THE NEW APPROACH TO THE STRATEGIC PROJECT MANAGEMENT IN THE POLISH PUBLIC ADMINISTRATION

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Abstract: The article deals with a way of standardizing project and program management methods in public administration, considering that they have been initiated by a number of administration units having a great autonomy, independently of the government strategy. To manage the government strategy, an original model of the unification process of managing projects and programs executed as part of the strategy and supported by a dedicated IT system has been specially developed and implemented. The essence of the presented approach is to replace the top-down forcing changes toward unifying the project management methodologies used by government administration units by stimulating interest in facilitation and benefits provided by the IT system and, as a result, also a willingness to join the system. Such voluntary joining the system is associated with voluntary adaptation of the previous locally applied management method to the methodology supported by the IT system.

Keywords*:* government strategy, IT system, project management, project management model, project management office, public administration, public finance, state government.

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1 Introduction

Rational use of resources – one of the paradigms of modern economics – is increasingly related to the management of public funds. The article presents experiences and innovative solutions for managing public funds spent under projects and programs realized in Poland by public administration on various levels, supported by a dedicated IT system.

The experience of many companies and institutions shows that the implementation of methodical project and program management is not an easy long-term process. There are many descriptions of such implementations in commercial organizations and in public institutions such as the UK National Health Service; however, literature on such implementation directed by a government is very limited.

The project management is not a completely new way of realization the initiatives. Gareis (1989) already in 1989 identified the growth of project participation, as a future way of management – "project management". Gareis (2002) and Lundin (2016) claimed that the effect of trend of "projectification" is a formation of project society or project-oriented society.

Rainey (1997) defined the differences between private and public organizations by their environmental characteristics (such as the intensity of political influence), transactions between organization and environment (such as the production of public goods), and the structures and processes of organizations (such as the clarity of organizational goals and the amount of "red tape," i.e., bureaucracy). The researchers shown that at present, about 25% world Gross Domestic Product (GDP), around 50 billion USD is an effect of projects. It seems that in the next 10 years, it will be ~35% GDP (Nieto-Rodriguez 2012, p.38). According to Price Waterhouse Coopers (PWC), global expenditures on public investment projects will increase from 4 trillion USD in 2012 to about 9 billion USD in 2025 (PWC, 2014). Research carried out in Norway indicated that 32.3% of working time in the analyzed companies was occupied by projects, generating 32% of revenues (Skeibrok and Svennson, 2016). In German economy in 2013, in public services, 17.8% of gross value added was invested in projects, which is quite low

comparing to 41.9% in industry or 42% in sales and transportation (Wald, et al., 2015).

Only in 2004–2011, 153,557 projects co-financed from EU funds were implemented in Poland (Jałocha, 2012). Managing private business seems to be easier than managing governmental administration, where goals and benefits are more difficult to be defined and monitored (Steward and Kringas, 2003). It also seems that, in particular, public administration is more resistant to implementing changes (Klarner, et al., 2008).

According to the Project Management Institute research, around 51 million people around the world are engaged in project management activities (PMI, 2013). One of the most important factors in managing change is motivation. Kirsten and Robert Rosacker (2010) described differences between motivation of stakeholders in public and private areas: "Unlike private enterprise, government agencies do not generally encounter the pressures of competitors." and "[…] the motivational sources are different between the private and public sectors but the need for and presence of motivational factors, both in the short term and in the long term, is not in dispute." Robert and Janet Denhardt (2000) expressed their opinion that a new model for managing in public administration is needed, taking into consideration new roles such as an administrative man or economic-oriented man.

One of the key subject of project management is collection of Programs, Projects, and other activities related with strategic goals realization, called Project Portfolio, Generally, the components of Project Portfolio should be adapted to the strategy of company, should be in line with company's culture and values, and should directly or indirectly influence on financial results, as well as use the company resources efficiently (Levine, 2005, p.23). It is widely believed that the development of Project Portfolio has been started by Markowitz (1952), who proposed the original solution for solving issues with choosing the best set of investments on financial market.

