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# PERFORMANCE ASSESSMENT ANALYSIS USING MALCOLM BALDRIGE CRITERIA FOR PERFORMANCE EXELLENCE (MBCfPE) METHOD (Case Study at PT. NYCZ)

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#### **ABSTRACT**

PT. NYCZ is a manufacturing company engaged in plastic bottle packaging production that cannot be separated from the problem of competition with similar companies. The problems encountered at PT. NYCZ regarding employee performance, namely lack of communication relations between subordinates and superiors, so that delivery of work instructions from superiors is still not understood by subordinates, it has an impact on employee performance output, Therefore the company must improve more efficient strategies in terms of leadership that is able to run and manage everything in internal and external of the company, more reliable skilled workforces, modern machines and technology, and is able to get a wider market and customers in plastic bottle products marketing. Malcolm Baldrige Criteria for Performance Excellence or Baldrige Criteria is a guide for a company to achieve high quality performance which consists 7 criterias, namely Leadership; Strategic Planning; Customer Focus; Measurement, Analysis and Knowledge Management; Focus on Workforce; Process Management; and Results. This research was conducted by distributing questionnaires to PT. NYCZ employees, respondents were taken according to job desks ranging from cashiers to managers. After questionnaire data was obtained, it was processed using SPSS to test validity and reliability. Then, questionnaire results were processed using Malcolm Baldrige score to determine company performance level. From the research results, it was obtained that the total points from Malcolm Baldrige Criteria for Performance Excellence survey are 411,14. Therefore, according to MBCfPE score, the performance of PT. NYCZ is Early Improvement with Average category.

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### 1. Preliminary

In the business world, changes in environmental conditions, the emergence of new competitors, the implementation of new standards, changes in consumer demands and other things, are part of what companies must anticipate. For this reason, the company tries to create its advantages, both in terms of business and performance.

Performance is the result of work that has a strong relationship with the organization's strategic goals, customer satisfaction, and contributes to the economy (Wibowo, 2007). Meanwhile, according to Guritno and Waridin (2005), performance is a comparison of the work achieved by employees with specified standards.

PT. NYCZ is a manufacturing company engaged in the production of plastic packaging products with simple technology and machines. In the development of the industrial world of making plastic bottle products, many competing companies produce with more sophisticated technology and machines and have reliable human resources. PT. NYCZ in facing this competition, it must improve a better strategy,

In the problems encountered at PT. NYCZ regarding employee performance, there are problems in terms of leadership who are not able to run and manage everything that is internal and external to the company, there are problems regarding workers who have less skills, machines and technology that are often damaged during the production process, K3 problems that still lacking in application in the field, lack of competitive strategies in innovation in the form of variants of plastic packaging bottles, as well as problems regarding the lack of loyalty to customers in terms of customer satisfaction and needs.

Based on this background, the company's performance appraisal is an important thing to do. According to Mathis and Jackson (2006) performance appraisal is the process of evaluating how well employees do their jobs compared to a set of standards, and then communicating that information to employees. Meanwhile, according to Dessler (2004), said that performance appraisal is an activity to compare the actual performance of subordinates with the standards that have been set.

In assessing the level of company performance, researchers used the *Malcolm Baldrige Criteria for Performance Excellence* Method. *Malcolm Baldrige Criteria for Performance Excellence* or *Baldrige Criteria* is a guide for a company to achieve high quality performance which consists of 7 criteria, namely Leadership; Strategic Planning; Customer Focus; Measurement, Analysis and Knowledge Management; Focus on Workforce; Process Management; and

Outcomes (Gazpersz, 2001). The Baldrige Criteria have a focus on performance excellence for the entire organization within a comprehensive managerial framework, identifying and tracking all organizational results that are customer, product/service, financial, human resources and organizational effectiveness. Quality measurement using the Baldrige Criteria has the advantage of allowing organizations to do self-assessments. Self-measurement based on the Baldrige Criteria can be carried out in various types of organizations, including business, non-profit, educational and health. The Malcolm Baldrige criteria have also been applied as a quality management tool in formulating strategies based on the company's internal and external conditions (Wijayanti, 2002).

