

## MTSDT 2019

### Modern Tools for Sustainable Development of Territories. Special Topic: Project Management in the Regions of Russia

#### PRACTICE OF APPLICATION OF THE PROJECT MANAGEMENT METHODOLOGY AT THE MUNICIPAL LEVEL

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#### *Abstract*

This article contains the results of an analysis of the practice of using methodologies of project activities at the local level on the example of the municipal formation, the urban district - Veliky Novgorod. The work outlines the main stages of project management implementation at the municipal level, taking into account the existing regulatory framework, as well as the features of the Agile methodology and Waterfall project management methodology. Agile methodologies allow developing new functions at a higher speed, but each change requires a certain amount of time to correct errors. When using the Waterfall methodology, on the contrary, new versions are released in a more complete form, but at the same time, the possibilities for the appearance of new products and innovations are limited. The study found that currently in the local government of the municipality of Veliky Novgorod, a Waterfall model of project management is used. The analysis of the used project management methodology carried out in the article on the example of the implementation of the specific project "Territory comfortable for business" (where the project "Hospitality School of Veliky Novgorod" was proposed for the comprehensive development of the tourism sector) as part of the priority direction "Formation of a modern urban environment" allowed the authors of the study to consider the possibility of applying various project management methodologies in the municipal environment in modern conditions. The article attempts to identify the prospects and limitations of the introduction of flexible project management methodologies at the municipal level.

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**Keywords:** Agile methodology, iterative approach, project life cycle, project office, Waterfall model.



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## 1. Introduction

The dynamic development of society in modern conditions necessitates the rationalization of management at all levels of state power and local self-management. As practice shows, the success of the implementation of many state projects adopted at the federal and regional levels depends on the willingness of local governments to implement management activities in the framework of new approaches and principles. Therefore, there is a need to improve the activities of municipalities in order to improve the quality and effectiveness of the implementation of management decisions.

Thus, the declared results can be achieved, first of all, by minimizing risks, improving managerial decisions, as well as reducing the number of possible alterations or eliminating them at all. It is these aspects that are relevant and priority areas of state and municipal government at the present stage. At the same time, project management does not deny and does not replace program and process management, but acts as a connecting element that allows as much as possible to cooperate various types of activities to achieve a common result. The widespread use of a project-oriented approach in the public and municipal sectors will contribute to improving the quality and effectiveness of management.

Throughout the history of project management experience, many different project management methods have been developed, among the main methodologies can be distinguished the following: waterfall and flexible, which are aimed at achieving results, but in different ways. When choosing a project management methodology, it is important to decide that the most important thing for a project is to complete on time, resource component or a combination of factors, and then to choose a project management method focused on achieving the target (Kwak, Walewski, Sleeper, & Sadatsafavi, 2014; Savchenko, 2018). In this regard, a factor in the successful implementation of project management is the presence of project competencies in municipal employees (Pritula & Shtreis, 2019).

The significance of the study in the framework of this article is confirmed by the fact that the practical use of flexible technologies in the municipal environment:

- does not require coordination of the budget and daily monitoring of progress in the implementation of the agreed budget;
- allows quickly generating a list of project events and their results;
- allows defining a list of events and their results in the sprint for the Agile team;
- allows distributing events by performers;
- allows for dialogue between all participants of the Agile team, as well as users of the product of the agile team;
- gives the opportunity to daily monitor the progress of the project using a personal computer or mobile devices.

Comparing Agile methodologies (Tkachenko & Sivokoz, 2017; Sazonov, Ezangina, Vaysbeyn, Gorshkova, & Makarova, 2016; Sivokoz, 2016) and Waterfall methodology (Blagov, 2010; Freeman, 1984; Mazur, Shapiro, Olderogge, & Polkovnikov, 2004) of project management, it can be argued that each of them has its own advantages and disadvantages. While using the Agile methodology allows developing new functions at a higher speed, each change requires a certain amount of time to correct

errors. With a more rigorous Waterfall process, new versions are released in a more complete form. Judging from the point of view of the client, the ongoing development process using the Agile methodology leads to continuous improvement of the existing product. With Waterfall development, the possibilities for new products and innovations are limited.