Maylor, et al. (2006) developed the projectification concept and created the term "programmification." It means that the main tool for transforming an organization is not exclusive individual projects but increasingly coordinating a group of projects – in the form of programs or portfolios.

Wiig (2002) indicated that public services should address issues and challenges relevantly, competently, and timely and consume minimal resources. A lack of facilitators and/or supporters is an important gap in modern public administration management. Petak (1985) underlined an importance of risk management in public administration, so it seems obvious that to effectively manage government strategic projects and programs, the risk management should be arranged to cover from the top to down and vice versa. In spite of wide development of project, programs and portfolio management, trainings, and so on, Meredith and Mantel Jr. (2011) were of the opinion that "There is a gap in public sector in project management knowledge. In some of the region countries, there is a difference in the practice between the private and public sectors with the public sector lagging behind in most cases."

Gareis (2005, p.556) pointed out that to perform the role of project manager, a person needs project management competences based on project management knowledge and project manager experience. According to Heerkens' (2002, p.8) book, the Project Managers have to know the project management theory and they need to be prepared well in area of knowledge. Without that, there are very low changes for satisfied results of projects. The International Project Management Association (IPMA)

Individual Competence Baseline 4th Version (ICB4) delivers a comprehensive an inventory of competences for individuals to use in career development, certification, training, education, consulting, research, and more (IPMA, 2015). The research conducted in Polish public administration confirms that having specific competences is crucial to significantly increasing the probability of successfully completing projects (Janka and Szymczak, 2018). According to the McKinsey report, almost 60% of senior managers indicated that creating an efficient project management culture is one of the three main priorities of their companies (McKinsey, 2010).

The importance and popularization of the concept of organizational maturity in project management is growing because of the growing interest in the management of the organization in solutions supporting

the improvement of project management efficiency Organizational Project Management Maturity Model (OPM3, 2013).

As a result of analysis of the issues related to the project and program management on different layers of management, from the top, through the middle to the operational, the following issues have been identified:

- public administration in terms of project delivery in not enough efficient and effective,
- there are not enough clear definitions of roles and responsibilities in projects,
- the cooperation between project team members and decision-makers should be improved,
- there is a need for precise and timed delivery of information as a base for making decisions,
- lack of synergy in cross-projects spending's,
- not enough use of lessons learned.

All these issues were a trigger for building a comprehensive model of providing best practices of projects management to the Polish public administration. The direct reason for the research in this area was the need for the organization of Programmes and Projects Management Office to manage the portfolio of programs and projects of the Strategy for Responsible Development (SRD) of Poland.

2 Strategy for Responsible Development (SRD)

On February 14, 2017, the Council of Ministers of Poland adopted the Strategy for Responsible Development (SRD, 2017), which is a key document of the Polish state in the area of medium and long-term economic policy. This strategy includes more than 150 projects and programs. A complexity of the SRD is illustrated in Fig. 1.

The projects and programs shown as rectangles are grouped by strategic goals and partial goals shown as parallelograms oblique. According to the research carried out by Project Management Institute, only very few organizations rate their self with high score in area of effectiveness and realization of company's strategy (9%).

Only 56% initiatives reach original goals and business assumptions (PMI, 2014). For the first time in polish administration, this kind of document has appeared (strategy combined with detailed list of projects' definitions), and as most of the projects are strictly related to contemporary economy trends, the new, effective, and agile mechanism was needed to obtain the ambitious goals.

Nowadays, when the acceleration of changes in competitive environment and the importance of increasing innovation and creativity is a need, project management as a form of organizational actions and creation of new potential is even more important (Florida, 2014). Particularly important is that, at the time of the adoption of the SRD, many projects and programs have already been implemented and managed independently of each other.

At that time, the Ministry of Economic Development was the center of economic management of the government and its tasks included coordination and undertaking direct actions affecting the implementation of the SRD. That time, the first analyses showed a very large variation in the degree of project and program management maturity of the units responsible for the implementation of the SRD, which significantly hindered and sometimes prevented their coordination. Some ministries already implemented basics of project management methods, others had to be assumed as novices.

It started with the inventory of projects and programs and unification of the structure of descriptions of their goals, benefits, and key performance indicators set for them, and then gradually next lower management levels have been joining the system: area portfolios, programs, projects and finally task groups.

