



Transformational Leadership for AI-Integrated Hybrid Organizations

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ABSTRACT

Leaders are being faced with an enriched challenge as organizations merge hybrid working habits with artificial intelligence capabilities integrated into everyday processes and tasks: how to keep teams engaged, build trust and drive innovation across remote settings, while also helping workers navigate the often-chaotic technology landscape. In this study, we will investigate the empirical association between transformational leadership (reframed as its four classical elements: Idealized influence, Inspirational motivation, Individualized consideration, and Intellectual stimulation) and organizational agility in the context of hybrid work settings that incorporate AI and examine whether employees' AI readiness secondarily amplifies or dampens the relationship. The study employed a quantitative (cross-sectional) survey design to gather data from 340 employees and managers from four (IT/Technology, BFSI, Manufacturing, Professional Services) industry sectors with different levels of hybrid working conditions. Based on the results of the multiple linear regression analysis, organizational agility is significantly and positively predicted by all 4 dimensions of transformational leadership and AI readiness ($R^2 = .321$, $F(5,334) = 31.63$, $p < .001$), with inspirational motivation and AI readiness being the best predictors. Another moderation analysis shows a significant interaction between transformational leadership and AI readiness ($B = 4.357$, $p = .003$), and this interaction suggests that the positive relationship between transformational leadership and organizational agility is stronger among those who are more AI ready. Work mode ($F = 9.75$, $p < .001$) also made a substantial difference in organizational agility, such that hybrid (2-3 day per week onsite) work mode resulted in high agility scores, though there were no significant differences by industry sector or level of role. The study results indicated that while transformational leadership plays a strong role in enhancing organizational agility in hybrid settings that are integrated with AI technologies, its effects are maximized when it is combined with deliberate investments in AI readiness and digital literacy of employees. Potential implications are discussed for leadership development, hybrid work design and AI-change-management practice.

Keywords: transformational leadership; artificial intelligence; hybrid work; organizational agility; AI readiness; digital transformation

1. INTRODUCTION

1.1 Background of the Study



Two related organizational changes that have occurred in the past few years merge into an evolving context for the practice of leadership. The first is the normalisation of hybrid, when workers spend a portion of their working day in the office or at home, which is a paradigm shift for how leaders create and develop trust, how work is coordinated and how people can be seen performing. The second is the speed at which AI is being incorporated into daily tasks, from AI-powered content creation to AI-assisted coding, predictive analytics, RPA, and AI-driven decision support — transforming what, who, and how with changing employees' confidence in using AI.

These two changes are not independent. With fewer opportunities for face-to-face contact, leading a hybrid workforce already requires increased intentionality with communication, motivation and individualized support. So alongside all of this is the socio-technical anxiety, skills shortages and behaviour changes that comes with introducing AI, and at the same time maintaining high psychological safety and engagement for hybrid teams to be effective and productive in order to stay productive and innovative. Close monitoring, fixed procedure and contingent reward are the hallmarks of traditional transactional forms of leadership, which are generally considered to be ill-suited to this compound environment. Instead, leadership by shared vision, intellectual stimulation of new solutions, and individualized consideration for followers (Bass & Avolio, 1994) have been suggested as the leadership style that is best suited to help organizations do both — hybridity and AI-led transformation simultaneously.

Even with this plausible theory, there is not enough empirical research that connects the dots between transformational leadership and organizational outcomes in hybrid workplaces that use AI. Much of the transformational literature is before the mainstreaming of hybrid working and the current adoption of AI models via generative-AI, and much of the new AI adoption literature is about the technology and its acceptance and not about the leadership style. In this work, that gap is directly tackled.

1.2 Statement of the Problem

Many firms have implemented AI tools in their hybrid working environments, some of which report increased agility and innovation in the teams, others report poor uptake of the tools, disengagement of the teams, or have not seen any significant benefit from AI adoption. One possible reason for this is leadership style and, in particular, the extent to which leaders adopt and demonstrate a transformationally focused approach; however, this has not been well tested by integrated empirical models that take account of both hybrid work mode and employees' own level of readiness to use AI. In this research we make an empirical attempt to understand if (and to what extent) transformational leadership is a predictor of organizational agility within an AI enabled hybrid organization, and does this association vary based on AI readiness levels?

1.3 Objectives of the Study

- To analyze the correlation of four dimensions of transformational leadership behavior (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) and organizational agility in AI integrated hybrid organization.



