THE ASSESSMENT METHODOLOGY PDCA/PDSA – A METHODOLOGY FOR COORDINATING THE EFFORTS TO IMPROVE THE ORGANIZATIONAL PROCESSES TO ACHIEVE EXCELLENCE

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Abstract

In the paper "The Assessment Methodology PDCA/PDSA – A Methodology for Coordinating the Efforts to Improve the Organizational Processes to Achieve Excellence" the authors present the basic features of the assessment methodology PDCA/PDSA that is designed to coordinate the efforts to improve the organizational processes in order to achieve excellence.

In the first part of the paper (the introduction of the paper), the authors present the general background concerning the performance of management business processes and the importance of achieving excellence and furthermore correctly assessing/evaluating it.

In the second part of the paper (the assessment methodology PDCA/PDSA – as a methodology for coordinating the efforts to improve the organizational processes to achieve excellence), the authors describe the characteristics of the assessment methodology PDCA/PDSA from a theoretical point of view.

We can say that in the current state of global economy, the global performance includes the economic, social and environmental issues, while, effectiveness and efficiency acquire new dimensions, both quantitative and qualitative. Performance needs to adopt a more holistic view of the interdependence of internal and external parameters, quantitative and qualitative, technical and human, physical and financial management of, thus leading to what we call today overall performance.

Keywords: *Assessment Methodology PDCA/PDSA, Coordinating Efforts, Improve the Organizational Processes, Achieve Excellence, Business Process Management.*

1. Introduction

Given that currently in Romania there are not many studies dedicated to performance management business processes and the use its tools in Romanian institutions, we believe that an article in this field may represent a step forward in our contemporary society which is evolving and transforming.

A feature of recent years specific to the business world and not only is the concept of performance (Venkatraman, N., Ramanujam, V., 1986). Organizations increasingly face unexpected challenges, which require a very competent management situation (Verboncu, I., Zalman, M., 2005). This places an emphasis on achieving performance strongly in all areas. Organizations are continually concerned either to achieve performance or maintain their performance or to improve performance or to measure the performance obtained.

The new global economy, characterized by economic liberalization, globalization, increased competition close, the transition from the industrial economy to an economy based on knowledge, information and knowledge, the social, environmental restrictions to the needs of sustainable development, many financial crisis felt globally have determined the changing requirements directed to various economic entities and diversify their responsibilities towards all categories of owners of interest to society as a whole. In this new economic system, companies can also be seen as "cells" on which the health of all its "body" depends (Zairi, Mohamed, 1997). Therefore, we cannot talk about the viability of a company in a competitive environment, unstable and turbulent, without taking into account the importance of performance.

Improving the business processes or business process excellence means in real life a continuous confrontation with a multitude of complex situations or very complex, which creates difficulties, not infrequently caused by unprofessional approach to business. Such situations can be explained by complex: multiple interdependencies between processes, which can cause major conflict situations in processes, the high number of activities and processes, the variety of their high involvement human factor insufficiently prepared to cope with unforeseen situations, internal constraints and external dynamics in business-related events, and so on.

We believe that one of the most important assessment methodologies that are able to coordinate the efforts to improve the organizational processes to achieve excellence is the assessment methodology entitled PDCA/PDSA. This particular type of assessment methodology is analysed below.

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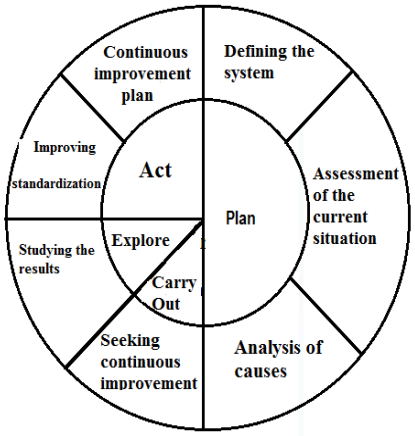
2. The assessment methodology PDCA/PDSA – as a methodology for coordinating the efforts to improve the organizational processes to achieve excellence

The PDSA methodology for improving organizational processes originally developed in the 1930s Walter A. Shewhart, has its roots in the scientific method (Francis Bacon in 1620) (see Figure no. 1: PDSA Cycle – Walter A. Shewhart).

