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REVIEW PAPER

Financial and Economic Tools of Project Management in **Public Sector**

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ABSTRACT

The article examines the introduction of project management as a result of the implementation of administrative reforms in modern states based on the management paradigm of New Public Management and New Public Governance. Based on both experts' opinions and a number of cases from different counties, it is shown that the development of such elements of new public management as focus on achieving results, monitoring of quantitative and qualitative performance indicators, budget savings, creative organizational culture, became possible thanks to a set of economic and strategic tools that characterize project management, especially PMBoK. The expediency of a large-scale transition to professional management of public projects through the use of the generally recognized PMBoK standard, as well as the "living" Agile project methodology, is substantiated.

HIGHLIGHTS

- The article is devoted to analyzing the development of the theory and practice of project activities in the public administration system.
- The obtained results demonstrated the highest level of expedience of synergetic combining of institutional and instrumental constituents of project management in public administration (public
- The research findings can be used to improve public administration based on government projects.

Keywords: Public administration, Project management, New Public Management, Public governance, **PMBoK**

At the present stage of development, many countries have chosen the strategy of transition to a public type of government and the concept of New Public Management. Accordingly, this involves the use of advanced, well-proven management techniques,

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including project management. The concept of "project management" in world practice correlates both with local projects aimed at implementing a narrowly focused task, and with projects of national importance. In all cases, it is about a multi-stage hierarchy of relationships, operations, and activities to achieve the stated goal.

Meanwhile, experts in the field of public administration, based on numerous examples, identify a number of problems that are usually encountered when implementing various types of projects (Dias *et al.* 2023):

- Unclear formulation of the goals and results of the project;
- Unclear formulation of the project implementation deadlines;
- Insufficiently developed strategy and project implementation plan;
- Inadequate organizational structure of project management;
- Discrepancy between the interests of project participants;
- Ineffective communications within the project and with external organizations.

Project management, from its definition, involves not just solving the above problems, but the absence of prerequisites for the emergence of these problems and overcoming difficulties in the administration and performance of state functions. In addition, officials at lower management levels should be not just performers, but participants in decision-making processes, which implies the delegation of some powers of government bodies (Arivazhagan et al. 2023). It is necessary to move from a traditional hierarchical structure to a horizontal one, that is, this means the use of team management, where certain powers are transferred from the department head to the team leader. Thus, responsibility for achieving the project goal is distributed among all participants and is not concentrated in the hands of one person who stands above the rest.

It is important to note that the activities of government agencies should be assessed by the final result of their activities, and not by the level of their activity. During the implementation of a project, a large-scale PR campaign can be carried out, thanks to which people will believe in the inevitable success of the implementation of this project and expect high results (Avedyan *et al.* 2023). And as a result, a negative opinion will be formed about the activities of government bodies when, after such activity during the implementation of the project, the results do not live up to the expectations. In this context, the use of a project approach will contribute to the transition to management models of commercial companies, that is, a change in the corporate culture and style of work of authorities, which will lead to the timely completion of assigned tasks, the efficiency of joint activities of various departments, and the observance of a high level of discipline.

Project management presupposes a focus on a result ("orientation on customer") and relatively greater freedom in management. A project is considered as a management object something unique and one of a kind. For each project, certain resources are allocated and its own management system is built (Shamne *et al.* 2019). Therefore, project management, as a rule, is distinguished by innovative approaches, assumes a higher responsibility of the management team for the result and less importance of hierarchy in the team.

Evidently, project management should be the "new normal" in the public sector. The primary function of public institutions is to preserve the state's stability by carrying out normal activities as defined in current legislation. However, the world around us is always changing. New technology, fast information expansion, new difficulties, and tasks geared toward the demands of residents and companies need changes in the public sector. VUCA-world, being in the process of transition to BANI-world, requires agility of public management sector as a whole and institutions in particular.

In the public and non-profit sectors, producing sustainable value entails ensuring that public money are spent in the most effective and efficient manner possible, in accordance with long-term goals, and that services give the desired benefits to society (Shavarskyi *et al.* 2023). Organizations should consider investment assessment in a broader strategic framework, including how an investment contributes to the attainment of strategic objectives, goals, and targets, as well as how it responds to opportunities and/or risks. For example, assessing whether acquisition or internal development is



more successful in achieving an organization's strategic goals necessitates an awareness of the business environment and the organization's unique circumstances.

