

PROCESS IMPROVEMENT: A KEY ELEMENT OF EFFECTIVE ORGANIZATION MANAGEMENT

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Purpose: The aim of the article is to portray process improvement as a key element of contemporary organizational management, along with a detailed analysis of the economic and organizational consequences of this process. Additionally, the article aims to precisely identify the main criteria for process improvement in organizations and position this process within the context of process management systems.

Design/methodology/approach: The objectives of the article were achieved through conducting thorough literature reviews, allowing for the presentation of detailed information regarding specific economic and organizational effects of process improvement. The literature analysis also facilitated the precise placement of the process of improvement within the context of process management systems, enhancing the theoretical and practical value of the presented conclusions.

Findings: The author of the article outlined the impact of process improvement on the functioning of an organization and provided a detailed analysis of its economic and organizational consequences. Additionally, based on a literature review, the author identified the specific role of process improvement within the framework of process management systems.

Originality/value: The originality of the article lies in its detailed focus on the specific economic and organizational effects of process improvement, while concurrently presenting a precise placement of this process within the context of process management systems.

Keywords: Process improvement, organisational management, criteria for improvement, economic and organisational impact.

Category of the paper: Literature review.

1. Introduction

When implementing a process-oriented approach in an organization, it is essential to consider process improvement, which is one of its key elements. In the ever-changing conditions of organizational functioning, process improvement becomes a challenge for all its components. The need for improvement is driven by the pressure for continuous quality

enhancement and constant cost competition. Process improvement is discussed in various management methods and concepts, such as quality management, knowledge management, broad logistics, and the philosophy of Kaizen (Trenkner, 2016). Process improvement can be divided into three fundamental stages: signaling the need, focusing on improving actions, and self-improvement study. Process improvement is oriented towards continuous, systematic enhancement within the organization's activities and the achievement of key strategic goals (Brajer-Marczak, 2019). To implement improvement, all employees in the organization should be involved, starting from top management, through lower-level managers, and ending with executive staff. In the organization's activities, attempting process improvement carries various consequences. In its basic assumptions, it is expected to contribute to increasing efficiency and improving the overall effectiveness of the organization (Raczyńska, 2022). However, literature presents numerous organizations that have experienced both anticipated positive and unanticipated negative effects of process improvement. The consequences of process improvement are considered in various aspects and on different levels, influencing the emergence of numerous organizational and economic effects (Gaitanides, 2012; Brajer-Marczak, 2009).

Improving processes has a direct impact on organizations setting increasingly higher and more ambitious goals. The establishment of goals in the management system is the responsibility of the organization's owners and should also result from continuously conducted process analyses. Process analysis is primarily about (Kowalczyk, 2009):

- assessment of adaptability to changes in the process environment,
- evaluation of the fulfillment of responsibilities and authorities,
- assessment of the efficiency and effectiveness in achieving the established goals for the process,
- evaluation of the effectiveness of information flow within the process,
- assessment of meeting the expectations and requirements of internal and external customers of the process,
- evaluation of flows and execution time,
- assessment of the efficiency of resource utilization,
- evaluation of the costs of the process, including quality costs.

The concept of continuous process improvement suggests that the majority of organization members should constantly seek opportunities to enhance key processes at every step. Every day, they should devise and implement solutions that increase the quality of products, operations, and productivity. As a result, process improvement aims to reduce operational costs, enhance productivity and quality, and contribute to overall organizational efficiency (Grajewski, 2007; Davenport, 1993).

In the long run, an organization's decision to abandon operations related to process improvement and operate based on previously established models and patterns may contribute to the emergence of hazardous dysfunctions in the entire management system (Cyfert, 2007).

2. Process improvement in organizations

In the literature, two main criteria for process improvement in organizations are distinguished (Cyfert, 2006; Nems, Knop, 2023):

- Criterion of the continuity of process improvement, which allows distinguishing two methods:
 1. Radical Process Improvement. It involves a thorough renewal of business processes at specific intervals. This can be achieved through redesigning existing processes, creating entirely new ones, or implementing process outsourcing.
 2. Continuous process improvement, or evolutionary improvement. It involves continuous and systematic enhancement of existing processes within the organization.
- Criterion of levels of process improvement, which should be divided into two subcriteria:
 1. Criterion of linking organizational development strategy with process improvement.
 2. Criterion of the comprehensiveness of the scope of improvement.

