



The impact of applying Project Management Approach to Manage Functions in Functional Organization

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ABSTRACT

The purpose of this research paper is to investigate the effectiveness of applying a project management approach to manage the function. As the functional organization focus on improving their operations and function management, function manager can implement project management approaches to achieve a high quality of management. Interviews were conducted with managers from different entities to examine the study hypothesis that function can be managed better if a project management approach is applied. The results indicate that a functional can be managed better by implementing different project management approaches that could be used to improve the quality of management in the functional organization. This study has also highlighted the main challenges that experienced in the functional organization's project management, along with recommendation that can be improve the quality of management in functional organizations.

1. INTRODUCTION

Organizations consider projects a powerful instrument to change and develop their operations and services, which requires implementing tools and techniques in project management to achieve their goals effectively [1][2][3][4]. However, organizations operate differently under various organizational formations. Such organizational structures include functional, matrix, and projectized approaches. Functional formation refers to organizations conducting under smaller structures based on specialized functional areas such as finance, marketing, and information technology (IT). [5][6] noted that functional structure involves establishing departments and selecting managers to head the departments. Matrix organizational structure refers to organizations with dual or multiple managerial responsibilities and accountability [7]-[11]. Organizations adopt the matrix structure to help during transformation and managing complex projects. It may involve several management

positions such as project managers, functional managers, and executive managers. The projectized formations remain the recent trends in the corporate world. [12] claims that organizations use projectized formation to manage projects that require coordination among different competencies from different departments. The matrix structure provides a transition period for organizations switching from functional structure to projectized structure [13][14].

2. LITERATURE REVIEW

Project managers within different organizations have varying roles and responsibilities. [15][16] claim that the changing business landscape has forced organizations to adopt complex structures. Project managers within a functional structure have limited authority over the team members instead of other organizational structures [17]-[22]. They exist more as project coordinators than project managers. The project managers in a

matrix structure remain focused on goals, timelines, and resources within the project context [3][23][24]. Functional managers in a structured matrix organization also give assignments to employees who are in the projects [25][26]. The functional manager and the project managers in a matrix setup share responsibilities and roles [27]-[30]. On the contrary, project managers in a projectized structure remain in complete control and charge of resources utilized by the project [4][31][32]. The project manager deploys tasks to managers, makes crucial decisions, and manages resources and funds. However, project managers have to ensure that they attain success and implement the project under a specified period and budget [33]-[38].

Functional managers manage and own resources in a particular department such as engineering, information technology, public relations, or marketing [39]-[42]. They generally direct the individual technical work from the departments towards the project [1][5][43][44]. Functional managers get involved in projects at different degrees depending on the corporate structure formation [45]. Functional managers in a matrix organization share the responsibilities for directing team members with the project manager. However, the functional manager remains the overall individual who directs [6][46]. Project managers should refrain from conflicting with the functional managers and coordinate the respective necessities concerning the utilization of resources to project work completion [47]-[55]. Functional managers assign particular persons to a team and negotiate with the project managers on available resources or other issues. In addition, the project managers must get involved in the initial planning until they assign the packages or activities [7][56][57][58]. Such a practice ensures that the project receives the needed foundation and boost to begin. Functional managers offer subject matter expertise and authorize the final schedule during the development of a program [59]-[64]. The manager, during project management plan development, approves the final project management plan [65]-[66]. Functional managers remain alert and note any challenges that may face the project [8][67][68]. They recommend changes and provide corrective actions for the project. Additionally, they continue to oversee their respective departments, help with issues

associated with team member performance, and enhance staff utilization [69]-[74].

A project may face challenges during its life cycle [75][76]. Such challenges arise when businesses fail to focus on value, establish clear accountability for measured results, have consistent processes for managing expected checkpoints, establish a consistent methodology for designing and implementing projects, provide team members with tools and techniques, and motivate their employees [77]-[82]. More importantly, the managers must distinguish the project organizational objectives from the organizational strategic objectives [83]-[87]. Project plans must cover the projected delivery, expected business transformation, and how the business benefits [88]-[92]. [9][93][94] claim that tailored technical focus alone is not enough in project delivery. Rather, project managers should focus on the value. Some key deficiencies expose projects to such challenges [95][96]. Such deficiencies include poor communication, strategies, and scarce skilled and talented labor [97]-[103]. However, managers can fix these deficiencies by recruiting and retaining trained and skilled labor force, encouraging and promoting effective communication skills, effectively managing scarce resources, utilizing technology, and implementing research-informed strategies [10][104][105].