Today's public management landscape is marked by tremendous unpredictability and dynamics. Thus, a broader strategic study might include an examination of (a) state and regional economy, (b) economic profitability across markets, goods, and consumers, (c) factors of long-term demand and competitive position, and (d) alternative possibilities (Chaliuk et al. 2021a; Tiesнeva and Smyrnov, 2023). Professional project managers in public administration play a critical role in promoting and explaining the basic concepts of project and investment assessment in their organizations, encouraging long-term decision-making while also managing uncertainty and complexity. Two significant obstacles may develop that demand their professional judgment:

- Understanding the theoretical foundation and practical implementation of a technique is frequently a source of confusion. Professional project managers in organizations may need to advise on areas where the connections between the application of financial principles and related project management theory are not easily understood or applicable in a current context, such as when economies are in a period of instability.
- Evaluating projects and investments is intrinsically difficult, with several subjective elements that can influence the result of a decision-making process and, ultimately, an organization's survival. A professional project manager at a company may assist in providing a strategic and operational framework, as well as estimating the various factors, such as expected cash flows and the cost of debt and equity utilized to fund any project (Kuzmin et al. 2023).

This determines the necessity of broad-scale research in the field of public management system transition to agile management based on project approaches, taking into account best practices and experience of overcoming challenges accumulated in the private sector.

LITERATURE REVIEW

From the mid-1980s to the early 1990s, when the traditional system of public administration, described in M. Weber's concept of rational bureaucracy, could no longer ensure sustainable growth and an advantage in global competition, the community of developed countries began to carry out administrative reforms. This movement can be described as "astonishing" in its scope, as it involved a significant number of nations using such similar transformation strategies in such a short period of time (Gladden, 2020). Geographically, a wave of change has swept the entire world: from the USA, New Zealand, and Sweden to India, China, and Mongolia. In the mid-2000s, this list of countries also included countries of the post-Soviet space.

Furthermore, public investment management has evolved into a technical function that is frequently outsourced to sector ministries, with the center retaining just a residual regulatory and coordinating role. In parallel, its proportion of world GDP fell from 17 percent to 4 percent between 1965 and 1990, a figure it has mostly maintained since. Even in middle- and low-income nations, where the argument for public investment appears to be particularly strong, the percentage of GDP decreased from 32% in 1965 to less than 10% in 2000 (Cangiano *et al.* 2013).

Since 2000, and especially in recent years, there has been a renewed interest in public investment. Important question is what has prompted this change? One source of concern has been the negative consequences of reduced public investment. In certain industrialized economies, the quantity of European Union Structural Funds has reignited enthusiasm in public investment. In some nations, new kinds of financing, such as public-private partnerships, have emerged as an appealing means of funding projects that appear to have little or no impact on budgets and taxes. Finally, the global financial crisis of 2008-2009 reignited interest in countercyclical fiscal policies, with a number of nations implementing economic stimulus packages that included expedited infrastructure repair and greater investment in ready-to-go public projects.

The traditional method of public investment management, which focuses on national development plans prepared by a separate ministry of planning, has major flaws. These flaws include a proclivity to become disconnected from fiscal constraints; a mismatch between required funding in the plan and budgetary allocation; procyclical spending; dual budgeting, in which investment spending is handled separately from the rest of the budget; ineffective project sequencing and prioritization; and insufficient project planning, design, and monitoring (Kostiukevych et al. 2020). Traditional methods for public investment may not usually maintain a close eye on running expenses throughout the project cycle, especially if dual budgeting is still used, budgets are simply yearly, and projects are centrally planned and supervised. As a result, money for operational expenditures or qualified personnel required to manage the new facility may not be available when construction is done, resulting in delayed operation.

The way out of this situation was the gradual borrowing and implementation of project management practices used in the private sector. By modernizing the state management system "in the image and likeness" of commercial companies, the initiators of managerial reforms created the conditions for using the project as a mechanism for solving government problems (Chaliuk et al. 2021b; Troschinsky et al. 2020). As a result of administrative reforms, along with such management technologies as program management, strategic management, etc., the project approach has become widely used by public authorities. And today, as noted in the literature, "almost every US government official uses project management software on his personal computer", which is applied also to carry out managerial functions within government (Osborne, 2010).

The scale of application of the project and the ongoing interest in it in countries with public administration systems transformed in the NPM logic make a number of issues relevant for researchers. Is the implementation of project management practices in government actually consistent with NPM principles? Does the project approach allow implementing NPM ideas? Are there any restrictions on the application of the project in the reformed state management system? Does project management open up new management opportunities for authorities, including regarding financial and economic aspects?

