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Process and project approach in contemporary organizations

Agnieszka Bitkowska, *Chair of Process Management, Warsaw University of Technology, agnieszka.bitkowska@pw.edu.pl*
Krzysztof Kolterman, *Warsaw University of Technology, krzysztof.kolterman@ pw.edu.pl*

Abstract

Progressing globalization processes, new technological solutions, constant mood development in the changing environment. More and more enterprises implement business process management, strategic planning and project planning. The main subject of the article is to present the functioning of the process and project approach in contemporary organizations, both from theoretical and practical perspectives. The following research methods and techniques were used: an analysis of the literature on the subject, a comparative analysis of the research conducted in the world, and the own research conducted in Poland. As a result of the conducted literature analyses and empirical research, an increase in interest in the process and project approach in contemporary organizations has been shown.

Keywords: Business process management, Project management, process-project approach

Introduction

Changes taking place in the market oblige enterprises to constantly react to changes taking place in their environment. Globalization, innovation, new technologies, threats from the competition and constantly growing customer requirements are the main prerequisites for restructuring processes in organizations. To maintain a strategic position on the market, organizations are constantly looking for new concepts, methods and techniques for effective management. Nowadays, one of the fundamental methods of enterprise management is business process management. Each organization is a set of intertwined processes [Bandara, Harmon, Rosemann, 2011]. Identification of individual processes allows for a transparent depiction of the structure of the organization and processes taking place in it, while their constant monitoring and optimization improves the effectiveness of functioning and increases the satisfaction of internal and external customers [Bandara, Merideth, Techatassanasoontorn, Mathiesen, O'Neill, 2019, Bandara, Wasana, 2019]. The essence of the process approach in organizations is, above all, focusing on the processes taking place in it. Other characteristics of this approach are: focusing the company's operations on the needs of internal and external customers, focusing on quality, results and value, and decentralization of management. Employees who constantly improve their competencies and the idea of teamwork also play an important role. The process organization is also focused on changes that determine continuous improvement. In the process approach, the strategic goals of the organization are translated into the goals of individual processes. It is important to constantly care for customer satisfaction, reduce the operating costs of unprofitable processes, improve quality and optimize the time of carrying out specific tasks. The transparent structure of processes in the company facilitates the introduction of changes and increases the "flexibility" of the organization about the changing environment [Bitkowska 2019,2021].

The main research question was defined as: What are the aspects of process and project approach in contemporary organizations in contemporary enterprises? The issues were discussed in both theoretical terms, by analyzing the literature review, and practical terms, by looking into the results of empirical research studies conducted in 2019.
The article is organized as follows structure. The first part presents a way of the perspective of process and projects in the organization. The second part concerns research in the field of process and project organizations in the world and Poland. The third part presents the summary of the article and the theoretical as well as empirical implications.

The perspective of processes and projects in the organization

Project management and business process management are two different ways of doing business. We talk about a project when the product of a time-limited work is a unique product or service. It has a predetermined scope, a fixed date, and a defined budget. We meet projects mainly in the field of investment activities. The process, on the other hand, is value-adding work, a repetitive set of simple operations performed similarly. Processes are typical operational work related to the use of a recipe or technology.

The most important differences are the uniqueness of the project and the repeatability of the process, as well as the risk incurred as a result. Projects are much more risky because of their uniqueness. Their advantage is that the unit margin is high compared to the process approach. Another important difference is the responsibility of the manager. The project manager is tasked with completing the project within the set time, budget and scope. Project work is usually complex, which is often done by several people who are not under the control of the project manager. In the case of processes, the work performed is simple and repetitive, which is why it is often responsible for someone who is not their creator. Table 1 below summarizes the most important differences between processes and projects.

