

OPTIMIZATION OF NON-PRODUCTION PROCESSES

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Abstract: The success of major part of companies depends on offered product, its price and promotion and also on many other factors, e.g.: product innovation, quality of service, reliability, fast and flexible reaction on customers' needs, substitution of sequential processes by parallel, etc. For these reasons, companies should deal with business processes. They should also define and implement business processes accurately because performance of company directly depends on the performance of business processes. The article deals with improving the program of non-manufacturing business processes and defines individual steps that need to be analysed in detail.

1 Introduction

Process approach to corporate management is not only a competitive advantage but also one of the requirements of the ISO certification. Competitive environment leads companies to deal with their processes and find the ways to improve them. Power of customers caused that importance of marketing specialists who study the market and look for new forms of competition increased. Price is not the only determining factor. Due to the influence of competitive environment there arise the problem of insufficient adaptability of companies with traditional organizational structure. The process organization with an effectively functioning quality management can react quickly to changes and also can maintain or improve its market position. One of the key factors of success is to accept change as part of the daily life of company. If company wants to be successful, it must look for new improvements and new product innovation. Company must assume an attitude both to products and processes. Appropriately selected monitoring and measuring processes will reveal weaknesses in organization which are also an opportunity for improving processes [2], [4].

2 Methods of improvement non-production process

If we want to improve the processes in non-production areas it is necessary to obtain management support. Managers have to decide if it is necessary to start process of improving. Then company can move to the next step which is particularly important for the philosophy of lean administration. Some company employees should be interested in process. All interested persons should be prepared and trained. Then some non-production areas should be analysed. At this stage the best methods that allow visualizing initial level will be applied. Then it is necessary to identify waste and vulnerabilities in non-manufacturing processes. Also we have to focus on the types of waste that occur in

administration. After correct analysis in non-manufacturing process and after correct identification of waste it is needed to eliminate the waste and it is necessary to implement methods of improvement. The last step, called the audit of program improvements, evaluate the rate of success in removing waste in non-production area. The principle of individual steps is shown in figure 1 [1].

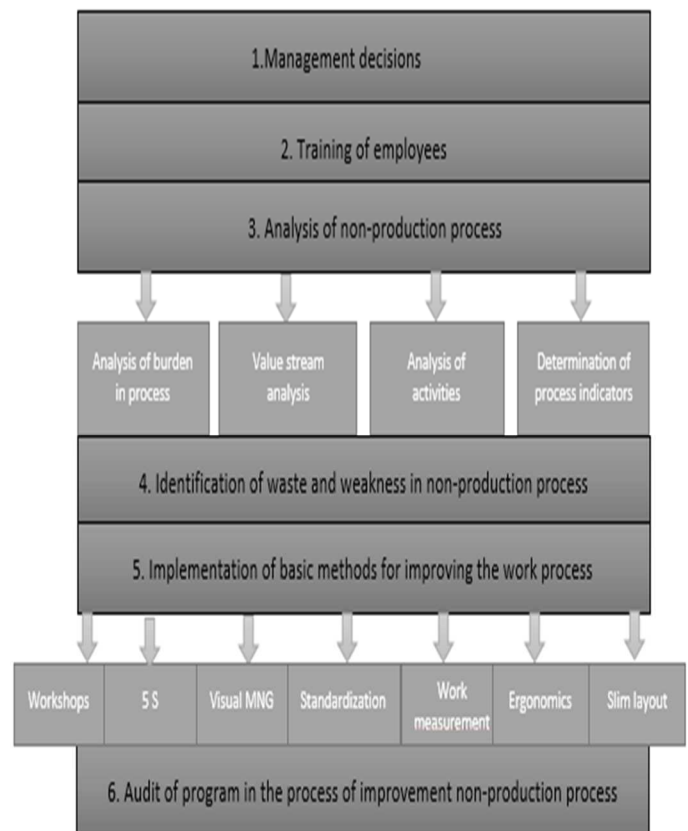


Figure 1 The principle of improvement non-production process

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2.1 Management decisions

Company management is responsible for the first step. It must decide if it is necessary to begin systematic process of improvement and if arrived the time of transfer to non-productive processes. This decision is not easy for managers because they get out of passive role to an active role. If this program will be realized, managers must become leaders of this program. Support for company management in decision-making can be, for example [3]:

- plan for the development of non-production areas within the frame of development of multinationals operating system,
- pressure from production,
- negative case studies of non-production processes,
- identified information from benchmarking,
- seminars, workshop about opportunities for improvement in the non-production processes.

2.2 Training of employees

It is necessary to point out one difference compared to programs implemented within the production area. Profile of administrative workers differs in the level of educational attainment, higher ability of autonomous education, better practical skills related to complex processes, better possibility to influence the running process, etc.

In consequence of these differences, it is necessary to use a slightly different approach in the training of workers in administrative processes and choose the following principles [3]:

- inspiring form of training,
- materials and resources for self-study,
- training of analytical methods,
- own diagnosis of processes,
- training of teamwork
- definition of project and project management.