MATERIALS AND METHODS

The theoretical and methodological basis of the research was the works of scientists on the problems of classical general and special management, and the specifics of project management. Also, the basis was the fundamental provisions of the theory of management, public administration, public governance, project management based on system methodology.

RESULTS

The main ideas of NPM, while analyzing the publications of scientists published both at the end of the 20th century and the latest, can be described through the prism of certain tasks of modernizing public administration systems (Zavattaro, 2023):

- Apply management technologies of commercial companies in the public sector;
- Carry out activities to perform government functions in accordance with the principle of customer focus;
- Use results-based management mechanisms;
- Strive to save budget resources;
- Carry out decentralization and delegation of some power in order to free up resources and improve the quality of self-government;
- Modernize the corporate culture and work style of government bodies;
- Reduce redundant, duplicative, and ineffective functions of structural elements;
- Strengthen competition in the provision of services and the execution of powers in the public sector.

It is obvious that the listed ideas of NPM are subordinate to the goal of creating an economical, rational, efficient and "flexible" state, which should be attractive to "clients" and capable of "reasonable" spending of money (Klymenko *et al.* 2016). Commercial companies are also striving to solve a similar problem, choosing project management as the main tool for overcoming obstacles. With the help of projects, business organizations resist low performance, irrational use of financial resources, inefficiency of cumbersome hierarchical organizational structures, bureaucratization and centralism of decision-making, low satisfaction of



service consumers with the quality of the product produced, etc. The presence of these problems in the field of government management has necessitated the use of project-based approach by authorities.

For example, in the UK, the project management strategy makes increasing efficiency and reducing government spending one of the key priorities of government policy (Khomiuk *et al.* 2020; Karpa *et al.* 2021). Through the implementation of projects, ministries and departments spent more than 1 billion pounds sterling, the feasibility assessment and spending control of which were carried out by special bodies. The government has separate structures that carry out detailed monitoring of the implementation of priority projects, control of their financing (Kassel, 2016). It is planned to increase the efficiency and effectiveness of budget spending by managing a portfolio of large government projects.

To increase the efficiency of interdepartmental interaction, the project approach was successfully used in France. In order to organize the joint activities of several government agencies, coordinate and ensure the work of a large number of specialists, project management was used by the Department of Public Modernization (Moutinho and Rabechini, 2019).

In other words, the implementation of projects in the sphere of public administration was carried out to overcome a number of difficulties in the administration and performance of state functions. But only due to the fact that reforms in the spirit of the NPM allowed government authorities to use business management technologies, the project approach began to be used at the state level. Project management provides solutions to the tasks posed by transformations in the logic of the NPM. Moreover, the projects contribute to the implementation of its key ideas.

Firstly, the introduction of a project approach into the public administration system makes it possible to implement the idea of using results-based management mechanisms in this area. Results-based management refers to the process of conducting goal-oriented activities, systematically coordinated using plan-factual control, environmental management, and quality monitoring (Vorobei *et al.* 2021). The emphasis on achieving the expected result and the ability to use it in the future is the

main feature of the project approach. In turn, the creation of unique products, services or results is also the most important purpose of the project, according to generally accepted interpretations of its essence (Zurga, 2018). Planning, comprehensive monitoring and control of the implementation of project activities, and quality management of the product or service produced are carried out. The main characteristics of the expected outcome of project activities are also determined by formulating the goal.

Let us add that goal orientation allows asserting that the project approach can be used as a way to manage strategic development. Project management, like program management, does not imply the creation of strategies, but can "breathe life into them, become a tool for their formation" (Moutinho and Rabechini, 2019). A project can become an "event" to achieve forward-looking development indicators, but only if the expected results of the project correspond to or are identical to the strategic goals. The use of projects as a technology for solving long-term problems makes strategic development programs more feasible and manageable (Nekvapilova and Pitas, 2016).

Secondly, the use of a project approach by authorities helps to increase the efficiency of resource management financial, time, personnel, etc. In the conditions of a constant search for a compromise between the allocation of funds to solve one problem in one direction and another problem in another direction, an objective need is formed for the introduction of formal planning methods and analysis used to determine the best option (Santos and Varajao, 2015). Project management technologies offer the use of a number of techniques and approaches for calculating the optimal amount of resources. Using the PERT (Program (Project) Evaluation and Review Technique) analysis technique and cost analysis tools, for example, the amount of resources required both for the project as a whole and for its individual tasks is established. According to the International Project Management Association (IPMA), the use of modern project management methodology and tools can usually save about 20-30% of time and about 15-20% of funds spent on activities (Milakovich, 2021).

