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Project Management in Central Banks

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Abstract: In this ever-changing environment of technological innovations central banks are strongly committed to fulfilling their key objectives of preserving monetary and financial stability, but also make efforts to adapt to new market requirements. On the path of technological transformation of financial systems, central banks face many challenges stemming from, inter alia, new less regulated and decentralized financial innovative services, cyberattacks, and endangered cyber security. Central banks need strong project management to successfully address these processes and that should be done in line with the highest international standards.

The paper analyses the implementation of project management in central banks according to the international standards. The authors present possible division of roles and responsibilities in the project organization structure in central banks based on these international standards. The standardized integrated project management activities and associated practices are described and presented in the context of project management in central banks. The authors conclude that the application of international standards is crucial for successful project management in central banks in order to ensure that the projects are implemented on time and within the envisaged scope and budget, thereby ensuring high quality results, efficient deployment of human resources, benefits realization and value creation for the organization.

Keywords: central bank, project management, international standards.

JEL Classification: E58, O30.

1. Introduction

We live in times of rapid changes with innovations as the primary drivers of development. In this new environment, led by digital transformation and faced with various challenges, project management practices quickly evolve using new tools and methods.

International Standard ISO 21502:2020, *Project, programme and portfolio management - Guidance on project management*, defines a project as "…a temporary endeavour to achieve one or more defined objectives" and project management as "coordinated activities to direct and control the accomplishment of agreed objectives". The Project Management Institute (2021) in *The standard for project management and a guide to the project management body of knowledge (PMBOK guide)* defines a project as "..a temporary endeavour undertaken to create a unique product, service or result", while project management includes "the application of knowledge, skills, tools, and techniques to project activities to meet project requirements". All projects are unique by their nature. They can either stand alone or be a part of a program or portfolio. Although projects can be implemented in any institution, private or public, every project has a life cycle comprised of specific phases. Projects have a defined beginning and end to the work and each phase.

In this paper, the focus is on project management in central banks. The authors consider that regardless of the size or ownership structure of the organization, project management should be undertaken on the basis of the highest internationally recognized standards. It is expected of every organization to adapt the organizational structure of projects to its own features and specificities but also to be guided by the international standards. Although it can make the project management processes more demanding for the organisation, the quality of results and overall final satisfaction will surpass the efforts made.

Central banks are committed to preserving monetary and financial stability. Although there are numerous definitions, some common characteristics can be extracted to define the central bank (Fabris, 2006). Firstly, it is the supreme monetary institution, secondly, it can perform a number of different functions and has a monopoly over issuing money, and thirdly, it's most important goal is to maintain price stability in the narrower sense, that is, financial stability in the broader sense. Continuous development, especially in today's era of rapid technological progress, is unthinkable without adapting to changes and new methods in compliance with applicable standards. Central banks are institutions strongly devoted to following global trends and implementing international standards in many activities they perform. Therefore, they are expected to apply the highest standards in project management as well.

The development of financial technologies, popularly called Fintech, significantly affect traditional banking functions. Digitalization of financial services and money supports bridging gaps in access to financial services for households and firms and also promotes economic development (Feyen, Natarajan, and Saal, 2023). Successful adaptation to new trends is important for central banks in order for them to respond to modern market demands. However, the development of decentralized payment systems, mobile applications that offer financial services, a new way of processing data using artificial technology and through machine learning, and storing data in the so-called clouds pose numerous challenges to central banks.

In order to modernize their systems and follow the latest trends, there are many examples of testing a possible central bank digital currency, which in the midst of huge exposure to the cyber environment raises additional concerns to central banks, which strive to provide secure monetary and financial systems. The global Covid-19 pandemic was the trigger that led to a further increase in cyber risks through amplified use of digital technologies and cashless transactions (Fabris, 2022). That particularly highlighted the importance and need for the development of strong and secure financial services that will be available to users in online format. Cyber security has expanded its significance during pandemics due to the growth of cyber-attacks and as cyber risk is the main risk arising from Fintech it should be analysed through the prism of financial innovation and risk-based thinking (Vučinić and Luburić, 2022). Prevention of cyber-attacks has become an important task and concern for central banks. Fast changes require effective and efficient adaptation, the technological development calls for necessary changes and therefore organizations today differ from those of ten to twenty years ago in the way they do business (Vučinić, Perović and Luburić, 2022).

It is important that central banks undertake project management activities and thereby apply the highest internationally recognized standards, which will ensure a more efficient deployment of human and material resources, strengthen the quality of results, and enable benefits realization. That will add value to the organization. Certainly, the emphasis should be on the implementation of changes, ensuring the desired quality of the delivered product or service through effective risk management. Deploying strong project management practices can serve as an effective prevention action and increase the probability of project success.

This paper consists of seven sections. The introduction is followed by the section which briefly explains the key project management processes in central banks. The third section gives general details about project management including its main characteristics, context and constraints as well as project governance and business case. The fourth section presents the authors' modified example of project organization structure in central banks based on ISO 21502:2020 as well as described roles and responsibilities in the project. The fifth section presents integrated project management activities based on ISO 21502:2020 and authors' modified example of integrated project management practices in central banks. The following section focuses on the importance of green investments and green finance as well as central banks' commitment to sustainable projects. Finally, the key finding are summarized in the conclusion.

2. The key management processes in central banks

Analysing the work of central banks, one could come to the conclusion that, on the one hand, they are very conservative institutions, and yet on the other hand, very dedicated to following international trends in all spheres in which the influence or involvement of the central bank can be recognized. However, in their operations, central banks traditionally adhere strictly to applicable laws and accompanying regulations, striving to follow and fulfil internationally recognized principles and standards in their work. Trends are generally led by countries where financial systems are highly developed, thus encouraging those in less developed countries to adapt them as well. An example is the Basel international standards set by the Basel Committee on Banking Supervision (BCBS) which is the primary global standard setter for the prudential regulation of banks (BCBS, n.d). Specifically, we can cite the example of the Central Bank of Montenegro, which, by introducing a set of laws and by-laws at the end of 2021, harmonized necessary regulations with "Basel III", an internationally agreed set of measures developed by BCBS in response to the financial crisis of 2007-2008, in order to be in step with international requirements and the most developed financial systems.