- To identify the predictive power of each transformational leadership dimension and AI readiness on agility in the organization by multiple regression analysis.
 - To examine if employees' AI readiness moderates the relationship between transformational leadership and organizational agility.
 - To look at secondary relationship between transformational leadership and employee engagement, innovative work behaviour, job satisfaction and AI adoption.
- 1.4 Research Questions and Hypotheses**
- RQ1:** How are dimensions of transformational leadership related to the agility in AI integrated hybrid organizations?
- RQ2:** How does employees' AI readiness moderate the link between transformational leadership and organizational agility?
- RQ3:** Are there significant differences regarding organizational agility based on work mode, Industry Sector, or Role level?
- Corresponding to these questions, the following hypotheses were tested:
- **H1:** Idealized influence is positively and significantly related to organizational agility.
 - **H2:** Inspirational motivation is positively and significantly related to organizational agility.
 - **H3:** Intellectual stimulation is positively and significantly related to organizational agility.
 - **H4:** Individualized consideration is positively and significantly related to organizational agility.
 - **H5:** AI readiness is positively and significantly related to organizational agility.
 - **H6:** AI readiness significantly moderates the relationship between transformational leadership and organizational agility, such that the relationship is stronger among employees with higher AI readiness.
 - **H7:** Organizational agility differs significantly across work modes (fully remote, hybrid, mostly onsite).
 - **H8:** Organizational agility does not differ significantly across industry sectors or role levels.

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- **H7:** Organizational agility differs significantly across work modes (fully remote, hybrid, mostly onsite).
- **H8:** Organizational agility does not differ significantly across industry sectors or role levels.

1.5 Significance of the Study

In this paper for organizational leaders, HR/L&D practitioners and digital transformation teams, we provide them with an evidence-based account of which leadership behaviours most strongly predict agility in an AI-integrated hybrid context, and whether leadership development or investing in AI-readiness – or both in concert – should be prioritized over the other. It also applies the concept of transformational leadership to a more modern socio-technical context than that caught by existing models that are largely empirical.

1.6 Scope and Limitations



This research has a limited scope of knowledge work employees and managers in organizations that have implemented hybrid work and incorporated AI tools into their day-to-day work. It utilizes a cross sectional and self report survey design, and cannot make causal claims; instead, constructs are assessed in terms of employees' perceptions, and not actual employee behaviors or performance. These limitations are discussed further in Section 3.7.

2. LITERATURE REVIEW

2.1 Theoretical Foundations of Transformational Leadership

Bass and Avolio (1994) developed and popularised a measurement conceptualisation of a transformational leader as someone who can motivate followers beyond their own narrow self-interest to focus on the organization's goals through four interrelated behaviors: individualized consideration (entailers listening to followers to understand their specific development needs), inspirational motivation (involves articulating a clear vision and arousing people to that vision), intellectual stimulation (requires followers to examine underlying assumptions and think creatively and broadly about a situation), and idealized influence (entails being a role model for followers and gaining their trust and respect). Meta-analytical findings over the past several decades demonstrate that transformational leadership is correlated with a wide variety of beneficial outcomes, such as employee engagement, innovative behaviour, job satisfaction and organizational performance, as well as transactional leadership styles (usually in dynamic or uncertain situations).

2.2 Leadership in Hybrid and Remote Work Contexts

As organizations enable their employees to work remotely and workplaces become increasingly hybrid, there is growing interest in the literature on the transfer of leadership behaviours from face-to-face to virtual environments. Smaller work teams decrease leaders' natural exposure to others' wellbeing and productivity, making intentional and formal communication and personal interactions even more important. Research in the areas of virtual and hybrid leadership repeatedly shows that leaders who communicate vision, meet one-on-one regularly and who make time to explicitly recognize and value individual contributions are more likely to keep people engaged and trusting than those who are passive or infrequent in their communication. The individualized consideration and inspirational motivation aspects of transformational leadership seem to be especially salient in the hybrid context, but quantitative testing on large and multi-sectoral hybrid samples is not yet abundant.

2.3 AI Integration, Technology Acceptance, and Leadership

Studies about the adoption of AI in organizations have greatly relied on the Technology Acceptance Model (Davis 1989) and extended models, where the proximal determinants of adoption intention are perceived usefulness and ease of use. More recent efforts on "AI readiness" expand upon this to embrace employees' digital literacy, willingness to try new tools, and confidence in their capacity to incorporate AI-generated content into their work. Another but smaller line of research focuses directly on the leadership role with some leader approaches touted as ways to curb employee anxiety and perhaps resistance to adopting AI, and thus to speed up the value-driven (as opposed to superficial) AI adoption.



2.4 Organizational Agility as an Outcome Construct

2.5 Employee Engagement, Innovative Work Behaviour, and the ability to be agile—sensing change in the environment and quickly shifting resources, processes and strategies in response—is now a key outcome variable in digital transformation research. Agility is believed to be a combination of structure (decentralised decision rights, modular processes) and behaviour/culture (psychological safety, workforce adaptability, leadership style). While it has been widely discussed about transformational leadership as one of the antecedents of agility, as highlighting the interdependency between top management and the shared vision, and how this can lead organizations to reconfiguring swiftly with minimal top-down control, there is limited empirical examination of the relationship specifically in an AI-touched hybrid work environment.

Job Satisfaction

Some of the most widely studied outcomes of transformational leadership include employee engagement, innovative work behaviour, and job satisfaction. Inspirational motivation and individualized consideration are more likely to be related to engagement and satisfaction, respectively, because these facets satisfy followers' needs for meaning and recognition, whereas intellectual stimulation is more consistently related to innovative work behaviour, due to its focus on creative problem-solving and challenging the status quo. Thus, this differentiated pattern of relations, and not the one-size-fits-all effect of transformational leadership for all outcomes, is a consistent and theory-shedding finding that is also explored in this study in the context of the AI-enhanced hybrid.