Thirdly, the need for decentralization and delegation of part of the powers of government bodies as a task of reforms in the spirit of NPM can also be achieved through the use of projects. Project management transforms the interaction between performers in the direction of reducing a number of obstacles, changing the style of work and the nature of conducting activities (Zilinska et al. 2022; Yermachenko et al. 2023). With the help of team management, used in the implementation of projects, "control levers" are transferred from the head of the structural unit to the team leader. This leads to the formation of a horizontal management structure in the organization, which has significant advantages over the traditional hierarchical structure by reducing the number of links between managers and subordinates (Nekvapilova and Pitas, 2016). Responsibility for achieving the project goal is distributed among all its participants and is not concentrated in the hands of one person. Relationships regarding achieving goals are modified, resulting in increased flexibility, transparency, and efficiency in solving assigned

Through the use of team management and project technologies in the public sector, the efficiency of interdepartmental interaction and the effectiveness of interaction with contractors attracted by the executive authority are increased (Mazikana, 2023).

Fourthly, project management in public administration can contribute to changing the corporate culture and operating style of government agencies, which also includes reforms in the spirit of NPM. Through the use of projects, a transition is being made from the rational bureaucracy of M. Weber to the management models of commercial companies. High-quality and timely completion of assigned tasks, efficiency of joint activities of various departments, adherence to a high level of discipline all these are the goals of the new mechanism for motivating civil servants, which can be achieved during the implementation of the project approach (Osborne, 2010). It is expected to transform the behavior model of government employees in the direction of increasing the effectiveness of the latter's functioning. Due to the use of a management mechanism in a team, flexibility and transparency of intra- and interdepartmental interaction can be achieved.

A project management system is necessary for managing the quality of work and is effective in analyzing the degree of risk (Kalyayev, et al., 2019). Project managers analyze deviations from the planned result, make adjustments if necessary, and make informed management decisions.

The practical advantages of project management application in public administration, including the use of appropriate financial and economic tools, are ranged in Fig. 1 below.

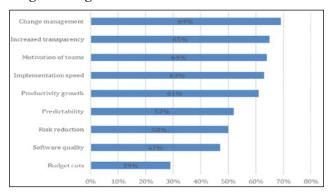


Fig. 1: Effectiveness (advantages) of project management in public administration (Zavattaro, 2023)

According to experts, in the 21st century, project management will take the place of traditional functional management, which is confirmed by the rapid development of the American Project Management Institute (PMI), a professional organization in this field. Project management has its own methodologies, tools, and standards. The most widely used process model is used in such well-known documents outlining the methodological foundations of project management as the Project Management Body of Knowledge (PMBoK) (PMI), which is recognized by many as a de facto international standard, and the ISO 10006:1997 standard, which has given a number of the most important provisions of the PMBoK de jure status.

Of course, besides PMBoK, there are a number of other frameworks, although less detailed in terms of processes and procedures. Among them, the most notable is the Scaled Agile Framework (SAFe) a flexible framework for developing products for end clients, allowing the use of Agile approaches in large teams of more than 50 people (Panasiuk, O. *et al.* 2021). There already exists SAFeforgovernment, a SAFe framework adapted specifically for government. The most used Agile technologies in public administration are presented in the Fig. 2 below.

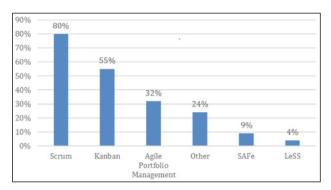


Fig. 2: The most used Agile technologies in public administration (Aleinikova *et al.* 2020)

To date, significant global experience has been accumulated in the implementation and development of a project management system in the public sector. Moreover, in many countries, business and government actively cooperate in the field of project management, implementing joint projects.

English-speaking countries have achieved the greatest success in implementing Agile in public administration (Isaieva et al. 2020). There are 18 management standards in the UK, which include the use of agile methods; Requirements for IT projects have also been adopted, which developments must comply with. The UK government is adapting Agile for large public service projects. Half of new projects are created according to Agile principles. Thus, in the UK, it was possible to reduce the cost of a project by 80 thousand pounds sterling from 1 million pounds sterling by following the principles of Agile (Milakovich, 2021). Savings occur due to detailed definition of requirements at the initial stage of the project, when it becomes obvious that some functionality specified in the documentation is not needed.

