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PROJECT MANAGEMENT OFFICE IN THE PUBLIC SECTOR: A CONCEPTUAL ROADMAP

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Abstract: Most public institutions nowadays use projects to implement their development activities. Based on in-depth literature review, this paper presents a conceptual model for establishing Project Management Office (PMO) in public sector. The paper analyses the role of PMO in successful project management, the value of PMO with the focus on the PMO in public sector, and presents a summary of theoretically proven and in practice validated project management methodologies, models and approaches. Based on systematic literature review and almost 20 years of working experience in the field, the main result of this paper is the nine-stage model for establishing of PMO in public sector. Finally, the paper emphasizes the necessity of dedicated time and resources, as well as a support of experts, training, infrastructure, government, and decision-makers.

Keywords: project, management, PMO, public sector.

1. INTRODUCTION

Organizations today realize much of their value through projects. According to the results of numerous research in the economy and official data from the World Bank and other institutions, the estimated GDP generated through projects is increasing from year to year and amounts to over 40% for developed countries, while for developing countries this figure is 33%. Through projects, resources and competencies are focused on strategic goals and enable the introduction of changes, which creates a competitive advantage and increases the value of the organization (Mir, & Pinnington, 2014). In today's times of crisis, good management of the spectrum of projects becomes extremely important for the economy (Hüsselmann & Golfels, 2020).

Some years ago, organizations started establishing a special unit for project management (Project Management Office - PMO), whose role is to manage a wide range of projects. PMO is an instrument for implementing organizational strategy through portfolio, programs and projects (Bredillet et al., 2018; Montenegro, 2019), however, practice has shown that it is difficult to always recognize and define the value that PMO brings. The most common activities carried out within the PMO are: providing methods and tools for project management, optimizing the use of resources, supporting project management, monitoring and controlling project progress and reporting, maintaining the project documentation base, providing support and training for project teams, etc. (Aubry et al., 2010), which is especially important today for sustainable management and achieving organizational flexibility (Stumpf et al., 2019).

At the strategic level, the role of the PMO is to ensure:

- connection of the project with the strategic goals of the organization;
- connection of the project with the strategic growth of the organization i
- efficient and effective management of knowledge through the collection, sharing and transfer of knowledge, as

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well as mechanisms for the reuse of knowledge.

At the tactical level, the role of the PMO is to ensure:

- connection of project initiatives, for better coordination of several projects;
- consistent quality of products/services created by the project, through constant monitoring of work in accordance with standards and methodologies;
- sharing knowledge between team members in order to have clear communication.

At the operational level the role of the PMO is to ensure:

- evaluation of the project, through reporting, approval of all changes and ensuring that everything takes place efficiently;
- integration of knowledge from the project, in order to obtain information for decisions on further processes;
- expert knowledge in project management, serving as a center for lessons learned, best practices and standardized methodologies;
- constant monitoring of user satisfaction.

A contemporary approach says that PMO nowadays is crucial for the:

- expert planning of time and schedules;
- coordinated resources utilization:
- structured monitoring;
- project scope/change management;
- focus on cost efficiency;
- stakeholders/communication;
- quality management;
- risk management;
- knowledge management;
- integrated project processes;
- monitoring of benefits realization.

The value that the PMO can have at the operational, middle, and strategic levels of the organization manifests itself in several ways (Silva & Bouter, 2015):

- Consistency of best practices, technology, processes – leading to discipline and aligned expectations and behaviors;
- Visibility through aggregate monitoring and analysis company management has a clear view of the portfolio for decision-making
- Transparency through independent and objective monitoring and recommendations, decisions are made based on facts;
- Quality regular reports of project results enable the project to be delivered in accordance with the acceptance criteria and in accordance with its purpose;
- Insurance enables security in management and disposal of information, through regular reports, assessments, recommendations and a unique approach;
- Predictability of costs, time and resources to deliver results, which further contributes to better planning in the organization and greater agility;
- Accountability through clearly defined roles and responsibilities, enabling people to take responsibility for results and benefits for the organization
- Alignment and focus allocation of resources in relation to priorities and contribution to strategic goals;
- Organizational learning about what should be repeated and what to avoid in the future, through the knowledge base and knowledge transfer in the organization;
- Flexibility through the analysis of project dependences and risk management.