In conducting a performance assessment using the MBCfPE method, there are steps that must be taken, namely:

- 1. Do a preliminary survey on the performance of the company or organization
- 2. Designing a list of questions by category MBCfPE
- 3. Distribute respondent's questionnaires
- 4. Processing the data obtained and then adjusting it to the MBCfPE category
- 5. Conduct an assessment on each category and sub-category of MBCfPE and then the assessment is made in the form of a percentage
- 6. Conduct an overall assessment to get the final score of performance
- 7. See the final score by looking at the MBCfPE level table to find out the company's position at the excellent, average, or poor level
- 8. Discussion to provide recommendations to improve the performance of the organization.

By conducting an assessment of the company's performance, it is expected that This research is able to provide suggestions or improvements to the company's performance to PT. NYCZ as a result of performance appraisal using the Malcolm Baldrige Criteria for performance excellence.

### 2. Research methods

The data used in this study were obtained from the company, namely PT. NYCZ, which is located on Jl. Rungkut Industri, SIER area, Surabaya – East Java. Data collection begins in January 2020 until the required data is sufficient. The focus of the study in this research is to conduct a work assessment using the Malcolm Baldrige Criteria for Performance Excellence method which is only carried out in the production and company management divisions by distributing questionnaires. Respondents were taken from employees of PT. NYCZ which consists of the

leadership, starting from section Chief, Head of Divisions, to managers.

### 2.1. Data Type

### 2.1.1. Primary data

Primary data is data that is directly collected or obtained from the first source. The method that can be used is a questionnaire. This data collection was carried out by distributing several questionnaires to respondents in the leadership ranks who were involved in the field, wich is officials who were already competent according to job describsion, with a number of questions to obtain information from respondents.

### 2.1.2. Secondary Data

Secondary data is data that is not directly obtained from the first source and has been arranged in the form of written documents obtained from the study of documentation. In this study some of the data included in the secondary data include the company's vision, mission and strategy, company history, organizational structure, employee data and others.

### 2.2. Data Processing and Analysis Method

In the data processing method for this research, after the data is collected from the questionnaire and will then be processed with the SPSS program:

1. Validity test

$$r = \frac{n(\sum XY) - (\sum X \sum Y)}{\sqrt{(n\sum X^2 - (\sum X)^2)(n\sum Y^2 - (\sum Y)^2)}}$$

note:

r = correlation

n = number of samples

X = question score

Y = Total score

2. Reliability Test

$$\alpha = \frac{k}{k-1} \left( \frac{s_X^2 - \sum_{j=1}^k s_j^2}{s_X^2} \right)$$

note:

Sj2 = variance of score item j with j = 1, 2, ..., k

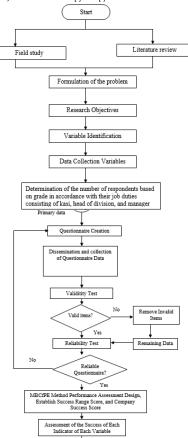
K = number of items tested

Sx2= total score of all items variances

Then, the next step is the design of the MBCfPE method of performance appraisal, set the success range score, and the company's success score. Determination of the range score to evaluate the performance results of the questionnaire data by

comparing the score points according to NIST. After that, an assessment of the success of each indicator of each variable is carried out. From the calculation of the success factor, we determine the appropriate score from the results of these calculations. The next step is comprehensive performance assessment by including the scoring points of each indicator and each variable. After each indicator has been calculated, it is known that the score is then linked to the results of the NIST score of each variable which was previously obtained from the results of the NIST score comprehensively. After that, an analysis of the results of the work assessment was carried out. With the information from the assessment results, discussion can be carried out, from the results of the discussion, the company can take proper and effective steps, both in maintaining or improving the poor company's performance that or maintaining the company's performance.