The part of transition to project-oriented organization is a proper establishment of organizational structure. In this case, there is a need for the creation of new functions and roles or for an enhancement of existing ones, which cover project management, monitoring, and control tasks Portfolio, Programme and Project Offices (P3O, 2013). Depending on the size of organization, head count, complexity of products, or services delivered, functions of monitoring and controls could be joint.

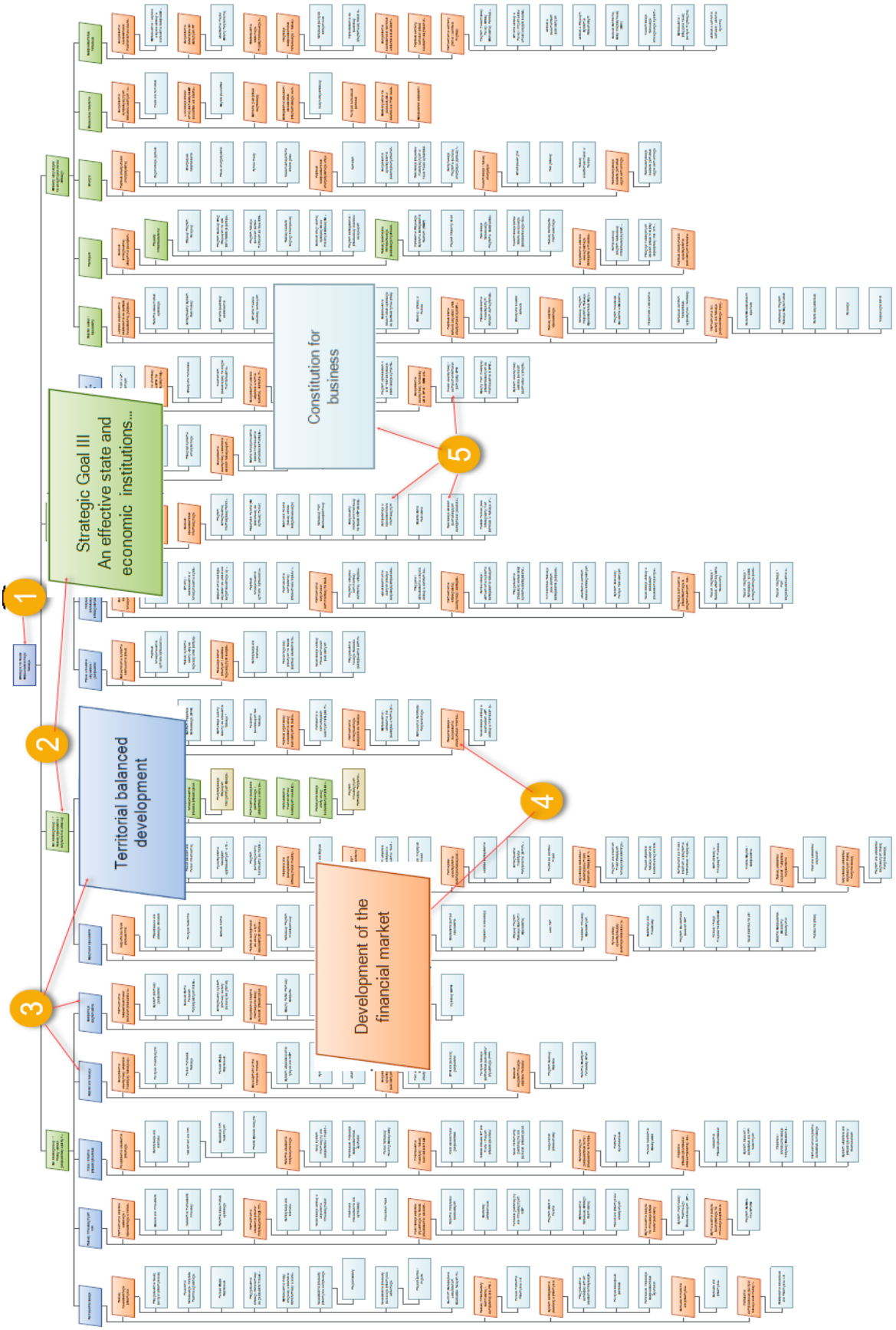

Figure 1. Complexity of the Strategy for Responsible Development
(*Source:* Own elaboration based on Polish Ministry of Economic Development (PMED, 2017))
1 – Strategy for Responsible Development, 2 – Strategic Goals, 3 – Area Portfolios, 4 – Programs, 5 – Projects

