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**Article**

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## **MANAGING PROCESS PERFORMANCE AND QUALITY FOR SUSTAINABILITY IN THE SERVICE ORGANIZATIONS**

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### **Abstract**

The sustainability of the service organization relies on its ability to monitor the external environment for opportunities, changes, trends and risks, and also its ability to learn, change and innovate in response to the results of monitoring. To achieve sustainability the service organization should focus on its results as well as on its processes. The paper summarizes the preliminary results of an ongoing research on organization maturity assessment and process performance management, conducted in Romanian organizations in 2008. Multiple managers, responsible for quality and other executives in over 1100 organizations completed the Maturity Assessment Survey (MAS), which collected information on the strategic and operational maturity level of their organizations. The MAS was designed to identify the degree to which Romanian organizations are sustainable and offer continued satisfaction to their stakeholders, and to help organizations identify areas in which they can improve their performances. The paper analyzes the cause and effect relationships that exist among the critical components of a service organization's management system at the strategic level so that key drivers or outcomes will become the heart of an effective solution. In particular, the paper focuses on how the organizational system influences process maturity of Romanian companies, and the degree to which process maturity level plays a role in sustainability improvement. A correlation analysis was employed, in order to show the degree to which organizational system and strategies shape process maturity in various companies. The research results show that strong positive correlations between the components of an organizational system account for a higher level of maturity and performance of organization's processes.

**Keywords:** process performance management, organization maturity assessment tool, management system for sustainability improvement, service organization

**JEL Classification:** M10, M11

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### **Introduction**

Service organizations today need performance measures to drive long-term strategies and organizational change, to manage resources, and to operate processes effectively and continuously improve (Paunescu, 2008; Bieker, 2004). A supply of consistent, accurate, and timely data across all functional areas of business provides organizations with real-time information for the evaluation, control, and improvement of its processes, products and services to meet both business objectives and dynamic changing customer needs. It is no longer enough for the service organizations to just make profits for their shareholders and

to obey the law. They are increasingly accountable to more environmentally and socially aware shareholders, to civil society in general, to employees, to customers, and to a variety of other stakeholders (Bovee et al, 2005). The creation and sustainable development of the service organizations is now central to our economic and social lives (Bieker, 2004).

The service organization today should give consideration to both its results as well as its processes (Paunescu, 2008; Olaru et al., 2007). A successful service organization should have the ability to continuously monitor the external environment for opportunities, changes, trends and risks. It should be able to identify, attract and allocate necessary resources. At the same time, the service organization needs to have the ability to continuously learn, change and innovate. In order for a service organization to determine its overall progress and process performance in the long term, it should perform a continual assessment of its strategies and operations, and determine its maturity level. The main assessment tool organizations might use, namely maturity assessment tool, aims at assessing an organization's strategy and its operations (Paunescu et al., 2008). The use of such an assessment tool should enable the service organization to identify specific areas for improvement and to establish any action plans needed for the organization's further development.

The concept of process maturity is continually being used in many aspects of organizations as a means of assessment or as a part of a framework for improvement. The notion of measuring an organization's maturity has been the subject of academic papers for years (Antonucci et al., 2004; Ravichandran and Rai, 2000; Harter et al., 2000; Humphrey, 1989). International standards provide also different models for assessing an organization's maturity level (ISO 9004 and ISO/IEC 15504). A maturity model can be used as a benchmark for comparison and as an aid to understanding business processes. By understanding a maturity model, service organizations can use this to help not only assess their current maturity level but also help efficiently advance them to a higher level of maturity (Antonucci et al., 2004; Rad and Levin, 2006). Harter et al. (2000) found that improvements in process maturity lead to higher quality. However, higher quality in turn leads to reduced cycle time and development effort in the service industry.