The question is how to establish project management in the public sector. Aiming to answer this question, this paper presents a conceptual model (Figure 2). This model is based on theoretically proven and validated in practice project management methodologies, models, and approaches as well as PMO role in successful project management, but also on almost 20 years long working experience of the author in the field of project management.

2. PMO IN PUBLIC SECTOR

The management of national investment projects has two systems: administrative and political. Projects are generally implemented

by several different participants, which makes them particularly complex (Cvijović, Obradović, & Todorović, 2021). Such projects are most often projects of great value and importance for several groups, especially citizens (Janka & Kosieradzka, 2019; Aubry & Brunet, 2016; Obradović et al., 2012). There are several dimensions that describe the complexity of projects such as: activity complexity, social complexity, cultural complexity, operational complexity (Kähkönen, 2013). The so-called trend "projectification" creates the need for project workers to have special competencies. Some of the main challenges for the project manager are connecting project performance with benefits and choosing a professional team. Also, the public sector is not results-oriented as an economy, it is surrounded by numerous political influences, which affects project management (Santos and Varajão, 2015; Suh, Hwang & Kim, 2014).

What distinguishes projects in the economy from projects in the public sector? (Jałocha et al., 2014)

- Complexity (large number of stakeholders, who have demands towards the project manager);
- Permeability (public institutions are 'open systems' and are influenced by numerous external events);
- Instability (political restrictions, changes in public policies and the imposition of short time horizons);
- Lack of competition (small number of competitors, especially dominant ones especially in the field of health and education).

Public sector organizations are under pressure to deliver services that are of general interest and are integrated systems, especially in a system of numerous stakeholders, limited deadlines and resources. The lack of systematized project manager jobs, the way project management is organized within the institution, the lack of project management culture lead to a greater waste of resources (Wirick, 2011). Also, orientation to results and strategic alignment are one of the key drivers of successful management of projects, programs and portfolios (Xue et al., 2013). According to Lomovtseva et al. (2019) projects represent a way to achieve strategic goals, using various resources (state funding programs, development programs, etc.), with appropriate support from the project office, which should provide competent team members.

The main challenges in the functioning of the PMO in the public sector are adequate staff, competent, the level of maturity of the PMO and positioning within the institutions (Akhmaaj, Sharif & Farhat, 2022; Janka & Kosieradzka, 2019). The figure below shows the forms of PMO development and the level of PMO development. This is how the PMO development process is described, which is a complex and time-consuming process.

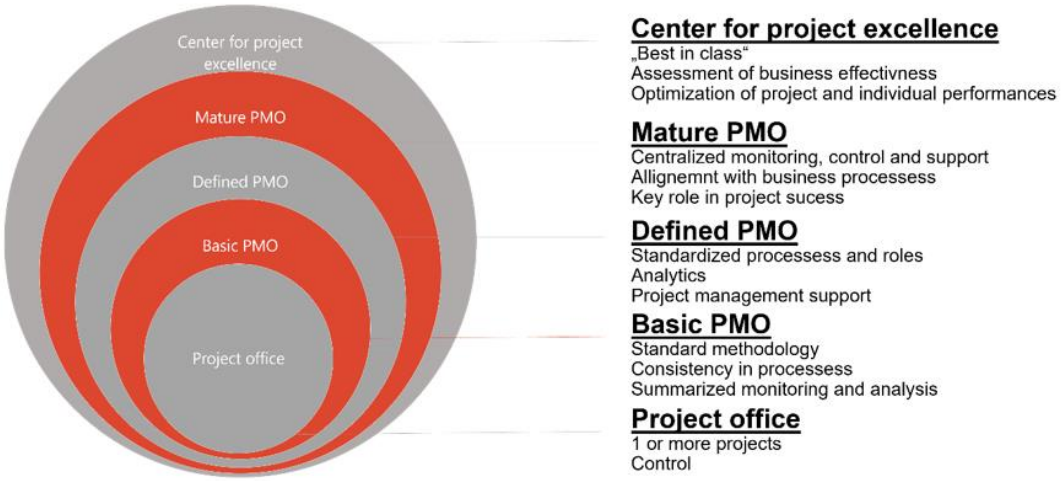

Figure 1: PMO maturity levels (adopted from Kerzner, 2019 and Aubry, Hobbs, & Thuillier, 2007)