The key role in the implementation of new procedures, related to project management in organization, is played by Project, Programme and Portfolio Office, which is also known as Project Management Office (PMO). It is an organizational unit that does not exist in pure functional-oriented organizations.

The general tasks of PMO are supporting activities of project management on all levels of organization and delivering procedures and policies connected to, for example, project planning, project communication, and project risk management (Rad and Raghavn, 2000).

Generally, each organization that realizes the strategy through projects is focused on some branch, specific products or services, specific business model, specific group of clients, specific geography, and so on. In case of the SRD projects, there is no such kind of specific areas of focus. Owing to great group of final beneficiaries, polish citizens, and large group of directions of works, the portfolio of the SRD projects is very complex, starting from legal projects, where the final product of project is a new regulation, to big, long-term programs, such as e-mobility covering the creation of new type of e-car and building e-infrastructure in country in parallel with increasing ecological key performance indicators. The SRD programs and projects are much different in time realization, budget, amount of project team members, number of products or services, branch, support of experts, entities involved, and so on.

The task faced by the team led by one of the authors of this publication went beyond cases described in the literature. In opposition to a business approach, it was not a problem of one commercial company or organization but of many institutions with high authority and autonomy, practically excluding any directive approach. So, to solve the problem, it had to be considered that the Chancellery of the Prime Minister has limited possibilities to influence the way projects and programs are managed by various government administration units and their subordinate units. This ruled out a possibility of top-down imposing a uniform project and program management methodology. However, the Chancellery has a possibility to influence the way of monitoring projects and programs implemented in government administration units, which supports the implementation of a holistic monitoring, analysis, and management system.

To solve the problem, a holistic approach to implementing project management, described in Section 3, has been developed, defining what and how a relevant support should be provided for governmental units to help them to become a part of one unified system supporting implementation of the country-wide strategy, starting from the highest level of management of the SRD.

3 Concept of the holistic model of project management implementation in public administration

3.1 Structure of the holistic model

The holistic Model of Project Management Implementation in Public Administration (MPMI-PA) is built by layers and groups (Fig. 2).

Figure 2. Holistic MPMI-PA (*Source:* Own elaboration)

There are three layers and eight groups that cover all aspects of project management that are needed to solve current issues of project management in public administration, relying on previous observations. They are recipients, implementation areas, and supporter. The first layer presented as an external ring is called recipients and is composed of eight groups of subjects/entities that play a specific role in project life cycle. The second layer, presented as an intermediate ring, is composed of four implementation areas. The third layer, presented as a center of the model, is called supporter. The supporter is crucial in implementation process especially because its main task is to deliver to all groups of recipients a support within all the implementation areas. This role should be played by the Project, Programme and Portfolio Office PPPO, which is also known as Project Management Office – PMO (P3O, 2013).

There are four implementation areas of the support to be covered by the PPPO: (1) knowledge, (2) focus, (3) processes and (4) tools. In opposition to the traditional project management, a support by PPPO is not directly delivered to dedicated recipients in all implementation areas. PPPO has to deliver a unified support within a particular implementation area to relevant recipients, depending on their level of project management maturity. By this way, they can easily take more advantage from the offered support. For this purpose, recipients are divided into producers and decision-makers.

The producers are mostly the people or entities responsible for the delivery of projects in different organizations. Project team members, project managers, key users, and suppliers belong to this group. The decision-makers are mostly members of Project or Programme Boards and Steering Committees (SC), top managers in public administration, and also pretenders to SC. The SC pretenders make the next difference between business and public administration. The fluctuation of SC compositions in public sector is higher than that in business. To keep the continuity of project delivery and mitigate the risk of delays related to often changes in SC composition, the PPPO and Project Managers (PMs) need to also focus on communication to future SC members.