To provide an overview of the research steps to be carried out, the following diagram is made:



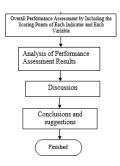


Figure 1. Research Flowchart

Receiving orders, verifying the quantity and quality of products from suppliers, verifying the

## 3. Results and Discussion 3.1. Data collection

The data was taken based on a questionnaire submitted by researchers for respondents related to the *Malcolm Baldrige Criteria for Performance Excellence* (MBCfPE) with the number of respondents taken from the population of employees of PT. NYCZ

quantity and quality of products from customers and product damage data. The data attribute measured is based on the SCOR Model Version 11.0 developed by the Supply Chain Council, namely Perfect Order Fulfillment. This reliability attribute measures things related to supply chain performance in obtaining the right product, at the right location, at the right time, with the right conditions and packaging, the right quantity, the right documentation, and for the right customer.

The next step in measuring supply chain performance is to integrate the scores of each metric obtained from the SCOR 11.0 approach with the weight of importance from the Analytical Hierarchy Process (AHP) calculation.

based on the job desk grade of respondents. For the customer and market focus variables taken from the total customer population of PT. NYCZ as many as 15 companies. The data on the number of employees of PT. NYCZ based jobdesk jobs are as follows.

Table 1. Characteristics of Respondents PT. NYCZ

Note.	Hrd	Acc & Fin	Purchasing	Mold & Shop	Sales marketing	Quality	Operati on	Engine ring	Total
Manager	1	1	1	1	3			2	9
Head of Division	0	1	0	3	0		2	1	7
Chief	3	1	0	7	0	1	8	2	22
		Total							38

Table 2. Characteristics of Customer Respondents PT. NYCZ

Company name	Amount
PT. Unilever Indonesia Tbk.	1
Loreal	1
PT. Kalbe Farma Tbk.	1
P&G	1
PT. Pertamina	1
Shell	1
PT. Aica Indria	1
PT. Abbott	1
PT. Salim Ivomas Pratama	1
PT. Danone Dairy Indonesia	1
PT. Megasurya Mas	1
PT. Indomilk	1
Johnson & Johnson	1
PT. Gajah Tunggal Tbk.	1
PT. Mahakan Beta Farm	1
TOTAL	15

### 3.2. Validity test

The validity test to the variable instrument criteria of the Malcolm Baldrige Criteria for

**Table 3. Variable Validity Test Results** 

				•
Variable	Question	r-count	r-table	Description
Leadership	1	0.332	0.3291	Valid
	2	0.352	0.3291	Valid
	3	0.350	0.3291	Valid
	4	0.411	0.3291	Valid
	5	0.482	0.3291	Valid
Strategic	1	0.418	0.3291	Valid
Planning	2	0.376	0.3291	Valid
	3	0.337	0.3291	Valid
	4	0.371	0.3291	Valid
Focus on	1	0.604	0.5529	Valid
customers and	2	0.675	0.5529	Valid
market	3	0.735	0.5529	Valid
	4	0.610	0.5529	Valid
	5	0.579	0.5529	Valid
Measurement,	1	0.413	0.3291	Valid
Analysis and	2	0.427	0.3291	Valid
Knowledge	3	0.339	0.3291	Valid
Management	4	0.389	0.3291	Valid
	5	0.430	0.3291	Valid
Focus on	1	0.344	0.3291	Valid
workforce	2	0.349	0.3291	Valid
	3	0.454	0.3291	Valid
	4	0.413	0.3291	Valid
	5	0.379	0.3291	Valid
Focus on	1	0.334	0.3291	Valid
operation	2	0.411	0.3291	Valid
_	3	0.367	0.3291	Valid
	4	0.437	0.3291	Valid
	5	0.338	0.3291	Valid
	6	0.494	0.3291	Valid
Performance	1	0.504	0.3291	Valid
Results	2	0.363	0.3291	Valid
	3	0.563	0.3291	Valid
	4	0.415	0.3291	Valid
	5	0.378	0.3291	Valid
	6	0.440	0.3291	Valid

The instrument considered valid if r-count > rtable (0.3291) and for the focus variable on customers and markets r-count > r-table (0.5529). Based on Table 3 above, the results of all research variables were tested valid, thus it can be concluded that the instrument of all questions can be used in research.