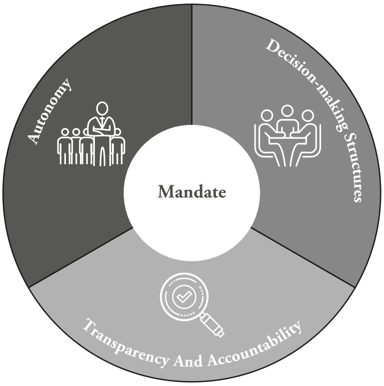
A better understanding of market operations, prioritization of business responsibilities, acquiring knowledge about ways to adapt to today's demanding market, and other factors contributed to the adaptation of the organization structure of central banks and the development of flexibility in order to fit into the new highly uncertain business environment characterized by globalization, technological modernization and progress in communications (Knežević, Todorović and Obradović, 2018).

All activities and decisions made by central banks should be in accordance with applicable laws and aimed at achieving their key goals. Nevertheless, two issues arise, the traditional goals of central banks to preserve price and financial stability, in relation to which we should consider, for example, the modernization of payment systems and particularly the challenging issue of central bank digital currencies (Bechara, Bossu, Liu, and Rossi, 2021). The second question relates to support for the development of Fintech and whether and how central banks will work to adjust regulation, with less traditional goals, which can be seen in the context of promoting financial inclusion, innovation, strengthening competition in the financial market and open access to payment systems. Accordingly, many central banks are adapting their internal structures to respond to Fintech by launching iLabs, hubs and other dedicated units.

As far as Fintech is profoundly transforming the financial sector landscape at a fast pace, there is a need for the active engagement of policy makers (Feyen et al., 2023). The various benefits of financial innovations and risks that call for attention have been identified (Vučinić, 2020). Therefore financial innovations are shifting consumer requirements and preferences thereby producing potential threats and impact to traditional financial services. Due to the impact of digital money on financial stability and possible effects of digital currencies on monetary policy transmission, the key measures that economic policy makers should undertake include the adoption of new set of rules guaranteeing payment security and of all other aspects of transaction as well as increasing financial inclusion and thereby the involvement of groups left without banking accounts (Fabris, 2019).

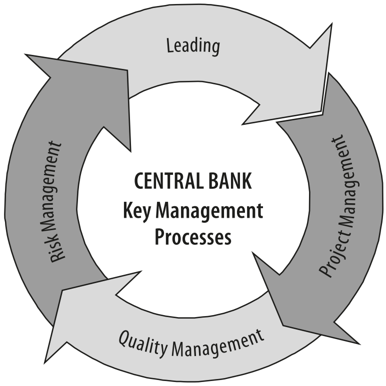
Central bank governance is a concept composed of four constitutive and interconnected components as represented in Figure 1 (Bechara et al., 2021). Those are a central bank's mandate, including its objectives (the "why"), functions (the "what"), and powers (the "how"), decision-making structures, autonomy and, transparency and accountability. The fundamental idea is that the mandate shapes the three other components and they, in turn, interact with each other. Formally, the main features of that governance are naturally established in the "central bank law/act".

Figure 1: The concept of management in central banks



Source: Bechara et al., 2021

Figure 2: Key management processes in central banks



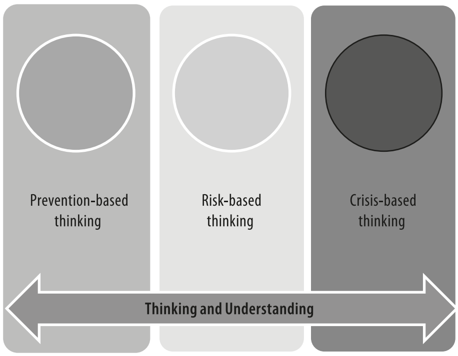
Source: Luburić, 2021a

Key management processes in central banks are leading, project management, quality management and risk management (Figure 2). Leadership is vital to the successful change management, the prevention of a crisis and the achievement of the sustainable success of each organization (Luburić, 2018). Identifying risks and undertaking preventive actions and measures are important processes and help central banks to safeguard monetary and financial stability. Quality management is crucial for fulfilling required quality level and creating value for the organization.

By applying the "Leadership" principle, central banks can achieve numerous other benefits such as better overall performance, increased competitiveness, customer retention and loyalty, improved decision-making effectiveness, optimal use of available resources, increased employee responsibility, improved intellectual capital, optimal, effective and efficient processes, improvement of supply chain performance, improvement of organizational performance, credibility and sustainability. The importance of leadership in central banks can be observed from the internal and external aspects. The internal aspect implies that the governor and top management have leadership ability to motivate employees for continuous performance improvement, optimize the use of resources, increase responsibility, and lead the overall improvement process. Still, when it comes to central banks, the external factor is a very important aspect because it can significantly contribute to the achievement of the basic mission of central banks. Accordingly, there is a direct link between credibility of the central bank and performance implementation of monetary policy (Luburić, 2021a). Communication is considered a very valuable tool in improving central bank transparency and, as Lehtimäki and Palmu (2022) explain, a remarkable shift in the frequency and level of communication is a facet of central bank transparency, being a foundation of modern monetary policy and it enacts a discipline of policymakers as it provides them with a method for affecting market expectations.

Timely, expedient and effective thinking about risks and opportunities generates a new system of employee behaviour and preventive actions through continual reviews and improvements. The management concept of "risk-based thinking" emphasizes that the organization should understand its own context and determine potential risks and opportunities as the basis for planning and action as shown in Figure 3.