Organizations should establish a unit responsible for project planning and execution. Most offices establish project management offices (PMO)[106]-[111]. [9][112] organizations establish project management offices according to the specific needs of a particular project [113][114]. The project management office comprises departments responsible for the drafting, planning, and executing of projects within an organization [11][116][117]. Organizations may establish one within the organization or hire services from project management firms [118][119]. The offices provide administrative services that standardize the project-linked management processes and support the project management team [120]-[125]. Besides, the office manages program governance procedures and coordinates the efforts of employees [126]-[131]. Another essential role consists of maintaining project documents while offering key and directional metrics for project execution [132]-[137]. Most organizations that establish and utilize project management offices

can enjoy a greater return on investment [138]-[142]. Higher return on investment occurs when project management offices ensure strategic planning, correctly define the project management methodology, enhance best practices, establish projects that align with the corporate culture, effective resource management, and create project archives, tools, and software to manage the project effectively [143]-[148].

Project management offices add more value than just monetary growth for organizations. The role of project management offices has evolved [13][149][150]. It improves decision-making, resource allocation, commitment, coordination between projects, and single project performance and provides information that remains crucial to the organization's decision-making [151]-[156]. Such roles indicate that the project management offices have a variety of functions, obligations, and roles that remain crucial to project excellence [157]-[160]. The literature review provides quality information on project management, the role of managers in different organizational structures, and the role of the project management office in project management [161][162][163].

The aim of this study is to examine the perceptions of implementing a project management approach by the functional manager to improve the functions management [164][165]. It will provide new insight in improving the efficiency of function management by a functional manager in case of implementing a project management approach and the impact of change [166][167][168]. There is a lack in the literature about the improvement of functional management in the frame of using project management approaches, and functional managers lack project management knowledge.

The hypothesis investigates the following:

- **Function can be managed better if a project management approach is applied**

Therefore, the objectives of this study:

- Evaluate the importance of implementing the project management approach in functional organization.
- Investigate the effectiveness of project management approach to managing functions

So, throughout the study, several questions will be

answered:

- Does augment the functional manager with project management approaches improve function management?
- Why does the functional manager need to apply the project management approach to manage function?
- How does implementing the project management approach influence the function manager's knowledge and management method?

3. RESEARCH METHOD

To correctly understand how a project management approach effects the functional organization, the data were collected by conducting four interviews. Therefore, the interviewees chosen for this primary research study are managers from different government and semi-government entities. This will be very helpful in analyzing how the project management approach might have positive and negative features. In addition, these participants might have encountered some challenges where they have thought about the functional organization. In addition, to use a secondary data that have been obtained for journals and academic articles.

The four interviewees were the following:

- Yousef, a project manager at Expo 2020
- Haya, an operations manager at Etihad Water and Electricity
- Roudha, HR manager at Jumeirah Group
- Alex, a project manager at Jumeirah Group

4. RESULTS AND DISCUSSION

Different organizational structures provide a unique characteristic to the firm's strategic objectives. One of the key dilemmas organizations face when they set up their project team is the composition of the project's decision. This has impacted the way leaders work in resourcing the project team [169]-[172]. A project is a temporary endeavor to create unique products, results, and services. They can be considered at any business domain for any specified period to achieve collective strategic goals for the firm [173]. Implementing these projects often becomes a

challenge for supervisors, leaders, and even project management because of setting project goals in alignment with the firm's goals and objectives.

- As the first manager motioned in the interview: "I see the project management approach as a short-term goal that we need to achieve. The team will be committed to finishing the work, and there will be more teamwork, more accuracy, and accountability in work, and the work will be more fun, not routine based work environment because if all the team is excited to move to the next project as they will feel that the more, they finish a project, they have achieved more while if there are no projects, there will not be any motivation and might be lost".

Particularly in a functional organization, the projects taken up by the firm are either solely functional projects that are contained with one functional group only and supervised by the functional manager, or they may be cross-functional. In the latter case, the project runs through each functional department and sometimes even with external workforces [174]. The project manager's role is managing scope, costs, timescales, quality, risks, and benefits. The project managers take up the responsibility of managing tasks at a critical step of the project [175][176]. However, the organization's functional structure creates complexity in specific jobs. This is because, under a functional organizational structure, the functional manager takes primary authority in assigning tasks, evaluating performances, and managing various activities associated with that function [177][178]. When a project is assigned in such an organization, the project manager is often left with legitimate power towards the employees and often has to coordinate with the functional manager to get tasks done. It is often seen that these project managers take to diminish their roles to project coordinators as employees' management line falls under the functional manager's authority.

