

From static to stage-based leadership: evolving agile leadership behaviors in organizational transformation

Del liderazgo estático al liderazgo por etapas: evolución de los comportamientos de liderazgo ágil en la transformación organizacional

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ABSTRACT

Purpose: This study aims to understand the impact of various leadership styles, including team leadership, situational leadership, and super leadership, on agile outcomes in the Indian IT industry. This study fills the vacuum in the literature about the interplay between leadership and emerging economies, presenting a model of leadership that is responsive to changes across different levels of agile maturity.

Design/Methodology/Approach: This study employed a quantitative, analytical-descriptive design, collecting data via a structured electronic survey from 248 agile practitioners, including team members and leaders from Indian IT firms. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) Version 28, employing correlation and multiple regression analyses to examine the impacts of leadership behaviors on agile transformation outcomes.

Findings: It was found that all three leadership styles have an impact on agile transformation, with super leadership having the most positive impact. The study proposes a Stage-Based Agile Leadership Model, illustrating that leadership effectiveness progresses across agile maturity stages, from situational leadership in pre-agile stages to team leadership in mid-level stages and super leadership at the highest level of agile maturity.

Practical Implications: The findings suggest that one-size-fits all leadership training may be inadequate for agile transformations. Organizations should implement stage-specific leadership development programs to align leadership behaviours with the evolving needs of agile teams, enhancing adaptability and resilience.

Originality/Value: This research extends the literature by introducing a dynamic, context-sensitive leadership model specifically applicable to emerging economies. It challenges the static view of leadership in agile contexts and emphasizes the importance of evolving leadership strategies for sustaining organizational agility.

Keywords. Agile transformation, team leadership, situational leadership, super leadership, change management, emerging markets

RESUMEN

Objetivo: Este estudio tiene como objetivo comprender el impacto de diversos estilos de liderazgo, incluidos el liderazgo de equipo, el liderazgo situacional y el superliderazgo, en los resultados ágiles dentro de la industria informática india. La investigación llena un vacío existente en la literatura sobre la interacción entre el liderazgo y las economías emergentes, presentando un modelo de liderazgo que responde a los cambios que se producen en los distintos niveles de madurez ágil.

Diseño/Metodología/Enfoque: El estudio adoptó un diseño cuantitativo de tipo analítico-descriptivo, recopilando datos mediante una encuesta electrónica estructurada dirigida a 248 profesionales ágiles, entre ellos miembros de equipos y líderes de empresas informáticas de la India. El análisis estadístico se realizó con el paquete Statistical Package for the Social Sciences (SPSS), versión 28, empleando análisis de correlación y regresión múltiple para examinar los efectos de los comportamientos de liderazgo sobre los resultados de la transformación ágil.

Resultados: Se encontró que los tres estilos de liderazgo influyen en la transformación ágil, siendo el superliderazgo el que ejerce el impacto más positivo. El estudio propone un Modelo de Liderazgo Ágil por Etapas, que muestra cómo la efectividad del liderazgo progresa a lo largo de las etapas de madurez ágil: desde el liderazgo situacional en las fases pre-ágiles, pasando por el liderazgo de equipo en etapas intermedias, hasta el superliderazgo en el nivel más alto de madurez ágil.

Implicaciones prácticas: Los resultados sugieren que la formación en liderazgo con un enfoque único para todos los casos puede ser inadecuada en procesos de transformación ágil. Las organizaciones deberían implementar programas de desarrollo de liderazgo específicos para cada etapa, con el fin de alinear los comportamientos de liderazgo con las necesidades evolutivas de los equipos ágiles, mejorando así la adaptabilidad y la resiliencia.

Originalidad/Valor: Esta investigación amplía la literatura existente al introducir un modelo de liderazgo dinámico y sensible al contexto, especialmente aplicable a economías emergentes.

Cuestiona la visión estática del liderazgo en contextos ágiles y subraya la importancia de estrategias de liderazgo evolutivas para sostener la agilidad organizacional.

Palabras clave. Transformación ágil, liderazgo de equipo, liderazgo situacional, superliderazgo, gestión del cambio, mercados emergentes

