APPLICATION OF PROJECT MANAGEMENT APPROACHES IN RUNNING AN ORGANIZATION IN MODERN CONDITIONS

Abstract. It is determined that we formulate the concept of project management as the art and science of effective use of experience, knowledge, skills, tools and methods to meet the expectations of stakeholders in accordance with the criteria of project acceptability within agreed parameters.

It is noted that project management is an approach to achieving project goals within organizational structural and resource constraints for internal projects. For external projects, there should also be considered political, social, legal and environmental constraints.

Five modern approaches to project management are considered, among them: traditional, flexible, waterfall, system approaches in project management and program management approach.

While analyzing these approaches, their main components were highlighted, as well as substantiated which components are the most effective in project management.

Among the highlighted components: defining the role of each member of the project team - because understanding of each area of responsibility will ensure the accuracy and timeliness of all processes; a clearly defined goal of the project - because the correctness of the goal determines the direction of movement and development of the project; ensuring transparency of tasks - this means creating a project management system in which all team members can easily and efficiently access all the necessary information about the project.

Keywords: project management, project management approaches, traditional approach, flexible approach, waterfall approach, system approach, program management approach.

Problem statement. Project-oriented organizations are becoming increasingly widespread and important for the modern economy and society. For such organizations the project is the main tool for accomplishing tasks. Projects are
used to provide innovative products and services, to implement changes and transformation, to ensure the effective functioning of the organization.

Effective management is essential for the economic growth of an organization. Every organization strives to constantly improve and at the same time directs its activities to achieve the set goals. Effective management is one of the most important factors affecting the development of the organization.

Project management is a direction of the organization's work which is becoming more and more widespread. A lot of modern companies implement project management approaches in the functioning of individual structural divisions and the company as a whole. The use of project management ensures timely and high-quality implementation of projects, optimizing the expenditure of money and human resources. Implementation of principles and methods of project management allows the organization to gain new competitive advantages and improve the productivity.

The importance of project approach in the activities of the organization cannot be overestimated. Project activity helps to involve employees in the implementation of the strategy which is established not only for the top management but also for each employee of the organization. A wide range of goals can be achieved with the help of project activities.

**Analysis of recent research and publications.** Domestic and foreign scientists have been dealing with project management issues for many years. There is a huge amount of developments and research that are used both in the formation of the theoretical basis and in the implementation of practical activities.

**The purpose of the article** is to study the experience of applying project approaches in managing an organization in modern conditions.

**Presentation of the main material.** Project management is an activity aimed at solving problems and achieving the set goal of the project. A process that includes planning, implementation of the project plan and measuring progress and performance.

The main document that is the basis for the implementation of project activities today is the Project Management Body of Knowledge or PMBOK Guide (A Guide to the Project Management Body of Knowledge) [1]. It examines the basic concepts, methods and tools currently used by managers in the planning and implementation of projects of various scopes and topics.

PMBOK is based on the Project Management Standards [3]. The PMBOK Guide provides detailed information on key concepts, emerging trends, considerations for adapting project management processes and information on how tools and techniques apply to projects. Project managers may use one or more methodologies to implement the project management processes outlined in the standards [1].

In the Project Management Body of Knowledge the concept of project management is interpreted as follows: "Project management is the application of
knowledge, skills, tools and techniques to activities to meet project requirements. Project management is carried out through appropriate application and integration of management processes. This allows organizations to be effectively engage in project activities» [1].

Scientists T. V. Mamatova, V. M. Molokanova, I. A. Chikarenko, and O. O. Chikarenko in their introductory guide consider project management as an activity within the framework of the program-target approach during which the clear goals are determined through balancing between composition and volume of work, resources (intelligence, labor, time, finances, materials, energy, space, etc.), quality and risks and the key success factors are early programming of a set of actions according to the adopted technology, risk minimization and effective change management [7, c. 6].

Scientists Zh. M. Zhigalkevich and V. E. Chuhlib determined in their paper that project management is interpreted as a whole science which is overgrown with a system of knowledge, rules and standards. This science helps to achieve the set of goals quickly and effectively. In addition, in this process a whole system of complexes are formed and can be used to achieve the general goals of the organization and simultaneously a scheme for the reasonable distribution of resources is developed [5,c.127].

On the website of the largest Ukrainian-language Information Base of Knowledge in the field of quality assurance in IT - QAinfo, it is determined that in the general sense of business, Project Management is a type of professional activity aimed at managing a team, resources, communications, risks, and quality. It combines the methods of assessment, planning, organization, monitoring and control in a different sequence depending on the methodology. The goal of project management is classically considered to be: performance of work according to the task in the specified volumes on time and within the limits of the allocated funds. And it was also noted that in IT project management is an almost identical discipline that combines similar procedures, principles and policies. But in IT project management is a more dynamic process. For the purposes of management in IT project management is focused on the concept of successful management or completion of a separate project but not on the management of economic activities of business as a whole [8].