Both methods distinguished by the criterion of continuous process improvement continually complement each other. Through the radical approach to improvement, changes achieved in processes are stabilized through continuous evolutionary improvement. The main criterion that allows choosing the method of applying improvement in an organization is the statement: if improving the implemented process does not yield the intended effect in the form of expected values of the given process, a radical approach should be applied. The most commonly used radical method is reengineering. This method is recommended to be applied in situations where strategic changes occur in the organization or significant changes take place in its environment. It is characterized by the abruptness of changes. Reengineering leads to the quick support and identification of change concepts and also offers many innovative solutions (Antony, Gupta, 2019; Nowosielski, 2008).

As the main characteristics of reengineering, the following should be mentioned (Grudziewski, 2004):

- modern information technologies,
- preserving the natural order of work,
- emphasis on results rather than tasks as the basis for compensation,
- elimination of the industrial model of work,
- minimizing external contacts,
- directors becoming leaders,
- changes in the roles of individuals within the organization,
- pursuit of simplifying organization's processes,
- minimizing non-value-added activities from the customer's perspective,

- changing the role of managers,
- changing the nature of task preparation,
- consolidation of multiple job positions,
- application of outsourcing,
- flattening the organizational structure,
- providing autonomy to individual units through information technology that combines the benefits of centralization and decentralization,
- decentralization of authority,
- changing the nature of work,
- introducing multidimensionality of processes,
- changing promotion criteria,
- functional departments giving way to process-oriented departments.

On the other hand, among the methods of evolutionary process improvement, the philosophy of Kaizen is the most well-known and widely applied. The philosophy symbolizes systematic and continuous improvement of the process flow (Bakotić, Krnić, 2017). It is focused on solving current problems and identifying the weakest links that lower the efficiency and effectiveness of implemented processes. It is also a tool for increasing productivity and the competitiveness of the organization by improving processes incrementally (Kisielnicki, 2008; Kalinowski, 2010).

Continuous improvement and enhancement of processes within the philosophy involve (Skrzypek, 2000):

- comprehensive exploitation,
- customer orientation,
- functioning without defects,
- development of new products,
- comprehensive quality control,
- automation and robotics,
- collaboration between managers and lower-level employees,
- a system for submitting proposals,
- deliveries at a precisely defined time,
- discipline in the functioning of processes,
- activity of small groups,
- improvement of quality and productivity.

To effectively implement the philosophy of Kaizen in an organization, it is essential to systematically apply the following systems (Łuczak, 2007):

- Total Quality Management/Total Quality Control,
- Just in Time - timely and quality deliveries,
- Total Productive Maintenance - a methodology for the proper maintenance of machines,
- Policy Deployment - a systematic process of planning and achieving long-term goals,
- Suggestion System,
- Work in Small Groups,
- Quality, Cost, Delivery.

The criterion of levels of process improvement allows for distinguishing two additional subcriteria. In the context of the criterion of linking organizational development strategy with process improvement, we can mention: operational process improvement and strategic process improvement. Operational process improvement is strongly associated with the significant valorization of the importance of a single organizational goal. Additionally, it may aim to unravel a specific dysfunction within the management system. On the other hand, strategic process improvement results in adapting processes to the organization's business model, which is based on a specific development strategy (Cyfert, 2006).

The criterion of the comprehensiveness of the scope of improvement determines whether actions related to improvement should be limited to a single process or should be oriented towards all processes carried out in the organization. When deciding on the method and scope of improvement, it is crucial to assess the likelihood of negative changes occurring in the execution of other processes, which often lead to a deterioration in the efficiency of the organization. Process architecture improvement is usually implemented in the later stages of this process. It involves comprehensive actions aimed at improving the efficiency of all processes. On the other hand, activities related to individual improvement are focused on eliminating defects that arise in the initial phase of process improvement (Brajer-Marczak, 2009).

Improving processes is therefore a crucial element of process management. The placement of process improvement in the process management system is illustrated in Figure number 1.

The improvement of processes is based, in particular, on a sequence of stages that can be named and presented, focusing on the measurement, analysis, and enhancement of the processes under examination. During improvement, which is a part of process management, a holistic approach is crucial. This means that to effectively enhance processes, the organization under examination should be considered at three levels: the entire organization, the executed processes, and the existing positions (Brache, Rummler, 2000).