## **2. Problem Statement**

With the introduction of the program and project approaches into the practice of state and municipal management as key tools for achieving the objectives, it becomes necessary to use new methods and mechanisms for organizing the process of managing state programs and projects aimed at achieving strategic and tactical goals.

An analysis of the practice of applying the project management methodology at the municipal level with a specific example should solve the following problematic issues:

- choose an objective project management method acceptable for use at the municipal level;
- adapt for practical use a reasonable project management method taking into account the peculiarities of project development and implementation at the municipal level;
- organize project activities at the municipal level in priority areas of development depending on the project life cycle, within the framework of the selected project management model.

In this regard, optimization of the project management process at the municipal level will ensure the quality of planned and actual results and increase the competitiveness of the territory. In this case, it is necessary to assess how municipal employees can implement their functional activities taking into account the requirements of project management (Pritula & Shtreis, 2017).

The main objective of the project-oriented approach to management is to most effectively distribute the available potential to achieve the goals.

## **3. Research Questions**

- 3.1. What are the features of a project-oriented management system at the regional and local levels?
- 3.2. What model of project management is used at the municipal level, what are features of its application, advantages and disadvantages?
- 3.3. What is the life cycle of the project in the framework of the selected model of project management at the municipal level?
- 3.4. What is the organization of project activities at the municipal level?

## **4. Purpose of the Study**

To give a comparative description of project management models, analyze the project management model used at the municipal level (the urban district - Veliky Novgorod), identify its advantages and

disadvantages by examining the organization of project activities at the municipal level and the stages of the life cycle (stages) of a specific project.

## 5. Research Methods

- 5.1. Monographic method - allowed a comprehensive study of a specific (separate) project as typical for the analyzed area.
- 5.2. Comparative analysis, which made it possible to compare the condition of one object with another, identify their advantages and disadvantages, clarify the significance of various methods of project management.

## 6. Findings

In 2017, the Governor of the Novgorod Region A.S. Nikitin made the decision "... on the introduction of a project-oriented management system in the activities of the Government of the Novgorod region ...” (Official site of the Government of the Novgorod region, 2019). To date, a regional project office has been created and operates. The regional project office of the Novgorod region provides methodological support and coordination of 51 regional components of federal projects aimed at achieving the goals and objectives of national projects, and 73 priority regional projects.

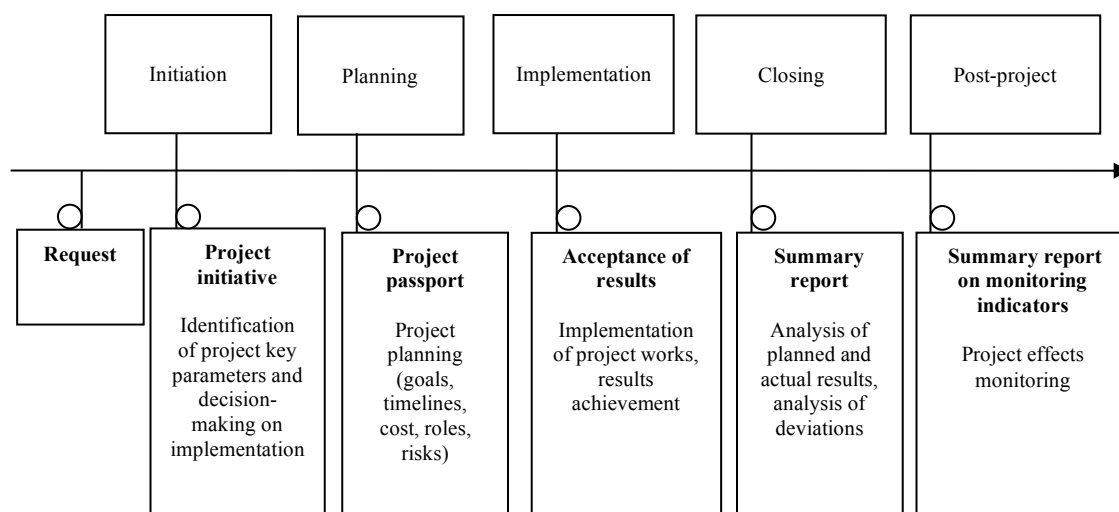
Functions and tasks of the project office of the Novgorod region:

- monitors project implementation;
- develops the project methodology and monitors its compliance with the projects, ensures the work of the Council / Presidium of the Council;
- coordinates the formation and development of an automated information system for project activities;
- ensures the implementation and development of the incentive system;
- coordinates work on the accumulation of experience.