Thus, the provided support should be divided into following Groups:

1) Processes for producers;
2) Processes for decision-makers;
3) Knowledge for producers;
4) Knowledge for decision-makers;
5) Tools for producers;
6) Tools for decision-makers;
7) Focus of producers;
8) Focus of decision-makers.

Each type of support requires different management products and techniques and can be provided in organization separately, but many of them are linked with other. So, to ensure the effective implementation of the project management system, the support should be delivered in proper order and composition.

3.2 Crucial role of PPPO

The PMO has been described by many authors, such as Hallows (2002), Crawford (2002), Rad and Levin (2002), Englund, et al. (2003), and Kendall and St. Rollins (2003). The main subject of their researches was the role and functions of PMO in organizations. In early phases of first researches, it was a lack of systematic and systemic approaches of final PMO picture. There was also a lack of proven implementations of PMO. Casey and Peck (2001) found that PMO represents many different things for different organizations, with a only one in common, that PMO is a cure for their project management mess. On the other hand, Hobbs and Aubry (2008), depending on a research, described five main groups of PMO: monitoring and control of project outputs; developing of methodology and competences of project crew; managing many projects in parallel, strategic management; and organizational learning. PPPO is a sophisticated and upgraded implementation of PMO, also covering program and portfolio management. PPPO should provide support in a particular implementation area for Producers and Decision-Makers in a different way. Depending on a Recipient, PPPO members should use their specific skills, to move forward the implementations.

For example, while focusing on focus of producers (Group 7), they should use soft skills to capture from project managers the real issues related to proper progress in project, analyze the issues, and give a feedback by ensuring relevant coaching dedicated to project managers. While focusing on processes for decision-makers (Group 2), they should use analytical skills to clarify the project monitoring process e.g., using Business Process Modelling Notation (BPMN) (Freund and Rücker, 2012).

The described holistic model of project management to be effective in practice requires existence of efficient Project, Programme and Portfolio Office in public administration. Crawford (2006) pointed out, that Portfolio Management is a process, which demands the advanced level of project management maturity in organization.

3.3 IT-system as a supporting tool for producers and decision-makers

In this article, two types of support area are described more deeply:

- supporting tools for producers (Group 5),
- supporting tools for decision-makers (Group 6).

Nowadays, in modern organizations, almost all areas of activities require IT system. The described model does not impose implementation of IT system as an exclusive supporting tool. It means that other tools and techniques, such as paper sheets and excel spread sheets, can also be used. However, the IT systems are the most common, efficient, and cheap option (taking into consideration all cost of collecting and processing data).

It is described in the following text how the two abovementioned support areas have been implemented in Polish public administration. At the beginning, 2 years ago, in one central entity of Polish government, an initiation group was set up consisting of people with project management knowledge and experience. First, a project management method was defined based mainly on the PRINCE2® method Office of Government Commerce (OGC, 2009). That time the Polish government defined a Strategy for Reasonable Development (SRD, 2017), which included nearly 200 projects and programs, many of them had been initiated and managed independently one of the other by a number of ministries and their subordinate units.

The main task was to put all of them into one management frame. It was clear that it would not be possible without a relevant IT system and that none of the system available on market was not suitable for this purpose. So, it was decided to select a software vendor with experience and knowledge in this kind of project management who is able to deliver a system fulfilling specific requirements. It was performed in three steps: gathering requirements, analyzing the requirements, and defining a specification for the IT system.

It was decided that a bespoke IT system should provide support for the both producers and decision-makers, because functionalities needed for producers and decision-makers are related to each other and use jointed chains of data flow.

The functionalities required as supporting tools for producers should cover the following areas:

- defining projects and creating relevant documentation (e.g., project charter and project brief),
- defining project's products and subproducts and relations between them,
- planning and budgeting projects,
- controlling project and its stages,
- defining project management team and project team,
- capturing and managing risks and issues,
- managing project product quality and delivery,
- communication within the project team,
- operational reporting.

