The essence of process management

It is difficult to explicitly answer the question of the essence of process management. It depends on the criteria which will be defined as fundamental in relation to this discussion. In the classical understanding a process is “a group of logically interconnected actions, which transform inputs into outputs, which process given resources and lead to meeting an objective”; other definitions treat the understanding of a process similarly, yet emphasizing some nuances [6], [7], [8]. It is noteworthy to heed the key features of a process:

- it has a deliberate character and is linked to creating value added in the understanding of an organization,
- it is a system of sequences and not a set of actions which, despite the fact that they may be even considered as crucial and necessary, do not create a logical chain of events,
- it transforms inputs into outputs, i.e. in relation to each process we will be able to define the expected outcome of realizing the process as well as identify the basis for its realization.

Authors note numerous aspects of process management. In the frames of the current conception it is necessary to conduct mapping, modeling and optimization of processes. The key issue appears to be process measurement which will allow organizational effectiveness and efficiency seen from the angle of realized processes [9].

Key contentious issues in realization of process management

- Literature analysis in a relatively coherent manner sees the conception of process management. Authors occasionally differ in:
  - functional and process orientation in management
  - division of roles as opposed to positions and functions of workers
  - standardization
  - notations used in process description
  - methods and details of mapping
  - process architecture
  - implementation of process management
  - the key issue – functionality and understanding of process management.

These issues among many others are essential for understanding the essence of process management and its functionality when applied in an organization [10].

Process quality management in light of the ISO 9000 series norms

Process approach is one of the fundamental rules of quality management in accordance with ISO 9001 requirements. In chapter four of the abovementioned standard requirements related to process management are presented. Thus,
organizations are obliged to explore the theory and practices of process approach as well as to select solutions in accordance with the norms' requirements in this regard.

Practice proves that frequently taken actions in this area, however accepted by certification bodies, are merely a semblance of solutions defined in the theory of Business Process Management (Kunstz, 2011, pp. 113-120).

Interest and popularity attached to process management becomes comprehensible in light of new requirements of the international norm. Unfortunately, practice frequently confirms that the interest often appears to be of limited range. The quality management conception focused on merely meeting the requirements of the standard defined in relevant parts of the norm should become outdated. At present the superior conception in reference to the system should be processes oriented towards creating value added for customers, i.e. the synergy of knowledge in various fields and of work done simultaneously in the whole enterprise and its surroundings (partners, clients, competition).

The fact that orientation towards processes is the basis for international quality management standards in practice means that it is not feasible to implement an effective quality management system in an organization without the analysis of the given organization as a system of all processes and as well as without improvement in joining actions of different functional areas.

Process identification and classification

Process identification (process mapping), i.e. the selection of key processes in an enterprise, amounts to the first stage of process quality management. In the results of this stage so-called contextual model is created. Regarding the fact that at further stages it is obligatory to depict the correlation between processes, they frequently belong to two or more groups [1].

The most popular, however, is the model which assumes two groups of processes. Processes are selected by the role they play in an organization and by their mutual correlation. Hence:

- basic processes which result in a product or service in- or directly related to the enterprise's activity. Generally, these processes create value added in so-called value added chain. Among these processes the following may be included: market research, product design, product delivery, sales, marketing, customer service;

- support processes which are designed to ensure an effective functioning of an enterprise and to enable the realization of basic processes. Support processes do not create value added for the customer in a direct manner. Among these processes the following may be included: strategic planning, human resource management, finances-accountancy, computer and logistic services.

Frequently the divisions differ as they are connected to functionality of process mapping. For instance, emergency processes, cost and business centers. Process map in each case should combine both the knowledge in process mapping and the specificity of the organization itself.

Key processes identification amounts to the basis for developing process architecture of the management system. Process architecture may be seen as an assemblage image of the structure of processes on account of the scale of the enterprise's activity. In relation to computer tools process architecture may include:

- cross-sectoral processes (megaprocesses);
- sectoral processes (basic processes);
- basic processes (individual actions).

Creating the process architecture, thus, consists in gradual division of given key business processes into smaller and more basic elements. In relation to the responsibility for the processes so-called process owners are in the leading roles. Process owners coordinate the operational flow of actions in the frames of processes as well as they manage the processes, i.e. set the goals and measures, analyze and improve processes (taking and verifying support and preventive actions).

Process parameterization

Effectiveness measurement is a significant feature of both process approach and quality management systems in conformity with ISO 9001. Therefore, there is a need to parameterize processes (Grajewski, 2007, s. 79-87). In practice it is linked to the need to define:

- main quality features;
- result and leading measures;
- target values of measures.

Parameterization should be conducted for individual processes in the frames of the process map. Hence, objectives, measures and target values are defined in the quality management practice, at least for so-called megaprocesses. At the next stage objectives, measures and target values for the basic processes are defined (sectors of lower level). Finally, these parameters are established for the lowest sectors - the operational level. As the result of these actions every worker is aware of objectives and tasks defined in the frames of a given process.

Process management in selected organizations

Case study includes deliberately selected five enterprises which have certified quality management systems (ISO 9001) or ISO/TS 16949. All the enterprises declare involvement in the realization of the process management conception. In this case certificates guarantee meeting at least the basic requirements concerning process management, independent of the versatility of the declaration. The organizations belong to the group of medium-sized enterprises; three of them amount to a part of bigger concerns; all of them are production enterprises.

The analysis of the enterprises has been focused on existence and functionality of key process management elements. In-depth interviews were conducted in head offices of the above-described enterprises in 2011 with plenipotentiaries for quality management, in one case with lean manager.
All the enterprises presented process maps, yet only in three cases they had been created according to the accepted methodology; in the remaining cases the maps had an intuitive character – they were frequently inconsistent or even did not meet basic definitions of processes.

Only in two cases the architecture used professional notations (BPMN), VACT and EPC diagrams, and included at least three levels. Hence, only in these two cases architecture was detailed enough in light of process optimization. In one organization supportive process management software was employed (Corporate modeler).

Three of the organizations analyzed in the research had at their disposal process very general process maps which had been created at the stage of implementing the quality management system. Processes were divided into two groups – basic and support processes.

Despite the fact that all of the abovementioned organizations met requirements included in ISO 9011 standard, it is difficult to agree with the thesis that they employ process management (except for one case). Processes were defined, the relation between them were described, system documentation embraced method and criteria of their realization. Process architecture; however, was limited to only one, occasionally two, levels consisting of processes presented uniquely in the form of VACT diagram. Thus, it is impossible to undertake actions which optimize processes on the basis of analyzing measures which make up a given process. Processes were described only in general and with no reference to particular actions. Furthermore, processes did not constitute a basis for planning, system documentation, and they did not define duties and entitlements of workers. The description level of processes did not allow measurement and factual analysis based on data.

In one case of an enterprise which acts on an extremely demanding market of auto industry and medical equipment the process map was the genuine basis for management. Process architecture had been modeled on four levels, the lowest of which was presented in the form of EPC algorithms. Quality management documentation was generated automatically on the basis of EPC algorithms. Planning and simulating activity in the frames of VSM, Lean and also TPM originated in processes.

**Conclusion**

Although in both the literature on the subject and practice numerous descriptions of process management may be found, there is no explicit opinion indicating that meeting the minimal requirements will allow process management in an organization. The thesis that a certified quality management system is an unequivocal piece of evidence for process management in the given organization appears not to be valid in practice. It may be even stated that there is no direct link between certified management systems and process management.

**References:**