

# Exploring the Influence of Leadership Styles on the Project Manager Competencies and Project Management Success

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DOI: <https://dx.doi.org/10.47772/IJRISS.2025.90300338>

Received: 14 January 2025; Accepted: 18 January 2025; Published: 19 April 2025

## ABSTRACT

Project management success is heavily influenced by the competencies of the project manager, which encompass leadership skills, communication skills, risk management and strategic decision making. These competencies are vital in navigating the complexities of modern projects, especially in industries such as construction, where time, cost, quality, and stakeholder satisfaction are the key success factors. The objective of this paper is to discuss the review in identifying how each leadership style contributes to project managers' competencies and project management success. Through comparative analysis, we will explore the unique impact of each leadership style on project managers' competencies and project outcomes, and draw meaningful conclusions about their influence on both project management competencies and overall project success. This paper was prepared through the methodology of a comprehensive literature review investigating the effects of various leadership styles, on project manager competence and project management success. Effective leadership is particularly significant in shaping these competencies, as it determines how project managers interact with their teams and stakeholders, manage possible risks and conflicts as well as facilitate project objectives. However, different leadership styles have varying impacts on a project manager's competencies. Each style emphasizes specific strengths that contribute to the development of essential skills like innovation, problem-solving, and ensuring organizational efficiency. By integrating findings from existing research, it investigates how different leadership styles impact key competencies in a project manager and how these, in turn, contribute to the overall success of projects. In conclusion, the valuable insights into how different leadership approaches can shape project management practices and offer guidance for optimizing leadership strategies in the field.

**Keywords:** Leadership Styles, Project Management Success, Project Manager Competency

## INTRODUCTION

As businesses continue to adapt to rapidly evolving markets and new challenges, the role of project management has expanded beyond its traditional scope. Project management, which once regarded as an administrative task has now become an essential factor that contributes to the success of an organization in the modern industries. For example, in the current construction field, projects have become larger and more complex, involving diverse stakeholder groups, tighter timelines, limited resources, and evolving demands, making effective project management essential. This has created a high demand for skilled project managers who can ensure that project objectives are met while managing various risks and uncertainties.

The competencies needed in a project manager are not limited to technical skills for executing project tasks and following project phases, but they must also be balanced with interpersonal skills. Sunindijo (2015) in his study confirmed that interpersonal skills have a positive influence on project quality performance. Soft skills like leadership, communication, and problem-solving are crucial for project managers as they enable effective engagement with stakeholders, conflict resolution, and team motivation. This is also consistent with Tahir

(2019) findings, which highlight that these skills enhance project managers' abilities to address challenges and effectively plan, execute, and manage projects.

Among other skills, leadership is one of the most significant factors in developing project manager competencies. Not only does it help project managers in navigating challenges, making critical decisions, and ensuring project success, but it also influences how they interact with teams, manage stakeholder expectations, and handle the uncertainties that are common in most projects. However, different leadership styles have varying effects on the development of project manager competencies and project outcomes. Each leadership style promotes distinct focuses and characteristics, which in turn affects how project managers develop and apply their competencies. Therefore, the aim of this literature review is to examine from the existing research on how various leadership approaches contribute to the competencies of the project managers and ultimately influence project success. By identifying these relationships, this review seeks to provide valuable insights that can guide future leadership development initiatives and improve project management practices.

## **Theoretical Review Framework**

In the study of project management, numerous literatures have explored the theoretical framework related to project management success, project manager competency, and leadership styles. This section of the literature review is organized into three key areas: what constitutes project management success, the competencies required of project managers, and the various leadership styles.

### **Project Management Success**

Project management success has historically been assessed through three primary constraints: time, cost, and quality, commonly referred to as the Iron Triangle or the Triple Constraint. This framework establishes the fundamental criteria for evaluating project management success—specifically, whether a project is completed on schedule, within budget, and meets predetermined quality standards (Venkataraman & Pinto, 2023) assert that if projects meeting these criteria, it can be deemed as successful. The Iron Triangle has remained a central concept in project management since its emergence in the 1970s, continuing to play a significant role in evaluating project outcomes (Pollack, et al., 2018). Moreover, Berssaneti and Carvalho (2015) have indicated that there is a correlation between project management maturity to the Iron Triangle and highlighted that its enduring relevance is due to its inherent simplicity.

However, the perspective on project management success has evolved over time. As noted by Ika (2015), the emphasis on the Iron Triangle has shifted since the late 20th century. While the original focus was on balancing time, cost, and quality, contemporary frameworks now incorporate additional dimensions, including client satisfaction, strategic objectives, and stakeholder engagement. The Project Management Institute (PMI) also emphasizes that project management success entails not only balancing these competing demands but includes addressing the diverse concerns and expectations of stakeholders (PMI, 2021). This holistic approach reflects the increasing importance of evaluating success through a broader lens, integrating both internal performance metrics and external stakeholder considerations.

Ali et al., (2021) also highlighted that customer satisfaction is also one of the important dimensions of project success aside from the Iron Triangle. Further enhancing this perspective, two more criteria in assessing project management success, which includes stakeholders' satisfaction and the realization of strategic objectives. Within this framework, project management success is conceptualized as multifaceted, encompassing not only project efficiency but also long-term impacts and benefits for both the organization and its stakeholders.

The evolution of the definition of project management success has led to the development of many sophisticated Key Performance Indicators (KPIs) for evaluating project outcomes. Traditionally, hard KPIs, such as time, cost, and quality, were the primary indicators used to assess the success of construction projects. They further added that these three elements remain essential as they reflect the efficient management of resources and adherence to project constraints, forming the backbone of the Iron Triangle in project management. However, as projects and industries evolved, soft KPIs, such as client satisfaction, stakeholder satisfaction, and safety, have emerged as crucial factors for measuring project management success. Research in the Saudi Arabian construction industry highlights that both hard KPIs (time, cost, and quality) and soft

KPIs (client and stakeholder satisfaction, safety, and sustainability) are significant indicators of successful project management (Hussain et al., 2024). The increasing importance of these factors reflects a shift towards a more stakeholder-centric understanding of project management success.

## Project Manager Competencies

The concept of competency is closely related to the role of a project manager, as it refers to an individual's underlying characteristics that directly influence performance in specific job roles or situations. Competencies are not just about what a person knows but also about how they apply their knowledge to perform tasks effectively. Boyatzis et al., (2019) further explains that competencies consist of a collection of behaviors tied to an underlying attribute, which drive effective job performance, and it requires both purposeful intention and corresponding actions. This broad understanding of competency is vital for project managers, as they need both technical expertise and the ability to lead teams through complex project phases (Norsyazwana, et al., 2024).

Project Management Institute (PMI, 2021) defines project manager competencies across three dimensions: knowledge, performance, and personal competence. Knowledge competence represents the depth of a manager's understanding of processes, methodologies, tools and techniques necessary for managing the activities and being assessed through successful completion of relevant credential assessments. While performance competence refers to what project managers can achieve through the practical application of their project management knowledge and individual skills. It is widely recognized that there is a causal relationship between a project manager's competence and project success, and then further defines personal competences as the behaviors, attitudes, cultural influences, and fundamental personality traits that contribute to an individual's ability to effectively manage the projects such as like communication, leadership, management, cognitive ability, effectiveness and professionalism. Table 1 show the project manager competencies.