2.3 Analysis of non-production process

In analysing of non-production process, it is necessary to use the best available techniques, which describes the initial state of process. First of all we are interested in description of burden the process, which usually has more dynamic features than process in the manufacturing sector. Furthermore, it is necessary to record material, information and value flow in the non-production process. We also have to put our mind to static description of the process by means of specific indicators, which are in some cases very similar indicators of production activity. Finally, we focus on the structure of the individual activities that are carried out in the process and their number is expressively larger [3], [5].

2.4 Identification of waste and weaknesses in non-production process

During the identification of weakness in non-production process we can use knowledge of traditional forms of waste, but it is also important to focus on waste that is specific for non-production processes.

The basic forms of waste in administrative activities are following [4], [6]:

2.4.1 Surplus production

It includes activities that do not increase company profit. It means they do not add value to the customer for which is customer willing to pay. Even the Japanese themselves consider this kind of waste as the worst. Examples are following:

- duplicate data storage (electronic and paper)
- problems given duplicate,
- extensive email distribution list.

2.4.2 Unnecessary processes, procedures

It includes activities that we do in addition. Our customers do not need them. It is important to take a think whether activities that we do are useful and optimized and if they add some value. Here we can include the following activities:

- more information than the need to job performance,
- few documents to job performance,
- complex workflows.

2.4.3 Information flow

Larea points out that waste is any movement of material and information that are not used for delivery of products or services directly to the customer.

Examples can include the following:

- complex information flows,
- capacity of information on the same shared disk,
- non-standardized information flows,
- inappropriateness of using the data format, for example: transport documents.

2.4.4 Overstock

This kind of waste we encounter if we use, e.g.: building, office supplies, materials and products for offering the services by inappropriate and inefficient way. It means the way that does not add value. Excess Inventory is all resources in the process that we use even earlier than required. We have to realize that any stock requires space and during the process of accumulation we use the space, which can be used in other ways. These include:

- redundant provision,
- a lot of stored data and the excessive accumulation,
- lot of emails waiting to be processed,
- unused recycling.

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2.4.5 Unnecessary movements

It represents kind of waste that is either within the enterprise deployment and information system, or it is a distribution within the office or department. Examples:

- team does not work under one roof,
- inefficient layout of space in the administration,
- inefficiently organized meetings,
- mismanagement of space.

2.4.6 Errors and corrections

If there are some mistakes in administrative activities we must perform that activity repeatedly. For that reason the activity is considered to be unnecessary. Whole process requires additional investment, time and work, so it does not contribute to the creation of added value. In practice, we meet with missing information, which are impulse for formation the next error.

- misunderstanding of assignments,
- incorrect specification of tasks,
- errors in documentation, incorrect background papers and not updated document
- layout of job, regardless of the potential customer.

2.4.7 Wait state

Waiting arises when people wait for delivery of documents, waiting for meeting, for worker, for signature, etc.. This kind of activity is considered as a waste, because waiting can't add value to the product or service. The most frequent types of waste in this area are:

- incorrect prioritization,
- waiting for the competent decision
- representation which extend the deadline,
- waiting for information, decision or materials.

2.4.8 Inactiveness of knowledge

Exists in area where knowledge and skills of workers are not used. Development of corporate employees is the most important element to strengthen the competitiveness of company. Most of companies decelerate this development and do not invest in their workers. The most common methods in inactiveness of knowledge are:

- unused creativity of employees in the company,
- lack of training courses and workshops for improving processes,
- lack of support when submitting proposals for improvement.

2.4.9 Unergonomic ways of working

It is important to make sure that the workplace and work tools are compatible with good ergonomics and its demands, so that everything will ensure good and safe health and promote the best medical services. Unergonomic ways of working are followed: working conditions - poor climate and noise at the workplace, maladjustment job aids and tools. This analysis belongs to complicated disciplines because different kinds of these

losses coexist for a long time and thus become an accepted problem.

2.5 Implementation of basic methods for improving the work process

Before we begin to implement any of methods, we need to analyse its advisability and adequacy. In general, there is a certain portfolio of basic methods for service, expense and administrative processes, which are also the basis for implementation more complex and complicated methods. These methods include [2], [7]:

- development of teamwork,
- utilization of methods of management by objectives and visions BSC,
- utilization of workshops to beating up,
- introduction of 5S in non-production areas,
- utilization of various forms of visual management,
- development of standardization in workplace,
- analysis of time-consuming work activities,
- application of working ergonomics,
- deal with slight layout.

2.6 Audit of program in the process of improvement non-production processes

Evaluation of initial improvement program has several forms. Except the quantification aspect of improved the non-production process through the medium of selected process indicators, there are also mini audits of individual steps and methods of improvement [2].

Conclusion

Reasons of process performance measurement do not have to be same for each organization. Through that, some reasons have common features and one of them is implementation of quality standards. Results that were found by measurement of processes performance:

- analyse problem that happened and deals with abstention of information. On the base of obtained information it is possible to eliminate concrete problem and manage individual processes effectively without unnecessary losses,
- help identify key business processes and their inadequacies. (It is more efficient to ignore the process that is not significant for company, but it is important to deals with key processes that have a significant impact on earnings, turnover, etc. and eliminate processes which are irrelevant and unprofitable.),
- provide a real background papers of problem (Business management intuitively anticipate that something is not all right but only results of measurement allow the to compare the actual situation with the plan.),
- are available for identifying relationships between inputs and outputs as well as for

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analysis of total results and their assignment fractional.

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