Table 1. Processes and projects in the organization

PROCESSES	**PROJECTS**
Stability	Change-oriented
Routine	Contain elements of novelty and science
Low level of risk (uncertainty)	Cause conflicts
Evolutionary changes	Company innovation
Company culture and tradition	Targeted changes
Management has sporadic control over the process	Management is actively involved in the implementation

Source: Nowosielski, 2018

Processes and projects occur today and simultaneously in every organization, and their management is also disjoint. Meanwhile, processes and projects as well as the concepts of process and project management show several similarities and are complementary to each other, complementing each other, in the pursuit of achieving goals and increasing the efficiency of management of the organization. It is not enough just their coexistence, which is often rooted in distrust, and strengthened by the functional division of the organization. What is needed is their cooperation, manifested in the transfer of knowledge (information, experiences) between process managers, project managers and line managers, underpinned by trust. It is also necessary for managers to support each other in solving intra-organizational problems, especially those lying at the interface between different areas and management concepts. Nowadays, every organization (enterprise, institution) is a set of processes and projects, often carried out simultaneously. At the same time, issues concerning processes and projects are treated separately in the literature of the subject, although these issues are common to a certain extent, complementary to each other. Although the complementary nature of the concept of process management and project management is indicated, the common idea of

process and methodology, there are also ideas and actions aimed at strengthening the relationships between them, but it is far from being a holistic approach.
In the literature on the subject, there are also connections between business process management and project management. Based on the results of the research, it is argued that the use of an appropriate project management methodology is extremely important for the effective implementation of business process management, as well as the implementation of even the smallest improvements. Therefore, all kinds of initiatives related to the identification, analysis, and improvement of processes must be treated as a project and professionally managed.

Project management is a field of management based on a process approach, consisting in harmonizing the processes of project implementation: project execution processes and processes of its operation with the help of management processes (setting goals, planning, organizing, and controlling them) with the use of specific knowledge, skills, methods and tools to achieve the assumed goals, the quality of the intended result, time and costs [Trocki, Grucza, Ogonek, 2003].

The starting point and the main component of project management is project flow. It consists in nothing else than the management of processes influencing the effectiveness and efficiency of the course of the project [Trocki 2012, pp. 129-144]. However, to understand this approach, you need to explain what project management is. Project management can be defined as the field of management, consisting in the harmonization of project processes and organizational processes within which the project is implemented, to achieve complex project goals, i.e. quality of the intended result, scope, deadlines and costs, using specific knowledge, skills, methods and tools. [Nowosielski, 2018p. 53-54]. To manage projects effectively, it is necessary to organize the processes influencing the implementation of the project in the first stage.

From the beginning to the end of the project, they distinguish the following group of implemented processes [Trocki,2012, 2018, Wyrozębski 2014]:

- project execution processes. As their name suggests, executive processes support the product execution process
- they implement the plan following with the company's procedures.

It is the plan and additional information about the project as well as the company's policy that are the most important inputs for the execution processes. On their basis, the right product of the project is made, and along with its implementation, proposals for changes are also generated.

The execution processes reach the peak of their activity when the project plan has been prepared in the planning processes and changes in it are only a response to the factors arising during its implementation:

- processes supporting the project. These processes are not directly involved in producing the project's result, but create the conditions necessary to achieve it.
- project management processes. These processes consist of harmonizing the execution and support processes to achieve the intended result of the project. The management processes consist of the following processes: setting goals, planning, organizing, motivating, controlling and coordinating the project.

Both the PMI and PRINCE2 methodologies apply a process approach to business process management – typical classic and the most popular project management methodologies. There are numerous interdependencies between the processes that make project management a series of successive iterations and the transition between them.
Project management following the PMI standard is based on 9 areas of knowledge:

- Project integration management,
- Scope management in the project,

- Time management in the project,
- Project cost management,
- Quality management in the project,
- Human resource management in the project,
- Project communication management,
- Project risk management,
- Order management in the project [Wyrozębski, 2014, p. 59].

The PRINCE2 methodology distinguishes the seven most important processes:

- Strategic project management,
- Project Launch / Preparation of Project Assumptions,
- Project initiation,
- Stage control,
- Product Manufacturing Management,
- Stage Scope Management,
- Closing a Project.

In applying the process approach in project management (implementation), the following stages can be distinguished, inextricably linked with the project life cycle (table 2).