To achieve a maximum level of competence, a project manager must demonstrate proficiency in all dimensions, striking a balance between technical knowledge, performance in applying that knowledge, and personal attributes that facilitate teamwork and effective communication (PMI, 2021). Competency in project management is essential for ensuring project management success. In the public sector, research by Irfan et al., (2021) confirms that project manager competencies significantly impact project success. The study found that competencies such as knowledge of project management processes, interpersonal skills, and relevant experience are crucial for achieving project goals. By focusing on these areas, public sector organizations can increase the likelihood of delivering successful projects while ensuring sustainable resource use.

In the construction industry, the role of competency is even more critical (Norsyazwana. et al., 2020). El Sawalhi and Lafy (2021) highlight the importance of project managers in large-scale construction projects, where their competencies directly affect employee performance and, consequently, project outcomes. Their research shows that construction project managers must possess a wide range of competencies, from technical skills to leadership, to ensure that projects are completed on time, within budget, and to the required quality standards, consequently achieving the project management success. The findings emphasize the strong link between a project manager's competencies and the overall success of a project.

Table 1 – Project Manager Competencies

Standard/F framework	Project Manager Competencies	
	Type of Competency	Unit of Competency
	People (10)	Self-reflection and Self-management, Personal Integrity and Reliability, Personal Communication, Relationships and Engagement, Leadership, Teamwork, Conflict and Crisis,

<b>ICB (4<sup>th</sup> Ed.)</b>		Resourcefulness, Negotiation, Result Orientation
	Practice (13)	Project Design, Requirements and Objectives, Scope, Time, Organization and Information, Quality, Finance, Resource, Procurement, Plan and Control, Risk and Opportunity, Stakeholders, Change and Transformation
	Personal (5)	Strategy, Governance, Structure and Processes, Compliance, Standard and Regulation, Power and Interest, Culture and Values
<b>PMCD (3<sup>rd</sup> Ed.)</b>	Performance (10)	Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communication Management, Project Risk Management, Project Procurement Management, Project Stakeholder Management
	Personal (6)	Communicating, Leading, Managing, Cognitive ability, Effectiveness, Professionalism

(Source: PMI, 2021)

## Leadership and its Styles

Leadership, defined as the process by which one individual influence others to achieve shared objectives, is a vital aspect of project management (Aga et al., 2016). It encompasses the ability to influence, motivate, and enable team members to contribute to organizational success (Qomariah et al., 2020). Effective leadership not only guides the team but also plays a critical role in the success of project management. Furthermore, Erasmus et al., (2016) stress that "leading" in project management means providing team support and encouragement, both of which are essential for aligning team efforts with project objectives and applicable to all field of professional including project management. Their study underscores that continuous support and encouragement from leaders enhance team performance and help achieve organizational goals. Similarly, Elmezain et al., (2021) assert that strong leadership skills are often more critical than technical skills when it comes to project management success.

Effective leadership is essential for project management success, emphasizing that competencies and leadership styles honed through experience greatly contribute to achieving successful project outcomes (Ahmed, 2018; Ghorbani, 2023). However, Shokory and Suradi (2018) argue that there is no single leadership style that fits all situations; effective leaders must adapt their approach based on project complexity, team member skills, and the specific phase of the project. Leadership style significantly impacts employee performance, as effective leaders can enhance their team's productivity by maintaining a style that resonates well with employees (Qomariah et al., 2020).

Given the importance of these leadership dynamics in project management, it is essential to examine specific leadership styles that can effectively guide teams toward achieving project objectives. Therefore, this literature will explore four leadership styles particularly relevant in this context: (i) Transformational Leadership, (ii) Transactional Leadership, (iii) Servant Leadership, and (iv) Democratic Leadership. Transformational leadership is characterized by leaders who inspire and motivate their followers through a compelling vision and



intellectual stimulation (McKleskey, 2014). As Humala (2017) articulates, transformational leaders focus on nurturing the individual needs and personal growth of their team members, thereby creating an environment that encourages creativity and innovation. This leadership style empowers followers to challenge themselves to exceed their potential and fosters a culture of collaboration (Larsson et al., 2015; Asree et al., 2019).

In contrast, transactional leadership emphasizes a more structured approach to management. According to Ramdas et al. (2024), transactional leaders concentrate on defining role expectations, establishing performance objectives, and administering rewards or penalties based on the performance of individuals or teams. They prioritize a contingent rewards-based system and utilize both active and passive management- by-exception strategies to ensure accountability (Müller & Turner, 2010). This approach ensures that team members are held accountable for their contributions and provides a clear framework for achieving objectives, making it particularly effective in environments where compliance and efficiency are paramount (Asree et al., 2019).

Servant leadership takes a different perspective, proposing that a leader's primary responsibility is to serve their followers. Ramdas et al. (2024) describe servant leaders as individuals who prioritize the growth and well-being of their followers, creating a supportive environment that fosters teamwork and ethical decision-making. This approach is rooted in humility and a genuine desire to address the needs of others, cultivating a culture of trust and collaboration, which can lead to enhanced team performance and morale (Udin et al., 2024). Lastly, the democratic leadership style, as discussed by Sarwar et al., (2022), involves a participatory approach where leaders and followers share decision-making responsibilities. This style promotes social equality and encourages active participation from team members, allowing diverse perspectives to be considered in the decision-making process. By fostering an inclusive environment, democratic leaders enhance team unity and commitment, leading to stronger alignment with shared project goals (Amanchukwu et al., 2015).

### **The Role of Leadership Styles in Shaping Project Manager Competencies and Enhancing Project Management Success**

As mentioned earlier, effective leadership is vital in project management, significantly influencing both team dynamics and the competencies of project managers. This part explore how various leadership styles—such as transformational, transactional, servant and democratic—characteristics essential for successful project management. By analyzing these leadership traits, we can understand their effects on team motivation, communication, and the overall project environment, setting the stage for a deeper discussion on their impact on project manager competencies. Following this, we will examine how different leadership styles affect project manager competencies and effectiveness. By understanding this relationship, it will help us to recognize the implications of leadership styles on project management success, highlighting the connection between effective leadership, enhanced competencies, and successful project outcomes.

### **Transformational Leadership**

According to McCleskey (2014), transformational leaders communicate the value and importance of desired outcomes, guiding their followers toward achieving those objectives. This leadership style influences the behavior of group members to fulfill shared purposes and emphasizes team effort, participation, and collaboration (Asree et al., 2019). Larsson et al. (2015) also assert that transformational leadership stimulates subordinates to surpass their own capabilities, incorporating intellectual motivation to inspire innovative approaches in completing a task. This is further supported by Fahlevi et al. (2022), who assert that transformational leaders empower their followers by focusing on their individual needs and personal development, fostering innovative problem-solving. In the context of the construction industry, transformational leadership has been shown to enhance safety performance, illustrating how effective leadership behaviors can lead to positive outcomes (Skeppers & Mbohwa, 2015). Additionally, Aga et al., (2016) in exploring transformational leadership found that there is a positive correlation between a project performance and the transformational leadership style exhibited by project managers.

