

## INFLUENCE OF LEADERSHIP STYLES ON HUMAN RESOURCE EFFECTIVENESS IN PROJECT-BASED ORGANIZATIONS

Muhammad Muddasser Mushtaq<sup>\*1</sup>, Farhaj Parvaiz<sup>2</sup>, Ahmad Nawaz Kandhro<sup>3</sup>, Samir Ahmed<sup>4</sup>

<sup>\*1</sup>Department of Business Administration, Allama Iqbal Open University, Islamabad

<sup>2</sup>Department of Management Sciences, COMSATS University, Attock Campus

<sup>3</sup>Department of Public Administration, University of Sindh, Jamshoro

<sup>4</sup>Department of Agricultural Economics Sindh Agricultural University Tandojam

<sup>\*1</sup>muddasser.hr@gmail.com, <sup>2</sup>enr.farhaj519@gmail.com, <sup>3</sup>ankdl99@salu.edu.pk,

<sup>4</sup>samirsami5610@gmail.com

DOI: <https://doi.org/10.5281/zenodo.18918780>

### Keywords

Project-based organizations, Leadership styles, Human resource effectiveness, Transformational leadership, Servant leadership, Leader-member exchange, Knowledge management, Ambidextrous leadership

### Article History

Received: 08 January 2026

Accepted: 21 February 2026

Published: 09 March 2026

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Corresponding Author: \*

Muhammad Muddasser

Mushtaq

### Abstract

Project-based organizations (PBOs) represent a dynamic organizational model where leadership plays a pivotal role in aligning human resources (HR) with strategic objectives to achieve project success. This study examines the influence of various leadership styles transformational, transactional, laissez-faire, servant, and digital on human resource effectiveness within PBOs. Drawing upon Social Exchange Theory (SET) and Leader-Member Exchange (LMX) frameworks, the research highlights how high-quality leader-member relationships enhance team performance, motivation, and retention. The study also explores the mediating roles of team-building practices, knowledge management, and ambidextrous leadership in complex and virtual project environments. Findings suggest that transformational and servant leadership styles significantly enhance HR effectiveness, project resilience, and organizational outcomes, whereas laissez-faire approaches often hinder performance. The study emphasizes the critical interplay between leadership, organizational structure, and human capital management for achieving sustainable project success.

## 1. INTRODUCTION

The shift toward project-based organizations (PBOs) represents one of the most significant structural transformations in modern management, moving away from rigid functional hierarchies to temporary, goal-oriented entities designed to deliver unique outcomes within specific constraints of time, cost, and scope (Umbrex, 2025). In these environments, the project serves as the primary unit for work and accountability, creating a dynamic where

leadership is not merely a supervisory function but a critical integrator of diverse professional talents across organizational boundaries (AlSoudani, 2025). Because the lifespan of these organizations is intrinsically tied to the project lifecycle, the effectiveness of human resources (HR) becomes the central pivot upon which project success or failure rotates (Mueller and Turner, 2007). Leadership styles are the primary drivers of this effectiveness, influencing how

project managers and team leaders align human capital with broader strategic objectives while navigating the inherent uncertainties (in figure

integrated conceptual framework linking leadership styles to human resource effectiveness and project success in project-based organizations.