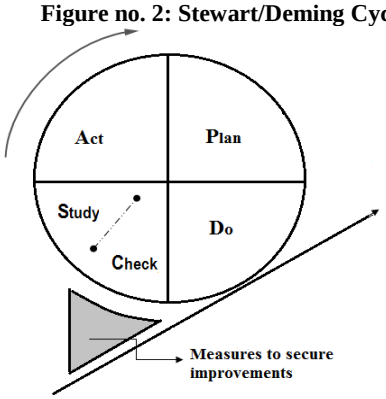
Figure no. 1: PDSA Cycle – Walter A. Shewhart



Source: Authors' adaptation after Walter A. Shewhart cycle in the process of continuous improvement

After the modification of W. E. Deming in 1950, this process can be found under the name PDCA, or "Deming Cycle". PDCA, designed to be used as a dynamic model, allows a continuous improvement process, every improvement meaning initiating a new cycle. Being a dynamic model, it implements the ideas and concepts that allow reconsideration process at any time. After applying the improvements deemed necessary, there may be a new cycle, which includes the latest enhancements. This process of continuous improvement processes contribute to the maturation subject to change (see Figure no. 2: Stewart/Deming Cycle).

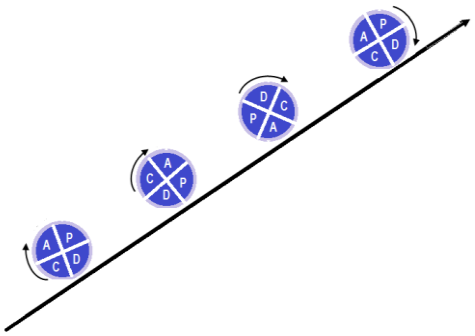
Figure no. 2: Stewart/Deming Cycle



Source: Authors' adaptation after Stewart and Deming cycle in the process of continuous improvement

Continuous improvement cycle can be graphically represented by the so-called "ramp of continuous improvement" (see Figure no. 3: Continuous improvement cycle).

Figure no. 3: Continuous improvement cycle



Source: The authors

Each concept that brings change can be represented by a spiral PDSA/PDCA. The ramp of continuous improvement can be sketched at an individual level, one cycle being followed by another, suggesting a spiral or a ladder.

Some of the ISO Standards (SR EN ISO 9000:2006, 2006; SR EN ISO 9001:2008, 2008; SR EN ISO 9004:2010, 2010) that are using PDCA methodology are able to improve organizational processes, such as the ISO 9001 defined for quality management (SR EN ISO 9001, 2009), ISO 14001 defined for environmental management (SR EN ISO 14001, 2000) and OHSAS 18001 defined for occupational safety and health management (OHSAS 18001, 1999).

The generic name comes from the initials PDCA methodology steps taken in a cycle: Plan - Do - Check - Act (Plan - Do - Check - Act), while PDSA cycle comes from the initials Plan - Do - Study - Act (plan - Do - Study - Act).

Prior to considering what needs improvement, identifying elements that provide opportunities in this regard. The aim is to select those elements of intervention that bring the greatest benefits in relation to the effort. Therefore, the planning phase is performed in two main steps.

I. The planning phase (Plan - Planning) aims to develop a plan of action to achieve change with the objective of continuous improvement; step is performed in two steps:

a) The first step, the identification of the problem involves: (a1) selection problem analysed; (a2) correct definition of the problem and determine precisely the elements on which it will intervene; (a3) setting measurable objectives and associated metrics in an effort to solve the problem for subsequent evaluation of progress; (a4) determining the coordination and implementation plan to improve.

b) The second step, the analysis of the problem involves: (b1) identifying processes that affect the question; (b2) choosing a pilot process; (b3) determining the actions taking place in the pilot

process, depending on how they take place in time; (b4) A graphical representation of the pilot process; (b5) pilot validation graphical representation of the process; (b6) identify potential cases they may face in the pilot process; (b7) data collection and analysis on the issue raised in the pilot process perspective; (b8) checking or reconsideration of the elements of the problem; (b9) identify the causes that generate the problem; (b10) collecting additional data, if deemed necessary; (b11) further actions of the other processes that impact on the problem, following the same steps as for the pilot process.

II. The implementation phase (Do - Execute) either to implement the proposed improvements or experimental testing of the proposed improvements, which will be implemented in a real system; this phase is performed also in two steps:

a) The first step in developing the solutions involves: (a1) to define the set of criteria on which the proposed solutions will be evaluated; (a2) determining the possible solutions to be applied to the root causes associated with the subject matter of discussion; (a3) choosing the best solutions in the set originally proposed; (a4) promoting this solution and promote it so that there is support for its implementation; (a5) planning solution selected.

b) The second step, the implementation of the solution selected, includes: (b1) implementation at experimental (pilot); (b2) identifying shortcomings and developing new improved solutions; (b3) applying the solution selected system-wide; (b4) to document improvement by developing procedures; (b5) additional data collection if using specialized mechanisms are necessary.