3. PROJECT MANAGEMENT APPROACHES AND METHODOLOGIES EVOLUTION

The analysis of the process of project management evolution showed that from the 50s of the last century of project management have been developed. The traditional approach, known as the "waterfall" approach, is a linear and incremental approach with defined phases. The linearity of this approach implies that one moves from one phase to another and there is no return to the previous phases. This approach was proposed by leading institutions such as Project Management Institute (PMI), International Project Management Association (IPMA), European Commission. The advantage of this approach is that it emphasizes the development and requirements of the project, and the disadvantage is that it is difficult to predict all the circumstances at the beginning of the project, that is, the client is not always able to present all the requirements at the beginning. With various changes in the business world and society, it has been concluded that not all projects are completed and not all deliver the expected results. Various research conducted in the early 2000s showed that between 25 and 40% of the time on a project is spent in rework (repetition of certain activities); that 40% of errors are discovered by users, that in America the average rate of failed applications is as high as 66%, and that 2/3 of IT projects fail (Hass, 2007). In response to the reasons for project failure, agile project management (Agile Project Management - APM) was presented as a non-linear approach in which processes are carried out iteratively. There are several agile approach methodologies: Scrum methodology, dynamic system development methodology, extreme programming; crystal, adaptive software development, lean development, future-based development.

The needs of society have led to significant changes in the approach to project management, depending on the purpose of the project, the number of users, the number and type of participants, sources of funding, project contributions, etc. The European Commission presented a new methodology for project management in the public sector (Open Project Management Methodology - Open PM2), dedicated to the institutions of the European Union, public administrations in various EU member states and wider circles of stakeholders Obradović, 2018). Green Project Management Institute presented a new standard for sustainable project management (GPM 5P GPM P5™ Standard for sustainability in project management. The International Organization for Standardization presented the international standard ISO 21500:2012 in order to provide general guidelines and principles for project management.

4. MANAGING OF PROJECTS IN PUBLIC SECTOR

The idea behind this paper is to present a model with elements that can be managed with the help of appropriate tools, based on the previously presented approaches and methodologies for project management, as well as the importance of PMO. Numerous governments have already adopted the PMO concept in the public sector as England, Portugal, Denmark, Lithuania, Brazil, Ireland, and many others. What is common is that the project management process is organized according to the waterfall principle (Santos & Varajão, 2015; da Silva Bezerra, Amorim, & de Melo, 2021), with the different PMO roles. Contemporary approach to management of public projects is a result-based approach (RBM), that focuses on results, outcome and impact, and it is standardized using RBM framework, aiming at monitoring of project level objectives in alignment with strategic/national objectives (Arif, Jubair, & Ahsan, 2015).

Monitoring and control of public projects has become significantly important for various stakeholders, therefore there are developed and systems for monitoring and reporting (Al-Barrak, Carr & Ryan, 2016; Hazır, 2015). Still, it has to relay on project plans and expected results. Figure 2 presents the process of managing projects in public sector supported with the PMO.