The characteristics of transformational leadership notably influence the competencies of project managers. For instance, Aga et al., (2016) demonstrate that transformational leaders cultivate a motivated team environment and inspire team members to work towards a common goal of project success, resulting in projects that are

both efficient and effective, leading to heightened satisfaction among stakeholders. The ability to inspire and motivate team members fosters enhanced communication skills and team management capabilities which are an essential part in developing project manager personal competencies. This also has been highlighted by Ceri-Booms et al., (2017) that transformational leaders inspire followers to attain objectives by enhancing their awareness, motivating them, as well as reshaping their self-worth and beliefs which align with the development of crucial competency in project manager. Furthermore, Larsson et al. (2015) added that project manager that apply the transformational leadership encourages the team to adopt creative problem-solving and decision-making skills. This characteristic of transformational leadership promotes intellectual stimulation and allows project managers and his subordinates to explore innovative solutions to methods, procedures and challenges that arise during project execution, therefore sharpening the project manager's competencies (Mohd Saidin et al., 2024).

The impact of transformational leadership is profound, extending beyond individual competencies to overall project management success. A critical lens for this evaluation is the Iron Triangle framework, which assets success through time, cost, and quality (Hussain et al., 2024). According to Maqbool et al. (2017), transformational leaders significantly improve performance and are more likely to achieve project success compared to those who do not exhibit these leadership qualities. This has been strengthened by the finding of Sunindijo (2015) where he noted that transformational leadership had a more significant positive effect on project quality than other leadership styles. Transformational leaders are also proven to be able to enhance customer satisfaction (Afriyie et al., 2019; Ana, 2014). Meanwhile, Aga et al., (2016) found that transformational leadership not only motivates team members but also leads to increased stakeholder satisfaction and efficient project delivery. As Bayiley and Teklu (2016) explain, project efficiency is reflected in the effective transformation of resources into desired results, meeting key criteria of quality, cost, and timeliness.

Ramdas et al., (2024) and Aga et al., (2016) reveal that transformational leadership boosts project success by enhancing these performance indicators, improving stakeholder satisfaction, and ensuring the project aligns with organizational goals. In sectors where safety and compliance are paramount, transformational leadership plays an even more critical role. Skeepers and Mbohwa (2015) illustrate how this leadership style significantly contributes to safety adherence and performance, essential to achieving project objectives, especially in high-stakes environments like construction. Martinez-Corcoles and Stephanou (2017) also concluded that active transactional leadership has a positive influence on few performances namely safety compliance and safety participation. Hundie and Habtewold (2024) add that transformational leadership fosters a quality work environment, increasing job satisfaction and enhancing employee performance, both of which are essential for delivering successful project outcomes.

## **Transactional Leadership**

Transactional leadership, as described by Ramdas et al., (2024), is characterized by its focus on contingent rewards and active management by exception. Leaders employing this style set clear goals and expectations, providing rewards for meeting these objectives while addressing any errors or shortcomings in performance. Transactional leaders create a structured environment where team members understand what is required to succeed, which can facilitate immediate task completion (Asree et al., 2019). However, its effectiveness may diminish in contexts that require flexibility and innovation, as this style relies heavily on external motivation (Ramdas et al., 2024).

Transactional leadership plays a significant role in shaping the competencies of project managers. This leadership style emphasizes clear communication, structure, and adherence to established protocols, making it an effective approach in various project environments (Asree et al., 2019; Ramdas et al., 2024). By clearly defining project objectives, transactional leaders enhance team members' focus and commitment to these goals (Asree et al., 2019). This clarity can boost motivation and performance, although it may not develop internal drive as effectively as transformational leadership. Ajayi (2020) also added that transactional leaders' focus on overseeing tasks can enhance project managers' skills in accountability and detailed performance monitoring.

Transactional leadership is particularly beneficial in environments or situations where adherence to protocols is

crucial. For instance, in healthcare settings, transactional leadership facilitates compliance with established procedures, which is paramount for achieving organizational goals (Ramdas et al., 2024). The structured nature of this leadership style supports project managers in navigating complex organizational structures and managing relationships within the project context (Tyssen et al., 2014). Meanwhile, the performance competence of a project manager can also be enhanced as Ajayi (2020) highlights that transactional leadership is more effective in crisis and emergencies situations because of its attentiveness to finding faults and deviations. This makes transactional leaders excel in problem-solving and adaptability.

Transactional leadership can significantly impact the dimensions of project management success by providing a clear framework for project execution (Asree et al., 2019). By setting a detail performance standards and offering rewards for meeting these standards, transactional leaders can ensure that projects are completed on time and within budget as it encourages the project team members to carry out and build up their efforts further than just typical anticipations and expectations (Bonkougou & Raisinghani, 2022). Transactional leaders, who focus on motivating people to meet expectations and follow rules, also ensure that standard quality is maintained (Ramdas et al., 2024). Their tendency to encourage stability and maintain the status quo, can help create a stable project environment, thereby contributing to project management success (Ajayi, 2020).

While transactional leadership is effective in achieving short-term goals and meeting project constraints, it is essential to recognize its limitations regarding long-term success and innovation. Ramdas et al., (2024) assert that transactional leaders may fail to promote creativity and adaptability, which are crucial for ensuring long-term project success. Therefore, while transactional leadership can drive immediate project outcomes, the integration of transformational leadership elements may be necessary to cultivate a culture of innovation and long-term success (Ramdas et al., 2024).

## **Servant Leadership**

Servant leadership is known for its deep commitment to the growth and well-being of followers. Leaders who apply this style prioritize the needs of their team members, exhibiting traits such as empathy, humility, and a dedication to serving others (Ramdas et al., 2024). Liden et al., (2015) and Udin (2024) highlight that servant leaders focus and committed on promoting success for their employees, placing their needs first in all aspects of leadership. By understanding the needs and challenges faced by employees, it will allow servant leaders to invest time and energy in fulfilling these needs, which then will help employees to realize their full potential (DiSegni et al., 2015). The attribute of servant leadership is that the leaders will assist followers in their growth and learning by creating opportunities for them (Darvishmotevali and Altinay, 2022; Siddiquei et al., 2021).

Servant leadership significantly enhances project manager competencies by fostering an environment that prioritizes collaboration, trust, and individual development (Udin et al., 2024). The literature further emphasizes that servant leaders are dedicated to the growth and development of their employees. By investing in their personal and professional growth, servant leaders not only enhance employee commitment and job satisfaction but also lead to improved performance outcomes.

The trust built by servant leaders is also crucial for enhancing team dynamics and ensuring effective communication within project teams (Udin, 2024). The literature further explained that trust is an essential key factor in employee performance because it creates a positive work environment and a willingness to take risks and innovate. This trust also fosters a culture of accountability and teamwork, as highlighted by Ramdas et al. (2024), where servant leaders create an environment conducive to the essential competencies required for project managers to achieve successful project execution.