At the end, it is checked to what extent opted for solutions are interrelated to prevent possible conflicts between processes.

III. The verification phase (Check - Check/Study) involves checking the ability to meet the objectives set, closely following the conduct of key activities, to ensure that what was to be implemented properly understood, trying to identify and intervene in a timely manner, avoiding other problems that may arise in the process.

Therefore, this step involves gathering relevant data solution implemented by analyzing data in relation to the planned objectives. The verification stage is an important and also a mandatory step, allowing verifying the manner in which the system works according to the changes applied.

IV. The action phase (Action - Act) requires final verification of the effects of change, to determine whether it can be adopted. The proposed solution can be finally adopted, resumed or abandoned by its results.

If the change results in improving the solution adopted, but not before being subjected to partial or full standardization procedure, enabling exploitation.

Accepting the solution involves the deployment of a new series of actions that take into account: training staff to implement the solution; monitoring the effects of the implemented solution; identify opportunities for refining the solution and those that could contribute to its improvement. Conversely, if the solution has been ineffective assuming consumption of time and resources being accepted hardly holds or members, or if improvements are significant, it must be abandoned.

It will resume PDCA cycle, seeking to improve elements that do not meet expectations, extending to the new segments that can be considered. The resumption of the cycle involves time and increasing complexity of how the problem will be addressed. In his approach to continuously improve organizational processes, W. E. Deming defines a more evolved version of PDCA methodology, called FOCUS - PDCA. The FOCUS acronym comes from the initials of the main steps which define the methodology: Clarify – Find – Organize – Understand – Select (Identify – Organize – Clarify – Understand – Select).

3. Conclusions

The manner to carry out the management process in order to ensure the company's success depends on its position against competitors. Performance management processes and related terms include: strategic planning, financial planning and budgeting, performance measurement and monitoring, human resources management, project management and software, business process management, knowledge management, risk management, quality management, and so on. All these processes are carried out based on scientific management, integrating all management and many others may be necessary, depending on the specific. It is a modern approach achieved with methods and methodologies, tools and techniques that can be integrated in various forms of design, development and improvement of processes specific organizations.

Companies began to feel a pressing need for new and better methodologies for measuring organizational performance. In response to requirements arising from both the external environment and the internal organizations, practitioners, specialists, scientists, consultants, efforts to develop new methods for assessing organizational performance. The first steps have been registered in an attempt to improve financial performance measurement methods: the development and implementation of concepts such as activity-based management, economic profit, cash flow analysis and stakeholder analysis.

Reassessment concept implies defining performance indicators that reflect as close to reality operation. The identification and use of appropriate indicators for assessing the performance of an organization should consider putting them in correlation with long-term goals that they have in mind. Performance indicators should be properly identified, mainly due to the general vision that can

provide the performance of the organization. On their basis will be able to assess whether the strategy chosen by the organization after implementation and execution has helped increase its value.

The conclusions of this paper are:

PDSA methodology: PDSA methodology for improving organizational processes originally developed in the 1930s Walter A. Shewhart, has its roots in the scientific method. After the modification of W. E. Deming in 1950, this process can be found under the name PDCA, or "Deming Cycle". PDCA, designed to be used as a dynamic model, allows a continuous improvement process, every improvement meaning initiating a new cycle. Being a dynamic model, it implements the ideas and concepts that allow reconsideration process at any time. After applying the improvements deemed necessary, there may be a new cycle, which includes the latest enhancements. This process of continuous improvement processes contribute to the maturation subject to change.

PDCA methodology: The generic name comes from the initials PDCA methodology steps taken in a cycle: Plan - Do - Check - Act (Plan - Do - Check - Act), while PDSA cycle comes from the initials Plan - Do - Study - Act (plan - Do - Study - Act).

This dynamic environment subject to such constraints affecting the efficiency of type PDCA methodology developed to support continuous improvement effort, not to allow systematic completion of the four steps necessary steps. It is believed that PDCA assessment methodology, although provides a very systematic approach, is time and resource consuming. The time is compressed so much that PDCA is no longer able to ensure accuracy. Due to this fact, it is believed that by using this method there is a conflict between accuracy and time in which to reach a conclusion.

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