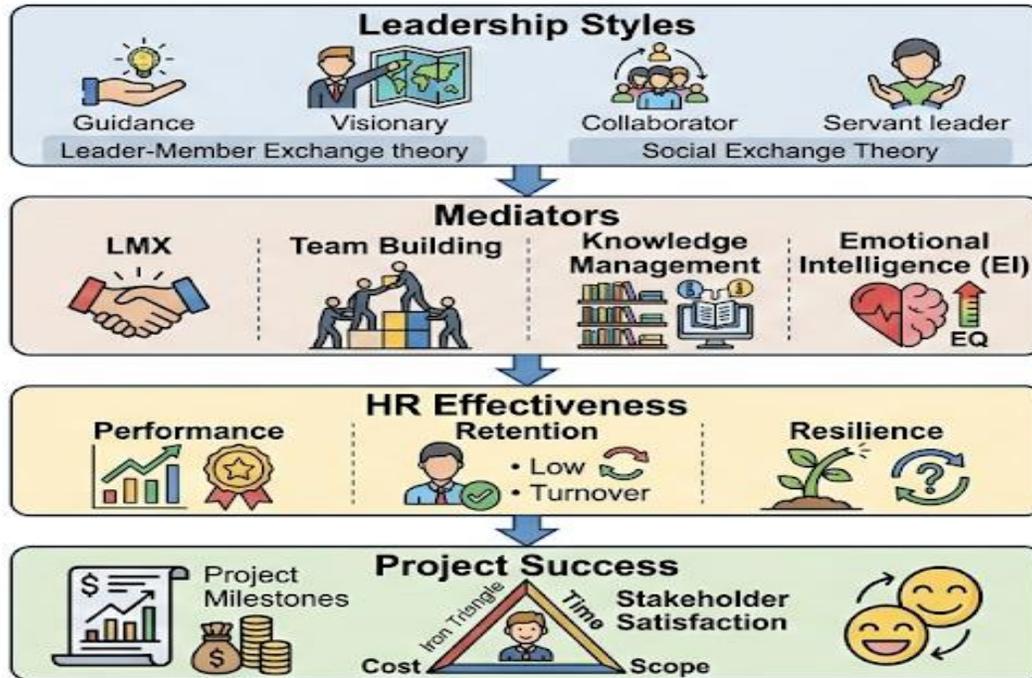


Figure 1. Conceptual Framework of Leadership Influence in PBOs

2. The Theoretical Nexus: Social Exchange and Dyadic Relationships

At the heart of leadership effectiveness in PBOs lies the quality of the relationships developed between leaders and followers. This is best understood through the lens of Social Exchange Theory (SET) and Leader-Member Exchange (LMX) theory (Zada et al., 2024). Social Exchange Theory posits that all human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives, but in the organizational context, it emphasizes trust and reciprocity as the foundation of interaction (Sindhushree et al., 2025). When a project leader demonstrates genuine care for the professional development and well-being of team members, a sense of obligation is created within the employees to repay these benefits through higher performance, loyalty, and commitment to project goals (Chang, 2024). This "reciprocity rule" creates an emotional balance that encourages extra-role behaviors-actions that go beyond the

formal job description to ensure the project's success (Ennida et al., 2025).

The Leader-Member Exchange (LMX) theory builds on this by focusing on the unique dyadic relationship between the leader and each individual team member. In PBOs, where teams are often assembled rapidly, the leader must quickly navigate the stages of role-taking, role-making, and routinization to establish high-quality exchanges (Graen and Uhl-Bien, 1995). In high-quality LMX relationships, team members are characterized as the "in-group," receiving greater trust, autonomy, and interesting work assignments in exchange for their loyalty and superior performance (Furtado et al., 2023). Conversely, "out-group" members experience low-quality exchanges marked by formal authority and a lack of mutual respect, which often leads to reduced motivation and higher turnover intention (Thuy, 2024). The effectiveness of the project manager, therefore, is heavily dependent on their ability to expand the "in-group" and

foster high-quality relationships across a diverse and often temporary workforce (Eyiah et al., 2025).

**Table 1: Stages of Leader-Member Exchange (LMX) Development and Their Implications**

Stage of LMX Development	Core Activity	Implications for Project Teams
Role-Taking	The leader assesses the member's skills and potential as they join the project.	Critical for initial resource allocation and matching expertise to tasks. (Graen and Uhl-Bien, 1995)
Role-Making	The member assists with project tasks; trust and expectations are established.	Formation of "in-groups" and "out-groups" occurs, often unconsciously. (Graen and Uhl-Bien, 1995)
Routinization	Stable patterns of interaction and mutual expectations are established.	Sets the tone for long-term project performance and team cohesion. (Graen and Uhl-Bien, 1995)

**3. The Transformational Leadership Paradigm and Mechanism of Performance**

Transformational leadership (TL) is widely regarded as one of the most effective styles for enhancing human resource effectiveness within PBOs, particularly in high-stakes environments like Information Technology (IT) and large-scale engineering (Buckley-McMahon, 2024). Transformational leaders inspire their followers by articulating a compelling vision, stimulating intellectual curiosity, and providing individual support (Iftikhar et al., 2023). This style transcends the simple transactional exchange of "work for pay," instead fostering a psychological environment where team members feel intrinsically motivated to reach their full potential (Demozie, 2025).