In the textbook of Taras Shevchenko Kyiv University, V. M. Pryimak considers project management as the application of knowledge, skills, competencies, methods and tools to project works in order to ensure compliance with project requirements [6, c. 16].

In another study guide, Z. V. Ryabova and A. B. Yermolenko interpret the concept as a set of tasks, organization, methods and management tools for project implementation [6, c. 8].

Based on the study of these sources, we can conclude that depending on the field in which the concept of project management is considered, its interpretation
changes. However, project management is always a process that focuses on ensuring that the project is written and implemented.

It is worth considering how project management differs from general management (table 1).

<table>
<thead>
<tr>
<th>Project management</th>
<th>General management</th>
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<tbody>
<tr>
<td>Project management has a clear, unique, detailed goal for each project.</td>
<td>General management organizes activities and performs a number of functions in any organization.</td>
</tr>
<tr>
<td>A project manager manages a project that is clearly limited in time.</td>
<td>The manager operates a constantly operating unit, process.</td>
</tr>
<tr>
<td>The project manager manages a team that includes representatives of various industries and spheres of activity.</td>
<td>The manager manages a relatively stable team that works to achieve a common goal and has relatively the same competencies.</td>
</tr>
<tr>
<td>The main goal is to complete the project by meeting the requirements of clients or customers within the specified time.</td>
<td>The main goal is to manage all the company's resources and control the day-to-day work.</td>
</tr>
<tr>
<td>It is a temporary process.</td>
<td>It is a continuous process.</td>
</tr>
<tr>
<td>The main attention of the project manager is given to the requirements of the project.</td>
<td>The manager's main attention is paid to the abilities of the team members working in the organization.</td>
</tr>
<tr>
<td>Available resources for project management are limited.</td>
<td>General management is endowed with a massive allocation of resources to maintain functional continuity.</td>
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<tr>
<td>Project management pays more attention to human resources.</td>
<td>General management is more focused on resources and machines.</td>
</tr>
<tr>
<td>Project management involves unique and complex team building processes.</td>
<td>General management principles are repetitive and involve simple team building.</td>
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Source: compiled by the author

So, we can conclude that project management is unique and highly planned, but unpredictable. The main difference between project management and general management is that the project manager has a temporary role, which leads to some specific differences and difficulties in the team building process.
Approaches to project management affect how a project is managed. Some approaches are flexible and some require strict deadlines and non-negotiable processes.

In project management, there are different approaches and methods exist that can be used to manage different types of projects. All types of project methodologies can be divided into traditional and modern approaches [4, c. 50].

Traditional approaches involve a number of sequential steps in the project management process. Processes take place step by step to design, develop and implement a product or service. This requires consistency in the implementation process and provides planning benefits based on the team formation phase.

Modern approaches to project management use different models of the management process. Such approaches do not focus on linear processes, but they provide an alternative approach to project management.

The traditional approach to project management is a way for project managers to achieve the desired results in a set period of time with a pre-set budget. This approach is most beneficial during the implementation of projects where no major changes are expected. In this approach projects have five specific stages of the project life cycle: initiation, planning, execution, control/monitoring and project closure [2].

Traditional project management follows a fixed sequence: initiation, planning, execution, monitoring and closure. The traditional approach to project management places special emphasis on linear processes, documentation, advance planning and prioritization.

According to this method, time and budget are variable and requirements are fixed, so it often faces budget and deadline problems. We can formulate the main advantages of the traditional methodology: clearly defined goals, controlled processes, clear documentation, more responsibility. The main components of the traditional approach to project management are depicted in the Figure 1.

![Components of traditional project management approach](image_url)

*Fig. 1. Components of traditional project management approach*  
*Source: compiled by the author*
The approach of flexible project management is constantly changing. Thanks to a flexible approach, traditional deadlines are reduced and projects run more smoothly. As updates or changes are made, decision makers and managers receive real-time feedback allowing them to begin making changes for the next rollout of features or services [2].

 Unlike the traditional approach, less time is spent on upfront planning and prioritization as it is more flexible in terms of specification changes and development. The main difference of this approach is to find alternatives to traditional project management. The advantages of this approach are: flexible prioritization, early and predictable delivery, predictable costs and schedules, improved quality, more transparency.

 An agile approach differs from other project management approaches which generally assume that things affecting the project are predictable. It emphasizes adaptability to changing situations, adequate and constant communication between the project team and between clients. Figure 2 shows the main components of an agile approach.