The supportive and collaborative environment fostered by servant leaders can lead to the enhancement of project outcomes. Moreover, the investment that servant leaders make in their employees' development enhances not only immediate project performance but also long-term organizational success and sustainability (Udin et al., 2024). Udin et al., (2024) further added that the trust and integrity cultivated by servant leaders create a positive work environment that encourages innovation and risk-taking, both of which are vital for successful project management. Not only that, according to Febrian (2024) and Lee & Shin (2018), enhanced employee satisfaction leads to higher client satisfaction, as employees are more likely to deliver quality

service, fostering client retention and positive referrals.

## Democratic Leadership

Democratic leadership is a type of leadership where highlights shared decision-making and team engagement to foster creativity and collaboration. As Amanchukwu et al., (2015) note, while democratic leaders ultimately make the final decisions, they actively involve team members in the decision-making process, which encourages creativity and enhances engagement. Sarwar et al., (2022) describe democratic leadership as a shared effort where the leader and followers contribute equally, highlighting social equality and the promotion of followers' interests.

Democratic leaders enhance competencies of project managers by encouraging active participation and collaboration. The shared decision-making process promotes skills such as emotional intelligence, adaptability, and effective communication (Amanchukwu et al., 2015; Bolarinwa et al., 2023). When team members feel valued, they are more engaged, leading to a work environment where project managers can continuously develop soft skills crucial for successful management. Democratic leadership also cultivates an environment conducive to learning and skill development. According to Rifaldi et al., (2019) and Amanchukwu et al., (2015), the democratic leadership style significantly impacts employee performance, suggesting that project managers benefit from exposure to diverse perspectives and expertise within their teams. This collaborative environment encourages project managers to stay updated with industry best practices and help to create a better organizational performance (Bolarinwa et al., 2023; Otieno et al., 2015; Amanchukwu et al., 2015). In addition, democratic leaders positively impact communication management within an organization by consulting their staff and incorporating their ideas into decision- making (Allafchi, 2017).

Democratic leadership is widely recognized for its positive impact on stakeholder engagement and satisfaction. As Otieno et al., (2015) indicate, the democratic style is one of the most effective approaches for enhancing organizational performance, largely due to its focus on employee involvement and empowerment. By inviting input from team members and other stakeholders, democratic leaders foster a sense of ownership and connection to project outcomes, which lead to higher motivation and satisfaction across the board (Amanchukwu et al., 2015). The inclusive nature of democratic leadership also creates a collaborative environment that supports team adaptability and innovation, enabling project teams to address emerging challenges effectively. Miloloža (2018) highlights that organizations adopting a democratic leadership style tend to perform better financially, especially those in dynamic environments, due to the style's promotion of creativity and openness to new ideas.

While democratic leadership can enhance employee satisfaction, productivity and organizational efficiency (Bolarinwa et al., 2023), it may also present challenges. For instance, Amanchukwu et al. (2015) points out that this style may struggle in situations requiring faster decision- making, such as in situations of crisis and emergency, where gathering team input can be time-consuming. Nonetheless, when team members possess expertise and expect to be treated as contributors, a democratic approach often yields the best results.

## METHODOLOGY

This literature review investigates the effects of various leadership styles namely, Transformational, Transactional, Servant, and Democratic, on project manager competencies and project management success. Understanding this relationship is crucial, as each leadership style cultivates specific skills in project managers that can significantly influence project outcomes. The objective of this review is to gather and summarize existing research on how these leadership styles impact competencies and project management success.

In carrying out this review, multiple academic databases were used to explore diverse range of peer- reviewed articles, conference papers, and credible literature related to project management and leadership such as Google Scholar, Scopus, Science Direct and Springer Link. The primary search terms included "Leadership Styles," "Project Manager Competencies," "Project Success," and "Project Management Success," along with specific terms for each leadership style, such as "Transformational Leadership," "Transactional Leadership," "Servant Leadership," and "Democratic Leadership." Articles published between 2014 and 2024 were



prioritized during the search to ensure that the review reflects current research. However, some foundational articles and important works published prior to 2014 were also incorporated to provide a solid theoretical framework while the studies that did not directly address and relate to these topics were excluded.

To ensure the inclusion of high-quality and relevant studies, this study applies a systematic selection process. Initially, there were more than 70 articles that were found through the academic database search. They were then screened via their titles and abstract to assess their alignment with the main themes of the review. Those that passed this initial screening were then reviewed in full to verify their relevance. Each selected study was evaluated for quality based on criteria such as research methodology and clarity of findings, prioritizing studies that demonstrated strong reliability and relevance. In the end, a total of 32 articles were found to fulfill the criteria required. This literature review extracted key information from each selected study, focusing on the criteria for different leadership styles, the project manager competencies they influence, as well as the indicators of project success that they affect.

Through a comparative analysis, we will explore the unique effects of each leadership style on project manager competencies and project outcomes, drawing meaningful conclusions about their influence on both competencies and overall project management success. The findings will provide valuable insights into how different leadership approaches can shape project management practices and offer guidance for optimizing leadership strategies in the field.

## Analysis

This literature review explores the various influences of four leadership styles namely, transformational, transactional, servant and democratic, on project manager competencies and project management success based on 32 studies. The review is organized into two sections to provide a detailed synthesis of the findings on the topic.

The first section examined the relationship between project manager competencies and each leadership style. In this analysis, PMI's (PMI, 2021), categorizes competencies into three types: personal, performance, and knowledge. We categorized the identified influences of leadership styles based on these competencies. However, for the purposes of this analysis, we focus exclusively on personal and performance competencies. This is because, as outlined in the framework, knowledge competencies are primarily determined by the successful completion of relevant credential assessments. Subsequently, each leadership style is evaluated based on its alignment with personal and performance competencies. A competency fulfillment score is used to assess the degree to which each leadership style meets the requirements of these competencies. By comparing how each leadership style fulfills personal and performance competencies, we aim to identify how each leadership style contributes to fulfilling these competencies and provide a comparative overview of how these leadership approaches support the effective management of projects.

In the second part of the analysis, we will delve into the relationship between various leadership styles and their influence on project success, aiming to provide a comprehensive understanding of how each style contributes to successful project outcomes. Project success will be evaluated using the Iron Triangle (time, cost, quality), complemented by the three most relevant soft KPIs—client satisfaction, stakeholder satisfaction, and quality considerations—which were identified through a review of 32 studies for the purpose of discussing the influence of leadership styles. The identified influences were categorized accordingly to present a clear view of the project success factors that each leadership style addresses. The data then was assessed using a fulfillment scoring system to quantify how effectively each leadership style meets the defined success criteria, allowing for an objective comparison of their impacts and clarifying which leadership approaches are most effective in achieving a balanced measure of project success.

## Leadership Styles and Project Manager Competencies

Through a comprehensive review of various literatures and studies, we carefully extracted and identified the influences of each leadership style. These influences were then systematically categorized into two primary competency areas: personal and performance competencies, as illustrated in Table 2. The categorization was

based on the specific attributes associated with each type of competency, allowing for a clear distinction between the different types of skills and behaviors that are impacted by each leadership style.

