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PMO within Moroccan Organizations: Towards a Synthetic Model of Implementation

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Abstract

The Project Management Office (PMO) is an emerging organizational structure that contributes to the improvement of both project and organizational performances, and project management maturity. Like worldwide, the PMO implementation represents a major challenge for Moroccan organizations due to several factors.. In order to explore the different aspects of PMO implementation, we adopted a qualitative approach based on conducting a set of interviews with PMO managers and experts who have implemented or have been part of a team in charge of implementing PMO. The results of the study have shown that this implementation goes through some generic steps in most cases, and the roles and functions assigned to the PMO are generally identical within the host organizations. One of the main factors influencing the PMO implementation is the top management support, seen through the organizational positioning and decision-making authority granted to the PMO. Moreover, the organizational culture and the degree of openness to innovations are determining factors too. Overall, the main challenges in PMO implementation remain change management and the maintenance of an ongoing support over time.

Keywords: Project Management Office, organizational performance, project management maturity, organizational culture, change management.

Introduction

Over the last decade, organizations have faced an increasingly fierce competition, a situation requiring innovative solutions to meet market needs (Antonio Martins & Ramos Martins, 2012). This situation has led organizations to move towards some management styles, to ensure their continuity but also to participate in improving their performance, while meeting market needs.

We are talking about project management, which can be qualified as an art combining project managers' knowledge and skills with the tools and techniques that are available to them, in order to meet the different requirements (PMBOK Guide [PMI], 2017). As a result, project management represents a mean of monitoring and organizing, allowing the improvement of organizational performance by improving the project performance (Munns & Principles). Bjeirmi, 1996).

In response to the various challenges that arise, organizations have developed new flexible structures to achieve the desired operational and strategic goals (Pettigrew, 2003). Indeed, many organizations have implemented a new organizational unit whose most common name is Project Management Office (PMO).

Management Office (PMO).

Müller et al. (2013) believe that implementing PMOs improves the project management efficiency, in particular, by enabling the acquisition of knowledge from past failures and successes and by providing a range of support and facilitation not only for projects, but also for different levels of management and support units. Salamah & Alnaji (2014), for their part, revealed the existence of several challenges related to the establishment of a PMO and leading to its success or failure.

However, despite the existence of several works and empirical research on PMO implementation, steps to follow and challenges to face, the treatment of this problem still requires more research to define a theoretical framework in order to understand the different interactions that may exist and the challenges

order to understand the different interactions that may exist and the challenges to face for an efficient implementation of the PMO.

Today, the PMO as a concept remains a subject little studied in Morocco, considered as a function that is not widespread and has only begun to find its place within Moroccan organizations in recent years. Therefore, this research work aims to (i) understand PMO implementation mechanisms in Morocco, (ii) participate in the solidification of findings reached at this stage, but also (iii) providing a synthetic model highlighting the main components involved in the PMO implementation.

Literature review

The Project Management Office (PMO) as an emerging organizational structure in the world of project management has been extensively addressed by experts and professionals (Antonio Martins & Ramos Martins, 2012). However, there is very little theoretical or empirical research on the subject. In addition, this organizational innovation has not been widely examined in the literature (Karayaz & Gungor, 2013).

Only in recent years has this concept begun to take a new turn with rising scientific output.

scientific output.

1. PMO definition

The definitions used to describe PMO have evolved over time. Early examples focused more on the functional application of this structure within the organization (Darling & Whitty, 2016).

For example, the definitions given to the PMO in the project management body of knowledge vary between editions 4 and 6. The definition given in the 6th edition of the PMBOK guide is as follows:

"A project management office (PMO) is an organizational structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques. The responsibilities of a PMO can range from providing project management support functions to the direct management of one or more projects" (PMBOK Guide [PMI], 2017).

Today, it is impopossible to give a complete definition of PMO due to its evolution, influenced by several factors determining its organization, mission and goals (Desouza & Evaristo, 2006).

2. PMO types

Early PMO research concluded that it is difficult at this stage to establish an exact model of PMO types because of the significant structural differences that exist (Aubry et al., 2008). The organization and responsibilities of PMOs are not static or invariable; they are under continuous changes and evolution in terms of needs and expectations, and depend on the degree of project management maturity within the organization (Babaeianpour & Zohrevandi, 2014).

