IMPROVING OF PROCESSES IN THE METALLURGICAL COMPANY FOCUSING ON INFORMATION AND HUMAN RESOURCES PROCESSES

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Abstract

The basic principle of modern management in the metallurgical company is the principle of continuous improvement of the performance of the processes. Its own improvement and its metrics associated with repetitive activities to increase capacity to meet the requirements of customers in the metallurgical company.

In the paper there are listed and analyzed selected approaches and methodology to improve the performance of the processes. At the same time are set out general principles and characteristics of the procedural approach to implementing projects leading to the improvement of the performance of the enterprise. The authors focus on the issue of procedural methodologies and improvement of strategic processes as a prerequisite to growth of value added in the metallurgical company. In the knowledge level information and staffing processes will be highlighted, which are strategically important for the measurement of the improvement processes in the level of measurement of added value of the product. The article also includes a case study of methodology for improving the outcomes in support of procedurals in the Třinecké železárny, a.s.

Keywords: Process, process metrics, strategy of process management, information and personnel processes, the change management process

1. INTRODUCTION

In recent years, dramatic changes have occurred in all areas of business, in particular a significant reduction in the business cycle of products and services. It is necessary to dynamically respond to changing environmental conditions. Process management is an approach that enables companies to respond to changes quickly and efficiently. Process management has become the subject of a custom deployment in metallurgical enterprises and gets its attention by many studies and documents processed. This need stems from the fact that the complex issues of process management it is difficult to simplify only for the technical mastery of the methodology.

In this article it will be presented in addition to the general process management even the specific process management approach of the Třinecké železárny. This approach is not simply picking out all of the current and modern mindlessly and without a second thought. The mission of the company experts in organization process management is a constant monitoring of trends in the development of methods and tools for process management. The mission of the managers is to be able to select the most appropriate principles and implement them permanently and constantly improving. And on the contrary, we shall immediately walk away from the established principles that do not deliver the results we want. That process management strategy used to populate the system of continuous improvement, and evaluation of process metrics is a successor of the classical functional management.
2. METODOLOGICAL RESOURCES

2.1 Processes in company management

The definition of the concept of the process is dependent on the purpose of the processing of the relevant issues. The concept of the process is most often characterized by and developed in the understanding of the economic process as a company-(Wolf)¹. For its understanding is an important output of the process, i.e., an enterprise product or service. The general concept and definition of the system, however, is a matter of and reflects a much wider use in the theory of management, or project management. It's not just about the supplier-customer relationship solutions, but on the definition of the wider relationship associated with the development of new products and procedures, project management. There is also a more practical application of the methodology of project management.

For a proper understanding of the processes in enterprise project management it is important to describe the performance of the various mechanisms of the boot process. For this reason it is always a specific reason – the initiative. According to the literature, (Chlapek, Řepa, Stanovská 2005)¹ may be a stimulus of external or internal reality. External stimuli (coming from around the process, are objective) is referred to as an event. Internal trigger is a situation in which the activity is located. It can be indicated according to the above authors as the status of the process. Mutual interaction takes place between processes. The status of the event starts and ends, that builds on the performance of the subsequent process. Between the individual processes can be used to establish a session to prevent and to create structural links individual processes into procedural arrangements, in graphic form, characterised by linear or branched lines.

2.2 Categorisation of the entreprise processes in the kontext of their improvement

In the categorisation of the processes in the enterprise, it is necessary to define and refine the basic categories of general understanding of the processes. This basic categorization allows you to the understanding and classification processes in terms of their potential for improvement.

In terms of procedural outcomes, thus making the added value of the product, there are (Crainer, 2000)¹:

- key processes – in these processes, there is the added value used to satisfy the needs of external customer-product user. The main processes usually do not exceed the limits of the individual areas, rather characterize the one area.
- support processes - these processes creates added value used to satisfy the needs of the internal customer. Therefore, it is a critical strategic or product (service), that product cannot be provided externally. When external collateral could compromise the mission.
- secondary processes--support their key processes and related activities. Their advantage is that they allow to the main processes were carried out with optimal performance. Secondary processes can be realized through outsourcing (in economic evaluation of their effectiveness and cost).

The above mentioned procedural groups are in their final phase of product output with added value for the customer--a product that uses by a consumer – a user in order to satisfy specific needs. However, over those processes operate non-production processes. Non-production processes do not have this property, but are inherently necessary for custom deployment and performance of production processes.