Figure 3: Crisis-based thinking



Source: Luburić, 2023

The prevention-based thinking" contributes to the anticipation, acceleration and development of preventive protection measures, exercising and training, as well as raising awareness of the necessity of solving the causes of problems, so that they do not turn into incidents and potentially crises. Timely detection of risks, both visible and invisible, through prediction, intuition, recognition, early warning and adequate management of risks, are strengthened by "risk-based thinking". "Risk-based thinking" helps the organisation to recognize those factors that may impact the development of potential risks, as well as potential threats that could stand in the way of set goals (Luburić, 2021b). "Crisis-based thinking" implies that crises require changes and innovations as well as a flexible, creative, strategic and sustainable response. For the successful resolution of global crises (climate change, epidemics and pandemics, conflicts and wars, cyberattacks and others), an adequate global response is necessary.

3. Project management concept

Project management exists in both private and public organizations. However, the reasons for starting a company differ since private companies focus on making a profit, while public organizations concentrate on meeting the needs of the public interest and creating value for society. Although the public sector has implemented the project management concept in order to roll out large projects more efficiently, organizing business processes through projects and introducing formal methodologies for their management is still a new dimension (Knežević et al., 2018). In the past, working on projects was only seen as the creation of a new product or service, but currently great attention is given to the value creation as a precise benefit arising from a particular project.

According to ISO 21502:2020, project management integrates the practices needed to direct, initiate, plan, monitor, control and close the project. Project management should be implemented through a set of processes and methods created as a system and it should contain the practices necessary for an exact project.

The Project management institute (PMI, 2021) identifies four values that are the basis for the *PMI Code of Ethics and Professional Conduct*: responsibility, respect, fairness and honesty. Further the PMI recognizes and develops twelve project management principles aligned with these values that serve as the basis for strategy, decision making and problem solving. These include:

- be a diligent, respectful and caring steward,
- create a collaborative project team environment,
- effectively engage with stakeholders,
- focus on value,
- recognize, evaluate and respond to system interactions,
- demonstrate leadership behaviours,
- tailor based on context,
- build quality into processes and deliverables,
- navigate complexity,
- optimize responses to risk,
- embrace adaptability and resilience,
- enable change to achieve the envisioned state.

3.1. Projects – main features, context and constraints

Although organizations carry out work to achieve particular objectives, it can be categorized as either operations or projects (ISO 21502:2020). Projects are temporary and focus on retaining or adding value for a sponsoring organization, stakeholder or customer, while operations are continuing activities which aim to support the organization such as through the delivery of recurring products and services.

Every project is unique and its objectives can be met through a mix of deliverables, outputs, outcomes and benefits depending on the project's context as well as direction provided through governance (ISO 21502:2020). Projects have similar features but their key characteristic is uniqueness. However, they differ in relation to the factors including, but not restricted to: objectives, context, outcomes desired, outputs provided, stakeholders impacted, resources, complexity, constraints and processes or methods used. Defined project objectives should contribute to outcomes and the realization of benefits for all stakeholders.

When working on projects, it is important to understand the entire context in which project activities are carried out, including both internal and external factors that can affect the realization of the project. Factors within the organization that can affect the project's success include strategy, technology, project management maturity, resource availability, and organizational culture and structure. Factors outside the organization may refer to socio-economic, geographical, political, regulatory, technological and ecological factors. External factors are usually beyond the control of the project sponsor or project manager but they should still be considered throughout the project.

Overall strategy in organizations is based on their vision, mission, values, policies and factors internal and external to the organization, therefore projects can be seen as ways to accomplish strategic objectives. Organizational and project governance, risks, control factors, features of the project, and other organizational and environmental factors should be considered when defining a project's life cycle (ISO 21502:2020). The project is made up of phases whose number and names depend on the type of undertaken project, preferred governance, and the estimated risk. Each phase should have a defined start and end as well as exactly defined milestones that relate to the decisions, key deliverables, outputs or outcomes. Each phase should be followed by a decision point and necessary criteria should be defined to approve the start of a phase which can vary depending on the organizational environment, the specific life cycle being used and the established project governance. The phases in the project may overlap.

Projects can be carried out from two standpoints. First, from perspective of customer or sponsoring organization, when the organisation owns the requirements and can undertake the work or subcontract some or all the work to a supplier organization. Second, from perspective of supplier or contractor organisation, when the organisation provides such a service or product as the core basis or part of business to other organizations (ISO 21502:2020). Accordingly, the parties to the project contract should define the manner how the project governance should operate on both sides of, and across a contractual boundary, the organization's project management team, as well as the appropriate people to be engaged in the project.

The project should be completed on time, meet the desired goals, justify the required quality and be realized within the approved budget. To successfully lead the project it is important to understand its constraints. The constraints can change during the project. It is crucial to meet the client's expectations so balancing those shifting constraints and maintaining stakeholder satisfaction is an enduring activity in the project (PMI, 2021).

The core of the project's success is seen through the prism of the triple limitation, that is, maintaining the balance between the project constraints - budget, scope and execution time - and that relationship affects the quality of the project (Vučinić et al., 2022). Quality could also be affected by changes in the scope, budget and schedule; therefore, it must be taken into account when considering the project constraints. Apart from these constraints, ISO 21502:2020 identifies other limitations, including, but not limited to: the availability of the project resources, including people with appropriate skills, facilities, equipment, materials, infrastructure, tools and other necessary resources, factors connected to the health and safety of personnel, security, acceptable level of risk, possible social, environmental and ecological influence of the project and its outputs, laws, rules and other governmental requirements, as well as minimum quality standards.

3.2. Project governance and business case

According to ISO 21502:2020, project governance should encompass the principles, policies and frameworks that the organizations use to direct, authorize and control the project defined in an agreed business case. The business case is a basis for project governance and should be used to explain the undertaking and continuation of a project. It serves as a documented justification supporting decision about commitment to the project, program or portfolio. It should contain, as a minimum: objectives to be accomplished; strategic alignment and potential benefits to be realized; defined metrics to assess the created value; the organization's tolerable level of risk; budget, schedule and quality requirements; potential business and interference with other organizational operations; stakeholder engagement and relationship management; usage of human and material resources; necessary skills, knowledge and capabilities; targeted scope; possible scenarios; suggested management approach, and ability to withstand business and organizational activities through change.