- The other manager stated the

following about functional organizations: "In a functional organization the chance of having work mistakes will be less as we will be doing the same work on a daily basis, and it is a routine work while in a project management approach there is more chance to have work mistakes as we will be working on new and different projects that we are not used to doing every day and have a time frame in which the project needs to be done".

4.1. Project Management Approach

Project management methodologies are defined as methods, principles, and rules for managing projects [179]. It can improve the efficiency of an organization by standardizing processes, creating a common language, and understanding how to manage a project. The method helps reduce project risks, reduce duplication of effort, and ultimately increase impact.

- One of the interviewees also mentioned that in the projectized organization, the work would be more efficient because we have a timeframe to finish a specific project, the target of the work will be clear as we will have specific tasks that we go through and objectives to fulfill.

4.2. PRINCE2 Approach

This project management methodology is dated back to the mid-1970s and has provided effective project management methods for organizations. The PRINCE2 methodology successfully delivers projects regardless of their complexity and size due to their universal nature [180]. The methodology can be applied in any type of project ranging in different industries, language, standardization of roles, etc. Some of its key features include acute control on specific project elements such as time, cost, quality, scope, benefits, and risks and enhanced communication with key stakeholders and team members.



Figure 1 PRINCE2 Methodology Structure

As seen in figure 1 above, the methodology has four significant integrated elements, project environment, project theme, project process, and project principles. Each of these elements provides best practices for project management. The principles of this structure are universal, self-validating, empowering. The themes of the project are built on these principles and form the following: risk, plans, progress, change, business case, organization, and quality. These themes are continuously addressed in during the project's progress. Next, the project processes are carried out to accomplish specific goals and objectives by taking in one or more inputs and converting them into output.

This methodology is selected; first, it adopts a step-by-step approach that ensures the project manager about the effectiveness and efficiency of team structure, planning, and delivery of stages within the project scope, time, and budget. Second, the degree of an effective plan, control, delegate, and monitor project work is provided by this methodology. Third, under this authority, it is clear and assumed for harmony at the workplace and builds trust among the team member and project managers, which helps them carry out work independently and with utmost trust.

In the previous section, we identified that in functional organizations there is a lack of authority provided to project managers, and the

communication gap experienced between team members and the leader causes the project to fail terribly. Therefore, this approach can help eliminate the issues in the project under functional organizations giving way to equipped and controlled project managers who will achieve the desired organizational objectives.

4.3. Critical Path Method (CPM)

The Critical Path Method identifies the most important tasks in a project by defining the sequences of activities and estimating the longest duration associated with each sequence. This method helps estimate the time it will take to complete the work and what tasks will form the scope of application.

- The third interviewee elaborated that the projectized organization might have a disadvantage in a good way which is that it will be stressful as we will have a timeframe; however, this is a good thing in the same way because we will be planning, managing our time and tasks, and all the project processes will be clear and detailed. As well as we will be thinking about the worst-case scenarios and managing accordingly.

4.4. Program Evaluation and Review Technique (PERT)

PERT techniques minimize trouble spots, bottlenecks of the program, delays, and interruptions. By identifying critical activities in advance to coordinate various activities in a project. Using this technique, managers can plan the best resources to meet their goals within time and budget constraints. It enables them to manage program uncertainties more effectively. In terms of time to complete the project, it helps to identify the slack periods between activities and which activities are crucial. PERT provides large amounts of data that are organized into a network which is helpful to both executors and customers to make decisions.

- One of the managers also mentioned: “Projectized organization will make us learn how to solve problems within a short time, because if we had challenges in one main activity, then all the other project activities will be delayed.”

4.5. Learn Approach

Lean project management aims to maximize customer value while reducing waste. With this methodology, organizations can create more value for their customers with fewer resources. As a result of this approach, customers are satisfied, and a value-oriented process flow is implemented, cutting out waste of products, services, transport, and storage.

- One of the interviewees said, “I would prefer to work in a projectized organization as I will be working on new and different types of projects in a specific period and then move to another new thing, the opposite of a functional organization where we have a dull work environment. So, it is more fun, and I enjoy being innovative more as working on projects will motivate me to work more and feel like I am contributing to the company and doing something big and remarkable where after years,

we will remember our achievements and the members who worked hard and helped our organization by the success of a specific project. Also, the most important aspects to me are recognition, being appreciated, good repetition, and a successful team which I think that a projectized organization fulfills those values.