The influence of TL on project success is often indirect, operating through a series of mediating variables. Research indicates a "serial mediation" effect where transformational leadership first improves team-building practices (TBP), which in turn enhances teamwork quality (TWQ), ultimately leading to project success (Ali et al., 2021). In sectors such as IT, TL has been found to account for some 63 percent of the variance in

team performance, highlighting its role as a critical predictor of organizational outcomes (Demozie et al., 2023). Furthermore, transformational leadership plays a vital role in building project team resilience. By encouraging adaptive learning and framing setbacks as opportunities for growth, transformational leaders help teams navigate the volatility and uncertainty common in complex project environments (Iftikhar et al., 2023).

**3.1. Comparative Influence of FRLT Styles**

The Full Range Leadership Theory (FRLT) offers a comparison between transformational, transactional, and laissez-faire styles. While transformational leadership focuses on inspiration and growth, transactional leadership relies on contingent rewards and punishments to drive performance (Poethke et al., 2025). Laissez-faire leadership, often characterized as a "hands-off" approach, is generally found to be destructive in project management settings, as it fails to provide the necessary direction and support required for temporary teams (Ntalakos et al., 2026).

**Table 2: Comparative Impact of Full Range Leadership Theory (FRLT) Styles on HR Effectiveness**

Leadership Style	Primary Motivation	Impact on HR Effectiveness in PBOs
Transformational	Visionary and Inspirational	High performance, team resilience, and innovative behavior. (Ali et al., 2021; AlSoudani, 2025)
Transactional	Rewards and Compliance	Effective for short-term tasks but lacks long-term vision. (Mueller and Turner, 2010)
Laissez-faire	Minimal Intervention	Often results in low productivity and project failure. (Ali et al., 2021)

**4. Servant and Moral-Based Leadership in PBOs**

Servant leadership is a holistic approach that prioritizes the needs of stakeholders and team members over the self-interest of the leader. This style is particularly effective in non-governmental organizations (NGOs) and sustainable construction projects where mission alignment and community value are paramount. Servant leaders engage their followers across multiple dimensions—emotional, relational, and ethical—to empower them to grow into their full potential (Purwanto et al., 2026).

The primary mechanism through which servant leadership influences project management effectiveness is conflict resolution. In high-pressure PBO environments, servant leaders, through their emphasis on listening, empathy, and emotional healing, are uniquely equipped to resolve conflicts constructively, fostering an atmosphere where the project team feels safe and productive (Willenborg, 2026). This style's effectiveness is further moderated by organizational culture; in a strong, supportive culture, the positive effects of servant leadership are significantly amplified (Zhang et al., 2021).

**5. Situational Contingencies and the Hierarchy of Command**

The construction industry provides a compelling case study for the situational or contingency theory of leadership, which argues that effectiveness depends on the specific context and

managerial position (Identifying..., 2014). In construction PBOs, there is a distinct preference for different leadership styles across the organizational hierarchy to ensure efficiency and minimize waste (Afzal & Tumpa, 2024).

**5.1. Style Preferences in the Project Hierarchy**

Research involving project executives and managers has identified specific combinations of autocratic, participatory, and free-rein leadership preferred for different roles. As one moves down the hierarchy from the executive level to the frontline superintendents, there is a marked trend toward more autocratic decision-making (Lingampally, 2025).

- **Project Executives:** At the top tier, executives are preferred to be participatory. Their role is strategic, involving long-term relationship management, and they depend on input from middle managers (Beyer, 2025).
- **Project Managers:** Those in middle management are preferred to lean toward autocratic styles by their superiors. The complexity of construction projects requires a high degree of control over cost, time, and quality (Guha et al., 2025).
- **Superintendents:** Frontline leaders are often expected to be the most autocratic. Quick decision-making and top-down instructions are seen as essential for safety and operational efficiency on site (O'Neill, 2020).

**Table 3: Preferred Leadership Styles Across the Construction Project Hierarchy**

Managerial Position	Preferred Style Score (1=Autocratic, 7=Free-rein)	Dominant Behavior
Project Executive	3.82 - 4.11	Intensive Participatory/Mentoring. (Identifying..., 2014)
Project Manager	3.21 - 3.71	Boss-centered/Directive. (Identifying..., 2014)
Superintendent	2.37 - 3.35	High-intensity Autocratic. (Identifying..., 2014)

**6. Complexity, Ambidexterity, and Knowledge Management**

As projects become increasingly complex and multi-disciplinary, leaders must adopt more sophisticated approaches to manage both human capital and information flows. To overcome hurdles, project leaders must exhibit ambidextrous leadership-the ability to balance innovation and brainstorming (exploration) with efficiency and execution (exploitation) (Jamil et al., 2024).