Since 2018, the Administration of Veliky Novgorod began work on organizing project activities and introducing the functional structure of the project management system. So, Resolution of the Administration of Veliky Novgorod dated January 26, 2018 No. 293 approved the Regulation on the organization of project activities in the Administration of Veliky Novgorod (hereinafter the Regulation) (The official website of the Administration of Veliky Novgorod, 2019). The document establishes the procedure for organizing project activities at the municipal level - the urban district of Veliky Novgorod, regulates issues related to the preparation of the project passport, preparation, implementation of the project, amendments to the project, etc.

Analysis of the Regulation allows concluding about the project management model used at the municipal level.

Thus, currently in the local government of Veliky Novgorod a Waterfall model of the management project is used, which is confirmed by the data in Figure 01.



**Figure 01.** Project life cycle in municipal administration (Resolution of the Administration of Veliky Novgorod, 2018)

Let us consider the project life cycle at the local level.

**Initiation:** Determining the key parameters of the project and deciding on the feasibility of the project, at the end we get the document “Project Initiative”.

**Planning:** Planning of the project (goals, timelines, cost, roles, risks), at the output we get the “Project Passport”.

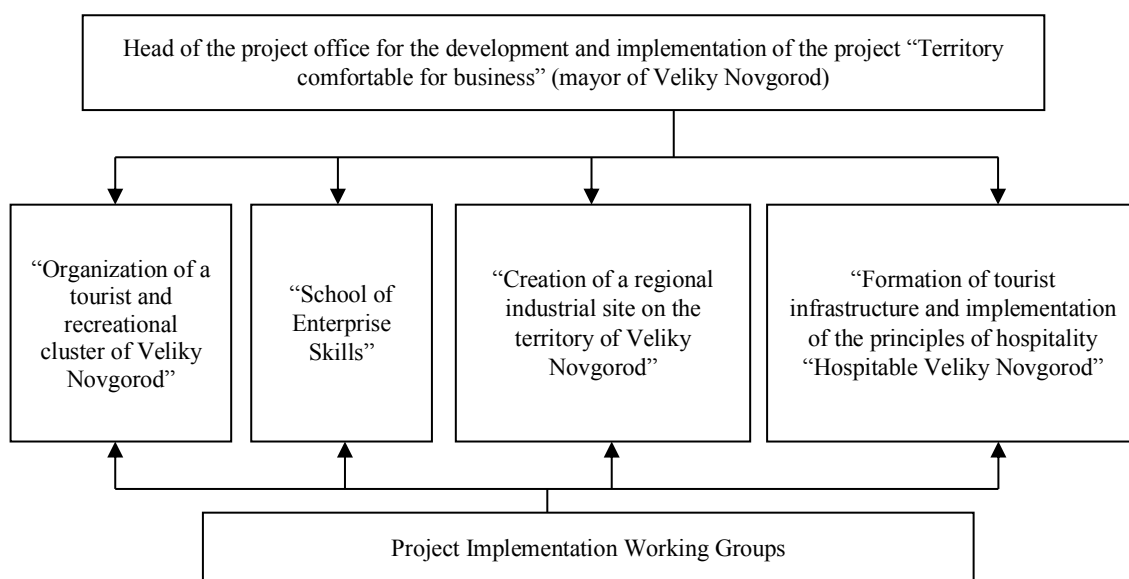
**Implementation:** Implementation of the project, achievement of results, after completion of the implementation, “Acceptance of results” is carried out.