In the UK, the project management system is headed by the Infrastructure and Projects Authority (IPA), the UK Infrastructure and Major Projects Authority, formed in 2016 through the merger of the Major projects authority and Infrastructure UK. The IPA is a UK Government project office that provides project support. In other words, IPA is a kind of center of knowledge and competencies in the field of project management, responsible for the management and support of large government projects, the development of project personnel, the development of national project management standards and cooperation with universities

(Gupta, M. et al. 2021). The IPA reports directly to the Chancellor of the Exchequer and the UK Prime Minister's Office. The UK has adopted a number of project management standards, the main one being PRINCE2® (PRojects IN Controlled Environments), developed by the OGC UK, which is one of the most widely used project management methods in the world in various industries (Bazaluk et al. 2023). This method is a practical, flexible, and adaptive approach that can be used to effectively manage any project, regardless of the scope and scale of the project. All major UK projects are independently reviewed; in particular, IPA assesses the likelihood of projects being implemented, its goals, and provides feedback on each project. Project progress data is regularly provided to the IPA, and project ratings are also maintained. According to the UK Treasury, public sector projects in any area (construction of roads and railways, strengthening the armed forces, modernization of information technology, etc.) are the state's way to provide quality public services to the population (Stephens, Awamleh, and Salem, 2022).

In the United States, the introduction of agile methods began in 2010 with Project Sentinel at the Federal Bureau of Investigation (FBI). The project took 20 months and amounted to only 5% of the department's expenses. The result of the successful implementation of Agile was the electronic database management system at the FBI. An unsuccessful example of project work using agile methods is Healthcare.gov, which was created to link the US Department of Health and Human Services database with government and insurance company databases (Gaman et al. 2022). After the first launch, the resource did not work. The teams worked using the Scrum framework, thanks to which they completed the entire project in 3 months. Each of the hired contractors worked on its own task, and overall planning was carried out using the cascade method. The author of the Scrum framework, J. Sutherland, sees the reasons for failure in the lack of regular testing of the project at the development stages and in the disunity of the team. Competently creating a Scrum project requires that the team is united not only by the final goal, but also by the actions along the way (Wernham, 2012). Similar to the UK, US, Australia, New Zealand and Italy, Canada created the Canadian Digital Service in July 2017 to provide

digital services to departments and citizens using an Agile approach (Gasik, 2023).

It should be noted that project management does not replace everyday regular procedures. Furthermore, no significant adjustments to the organizational structure are required. As a result, project management in the public sector should be used as an extra tool to assist workers in implementing changes (Byrkovych *et al.* 2023). It is worth noting that specific preconditions are required for the successful implementation of project management in public sector organizations.

First and foremost, public sector organizations can select an acceptable project management organizational model based on the number of projects they perform and the details of their activity (Oliinyk *et al.* 2021). Common preferences include current functional, project, or matrix organizational management structures. The project management process should be codified, regardless of the organizational structure of the public administration agency (Gaievska *et al.* 2023). For example, this should include a project management organizational structure plan as well as descriptions of the roles and duties of project management participants. This should also be represented in the applicable internal regulations.

The public administrations of European Union member states make extensive use of project management (Gavkalova *et al.* 2022). It maintains their management techniques flexible, current, and efficient when faced with new issues. The instance of Lithuania is particularly interesting.

Lithuania now implements project management in a comprehensive and centralized manner. First and foremost, it has a legislative basis: the Republic of Lithuania's Law on Strategic Management outlines the interfaces between strategic management and project management. The Government has adopted the Republic of Lithuania's standard project management processes through a resolution. Furthermore, with all applicable methodological guidelines and appropriate templates, the Project Management Standard was produced by the Office of Government and is periodically evaluated and updated (Stephens *et al.* 2022).

The created standard is a methodological guideline that suggests using systematized theoretical and practical project management knowledge to successfully implement projects, project programs, and portfolios in the public sector. The document explains the methods for managing projects, project programs, and portfolios, which will be implemented in accordance with the intended timeline, scope, and budget (Deyneha et al. 2016). The standard's recommended monitoring and control system guarantees that state resources are used rationally and that society benefits more. The document illustrates how project, program, and portfolio management methods fit into existing strategic planning approaches. It is based on the PMI project management standard, PMBoK. It should be noted that even after creating a single standard, institutions may opt to include additional project management standards into their operations.