Project governance should provide the supervision of subjects, including policies, processes and methods for performing the activities in the project, management frameworks involving the project life cycle, as well as the roles and responsibilities within the authority limits for decision-making. Commonly, the governing body of the sponsoring organization assigns the responsibility for maintaining project governance to the project sponsor or project board. Project governance should be incorporated in the sponsoring organization's overall governance framework. The governance framework for projects should be associated with other organizational processes and systems such as organizational governance, performance reporting, applicable procedures and relevant delivery approaches, risk management, portfolio and programme management, investment and financial management, business analysis, strategic and operational planning, information and documentation management, as well as quality management.

In regards to the alignment of the governance framework to project management practices and systems, those that should also be taken into account are functional and physical organizational or other prevailing structures, contradictory procedures, processes, plans and systems, communication methods, technology accessibility, the context of operations of the organization, balancing the social, economic and environmental characteristics, as well as administrative and authorization systems.

Consideration of social and environmental effects in the initial project planning has become more common (PMI, 2021). Recently, the latter are usually referred to as the Triple Bottom Line of people-planet-profit. This may, for example, involve the assessment of the product life cycle through evaluating the potential environmental effect of product, process and system. It may reflect the impacts of materials and processes on environment, sustainability and toxicity.

As far as projects are unique in nature, it is difficult to develop a standardized approach because there is rarely a general solution that would be acceptable for every project, especially due to the ever-present level of uncertainty (Warburton and Kanabar, 2016). On the other hand, standardized methods have been developed that can reduce the risks associated with uncertainty. Therefore, the application of standards significantly facilitates project management.

4. Project organisation structure and its application in the central bank

ISO 21502:2020 describes project organization as a temporary structure which defines roles, responsibilities and authorities in the project while persons are assigned to explicit roles by names. The project organization should specify clear reporting lines, agree on the project sponsor or project board, and be communicated to everyone involved in the project.

The project's context, the organizational environment and stakeholder's preferences may influence and determine a design of the project organization. It is important that the project organization is defined in sufficient details for each individual in order to comprehend their roles and responsibilities as well as those of people with whom they work (ISO 21502:2020). Apart from the formal side of project management, there are also informal aspects. They usually include the culture of the organization, motivation and cooperation among team members, as well as their interpersonal skills. Organizational culture is of particular importance in leadership and particularly in team leadership because it affects strategic decisions in the organization and determines its ability to adapt to changes in the environment (Luburić, 2016).

Roles in project organizations should be defined precisely to ensure the smooth functioning of the project activities. The following paragraphs explain the roles in the project organization structure according to the ISO 21502:2020. In Figure 4 the authors give an example of project organizational structure that is modified according to ISO 21502:2020 and show how it could fit into central bank`s project organization structure.

Sponsoring organization is a higher-level authority that should provide direction and resources to the project board or the project sponsor, address deteriorated risks and other matters, as well as decide on issues that are above the delegated authority of the project board or the project sponsor. It is possible for a project sponsor to represent the sponsoring organization and thus may not have a higher-level authority to whom to escalate risks and issues or from whom to search for direction. Who will be fulfilling this role, whether it be the sponsoring organization, an actual person or a body, depends on the project's context. If the project is a part of a portfolio, a higher-level authority can be the portfolio manager or director, whereas for a project within a programme, that can be the role of the programme manager.

In the case of central bank, the sponsoring organization is the central bank which provides resources and sets up project requirements. Due to generally conservative approaches that are typical for central banks, whether this role should be occupied by project sponsor as a representative of the sponsoring organization or a project board which would be governed by the project sponsor or to whom the project sponsor would be accountable, depends on the complexity, significance and potential effects of the project. The project context will determine the latter. If the project is complex and involves a number of organizational units in the central bank, the sponsoring organization should be the governing body of the central bank such as the council or board.

Project board, if established, should provide direction and guidance to the project sponsor. The project board's role may vary among organizations as well as projects and that determines its authority relative to the project sponsor. The project board should monitor the project's improvement in order to confirm that the interests of the organization are being met. It also serves as a forum for a support with strategic decisions, eliminating impediments, and addressing unresolved issues.

Considering the example of central banks, the designation of a project board depends on the project concept. It may involve members of top management and senior level management primarily from organizational units whose responsibilities refer to the project requirements. The project board might be chaired by the project sponsor and provide the sponsor with the senior level advice. Another possibility is that the project board serves as a higher level authority to which the project sponsor is accountable. In the case the project is undertaken jointly with other organizations, each organization may have a representative in the board.

Project sponsor is generally accountable to a specified higher-level authority for fulfilling the objectives of the project, delivering the required outputs and outcomes, and ensuring the realization of desired benefits. The project sponsor is often a member or the chair of the project board, and represents the board`s interests. The project sponsor should champion the business case and be held accountable for project governance, including audits, reviews and assurance. According to ISO 21502:2020, there are other potential accountabilities such as assurance that the project is justified throughout its life cycle, confirmation that the project manager and the team have proper skills to execute the work, providing the project manager with decisions, direction, advice and context to perform activities as defined in the business case, confirming that the organization is ready for the organizational or societal change, addressing accelerated issues and risks, ensuring key stakeholders' engagement, deciding within delegated authority and escalating risks and issues beyond delegated authority to the higher-level authority, and designing the cultural and ethical character for the project. The possible relationship between the project sponsor and the project board in the central bank has been explained in the previous paragraph.