**Closing:** Analysis of planned and actual results, analysis of deviations - a “Summary Report” is generated.

**Post-project:** Monitoring of the effects of the project, a “Summary report on monitoring indicators” is formed.

To justify the assumption made about using the Waterfall methodology of project management in the town of Veliky Novgorod, we consider a specific example.

In order to develop tourism and related areas, a project office has been created within the framework of project activities in the Administration of Veliky Novgorod to develop and implement the project “Territory comfortable for business” (hereinafter referred to as the project office), which is headed by the mayor of Veliky Novgorod. In the structure of the project office, working groups are created for the implementation of the following projects: “Organization of a tourist and recreational cluster of Veliky Novgorod”, “School of Enterprise Skills”, “Creation of a regional industrial site on the territory of Veliky Novgorod”, “Formation of tourist infrastructure and implementation of the principles of hospitality “Hospitable Veliky Novgorod”. The structure of the project office is presented in Figure 02.



**Figure 02.** The structure of the project office for the development and implementation of the project “Territory comfortable for business”

The leaders of the working groups are the heads of the specialized committees of the Administration of Veliky Novgorod, the members of the working groups are the heads of municipal institutions, non-profit organizations, and representatives of business structures.

As part of the implementation of the Action Plan (“Roadmap”) of the working group for the implementation of the project “Hospitable Veliky Novgorod”, the following activities and projects are provided: development of a unified visual concept for stopping complexes, information signs, town maps for placement under the Veliky Novgorod - Homeland of Russia brand ; inclusion of bus stops in a single layout of advertising structures in the town; the study of the placement of information on bus routes (in Russian, English, Chinese) at stopping complexes and in vehicles; study of the organization of equipped areas for bike rides.

The working group in the direction “Hospitable Veliky Novgorod” currently includes representatives of tourist administrations and enterprises of the city. So, in September 2018, at a regular meeting of the project office for the development and implementation of the project “Territory comfortable for business,” the working group in the direction “Hospitable Veliky Novgorod” proposed a project aimed at the comprehensive development of the tourism sector – “The School of Hospitality of Veliky Novgorod”. The project was approved by the project office and assigned to the implementation to the working group.

The project “Hospitality School of Veliky Novgorod” is planned to be implemented as part of a public-private partnership in 2019 - 2021. The main goal of creating a project is to solve the following problems:

- increasing the tourist attractiveness of Veliky Novgorod, expressed in the formation (and subsequently transmitting) of the image of a hospitable city, which is glad to guests, open to help with tourist navigation around the city, communication;

- increasing the competitiveness of Veliky Novgorod among neighboring competing cities in the field of tourist services and promoting a “hospitable” distinction in the Russian and international tourism market;
- increase in tourist flow and return of tourists by transmitting information from tourists who recommended Veliky Novgorod as a particularly hospitable city in which all locals help town guests.

The project is currently in a pre-investment phase. There is a process of developing the necessary documentation: the formation of a working group, project application, project analysis, decision on the organization of financing.

We also note that there is a tendency to actively attract subordinate institutions to the implementation of projects aimed at the development of various sectors of the economy, including tourism. So the municipal budget institution (MBU) “Tourism Development Center “Krasnaya Izba” was appointed the responsible executor of the project “Hospitality School of Veliky Novgorod” and is considered today as the base site of Veliky Novgorod.

## 7. Conclusion

Thus, when analyzing the existing practice of project activities at the local level, it is clear that the Waterfall project management methodology is preferred. However, one cannot exclude the possibility of using flexible methodologies in project management (as evidenced by the real experience of Veliky Novgorod), which, in turn, will allow eliminating the existing shortcomings of the Waterfall model and increasing productivity.

In conclusion, it should be noted that flexible (iterative) methodologies (Agile) in modern realities are gaining considerable popularity. Using Agile methodologies allows quickly managing changes and risks when implementing project management at the local level. At the same time, the use of flexible project management methodologies is also possible using distributed registry technologies (block chain). Therefore, the basis for successful implementation of projects in modern conditions at the municipal level is largely the competent selection of methodologies, concord and coordination of actions of its participants.

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