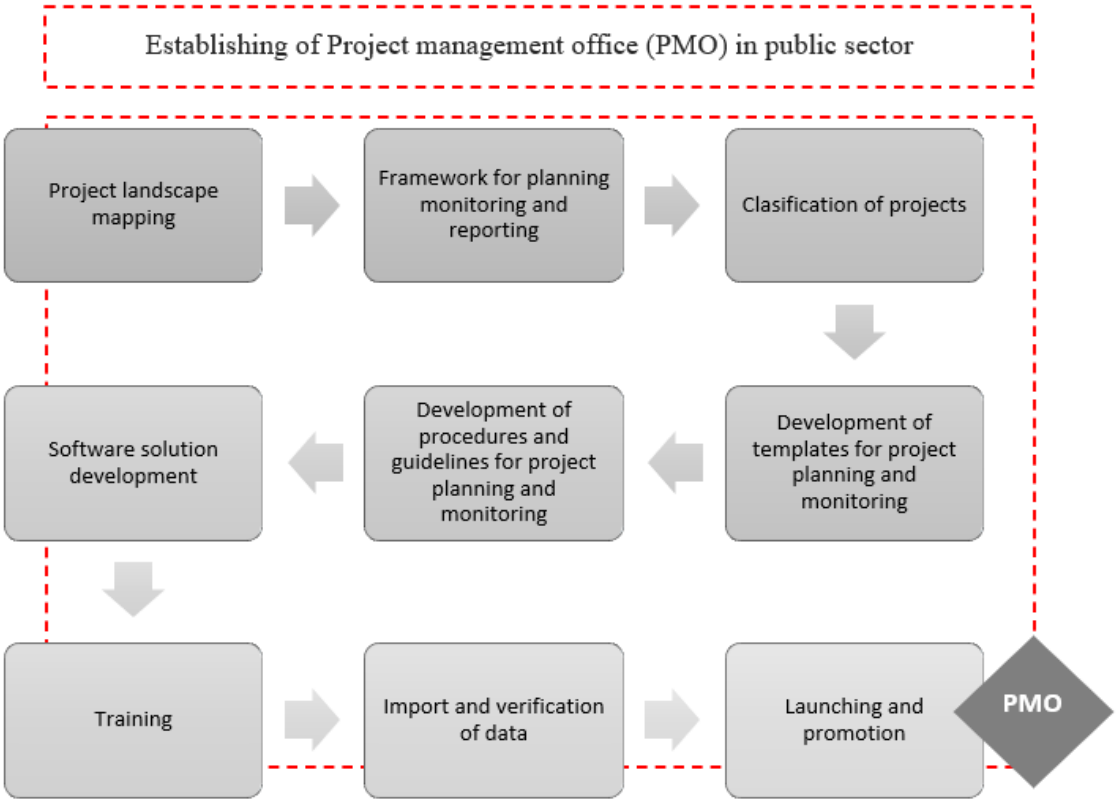

Figure 2: Developing of the planning and monitoring system for projects in public sector: A conceptual model of establishing PMO in public sector

Developing of the planning and monitoring system for projects in public sector: a conceptual model of establishing PMO in public sector consist of nine stages. Here, only main sub-elements will be given without further elaboration. For the purpose of practical implementation of the conceptual framework, additional and more detailed work out of the model is foreseen. The nine phases with main sub-elements are:

1. Project landscape mapping
   - Identify key stakeholders, their interest and needs;
   - Determine present state of project management maturity;
   - Define the main goals of establishing PMO;
2. Framework for planning, monitoring and reporting
   - Determine requirements in all phases of project management (initiation, planning, implementation, monitoring closure) coming from various internal and external stakeholders (Ministry, Government, International Community, Partners, etc.) in terms of content and frequency;
   - Determine the content and frequency of reports to different stakeholders.
3. Classification of projects
   - Identify different types of projects based on different criteria such as project size, area, impact, budget and other defined relevant criteria (traffic, utilities, urban areas, etc.);
4. Development of templates for project planning and monitoring
   - Define a set of forms that must be filled in at different stages (by project type), at different managerial levels;
   - Define a set of reports for different audiences. Reports should enable greater transparency in the work of the public sector, taking into account the simplicity of their use;
5. Development of procedures and guidelines for planning and monitoring
   - Based on the adopted forms, develop procedures and instructions (methodological manual) for project management;
6. Software solution development

- After the adopted forms, the development and integration of a software solution should take place, to enable easier project management and reporting to different stakeholders.

7. Training
   - After completing the project management system, it is necessary to train different groups of users, in accordance with the needs for using the system
8. Data import and verification
   - It is necessary to enter the "initial state" into the system, i.e. an initial set of active projects that will represent the basis for further management of the implementation of the new system. As this is the first entry, it is necessary to pay special attention to essential, methodological and software aspects
9. Launch and promotion
   - As the monitoring and reporting system is of particular importance to the public, it is necessary to carry out appropriate promotion so that as many citizens, media, members of NGOs and other interested members of the public as possible start using the newly established system.

These nine phases lead to the basic PMO, according to the maturity levels in PMO development process. As previously described in the paper, it should provide an adequate methodology for project management, coordination, templates, analytics, summary reporting and other support for project managers, as well as support for decision makers at a higher level.

5. CONCLUSION

It is expected to have a dedicated time and resources for PMO development, for the establishment of procedures and processes, methodology for project management, as well as the PMO governance system. This process in developed European countries lasts two years per PMO development phase. This means that, after the PMO is established according to the conceptual model proposed, it will take eight more years to reach the highest level of the PMO maturity level, and project excellence. This process should be continuously supported with trainings, infrastructure, licenses for IT support, governance and decision makers support as well as change management procedure (Obradović, 2018; Pilkaitė & Chmieliauskas, 2015). PMO in public sector is a hot topic especially in developing countries, still there is a proven practice and experience of other countries with great results that proves us the benefits and value of PMO establishment for all stakeholders: decision makers, project partners and citizens.

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