Observations were made of many types of PMOs including administrative support, control and centers of excellence (Hill, 2004). Aubry et al. (2010) proposed a descriptive model of PMO, with functions referring to two types of PMO, the controller and the supporter, with the possibility of coexistence of both.

Unger et al., (2012), in their analysis of 278 project portfolios, relied on three identified types of PMO, the coordinator and the controller involved in improving the success of the portfolio, as well as the PMO supporter who has a direct impact on the success of individual projects.

3. PMO roles and functions

As the concept of PMO has existed for several years, the functions and roles assigned to it have changed over time (Van der Linde & Steyn, 2016). These functions and roles varied since there is no standard framework or model that can describe the exact functions to perform by the PMO (Hobbs & Aubry, 2007).

Through a literature review, Dai and Wells (2004) identified six categories Through a literature review, Dai and Wells (2004) identified six categories of PMO functions: (i) development and maintenance of project management standards and methods, (ii) development and maintenance of project historical archives (iii) providing project administrative support, (iv) providing human resources, (v) providing project management consulting and mentoring, (vi) providing project management training.

Hobbs and Aubry (2007) based on their survey of 500 organizations, identified 27 important PMO functions, which they grouped under five main categories: (i) monitoring and controlling project performance, (ii) development of project management competencies and methodologies, (iii) multi-project management, (iv) strategic management, (v) organizational learning

learning.

Today's, researches have shown that PMOs are implemented primarily to promote exchange and sharing of knowledge around projects (Lee-Kelley & Turner, 2017, Widforss & Rosqvist, 2015), to raise the level of maturity (Van der Linde & Steyn, 2016), provide project management methods and standards, assist in the recruitment and deployment of the project team, and advise and guide (Kiani et al., 2015).

4. PMO implementation

In recent years, the literature revealed the reasons behind the implementation of PMOs (Kutsch et al., 2015). In fact, the implementation of a PMO primarily contributes to improving project management maturity by enabling the acquisition of knowledge through lessons learned in previous projects and by providing a range of support and facilitation services for projects (Van der Linde & Steyn, 2016), but also plays a key role in the success of projects within organizations (Kiani et al., 2015). The study conducted by Babaeianpour and Zohrevandi (2014) showed that the implementation of the PMO has a significant effect on improving the project performance monitoring and control, crosscutting projects management and decision-making. On the other hand, the implementation of such structure within the organization participates in the improvement of organizational performance as well as the development of project management competencies, and this, by providing a range of management tools as well as strengthening the communication within the organization (Spalek, 2012).

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Other studies have yielded conflicting results, assuming that PMOs do not guarantee project success but rather improve project management performance (Darling, & Whitty, 2016). Through their study of seven international organizations, Pemsel and Wiewiora (2013) concluded that the PMOs in the different cases studied did not fully meet the requirements in terms of knowledge management, consisting in coordination between projects

and between projects and the organization. Ward and Daniel (2013) consider that having a PMO has no effect on overall project success rates.

According to Aubry et al., (2010) the PMO, like the organization, is impacted by incidents and events deriving from its external or internal environment, which does not allow this one to evolve and progress clearly and correctly. This is why the implementation of the PMO should take into consideration the real expectations of all stakeholders involved and not only focusing on project performance, while adapting to any changes and evolutions that may take place and that have an impact on the project organization (Kutsch et al., 2015).

Indeed, the major obstacle to PMO implementation remains the diversification of existing models in addition to the absence of a consensus about its benefit within the organization (Ferreira et al., 2016). This joins the conclusions of Hobbs et al. (2008), who said that when implementing a PMO, organizations should perceive the true value that the latter will bring, by identifying in advance its mission and functions, in perfect harmony with the expectations of the organization, and not trying to mimic existing models, which can lead to a total failure due to different obstacles.

It should be pointed remember that the real value perceived through PMO implementation lies in the synergy between its functions and roles (Van der Linde & Steyn, 2016).

Methodology

As part of this research, we adopted a qualitative approach, based on conducting interviews, as it allowed richer data collection and wider exploration. We also used the "snowball" method as part of this approach due to the absence of an existing database providing access to PMO managers and experts in Morocco.

The group of people interviewed was limited to the leaders and experts who participated or were part of a team responsible for PMO implementation (Table 1).