INTRODUCTION

The pressure to respond to evolving market requirements, customer behavior, and technology shifts is felt across all industries and sectors in the contemporary world (Chan, 2023). Agile transformation has emerged as a vital solution, enhancing responsiveness, innovation, collaboration, and resilience at all organizational levels (Kraus et al., 2021). However, many organizations continue to struggle, two decades after the Agile Manifesto, due to deeply rooted cultural norms, mismatched dynamic leadership behaviors, and a lack of agile, context-applicable leadership frameworks (Murdoch, 2022; Totten et al., 2022). This suggests a dire need to shift the focus to leadership models based on empowerment, agile frameworks, and empathy, which encourage active experimentation and sustained learning (Kim, 2025). Agile leadership expands the scope of conventional frameworks by delegating decision-making authority downward and by fostering self-organizing, proactive teams within specific roles, such as Scrum Masters and Agile Coaches (Gunawan et al., 2024). There is still insufficient evidence regarding the impact of team, situational, and super leadership on agile transformation, especially within growing economies like India (Riedel et al., 2022; Kumar et al., 2022). Some researchers have investigated the relationship between leadership and organizational agility; however, there is still limited evidence on the impact of specific leadership behaviors on various stages of organisational maturity regarding agile transformation (Cort & Rudolph, 2021; Gunawan et al., 2024).

In response to these gaps, this study examines the leadership-agility nexus using a sample of 248 agile practitioners from Indian IT firms, where the sector's rapid agile transformations align with the ethos of technologically advanced cultures (Gunawan et al., 2024). Building on this empirical base, the study develops a Stage-Based Agile Leadership Model, further arguing that the effectiveness of leadership intricacies shifts dynamically with an organization's level of agile maturity. It is widely accepted that a singular style of leadership can safely navigate complex organizational transformations (Kim, 2025). The model, however, argues that situational leadership is critical during the early stages, team leadership dominates in the mid-transformation stage, and super leadership maintains sustained agility at maturity.

In addition, by identifying the leadership competencies required at each stage of agile maturity, the study has practical implications for designing tailored frameworks to develop executive leadership skills. It challenges the prevailing notion that a singular, universal leadership style can drive all levels of an organization, illustrating instead the need for agile, stage-sensitive leadership to achieve strategic agility (Kim, 2025; Faqih et al., 2024). To summarize this research makes a contribution to the theory and practice by (1) developing a new stage-based agile transformation leadership paradigm, (2) adding an empirical perspective from the Indian IT ecosystem, which has not been extensively studied, and (3) helping firms develop defendable, adaptable, and resilient agile business ecosystems engineered for constant change.

LITERATURE REVIEW

The agile transformation embodies a new approach and a comprehensive shift in how an organization thinks about structure, leadership, and decision-making processes. Leadership used

to be modeled based on control, stability, and predictive planning. In the current highly complex and volatile global market context, however, organizations are beginning to adopt Agile principles, which emphasize flexibility, cross-functional collaboration, and responsiveness (Beck et al., 2001; Dikert et al., 2016). The foundation of Agile transformation focuses on complexity theory and systems thinking, which argue that in flexible environments, adaptive systems outperform rigid systems (complex systems outperform simple systems). Therefore, governance under the Agile framework must shift from directive, command-and-control styles to more hierarchical, relational, adaptive, and empowering teams that support decentralized decision-making and continuous learning (Denning, 2018). This also entails a shift from transactional to transformational and servant leadership, allowing further research on team, situational, and super leadership in Agile contexts. Recent contributions reinforce this shift. Coimbra et al. (2023) emphasize that leadership support is pivotal in enabling Agile Transformation. Similarly, Das and Gary (2021) highlighted the importance of agility-centered leadership competencies in large-scale Agile transformations.

Leadership Behaviours and Their Role in Agile Transformation

It is difficult to overstate the importance of leadership in achieving successful agile transformations. Leaders must guide cultural shifts, align everyone on the same page, and ensure that everyone is committed to agile ideas (Hanelt et al., 2020). The foundational work by Kelly et al. (2022) on emotional intelligence in leadership emphasizes the importance of people skills in creating an environment conducive to agile practices. Additionally, it is crucial to examine how leadership behavior affects employee engagement and satisfaction during agile transformations. Past research, including that of Chari et al. (2022) and Dey et al. (2023), suggests that the actions of leaders have a significant impact on team morale and motivation; however, it does not explore how these dynamics change during substantial shifts. By understanding the various behavioral aspects of leadership during agile transformations, we can gain valuable insights that inform future leadership development programs (Murthy, L., 2025).

Team Leadership in Agile Contexts

Effective team leadership plays a crucial role in achieving Agile transformation, particularly in cases involving a multi-tenant model with continuous delivery. It highlights the necessity of leaders adapting their techniques based on team dynamics and project needs, a concept well-supported in foundational literature (Murthy et al., 2024). As agile methodologies gained prominence, researchers began to view leadership as a facilitator of team involvement and empowerment. This revealed the vital role situational leaders play in navigating the intricacies of agile settings (Porkodi, 2024; Octavian, 2023).

Bäcklander (2019) describes Agile team leaders as enablers who sustain collaborative partnerships and trust while ensuring psychological safety within the team. Similarly, Dikert et al. (2016) observed that leadership effectiveness in Agile teams is closely linked to open communication, partnership, and responsibility at a multifunctional level, which enables decision-making and improvement at the team level.