**3.3. Reliability Test**The reliability test conducted on the study showed the following results:

Table 4. Variable Reliability Test Results

Variable	Cronbach's	r-table	Description
	Alpha		
Leadership	0.627	0.3291	Reliable
Strategic Planning	0.595	0.3291	Reliable
Focus on Customers and	0.834	0.5529	Reliable
Market			
Measurement, Analysis	0.639	0.3291	Reliable
and Knowledge			
Management			
Focus on Workforce	0.634	0.3291	Reliable
Focus on Operations	0.665	0.3291	Reliable
Performance Results	0.712	0.3291	Reliable

Based on Table 4 above, the results of testing all research variables are r-count > r-table (0.3291) and for the customer and market focus variable r-count

> r-table (0.5529). Thus, it can be concluded that all of the question instruments are reliable, so they are feasible to be used in research.

### 3.4. Scoring MBCfPE Survey Results

From the results of the analysis of each variable question, the score results will be totaled into overall points, then it will be seen that the company is

in an excellent, average, or poor position. The following table presents the calculation of the total analysis results per question for all variables.

**Table 5. MBCfPE Survey Score Points** 

	MBCfPE	<b>Total Points</b>	Points Scored Research result
1.	Leadership	120	50.52
2.	Strategic Planning	85	33.54
3.	Focus on Customers and Market	85	34.99
4.	Measurement, Analysis and Knowledge	90	32.36
	Management		
5.	Focus on Workforce	85	31.04
6.	Focus on Operations	85	31.61
7.	Performance Results (Business)	450	197.08
	Total	1000	411.14

From the total number of points the value of the *Malcolm Baldrige Criteria for Performance Excellence* survey above is 411.14 points. So according to the MBCfPE score, the performance of PT. NYCZ is *Early Improvement* with the *Average* category. At this level the company has the following performance characteristics:

 Good levels of organizational performance are reported, responsive to basic needs items.

### 3.5. Improvement Proposal

Based on the results of the study, it can be seen that the company's position is in the position of

- Few improvement data are reported, and most of the improvements presented are favorable.
- 3. Initial stage to obtain clear comparative information
- 4. Results are reported for many areas that are important to the fulfillment of the organization's mission.

*Early Improvement* by category *Average*, therefore the proposed improvements to PT. NYCZ to improve the company's performance and move to the stage of excellence.

**Table 6. Proposed Improvements** 

Variable	Improvement Proposal
Leadership	Companies can evaluate in carrying out decisions that have been made to be carried out with organizational members in the company and evaluate the performance of senior leaders through a two-way assessment system, namely from superiors to subordinates and from subordinates to superiors.
Strategic Planning	Companies can evaluate the effectiveness of policies and approaches taken in the form of information sharing processes to harmonize complementary learning between processes and work units.
Customer Focus	The company needs to conduct periodic and consistent evaluations in the level of customer satisfaction and conduct these evaluations on all company customers so that customers feel loyal to the services of PT. NYCZ.
Measurement Analysis and	Companies need to make improvements and evaluations of measuring
Knowledge Management	the quality of employee performance by being reviewed repeatedly and given training to employees who have low performance quality so that competent human resources are obtained
Focus on Workforce	The company can evaluate the workforce development system and create a workforce climate through the safety and health programs carried out and the effectiveness of the education and training programs provided by the company on the effectiveness of improving company performance.
<b>Process Management</b>	Companies need to carry out further evaluations on the effectiveness of the approach taken to improve company performance to encourage innovation to the system used to be even better.
Performance Results	Companies need to report all levels of company performance and improvement using comparative data that is more relevant to indicators or company performance measures on the seven performance variables that have been measured and improved.