The functionalities for Group 6 are closely related to data gathered by Group 5 and are as follows:

- reviewing dashboards dedicated for project and program managers,
- reviewing summary of project and program statuses,
- reviewing statuses of projects in detail,
- receiving and reviewing the specific reports, such as risk logs, budget reports,
- making decisions,

- reporting to corporate, program, and customer management,
- communication with stakeholders.

The implementation of IT supporting tools has been proceeded in agile mode, which means the often meetings between key users represented by PPPO members and IT specialists represented the selected vendor. Several meetings related to clarification details and adjusting the specification followed by delivery of relevant functionalities resulted with an effective IT tool that brings added value to producers and decision-makers from the beginning of their involvement in projects and/or programs.

The noticeable progress of projects supported by IT tool conditioned a decision of scaling up the system to other entities of Polish government. As the whole strategy contains nearly 200 projects and programs managed by independent units of administration and other institutions, it was not possible to order them to accept the project management method and tools. For this reason, it was decided to demonstrate them the advantages of joining and getting an access to the IT system as well as getting support in all eight groups of support. To ensure such support, the governmental PMO was created within the Prime Minister Office with a clear task to also include providing support to all units responsible for managing projects and programs realized within the SRD.

4 Implementation of project management system in governmental administration of Poland – case study

The main steps of the holistic approach are illustrated in Fig. 3.

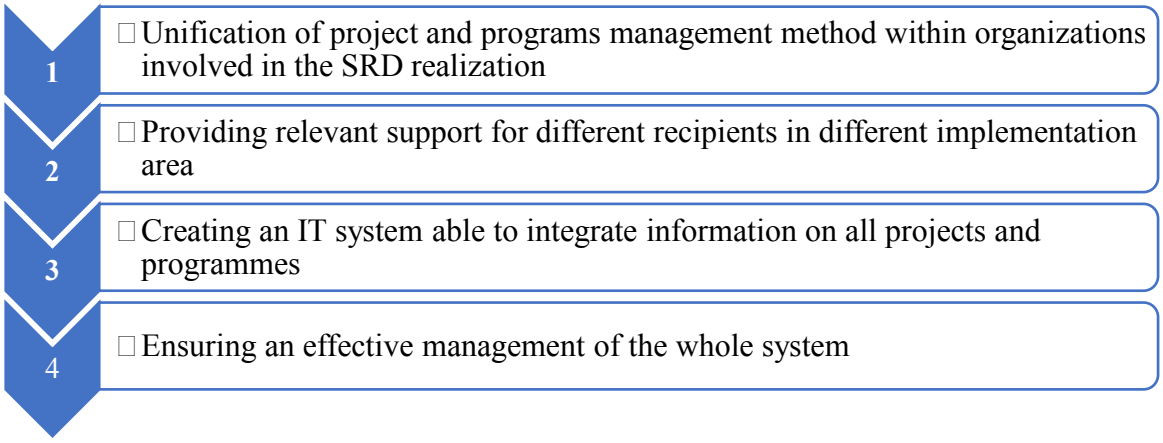

Figure 3. The main steps of the holistic approach (*Source:* Own elaboration)

In practice, the holistic approach was executed as follows:

- initial analysis and development of the holistic approach idea by the Ministry of Economic Development,
- the Ministry of Economic Development together with P2ware Ltd. developed and implemented an IT system called MonAliZa (monitoring, analyzing, and management), based on the PMED (2017),
- inventory of projects and programs,
- standardization of descriptions, goals, goal and benefit measures, and baseline plans,
- inventory of connections between projects and programs (interdependence of goals, benefits, resources needed, deadlines, etc.),
- equipping project leaders with tools for operational project management with the possibility of planning; defining tasks; delegating tasks to implementation; tracking implementation progress, risk management, and issues; and reporting to a higher level,

- transferring responsibility for administering the system to the Chancellery of the Prime Minister and setting up the Governmental Project Management Office,
- increasing interest in the system on the part of individual units of governmental administration by public relation events,
- dividing the SRD portfolio into sub-portfolios (or area portfolios) for which specific ministries and other units are responsible,
- adjusting the methodology for managing projects, programs, area portfolios, and SRD portfolio, based on the previously implemented project process, taking into account the possibilities that MonAliZa gradually developed together with P2ware,
- establishing the rules for joining the system by persons responsible for managing area portfolios with their programs and projects (licenses, trainings, methodical and technical support),
- separation of the management of area portfolios by keeping the reporting obligations on the level of the portfolio.