Under the PMCD Framework (2017), there are six distinct units within the personal competency category, while the performance competency category consists of ten units. To further enhance the analysis, we developed a checklist to assess the degree to which each of these units is fulfilled by the identified impacts of the leadership styles.

Table 2 - Influences of Leadership Styles on Personal and Performance Competencies

Leadership Styles	Influence on Project Manager Competencies	Sources in Literature
Transformational	<b>Personal</b> <ul style="list-style-type: none"> <li>- Enhances communication</li> <li>- Enhances team management skills</li> <li>- Improves conflict management</li> <li>- Promotes continuous learning and strategic thinking among the team members</li> <li>- Improves team leadership</li> <li>- Inspires followers to attain objectives by motivating them</li> <li>- Encourages team to foster innovation, creative problem-solving and decision-making skills</li> <li>- Improves emotional intelligence</li> <li>- Fostering innovative problem solving</li> </ul>	Aga et al., 2016; McCleskey, 2014; Asree et al., 2019; Larsson et al., 2015; Ceri-Booms et al., 2017
	<b>Performance</b> <ul style="list-style-type: none"> <li>- Enhances safety adherence</li> <li>- Enhances stakeholder management</li> <li>- Stimulates strategic thinking</li> </ul>	Skeepers & Mbohwa, 2015; Larsson et al., 2015; Fahlevi et al., 2022; Aga et al., 2016
Transactional	<b>Personal</b> <ul style="list-style-type: none"> <li>- Enhances communicating skills</li> <li>- Assists in navigating complex organizational structures</li> <li>- Managing relationships with stakeholders of the project</li> <li>- Enhances team members' focus and commitment to the project goals</li> <li>- Encourages the project team members to carry</li> </ul>	Asree et al., 2019; Ramdas et al., 2024; Bonkounou & Raisinghani, 2022; Ajayi, 2020

	<p>out and build up their efforts further than just typical anticipations and expectations</p> <ul style="list-style-type: none"> <li>- Enhances accountability</li> </ul>	
	<p>Performance</p> <ul style="list-style-type: none"> <li>- Focuses on task completion and uses clear structure</li> <li>- Prioritizes performance monitoring</li> <li>- Adherences to established protocols and rules</li> <li>- Prioritizes performance monitoring</li> <li>- Positive influence on safety compliance and safety participation</li> <li>- Manage relationships with stakeholders of the project</li> <li>- Positive influence on safety compliance and safety participation</li> <li>- Promotes cost control</li> </ul>	<p>Asree et al., 2019; Ramdas et al., 2024; Ajayi, 2020; Tyssen et al., 2014; Martinez-Corcoles &amp; Stephanou, 2017</p>
Servant	<p>Personal</p> <ul style="list-style-type: none"> <li>- Builds trust and empathy</li> </ul>	<p>Udin et al., 2024; Ramdas et al., 2024; Udin, 2024; Al-Smadi et al., 2024; DiSegni et al., 2015</p>
	<ul style="list-style-type: none"> <li>- Ensure effective communication within project team</li> <li>- Enhances conflict management competencies</li> <li>- Supports sustainable organizational success</li> <li>- Fosters a culture of innovation through individual empowerment</li> <li>- Enhances leadership</li> <li>- Fosters team collaboration</li> <li>- Fosters decision-making</li> </ul>	
	<p>Performance</p> <ul style="list-style-type: none"> <li>- Lead to improved quality outcomes</li> <li>- Strengthens relationship with stakeholders</li> <li>- Fosters risk-taking</li> </ul>	<p>Ramdas et al., 2024; DiSegni et al., 2015; Udin et al., 2024</p>

Democratic	<b>Personal</b> <ul style="list-style-type: none"> <li>- Lead to higher motivation and satisfaction within the team</li> <li>- Ensure effective communication and interpersonal skills</li> <li>- Promotes emotional intelligence</li> <li>- Include stakeholders' opinion in decision making</li> <li>- Leads to higher employees' efficiency</li> </ul>	Amanchukwu et al., 2015; Ajayi, 2020; Bolarinwa et al., 2023;
	<b>Performance</b> <ul style="list-style-type: none"> <li>- Improve organizational and employees' job performance</li> <li>- Increase productivity of the project</li> <li>- Enhancement of stakeholder management</li> <li>- Facilitates cost control</li> <li>- Improves communication management</li> </ul>	Amanchukwu et al., 2015; Otieno et al., 2015; Rifaldi et al., 2019; Goleman et al., 2013; Miloloža, 2018; Allafchi, 2017; Bolarinwa et al., 2023

This checklist, presented in Table 3, provides a detailed overview of which units are addressed by each leadership style, offering a clearer understanding of their strengths and areas for development.

Table 3 - Checklist of Competency Units Fulfilled by Leadership Styles

Leadership Styles	Dimension of Project Manager Competencies															
	Performance										Personal					
	Integration	Scope	Time	Cost	Quality	Human Resource	Communications	Risk	Procurement	Stakeholders	Communicating	Leading	Managing	Cognitive Ability	Effectiveness	Professionalism
Transformational	/				/			/		/	/	/	/	/	/	
Transactional	/	/	/	/	/			/		/	/	/	/			
Servant					/			/		/	/	/	/	/		/
Democratic				/	/		/			/	/			/	/	

### Competency Fulfillment Score in Leadership Styles

The comparison of leadership styles based on their ability to fulfill personal and performance competencies reveals significant strengths and weaknesses in each approach. Transformational leadership stands out for its strong focus on personal competencies, excelling in areas such as team management skills, team motivation, and conflict resolution (Aga et al., 2016; Ceri-Booms et al., 2017; Larsson et al., 2015). This indicates its



effectiveness in developing leaders who can communicate, manage, and think strategically.

However, it shows a moderate fulfillment of performance competencies, indicating that it may need supplementary approaches when it comes to more structured, results-oriented tasks as transformational leaders is required to spend extra time and effort considering how to effectively persuade their followers (Lin et al., 2018). On the other hand, transactional leadership excels in performance competencies such as meeting deadlines and adhering to project scopes. However, it often falls short in developing personal competencies, particularly in fostering employee growth and creativity (Ajayi, 2020). To overcome this, transactional leaders could incorporate more focus on individualized development and innovation, beyond just reward-based motivation (Wahyudi, 2024; Saleh et al., 2018).