Additionally, team leadership in Agile environments corresponds with the tenets of servant leadership, which emphasizes overcoming barriers, helping, and protecting stakeholders' attention to value delivery. This notion also helps explain why Agile leaders have to 'lead from behind.' It means they facilitate instead of control. According to Denning (2018), achieving leadership success in Agile settings involves providing sufficient autonomy to teams, promoting prospective thinking focused on the customer, and fostering responsive, agile behaviors rather than strict control-oriented governance. All these attributes strengthen the model of collective ownership where leadership at the team level is diffuse, improving the cohesion of the teams and the effectiveness of their deliveries.

Situational Leadership and Agile Responsiveness

The concept of situational leadership, which involves modifying a leader's style according to the specific developmental level of the particular group being led, aligns well with the dynamic nature of Agile contexts. (AlNuaimi et al., 2022) Found that as companies shift to agile structures, situational leadership—where a leader adjusts their style based on the team's maturity and circumstances—has become popular for its ability to create a supportive environment for agile principles. Hersey and Blanchard (1982) suggest that leaders must evaluate the readiness of their teams and choose one of the four styles: telling, selling, participating, or delegating, which also considers the level of task maturity and the psychological readiness of the group. This flexibility complements agile values in human beings and relationships, as agility prioritizes responsiveness to change over processes. Other studies suggest the same. For instance, Octavian (2023) found that leaders who use situational leadership can better meet the diverse needs of their team members, boosting performance and morale. More seasoned teams are seeking a hands-off leadership style that fosters effective delegation. Research supporting enabling leadership practices that aid adaptive responsiveness, such as those by Bäcklander (2019) and Dikert et al. (2016), demonstrates that flexing styles enhance morale and decrease team resistance during Agile transitions, particularly when leaders are optimally involved. Furthermore, based on situational leadership frameworks, common scaling Agile challenges, such as coordination fragmentation and guidance vacuums in hybrid structures, are alleviated. Situational leaders act as adaptive catalysts, iteratively and non-linearly recalibrating with feedback, the team, organizational context, and agile transformation elements.

Super Leadership and Self-Managing Teams

Super leadership (Arunprasad et al., 2022), which focuses on empowering team members to lead themselves, aligns with the goals of agility, aiming to create self-managing and innovative teams, which is valuable in hierarchical organizations. This self-governance becomes necessary in Agile environments where autonomy and accountability form the foundation of team functioning. Rather than subordinate levels of leadership, super leadership seeks to develop leaders at all levels by nurturing self-leadership skills in team members (Manz & Sims, 1991). In the context of Agile transformation, research by (Riedel P-L et al., 2022) and (Kraus S et al., 2021) shows that super leaders create environments that encourage independence, which then enhances team performance. Super leaders promote ownership within the team by allowing them to set, track, and regulate their performance. It builds on the agile manifesto and focuses on “individuals and interactions over processes and tools” (Beck et al., 2001).

Exploring super leadership and self-managing teams further reveals common themes that highlight why they are essential in today's organizations. One of the biggest is empowerment. Super leadership creates a space where team members can take charge and own their performance. Research supports this, showing that super leaders employ strategies to help team members believe in themselves, encouraging them to make decisions and take initiative (Murdoch, Z., 2022; Tabassum, M., et al., 2024). However, some scholars point out potential downsides, suggesting that relying too much on self-management can make leadership roles unclear. For example, Yau et al. (2022) and Bütthe et al. (2023) provide important insights into how a lack of clear guidance can lead to confusion within teams, ultimately hindering their effectiveness. Their arguments suggest that while super leadership can empower teams, it might also create an imbalance if not managed correctly.

Agile Leadership Challenges in Emerging Economies

The exploration of agile leadership has seen considerable development in recent years, especially in emerging economies. Initially, studies concentrated on agile methodologies, spotlighting the importance of flexibility and responsiveness in leadership for rapidly evolving

markets (Limon et al., 2023). Entrenched hierarchies, cultural traditions, and legacy governance frameworks pose distinct concerns for agile leadership within Indian organizations. Many leaders tend not to 'let go' of the directing style, which leads to micromanagement and lower team autonomy (Dikert et al., 2016). Such leadership challenges that emerge in agile settings are particularly complex and ever-evolving problems, especially in polycentric and hierarchical organizational cultures, such as those found in India. Agile success requires decentralization and autonomy, which are persistently obstructed by entrenched hierarchies, legacy governance systems, and cultural expectations of seniority. These forces typically lead to micromanagement and disempowerment of teams, as more rigid control and defined performance targets are imposed to implement Agile strategies (Dikert et al., 2016). In this context, bounded agility paradoxically offers empowerment that is rhetorical in nature and constrictive in practice.