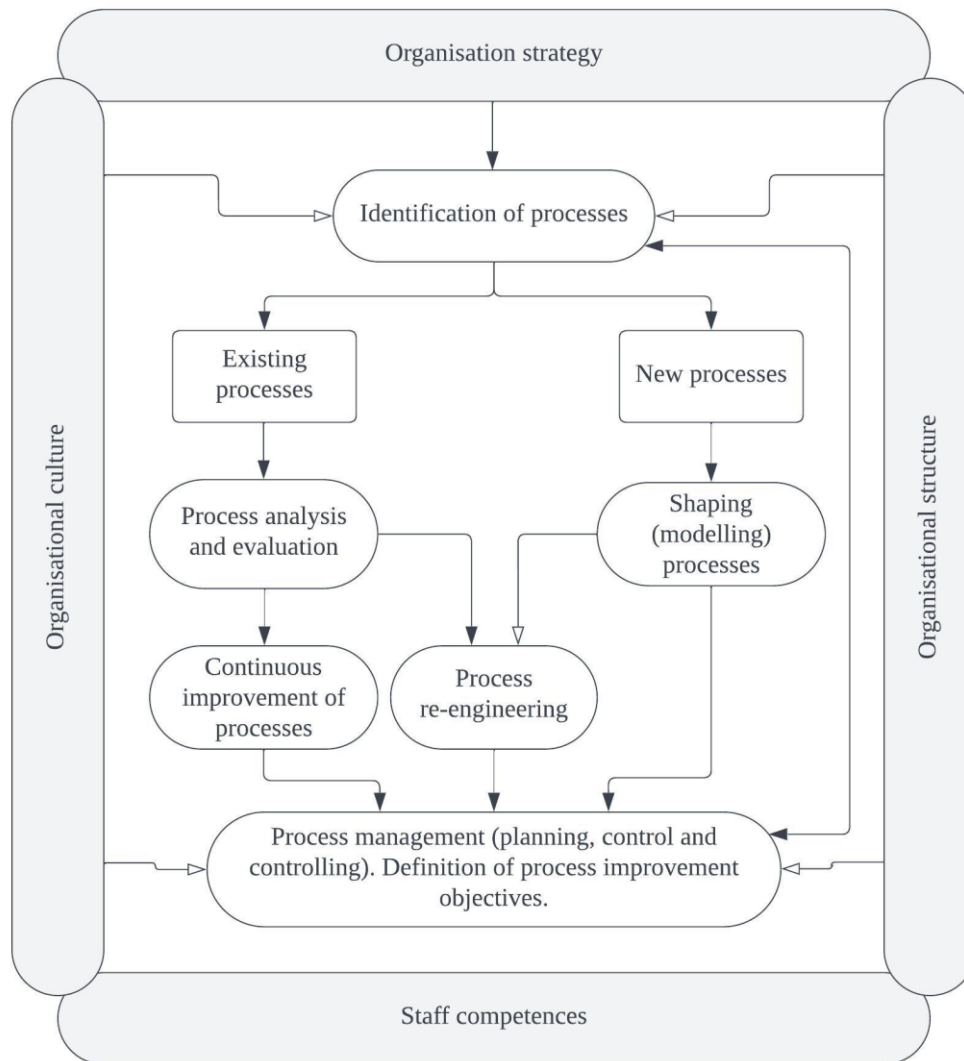


Figure 1. The place of process improvement in the process management system.

Source: own elaboration based on Nowosielski, 2014.

3. Economic effects of process improvement

An organization aiming to improve its processes must rely on information regarding the engagement of individual resources utilized in the process execution. In this manner, the organization gains knowledge about the costs incurred during the implementation cycle of individual processes and the consumption of utilized resources. To enable the identification of the costs of executed activities, process costing must be applied. The use of this method provides employees with the ability to control processes within the organization. Additionally, the method employed during process improvement creates an informational foundation for the reduction and rationalization of process costs. The consequence of the utilized method is the deepening of analytical research into the profitability assessment of the provided service or

manufactured product. Research into the course of processes is also intensified, focusing on full optimization. Managers in the organization, thanks to the ongoing process improvement, are compelled to analyze and determine the point where value is created. In the course of improvement, process controlling and budgeting of activity costs are often introduced in the organization (Brajer-Marczak, 2009; Witt, Witt, 2010; Głodziński, Marciniak, 2016).