The PMBOK provides a whole range of highly effective techniques and tools for managing project costs, in particular the creation of a comprehensive cost management plan, various cost estimation methods like analogous, parametric, and bottom-up estimating, budgeting tools (cost aggregation, or funding limit reconciliation) (Kassel, 2016). Fig. 3 below shows one of the stages of using PMI Standards Framework to improve U.S. Federal Government capital investment outcomes.

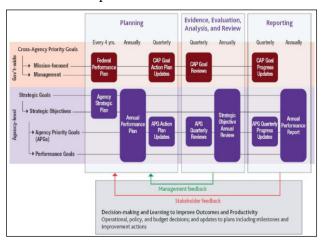


Fig. 3: Performance management cycle, in the project of improving U.S. Federal Government capital investment outcomes with the use of PMI standards (Driessnck, 2015)

The Department of Housing and Urban Development (HUD) back in 2014 converted from conventional lifecycle, what they dubbed PPM V1.0, to V2.0, which fits with the PMBOK® Guide Process Groups indicated in Fig. 4.



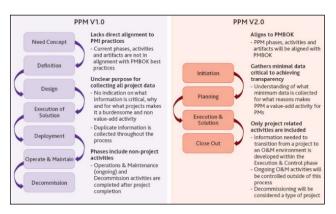


Fig. 4: Department of USA Housing and Urban Development's lifecycle past and present (Driessnek, 2015)

Simultaneously with the implementation of project management standards in Lithuania, an active training program for government personnel was initiated. Finally, IT tools for project management in all ministries and subordinated organizations were created.

All of the required precondition and ingredients for the effective implementation of project management in the Lithuanian public sector were not developed in a year. Some of them, such as relevant laws and regulations, were only recently passed or authorized (Panasiuk, I. *et al.* 2020). This is the outcome of many civil servants' long, methodical, and demanding effort in the Office of the Government and key ministries, backed up by a strong political determination to execute changes in the most effective way possible.

DISCUSSION

In order to overcome the major limits and drawbacks of NPM-oriented reforms, a comprehensive approach to societal challenges has arisen (Bouckaert, Peters, and Verhoest, 2010). Several writers have proposed conceptual frameworks to better comprehend the changes occurring in public sector management practice (Pulmanis, 2014). Scholars have referred to these new network linkages as governance, public governance, network governance, and new public governance, and they have sparked and stimulated a long-standing theoretical discussion in the area (Pestoff, Brandsen, and Verschuere, 2013). Indeed, since the late 1990s, New Public Governance has been a hot topic in public management research. It has been researched with many grounds of interest, due to a substantial preceding theoretical and/or ideological baggage. (Vignieri, 2020).

A process view of New Public Governance evolution is presented in Fig. 5 below.

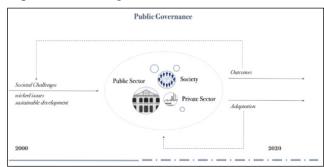


Fig. 5: A process view of New Public Governance evolution (Vignieri 2020)

Governance necessitates collaborative forums where public leaders may foster trust, manage dispute, and design strong policies. Collaborative governance systems (Emerson and Nabatchi, 2015) can harmonize policy formulation at the organizational and interinstitutional levels. In fact, member organizations are required to align their plans, actions, and aims with the goals and policies established with other stakeholders at the macro (national and local policies) or policy field levels (e.g., a specific sector). At the same time, successful collaborative governance necessitates that policy results be regularly assessed. This is also a key component in efficiently meeting public needs and political demands, as well as pursuing the adaptation of the governance structure via learning and reciprocal "knowledge transfer" (Stephens, Awamleh, and Salem, 2022).

In an effort to develop a relevant definition of governance, writers and scientific institutes propose a variety of reasons for governance. These include (Kassel, 2016; Mazikana, 2023):

- Governance refers to how stakeholders engage with one another to impact policy results;
- Governance as "self-organizing interorganizational networks" that work both with and without government to offer public services;
- Governance is "about managing networks." Governance as "minimal state, socio-cybernetic system and self-organizing networks";
- It was argued that "public administration is steadily moving [...] toward theories

of cooperation, networking, governance, and institution building and maintenance" (Zavattaro, 2023);

These definitions outline the fundamental aspects of New Public Governance while also attempting to alleviate the NPM model's limitations. It is a public-sector decision-making process that takes an inter-institutional approach to policy development and execution.

Table 1 outlines main traits of three modes of Public Administration.