Table 2. Processes in project management

PROCESSES	**CHARACTERISTICS**
Initiation	Processes related to identifying project ideas
Planning	During the implementation of these processes, it is possible to observe the presence of additional elements systematizing the activities undertaken at this stage;
Defining activities	Means identifying and describing specific works
Establishing the relationship of succession between activities	In order to establish these relations, one should pay attention to a lot of information, first of all, the accuracy of the product description, design and applied solutions may have a large impact, the solutions used may, in turn, affect the order of execution and its sequence
Estimating the duration of the activity	When determining the duration of each activity, not only its description should be taken into account, but also the resources used; the best estimate can usually be made by people who have experience in this type of work, or people who will coordinate the project in the future),
Schedule construction	It is about defining project deadlines.
Schedule control	By using the so-called milestones.
Executive	In the initial phase of the implementation processes, it is necessary to verify (check) certain elements established during the planning processes, including: checking the effects of projects, required teams, project work analysis, project estimates and project schedule; after checking the components of the project plan, introducing all necessary changes and establishing the standards, you can start the implementation phase; during the implementation processes, a project team is formed, work packages (tasks) are determined, the team is developed and work is monitored, all this in order to achieve the goals of the project
Control and evaluation	Most project managers admit that the most important and one of the most important work in the project is its control.
Closing and billing	As part of the implementation of these processes, the product (s) of the project is formally approved and a settlement application (payment application) is prepared.

Source: own elaboration based on: Trocki 2012, 2018, Wyrozębski 2014.

In search of solutions to beat the competition, management theorists raised the topic of projects and processes. According to them, the use of process or project management allows for the reduction of losses, better use of resources (financial, human, material), improvement of the quality and time of task implementation, and, consequently, increasing the final financial result. Although the above-mentioned methods are classified together and their objectives initially overlap, as shown in the table 3 below.

Table 3. Differences between project management and process management

PROJECT MANAGEMENT	PROCESS MANAGEMENT
Diverse purpose of operation.	Systematic action. The main goal is customer satisfaction.
The uniqueness of the project.	Repeatability of the process.
Hard time frame. Clearly defined schedule of activities and milestones of the project.	Continuous and systematic implementation of tasks without the need for a time frame.
Detailed, narrow division of labor and responsibilities of the project participants.	Increased scope of work and responsibility of employees.
Technical specialization and knowledge of the participants.	Employees' customer orientation, creativity, willingness and the ability to quickly learn and assimilate.
Project group oriented thinking.	Holistic thinking.
Multilevel hierarchy. Starting from the sponsor, through the manager, to the operational participants.	Flat organizational structure.

Source: based on: Nowosielski 2018

Project management is a method that serves the various purposes of an organization. Projects may concern, for example, the introduction of a new product, technology or program, an advertising campaign or a service action. A specific goal is pursued, not a sequence of actions. "Compared to projects, processes are structured activities towards achieving goals aimed at increasing customer satisfaction. The process organization focuses on increasing the quality, shortening the time of task completion in order to meet the customer's needs. The process concept established a greater scope of tasks and responsibilities among employees than the project [Schmiedel, Recker, vom Brocke, 2019, Steven, 2019]. In the process organization, the rule is greater independence of the employee who is responsible for processes and shapes them. In this situation, the key factor of effective operation is an increased range of competences as well as greater responsibility. Employees do not require any specific technical specialization, creativity and customer orientation are expected. Group-oriented thinking is characteristic of the realization of projects. The project group must be properly selected so that the required scope of knowledge and key skills are not lacking while achieving the goals [Nowosielski, 2018, Malinova, Mendling, 2018, Rosemann,Vom Brocke, 2015]. There is a flow of information and necessary resources between the group. The activities of the project group are focused on the project schedule, not the enterprise. What matters to the participants in the group and the success of the project. The above thinking in process management can lead to big problems. The process concept is focused on the whole [Jeston, Nelis, 2014]. All employees must pursue the goal of customer satisfaction [Hrabal, Tuček, Molnár, Fedorko, 2020, Dumas, La Rosa, Mendling, Reijers 2013]. The place and role of tasks are variable and dispersed among individual organizational units, e.g. research and development, marketing, sales. All information travels throughout the enterprise. Employees are located within the tasks of the entire organization, and not, as in project management, in a closed space specialized in the implementation of group tasks.