Process management in the broad sense is the special effect (streamlining). Management is a higher type of special effects. Through that, the system makes or develops. Control and change processes to ensure the stability, integrity, and a basic operation of the systems. Efficient and effective system of strategic management creates the conditions for the management of the business (including feedback), decision making, and their informational support.
3 GENERAL PRINCIPLE OF APPROACH AND CHARACTERISTICS OF THE ENTREPRISE PROCESSES IMPROVEMENT

The improvement of the procedural elements of the improvement of entreprise governance, it is necessary to define the general principles of this perspective and process approach in the area of company management - define principles and procedural approach. In other words, we limit the basic rules of a procedural approach for the determination of the project process and content of life cycle, we limit the degree of generality, taking into account the degree of specificity and variantnosti of a particular solution (method, a technique, a tool) for the specific development stage of the company management.

The following principles have become the default and the basic principles (axioms) for the formulation of principles of procedural approach as tools for improving processes in the enterprise. This includes the following rules:

3.1 Principle of process strategy

The principle of the procedural strategy and the strategic concept is the basic principle of design methods and management of the entreprise system. Procedural strategy shows that the custom project solutions and project production activities are not the only process in the entreprise, but that there is procedural groups, clusters, sections, and views on them, that it is possible to describe the appropriate entreprise process model and further divided into major and minor procedural groups. These process chains interact, complement, often take place in parallel outputs from one enter into the others. The revision of the processes and revision control affect more the whole branches and shall be subject to such inspection arrangements.

3.2 Principle of process modelling in an entreprise

Creation of process models in an entreprise is understood as a key principle, which allows for procedural analyst look at abstract the general characteristics of the entreprise, unencumbered by the current state of affairs, the used technology, and other abstract characteristics. Designed entreprise system is generally built up gradually after each of the hierarchical levels of the design-from concept, through technological, until after the implementation model, with each level abstracted from the specific characteristics of the other levels. The principle of process model results in clearly defining the hierarchy of processes and a clear separation of the essence of the system (what the system must do) from the restrictions that are to be added as a result of the design of the selected technologies and the deployment environment (how it will do). The main and hierarchically up are those processes through which generated outputs as the final value for the customer. Later they will then form the basis of process model of the entreprise.

3.3 Principle of delegacy, monitoring and review in an entreprise

Fulfillment of the basic meaning of the entreprise in this concept is the consistent application of the procedural principle of delegation. The delegation is always meant the transfer of the powers and responsibilities of the owner of the transmission process, which alone can thoroughly understand and recognize the current need, where appropriate apply, and modify the necessary implementation processes leading to the fulfillment of the above, the mission of the process (or the process groups). The structure of the procedural team is built so as to be able to delegate to implement and adapt to the requirements imposed on it. Processes are often accompanied by a delegation of the decision-making processes, which also brings an element of responsibility for the impact of the adoption and implementation of the relevant decisions of the executive in the follow-up and implementation processes. For example, if the limited duration of the project date in the entreprise of transmission of the information to a specific output, it is
necessary to often adopt the risk management process and a greater degree of risk in the process of the project scope, project costs and testing processes, all for the purpose of the measure.

3.4 Principle of team work, principle of assessment and staff motivation in an entreprise

Although it is an essential attribute of the process of its unique owner, not procedural activities and entreprise activities are carried out by individuals without interactions. In procedural understanding creates a subset of the processes of specific outputs, which enter into other processes, and thus affect their implementation. The interaction is so strong that the entreprise output and its parameters depend not on a simple summary of the individual performance of individuals, but on the strict application of the principle of teamwork. For custom project management performance is therefore necessary to accept and promote the interests and purpose of procedural strategies affect a subset of the project teams and creates an appropriate procedural and organizational structure. The procedural approach, however, does not focus on the autonomy of the project teams with sufficient powers. The motivation for these teams to project performance, however, must be in conformity with the added value of the use of the output for the customer and user of the process output. The motivation, however, should be approached comprehensively and unfold it from compliance with the final product.

3.5 Principle of maximalisation of utilisation of the knowledge processes in an entreprise

This principle is based on the assumption that the etreprises, and their outputs, therefore the products, are evidence of a general trend in the transition from the industrial economy to a knowledge economy. The added value of the outputs is so high that it is necessary in the processes in the respective types of projects and their specific performance to maximize. Processes based on this principle, increase the total design intelligence (in the human factor, organizational structure, management sections, control mechanisms, etc.), and makes the groundwork for the processes of permanent learning. The use of the knowledge of the principle also means to delete the entreprise information and knowledge barriers to their diffusion-open channel the flow of knowledge. This flow is in the direction of the horizontal (via individual production processes), and vertically (through non-production processes), released with the barriers of the project activities. The owners of the process in this environment, the flow of knowledge to maximize the impact and effectiveness of the controlled process and maximize this principle and value of the product

4 PROCESS MANAGEMENT AND ITS DEVELOPMENT IN THE TŘINECKÉ ŽELEZÁRNY, A.S.

Process management and its improvement in the Třinecké železárny is a very broad topic. In the following text, therefore, we will pay the attention only for the one area, ICT processes. ICT processes permeate the whole company and are the basis of any action. Therefore, it is and must be a special emphasis on them.