Furthermore, in recent decades, public investment management has kept up with larger advances in public financial management (PFM). The traditional dual budgeting method was abandoned in favor of a more integrated strategy in which investment was progressively allocated to expenditure ministries (Kryshtanovych et al. 2022; Lola et al. 2022). Although initially successful, this response ultimately undermined the strategic importance of public investment to the economy, exposing longterm and costly decisions common to many large infrastructure projects to shorter-term political whims and jeopardizing economic prosperity. Realization of this hazard has led to the return of a more strategic approach to the administration of public investment in which long-term goals are more systematically specified (Cangiano, Curristine, and Lazare, 2013).

The objective of the investment is critical; it is the reason for establishing the project and serves as the foundation for setting more detailed goals and targets. Governments will also prioritize economic and financial factors such as value for money and fundability (Kulikov et al. 2022). The public sector is organized differently in each country. Being the financing party does not entail that the government must be the implementing party. Typically, a sectoral ministry is the owner, while project implementation is delegated to a public agency or a private business under a Public-Private Partnership arrangement. Public projects often have additional tendering criteria.

PPP contracts generally have financial repercussions for governments. Payment commitments under PPP contracts are frequently long-term and risk-based. Types of Fiscal Commitments to PPPs describes the many risk categories associated with PPPs (Levytska et al. 2022). Managing these risks can provide issues for public financial management, which is often focused on yearly expenditure allocations. As a result, public financial management techniques tailored to PPPs have emerged.

Fiscal obligations to PPPs can take the form of recurring payments that make up all or part of the private party's salary, a measure of risk sharing, or a combination of both (Kussainov et al. 2023). Common types of government fiscal commitments to PPPs include the following:

1. Direct liabilities

These commitments represent payment obligations

Table 1: Difference between three evolutional models of Public Management (Vignieri, 2020)

Aspects	Management models of Public Administration			
	Old Public Administration	New Public Management	New Public Governance	
Theoretical Roots	Political science and public	Rational/public choice theory	Organizational sociology and	
	policy	and management studies	network theory	
Nature of the state	Unitary	Disaggregated	Plural and pluralist	
Focus	The policy system	Intra-organizational	Inter-organizational	
		management	governance	
Emphasis	Policy implementation	Service inputs and outputs	Service processes an outcomes	
Relationship	evetom	Independent contractors	Preferred suppliers, and often	
		within a competitive marketplace	inter-dependent agents within ongoing relationship	
		*	origonig relationship	
Governance mechanism	Hierarchy	The market and classical or neo-classical contracts	Trust or relational contracts	
Value base	Public sector ethos	Efficacy of competition and the	Neo-corporatist	
		marketplace	_	



that are not contingent on the occurrence of an unknown future event. Direct obligations resulting from PPP contracts may include:

- "Viability gap" payments, representing a type of capital subsidy that can be phased in over time or used to offset equity investments (Litvinova et al. 2020). Alternatively, subsidies can be utilized to reduce rates for specific endusers, making them more affordable to them.
- Availability payments are recurring payments or subsidies made throughout the course of a project, generally contingent on the availability of the service or asset at the contractually stipulated quality (Lopushynskyi et al. 2021). The payout may be changed using performancebased bonuses or penalties.
- Shadow tolls, or output-based payments a payment or subsidy per unit or user of a service, such as per kilometer traveled on a toll road.

2. Contingent liabilities

Contingent liabilities are payment obligations whose incidence, timing, and size are dependent on an unpredictable future event. Explicit contingent liabilities in PPP contracts may include:

- Guarantees on specific risk variables, that is, an agreement to reimburse the private party for revenue losses if a particular risk variable deviates from a contractually set level. The accompanying risk is thus shared by the government and the private party (Kubiniy, et al. 2021). For example, this might include guarantees that demand would continue above a given level, currency rates will remain within a specific range, agreements to acquire land required for the project, or compensation for the relocation of persons and activities.
- Compensation provisions, for example, a pledge to reimburse the private party for harm or loss caused by specific, uninsurable force majeure situations.
- Termination payment commitments a commitment to pay an agreed-upon sum if the contract is canceled owing to default by a public or private entity; the amount may vary depending on the reasons of default.

- Debt guarantees or other credit enhancements a commitment of repaying some or all of the debt used to fund a project (Maksymenko *et al.* 2020). The guarantees may cover a specific risk or occurrence. Their intention is to provide a lender additional assurance that their loan will be repaid.
- Litigation potential litigation costs to government relating to PPP.

