# TOPIC ANALYSIS AND SYNTHESIS

Software Project Management (SOEN 6841)

# What are the most important responsibilities of a project manager?

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## Abstract

This study explores the multifaceted responsibilities of project managers, examining their role in project ownership, process establishment, and team leadership within varying organizational structures and project hierarchies. The responsibilities, though dynamic across roles, emphasize three core areas: understanding the project, implementing necessary processes, and leading the team. Regardless of the specific role, project managers are tasked with validating objectives, documenting requirements, and creating realistic plans for project completion. The establishment of processes involves communication, planning, and execution, with an emphasis on team involvement and change management. Leadership responsibilities center on building trust and robust relationships, particularly challenging in distributed teams. Successful leadership hinges on aligning team members with a shared vision and uncovering personal connections to project objectives. Overall, the study underscores the integral role of project managers in project success, advocating for adaptive leadership, diverse skill sets, and strategic skill development across diverse project contexts.

# 1 Introduction

#### 1.1 Motivation

In contemporary project management landscapes, the role of project managers has evolved into a complex tapestry of responsibilities, with nuances across roles and organizational structures. The motivation behind this study stems from the recognition of the pivotal impact that effective project management has on overall project success. As organizations grapple with dynamic project environments and diverse teams, understanding the intricacies of project manager responsibilities becomes imperative. This research is motivated by the need to unravel the multifaceted nature of project management, explore the challenges faced by project managers in various roles, and advocate for the development of adaptive leadership and diverse skill sets for navigating the complexities of modern projects.

#### 1.2 Problem Statement

While the importance of project management is widely acknowledged, there exists a gap in comprehensively understanding the specific responsibilities that project managers must navigate. The problem at hand is the lack of a holistic exploration of project manager roles, particularly in diverse organizational structures and project hierarchies. Existing literature often provides fragmented insights into specific aspects of project management, but a comprehensive understanding of the interconnected nature of responsibilities across roles is lacking. Furthermore, with the evolving landscape of project environments and the increasing prevalence of distributed teams, there is a dearth of research addressing the unique challenges faced by project managers in fostering effective communication, ensuring comprehensive planning, and providing adept leadership.

## 1.3 Objectives

The primary objective of this research is to provide a holistic understanding of project manager responsibilities across various roles, ranging from project coordinators to program managers, within diverse organizational structures. Some objectives include:

- 1. To delineate the responsibilities associated with different project management roles.
- 2. To advocate for adaptive leadership and skill development.
- 3. To identify challenges faced by project managers in contemporary project environments.

Through achieving these objectives, this research aims to contribute a nuanced and comprehensive understanding of project manager responsibilities, offering practical insights for project managers, organizational leaders, and educators in the field of project management.

# 2 Background Material

In the dynamic landscape of project management, the proficiency and aptitude of project managers emerge as pivotal determinants influencing the success of diverse projects. An empirical study reveals the nuanced relationship between specific competencies and project performance [1]. Noteworthy findings include the positive correlation between interpersonal influence and project time performance, underscoring the significance of the project manager's ability to persuade stakeholders for effective cooperation and goal attainment. Additionally, the research identifies a multifaceted impact on project cost performance, elucidating the role of emotional intelligence, interpersonal skills, apparent sincerity, and budgeting in managing emotions, fostering effective communication, building trust, and controlling costs. The investigation extends to project quality performance, revealing eight critical skill components contributing to the project manager's capacity to create a shared vision, inspire teams, ensure quality standards, and navigate contractual complexities [1].

A comprehensive review provides a panoramic overview of the paramount importance of people skills for project managers, encompassing communication, motivation, leadership, conflict management, team building, cultural awareness, and emotional management [2]. Despite the acknowledged significance of these skills, the literature reveals a lack of consensus regarding the most critical competencies, measurement methodologies, and developmental strategies, underscoring the need for further exploration in this domain.