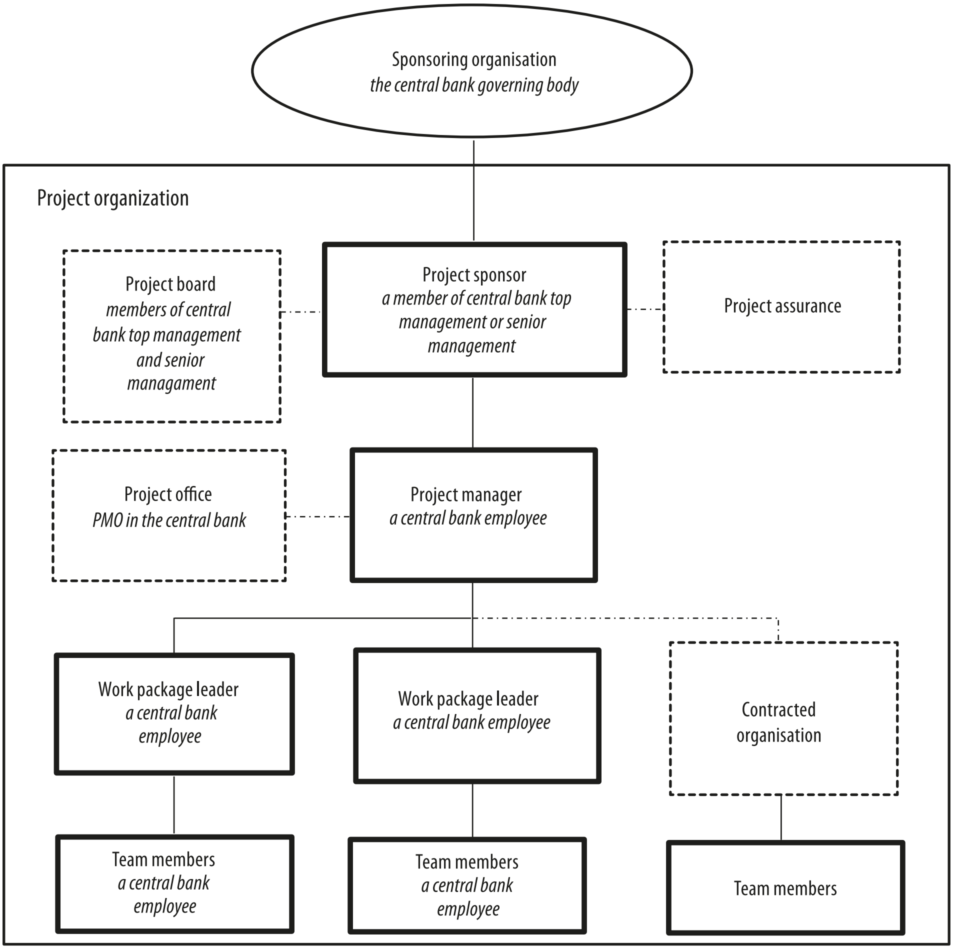
Although one person may undertake various roles in the project, an individual fulfilling the project sponsor role should not undertake the project manager role, work package or team member role because of the possibility of conflicting interests (ISO 21502:2020).

Project assurance is usually considered a responsibility of the project sponsor, including for audits and reviews, and these activities may be allocated to one or more persons who are independent of the project manager and team, and who act on behalf of the project sponsor (ISO 21502:2020).

In central banks, project assurance is highly significant and contributes to the project justification and adequacy, as well as objectives' accomplishments. It supports the transparency of the central bank activities as well.

Project manager is an individual who is assigned by the performing organization to lead the project team and is accountable for achieving the project objectives (PMI, 2021). The project manager is accountable to the project sponsor or project board for finalizing the project scope, and for leading and managing the project team (ISO 21502:2020). Other activities of the project manager include: designing a management approach aligned with the decided governance style, inspiring the project team, daily supervision and leadership, defining the team approach, responsibilities, scope of work and objectives, monitoring, estimating and reporting whole progress against the project plan, managing risks and issues, monitoring and managing project changes, managing supplier performance as defined in appropriate contracts, guaranteeing stakeholder engagement and required communication and confirming the deliverables and outcomes provided by the project.

Figure 4: Authors' modified example of project organization structure in central banks according to ISO 21502:2020



Source: Authors based on ISO 21502:2020,

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Project manager is the key person responsible for forming and preserving safe, respectful, non-judgemental environment which allows the project team to communicate appropriately (PMI, 2021). The way to achieve this is by showing desired behaviours such as transparency, integrity, respect, positive disclosure, support, courage and celebrating success.

In the example of the central bank, the project manager should be an employee of the central bank or can be outsourced if it is necessary due to the project requirements.

Project Management Office or PMO, if established, can accomplish many activities that support the project manager and team, including analysis, defining and administering governance, standardizing project methods and processes, training of project management, planning and monitoring, managing information and providing administrative support. Project offices can provide assistance to the project manager but also to the project sponsor, the project board or other positions within the project team. The project office may also perform the role of the competence centre or the centre of excellence of project management supporting organizations in improving their project management maturity.

PMO may or may not exist in central banks. It depends on the organizational structure of the central bank and the way it perceives project management. In that regard, there may exist a devoted PMO to mobilize people from the inside or outside of the organization and create the project organization structure. Projects are generally used directly or indirectly as ways to achieve the organization's strategic goals and, therefore, they are aligned with them. In this context, Rigassi and Campos (2018) conducted research in which they explain the link between projects and economic stability by considering the formal organizational setting of project management offices in central banks. The result of the research showed that, bearing in mind that the mission of central banks is to contribute to the preservation of economic health, there is an indirect connection between project management and economic stabilization, regardless of whether it is stability, recovery or economic growth.

Work package leader is accountable to the project manager for leading, managing and delivering the specific outputs or outcomes that are specified in a work package. The work package leader or team leader can belong to sponsoring organization or come from a third-party organization, such as a contractor. Work packages should be precisely allocated to the work package leader. Tasks of the work package leader include but are not limited to: approving that the work packages are accomplished to the required quality, on schedule, and on budget; planning, monitoring, estimating and reporting overall improvement against the work package plan; resolving issues and escalating any that surpass the level of decision authority; monitoring changes to the work scope and requesting authorization for those changes that are out of their authority; managing and enhancing the resources usage as well as passing on final outputs to the project team or project manager. The role of the work package leader may be undertaken by the project manager.

From the perspective of a central bank, the work package leader should be assigned a specific role in case there is a need for organizing specific teams. It is usually the case in the bigger projects that require different tasks to be performed simultaneously and require human and financial resources. If the involvement of many organizational units is required as some tasks should be grouped in work package and led by the work package leader.