Table 1: Respondents characteristics

1. Fonction

- PMO Consultant 27%
- PMO Manager 73%

2. Experience in PMO

- 13% more than 10 years
- 67% between 5 and 10 years
- 20% less than 5 years

3. Sector

- Insurance 20%
- Automotive 7%
- Banking 13%
- Council 27%

- Studies & Engineering 7 % ■ Information Technology 7%
- Government 20 %

At first, we developed a semi-directive interview guide, administered to three PMO experts in order to ensure the understanding of all questions and their relevance.

In the end, we conducted 15 semi-directive interviews, each one lasts about 40 minutes. After recording and transcribing the interviews, we encoded and analyzed them using NVivo (version 12). Initially, we made a simple thematic cutting, by creating free nodes referring to the different themes studied. Then it was proceeded to the hierarchization of these themes by creating sub-themes. Therefore, we carried out the analysis based on the different themes, and this, through the creation of queries and illustrative models, allowing a thematic analysis of the collected data.

Findings

In this section, we present the key findings of our study, organized along five axes:

1. PMO roles/functions

According to PMO managers and experts interviewed, there are different roles and functions assigned to the PMO that we could regroup by families. These roles and responsibilities are as follows:

Project management promotion

According to respondents, project management promotion relies on the establishment of a project management methodology, providing tools and project management techniques, coaching and support for project managers as well as achievement driving actions for change. However, one of the respondents also cited training and assurance of competencies growing of project managers as a secondary role.

Standardization and ensuring practices compliance

This aspect is primarily linked to the standardization of tools and techniques, ensuring their application and the compliance with the methodological framework. Indeed all respondents highlighted the importance of these functions and the necessity of establishing them gradually in order to avoid being in regular confrontation with stakeholders, and therefore giving a negative picture of the PMO. Rather, stakeholders must be approached in order to integrate their needs and several benefits of PMO implementation.

Project monitoring and controlling

All the PMO managers and experts did not deny the idea that, today

Moroccan organizations are embarking on PMO implementation essentially
to report and communicate on projects progress by implementing different

dashboards and tracking relevant indicators. For them, these are the main functions that we can observe in the majority of the PMOs within Moroccan organizations.

Multi-project management

This process is essentially implemented through the analysis and prioritization of project requests, arbitration and programs and portfolios management. However, the most neglected aspect remains the analysis and optimization of resources between projects. According to the respondents, today there is no attempt to pool resources within the portfolios and programs involved

Strategic management

Concerning the implementation of PMO, , respondents believe that it has to meet their needs in terms of strategic decision-making support, and use it as a strategic planning tool to ensure strategic alignment of projects.

Knowledge management

PMO experts and managers interviewed confirmed that PMO participates in knowledge management through the centralization of experience feedback, the building of a library of knowledge and expertise and by providing lessons learned for project managers. However, they share the following common concern: even if leaders and managers are aware about this role and its impact on projects management within the organization, they often neglect it.

2. PMO implementation key steps

The results of the study led us to conclude that there are some similarities in PMO implementation steps listed by respondents. These key steps are as follows:

Analysis of the existing and identification of needs

Whatever the type of PMO to implement, among the key steps that PMO experts and managers insisted on, we find the analysis of current practices within the organization in terms of project management and the identification of goals to achieve. The results indicated that this step includes (i) the identification of practices, techniques and tools adopted for project management, (ii) the assessment of project management maturity as well as (iii) the establishment of the structuring choices, or scenarios of implementation. implementation.

Structure building

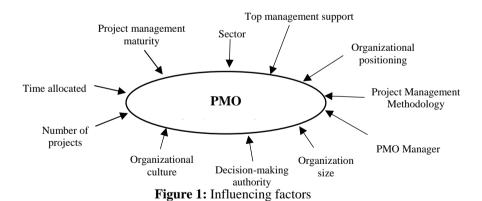
This is the step of building the PMO. Typically, at this stage, organizations clarify several critical points related to the PMO, such as the mission, scope, roles and responsibilities, organizational positioning, and governance. Globally, this step is about validating the choices made, but also to announce the birth of the PMO as an organizational structure that comes to enforce other existing entities.

Deployment and implementation

Generally, this stage starts with a trial period or a transition phase during which the organization tries to operationalize the PMO while keeping an eye on its progress. This involves implementing the PMO structure as part of a pilot project or a reduced scope, which will allow to identify the first feedback from internal and external stakeholders, but above all to better frame the operationalization of the PMO before moving on to generalization.

