

Research on Performance Assessment of Y Enterprises Based on KPI

Xiuping Wang^a and Wenyi Yao^{b,*}

Jiangsu University of Science and Technology, Zhenjiang, Jiangsu Province, China

^a email: 744145488@qq.com, ^b email: 382301198@qq.com

*corresponding author

Keywords: Performance Appraisal; KPI; Shipbuilding Industry

Abstract: Focusing on the strategic objectives of Y Company, this paper builds a sound performance appraisal system for Y Company by referring to the concept of balanced scorecard and the content of key performance indicator method. Based on this appraisal system, Y Company can effectively transform and implement its strategic objectives.

1 Introduction

In recent years, the country requires to create a good environment for the innovation and development of the shipping industry. In this environment, the establishment of a good performance appraisal system is crucial to the development of shipbuilding enterprises.

Foreign scholars started the research on performance appraisal earlier, one of the most widely used Performance appraisal theoretical systems is the Key Performance Index method, which has been deeply studied by foreign scholars. Yoon-HoK (2015) analyzed the impact of performance appraisal on employees, and proved that a scientific and reasonable performance appraisal system was conducive to improving employees' happiness and sense of achievement[1]. Dong nuan (2015) pointed out that the particularity of the electric power industry determines that enterprises inevitably had a big problem in management[2]. Hu zhou (2016) believed only with strong performance management awareness can managers accurately grasp the positioning of employee performance assessment, so as to improve the management effect.[3]. Wen subin and Guo yubing (2020) interpreted the key performance indicator method in the application guide of management accounting, and pointed out that this method combined the performance indicator wand allocated the limited resources to the key field[4].

2 Construction of Performance Appraisal System of Y Enterprise

Y enterprise is dedicated to the research, production and service of high-quality diesel generators, it identified "continuous improvement to build an international brand" in 2018. Therefore, this paper aims to build a scientific and perfect performance assessment system, so as to promote the transformation and implementation of Y enterprise's strategic objectives.

2.1 Preparation of Integration

2.1.1 Set up Assessment Team

① Team composition

Chairman, general manager, middle-level leader, human resources department, etc.

② Group assignment of authority

The general manager has the right to decide the formulation and modification of all assessment contents, and is responsible for supervising the implementation of the assessment system. All middle-level leading cadres are responsible for setting the performance appraisal indicators of the department and communicate with employees. After the assessment, the human resources department shall sort out and file the performance results.

2.1.2 Establish a Monitoring Mechanism

If the employees have any objection to the appraisal result, it should be reported to the supervisory team at any time, and the team shall conduct an investigation immediately.

2.2 The Specific Design of Performance Appraisal Index of Y Enterprise

2.2.1 Establish Company-level KPIs

The performance appraisal system is constructed from four dimensions: cost management, product delivery, product quality and employee training. After identified the key success factors, the decomposed sub strategic objectives as a basis for the corporate level KPI setting, decomposition of the strategic goal is associated with critical success factors, the strategic map, as shown in Figure 1:

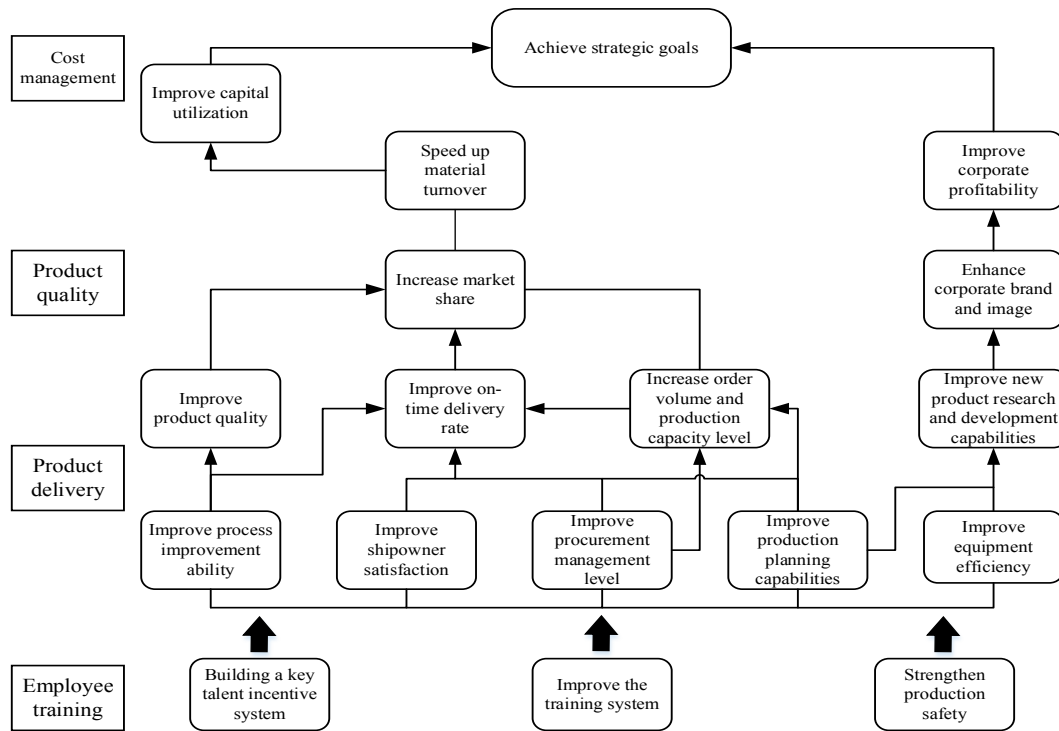


Figure 1. Strategic map of company-level KPIs

Members of the assessment team can determine the types of performance assessment indicators and use the fishbone diagram to display the key elements of the indicators of the company-level KPI, as shown in Figure 2:

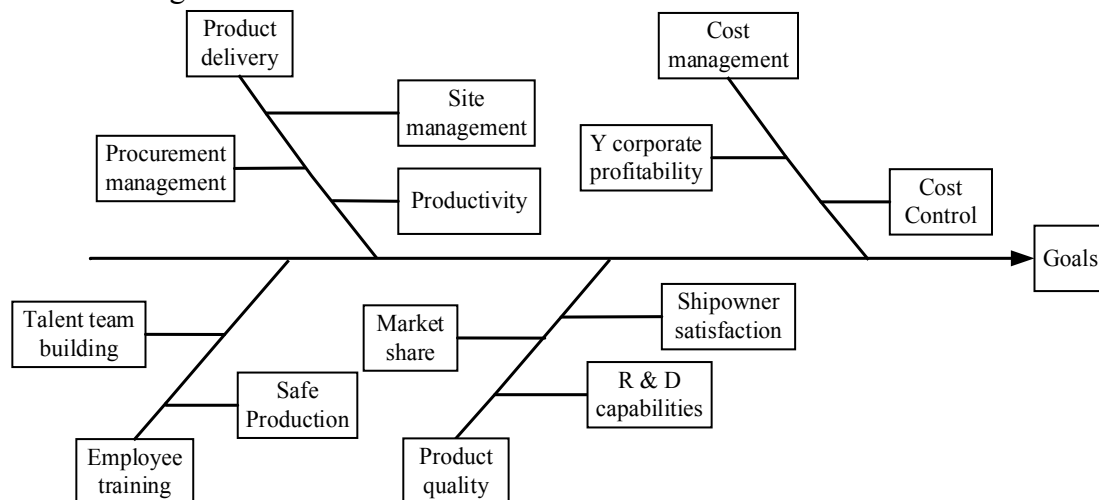


Figure 2. Decomposition of Y enterprise company-level KPI indicators

To sum up, a complete enterprise KPI performance appraisal system as shown in Table 1:

Table 1. Y enterprise company-level KPI performance appraisal system

Dimension	KPI indicators	Assessment criteria	Weights	Points
Cost (25%)	Roe	> 10%	10%	10
	Payment days	60 days-90 days	5%	5
	Cost control rate	> 5%	10%	5
Quality (30%)	Complaints	0 times	15%	10
	Market share	More than 12%	10%	10
	Number of projects	More than 2 per year	5%	5
Delivery (25%)	Material storage rate	100%	10%	5
	On-time delivery rate	100%	10%	10
	shutdowns	<2 times	5%	5
Training (20%)	Safety training times	At least once every quarter	8%	10
	Safety incidents	0 times	8%	10
	Training cycle	At least once every quarter	5%	10
	Culture promotion	At least once every half year	4%	5

2.2.2 Establish Departmental KPIs

The indicators of department-level KPI are decomposed from department-level KPI. The department-level KPI of the production workshop of Y Enterprise is shown in Table 2:

Table 2. KPI performance appraisal system of Y enterprise department level

Dimension	KPI indicators	Assessment criteria	Weights	Points
Cost (25%)	Finished PPM	< 5%	10%	10
	OT	Up to 20 hours per month	5%	5
	Cost control rate	> 5%	10%	10
Quality (30%)	Complaints	< 2%	15%	10
	Return rate	0%	5%	5
	One pass rate	> 98%	10%	10
Delivery (25%)	Equipment turnover	> 95%	5%	5
	Delivery rate	100%	15%	10
	Shutdowns	< 2 Times	5%	5
Training (20%)	Safety training times	At least once every quarter	10%	10
	Safety incidents	0 times	10%	10
	Turnover rate	< 8%	5%	5

	Training cycle	Once every quarter	5%	5
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2.2.3 Establish Job-level KPIs

The indicators of position-level KPI are decomposed from department-level KPI. The job-level KPI of the production workshop of Y Enterprise is shown in Table 3:

Table 3. Y company job-level KPI assessment system

Dimension	KPI indicators	Assessment criteria	Weights	Points
Cost (25%)	Material PPM	<5%	15%	10
	OT	Up to 20 hours per month	10%	5
Quality (30%)	Complaints	0 times	10%	10
	One pass rate	0%	15%	10
	Return rate	>98%	5%	5
Delivery (25%)	Delivery rate	100%	5%	5
	Completion rate	100%	15%	10
	Obey the schedule	Depends on the situation	5%	5
Training (20%)	Safety training times	At least once per quarter	10%	10
	Training rate	100%	5%	10
	Suggestions	Depends on the situation	5%	5

2.3 The Result Feedback of Y Enterprise Performance Appraisal System

2.3.1 Evaluation of Performance Appraisal Results

After the assessment at the end of each month, the individual performance score of the employee is calculated by multiplying the total score value of the current month by the weight of the corporate performance, department performance and post-performance respectively. The calculation method is Company-level KPI performance \times 20% + department-level KPI performance \times 20% + position-level KPI performance \times 50%

2.3.2 Feedback of Assessment Results

If an employee has worked in the company for more than three years and obtained excellent results in three consecutive assessments, the general manager may consider the reward based on the promotion or salary increase of the employee. But if an employee gets three bad reviews in a row and shows no improvement over the observation period, the leadership should consider demoting him or her to a lower salary or even firing position.

2.4 The Implementation Effect of Performance Appraisal System of Y Enterprise Based On KPI

Taking the actual operation situation of Y in November 2020 as the reference, the performance score of a randomly selected worker in the production workshop in November is shown in Table 4:

Table 4. Performance appraisal of employee A

November production workshop staff performance appraisal score sheet						
Name: A	Age: 42	Department: Workshop		Position: Worker		
Evaluation period: November 2020						
Dimension	Assessment index	Scoring criteria				Score
		Excellent	Good	General	Poor	
Cost	Material PPM	10	8	6	2	8
	OT	5	4	3	1	5
Quality	Shipowners' complaints	10	8	6	2	10
	One pass rate	5	4	3	1	4
	Return rate	5	4	3	1	5
Delivery	On-time delivery rate	10	8	6	2	8
	Obey the schedule	5	4	3	1	5
	Daily planned schedule	5	4	3	1	5
Training	Safety training times	10	8	6	2	10
	Training completion rate	10	8	6	2	10
	Suggestions	5	4	3	1	3
Attendance	Attendance number	5	4	3	1	5
Attitude	Labor discipline situation	5	4	3	1	4
	Equipment maintenance	5	4	3	1	4
	Cleanliness of site	5	4	3	1	4
Total Score						90

Through investigation and calculation, the company KPI score of Y Enterprise in November 2020 is 92 points, and the departmental KPI score of production workshop is 90 points. The individual performance score of Employee A :

$$92 \times 20\% + 90 \times 30\% + 90 \times 50\% = 90.4$$

The score can be classified into excellent category .The general manager can keep an eye on the examination period in the following, if his performance is excellent, considering the promotion on the next business year.

3 Safeguard Measures of Enterprise Y's Assessment System

First of all, leaders of Y should pay more attention to performance appraisal and take more measures to strengthen the execution of the appraisal system. Second, the inspection team use method to conduct a comprehensive grasp of performance appraisal to build a good interpersonal relationship, health good team atmosphere, improve employee's work, leadership, improve the ability of collaboration between departments, provide the foundation for the realization of the enterprise strategic target safeguard. Finally, opinions of employees should be widely listened to, and a scientific performance appraisal system should be established based on the actual development situation of Y Company and the hierarchical organizational structure of all levels and with key points.

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