In this analysis, the effectiveness of different leadership styles in fulfilling key project management competencies is assessed by using Competency Fulfillment Score. It will demonstrate to what extent each leadership style (Transformational, Transactional, Servant, and Democratic) aligns with and supports the development of the necessary competencies for successful project management. This is done by calculating the percentage of competencies fulfilled in both categories (personal and performance) for each leadership style in which the result can be found in Figure 1. The Competency Fulfillment Score is calculated using the formula:

$$\text{Competency Fulfillment Score} = \left( \frac{\text{Number of Competencies Fulfilled}}{\text{Total Number of Competencies}} \right) \times 100$$

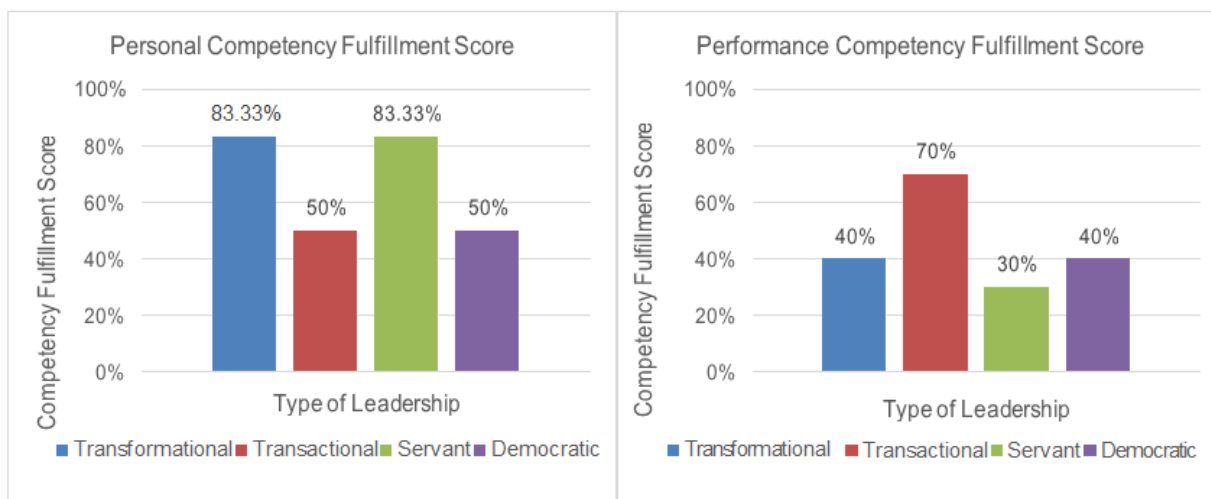


Figure 1 - Comparison of Leadership Styles in Influencing Personal and Performance Competencies

Servant leadership follows a similar pattern, excelling in personal competencies but underperforming in performance competencies. This makes it well-suited for team development but less effective in meeting strict project goals due to the time investment required to build strong relationships. Servant leaders could improve by adopting more structured strategies for achieving time-sensitive project objectives without sacrificing the personal development focus (Disegni et al., 2015). Balancing the needs of individual followers with organizational goals remains a significant challenge for servant leaders, and improving this balance would enhance their overall effectiveness (Sinek, 2014). Finally, democratic leadership shows a balanced, yet moderate, fulfillment of both personal and performance competencies. They can lack the decisiveness needed in more structured or high-pressure environments. Democratic leaders could work on enhancing their ability to make quick decisions in critical situations without losing the collaborative aspect that defines their leadership style (Amanchukwu et al., 2015).

## Leadership Styles and Project Management Success

This study systematically examines the influence of various leadership styles on project management success, drawing insights from an extensive review of relevant literature. The impact of each leadership style was analysed across six key project management success factors: time, cost, quality, client satisfaction, stakeholder

satisfaction, and safety considerations, as outlined in Table 4. By categorizing the leadership styles' effects within these success factors, we aim to provide a clear understanding of how different leadership approaches contribute to achieving project goals across these critical dimensions.

Table 4: Leadership Styles and Their Impact on Project Success Dimensions

Leadership Styles	Positive Influence on Project Management Success						Sources
	Time	Cost	Quality	Soft KPI			
				Client Satisfaction	Stakeholder Satisfaction	Safety Consideration	
Transformational			/	/	/	/	Aga et al., 2016; Bayiley & Teklu, 2016; Maqbool et al., 2017; Ramdas et al., 2024; Skeepers & Mbohwa, 2015; Sunindijo, 2015; Afriyie et al.,2019; Ana, 2014
Transactional	/	/	/		/	/	Ramdas et al., 2024; Ajayi, 2020; Asree et al., 2019; Bonkougou & Raisinghani, 2022; Ajayi, 2020; Martinez-Corcoles & Stephanou, 2017
Servant			/	/	/		Barbuto & Hayden, 2011; Udin et al., 2024; Al-Smadi et al., 2024; Udin, 2024;Febrian, 2024; Lee & Shin, 2018
Democratic		/	/		/		Amanchukwu et al., 015; Otieno et al., 2015; Miloloža, 2018

### Project Management Success Fulfillment Scoring by Leadership Style

In order to systematically assess the influence of different leadership styles on project management success, this study will use Project Management Success Fulfillment Score in Leadership Styles to evaluate how each leadership style contributes to fulfilling the key factors of project success. By assigning percentage scores, we can identify which leadership styles are most impactful in achieving project management success, offering valuable insights for choosing the most suitable leadership approach in various project scenarios. The result can be found in Figure 2.

Transformational leadership significantly impacts quality, client satisfaction, stakeholder satisfaction, and safety. This style thrives in environments where innovation, trust, and long-term relationships are prioritized. Transformational leaders inspire and motivate teams to foster creativity, collaboration, and personal growth, leading to higher engagement and better-quality outcomes. However, while it excels in the softer aspects of project management success, transformational leadership can struggle with time and cost management, potentially resulting in scope creep and budget overruns when innovation leads to delays or unforeseen expenses (Bonkougou & Raisinghani, 2022). It is most effective in projects that require adaptability and innovation, such as in research and development or technology-driven initiatives. In contrast, transactional leadership strongly influences time, cost, quality, stakeholder satisfaction, and safety by emphasizing task completion, adherence to rules, and meeting measurable goals. This leadership style is highly effective in structured, outcome-focused environments with clear expectations, ensuring projects meet core success factors. However, its focus on compliance can limit flexibility, making it less suited for environments that require adaptability or quick responses to unforeseen challenges (Ajayi, 2020; Sudha et al., 2016).

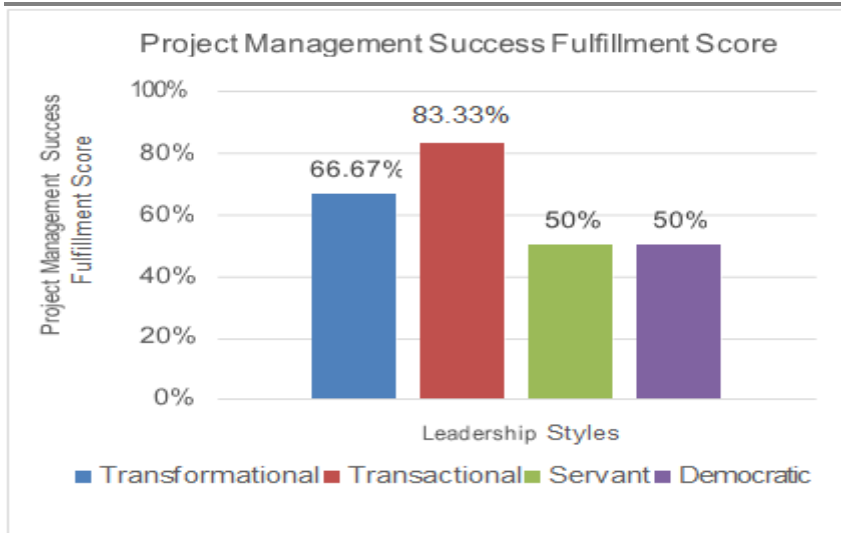


Figure 2- Comparison of Leadership Styles in Influencing Personal and Performance Competencies

