formed close to balanced conditions because both are in the good category. The results of priority analysis of HR performance improvement in the short term using the Analytical Hierarchy Process (AHP) method with the help of expert choice software resulted in 4 proposals for the top priority lag indicator with a weight of 0.125. And 1 proposed top priority indicator lead with a weight of 0.157.

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