Naim et al. (2024) and Balasubramaniam et al. (2024) raise concerns as they identify a shift in leadership relations toward adaptability, emotional intelligence, and communication-centered practices. Jain et al. (2024) and Schildt (2022) suggest that as agile teams grapple with increasingly complex challenges, leaders are expected to relinquish control-oriented behaviors in favor of contextually responsive and participatory actions. The evolving scholars emphasize that agile leadership effectiveness is no longer evaluated solely by task supervision and completion, but rather by the provision of psychological safety, fostering continuous learning, and adeptness in managing ambiguity (Zaman et al., 2024; Mueller-Saegebrecht et al., 2025).

Agile leadership also accommodates rapid changes, making these environments subject to constant change, and, therefore, the work of Zaman et al. (2024) is essential. The authors center their research on autonomous teams. How agile and dynamic contexts enable separate, and borders permeate a previously assumed fixed, rigid structure, to (at least, in assumption) achieve flexible fluidity. The studies above claim that agile methodologies increase responsiveness and flexibility; however, this depends on the leadership style that balances several factors by design. Failing to establish a defined leadership approach that balances the correct dose (and often contradictory elements) of independence with dictated control, leadership and subordination, or structuralism with hyper-emotionalism, servitude, and transformed stasis undermines the attractiveness of prospects. These studies emphasize the importance of strategic alignment, seamless organizational unity, and unified goal attainment among teams, cultivating streamlined processes and an enhanced productivity quotient with defined outcomes.

Thus, many leaders grapple with relinquishing control in Agile transformation that requires strategic immersion, responsiveness, and perpetual evolution in their actions as leaders. In this respect, this study argues that the prevailing leadership requires broader, not deeper, strategies in these contexts, incorporating necessary skills such as flexible authority, cultural intelligence, and adaptability. In this regard, the current research explores the intersection of team, situational, and super leadership with the distinctive organizational contexts of Indian IT companies undergoing Agile transformation.

Research Gap and Theoretical Anchoring

The significance of leadership is prominent in agile transformations, but the body of work is critically lacking in depth and breadth. First and foremost, although leadership is widely acknowledged as a vital component in achieving Agile adoption, much of the research conducted remains theoretical – in other words, it lacks evidence. Take, for instance, Dikert et al. (2016), who seem to center their attention on scaling and transformation, but do not explain what specific leadership actions support or obstruct Agile transformations.

Furthermore, the absence of comparative frameworks that differentiate between team, situational, and super leadership is highly noticeable. While Murdoch (2022) and Tabassum et al. (2024) have moved the conversation forward regarding distributed and super leadership, very few have attempted to test in practice how different leadership styles impact Agile adoption at various

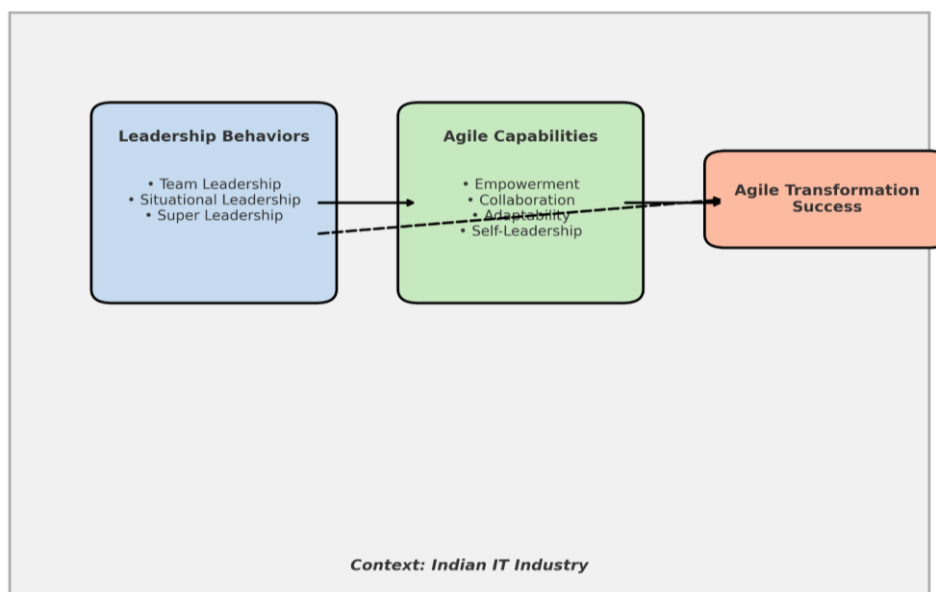
levels of organizational maturity. Existing literature views leadership as devoid of context – that is, leadership is perceived as static rather than dynamic, responsive, and adaptive.