**6.1. The Mediating Role of Knowledge Management**

In complex environments, knowledge management (KM) serves as a critical mediator

between leadership style and project outcomes. Ambidextrous leaders foster a culture of openness, encouraging the transfer of best practices and diverse knowledge acquisition (Haider et al., 2023). This is particularly relevant in the IT sector, where the ability to leverage data-driven tools is a prerequisite for successful project delivery (Malik et al., 2024). Recent research indicates that providing constructive feedback has a strong positive correlation ( $\rho = 0.28$ ) with achieving project goals, confirming the value of leader communication in complex settings (Bwalya, 2023). Figure 2, represent the mediating role of knowledge management between ambidextrous leadership and project success.



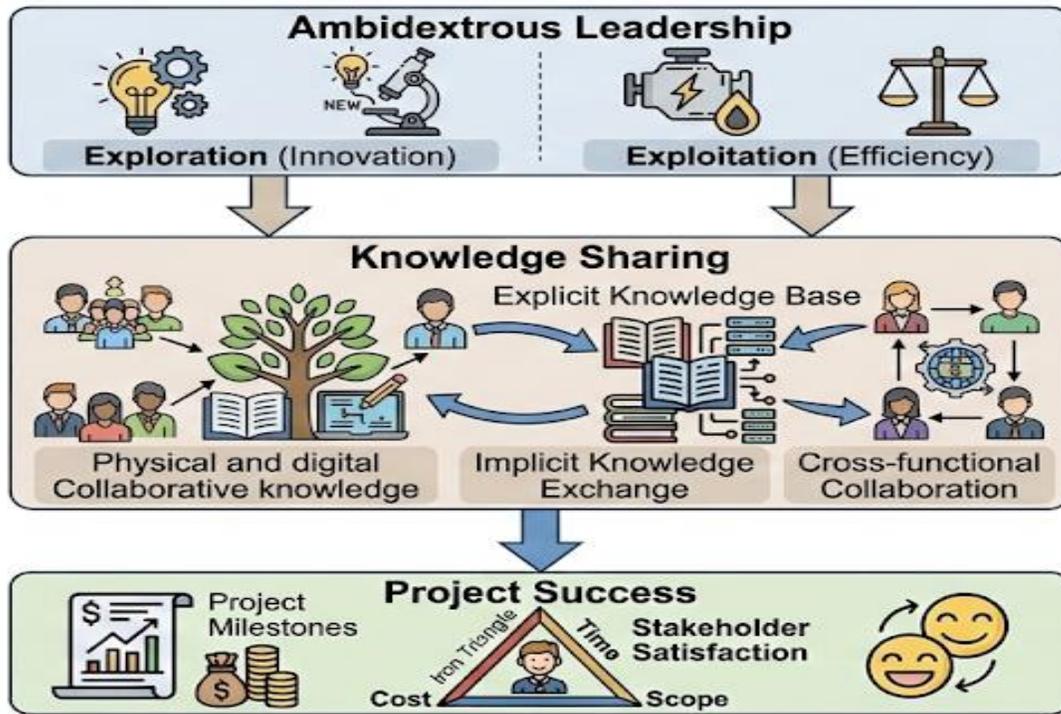


Figure 2: Ambidextrous Leadership and Knowledge Management Mediation

**7. Human Capital Challenges: Resilience, Well-being, and Retention**

The temporary nature of project-based work introduces specific stressors for human resources, ranging from work-life imbalance to career path ambiguity. Unlike permanent departments, PBOs often dismantle teams once a goal is achieved, which can lead to a sense of instability among employees (Umbrex, 2025).

**7.1. Work-Life Balance and the Job Demands-Resources (JD-R) Model**

Knowledge managers and project leaders often face the challenge of being "always on," driven by high expectations for responsiveness and cross-departmental collaboration (Ferstl, 2025). Applying the JD-R model, effective HR leaders must ensure that employees have sufficient resources—such as autonomy, supportive

supervision, and flexible work arrangements—to cope with the high demands of project tasks (Chevis, 2023). Fostering a culture that acknowledges life outside of work and ensures that time off is "clear, simple, and guilt-free" is essential for long-term retention (Maurer, 2024).