3. Factors influencing the PMO implementation

According to the results, we can say that the implementation of PMO represents a major challenge for organizations because of the several stages during which it is necessary to make the right decisions to ensure its success. In addition, the results of our study revealed the existence of some elements or factors that may influence this implementation, whether positively or negatively, and to which organizations must pay attention (Figure 1).



All of the PMO managers and experts interviewed consider that support from Top management is one of the key factors to PMO implementation, which we can generally feel through the organizational positioning, and the decision-making authority granted to this one, and which influence its implementation.

They believe that the organizational culture as well as the project management maturity represent facilitating factors in PMO implementation. Moreover, they consider that the existence of a project management methodology helps standardize practices within the organization. According to them, it takes time and we must do it gradually and according to a scope of intervention in coherence with its dimensioning.

They noted that there is some variance in the implementation of the PMO between public and private sectors and between different economic sectors because of maturity level and openness to the changes.

Moreover, the results also showed that the size of the organization affects the sizing of the PMO and its scope. It also determines the effort to make by organizations when implementing the PMO in terms of change management and communication, hence the observation that the PMO manager should have certain qualifications in project management and interaction with different stakeholders stakeholders.

4. Main difficulties when implementing PMOThe general idea that has been shared by PMO managers and experts interviewed is that they encounter a set of difficulties whether before, during or after the implementation. According to the answers collected, we can say that the main difficulties are as follows:

Resistance to change and rejection of the PMO due to the culture embedded in the organization, and in most cases does not support change and does not help to define the organization values and principles that will allow it to guide organizational behavior.

Lack or inexistence of support from the top management, making the PMO vulnerable to the resistance that it imperatively faces, and does not give to this one the necessary legitimacy to perform properly its mission.

Absence of a clear vision about the type of PMO to implement, its mission and roles, leading to an absence of well-defined guidelines for measuring the degree of expected goals achievement from the implementation.

Non-qualification of PMO managers in terms of:

- understanding the organizational PMO implementation context;
- mastering the degree of different project management knowledge areas;
- ability to carry the PMO implementation project and to be a true ambassador to the stakeholders.

5. Proposed actions to address difficultiesAccording to PMO managers and experts interviewed, the focus should be on:

- Strengthening PMO's organizational positioning, by supporting its implementation from the beginning and maintain this support throughout the PMO lifecycle;
- Alignment with the mission, goals and typology agreed, because according to our results we must not lose sight of them during the implementation;
- Change management, because of the possible transformations that will happen and require close support to anticipate or dampen the effects of resistance that may arise at any time during implementation;
- The qualification and skills of the person responsible of implementing PMO. This one should have some qualifications and skills to carry out this task

Discussion

Through the methodological approach adopted in this study, the objective was to draw a clear picture of PMO implementation within Moroccan organizations, to detect possible trends that may exist as well as the challenges to face. The richness of the data collected has allowed several interpretations.

The results of the study show that organizations implement PMO in order to improve project management performance, by ensuring the promotion of best practices and supporting all stakeholders involved in this process in harmony with the strategic vision of top management. Therefore, the PMO functions revolve around these main orientations without relying on a conventional model that describes them. This ties in with the conclusion made by Hobbs and Aubry (2007) that there is no standard model that identifies the exact functions assigned to the PMO. The idea is that these functions or roles will evolve under the influence of different components, ranging from internal to external requirements.

However, the results lead us to say that today these functions or roles are identical within Moroccan organizations with some differences depending on project management maturity and the expectations behind PMO implementation. We also noticed that these are generally the same functions and roles listed in the PMO literature.

Indeed, the choice of roles and mission to ensure by the PMO is part of the stages of its implementation. An implementation that remains generic in most cases without having a standard character, because there is obviously no exact approach prescribed to implement a PMO. The approach or steps to follow

depend primarily on the organization and its context. Generally, the PMO implementation represents an action that is continuous over time, aiming its sustainability and incorporation into the organization. According to Andersen et al., (2007), organizations should adopt a phased approach when implementing a PMO, by proceeding with a gradual deployment taking in consideration the organizational context.

consideration the organizational context.