Moreover, there is a void of information in the context of new economies. Agile studies are typically leadership-focused and centered on the Western world. At the same time, very little attention is given to hierarchy, local culture, and the colonial mindset regarding Agile leadership practices in Indian organizations. Given the ever-present dominance of hierarchical decision-making in Indian corporate culture, self-managed teams and distributed leadership models tend to encounter systemic pushback.

Finally, an overemphasis on existing leadership frameworks such as Path-Goal and Transformational Leadership pushes to the back of the conversation those frameworks that better align with Agile's team-based adaptability and fluidity. This stagnates the empirical investigation of more adaptable and situational fluid leadership in Agile contexts.

To address these issues, the research seeks to investigate the impact of team, situational, and super leadership on Agile transformation outcomes in the Indian IT sector. Covering the socio-organizational context of India, the study highlights the shifting dynamics of leadership behaviors across various stages of Agile maturity, thereby contributing to the discourse on organizational agility and leadership with practical, staged sensitivity. Synthesizing insights from prior research, the following conceptual framework (Figure 1) is developed to guide the empirical investigation.

Figure 1. Conceptual framework for leadership behaviors impacting agile transformation



METHODOLOGY

This research employs a quantitative design with a deductive strategy, focusing on exploring the impact of leadership styles—team, situational, and transformational leadership—on agile transformation in Indian IT companies. A deductive approach was selected in this case because it aims to evaluate the theories concerning the influence of leadership on agile practices (Pandey & Pandey, 2021).

Research Problem and Variables

Leaders demonstrate greater engagement than others in issues related to organizational agility because it is unclear which leadership behaviors enable the most effective agile transformations.

The independent variables are team leadership, situational leadership, and super leadership, and the dependent variable is the level of agile transformation attained within the organization. Additionally, the research examines the moderating variables of communication, cultural alignment, and empowerment.

Research Inquiries

- 1. What are the possible types of leadership behaviors exhibited by the chosen leaders, that is, team leaders, situational leaders, and super leaders?
- 2. What is the direct impact of team leadership behaviors on agile transformation?
- 3. How do situational leaders influence or drive the agile transformation process?
- 4. What is the impact of super leadership on the agile transformation process?
- 5. What can be the misconceptions or misunderstandings surrounding agile transformation?
- 6. What is the overall impact of transformation efforts on leadership behaviors, that is, team leadership, situational leadership, and super leadership?

Sampling and Participants

The participants, who showed engagement through their activities in efforts to transform the organization into an agile one, were chosen using purposive sampling. The study had a total sample of 248 respondents comprising:

The team consists of 158 members, including software developers, testers, and business analysts.

90 were leaders serving in roles such as Scrum Masters, Agile Coaches, Project Managers, and Line Managers.

They were all employed in mid to large-sized IT service and product companies based in India. The inclusion criteria for these companies were their public claim to undertake agile transformation for some time.

Demographic Overview

To sharpen participant allocation and maintain the study's quality, demographic details of the participants were obtained, as summarized in Table 1.

Table 1. Demographic Data

Demographic Variable	Category	Count
Gender	Male	172
Gender	Female	76
Age Range	25–34	102
Age Range	35–44	97
Age Range	45+	49
Education Level	Bachelor's Degree	113
Education Level	Master's Degree or Higher	135
Role	Team Member	158
Role	Leader	90

Data Collection Instrument

Primary data were collected using a structured electronic questionnaire developed on Google Forms. The instrument consisted of 26 items, grouped under the four constructs:

- Team Leadership (7 items)
- Situational Leadership (6 items)
- Super Leadership (7 items)
- Agile Transformation Outcomes (6 items)

All items were measured using a 5-point scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire was adapted from previously validated tools in leadership and agile studies (Dragičević & Bošnjak, 2019; Joiner, 2017). A pilot test was conducted with 20 participants to refine clarity and internal consistency.

Analyzing the Data

The analysis was conducted using SPSS Version 28. The following statistical procedures were performed:

- Descriptive statistics (means, frequencies, and standard deviations)
- Correlation analysis (Pearson's r) to understand the relationship between agile transformation and various leadership behaviours
- Multiple regression analysis of each agile outcome to assess the impact of each leadership construct and ascertain the significance of predictive values
- *Common Method Bias*: Harman's single-factor test and marker variable techniques were used to assess and control for standard method variance.

Ethical Issues

Voluntary and anonymous participation in the study was permitted. The purpose of the research was explained, and express consent was obtained before participation. Secure retrieval systems restricted access to data and ensured usage was limited to academic purposes. The data collected was devoid of any identifying details.

