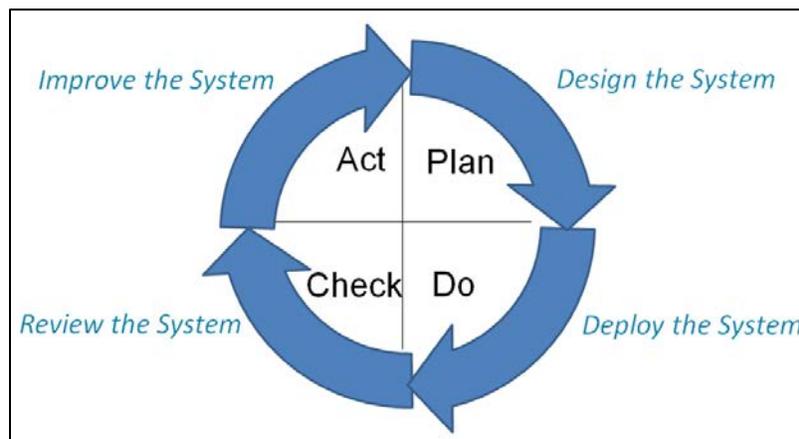


**Designing, Deploying, and  
Improving an Organization's  
Performance Management System:  
Using the PDCA Approach**

**By John W. Moran, Paul D. Epstein, and Leslie M.  
Beitsch**

## Introduction

A performance management (PM) system can be of great value to any organization by providing periodic, repeatable cycles of information the organization can use to continually improve its operating performance. The PDCA model is a useful approach for organizing and operating a PM system. The PDCA model not only can support system development and implementation, but can also drive results-based culture change throughout the organization.



**Figure 1. PDCA Cycle for PM System Development and Improvement**

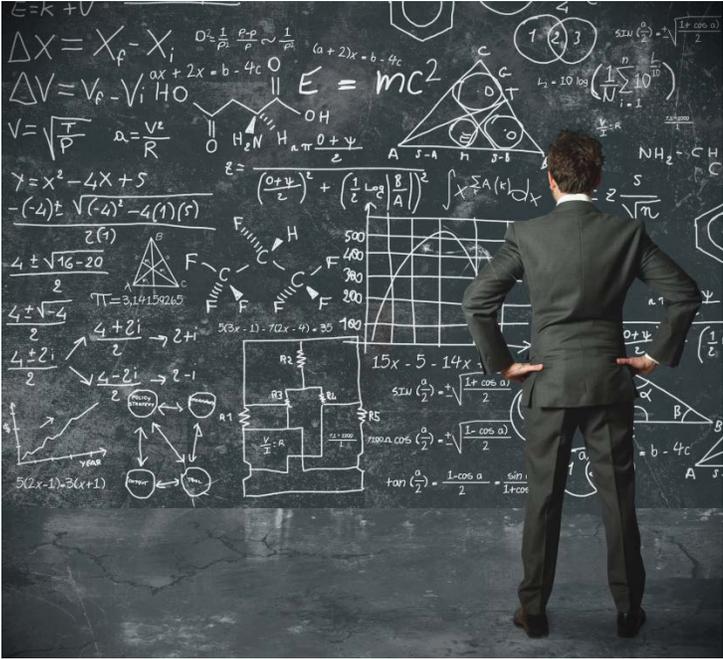
As shown in Figure 1, the PDCA stages related to a PM system development and improvement are:

- PLAN: Design the System
- DO: Deploy the System
- CHECK: Review the System
- ACT: Improve the System

## STEP 1: PLAN

### Design the System

A performance management system needs to be one that the entire organization can value and use for entering data and reviewing critical performance trends; guide day-to-day operations; develop performance plans, budgets, and longer-term strategic intents; and direct attention to areas needing improvement. Whether you are planning a new system, adding on, or retrofitting an existing PM system a complete and well-defined performance management design is essential.



**Good planning is essential for success**

A good place to start is to appoint a Performance Management System Design Team (PMSDT). This team needs to be staffed with expected system users (e.g., program and operations managers, budget staff), along with IT staffers, and representatives from executive management who ultimately will “own” the PM system.

The first task of a PMSDT is to develop a *conceptual* model to help define how the performance management system will work. Too often, systems development efforts fail because they do not reflect the realities of the organization. Often the system was an off the shelf model, and the expectation was that people’s work would conform to the system, with no opportunities for local adaptation, resulting in most employees becoming resentful and uncooperative with the system. The PMSDT needs to avoid such pitfalls.

The design team can build its model from existing models, experiences with past reporting systems, existing software, and what has been successful in other organizations. But they should be careful to adapt any models to the culture and capacity of the organization and how the organization does business. Often part of the purpose of a new PM system is to change the culture to move away from “business as usual” to a data-driven, results-focused approach. Even so, the existing culture and business practices must be considered and staff engaged to be sure they are part of designing and “owning” the change the new PM system will deliver.