The above information clearly shows that the process and project concepts differ in many aspects of the business. The differences are significant, ranging from goals and timing to skills and workforce distribution

[Doyle, Seymour, 2020]. According to theoreticians, this state of affairs does not exclude the use of the concepts together. They believe that they can be intertwined. In a customer-oriented process organization, project management such as building a new headquarters or introducing ISO procedures can be successfully implemented [Chountalas, Lagodimos, 2018]. The concepts presented are intended to increase competitiveness and improve the company's operations. Process organization increases quality, shortens the time of task completion and increases the satisfaction of external and internal customers [Danilova, 2019, Di Ciccio, Gabryelczyk, García-Bañuelos, Hernaus, Hull,. Štemberger, Ko, Stables 2019]. Project management of the enterprise allows maintaining the appropriate time frames, properly use human, material and financial resources [Trocki 2012, pp. 129-144].

Processes in the enterprise naturally coexist and cooperate with projects they are complementary to each other - the dual approach (processes-projects). It assumes cooperating, coexisting, and complementary elements in the enterprise, in particular: processes, projects and knowledge. Each process in the enterprise has a specific character and each is accompanied by knowledge resources, and each project contains process elements, where knowledge resources are also required. Also, knowledge is dual and, in addition to the resource, it is also a process used, inter alia, for acquiring, collecting, discovering and sharing knowledge in the enterprise. It is not enough just the coexistence of processes and projects (concepts of their management) - their cooperation is needed, also manifested in the transfer of knowledge within the organization. Therefore, it is necessary to define in organizations the relations between the elements of processes – projects. These categories should be considered in terms of consistency and achieving a synergy effect, as well as in the context of the products and services provided by the organization, as well as the needs and expectations of customers, actively participates in the construction of the organization's processes.

Research in the field of process and project organizations in the world and in Poland

The conducted analysis of empirical research includes the results of research carried out cyclically in the world as part of BPM Trends[1] and own research. The research in the world was carried out in 2019 on a sample of 129 companies, while the research in Poland covered 120 companies in the same year. A comparative analysis was made in the first part of the subsection. Research carried out around the world has shown that in process organizations, a project approach is important in terms of focusing on process automation, improving existing processes, or defining business process architecture [Harmon, Garcia 2020].

Table 4. Challenges in process-oriented organizations

FACTORS	2009	2011	2013	2015	2017	2019
Focus on improving the processes of a specific department or level	32%	28%	40%	39%	28%	289
Focus on RPA (Robotic Process automation)	23%	31%	20%	25%	34%	36%

Source: Harmon, Garcia 2020

In turn, the research carried out by APQC in 2020 in process organizations included the use of a project approach in the implementation of agile methodologies (agile project management - 36%), development of

[1] The research has been carried out cyclically every two years since 2005. The research carried out in 2019 covered enterprises in the following regions: North America (29%), Europe (36%), Africa (27%), India and Asia (8%), Australia / New Zealand (1%), and the respondents were practitioners and specialists, process management consultants (Harmon, Garcia 2020). 29% of enterprises with more than 2,000 employees, 36% of enterprises with 500 to 1999 employees and 35% with less than 5,000 employees participated in the research.

project leadership (33%), gathering project knowledge in the system and defining project success goals [APQC 2020].

Changes taking place in the environment determine initiatives implemented by process-oriented enterprises (Table 4). Enterprises in the world mainly implemented projects in the field of: undertaking projects related to the reorganization of processes, development of process architecture, coordination of changes in business processes and projects in the field of process automation. When analyzing the dynamism in the presented research concerning the process architecture, it should be emphasized that the basic processes were subject to the greatest changes, while the auxiliary and management processes functioned without major deviations. In relation to Polish enterprises, the development of a system for measuring the efficiency of business processes and training process managers were of particular importance. Initiatives to coordinate changes in processes, improvement of process architecture as well as undertaking serious projects and process automation were important.