Project team members perform project activities and are accountable to the work package leader or the project manager for the accomplishment of given undertakings and the resulting deliverables (ISO 21502:2020). Every project team develops its own team culture. It can be created intentionally by developing project team norms or just informally through behaviours and actions of its project team members (PMI, 2021). Although team culture operates within the organization, it reflects project team's individual ways of working and interacting. It is the fact that people in the team have their own biases both unconscious and conscious, therefore, it is important to establish a culture of openness and trust where people can be open and transparent about their biases (PMI, 2021).

Project stakeholders are individuals, groups or organizations that may have interests in, can influence, or be affected by, or identify themselves to be affected by any aspect of the project and they can be internal or external in relation to the project and the organization. Project stakeholders are governing body, sponsoring organization, project board, project sponsor, project manager, work package leader, project team members, project office, customers, suppliers, employees, regulatory bodies, business partners, finance providers, shareholders, interest groups and users.

Leadership should be practiced by all members of the team. Leadership is not limited to any explicit role in the project, thus the highest performing projects may have different people exhibiting effective leadership skills. That could be project manager, sponsor, stakeholders, senior managers or even project team members. Creating high–performing–teams is an important goal of effective leadership. Some of the factors that describe high-performing-teams are open communication, shared understanding, share ownership, trust, collaboration, adaptability, resilience, empowerment and recognition among others (PMI, 2021). Leadership skills are beneficial for all project team members. Effective leadership involves the following traits and activities:

- project purpose should be understood among team members to attain the objective,
- critical thinking, which includes disciplined, logical, evidence–based thinking,
- motivating team members,
- interpersonal skills in the projects usually include emotional intelligence, decision making and conflict resolution among others.

5. Integrated project management activities

Integrated project management practices should include the practices from the pre-project activities aimed at making the decision whether to initiate the project, through the planning and controlling activities to the post-project activities (ISO 21502:2020). Those practices should be accomplished in order to facilitate the project organization to attain the project's objectives, define and manage the project scope within the constraints considering the risks and resource needs, and get all necessary support from each participating organization, including commitment from resource owners, funders, suppliers, customers, users and other stakeholders (ISO 21502:2020). There have been recommended seven practices. Their relationships are shown in Figure 5 and explained in the following paragraphs in more detail. There are eighteen recommended individual project management practices that should be considered throughout a project and used when undertaking the integrated project management practices (Figure 5). These are: planning, benefit management, scope management, resources management, schedule management, cost and risk management, issues management, change control, quality management, stakeholder engagement, communication management, monitoring organizational and societal change, reporting, information management, procurement, and lessons learned.

Project management should be based on an integrated approach that embraces the various roles, disciplines, competencies and organizational and environmental factors that may impact the project achievements. It should be aligned with and applied considering the organization's needs, level of identified risks, the involved individuals' competency and other project-specific concerns.

Pre-project activities are supposed to verify whether the project is worth starting for the sponsoring organization (ISO 21502:2020). They include activities that should be undertaken leading up to a decision to initiate a project. In regards to the latter, the project's objectives, benefits, validation and investment should be justified and documented in order to empower a decision about whether to initiate a project. The information obtained may be used to assist the prioritization of needs and opportunities, which may refer to some features of the organization's strategy or business plan, needs for a higher-level programme or portfolio as well as customer's needs. Before authorizing the project, the sponsoring organization should define the project sponsor, the project manager, as well as their initial responsibilities and authorities, then determine on initial governance arrangements and decide if there are available necessary resources and funding for the whole project in the organization, or at least for the first phase whereas there are available possibilities to provide the rest of funding later.

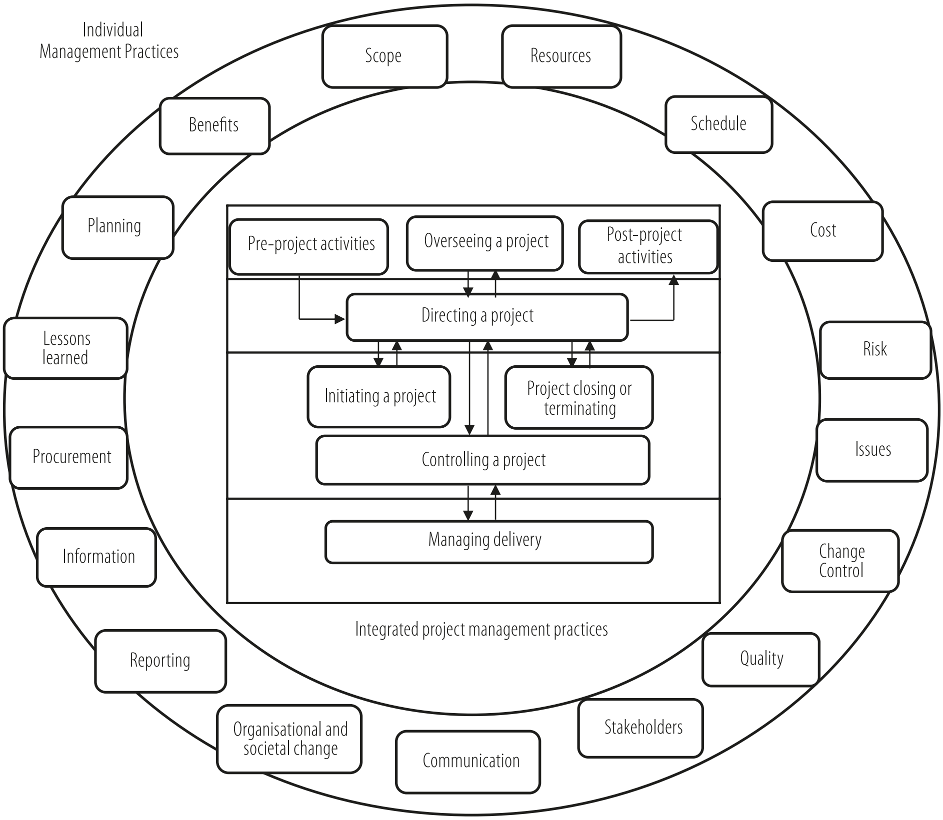
Overseeing a project enables the sponsoring organization to make sure that the project team can achieve the project's objectives, the project keeps meeting the organization's needs and stakeholders` expectations, whereas the identified risks are at tolerable levels. This oversight can be performed through the following activities: participation in making vital decisions, periodic reporting, assurance evaluations and audits, as well as ad hoc escalations and interventions.