In addition to the conceptual model, the design team must define the system's DNA, in broad terms:

- **Purpose** - What is the purpose of the performance management system and what do we want it to accomplish with it today and in the future?<sup>1</sup>
- **Functional requirements** – what it is supposed to do? What capabilities must it have?
- **Performance requirements** - how does the system perform its functions?
- **Usability requirements** - who are the users and what do they want from the system?
- **Data semantics** – What are the key business and process terms we will be using, such as types of performance measures and their definitions?
- **Environmental requirements** - under what conditions does the system have to work and meet its performance goals?
- **Budget requirements** – what will be the ongoing staffing, licensing, operating and upgrade costs for this system?

The planning process identifies the needs of the organization and its users. These needs are translated into business requirements - “what we want.” Translating the needs into requirements can be facilitated by using Quality Function Deployment (QFD) process<sup>2</sup>. Eventually, the design

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<sup>1</sup> The Quality Improvement Tools Encyclopedia and Glossary, J. Moran and G. Duffy, Public Health Foundation, 2012, reference the Purpose Hierarchy, pp. 101 - 102

<sup>2</sup> Quality Function Deployment and Lean Six Sigma Applications in Public Health, Grace L. Duffy, John W. Moran, and William Riley, ASQ Quality Press, 2011, pp. 173 - 184

team can transition into a "Performance Management System Team" (PMST), which will oversee and improve the system in the long-term.

Some team members may change in this transition since the PMST is likely to include people who will spend a higher percentage of their time developing and improving the system. The PMST will make decisions on operational guidance, software, hardware, upgrades, and additions as the system matures. An effective performance management system needs to have adequate ongoing resources, including funding, to run efficiently.

It is important that the PMST be an ownership group that has full accountability for the system and makes sure the system is meeting the needs of the organization on an ongoing basis. This group will be a decision making body that will entertain user requests for changes, different reporting modules, additional fields, and any refinements to the system to make it user friendly. The PMST should report to the leadership team since the PM system will be used to guide the organization's critical decision making.

The organization's IT staff, especially the IT representatives on the PMST, will facilitate how the system will fulfill the requirements by developing the enabling processes. Enabling processes are the nuts and bolts of the system, such as how existing systems will be integrated, what systems will no longer be supported, how existing data will be migrated into the new system, how to automate data collection and develop dashboards for each organizational level, what reports will be available at what times, security levels, what new data warehouses or data marts may be needed, how to create supporting policies, procedures, and user tools, and how users will be trained to use the new system.

Many planning steps must be completed before the system can be deployed. Lack of a thorough planning process can result in a lot of rework throughout the organization during system deployment, which drives skepticism and potential failure. To avoid these pitfalls, some organizations deploy their system in stages, discussed under "Do: Deployment."

A key planning step that can provide a transition to the “Do: Deployment” stage is the selection of performance measures for all organizational units or programs, and for any cross-cutting strategies to address priority issues. So the PMST must develop a process to help division and program managers to select, define, and standardize performance and quality measures across the organization and set the targets to be achieved for each measure.

In many cases existing measures can be used, but the PMST must make it clear that measures must be chosen that fit the conceptual model of the PM system and that are aligned with the organization's major strategies. This can lead to dropping some existing measures that do not align with organization strategy and adding new measures that do. Adopting a “performance driver-outcome” (or leading-lagging) approach to performance measurement can help achieve that alignment. Program managers can continue to use data from measures not included in the PM system to manage their operations. But that data will not be reported on PM system scorecards or dashboards used by others in the organization.

## STEP 2: DO

### Deployment

The deployment of the performance management system should be part of an organizational cultural change that strongly aligns the organization and its employees with the organization's major strategies. The deployment of a PM system is a time to use measures to drive a new culture focused on quality and strategic alignment. The deployment of the PM system must ensure that all strategic and operational measures align with the major strategies of the organization



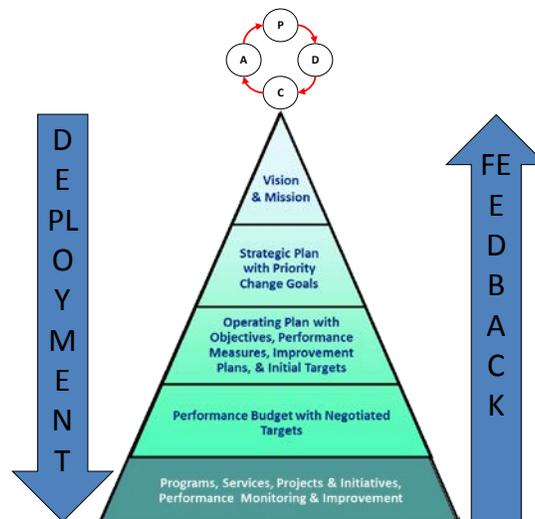
***Performance management must become part of the company culture***

throughout the value chain, not just during the product or service delivery process, but also, for example, in how employees are trained and how policies are developed.

A culture change will be achieved when it is clear to everyone in the organization how everything they do adds value to the product or service being delivered by the organization — not just in concept, but through clear strategic connections from their work and the work of others to outcome goals of the organization.