The basis for the improvement of ICT processes in the Třinecké železárny is to repeat the processing and consideration of information strategies for the group of the Třinecké železárny. The approval process of the strategy takes place in four-year intervals. Every year, then the inspection report is discussed, which aims to inform the management about the degree of its implementation and submit for approval any changes and updates. The basic pillars of the strategy are the starting points of information arising from the questions:

- How to increase the performance of the employees
- How to promote the achievement of the strategic goals of the company
- How to obtain a competitive advantage for the company
- How to create more opportunities for the development of strategic
The process of development is the dialogue between the users (employees and managers) and computer science and must include a systematic creation of necessary information infrastructure. The objectives of the process of improving the ICT processes are based on the basic questions:

- How can ICT add value to our products,
- What information system will increase the most our competitiveness,
- How should the development and operation of ICT be organized and who and how it has control
- How much for development you can spend and how to evaluate their effectiveness,
- How to educate and motivate staff in the effective use of ICT

Measuring of the effectiveness and efficiency of the ICT processes in the Třinecké železárny is conducted in three levels.

1. Evaluation of the implementation of the information strategy – evaluation of the level of implementation of and compliance with the strategy of the company. Rated 1x per year.
2. Evaluation of three fundamental process parameters – length of a failure of the main applications, the length of the outage in networks and the percentage completed user requirements by the deadline. Rated 2x per year.
3. Evaluation of ICT services. As for the detailed parameters of the service, the development of a range of services, change of quality of service, capacity changes, service options and suggestions for its improvement. Rated 1x per year.

The improvement of processes ICT, arising on the basis of these recommendations, are the starting point for the planning and improvement of other processes. There is a more efficient use of ICT costs, facilitating the transmission of knowledge capital and the extension of the standards in the Třinecké železárny, the transparency of the existing relationship, flows of information and procedural links.

The Třinecké železárny takes one to two companies every year. Their integration into the group, it is a very difficult process. The objective of this integration is to modify the existing processes in the group and even in the new company so that they are compatible with each other, in order to transfer information between the subsidiary and the group could run as efficiently as possible and to have been used by any synergistic effects.

Integration of a new company into the group of the Třinecké železárny is under the project event. The basic tasks of integration projects are the mapping of current processes of the subsidiary, and determine which of them and how they have changed. Or, if a process of the subsidiary records better results than a similar process in the Třinecké železárny, to propose an amendment to this process. At this stage in the establishment of the concept of integration follows by stage of realization, in which they are made the appropriate changes, and on stage in the evaluation of the fulfillment of the project objectives. And in these tasks play an effective and well documented ICT processes, irreplaceable role.

As already mentioned, ICT processes permeate the whole company, and so in the course of integration must cover all areas of the company:

- Marketing and trade (purchase, sale)
- Production and logistics (scheduling and production planning, production, storage and shipping, quality control)
- Maintenance and repair
- Finance and accounting
- Human resources and payroll
- Controlling, calculation and reporting
- Support processes (health and safety, mail, etc.)
Technically this means to realize interconnection systems of the Třinecké železárny are systems of subsidiary, retrofitted with the company with the necessary hardware and unite the ERP system (purchasing of licence, installation, users training and start up).

Projects integration of ICT processes are characterized by high risk. The most serious are the possible problems in production caused by the replacement of the long term existing system, especially when the new system is deployed to the production type, whose specifics the team still has not addressed yet. The big problem is staffing solutions of the project tasks at a time when it is running more integration or other projects.

Integration projects in the Třinecké železárny is enjoying a high success rate, when in addition to the occasional slips, does not occur more problems. Each integration in the field of process controls know-how also to the Třinecké železárny and happens between companies for mutual learning. These positive facts indicate of the experience and capabilities of the integration of the team and also a good knowledge and quality management of the enterprise (not only ICT) processes.

5 RECOMMENDATION AND CONCLUSION

Continuous improvement of processes in the metallurgical enterprise is an activity that brings in the longer term significant effects. Compliance with the above general principles of procedural approach is possible to achieve gradual improvement, which produce an economic return on the costs, contribute to improving working conditions and increasing employee satisfaction. The involvement of human capital and ICT in terms of measuring the value added of the resulting improvement absolutely necessary.

Improvement of the processes must become the basic philosophy of the company - absolutely essential factor is the active involvement of the top management. Process approach must be reflected in the willingness and commitment of the management to promote changes and improvements. This path must constantly communicate with the staff. These must be periodically learning how to manage and improve processes, how to measure and evaluate the improvement effects. The processes of strategic, tactical and operational management must be linked in a continuous follow-up on corporate culture and the development of human potential.

LITERATURE