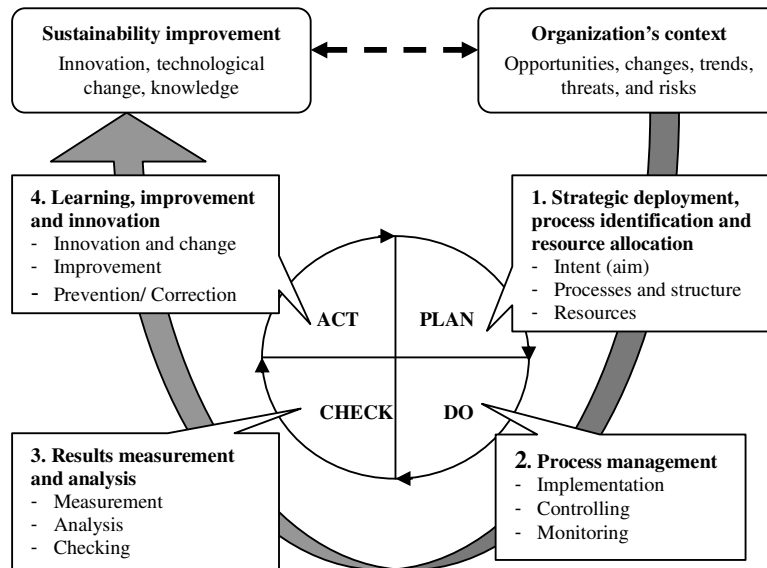
The remainder of the paper is organized as follows. The next section presents our rationale of conceptualizing the major constructs that constitute a sustainability-oriented organizational management system for service organizations. The section proposes a model that establishes theoretical relationships between these constructs. The subsequent section interprets the results and discusses our findings. The paper ends with a section of conclusions. A correlation analysis was employed, in order to show the degree to which the strategic organizational system shapes process maturity in Romanian companies. However, it is important to provide advanced empirical evidence to substantiate our beliefs.

### **1. Conceptual Model and Hypotheses**

The paper builds upon the concept of managing process performance for sustainability improvement developed by the international standard ISO 9004 in its latest version. According to this standard, the sustainability of the organization is reliant on its capacity to autonomously monitor the external and internal environment and ability to learn and innovate in response to the results of monitoring, through cohesive, efficient and aligned processes that are based on quality management principles. The sequence of the steps needed for the process of managing for sustainability follows the well known "Plan-Do-

Check-Act" (or P-D-C-A) cycle. Aiming for sustainability means that the service organization should always try to improve its ability to enhance the improvement part of the P-D-C-A cycle, supported by an autonomous organization culture.

We draw from the quality management literature to identify and define the key constructs of an organizational management system for sustainability improvement in service organizations. The conceptual framework for our study (Figure 1) integrates four constructs that interrelate each other. These constructs are: strategic deployment, process identification and resource allocation; process management; results measurement and analysis; and learning, improvement and innovation. We developed a model that interrelates these constructs with the organization's context and sustainability improvement.



**Figure 1 Conceptual Model: The Process of Managing for Sustainability Improvement**

The model is based on the view that quality management requires an organizational system perspective. The first construct relates the organization's context, including opportunities, changes, trends and risks to strategic deployment, process definition and resources. In the second and third constructs, process management and results measurement and analysis are specified as a driver of learning, improvement and innovation. In the fourth construct, innovation and change, improvement and corrective actions are specified as drivers of sustainability improvement. The model is tested using data collected from 1182 companies in Romania. An explanation of each construct and our hypotheses follow.

In our first construct (1), we relate the service organization's maturity and sustainability to strategic deployment.

$$\text{Sustainability Improvement} = \text{Function (Intent, Processes\&Structure, Resources)} \quad (1)$$

The service organization sets a strategic aim for its core activities that reflects the needs of all its stakeholders in a sustainable way, and defines appropriately processes to address the aim for the core activities being considered; also adequate resources are planned and available for the working of the core activities. This implies:

*Hypothesis 1: A higher level of strategic deployment leads to higher levels of process maturity at strategic level and sustainability improvement.*

In our second construct (2), we relate the service organization's maturity and sustainability to process management.

$$\text{Sustainability Improvement} = \text{Function (Process Management)} \quad (2)$$

The processes related to the core activities are implemented as planned and the organization assures that these processes are cohesively linked to other organizational processes and features. Therefore:

*Hypothesis 2: Implementation of a process approach in the organization is associated with higher levels of process maturity at strategic level and sustainability improvement.*

In our third construct (3), we relate the service organization's maturity and sustainability to results measurement and analysis.

$$\text{Sustainability Improvement} = \text{Function (Measurements, Analyses, Checking and Monitoring)} \quad (3)$$

The planned outcomes are monitored and measured and the measures developed provide useful and efficient information concerning the working of the core activities. Also, the processes and structures are implemented or changed as planned and the necessary resources are allocated and provided as planned. Thus:

*Hypothesis 3: Higher quality levels of results measurements and analyses are associated with higher levels of process maturity at strategic level and sustainability improvement.*

In our fourth construct (4), we relate the service organization's maturity and sustainability to learning, improvement and innovation.

$$\text{Sustainability Improvement} = \text{Function (Innovation, Change, Improvement, Corrective and Preventive Actions)} \quad (4)$$

The results achieved on the core activities contribute to the sustainability of the service organization, which means: the improvement and learning needs are identified by the service organization from its analyses; the corrections needed to ensure the achievement of the objectives of the organization, which weren't met initially, are identified; the necessary improvement activities in processes, products, structures and systems are determined; the innovations and necessary changes needed to achieve the service organization's articulated mission, vision and objectives are determined. This implies:

*Hypothesis 4: Higher levels of learning, improvement and innovation lead to higher levels of process maturity at strategic level and sustainability improvement.*

To ensure sustainability improvement, the monitoring and analysis of the environment in which a service organization operates are also necessary to provide ongoing data and information, to enable decisions for organizational change that will maintain and improve the performance of the service organization.