Controlling in an organization is a management system that supports the control of the course of economic processes carried out within it. It also aids in coordinating various areas of activity from the organization's perspective as a whole to achieve previously set goals (Koontz, Weihrich, 2009).

Selected division criteria and types of controlling are presented in figure number 2.

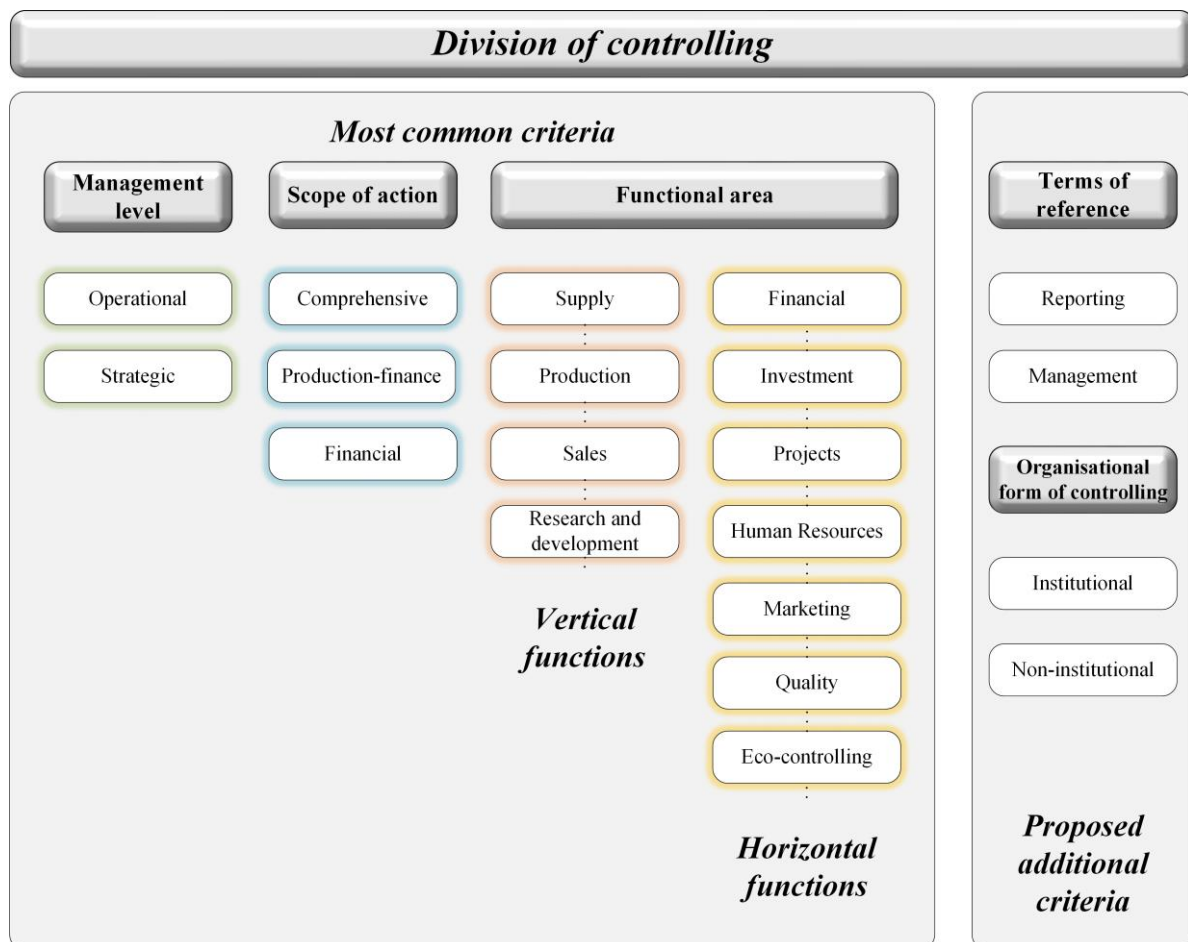


Figure 2. Selected division criteria and types of controlling.

Source: own elaboration based on Nesterak, 2015.

In the field of scientific literature, various methods and tools used in the field of controlling are extensively discussed, which constitutes a significant contribution to understanding the complexity of this area and enables effective management of processes. Table 1 presents selected methods and tools of controlling.

