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Are IT Skills Helpful to Manage Processes in a Small Business?

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Abstract

During last three decades, process management has become well-recognised method for planning, monitoring, controlling and transforming organisational operations. Often process management in organisation is associated with the development or implementation of IT systems and automation projects. However, this is just one of the aspects of the process management. Other approach, named Business process management (BPM) is a comprehensive system for transforming organizational operations and managing company performance.

Skills needed for managing company are different to skills necessary for development of IT systems. Process approach for managing enterprise performance differs significantly from the process approach used for development of the IT solutions and automating workflows. Selection of appropriate approach requires sufficient knowledge and experience for manager in charge.

Small business most of times faces challenge of limited resources and limited competencies. This also leads to often confusing and disappointing results from implementing process management approach in small and medium companies.

Article review main differences in process management approaches for managing company performance and process automation purposes, and discuss results of focus groups on how manager's IT skills can facilitate or diminish success of the business process management initiatives in a company.

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1. Introduction

During last three decades, process management has become well-recognized method for planning, monitoring, controlling and transforming organizational operations. Very often process management in organization is associated with the development or implementation of IT systems and automation projects. However, automation, IT and software development is just one of the aspects of the process management. Business Process Management (BPM) is a comprehensive system for transforming organizational operations and managing company performance.

Skills needed for managing company are different to skills necessary for development of IT systems. Process approach for managing enterprise performance differs significantly from the process approach used for development of the IT solutions and automating workflows. Selection of appropriate approach requires sufficient knowledge and experience for manager in charge.

Small business most of times faces challenge of limited resources and limited competencies. This also leads to often confusing and disappointing results from implementing process management approach in small and medium companies.

The methodology of this research is based on the state-of-the-art literature review on process management aspects and empirical analysis of the SME experiences in application of the process management. Empirical analysis was conducted by organizing four focus group discussions with owners and managers of Small and medium enterprises. Focus groups were conducted to understand how process management approach is used in SMEs. Participants shared their experience to identify factors, which lead to success, and discovered reasons that diminished positive effects from use of process approach. In total 58 SME owners and managers participated focus groups during September 2015 - April 2016.

According to technology lifecycle theory, and adoption curve, introduced by Bohlen and Beal¹, the Process management approach is mature concept. However, companies have different level of experience and also different outcomes from using the process management approach. This article discuss main differences in process management approaches for managing company performance and process automation purposes, and analyse how manager's IT skills can facilitate or diminish success of the business process management initiatives in a company.

2. Two definitions of the process management

Modern business process management (BPM) approach has originated from works of Shewhart² and Deming³ on statistical process control. These efforts led to the development of modern quality movement and Six Sigma approach. Process approach become a central concept in a Total Quality Management (TQM) and in series of ISO-9000 recommendations on quality management systems in enterprises.

Still, there are several definitions of the process itself and the process management, and definitions are different from business perspective and system engineering perspective (see the Table 1 for summary of main differences).

In the systems engineering arena, a process is a sequence of events that uses inputs to produce outputs. Broad definitions from Hammer, Davenport, Short, Chang works can include sequences as mechanical as reading a file and transforming the file to a desired output format; to taking a customer order, filling that order, and issuing the customer invoice^{4,5,6}.

From a business perspective, a process is a coordinated and standardized flow of activities performed by people or machines, which can traverse functional or departmental boundaries to achieve a business objective that creates value for internal or external customers.^{7,8,3} Even more, Business Process Management (BPM) is seen a comprehensive system for managing and transforming organizational operations, based on what is arguably the first set of new ideas about organizational performance since the Industrial Revolution⁹.

Hammer and Champy works on Business Process Reengineering^{4,7} refined definition of process: "end-to-end work across an enterprise that creates customer value" and put focus on process design by reengineering as opposed to process execution.

Along with difference in definitions, there is also a difference in tools and concepts used. Process management approach used for system engineering, IT and technology development encompass development of extensive and accurate flowcharts of activities, detailed definition of interfaces between system elements, definition of strong criteria for decision making during flow of activities.

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