Research Plan

Stage 1: Design - Identification of variables along with the construction of the questionnaire

Stage 2: Data Gathering - Purposeful selection of the participants through LinkedIn, agile communities, and organizational networks

Stage 3: Data Analysis – Statistical validation alongside hypothesis testing through SPSS as the primary tool

Stage 4: Reporting – Melding the actionable recommendations with the findings from the leadership frameworks in the outcomes of the study

These methods ensure a thorough examination, empirically supported by theory, while providing actionable advice on leadership for agility and transformation in the Indian technology sector.

RESULTS

The results obtained from the quantitative evaluation were analyzed using SPSS Version 28. Data were gathered using a structured online questionnaire from a sample of 248 Indian IT professionals, comprising 158 agile team members and 90 leaders, including Scrum Masters, Agile Coaches, and Project Managers. The respondents completed a survey that included 26 questions on team leadership, situational leadership, super leadership, and agile transformation outcomes using a 5-point Likert scale.

The hypothesis was formulated based on theoretical frameworks created during the literature review. The hypotheses were specifically developed to assess the effect of three types of leadership: team, situational, and super leadership, on the success of agile transformation.

The data were first checked for normal distribution and reliability by calculating some descriptive statistics. The relationship between leadership behaviors and agile outcomes was evaluated using the correlation approach with Pearson's r . The predictive importance of leadership on agile transformation was tested using multiple regression and analysis of variance (ANOVA) tests.

Analysis of Hypotheses Pair 1

H01: Leadership Behaviors have no significant impact on the adoption of Agile Practices.

H11: Leadership Behaviors have a significant impact on the adoption of Agile Practices.

The Pearson correlation test indicated a moderately strong positive correlation between leadership behaviors and adopting agile practices ($r = 0.422$, $p < 0.01$).

Table 2. ANOVA Results for Hypothesis Pair 1

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.684	2	6.842	21.176	.000b
Residual	63.003	195	0.323		
Total	76.687	197			

a. Dependent Variable: Team Leaders' Behavior

b. Predictors: (Constant), The organization ensures all stakeholders undergo consistent agile training and education to ensure consistent understanding. Our organization is proactively adopting compromising agile practices.

Table 2 shows the outcome of the evaluation whether different leadership behaviours, which is showcased by managers, have any impact on the adoption of agile practices in the organisation (Here, project-based software companies). Correlation analysis was conducted to evaluate the relationship between both variables, which showcased a value of 0.422, or a moderate relationship evident from responses collected during the survey. Additionally, a P-value of 0.000 is measured, which is less than 0.05 or the null hypothesis is rejected. Moreover, two aspects that organisations are proactively adopting different agile management practices and usage of agile process training and education, both have been found to have significant and positive influence on team leader behaviour and hence, adoption of agile practices in the workplace.

Analysis of Hypotheses Pair 2

H02: Leadership Behaviors have no significant impact on the aspect of agile transformation within an organization.

H12: Leadership Behaviors have a significant impact on the aspect of agile transformation within an organization.

Table 3. ANOVA Results for Hypothesis Pair 2

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.115	3	6.705	20.953	.000b
Residual	60.612	194	0.313		
Total	80.727	197			

a. Dependent Variable: Agile Transformation Outcomes

b. Predictors: (Constant), Leadership behaviours (team, situational, super).

Similarly, the second hypothesis pair have also been tested empirically. The results from the ANOVA analysis for Hypothesis Pair 2 are outlined in Table 3. Results indicate there is a notable difference in agile transformation outcomes based on particular leadership behaviours demonstrated ($F = 20.953$, $p = 0.000$). This shows that varying types of leadership, in context to team leadership, situational leadership, and super leadership, result in differing levels of achievement in agile transformation. Given the p-value is significantly lower than the alpha of 0.05, this means the null hypothesis is rejected, and the alternate hypothesis is accepted. It once again corroborates the outcomes of the study, reiterating that leadership is crucial in enabling the positive transformation of agile practices in organizations.

Table 4. Summary of Hypothesis Results

Research Objectives	Hypothesis	Status
To assess the effects of team leadership behaviors on agile transformation.	H01/H11	P value is $0.000 < 0.05$, thus, the null hypothesis is rejected, and it is concluded that Leadership Behaviors have a significant impact on the adoption of Agile Practices.
To determine the impact of situational leadership on agile transformation.	H01/H11	P value is $0.000 < 0.05$. Thus, the null hypothesis is rejected, and it is concluded that Leadership Behaviors significantly impact the adoption of Agile Practices.
To examine the link between super leadership and agile transformation.	H01/H11	P value is $0.000 < 0.05$. Thus, the null hypothesis is rejected, and it is concluded that Leadership Behaviors significantly impact the adoption of Agile Practices.
To identify misconceptions about agile transformation.	H01/H11	P value is $0.000 < 0.05$. Thus, the null hypothesis is rejected, and it is concluded that Leadership Behaviors significantly impact the adoption of Agile Practices.
To study the impact of transformation on all leadership types.	H02/H12	P value is $0.000 < 0.05$, thus, the null hypothesis is rejected, and it is concluded that Leadership Behaviors have a significant impact on the aspect of agile transformation within an organization.