Controlling a project, through phases and work packages, is aimed at monitoring and measuring performance against a settled plan, including authorized changes. The project justification can further develop through phases of the project as work progresses. The business case should be updated before every decision point to authorize the project in consultation with the project sponsor to mirror changes in the project's context and scope. Managing project performance is an ongoing process and the project manager should monitor and verify the performance of the project team in performing their tasks. The project manager should assemble and analyse progress and performance data to measure progress against the agreed project plan, including: work completed, milestones achieved and costs incurred, planned or realized benefits, managing the scope, obtaining adequate resources to complete the work, managing the schedule and costs, identifying and managing risks and change control, quality, stakeholder engagement and communications, managing organizational or societal change, progress reporting, maintaining the integrity and availability of information and documentation, managing the status of procurement activities, and lessons learned. The project manager is expected to report the project's status and performance, in alignment with the project's plan, to the project sponsor, project team and selected stakeholders.

Managing delivery involves defining required outputs and outcomes, and planning and enabling their delivery. This should guarantee that project's outcomes to be accomplished and benefits realized. As far as the project's work can be structured into work packages, the work package leader should manage their delivery.

In order to achieve that, the work in packages is adequately defined, planned, monitored and controlled, and the quality of outputs and outcomes should be vigorously managed.

Figure 5: Management practices for a project in relation to integrated project management practices



Source: ISO 21502:2020,

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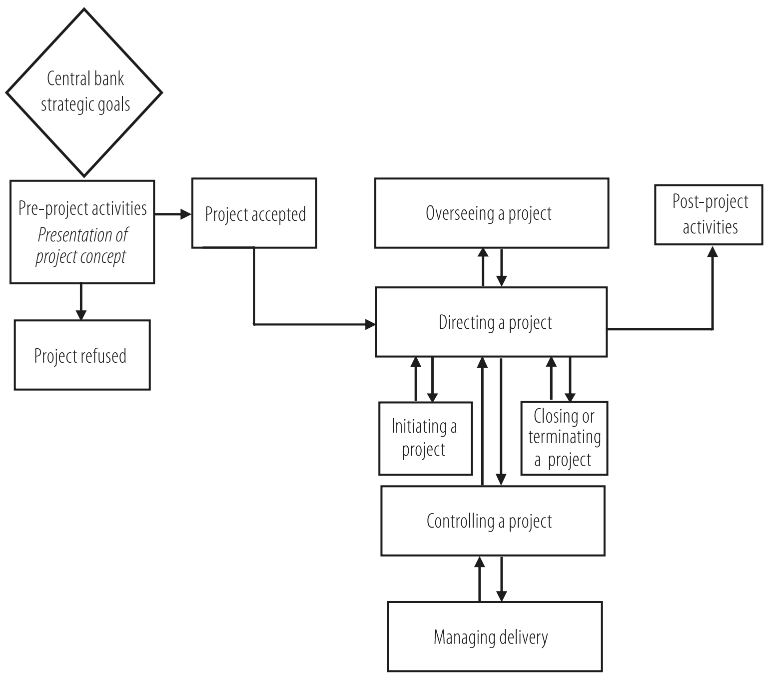
Closing or terminating a project means that the project has been either implemented when closing the project, thus confirming the completion of the project's scope or, in the case of termination, to note that activities have not been completed. This enables post-projects benefit realization in the case of project closing and also to dismiss any remaining resources and facilities. Before closing the project, if not due to termination, the completion of all activities should be confirmed and the project's scope completion verified, with every work package either being accomplished or terminated. Also, if there is any remaining operational tasks, these should be agreed and accepted.

Post-project activities include the confirmation that the outcomes are sustainable and the expected benefits are realized. The project sponsor determines the degree of the project's success and whether objectives have been met and benefits realized. Also, if included in the project, it should be verified whether organizational or societal changes or outcomes have been delivered. Lessons learned from the project should be captured and communicated in order to promote improvement of the existing or future projects.

Figure 6: Authors' modified example of integrated project management practices in central banks based on ISO 21502:2020



Source: Authors based on ISO 21502:2020

In Figure 6 the authors give their vision of integrated management practices in a central bank, based on the ISO 21502:2020. The project concept should be aligned with strategic objectives of the central bank. The project concept should be presented to the top or senior level management, depending on the complexity. The project can be either refused or accepted. If refused, the reason for that should be documented and considered as a lesson learned and that experience should be used for preparing future project concepts. Otherwise, if accepted, the authors consider that the flow of actions should be according to the ISO 21502:2020, representing justified successful practices in project management as described and shown in Figure 5.

The authors consider that central banks should always base their activities on risk evaluation in order to minimize the chances for problems or their complication as shown in Figure 3 (flow of thinking and understanding problems, incidents and crisis). This also should be applied in regards to project management. Central banks are strongly focused on avoiding and minimizing problems and, therefore, implementing standardized approach to project management will also lower the risks and the probability of their materialization.