Fig. 2. Components of agile project management approach  
Source: compiled by the author

The waterfall approach to project management refers to the traditional process approach in project management.

This approach is good for projects that have linear steps. We don't start another step until we finish the previous step, and we don't go back to previous steps after we finish.

This approach is one of the traditional methods of project management where team members work linearly to achieve a set end goal. Each participant has a clearly defined role and none of the phases or objectives will change.
This approach is best for projects with long detailed plans that require a single deadline. Advantages of the waterfall approach: waterfall workflows can be easily replicated for future similar tasks, replication is possible, the strategy is relatively inflexible.

It is characterised by the work that is planned in detail in advance and then executed in a strict sequence following the requirements to complete the project in a single and usually very long cycle. Requirements are fully determined before starting any work. Then work cascades through project phases. In this approach each phase must be completed before the next phase begins and phases do not overlap. Typically, in a waterfall approach the results of one phase act as inputs for the next phase in sequence. Once a plan is approved, there are no a lot of possibilities for adaptation unless absolutely necessary. Next, the project goes through the process from requirements gathering to design, implementation, testing and maintenance.

This approach can be useful and predictable if the requirements are fixed, well documented and understood, the technology is clear and mature, the project is short and there is no added value. A waterfall approach can actually provide a more predictable end result in terms of budget, timeline, and scope. The components of the waterfall approach are shown in the Figure 3.

![Fig.3. Components of the waterfall project management approach](Source: compiled by the author)

Systematic approach to project management is a methodical approach. In a project management system, the project planning, project monitoring and project adaptation stages work in a continuous project management cycle until the project is completed. The project manager or managers then review the project to assess
what they have learned. This leads to the next project, where the cycle starts over [2].

Using a systematic approach to project management allows the project manager to keep goals and deliverables in mind at all times so that the end results are what the client wants. All elements within a project are interdependent and each will have its own specific needs or characteristics. The goal of this approach is to determine the most effective means of obtaining consistent and optimal results. A systematic approach to project management is beneficial for companies as it helps develop the necessary capabilities and strengths for both companies and employees. The formed main elements of this approach are shown in the Figure 4.

**Fig. 4.**

*Components of a systematic approach to project management*

*Source: compiled by the author*

Program management is an approach to project management that is useful for managers who have to manage many projects simultaneously. Program management is most often used in relation to projects where functional improvement is the primary objective [2].

It is a strategic approach to the execution and control of several related projects. The goal of program management is to obtain benefits for the entire program through the allocation of project resources, costs and other project activities. Managing related projects simultaneously creates an opportunity for synergy that would be unachievable when managing each project separately. This requires more complex management than managing a single project because the focus of program management is broader. The components of the program management approach are presented in the Figure 5.
Fig. 5. Components of the program management approach
Source: compiled by the author

Program management is the process of managing programs that meet objectives that improve organizational performance. Program managers oversee and coordinate various projects and other strategic initiatives within the organization.

So, there are different approaches to project management. We believe that it is necessary to highlight the components that will have the most effective impact on the organization's project management.

The most important component is the presence of a clearly defined goal of the project. The goal of the project can be defined as specific tasks that must be completed to achieve the final result. Having a sustainable goal will ensure a connection between the project and the overall goals of the organization.

The next component is ensuring the transparency of tasks. This means creating a project management system where all team members can easily and efficiently access all important project information. Another component of an effective approach is a clearly defined role for each member of the project team. The project team is responsible for contributing to the achievement of overall project goals and specific team deliverables by contributing to the planning of project activities and the completion of assigned tasks within expected quality standards to ensure project success.

Thus, we formed a set of components shown in Figure 6 which will ensure effective project management.
Having analyzed modern approaches to project management an approximate set of the most effective components of project management was formed.

**Conclusions.** The analysis of theoretical foundations in project management gave us the opportunity to form a general idea of the essence of project activity. In addition, it was found that project management is a complex system of methods and tools that requires a comprehensive approach and general methodology, capable of bringing additional value to the organization.

Project management is the art of managing and coordinating labor, material and other resources throughout the project's life cycle.

Project management methods are another important section in project management. They ensure the development of rules for the construction of organizational forms and structures focused on the implementation of projects. Establish rules and relationships between project participants and the project team. These methods help to formulate the necessary composition of the project team, organize its effective work, ensure the management of all processes and establish the necessary communications.

Project activity in the perspective of the last decade has become a driving force for the development of a considerable number of organizations. Project activity changes the professional consciousness of employees, prompts them to look for real opportunities to quickly solve urgent problems, to master new knowledge, skills and practical skills in the field of project management.

**References:**