Although the empirical results validate that leadership behaviors significantly influence the agile transformation, a more complex interplay appears to be at work. Drawing from leadership theory alongside the agile transformation framework, we introduce a Stage-Based Agile Leadership Model, which proposes that varying leadership behaviors are applicable at distinct stages of agile maturity.

DISCUSSION

The analysis of the data from this study reveals the growth of leadership behaviors in tandem with the agile transformation of the Indian IT sector. Both hypotheses have been validated, indicating that leadership, especially in team, situational, and super leadership, exerts a considerable influence on adopting agile practices and transforming them into tangible results.

This supports prior research; for instance, Dragičević and Bošnjak (2019) highlighted the importance of leadership skill sets in managing agile environments, specifically in terms of empowering, adapting, and promoting collaboration. Wise and Daniel (2016) also observed that team-centered leadership contributes to agility by facilitating better communication, decision-making, and self-management.

Regarding Hypothesis 1, the moderate correlation ($r = 0.422$) between leadership behaviors and the adoption of agile practices aligns with Gren and Lindman's (2020) observations that agile maturity is strongly linked to leaders' management of transparency and servant leadership. The findings of this study suggest that leaders play a crucial role in shaping organizational culture, breaking down silos, and promoting team alignment.

As for Hypothesis 2, the notable association ($r = 0.561$) between leadership behaviours and agile transformation outcomes aligns with Denning (2018), who argued that agile adoption at scale is rooted in leadership. Additionally, Dikert et al. (2016) concluded that the success of a transformation is largely contingent upon the active support and behavioral commitment of senior leaders. These similarities provide this study with a substantial external scope of validity.

Nevertheless, this study differs in claiming that none of the leadership approaches are effective in all stages of agile transformation. Although much of the literature relies on servant or transformational leadership models, these results indicate the need for a more structured, stage-sensitive approach. Initially, leaders enact situational leadership—diagnosing the team's readiness, addressing resistance, and requiring them to adjust to the perceived level of maturity. Subsequently, team leadership focuses on enabling collaboration, psychological safety, and shared ownership as the team matures. In the final stage, when self-organization is expected, super leadership becomes essential to encourage self-direction and promote innovative strategies for executing tasks independently.

This disputes the prevailing view that agile leadership is uniform across different contexts. Instead, it supports a holistic leadership model that evolves with the organization's agile maturity. While Poeth (2021) attributes structural boundaries as impediments to agile transformation, this research emphasizes that adaptability, rather than any one leadership style, enables sustained organizational agility more effectively.

The discussion validates the primary hypotheses while offering a differentiated perspective by proposing a leadership continuum characterized by multiple modalities. The results enhance the body of literature and add a geo-specific empirical perspective from the Indian IT industry, which has been under-explored in this literature.

Proposed Stage-Based Agile Leadership Model

This research suggests that the influence of leadership behaviors is not one-dimensional in facilitating agile transformation. Instead, the adoption of agility shifts the effectiveness of different leadership styles.

- In the formative phases of agile transformation, situational leadership, which is both directive and flexible, proves to be the most effective approach in overcoming resistance and enabling change.
- As more agile practices are integrated, the emphasis on team leadership increases as it cultivates collaboration, psychological safety, and collective ownership at the team level.
- During the maturity stage, self-leadership and autonomy are heavily promoted, granting agility even greater sustainability. This is dominantly supported by super leadership.

This stage-based view offers a dynamic understanding of leadership effectiveness, challenging the notion of a one-size-fits-all leadership style in agile transformation.

Theoretical Contribution

This research contributes to the leadership theory in the context of agile transformations by proposing a Stage-Based Agile Leadership Model. This model assumes that there are distinct leadership behaviors that are effective at different stages of agile maturity.

As noted in prior literature, leadership is often treated as a constant influence in any transformational context (AlNuaimi et al., 2022; Naveed et al., 2022). The findings from this study, however, show that leadership effectiveness is not universal; it changes with organizational maturity.

Moreover, given that much of the literature on agile leadership stems from Western-centric contexts (Giuggioli & Pellegrini, 2022; Trenerry et al., 2021), this study, positioned within the framework of Indian socio-economics, provides a significant contextual counterbalance. It asserts that while organizational age is a factor, leadership behaviors also need to be adapted to cultural dimensions (Budhwar et al., 2023; Ghobakhloo et al., 2023), thus challenging the universality of existing leadership models and calling for a context-driven, dynamic approach to agile transformations in emerging economies.