**7.2. Addressing Voluntary Turnover Intention (VTI)**

The risk of losing institutional memory through voluntary turnover is high in PBOs. Research indicates that VTI is strongly influenced by factors such as person-organization fit, goal clarity, and the quality of the leader-member exchange (Thuy, 2024). Ethical leaders who treat their subordinates with dignity and respect can satisfy basic psychological needs for competence and autonomy, thereby reducing turnover (Zada et al., 2024).

**Table 4: Predictors and Mechanisms of Voluntary Turnover Intention (VTI)**

Predictor of VTI	Mechanism	Impact on Retention
Goal Clarity	Reduces role ambiguity and stress.	High commitment when purpose is clear. (Thuy, 2024)
Intrinsic Motivation	Leads to higher job satisfaction.	Partial mediation of retention. (Thuy, 2024)
Leader-Member Exchange	Provides social support and resources.	Fully mediates actual departure paths. (Thuy, 2024)

**8. Leadership in the Virtual and Digital Frontier**

The digitalization of work has fundamentally altered leadership requirements, giving rise to "remote leadership" and "digital leadership". These styles require a shift from physical supervision to managing distributed teams through digital tools and virtual channels (Müller et al., 2024).

**8.1. Enabling Digital Leadership and Creative Performance**

Enabling Digital Leadership (EDL) has been found to have a direct positive impact on the creative performance of remote workers. EDL is characterized by creating psychological safety, flattening hierarchies, and fostering an "open-error" culture where mistakes are viewed as learning opportunities rather than failures (Pasalong et al., 2024). By providing the necessary resources and digital empathy, leaders can

unleash the potential of remote employees (Ennida et al., 2025).

**8.2. The Skill of Micro-Understanding**

Successful remote leaders must develop "micro-understanding"-the ability to pick up on subtle signals in virtual communication that would be obvious in face-to-face settings (Iftikhar et al., 2023). Recognizing subtle shifts in response times or communication tone early on allows managers to address potential burnout or disengagement before it negatively impacts project success (Demozie, 2025).

**9. Organizational Structure as a Moderator of Effectiveness**

The effectiveness of any leadership style is inevitably constrained or facilitated by the organizational structure. PBOs generally fall into three structural archetypes: functional, projectized, or matrix structures (Umbrex, 2025).

**Table 5: Relationship between Organizational Structure, Authority, and Leadership Requirements**

Structure Type	PM Authority	Leadership Requirement	Primary Risk
Weak Matrix	Low	Persuasive and Relational	Silos and slow decision-making. (Umbrex, 2025)
Balanced Matrix	Equal with Functional	Collaborative and Adaptive	Power struggles. (Umbrex, 2025)
Strong Matrix/Projectized	High	Directive and Visionary	Resource duplication and isolation. (Umbrex, 2025)

**10. Synthesis: Leadership and the Iron Triangle**

The ultimate evaluation of leadership effectiveness in PBOs is often measured through the "Iron Triangle"-time, cost, and quality-but modern management recognizes that stakeholder satisfaction and team performance are equally critical metrics (Ali et al., 2021). Emotional

intelligence (EI) is the cornerstone of this balance, allowing leaders to manage workplace harmony, solve conflicts, and inspire commitment across diverse teams (AlSoudani, 2025). By prioritizing leadership development that includes emotional intelligence and strategic

thinking, organizations can improve their bottom-line performance (Beyer, 2025).

### 11. Conclusions

Effective leadership is the cornerstone of human resource performance in PBOs, where temporary and goal-oriented teams are the norm. Transformational and servant leadership styles emerge as the most impactful, fostering trust, motivation, and resilience among team members. Leadership effectiveness is further enhanced by high-quality dyadic relationships, knowledge management, and adaptive strategies suitable to organizational context and hierarchy. Conversely, laissez-faire approaches and poorly managed virtual environments can undermine HR effectiveness and project outcomes. Organizations that strategically develop leadership capabilities, align them with project complexity, and nurture employee well-being are better positioned to achieve sustainable project success and maintain competitive advantage

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