

The Design of Performance Dashboard PT PLN (Persero) Pembangkitan Sumatera Bagian Selatan

Slamet Sumartono, Muhammad Izman Herdiansyah,
Ahmad Haidar Mirza

Master of Information Technology
Bina Darma University
e-mail:s.sumartono@gmail.com
e-mail:s.m.herdiansyah@mail.binadarma.ac.id
e-mail:s.haidarmirza@yahoo.com

Abstract

To achieve the vision as a leading power generation company and excellence in Indonesia with world-class performance, PLN Pembangkitan Sumbagsel have implemented Malcolm Baldrige Criteria for Performance Excellence (MBCfPE). Baldrige Score in 2013 showed the aspect of Measurement, Analysis and Improvement Organizational Performance still below the target. Dashboard technology can be one of the opportunities for improvement in increasing the Baldrige score. The main issue within the performance management function that the performance dashboard is intended to address is that data about company and organization performance is not accessible easily, particularly in the case of operational performance. It is known that a larger part of the information is measured and stored somewhere in the organization today, but there is no exact view of what information exists and it is not possible to get a holistic view of organization level of performance within the most relevant aspects. The aim of the research is to design performance dashboard; to investigate what KPIs and other measurements that should be included in the dashboard. The dashboard should function as tool for visualization of organization performance, to support performance management and allow fact-based decision-making within several areas at the strategic level.

Keywords : *Design, Dashboard, PT PLN (Persero)*

1 INTRODUCTION

One of the strategies performed in PT PLN (Persero) Pembangkitan Sumbagsel is to adapt to the development and changes in the external environment and internal organization is through the application of criteria Malcolm Baldrige Criteria for Performance Excellence (MBCfPE). MBCfPE provide perspectives in the management system of the organization and processes key to superior performance. 7 categories and 11 core values in MBCfPE are

mechanisms to build and integrate criteria in organizational systems development excellence business.

MBCfPE PLN KITSBS in 2013 is still in the early stages of development (Early Improvement) while the target achievement of Good Performance. Measurement, Analysis and Improvement Organizational Performance (Category 4) is below target to become one of the opportunities for improvement in increasing the Baldrige score .

Given the complexity and amount of information held by the organization, management and presentation of information is not easy. Organization need tools to manage the information and presenting it in a form that is efficient and effective. One method that is used to present information that is the use of performance dashboard.

Vincent (2013:491) stated performance management includes activities to ensure systematic strategic goals and objectives will be achieved consistently effective and efficient. Performance management may include the performance of the organization, division/function, department, manager, employee, or processes, systems which produce products and services, as well as a variety of other areas .

According to Vincent (2013:491) performance measures should be linked to the overall vision, mission, goals and objectives, relying on the ability to measure (measurability), valid and credible (valid and reliable), provide clear responsibilities, attention priorities and benefits for the customer's internal/external, stakeholders, and others .

There are six steps that can be followed when making the selection criteria performance, namely: selecting the size of the initial performance, evaluate performance measures, select key performance measures, determine data requirements, defining the measures performance, determine the performance of the basic / initial (baseline performance).

David Parmenter (2007) stated Key Performance Indicator (KPI) is one of the indicators of performance measures, in addition to Performance Indicator (PI) and Key Result Indicators (KRI) which is also called Key Goal Indicator (KGI). Performance measures are indicators used in the measurement, report generation, and performance management. KPI is an indicator that represents the performance of the process carried out in the form of a set of measures of the most critical aspects of performance, and determine present and future success of the organization. KPIs can be used to predict the chances of success or failure of the processes within the organization, so the KPI used as a tool to improve organizational performance. KGI is an indicator that states something that has implemented the organization. KGI is used to describe the impact (outcomes) of a process. KGI is used to measure the processes that have been completed. Among the KPI and KGI are some PI.

Wayne Eckerson (2006) stated the dashboard as a mechanism of visual presentation of information in the performance management system , which presents critical information about the operational processes at a glance. Wayne focuses use dashboard for monitoring the performance of operational processes to assist the organization in achieving its strategic objectives. Dashboard is used to measure the process has been running , monitor ongoing performance and predicting future performance. By doing so, organizations can create, assess, and adjust strategies that have been made to optimize its performance.