To make culture change a reality, measures, targets, scorecards, and dashboards must be developed with the participation of those held accountable for reaching the targets and must be available on a timely basis to all employees, demonstrating how they are linked to the organization's objectives. A culture will change when the new desired behaviors are measured,

reacted to, rewarded, reported, and celebrated through a feedback system as in Figure 2. As shown in Figure 2, the PM system should enable the deployment of the goals and objectives of the organization as well as providing a structured framework to allow the relevant information to flow to appropriate points for enabling decision and control processes.<sup>3</sup>



**Figure 2 The closed loop deployment and feedback system**

In order to avoid user resistance to a new performance management system, the PMST needs to develop an on-line dictionary of terms and acronyms that are used in the PM system to help avoid confusion and misinterpretations. This applies to key types of metrics and other basic terminology used in the system.

People will resist if they feel they do not understand the new measures, that the measures are not relevant or reliable, or that data from the measures will be used against them. This can drive people to develop their own spreadsheets to prove they are right and the “system” is

<sup>3</sup> Integrated Performance Measurement Systems: A Development Guide. Umit S Bititci, Allan S Carrie and Liam McDevitt, International Journal of Operations and Production Management, vol. 17, no. 6, May/June 1997, MCB University Press, pp. 522-535.

wrong. Such “data fights” burn a lot of time and energy defending the new system against those who are being measured by it, instead of helping people learn how to use the system to become better contributors to the organization's improvement efforts.

### **Staged Deployment:**

This is an approach used to work out system issues with a few pilot programs or organizational units before rolling out the PM system to the entire organization. Generally, staff groups are chosen as pilots who are most likely to be cooperative with a new PM system, perhaps because they know their current system is inadequate for their current purposes (e.g., to achieve desired improvements or to meet grant requirements), or they have had a positive experience with QI or other results-focused change process, or because they have demonstrated a willingness to try new things or to be accountable for results. If possible, it is useful to select pilot groups with various types of functions and strategic roles, one closely connected with an organization's strategic priority, so later, more groups in the organization can identify with their examples.

As the PMST completes planning steps with the pilot groups (e.g., select aligned measures and targets) and helps them work through deployment, PMST members and pilot group staff can identify system bugs and weaknesses in the planning and deployment processes to be corrected before full organization deployment. Then, in the larger roll-out, it will be easier to avoid pitfalls and help people in all programs adapt the new system to meet their performance needs.

As shown in figure 3 (on next page) different parts of the organization have different views of the organization strategy and will have different performance metrics associated with their operating plans but they all need to be supportive and able to roll up into each other.

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**Figure 3: Varying Strategic and Operational Views**

## STEP 3: CHECK

### Review the System

A review of the performance management system should be conducted at least yearly by the PMST to ensure that the system is meeting the needs and expectations of the organization and all system users.

The general areas to focus on for review are:

- **Effective Use of Data by Users** – system is being used as a decision making tool and not just compiling data. The PMST should ensure that different levels of the organization are using the data to make informed decisions.
- **Alignment** – system is aligned with organizational goals and helps users support goal achievement.
- **Results-focus** – system delivers timely and accurate information that holds employees accountable for achieving results appropriate to their level of responsibility.
- **Relevant Measures** – system is providing employees with timely data on measures that are most relevant to how they contribute to organization success, which will vary among staff groups and may include, for example, measures of outcomes, quality, quantity, timeliness, efficiency, cost-effectiveness, professional competencies, or customer satisfaction.



*Monitoring and review of the performance management system is necessary to make sure it's meeting your business needs.*

- **Reliable Data** – system provides data that are accurate, valid, and consistent, with clear, documented definitions for all measures that are consistently followed in collecting data and compiling and reporting results.
- **Employee Involvement** - employees are continually involved in the design and upgrade of the PM system since this is designed for all in the organization to use.
- **Training** - The PMST reviews the user training programs to ensure they are making the organization more competent in the use of the system.
- **Organizational Assessment and Guidance** - the PMST conducts leadership and user satisfaction surveys to determine if the PM system is meeting the current needs of the organization and its users. Then the PMST uses the survey data to make decisions on any needed changes to the system.

## STEP 4: ACT

### Improve the System

Based on the results of a regular review of the performance management system the PMST should review the output and decide where improvements are needed.

These improvements will require the team to start the PDCA cycle again and review the system requirements to see if they remain relevant. Any time a

change to the PM system is made a communication to all users should also be made indicating the change process and what will be changing. The PMST needs to update all documents, policies, procedures, terminology, and training to reflect the upgrades to the system. All changes and their impact on the users of the PM system need to be communicated well in advance of the changes taking place.



***Continue to improve the system by starting the PDCA cycle again.***

## **Summary:**

A well defined and deployed performance management system will ensure that strategic and operational goals and objectives are aligned and reinforce one another. The PM system aligns all organization measurement frameworks to help executives, managers, and employees make informed decisions at any level of the organization. The PM system should not just supply data but should help users turn data into actionable knowledge to improve performance. To make that happen, the Performance Management System Team should clarify to all users the overarching system policies and functions and actively assist users in learning how to make effective use of system information. Ultimately, the PM system should help all the organization's employees understand how their work contributes to improving the organization, and should help them become more effective in doing so.

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