### 4. Conclusions and suggestions

### 4.1.Conclusion

Based on the results of the analysis and discussion conducted at PT. NYCZ regarding performance appraisal using the Malcolm Baldrige Criteria for Performance Excellence method, it can be concluded that from the total number of points scored from the Malcolm Baldrige Criteria for Performance Excellence survey, PT. Abadi Adimulia's performance results are 411.14 points. So according to the MBCfPE score, it is known that the performance of PT. NYCZ is Early Improvement with Average category. At this level the company has performance characteristics: a good level of organizational performance is reported, responsive to basic needs items, Some improvement data reported, and most of the improvements presented are favorable, early stage to obtain clear comparative information, results are reported for many areas

covered important for the fulfillment of the mission of the organization. Based on the results of the study, suggestions for improvements can be given to PT. NYCZ to improve the company's performance and go to the excellence stage, namely; In the Leadership category, suggestions for improvement are given that leadership evaluates the performance of senior leaders through a two-way assessment system, namely from superiors to subordinates and from subordinates to superiors. In the category of Strategic planning, suggestions can be given to companies to be able to evaluate the effectiveness of the policies and approaches taken. In the Customer Focus category, suggestions for organizational improvements can be made in determining the requirements, expectations and preferences of customers and the market. In the Measurement category, Analysis and Knowledge Management can be given suggestions for improvement to the organization to improve performance in measuring, analyzing, aligning and improving performance data and information at all levels and in all parts of the organization. In the category of Focus on Manpower, it can be suggested that the leadership improve the organization's ability to assess the capability and capacity of the workforce. In the Focus To Process category, suggestions for organizational improvements need to be made to improve performance in designing, managing, and improving work systems and work processes. And in the Performance Results category, suggestions for improvements are given to all categories of organizational performance. align and improve performance data and information at all levels and throughout the organization. In the category of Focus on Manpower, it can be suggested that the leadership improve the organization's ability to assess the capability and capacity of the workforce. In the Focus To Process category, suggestions for organizational improvements need to be made to improve performance in designing, managing, and improving work systems and work processes. And in the Performance Results category, suggestions for improvements are given to all categories of organizational performance. align and improve performance data and information at all levels and throughout the organization. In the category of Focus on Manpower, it can be suggested that the leadership improve the organization's ability to assess the capability and capacity of the workforce. In the Focus To Process category, suggestions for organizational improvements need to be made to improve performance in designing, managing, and improving work systems and work processes. And in the Performance Results category, suggestions for improvements are given to all categories of organizational performance. In the Focus To Process category, suggestions for organizational improvements need to be made to improve performance in designing, managing, and improving work systems and work processes. And in the Performance Results category, suggestions for improvements are given to all categories of organizational performance. In the Focus To Process category, suggestions for organizational improvements need to be made to improve performance in designing, managing, and improving work systems and work processes. And in the Performance Results category, suggestions for improvements are given to all categories of organizational performance.

### 4.2. Suggestion

To improve the performance of PT. NYCZ according to the results of the study, the suggestions that can be put forward for efforts to improve performance are PT. NYCZ can further improve the company's performance from leadership to subordinates which is the main point for the

company's sustainability in achieving superior performance in competing. PT. NYCZ is also suggested for senior leaders to be more consistent in evaluating a performance and in managing the organization, so that there is a good communication relationship between subordinates and superiors in the delivery of assigned tasks, so that the work process can take place conducively, and PT. NYCZ is suggested to be more loyal to customer needs and satisfaction, because customers are a valuable asset in the company's profitability.

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