Moreover, an exploration into project life cycles and managerial competencies introduces the conceptualization of natural and internal cycles that influence both project development and team dynamics [3]. This study advocates for a balance between hard technical skills and soft interpersonal skills, emphasizing their interconnectedness for successful project outcomes. The intricate dance of natural cycles, including design, construction, commissioning, and handover, is paralleled by internal cycles involving the psychological and emotional changes experienced by project teams. The proposed model presents four internal cycles—mature growth, mature complacency, decline, and renewal—each affecting the project team's performance in distinct ways Fig[1].

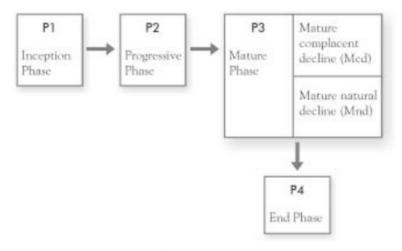


Figure 1. A model of project life cycle internal phase

In a complementary vein, an investigation into the leadership role of project managers and its impact on project performance proposes a comprehensive model based on surveys and interviews [4]. The research underscores the importance of people-related factors, such as communication, motivation, trust, empowerment, and conflict management, in influencing project team performance. Interpretive Structural Modeling (ISM) is employed to analyze the intricate interactions among these factors, providing a deeper understanding of their hierarchical structure and identifying driving and dependent factors [4].

A survey-based exploration unveils the diverse landscape of project management education programs, ranging from graduate and certificate programs to organizational initiatives [5]. Their findings indicate that less than half of organizations surveyed had any form of project management training program, revealing a significant gap in preparing project managers for their roles. However, among those who received training, a substantial majority felt adequately prepared, emphasizing the potential efficacy of targeted training programs in enhancing project management skills [5].

Furthermore, a research gap in understanding the impact of project managers on planning processes within various project management knowledge areas is identified [6]. Utilizing a survey questionnaire, their study evaluates the influence of project managers on the quality of planning processes, revealing risk management and communications as processes with lower quality, influenced by the lack of formal tools, techniques, and insufficient involvement of functional managers [6]. The research provides valuable recommendations for enhancing the quality of planning processes, including the development of new tools and organizational training initiatives.

An exploration takes a deep dive into the competencies of exceptional project managers, assessing both behavioral and job-task competencies [7]. The study identifies job-task competencies that are highly specific to the construction industry, while behavioral competencies exhibit a more generic applicability to other management positions. The competency profile of superior project managers is proposed as a framework for managing performance and skill development, emphasizing the need for tailored approaches in different project contexts [7].

A grounded theory study sheds light on the roles of managers in agile project management, unraveling a spectrum of responsibilities [8]. The manager's role is not to dictate but to support and enable the team's self-organization and autonomy. Four distinct roles—mentor, coordinator, negotiator, and process adapter—are identified, each with its responsibilities and requisite skills. The study emphasizes the challenges and benefits of the manager's role in an agile setting, providing valuable insights for future research and practice [8].

An exploration into construction project management illuminates the roles and responsibilities of project managers during the construction phase [9]. The article defines construction management as the process of ensuring that the project plan is executed as intended, making adjustments for unforeseen challenges along the way. The project manager's responsibilities during this phase encompass coordination with the design team, contractors, and stakeholders, monitoring project progress and performance, managing risks and changes, and ensuring project quality and safety [9].

In a parallel strand, insights into effective project managers in engineering projects emphasize the necessity of a diverse skill set [10]. The project manager's primary functions are identified as integrating all elements of the project system and providing leadership to the project team. Four essential skills—conceptual, human, negotiating, and technical—are identified, with communication emerging as a common ingredient fostering effective project management [10]. The article provides a checklist of critical success factors for project management, offering recommendations for improving project management education and training.

Collectively, these studies weave a rich tapestry of insights into the multifaceted landscape of project management competencies and skills. This body of research underscores the intricate interplay of technical expertise, interpersonal acumen, and adaptive leadership required for successful project outcomes. As organizations navigate the complexities of modern projects, the findings presented herein serve as a valuable guide, advocating for strategic investments in developing tailored skill profiles for project managers and fostering a nuanced understanding of their roles in diverse project contexts.

- 3 METHODS & METHODOLOGY
- 4 Results Obtained

# 5 CONCLUSION AND FUTURE WORKS

## 6 References

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