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2R. Behavioral Competencies Required of Agile IT Project Managers

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Abstract

Managing projects has become a complex process for IT project managers (IT PMs). A well-defined combination of behavioral and technical competencies is required to ensure the success of IT projects. However, there is a dearth of studies on behavioral skills explicitly related to IT project management. This study aims to identify and conceptualize the essential behavioral competencies required for modern (i.e. Agile) IT PMs. The study adopts a qualitative content analysis approach to examine IT project management job advertisements as a reflection of current industry expectations. A dataset of job postings is being collected across multiple countries, job types, and experience levels, and is analyzed through a structured coding process to identify recurring behavioral competency themes and variations across contexts. Preliminary insights indicate an increasing emphasis on interpersonal and adaptive competencies such as problem-solving, collaboration, and team management, alongside traditional managerial skills. The study expects to develop a behavioral competency framework that reflects these evolving requirements in practice. By bridging the gap between academic theory and industry expectations, this research contributes to recruitment practices, professional development, and curriculum design, offering a practical and empirically grounded understanding of behavioral competencies in IT project management.

Keywords: IT Project Management, Agile Environments, Behavioral Competencies, Content Analysis, Job Advertisements

1. Introduction

Project Management Institute (PMI) defines project management as an approach that utilizes specific tools, skills, knowledge, and procedures, providing value to stakeholders, where the project manager effectively plans, communicates, makes decisions, negotiates, and resolves conflicts (PMI, 2013 & 2017). Given the significant role Information Technology (IT) plays in today's enterprises, it is expected that organizations seek highly competent IT Project Managers (IT PM) to handle and manage IT-based change (Teubner, 2019).

According to PMI (2023), project managers are communicators, relationship builders, cooperative leaders, and creative problem solvers, enhancing their abilities to promote change and support organizational goals. This includes technical and power (i.e. soft or behavioral) skills, including interpersonal and problem-solving abilities, to lead teams effectively, involve stakeholders, and overcome challenges. The IT community recognizes the need for

enhanced leadership and project management training to combat increasing project failure rates in IT projects, with academic literature highlighting the correlation between IT PM competency and project efficiency (Parker, 2021). However, the extant literature on IT PM competencies continue to pay little attention to the behavioral “softer” aspects (Castro et al., 2022).

The importance of a project manager's behavioral skills in modern IT project management approaches like Agile is heightened due to the increased frequency of unstructured interactions with various stakeholder groups (Ahsan and Ho, 2024). They also observed that academic research and professional project management associations are behind in developing competency frameworks to guide project management practices. There remains a paucity of research on nontechnical (i.e. behavioral) skills needed in effective Agile IT project management.

As a result, this study proposes to examine the behavioral competencies required for IT project managers. It seeks to answer the following research question:

RQ: What are the essential behavioral competencies organizations seek in an Agile IT project manager?

2. Project Manager Competencies

Competence refers to the ability to mobilise and integrate knowledge, skills, and attitudes to perform activities effectively within a given context (Loufrani-Fedida & Missonier, 2015). In project management, competencies are typically categorised into behavioral, technical, and contextual capabilities; however, behavioral competencies are increasingly recognised as critical to IT project success. Behavioral competencies include leadership, communication, collaboration, problem-solving, adaptability, and interpersonal skills. These enable project managers to coordinate teams, manage stakeholders, and operate effectively in complex environments. Leadership involves decision-making, motivating teams, and providing direction (Stevenson & Starkweather, 2010; PMI, 2020), while communication ensures clarity, alignment, and effective information flow across stakeholders (PMI, 2013). Collaboration and social competencies are essential for managing diverse and distributed teams, particularly in global IT environments (Görög, 2013; Rodríguez-Rivero et al., 2018). Likewise, problem-solving and adaptability are crucial for handling uncertainty, evolving requirements, and technical challenges (Chipulu et al., 2013; Cech & Chadt, 2015).

In agile environments, behavioral competencies become even more significant. Project managers adopt facilitative roles that require strong collaboration, communication, and team-oriented leadership (Shastri et al., 2021). Additionally, the concept of control ambidexterity highlights the need to balance structure and flexibility by adapting leadership styles based on project needs (Virag et al., 2024). This reinforces the importance of adaptability in agile IT project management. Research also indicates that project success is strongly influenced by human and organisational factors, including trust, relationships, and interpersonal dynamics (Alias et al., 2014; Müller & Martinsuo, 2015). Effective project management therefore relies heavily on behavioral capabilities rather than solely technical expertise.

Interestingly, the recent PMI's Pulse of the Profession 2023: Power Skills: Redefining Project Success (PMI, 2023) report highlights a major shift in the industry where behavioral skills are now the primary factors separating top-tier project leaders from the rest. Traditional models that prioritize technical "hard skills" are becoming outdated. The report's research indicates

that "behavioral skills" such as collaborative leadership, emotional intelligence, clear communication, and strategic thinking—are the true drivers of project success. The report outlines how these human-centric skills lead to tangible improvements, including:

- Stronger Alignment: Better synchronization between stakeholders and project goals;
- Team Synergy: Enhanced internal effectiveness and morale;
- Agility: A more resilient response to unpredictable changes and market uncertainty.

The criteria for successful projects have evolved. Executives and stakeholders no longer judge success solely on technical completion; they now weigh the “quality of the experience” and the project’s “alignment with broader business objectives” just as heavily (PMI, 2023).