Table 5. Implementation of process initiatives in the surveyed enterprises

DESCRIPTION	RESEARCH IN THE WORLD	RESEARCH IN POLAND
Development of business process architecture	39.00%	26.00%
Development of a system for measuring the efficiency of business processes	16.00%	34.43%
Coordination of changes in business processes	28.00%	29.51%
Training process managers	24.00%	35.25%
Balanced Scorecard	13.00%	8.20%
Major process redesign projects	40.00%	13.11%
Projects including SCOR, ITIL	9.00%	6.56%
Projects improving Six Sigma processes	12.00%	4.92%
Process automation projects	26.00%	24.59%
Process analysis and training (without Six Sigma)	22.00%	20.49%
Training in modeling and designing Lean Six Sigma processes	6.00%	10.66%

Source: Harmon, Garcia 2020; outcome of personal research conducted in 2019

The results of research in the world and Poland indicate an increase in the project approach in process-oriented organizations, which results from the requirements related to adaptation to the changes taking place in the environment (Table 5). It is important to use the knowledge needed to implement as well as initiate new projects. 56.00% in the world, 44.00% of respondents in Poland stated that their companies are involved in the implementation of many projects (project portfolio), 29% - that in a limited number of them, and 23% - that their management has undertaken significant activities related to the involvement of new project initiatives. Research respondents around the world emphasize that their involvement in the implementation of larger projects is growing because more than 50 projects are mainly carried out by large companies from North America and Europe.

Table 6. Process initiatives implemented in the surveyed enterprises

DESCRIPTION	RESEARCH IN THE WORLD	RESEARCH IN POLAND
Number of implemented projects over 50	13.00%	10.00%
The number of implemented projects ranged from 11 to 49	23.00%	20.00%
Number of implemented projects from 1 to 10	56.00%	44.00%
No ongoing projects	9.00%	8.00%

Source: Harmon, Garcia 2020; the results of own research conducted in 2019

The organizational aspect of project management is also important, because the initiation and implementation of projects are mostly done by managers (26.00% in the world, 33.00% in Poland, department managers (24.00% in the world, 29.00% in Poland) top management (13.00% in the world, 19.00% in Poland) or a process management office (13.00% in the world, 19.00% in Poland) (Table 6) The most important role in the approach to project management both in Poland and in the world is played by department managers and managers. Project initiatives were observed through the process or project offices.

Table 7. Organization of the approach to project management in the surveyed enterprises

DESCRIPTION	RESEARCH IN THE WORLD	RESEARCH IN POLAND
Managers initiate and manage projects	26.00%	33.00%
Department managers initiate and manage projects	24.00%	29.00%
Process office, project office initiates and manages projects	15.00%	13.00%
Top management initiates and manages projects	13.00%	19.00%

Source: Harmon, Garcia 2020; the results of own research conducted in 2019

The presented research results show that process-oriented enterprises undertake many activities aimed at improving their activities through the use of process management and the implementation of an increasing number of projects, including the implementation of technological solutions. In this situation, knowledge resources are also necessary to enable the effective implementation of projects. It is also necessary to define the process architecture and its improvement through project activities, based on the knowledge of employees, customers, and above all, changes in the environment. The usefulness of the solution has been confirmed by its application for modern enterprises through internal adaptation to the dynamic changes taking place on the market, internal ordering, and building relationships with both stakeholders.

Conclusion

An important aspect of the functioning of enterprises is the appropriate project and process approach. Business process management means full use of knowledge, tools, techniques as well as concepts or systems that can be helpful in defining, measuring, visualizing or controlling processes. This management covers the final customer, recipient, and also an employee who is a customer within the organization. The process approach is process-oriented with dominant horizontal communication and free flow of information. The company's activities focus on process management to maximize customer satisfaction. Process organizations are oriented towards both external and internal customers. Process orientation enables systematic introduction of changes, and also assumes flexible operation of the company and anticipates fluctuation of processes. According to theoreticians, this state of affairs does not exclude the use of the concepts- process management and project management together. The concepts presented are intended to increase competitiveness and improve the company's operations. Process organization increases quality, shortens the time of task completion and increases the satisfaction of external and internal customers. Project management of the enterprise allows maintaining the appropriate time frame, properly use human, material, and financial resources.

Future research into process and project management may want to draw on a larger sample and issues related to the use and the actual impact of technical infrastructure and integration. Therefore, it seems necessary to undertake all activities aimed at identifying the relations between processes and projects and to develop solutions enabling the achievement of consistency between particular categories, both in theory and in practice. The issues discussed in this paper require further in-depth theoretical and empirical studies.

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