Wayne Eckerson (2006) declare dashboard has three main benefits, namely: (1) Communicate the strategy and goals made by the executive, to all interested parties, in accordance with the role and level in the organization. (2) Monitor the implementation of plans and strategies that have been made. Dashboard allow the executive to identify critical issues

and create strategies to overcome them. (3) Present information at a glance using graphics, symbols, charts and colors that allows users to understand and perceive the information correctly.

Eva Hariyanti (2008) stated dashboard development methodology consists of 7 (seven) main stages, in accordance with the stages in the development of software systems, namely the identification of needs, planning, prototype design, prototype review, implementation, deployment, and maintenance.

The problem in this study may include what data/information required for support the achievement of the organization's performance and how to design appropriate dashboard management needs to monitor execution strategies to achieve organizational performance.

Boundary problem in the study include : KPI dashboard design to present relevant to the needs of users , with attention to the role of the dashboard as a tool for communicating information about the performance. The study does not cover the process of designing and database development necessary for application dashboard . Data collection is considered has been completed.

The purpose of the study is to provide a reference dashboard development that will be used management in finding problems quickly and provide information support in monitoring the strategy execution achievement of the performance , as well as providing design dashboard that is easy to operate according management needs.

The benefits of the study include : (1) assist analyze the data / information supporting decision making through the provision of data / information relevant to the performance management process, (2) management can find out information about issues and opportunities, (3) to control and make decisions related to the factors that influence the achievement of organizational goals quickly, precisely and accurately in accordance with the needs, (4) management can be helped monitor the implementation of the strategy for optimize the performance of the organization as well a medium of communication between the user dashboard in the process of achieving the target the performance. The final results are expected to be reference -making enterprise dashboards organization used in monitoring and performance measurement.

Research activities carried out at the PT PLN (Persero) Pembangkitan Sumatera Bagian Selatan, Palembang.

1. Determination Problems; Conduct observations to analyze the elements of performance management that goes unknown at this time so that the advantages and weakness ;
2. The study of literature ; Analyze the elements performance management based on observation and study of literature and reference used in performance management PLN KITSBS management and development of performance dashboards ;
3. Mapping existing condition ; Conduct interview to the user performance management system to obtain data and clear information about the process business enterprise , dashboard requirements management as well as any strategic information that support the evaluation of critical success factors in the achievement of the performance . case This will help to be able to go to the stage The next is to determine the parameters .
4. Design ; Conduct prototype management dashboards based on the results analysis in the previous step . Grouping users , user hierarchy . The objective of this application

is in order to know how to design user interface for a dashboard that effective and only displays information relevant.

2 RESEARCH FINDING

2.1 Existing Conditions

PLN KITSBS set a target KPI of every strategic objectives in the short term and long length as a measure of achievement of performance company. Measurement of achievement set of strategic key performance indicators (KPI) and the target short term (1 year) and long term (5 years) by considering challenges and opportunities result of the SWOT analysis.

The work plan has been set for achieving strategic objectives in RJPP PLN KITSBS lowered into contract based performance with PLN Holding approval. Business strategy or PLN strategic programs that make by KITSBS can be mapped through the strategy map.

Targets and strategic programs that are in PLN KITSBS relegated to the level of the unit. In the end target translated the company's strategic became operational performance targets and programs action general manager, deputy manager and supervisor unit that will be a guide map work daily, weekly and annual continuously attached to follow the movements of the organization. To ensure the achievement of objectives, do process monitoring and evaluation of lagging and leading indicators using evaluation report every month concession followed by :

1. Weekly meetings at the unit level : for daily operations .
2. Management Meeting at the parent level : for daily operations .
3. Internal Evaluation of Planning : to identify constraints to obtain solution to overcome the gap between the target and realization .
4. Planning any internal evaluation quarter .
5. Evaluation of annual work plans used as the baseline of next year plan.

Data and information management system Performance Management of data and performance information current conducted by Engineering department and engineering section on each unit business. Results management performance delivered in a format to PLN management report. The process of data management/information-based performance balanced scorecard framework. Summary process data management/performance information in PLN KITSBS.