Despite the recognition of these competencies, many organisations still face challenges in achieving project success, often due to gaps in behavioral capabilities. Therefore, this study aims to explore these competencies through empirical analysis of job advertisements, contributing to a better understanding of the behavioral skills required in contemporary IT project management roles.

3. Proposed Research Methodology

3.1 Research Design

This study adopts a qualitative content analysis method to address the research question. It follows a structured qualitative approach to systematically examine job advertisements and identify behavioral competencies required of IT Project Managers. The study is currently in progress, with data collection and analysis being conducted iteratively.

Content analysis is a widely used and recommended method for analysing textual data, particularly when aiming to identify competencies associated with specific roles, as it enables the systematic reduction of large volumes of text into meaningful categories through structured coding (Stemler, 2000; Rios et al., 2020).

3.2 Data Collection

The data for this study is collected from job advertisements on LinkedIn, selected for its widespread use, accessibility, and detailed postings that outline required skills and competencies (Singla et al., 2023). Job advertisements provide real-time insight into employer expectations and reflect competencies valued in practice (De Cooman & Pepermans, 2012; Dineen & Williamson, 2012). Unlike surveys, they are independently created and free from respondent bias (Sodhi & Son, 2010; Pinho et al., 2019), supporting consistent and reliable analysis.

To ensure relevance and quality, the study applies predefined inclusion and exclusion criteria. The study includes English-language LinkedIn job advertisements sourced from eight countries (New Zealand, Australia, India, the United States, Canada, and the United Kingdom), identified using search terms such as “Project Manager,” “Project Management,” and “Agile,” with a focus on currently active postings, and covering junior, middle, and senior roles across both full-time and contract positions. Along with that, it excludes non-English postings, non-IT roles, advertisements with insufficient detail on skills and requirements, and roles that are not aligned with IT project management or behavioral competencies, such as purely technical positions or program management roles.

Figure 1 below outlines the proposed search procedure.

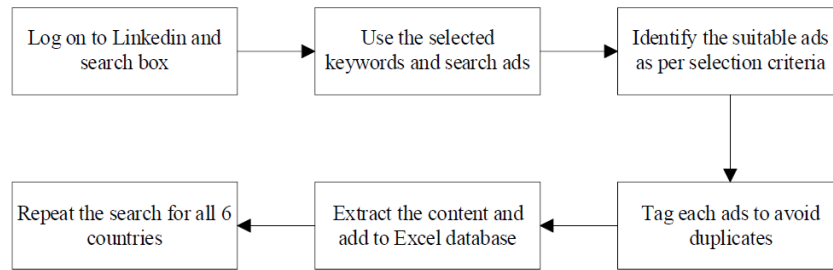


Figure 1: Job Advertisement Search Procedure

3.3 Data Analysis and Coding Process

The analysis of job advertisements follows a structured content analysis process designed to identify behavioral competencies and their patterns across different roles and contexts. Each job advertisement is examined in detail, with particular focus on sections such as *required skills*, *qualifications*, and *job responsibilities*. Relevant text is segmented into smaller units of meaning, which are then assigned descriptive codes representing behavioral competencies. (Krippendorff, 2018; Rios et al., 2020; Kleinheksel et al., 2020). These codes are developed through an iterative process and are grouped into sub-categories / categories and then themes based on similarities. Competencies that appear consistently across multiple job advertisements are considered indicative of essential competencies, as they reflect strong and repeated employer expectations. Appendix 1 provides a preliminary example of the coding for the theme Personal Competencies.

Following coding, the study will apply a frequency-based analysis to identify patterns in competency requirements. The results will be synthesised into a behavioral competency framework, which is intended to represent the key competencies required in Agile IT PM roles.

5. Conclusion

This study proposes to identify the essential behavioral competencies organizations seek in Agile IT PMs. This will be undertaken by examining the job advertisements for Agile IT PM roles. It also aims to develop a behavioral competency framework for Agile IT PMs.

The framework will help businesses organize hiring and development procedures, focusing on essential skills for successful completion of Agile projects. It also offers guidance for educational institutions and other researchers on modifying project management courses and subject matter to meet the current IT sector's expectations. Additionally, it can enable IT PMs to identify the areas of improvement and upskill themselves for smooth progress in their career.

Finally, the research contributes to the ongoing discourse on the rising role of Agile IT PMs by promoting the balanced requirements of strong behavioral competencies in addition to technical skills.

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Appendix 1: Preliminary Coding Schema Example

Theme	Category	Subcategory	Code	Units of meaning/keywords
Personal Competencies	Emotional Intelligence	Self-awareness	Emotional awareness	Ability to recognize and specify own feelings
			Self-confidence	Believing one's capability, competency, and self-esteem
			Seeking information	Continuous learning as required
		Self-regulation	Self-assessment	Knowing own weaknesses and strengths
			Trustworthiness	Upholding honesty and ethics in behavior
			Maintaining order	Assuring quality and accuracy
			Flexibility	Adaptable to changes
			Innovation	Creative and open with modern ideas, approaches
			Responsibility	Being conscious and responsible for own performance
			Production efficiency	Performing high-quality work quickly
			Decision quality	Decision-making based on principles and values
			Stress management	Handle adverse stressful issues and situations
	Problem-Solving	Cognitive skills	Analytical thinking	Breaking down problems and systematically diagnosing
			Conceptual thinking	Identifying and applying methodologies
			Language proficiency	Able to use foreign languages
		Motivation	Achievement drive	Striving for better performances
			Commitment	Alignment with goals of the organization
			Initiative	Doing things proactively and able to create opportunities
			Optimism	Achieving goals despite hurdles