Table 1.
Selected methods and tools of controlling

| ID | Authors | Controlling methods and tools |
|----|-----------------------------------|--|
| 1. | H.J. Vollmuth | ABC analysis; Order volume analysis; Break-even analysis; Direct costing; Investment account methods; Quality circles; Discount analysis; Value analysis; XYZ analysis |
| 2. | W. Radzikowski, J. Wierzbiński | Deviation analysis; Regression analysis; Risk analysis; Just in time; Early warning systems; Management by objectives; Balanced scorecard; Mathematical programming |
| 3. | S. Marciniak | BEP analysis; Market analysis; Composite analysis |
| 4. | S. Nahotko | Systems theory; New management concepts |

Source: own elaboration based on Siekierski, 2010.

Controlling is a complex management process consisting of several key stages. In the first stage, it is essential to establish clear standards that serve as a reference point for subsequent actions. Next, in the second stage, we measure the actual performance, and in the third stage, we compare it to the previously established standards. In case of discrepancies, the fourth stage involves taking corrective actions to optimize the processes (Preißler, 2020). The activities carried out during controlling in organizations are presented in Figure number 3.

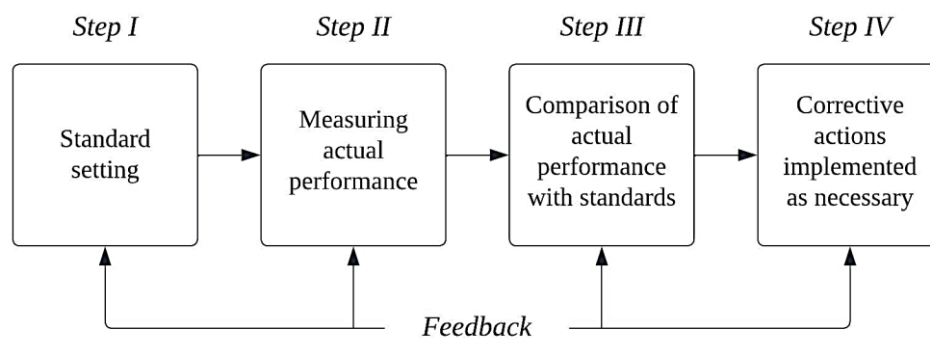


Figure 3. The activities carried out during controlling in organizations.

Source: own elaboration.

The most common effect of process improvement is the organization's focus on issues occurring "at the interface" of individual activities contributing to the process, as well as on issues between processes that cross the boundaries of functional departments. The most significant skills become the ability to eliminate, recognize, mitigate, or identify so-called bottlenecks. To initiate and implement changes in the organization, the use of controlling in the area of process improvement is recommended. It allows choosing between an evolutionary and a radical approach to implementing changes. Reference standards are established, and measurements of individual results are made and compared with assumptions. Periodic reports on the progress of implemented processes are also prepared (Jochem, Geers, 2010).

Process improvement relies on evaluations determined by appropriately chosen metrics. This results in the development of a coherent internal process control system using reliable and relevant measures. The literature on the subject indicates that, in practice, this is not a simple task for organizations. In many cases, inappropriate assessment indicators are selected,

especially when measuring customer satisfaction and expectations. Managers often lack the skills to define process goals, leading to a mismatch of assessment metrics. The aggregated result of a company's performance, such as profit or market share, is the most commonly used metric among organizations. Organizations often neglect the use of partial indicators that would determine the effectiveness of the processes themselves (Szczepańska, 2008).

4. Organizational effects of process improvement

The results of process improvement in an organization are related to specific strategic goals. They depend on the applied techniques and improvement tools, fulfilled initial conditions, and the requirements of the adopted procedure. The first condition that an organization must meet is the complete identification of processes, particularly specifying suppliers and customers. The process of improvement, as well as process management, requires a comprehensive mapping of processes (Brajter-Marczak, 2009).

Process mapping is used to streamline processes and is a tool that illustrates the entire course of processes within an organization. It allows for the identification of discontinuities, bottlenecks, and the analysis of process execution from the perspective of a specific goal. Relationships between suppliers and recipients within the organization are also established. Understanding these relationships explains the conditions of physical and informational flows and enables the proper organization of work (Sanders et al., 1999; Szymonik, 2011).