Every PPP contract also involves implicit contingent liabilities, which are moral commitments of governments that represent public interest or political pressure (Omarov *et al.* 2022). These include the cost of retendering or running if operators go bankrupt; the expense of extending or redesigning services when the PPP contract is extremely inflexible; and changes in government policies.

There are several issues that frequently occur when the fiscal consequences of PPPs are not adequately considered. Without particular procedures to handle and manage fiscal risk, PPPs can be utilized to avoid budget limitations or borrowing limits, resulting in hidden deficits for the government.

PMBoK and alternative project management methodologies give advise for practitioners on public financial management for PPPs, helping to avoid these problems by detailing how governments might:

- Evaluate proposed PPP project' fiscal implications of a
- Control aggregate exposure to PPPs
- Budget for fiscal commitments to PPPs
- Reflect fiscal commitments to PPPs in government accounts and reports.

The success of a project is defined at its front-end phase, which is the period between when the project concept is formed and when decision-makers eventually agree to finance the project. The phase consists of issue identification, idea identification, preparation and assessment, but not thorough planning (Williams and Samset, 2010). The relevance of the front-end phase in project development is increasingly acknowledged (Samset & Volden, 2016). Several studies have demonstrated that initiatives fail because of important decisions made during this period (Williams *et al.* 2019).



Furthermore, this phase defines success, selects the project concept, and establishes the framework requirements for efficient project delivery. Ex post evaluations of projects must be conducted in light of these success criteria. Several nations have implemented governance frameworks to improve the success of significant public projects in response to the growing recognition of project front-ends. Norway adopted a plan that originally attempted to improve cost performance in 2000, and then from 2005 to assure the appropriate choice of idea (Volden and Welde, 2022). The Norwegian method is a stage-gate approach in which government agencies' plans, evaluations, and estimates are reviewed by external consultants who are properly qualified for the task before money is granted. The so-called Quality Assurance (QA) plan comprises two external reviews:

- QA1 Quality assurance of idea selection before Cabinet's approval to begin a pre-project
- QA2 Before submitting the project to Parliament for approval and funding, ensure the quality of the management basis and cost projections.

Together, the two studies comprise a wide examination of the project ex ante: QA1 looks for consistency with needs and strategy and evaluates the project's value for money (i.e., to guarantee tactical and strategic success), whereas QA2 ensures that the project is well-planned and can be completed within budget (Gupta, S.K. et al. 2024). The scheme applies to all large government projects (those estimated to cost more than NOK 1000 million, or approximately USD 110 million) in transportation, defense, and building construction, as well as major information and communications technology (ICT) projects. The formal decision to build cannot be made until QA2 is complete. The Ministry of Finance has produced a series of papers to assist relevant agencies in project development and verify that projects are adequately mature before progressing from one level to the next (Mishchuk et al. 2020). The use of a logical framework approach to goal formulation is required, as it ensures consistency throughout projects and provides an institutional architecture that encourages qualityat-entry to improve project performance.

CONCLUSION

As the research reveals, the growth of public administration ideas and suitable adjustments in public sector operations landscape and difficulties needs the application of successful ways developed and well-established in the private sector, which will allow obtaining a comprehensive result from the implementation of each government project (Novak et al. 2022). The implementation of the project approach in government bodies involves activities in two key areas: state design (selection of strategic goals and priorities, formation of a portfolio of projects on a national scale, identification of resources for their implementation and consolidation in the national budget) and the creation of a state project management mechanism (formation of institutional design project management in the system of public authorities at the national and regional levels, institutional consolidation and normative unification of the stages of project activity: preparation, implementation, completion, evaluation). It is important that project-oriented management does not exclude process activities (Ortina et al. 2023). Managing socio-economic development and financing state activities combines process and project components, and this depends on various tasks of public administration (Chaliuk et al. 2023). The main difference between the two types of activities is that projects are aimed at achieving a unique goal within a limited time frame, while the processes are repetitive in nature.

Project management in the public sector as a set of basic rules, methods, principles, and organizational forms for the shaping and implementation of projects, both statically and dynamically, must take into account the influence of elements of the external and internal environment of indirect and direct influence, especially factors of instability and, especially, entropy. It should include three aspects: functional, institutional, and instrumental, aimed at performing the basic, managerial, specific, and program-targeted functions of project management. Further development of directions for increasing the efficiency of project management in the public sector based on the introduction of the project approach into the activities of government bodies is an urgent scientific and practical task.



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