

ECONOMIC PROCESSES MODELLING AND ECONOMIC SYSTEM

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ABSTRACT:

Process oriented attitude for organization and company management is being used widely at the moment. Presented paper therefore deals with process management, process definition and identification, process description in three levels (A, B, C), process categorization, outsourcing and economic system implementation.

KEYWORDS:

Business Process, Economic process, Core Business, ERP system (Enterprise Resource Planning), Business System, Business Consulting, Economic System Modelling, BPR (Business Process Reengineering)

INTRODUCTION

Some authors [1] who deal with company management are strongly warning that the theory of Adam Smith is obsolete. Companies which want to be successful in the future (when economic globalization is spread worldwide) have to replace old attitude towards company management with a new one - process oriented approach. In the area of work organization it usually means shifting to flat organization structures, which are based on horizontally running processes. Transition from hierarchy-driven organization to process-driven organization means in most cases reengineering of the whole company and also economic system replacement.

1. PROCEDURE PROPOSAL FOR COMPANY REENGINEERING (PROCESS OPTIMIZATION) AND ECONOMIC SYSTEM IMPLEMENTATION

In case the company decides for reengineering together with economic system implementation I suggest the following procedure:

- Start with own process identification, check and describe all company processes (rough description – level A), make their categorization
- Take decision about outsourcing
At this point it is necessary to have process description with rough degree of details (level A) available, where we decide which processes should be outsourced and which should retain in the company.
- Detailed analysis – level B
After previous step, we have to analyze in detail only those processes which will be secured by the company itself. We make further detailed description and will go further into the content (level B). Based on process content we define requirements for the information system.
- Information system selection follows
- Third degree of detailed process description incl. selected IS – level C

In this step it is necessary to do the last detailed check of company processes activities (in accordance with possibilities of selected IS – level C) and to secure synchronization between its implementation into a company structure and new IS implementation. It is recommended to use an implementation method according to the implementation partner (such as SAP company has “ASAP methodology”).

- Assurance of routine operation and system development.

In the following chapters of the paper I will explain chosen steps of this procedure assuming the modeling of economic processes in the company and implementation of company system (ERP – Enterprise Resource Planning).

2. DEFINITION, IDENTIFICATION AND PROCESS DESCRIPTION

Davenport defines process as a group of logically bounded tasks provided to ensure business target achievement. The process is a structured and measurable group of activities which stream to deliver the result to a specific customer or market. Any process has a remarkable impact on the organization of work in the company. It can be simply described as a work flow going from one employee to the other and in case more complex processes from one department to the other. Processes can be defined on many levels, always having clearly marked beginning, certain amount of steps and marked end (process attributes). Processes are further described in [3], [4], [5].

It has been already mentioned that every organization should identify and describe all of its processes, make their list which will be used when creating company process model. In the first step it is sufficient to make the process description on a rough level, which is marked as level A. It will help company management to understand company behavior from the process point of view. This description will serve as a process categorization.

3. COMPANY PROCESS CATEGORIZATION

With regard to other progress it is very important to produce the categorization of company processes. For this, process description of level A will be sufficient. To be able to continue we have to define the criteria first. As a first criterion is the process relation to the main subject of the business (company mission). It is recommended to start at the end, from the final product, and continue to the beginning. Main processes that are directly related to core business of the company could be usually described as the key or value creating processes.

Further, we define the second criterion, which is the relation to the main process, consequently also to the subject of the company business or to main organization activity. Based on this criterion, we can mark specific process group as supporting (adjacent, auxiliary). These are processes which enable trouble-free operation of main (key) processes. Finally we have the controlling processes which are managing these two process groups.

The result is separation of the processes into three groups:

- Main (key)
- Supporting (adjacent, auxiliary)
- Controlling (managing)

4. DECISION ABOUT OUTSOURCING

Outsourcing as a strategic organizational tool can be defined as purchase of selected activities and services from external specialized supplier. The word “outsourcing” itself can be disassembled as “out-resource-using”.

It is very important to consider which process groups in terms of our categorization are suitable for outsourcing. Processes which belong to the first group are directly connected to the main subject of the business and therefore are not suitable for outsourcing. The company can not give up its core business, i.e. to buy these processes as a service from external supplier. That would be too risky; the company has to secure this process by itself.

Similarly, processes which we added to controlling activities have to retain under supervision of company management. It would not be appropriate to transfer these activities to other provider.

When thinking about the substance of supporting process group we can consider this group (from their own characteristics) to be convenient for outsourcing and therefore we can buy these processes as a service. Criteria helping us to decide whether use outsourcing or not can be sorted into following order:

- Decrease of management workload (outsourcing processes do not have to be controlled)
- Output quality from the process, security
- Cost comparison (own process and outsourcing)
- Other specific criteria.

When deciding about the outsourcing the cost should not be the primary criterion as we do not compare the same output quality from the process (in most cases).

5. PROCESS ANALYSIS (LEVEL B) AND DEFINITION OF ECONOMIC SYSTEM REQUIREMENTS

Group of economic processes we intend to keep inside the company has to be described in more detailed form. Level B as we defined the intermediary level of process description can be carried out as detailed characteristics of particular activities which belong to the process. This analysis serves for requirements definition on behalf of them we will choose the economic system.

6. SELECTION OF ECONOMIC INFORMATION SYSTEM

Selection of the information system is a very important part of the process. Selected ERP system should serve for its purpose for at least ten years, of course incl. application of respective upgrades according to implementation company recommendations (or producer's ones). Based on defined requirements and other criteria set we choose a concrete information system utilizing the contractual process. Our aim should be to achieve the best possible intersection between our requirements and standard functionalities provided by the system. Final decision should take into consideration other special criteria such as economic stability of the IS producer, maturity of used technology, references and price from the long-term view. The process results in the public supply contract signing between client and the system supplier. To reach a good quality contract I recommend the cooperation with the consulting agencies (as much independent as possible) to ensure the proper legal and technical wording.

7. SYNCHRONIZATION BETWEEN DETAILED PROCESS PROPOSAL OF LEVEL C WITH THE INFORMATION SYSTEM IMPLEMENTATION

Having a successful public supply contract specifying the information system possibilities intended to be implemented and a signed contract with the supplier we have to carry on with the detailed specification of future business processes on the level C. It is crucial to synchronize this activity with customization and implementation process according to the company procedures of the implementation company and also with the company reengineering as it is intended by the top management. When synchronizing these three difficult activities it is necessary that all parties involved are ready for incidental compromise.

CONCLUSION

At the very end, I would like to remind that during the company reengineering, selection and implementation of the economic information system it is essential to keep proved procedures and guidelines. Some of them have been mentioned in this paper; however, I would also recommend for the company managers some additional literature, e.g. [7]. The main rule for a.m. activities should be the cooperation between company management and consulting companies having the practical experience in these activities, good theoretical view of this area, independence on particular IS/ICT suppliers and knowledge of the situation in the IS market [8], [9].

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