According to the study conducted by do Valle and Soares (2014), there are success factors influencing PMO implementation within organizations and that we must take into consideration. Regarding the results of our study, we can say that the richness of data collected allowed us to identify a set of organizational and structural factors like those described in the descriptive model developed by Aubry et al. (2010) and which positively or negatively influence the PMO implementation. Generally, the successful PMO implementation depends mostly on top management support, which in most cases does not have a clear and well-defined vision of the expectations and goals behind. Therefore, it jeopardize the implementation by affecting the PMO's mission and characteristics, giving rise to a resistance of various stakeholders.

Furthermore, the success of PMO implementation and its sustainability over time also depend on its resources, since we noted that investment in PMO managers and team does not represent today a widespread concern in host organizations. The idea is that to support the various PMO transition phases, and in order to meet changing expectations, the organization must engage training and benchmarking actions for the PMO teams, allowing them to be informed about the latest PMO innovations, and therefore allowing more anchorage of this function within the organization.

anchorage of this function within the organization.

As proposed by Aubry et al. (2010), PMO represents an innovation that is unstable and evolves over time within the organization. Therefore, it is important to track this evolution and ensure alignment of the PMO's mission and functions with the organizational strategic and operational goals in order to ensure its sustainability over time, but also to guarantee the adhesion and the involvement of all stakeholders.

To summarize, we suggest a synthetic model highlighting the main conclusions drawn through this study and that contextualizes the implementation of the PMO in Moroccan organizations (Figure 2).

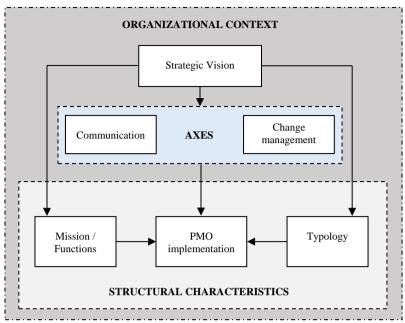


Figure 2: Synthetic model

Conclusion

Overall, we can say that the reason behind PMO implementation is always to ensure the management of some tasks within project management framework, according to PMO definition and without moving away from the roles and functions described in the literature. On the other hand, we should note that the roles and functions assigned to the PMO would continue to evolve, due to the evolution of the internal and external environment of Moroccan organizations.

Moroccan organizations should adopt a close communication with stakeholders involved throughout the PMO implementation. This is an action triggered at the very beginning and that concerns all decision-making and operational levels within the organization, aiming to share a common vision about PMO's mission. In addition to communication, it is necessary to provide a well-thought-out change management to facilitate the different transition phases and therefore set aside all chances to succeed.

During PMO implementation, Moroccan organizations should pay more attention to factors that can influence the implementation either positively or negatively. In addition, they must ensure the implementation of some actions in order to ensure the sustainability and incorporation of the PMO within the organization. In this case, experts suggest adopting a gradual approach of implementation while taking into account organizational context.

Generally, the success in PMO implementation within Moroccan organizations depends mainly on mastering the degree of these factors but also on the organization capacity to face the different challenges that arise.

To conclude, we recognize that one of the limitations of this research is due to methodological choice, not allowing the generalization of the findings. Hence, the need for further research on this subject through other approaches (quantitative/mixed) to pronounce on the validity of the proposed synthetic model.

References:

- 1. Andersen, B., Henriksen, B., & Aarseth, W. (2007). Benchmarking of project management office establishment: Extracting best
- practices. *Journal of Management in Engineering*, 23(2), 97-104.

 2. Martins, V. A., & Martins, M. R. (2012). Outsourcing operations in project management offices: The reality of Brazilian companies. *Project Management Journal*, *43*(2), 68-83.

 3. Aubry, M., Hobbs, B., & Thuillier, D. (2008). Organisational project
- study management: An historical approach to the
- management: An instorical approach to the study of PMOs. International Journal of Project Management, 26(1), 38-43.
 4. Aubry, M., Müller, R., Hobbs, B., & Blomquist, T. (2010). Project management offices in transition. International Journal of Project Management, 28(8), 766-778.
 5. Babaeianpour, M., & Zohrevandi, H. (2014). Using project management office (PMO) to improve project management abilities. UTCC International Journal of Business and Economics, 6(1), 153-165.
- 6. Dai, C. X., & Wells, W. G. (2004). An exploration of project management office features and their relationship to project performance. *International Journal of Project Management*, 22(7), 523-532.
- 7. Darling, E. J., & Whitty, S. J. (2016). The Project Management Office: it's just not what it used to be. *International Journal of Managing Projects in Business*, 9(2), 282-308.
- Desouza, K. C., & Evaristo, J. R. (2006). Project management offices:

 A case of knowledge-based archetypes. *International Journal of Information Management*, 26(5), 414-423.

 do Valle, J. A. S., & Soares, C. A. P. EFFECTIVE
- IMPLEMENTATION OF PROJECT MANAGEMENT OFFICES-PMO-IN ORGANIZATIONS.
- 10. Ferreira, H., Tereso, A. P., & Fernandes, A. G. G. (2016). Conceptualization of project management offices structures.

- In ICOPEV 2016-3rd International Conference on Project
- Evaluation (pp. 261-266). University of Minho.
 Hill, G. M. (2004). Evolving the project management office: a competency continuum. Information Systems Management, 21(4), 45-51.

- Hobbs, B., & Aubry, M. (2007). A multi-phase research program investigating project management offices (PMOs): the results of phase 1. *Project management journal*, 38(1), 74-86.
 Hobbs, B., Aubry, M., & Thuillier, D. (2008). The project management office as an organisational innovation. *International Journal of Project Management*, 26(5), 547-555.
 Karayaz, G., & Gungor, O. (2013, January). Strategic Alignment and Project Management Offices: Case Studies from Successful Implementations in Turkey. In 2013 46th Hawaii International Conference on System Sciences (pp. 4374-4383). IEEE
- Conference on System Sciences (pp. 4374-4383). IEEE.
 15. Kiani, S., Yousefi, V., Nouri, S., Khadivi, A. M., & Mehrabanfar, E. (2015). Determining the Role of Project Management Office in the Success of Project-Based Organizations. Mediterranean Journal of Social Sciences, 6(6 S2), 325.
 16. Kutsch, E., Ward, J., Hall, M., & Algar, J. (2015). The contribution of the project of the project of the project of the second of the project of the pro
- the project management office: A balanced scorecard perspective. *Information Systems Management*, 32(2), 105-118.

 17. Lee-Kelley, L., & Turner, N. (2017). PMO managers' self-determined
- participation in a purposeful virtual community-of-practice. *International Journal of Project Management*, 35(1), 64-77.

 18. Munns, A. K., & Bjeirmi, B. F. (1996). The role of project management in achieving project success. *International journal of*
- management in achieving project success. *International Journal of project management*, 14(2), 81-87.
 19. Müller, R., Glückler, J., Aubry, M., & Shao, J. (2013). Project management knowledge flows in networks of project managers and project management offices: A case study in the pharmaceutical industry. *Project Management Journal*, 44(2), 4-19.
- 20. PMI-Project Management Institute, (2017). A Guide to Project Management Body of Knowledge (PMBOK Guide), 6th ed. *Project Management Institute*, pp. 48.
- 21. Pemsel, S., & Wiewiora, A. (2013). Project management office a knowledge broker in project-based organisations. *International Journal of Project Management*, 31(1), 31-42.
 22. Pettigrew, A. (2003). Innovative forms of organizing: Progress,
- performance and process.

- 23. Salamah, H., & Alnaji, L. (2014). Challenges in establishing, managing, and operating a Project Management Office. *Recent Advances in Economics, Management and Development*.
- 24. Spalek, S. (2012). The role of project management office in the multiproject environment. *International Journal of Management and Enterprise Development*, 12(2), 172-188.
- 25. Unger, B. N., Gemünden, H. G., & Aubry, M. (2012). The three roles of a project portfolio management office: Their impact on portfolio management execution and success. *International Journal of Project Management*, 30(5), 608-620.
- 26. Van der Linde, J., & Steyn, H. (2016). The effect of a Project Management Office on project and organisational performance: A case study. *South African Journal of Industrial Engineering*, 27(1), 151-161.
- 27. Ward, J., & Daniel, E. M. (2013). The role of project management offices (PMOs) in IS project success and management satisfaction. *Journal of Enterprise Information Management*, 26(3), 316-336.
- 28. Widforss, G., & Rosqvist, M. (2015). The project office as project management support in complex environments. *Procedia Computer Science*, 64, 764-770.