The factors influencing process improvement include information from customers, internal reviews, and insights gained from organizational experience. Employees focus not on departments or functions, but on the services provided or products manufactured. This results in a holistic view of the organization. Managers acquire the ability to differentiate and classify processes within the organization. This allows assigning significance to processes based on diverse outcomes and their impact on organizational efficiency. It's crucial to develop the ability to focus on the most essential processes from a strategic perspective and the value delivered to the customer. Process improvement also requires changes in responsibilities, scope of duties, and the authority of individual employees. Empowerment is introduced, expanding responsibility and duties, engaging employees in decision-making about the organization. Process improvement is aimed at combining tasks to simplify processes. Previously separate tasks are consolidated and assigned to a single employee. This reduces coordination efforts and saves time in executing activities. This leads to the professionalization of employees, who are now accountable for the effectiveness of their work, not just seniority. Managers gain influence over employees with the same specialization, dispersed across subprocesses and processes throughout the entire enterprise. Over time, competence centers may emerge to enhance the skill levels of employees assigned to various processes in different parts of the

organization. The exchange of information often occurs through an IT network, and these centers take on a virtual character. Radical changes sometimes occur, leading to transformations in the organizational structure. These changes align with the needs for an effective and efficient flow of processes within the organization (Conger, Kanungo, 1988; Brajer-Marczak, 2021).

The transformation of organizational structure can progress through three distinct stages, starting with considering process logic in a function-based organization, moving on to a matrix organization, and ultimately adopting a complete process-oriented structure. These stages aim to enhance the flow of process-related information and minimize the number of hierarchical levels. Introducing a process or matrix structure exposes the organization to internal challenges. A critical aspect is the coexistence of two managers, where one is responsible for the process department, and the other oversees the functional department. However, having equal competencies between the line manager and the process owner can lead to conflicts. Conflicts of goals may also arise during task execution in processes, particularly when resources used in processes are controlled by functional area managers rather than the process owner. To eliminate these weaknesses, it is essential to designate either the process line or the specialized line as dominant in the entire process. However, this may generate additional internal issues among subordinates who are accustomed to a stable and clear hierarchy. Often, these are deeply ingrained beliefs and habits that are challenging to modify (Brilman, 2002; Kerzner, 2005).

5. Conclusion

Engaging in efforts to improve processes in organizational activities entails various consequences. In basic assumptions, it is expected to contribute to the increase in efficiency and improvement of the overall effectiveness of the organization. However, the literature presents many organizations that have achieved both anticipated positive and unforeseen negative effects of process improvement. The consequences of process improvement are considered in various dimensions and on different levels, impacting the emergence of numerous organizational and economic effects.

In the longer perspective, an organization's decision to abandon operations related to process improvement and function based on previously established models and patterns can contribute to the emergence of dangerous dysfunctions in the entire management system. Process improvement is, therefore, a crucial element of process management. Process improvement is based particularly on a sequence of stages that can be named and presented, and that involve measuring, analyzing, and improving the studied processes. During improvement, which is part of process management, a holistic approach is crucial. This means that to effectively improve processes, the organization under examination should

be considered on three levels: the entire organization, the executed processes, and the existing positions.

Managers of an organization, through the ongoing process improvement, are compelled to analyze and determine the point where added value is created. During improvement initiatives, organizations often introduce process controlling and budgeting of activity costs. The most common outcome of process improvement is the organization's focus on issues occurring at the intersection of individual activities that make up a process, as well as on problems between processes that transcend the boundaries of functional departments. The most significant skills become the ability to eliminate, recognize, eliminate, or find so-called bottlenecks.

Process improvement is based on assessments determined by appropriately chosen metrics. This results in the development of a coherent internal system for controlling processes using reliable and relevant measures. Improvement also requires changes in responsibilities, duties, and privileges of individual executive employees. Empowerment is introduced, expanding responsibility and duties and involving employees in making decisions regarding the organization. Improvement is focused on combining tasks to simplify processes. Previously separate tasks are consolidated and assigned to a single employee, reducing coordination efforts and saving time in task execution.

In the constantly changing conditions of organizational operation, process improvement becomes a challenge for all its elements. The key condition for efficient, effective, and successful execution of individual tasks is the collaboration of all individuals designated to carry out a specific process. Openness to the views of others and an undisturbed flow of information play a particularly important role.

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