Practical Implications

For practitioners, General leadership training may not be sufficient in supporting agile transformations. Organizations should create distinct training programs for each stage of leadership evolution:

- Early-stage agile initiative leaders must focus on effective situational leadership that enables teams to navigate turbulent times (Walter, 2024; Budhwar et al., 2023).
- Mid-stage transformations should aim at fostering team leadership skills that promote collaboration and self-organization within the team (Ghobakhloo et al., 2023; Giuggioli & Pellegrini, 2022).
- Mature agile organizations are expected to adopt super leadership training that promotes self-leadership among employees to maintain organizational agility (Alenezi, 2023; AlNuaimi et al., 2022).

Table 5. Leadership Style Interventions

Leadership Style	Phase of Influence	Focus & Outcomes
Situational Leadership	Early Stage	Readiness assessment, resistance reduction
Team Leadership	Mid-Transformation Stage	Improved collaboration, shared ownership
Super Leadership	Maturity Stage	Sustained self-management through self-leadership and innovation. Leading the agile transformation driven by Agile principles

Additionally, in the context of emerging economies such as India, these leadership programs must address the need for cultural awareness (Trenerry et al., 2021; Ghobakhloo et al., 2023) by acknowledging hierarchical cultures and gradually adopting more distributed decision-making practices aligned with Agile principles, not just practices.

Limitations and Future Directions

Although this research makes a valuable contribution regarding the interplay between leadership actions and agile transformation results, some limitations also need to be discussed. Firstly, the use of cross-sectional data presents a clear restriction that stems from gathering data at a singular moment in time. This makes it impossible to determine the causal relationships that may exist between the leadership styles applied and the success of the agile transformation. We encourage more longitudinal research to better understand the various stages of leadership across the agile maturity levels.

Secondly, the possibility of self-reported survey bias due to social desirability bias presents during attempts to protect the anonymity of participants, as well as the common method bias. Leadership in agile transformations is an area that could benefit from the use of case studies or interview techniques, which would bring more clarity through comprehensive analysis.

Thirdly, despite the compelling findings, some limitations within the existing literature should be noted. While numerous studies critique traditional leadership frameworks, there remains a significant gap in empirical research that rigorously assesses how specific leadership models fail to resonate within distinct sectors and contexts across India (Singh & Radha, 2023); (Близнюк, 2022). Furthermore, the study predominantly relies on quantitative insights and generalizations, leaving a pressing need for qualitative analyses that can provide a more nuanced understanding of leadership effectiveness in Indian organizations (Bilderback, 2025). This deficiency highlights avenues for future research, encouraging scholars to engage with diverse methodological approaches, including mixed methods and longitudinal studies, to capture the evolving nature of leadership practices in real-time.

Future research should also explore the implications of emerging technologies and globalization on leadership dynamics in India, particularly as these factors continue to reshape traditional norms (Antony M et al., 2025), (D'Souza, 2024). Investigating how leaders adapt their strategies in response to these changes will be invaluable for both scholarly understanding and practical application. Additionally, there is a need for studies that focus specifically on the educational aspects of leadership training in India, aiming to cultivate leaders equipped to navigate the complexities of both local and international challenges (Thakur, E., 2024; Ramaiya, B., 2024).

Finally, while this research examined team leadership, situational leadership, and super leadership, other leadership models, such as distributed leadership or adaptive leadership, were outside the scope of this work. Further research may investigate these alternative approaches to enhance the understanding of leadership within agile transformations.

CONCLUSION

This research highlights the significance of leadership in the agile transformation process, while also challenging the assumption that leadership roles and actions in organizational settings remain unchanged over time. (Naveed et al., 2022; Walter, 2024). With the introduction of the Stage-Based Agile Leadership Model, we emphasize that leadership must be responsive to change shaped by the organization's maturity level and its cultural environment (Budhwar et al., 2023; Dey et al., 2023). Our findings suggest that agile transformations are not failing solely due to inadequate leadership, but rather due to futile attempts to align differing leadership approaches with the varying stages of the transformation process. This argument has been insufficiently explored in prior works. (Giuggioli & Pellegrini, 2022; Trenerry et al., 2021).

This gap highlights the urgent need for strategic, dynamic, and phased transitions, as virtually all the literature emphasizes the importance of empowerment and adaptability. In addressing emerging economies, it is essential to focus on how culture-specific elements mediate leadership action within agile frameworks, bounded by the contours of grounded theory (Ghobakhloo et al., 2023; Cheungsirakulvit & Pranee, 2023).

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