PLN KITSBS selecting, collecting, align, integrate data and trace information for the daily operation and organizational performance, including tracking progress strategic objectives and work plan in a manner as .

1. Selecting data and information with consider managements contract / corporate KPIs, road map, program featured and KPI previous year.
2. Collect data and information from business unit especially throughout the data and daily operational information direct impact on the performance of PLN KITSBS through the utilization of a particular application or manually.

3. To verify the integrity of the data and information that has been collected with the ERP system and later also with EAM systems.
4. Aligning data and information with cascading management contract which has been determined by the PLN Holding consider key business processes. Achievement of KPI lower level will effect on the above level KPIs and will be the input for evaluation strategic target and action plan further.
5. To evaluate the realization and targets based on the data and information support for improvement.

Problems in the process of collecting and management of data / information, although performance has done with the help of some applications but still dominated by the use of spreadsheets . This makes the chances of problems related data / information such as : no accurate , duplication , security and data inconsistencies. It takes a relatively long time to collection and verification process validation of data so that the data / information is not performance can be directly presented to management.

2.2 System Requirements Analysis

Identification of high - level dashboard scenario; done through observation and interviews with management. Retrieved purpose and scope the design of the dashboard.

Identify types of dashboards and groups users ; conducted through review of the structure KITSBS PLN working relationship with parts or other departments within the PLN KITSBS performance in relation to achievement PLN KITSBS environment . The results of the review of the structure of labor relations , generating the kind of dashboards and dashboard user groups involved . Dashboard type hierarchy and each user group.

Table 3 shows the need for 10 (ten) level user. At the initial stage, the type of which will be designed dashboard is the dashboard to meet the needs of management, which presents information on the achievement of performance as a whole. Furthermore, the development of dashboard can be done on an ongoing basis with regard connectedness and integration between the dashboard. Hence, the phase identification of types of dashboards and groups the user is done taking into account any possible development in the dashboard organizational environment, making it easier in an effort to further development.

Identify Business Needs users; Dashboard is designed to meet management needs that are members organization assigned to perform process monitoring, evaluation of assesment performance achievements in PLN KITSBS. monitoring results conducted by the manager 's performance will User can see clearly the advantages and shortage of work units.

Data Entry; are used for inputting the data performance conducted by the management staff performance assigned by the unit of measurement performance is done every certain period. To conduct performance appraisals conducted by way of assessing the using the form / spreadsheet for import form of data or through Direct Data Entry.

3 CONCLUSION

From the results, analysis and discussion that has been done in this study, it can be concluded as follows:

1. Software of Excellence

- (a) With the Decision Support System Determination Method Using Analytic Scholarship Hierarchy The process as a medium to help executives make decisions in the selection of scholarship recipients.
- (b) Determination decision recipients are determined based on GPA, parental income, dependents of parents and half of these assessments can be justified with the support of the calculations performed by the method of Analytical Hierarchy Process.
- (c) This application can help and provide an alternative to the admin part in the process of selecting eligible recipients using AHP (Analytical Hierarchy Process).

2. Disadvantages Software

- (a) Determination of Decision Support Systems Scholarship has many shortcomings, hopefully next can proceed to the next study as a form of improvements over existing deficiencies.
- (b) Further development is expected to be sub-criteria in the assessment of not only the form of the final score.

3.1 SUGGESTION

1. To ensure compatibility between the KPI dashboard with user requirement, identification of KPIs in a dashboard begins the identification of the vision / mission, strategy organization, critical success factors, the action plan and KPIs that support the management level top. Subsequently reduced to determine KPIs that support level underneath management .
2. The design has the identification stage needs and planning consider all possibilities the use of dashboard in the environment organization so that the resulting dashboard can be integrated with each other. The design of the dashboard should pay attention Other dashboard, especially when the dashboard will support the same business scope within the organization.
3. For effective development of performance dashboard implementation should performed in conjunction with the development of organizational strategy.
4. References can also be applied to dashboard design within the scope different organizations or companies other than electricity, for example the development of a dashboard for the monitoring of the production process, monitoring performance at university.

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