Servant leadership shines in its ability to foster client satisfaction, stakeholder satisfaction, and quality considerations. By putting the needs of the team and stakeholders first, servant leaders create a culture of trust and collaboration. This leadership style leads to high morale and strong interpersonal relationships, which positively influence project outcomes. However, the focus on team empowerment may slow decision-making and extend project timelines, especially in crisis situations where quick action is needed (Disegni et al., 2015; Udin et al., 2024). Servant leadership works best for long-term projects focused on sustainable outcomes and team cohesion. Democratic leadership positively influences cost, quality, and stakeholder satisfaction by promoting collaboration, consensus, and active involvement from both team members and stakeholders. This style is especially useful in projects where stakeholder input is essential, such as large-scale infrastructure or public sector projects. However, it can slow down decision-making, particularly in fast-paced environments that require quick responses (Amanchukwu et al., 2015).

### Balance Leadership Approach

While each leadership style offers unique strengths, a combination of these types of leaderships can offer a well-rounded and balanced approach that maximizes both short-term project efficiency and long-term innovation as there is no one leadership style that fits all conditions and situations (Shokory & Suradi, 2018). For example, in fast-paced or high-pressure projects, transformational leaders could benefit from combining their inspirational approach with transactional leadership elements, especially in decision-making scenarios that require immediate attention to cost, time, and resource management. While in dynamic or complex projects, transactional leaders should allow for flexibility and innovation, empowering team members to explore creative solutions without compromising on deadlines or quality.

## CONCLUSION

In conclusion, leadership styles have a significant and multifaceted influence on both project manager competencies and project management success. Transformational leadership enhances behavioural competencies such as emotional intelligence, creativity, and team leadership, driving innovation and long-term success. Transactional leadership, with its focus on clear goals, structure, and accountability, strengthens the performance competencies, ensuring projects stay on track and meet deadlines and budgets. Servant leadership, by fostering trust, prioritizing the well-being of the team, and encouraging collaboration, plays a significant role in enhancing stakeholder satisfaction and ensuring the quality of project outcomes. This leadership style's focus on empathy and support promotes a sustainable approach to project management success, particularly in fostering long-term relationships and achieving the project's broader objectives. Democratic leadership, with its emphasis on shared decision-making and team involvement, enhances problem-solving and engagement, which are crucial for high-performing teams and positive stakeholder relationships.

When these leadership styles are integrated, they form a comprehensive framework for developing the necessary competencies to navigate the complexities of modern projects. In practice, a hybrid approach that blends elements of transformational, transactional, servant, and democratic leadership offers flexibility and adaptability for project managers to face diverse challenges. In industries such as construction, technology, and healthcare, where projects often require both innovation and strict adherence to timelines and budgets, applying a tailored leadership approach can be the difference between a project's success or failure. Ultimately, leadership is the cornerstone of both effective project execution and the ongoing development of project managers, creating an environment where efficiency, innovation, and success can thrive.

## REFERENCES

1. Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. *International Journal of Project Management*, 34(5), 806–818.
2. Ahmed, R. (2018). Leadership competencies affecting projects in organizations. *Organizational culture* (pp.1–22). INTECH Open Limited.
3. Ajayi, S. (2020). The impact of leadership styles on employee productivity in Nigerian oil & gas industry: A case study of Nigeria LNG Limited. SSRN.
4. Ali, H., Chuanmin, S., Ahmed, M., Mahmood, A., Khayyam, M., & Tikhomirova, A. (2021). Transformational Leadership and Project Success: Serial Mediation of Team-Building and Teamwork. *Frontiers in Psychology*, 12, 689311, 1-11.
5. Allafchi, N. (2017). Effect of democratic leadership style on management of communication with customers in Melli Banks of Hamedan. *International Journal of Cultural and Social Studies*, 3(1), 168–179.
6. Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management*, 5(1), 10–17.
7. Asree, S., Cherikh, M., & Baucum, C. (2019). A review of leadership styles that affect project success. *International Journal of the Academic Business World*, 13(1), 36–47. 7.
8. Barbuto, J. E., Jr., & Hayden, R. W. (2011). Testing relationships between servant leadership dimensions and leader-member exchange (LMX). *Journal of Leadership Education*, 10(2), 22–37.
9. Berssaneti, F. T., & Carvalho, M. M. (2015). Identification of variables that impact project success in Brazilian companies. *International Journal of Project Management*, 33(3), 638–649.
10. Berssaneti, F. T., & Carvalho, M. M. (2015). Identification of variables that impact project success in Brazilian companies. *International Journal of Project Management*, 33(3), 638–649.
11. Bolarinwa, K. K., Ajayi, I. S., Adenuga, O., & Obayelu, A. E. (2023). Leadership styles and employees' job performance at Forestry Research Institute of Nigeria. *Journal of Agricultural Extension*, 27(2), 38–46.
12. Bonkougou, W., & Raisinghani, M. S. (2022). A study of the impact of different styles of leadership on project quality performance: An empirical analysis. *International Journal of Information Technology Project Management*, 13(1), 1-14.
13. Boyatzis, R. E., Goleman, D., Gerli, F. & Cortellazzo, L. (2019). Emotional and Social Intelligence Competencies and the Intentional Change Process, in *Cognitive Readiness in Project Teams*.
14. Ceri-Booms, M., Curşeu, P. L., & Oerlemans, L. A. (2017). Task and person-focused leadership behaviors and team performance: A meta-analysis. *Human Resource Management Review*, 27(1), 178–192.
15. Darvishmotevali, M., & Altinay, L. (2022). Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. *Tourism Management*, 88, Article 104401.
16. DiSegni, D. M., Moshe, H., & Akron, S. (2015). Corporate social responsibility, environmental leadership and financial performance. *Social Responsibility Journal*, 11(1), 131–148.
17. El Sawalhi, N., & Lafy, R. (2021). The relationship between project management managers' competencies and employees' performance of the construction industry at Gaza Strip. *International Journal of Sustainable Construction Engineering and Technology*, 12(2), 38–52.
18. Elmezain, M., Baduruzzaman, W. H. W., & Khoiry, M. A. (2021). The impact of project manager's skills and age on project success. *Brazilian Journal of Operations & Production Management*, 18(4), 1-16.