While this article was written, representatives of all ministries had already been trained how to use the MonAliZa system with a relevant IT support. Their reaction confirmed that the approach suggested in the presented holistic model works in practice. They noticed that instead of creating separated systems, it is much easier to apply already developed system. Project and program management processes are unified. All trainees have got the basic knowledge of the whole MonAliZa system. They learned how to use the P2ware Suite software as a standard IT tool that allows to focus on their goals. Project and program data can be entered in unified way.

Work progress can be easily monitored by generating reports dedicated for particular users: the prime minister, ministers, program and project managers, as well people responsible for individual work packages.

So, as expected, although the model had been created, now there is no need to force changes. Now there is a need for a permanent support for the both groups: producers and decision-makers. This support will be ensured by the central PMO in the Chancellery of the Prime Minister and local PMOs in ministries and other units involved in managing and executing the SRD.

After two years of realization of the SRD, the main indicators have been increased according to previous assumptions (see Table 1). Most of them are related to the social projects that bring results earlier than long-term, economic "green fields" projects. The results of this group of projects will be checked in the next time period.

Table 1. Significant indicators of the implementation of SRD
(*Source:* https://www.gov.pl/documents/33377/436740/Prezentacja_2_lata_sor.pdf)

SOR KPIs	Base value (base year)	Current value	Intermediate value (2020)	Target value (2030)	Data source
Poverty risk or social exclusion indicator [%]	23,4 (2015)	19,5 (2017)	20,00	17,00	GUS
Gini's indicator	30.6 (2015)	29,2 (2017)	30,00	27,00	GUS
GDP per capita by PPP (UE28 = 100)	68 (2015)	70 (2017)	75,0–78,0	95	GUS/ Eurostat
Adjusted real gross disposable income per capita by PPP (UE28 = 100) [%]	68,2 (2014)	70,3 (2016)	76,0–80,0	100,00	Eurostat

Moreover, at least one person in each of the 19 Ministry's in Poland uses the MonAliZa system for monitoring the key ministerial projects. In 2 cases, there are more than 20 users in 1 resort, which is connected to not only monitoring but also to managing projects. Also the quantity of project has increased from 185 projects in 2016 to 308 projects in 2019. The project portfolio fluctuates as some projects are completed and there are also some new project initiatives.

5 Conclusions

The presented approach was used in practice to manage the implementation of the SRD, which is a key document of the Polish state in the area of medium and long-term economic policy. Within its framework, the Ministry of Economic Development and P2ware Ltd. created a system called MonAliZa (monitoring, analyzing, and management), which is currently administered by the Chancellery of the Prime Minister.

The aim was to implement a single method for managing projects and programs serving the implementation of the SRD of the Polish government, as a collection of ambitious goals in line with contemporary economic trends. The main problem was that many of the projects and programs were initiated independently of each other and initially managed in various ways by a number of ministries and public administration units having a great autonomy.

The Ministry of Economic Development was not in power to force these units to implement a unified management method, so it was necessary to find out other approaches. To solve this problem, the author has developed the holistic approach described above to replace the top-down forcing changes by stimulating interest in facilitation and benefits provided by unified management processes and IT tools forming together the system called MonAliZa. The P2ware Suite software for projects and programs planning, monitoring and operational management has been adjusted by people responsible for the SRD management and P2ware Ltd. occurred to be crucial to effective implementation of the holistic approach.

The process of unifying project and programs management will be continued and will cover other public administration units. The authors will observe weak and good sides of the holistic approach taking into consideration how it suits depending on initial project management maturity of the administration units involved. On the basis of the experience got from observation of positive and negative aspects of implementation of the holistic approach, the authors are going to improve it and present as suitable not only for public administration but also for large business organizations, which have also problems with implementation of unified project and program management methods.

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