## 2. Analysis and Findings

**Sample and Data Collection.** The data were collected, based on the Maturity Assessment Survey (MAS) (Paunescu, 2008), from multiple managers, quality responsible and other executives from 1182 Romanian organizations, through face-to-face interviews (100%), during October 2007 and May 2008. The reporting companies represented a range of service industries, including commerce and sales (46%), real estate (15%), consulting (10%), distribution and transportation (7%), banking and insurance (6%), IT (6%), telecommunications (3%), advertising (2), and a mix of other industries (5%). The companies had been in operation for a significant number of year (Mean = 8.5, s.d. = 7). As regards the organization size, 26% companies employ less than 10 employees (n = 305), 34% of them employ between 10 and 49 employees (n = 397), 23% organizations employ between 50 and 249 employees (n = 274), and 17% organizations employ more than 250 employees (n = 206). Of the 1182 responding organizations, 787 (65%) achieved profitability in the last three consecutive years of operation or more. The sample consisted of 615 men (52%) and 567 women (48%), while 30% were general managers (n = 360), 19% quality managers (n = 225) and 51% were from various executive positions (n = 597: sales and marketing managers, financial managers, operations managers, HR managers, product and account managers, etc.). The mean age of respondents was 37 years (s.d. = 11).

**Methodology.** We took into account the four categories of constructs described above, for which correlation analysis was employed to show the degree to which organizational system and strategies shape process maturity in Romanian companies and drive their sustainability improvement. Due to space limitation, the descriptive statistics for this group of constructs as well as the results of the Pearson correlation analysis are not included in this paper, but only interpreted. The Cronbach's Alpha score for these constructs was 0.883, over 0.7, which meets the reliability requirements of the analysis.

**Results.** The Pearson correlation analysis revealed that there are strong positive relationships between the variables examined, which proves that each one accounts for advancing the maturity level of organization's processes and its sustainability development. According to our research results, more than 75% of the Romanian responding companies report that they monitor and analyze periodically their external and internal environment and collect data on a constant basis. They also develop strategic orientations based on the risks and opportunities identified, and the trends in the external environment. This leads us to the conclusion that there is a strong positive correlation between the process performance and maturity of the service organizations and their strategic planning and deployment, including also process identification and resource allocation (0.578). Therefore, a higher level of strategic deployment in service organizations leads to higher levels of process maturity at strategic level and sustainability improvement. Furthermore, the poor cross-functional coordination among business departments and lack of understanding of the

importance of having a process view of the organization and of assigning process owners -- responsible for monitoring the processes and their improvement, and whose authorities are recognized throughout the entire organization--, influence negatively the process performance and maturity in the service organizations. Therefore, implementation of a process approach in the organization is associated with higher levels of process maturity and sustainability improvement (0.630). The research results show that 39% of the surveyed organizations don't use a business process approach to manage their processes and interactions between them, and this leads directly to a poor performance of both strategic and operational processes. Additionally, our research results show also that more than two thirds of the responding organizations keep track on their progress by monitoring and measuring systematically their process performance based on a set of key performance indicators. They conduct periodical internal audits and assessments and take necessary corrective actions when needed. Nevertheless, almost 35% of the responding organizations report that they don't have a culture of learning organization in place and the changes and trends in the external environment don't impact learning as an objective of the organization. Therefore, higher quality levels of results measurements, as well as higher levels of improvement, learning and innovation are associated with higher levels of process maturity and sustainability improvement (0.662).

### Conclusions

The research results outline that strong positive correlations between the components of an organization's quality management system at strategic level that drive its sustainability account for a higher level of maturity and performance of organization's processes. Overall, the service organizations in Romania are aware of and understand their core competences and competitive priorities on the market, consider the needs and interests of various stakeholders of their business offerings, are improvement-oriented, plan to insure predictability of the results, focus on innovation and invest in their capabilities as necessary to ensure future success. It must be underlined that the respondents (organizations) were not selected at random and therefore, generalization is an important limitation of the study. Furthermore, due to the large differences in the size of the samples and to the complexity of the questionnaire, the error estimated for data collection and processing is of maximum 3%. Nevertheless, the present paper could prove a solid basis for further research in the fields it addresses. Further empirical evidence to substantiate our research hypotheses will be provided in a future research.

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