4.6. Six Sigma Approach

Six Sigma is a method that helps organizations improve their business processes. This increase in performance and decrease in process variation contributes to the reduction of defects and improvements in profits, employee morale, and quality of products or services. The essential approach of this methodology, to ensure that a process is implemented accurately and as quickly as possible; this methodology relies on eliminating or minimizing losses.

- The other manager mentioned that the strengths and weaknesses of the team members would be more obvious, and the project tasks will be a challenge to focus on their skills for improvement and career development. Also, we will have more motivation and recognition as we can implement the recognition idea by setting the “Star of the project” instead of having the “Star of the month” as this idea will be as a memory of the project in which it shows that there is one member of the team who was the main reason for the project success.

By implementing a project management methodology, organizations are able to:

1. Quickly adapt to new challenges and invest limited resources in the best way possible to achieve recurring successes.
2. Give project managers a solid foundation and a holistic understanding of managing their projects effectively.
3. Reducing risks and increasing the success of projects.
4. Motivating team members and increasing their productivity.

5. Ensure more projects are delivered on time and within the budget that meets or exceeds the expectations of donors, beneficiaries, and stakeholders.

5. CHALLENGES

According to the standards set by Project Management Institute (PMI), a project manager has ten key areas of knowledge that they must deal with. These aspects include integration, scope, schedule, cost, quality, resources, risk management, procurement, stakeholder, and project manager have for carrying out the work, the need for legitimate power and authority is fundamentally required. The delegation of work and maintenance of quick communication processes between the project participants will aid in on-time deliverables. However, in functional organizational structure, management of all these key deliverables is not smooth and often complicated due to the slow vertical communication processes.

Project managers appointed at functional organizations need to be provided with project team formation and evaluation authority for effective and efficient management. According to PMI standards, project managers drive five key processes under project management. These include initiating, planning, executing, monitoring, controlling, and closing. The majority of the issues are experienced in the execution part of the project life cycle, which is directly linked with the management of employees, and as functional organizational structure compromises on the authority and power of the project manager, this is inevitable. The first three processes in the cycle, i.e., planning, executing, and controlling, are ongoing through the project's life and are also mutually dependent on one another. Thereby if any process gets compromised, it can slow down the others.

The communication process is another challenge often experienced in the functional organization's project management. Because the project manager has to get regular updates on the performance of the project team for adequate execution and controlling process, and often misses it out due to expanded communication network. In the case of large complex projects, this communication barrier becomes even more complex as the project manager has to first communicate the changes and alterations to the functional manager, who then

implements them on the team members. Moreover, this way of carrying out work increases the risk aspect of the project with regards to the employees involved in the project (Turner & Müller, 2003).

- Furthermore, as one of the managers mentioned in the interview, the challenge of updating the management of functional organization will be to those who resist the change and are used to the routine-based work environment. As the project management approach requires people who are ready to face all types of challenges, innovative and creative, have new and different environments, and work on different types of projects with unique ideas and different people. As in a functional organization, the work doesn't require creativity and innovation because all the members are the same as robots; they know their work, so they will do the required work and leave while in a project management approach, all the work requires to be creative and innovative not only the work but also in solving the problems that come within the process of completing a project.

• **Recommendations**

In the case of functional organizations, projects tend to be less motivating, engaging, and belonging to the needs of the team members and more aligned towards completing them. Employees then view this as an added burden on their job responsibilities rather than a step towards career progression. This situation can be improved by the following:

- **Redefine Roles and Responsibilities:** Assigning authority to the project manager is not enough to create an efficient work environment. Employees should be able to distinguish between the line of authorities, and this can only be possible if the job roles and responsibilities of both the project manager and the functional manager are clearly defined (Claudinger, 2019).

- Breaking away from the functional structure

When both functional managers and project managers are provided legitimate power, that can help manage their employees better. This can be carried out by imposing part-time project work on the team member, requiring a different lien of management. Also, such a setting will help move away the team members temporarily from their functional departments and work solely on the project goals.

- Revising resources and performance management

Aligning project goals and performance with those of the department is important for gaining the best insight on the skills and expertise of the staff members and for adequate monitoring of performance by employees. A significant aspect that can be considered here is the role of communication, clearly defining the employees who report to whom with a detailed communication plan.

6. CONCLUSION

In conclusion, this research report aims to examine the hypothesis "Function can be managed better if a project management approach is applied". As a result of the research, by implementing the project management approach the project managers will have a solid foundation and better understanding of managing projects effectively, will allow more projects to be delivered on time within the budget that meets and exceeds the expectations, will motivate team members and increase productivity, and will adapt new challenges and invest limited resources in the best way possible to achieve success.

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