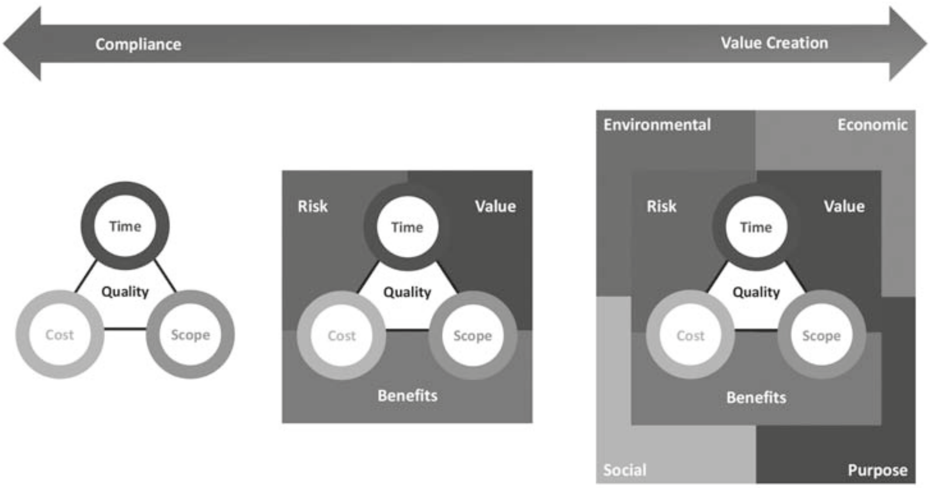
Executive and senior management in a project should enable the continuous development of the project management environment and culture which pursues to prove and withstand the ongoing adequacy, effectiveness and efficiency of project management in the organization. In that regards, they should: establish an evaluation process for the organization's project management framework to confirm its alignment to the agreed organization's strategy, business and operational objectives, assess the effectiveness of the project management framework and governance, implement recognized and agreed enhancements, determine which improvements and adjustments to be applied, collect and implement lessons learned for the benefit of present and future projects, develop staff management skills through education, training and mentoring (ISO 21502:2020). Evaluations of project management progress may as well give more evidence to the organization for the continuous development of project management frameworks, methods and techniques.

Senior management, a quality assurance function and/or a project office should create a timeline and a method for periodic evaluation in order to ensure continuous improvement of project management processes, methods and techniques, and enable for valuations of project management maturity within the organization and also to embrace communication with people who are influenced by changes in the project. For the purpose of any evaluation, project sponsors, project managers and their teams should be consulted.

6. Central banks' commitment to sustainable projects

Being socially responsible institutions, central banks worldwide are adapting their own activities and practices according to green requirements, from shifting to green energy sources, over electric car use to analysing green risk exposure in the financial system and promoting green financing. Through providing support to green finance the central bank boosts the green investment and further reduction of CO2 emissions. The COP27 (2022) underlined the need for immediate, deep, fast and sustained reductions in the global GHG emissions throughout all applicable sectors, including through increase in low-emission and renewable energy, just energy transition partnerships and other cooperative actions.

Figure 7: Project sustainability



Source: Green Project Management, 2022

Sustainable Project Management is defined as the application of methods, tools, and techniques in order to achieve a defined objective while considering the project outcome's entire lifecycle to ensure a net positive environmental, social, and economic impact (Green Project Management, 2022). Project management is developing and the meaning of the successful project has been transformed as well. It is now moving beyond its traditional focus on time, cost, and scope, placing the focus on delivering the value and desired benefits, whereas the next phase should be to integrate sustainability ethos where projects do not come at the cost of the planet and its limited resources (Figure 7). For that reason, every project should measure its social and environmental influences so that the world we live in can restore and be sustained. Therefore, any development project should be carefully and professionally, environmentally and socially sensitively selected, whereas public policies should be changed according to the new scientific know-how and social awareness, where sustainable development requires a free, critical and fair information delivery, a more modern education and a higher general culture level (Đukić, 2021).

According to one of the PMI`s principles (PMI, 2021), changes should be enabled to attain the envisioned state. Change can originate from internal or external sources of the project management. Enabling change is very challenging, particularly if all stakeholders do not understand it and embrace it. Also, empowering various changes simultaneously could be perceived with too much pressure and also resistance to change. There are people who may be risk averse or their environment can be more conservative when it comes to changes. When attempting changes, stakeholder engagement and motivational approaches contribute to change adoption. Project managers can play a significant role here to try to channel the resistance or change absorption to relevant stakeholders, thereby increasing the likelihood of the change being accepted and adopted. This principle should be applied in searching for the best approach to attract green projects, particularly due to the fact that many people do not understand the process of greening economy and financial systems. It is important that everybody understands and embraces the green policies.

7. Conclusion

A project should be aligned with the strategic objectives of the organization, regardless of it being private or public. The project governance and management framework should be defined to provide direction and guidance to individuals who are involved in the project and appropriate to the work assigned. Project work should be given to individuals who are competent and with the capacity to deliver the expected results and accomplish the assigned roles. As far as the context in which the project is undertaken, as it can impact the project's performance and probability of success, it is important to consider factors both within and outside the organization. Project managers should deliver a project that can create value for the organization and stakeholders. Accordingly, in order to effectively lead the project, it is vital to understand the constraints specific to the project so that the balance between the project constraints - budget, scope and execution time - and consequently quality of the project can be managed. The project should be completed on time, meet the desired goals, justify the required quality, and be realized within the approved budget.

Raising awareness of the importance of international standards is fundamental. In addition to frequent emphasis on the importance of standardization and application of standards, it would be desirable to implement them wherever possible. The speed of changes in the world increases constantly and while some organizations are created and some are terminated, old technologies are substituted for new ones that provide different opportunities and allow people to improve and adapt their skills, ways of thinking and abilities to keep pace with new trends. The application of internationally recognized standards in project management in central banks confirms their aspiration and commitment to the most rational and effective use of resources within the framework of existing limitations and recognized risks in order to achieve results that satisfy expected quality and create benefits, with the primary achievement of the key goal - preservation of monetary and financial stability, thereby contributing to economic development.

Against the backdrop of an ever-changing business environment, it is important to remain relevant and this can be very challenging. Relevance means being responsive to stakeholders` needs and requirements, which entails continual evaluation of offerings for the benefit of stakeholders and quickly responding to changes.

A standardized approach to project management provides a justified way to organize the work of the project and decide about the roles` assignment for each project. That contributes to the efficient use of human resources and funding. Precise organizational structure of the project and clear division of responsibilities is key to accomplishing the project objectives on time, within scope and on budget whilst providing required quality results and reliable benefits. Accordingly, the application of international standards is crucial for successful project management in central banks in order to ensure benefits realization and value creation for the organization.

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