19. Erasmus, W., Joseph, N., & Marnewick, C. (2016, May). Competencies of IT project managers: A South African perspective. Paper presented at the International Conference for Management of Technology. 408-429.
20. Fahlevi, M., Aljuaid, M., & Saniuk, S. (2022). Leadership style and hospital performance: Empirical evidence from Indonesia. *Frontiers in Psychology*, 13, 911640.
21. Febrian, W. D. (2024). The effectiveness of delegation leadership and servant leadership in law firms. *Dian Nusantara International Journal of Management and Strategy*, 5(4), 830-836.
22. Ghorbani, A. (2023). A review of successful construction project managers' competencies and leadership profile. *Journal of Rehabilitation in Civil Engineering*, 11(1), 76–95.
23. Hundie, Z. A., & Habtewold, E. M. (2024). The effect of transformational, transactional, and laissez-faire leadership styles on employees' level of performance: The case of hospitals in Oromia Region, Ethiopia. *Journal of Healthcare Leadership*, 16, 67–82.
24. Hussain, S., Hasmori, M. F., Balasbaneh, A. T., Khan, M. W., & Sohu, S. (2024). Contributing factors to key performance indicators of Saudi Arabian construction project success. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 50(1), 1-17.
25. Ika, L. A. (2015). Opening the black box of project management: Does World Bank project supervision influence project impact? *International Journal of Project Management*, 33(5), 1054–1066.
26. International Project Management Association (IPMA). (2015). Individual competence baseline for project, programme & portfolio management (4th ed.). IPMA.
27. Irfan, M., Khan, S. Z., Hassan, N., Hassan, M., Habib, M., Khan, S., & Khan, H. H. (2021). Role of project planning and project manager competencies on public sector project success. *Sustainability*, 13(3), 1421.
28. Larsson, J., Eriksson, P. E., Olofsson, T., & Simonsson, P. (2015). Leadership in civil engineering: Effects of project managers' leadership styles on project performance. *Journal of Management Engineering*, 31(6), 04015011.
29. Lee, H.-S., & Shin, H.-C. (2018). The effects of project managers' servant leadership on project performance via customer satisfaction. *Journal of Korean Society for Quality Management*, 46(2), 283-300.
30. Liden, R. C., Wayne, S., Meuser, J. D., Hu, J., Wu, J., & Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly*, 26(2), 254–269.
31. Lin, S. H. J., Scott, B. A., & Matta, F. (2018). The dark side of transformational leader behaviors for leaders themselves: A conservation of resources perspective. *Academy of Management Journal*, 62(5), 1-59.
32. Maqbool, R., Sudong, Y., Manzoor, N., & Rashid, Y. (2017). The impact of emotional intelligence, project managers' competencies, and transformational leadership on project success: An empirical perspective. *Project Management Journal*, 48(3), 58–75.
33. Martinez-Corcoles, M., & Stephanou, K. (2017). Linking active transactional leadership and safety performance in military operations. *Safety Science*, 96, 93–101.
34. McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of Business Studies Quarterly*, 5, 117-130.
35. Miloloža, I. (2018). Impact of leadership style to financial performance of enterprises. *Business Systems Research Journal*, 9(1), 93-106.
36. Mohd Saidin Misnan, Mohamad Zahierruden Ismail, Tan Jia Yan (2024) Construction Project Management Issues and Development in Current for Future Construction Project: Challenges and Prospects in Sustainable Project Management, *International Journal of Research and Innovation in Social Science*, 8(2), 1997-2011
37. Norsyazwana Jenuwa, Mohd Saidin Misnan, & Mat Naim Abdullah (2020) The Important of Facility Manager in Construction at Pre-Construction Stage, *Journal of Business Innovation*, 5(1), 1-8. Mac.
38. Norsyazwana Jenuwa, Wan Norizan Wan Ismail, Norhafizah Yusop, Siti Sarah Mat Isa, & Mohd Saidin Misnan (2024) A Model for Assessing The Competency of Facility Managers in Pre-Construction Hospitals in Malaysia, *The Malaysian Construction Research Journal (MCRJ)*, Special Issue 22(2), 277-285.
39. Otieno, B. B. A., Waiganjo, E. W., & Njeru, A. (2015). Effect of employee engagement on organization performance in Kenya's horticultural sector. *International Journal of Business*

- Administration, 6(2), 12-23.
40. Venkataraman, R.R. & Pinto, J. K. (2023). Cost and value management in projects, John Wiley & Sons.
41. Pollack, J., Helm, J., & Adler, D. (2018). What is the Iron Triangle, and how has it changed? *International Journal of Managing Projects in Business*, 11(2), 527–547.
42. Project Management Institute (PMI). (2021). Project manager competency development (PMCD) framework (7<sup>th</sup>. ed.). Project Management Institute.
43. Qomariah, N., Friyanti, D., Budisatoto, E., Masram, & Mu'ah. (2020). The impact of leadership style, work environment, and job satisfaction on employee performance. *International Journal of Engineering Research and Technology*, 13(8), 2030–2038.
44. Ramdas, S., Bhowmik, M., Kumar, C. N., Sthul, S., Patel, P. B., Hodade, D., & Shende, C. N. (2024). Leadership styles and their impact on health system performance: A comparative analysis. *South Eastern European Journal of Public Health, Special Volume XXIII No. 1*, 76–89.
45. Rifaldi, R. B., Ramadhini, N., & Usman, O. (2019). Effect of democratic leadership style, work environment, cultural organization, motivation and compensation on employee performance. *SSRN Electronic Journal*. 6(9), 1-17.
46. Saleh, R. M. M., Nusari, M., Ameen, A., & Alrajawy, I. (2018). Leadership in the organization: A conceptual review. *International Journal of Management and Human Science (IJMHS)*, 2(4), 52–59.
47. Sarwar, U., Tariq, R., & Yong, Q. Z. (2022). Principals' leadership styles and its impact on teachers' performance at college level. *Frontiers in Psychology*, 13, Article 919693.
48. Shokory, S. M., & Suradi, N. R. M. (2018). Transformational leadership and its impact on extra-role performance of project team members: The mediating role of work engagement. *Academy of Strategic Management Journal*, 17(5), 1-6.
49. Sibiya, M., Aigbavboa, C., & Thwala, W. (2015). Construction projects' key performance indicators: A case of the South African construction industry. In *Proceedings of the ICCREM 2015* (pp. 954–960).
50. Siddiquei, A., Asmi, F., Asadullah, M. A., & Mir, F. (2021). Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: A case of China. *International Journal of Manpower*, 42(7), 1161–1182.
51. Sinek, S. (2014). *Leaders eat last: Why some teams pull together and others don't*. Portfolio/Penguin. New York, NY.
52. Skeepers, N. C., & Mbohwa, C. (2015). A study on the leadership behaviour, safety leadership and safety performance in the construction industry in South Africa. *Procedia Manufacturing*, 4, 10–16.
53. Sunindijo, R. Y. (2015). Project manager skills for improving project performance. *International Journal of Business Performance Management*, 16(1), 67-83.
54. Tyssen, A. K., Wald, A., & Spieth, P. (2014). The challenge of transactional and transformational leadership in projects. *International Journal of Project Management*, 32, 365-37
55. Udin, U. (2024). Leadership styles and sustainable performance. *Multidisciplinary Reviews*, 7(8), Article 2024171.
56. Udin, U., Rakasiwi, G., & Dananjoyo, R. (2024). Servant leadership and work engagement: Exploring the mediation role of affective commitment and job satisfaction. *International Journal of Human Capital in Urban Management*, 9(2), 1-16.
57. Wahyudi, W. (2024). Comparison of transformational leadership models and transactional leadership models. *ProBusiness: Management Journal*, 15(4), 690–694.