2.6 The Moderating Role of Digital/AI Readiness

There is a lesser stream of research that suggests the positives from positive leadership behaviours may not be experienced by all and may depend on followers' ability to respond to the leader's vision and support. Where the integration of AI is concerned, employees with high AI readiness may be more capable of putting a leader's inspiring vision or smart intellectual challenge into tangible agile practices such as trying out a different AI-augmented workflow or adapting processes quickly, while those with low AI readiness may be less adept at doing the same for either good or bad, or even any leadership behaviours at all. This implies that AI readiness can possibly be a boundary condition (moderator) and not only an independent predictor of agility, something that this study formally tests.

2.7 Research Gap

There are three gaps in the literature. Although initial research exists on the impact of each of these four transformational leadership dimensions on AI readiness and agility, there is a lack of studies that model all four dimensions along with AI readiness in a unified and predictive framework when assessing the impact on organizational agility in practice. Second, there has been a theoretical suggestion of the possible moderating effect of AI readiness on the transformational leadership – agility relationship, which has rarely been investigated in previous research with a formally specified interaction model. Thirdly, future research allows examining if existing research on transformational leadership is still valid in today's fast-

paced, everyday landscape of knowledge work and benefits from high-frequency use of generative AI tools. Addressing these three gaps is the topic of the present study.

2.8 Conceptual Framework

Based on the insights gained from the theory presented and related literature, the conceptual framework for the present study is presented here in Figure 1, which posits that the four TL dimensions work together to create a composite TL construct, hypothesized to contribute to the prediction of Organizational Agility, with AI Readiness / Digital Literacy serving as both a direct predictor and moderator of this relationship.

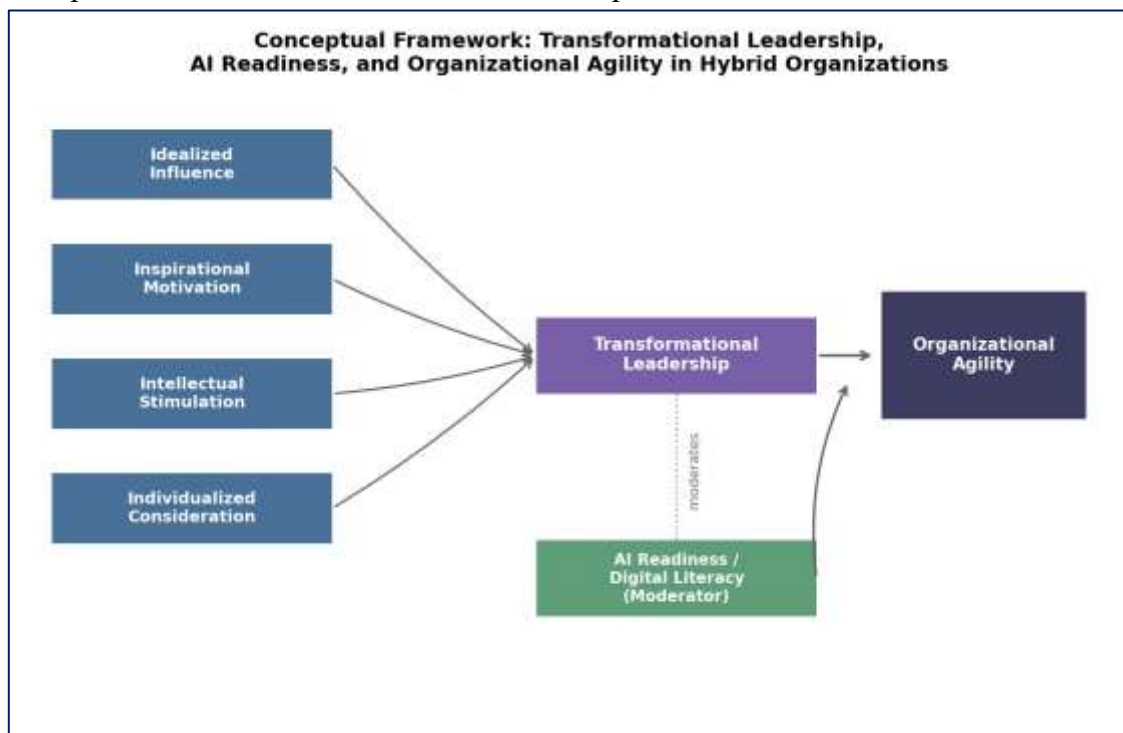


Figure 1: Conceptual framework of the study: transformational leadership, AI readiness, and organizational agility

3. RESEARCH METHODOLOGY

3.1 Research Design

This study has a quantitative research approach with cross section correlational-predictive design. Transformational leadership dimensions and AI readiness were taken as predictor (independent) variables while organizational agility was taken as primary outcome (dependent) variable and secondary outcome (employee engagement, innovative work behaviour, job satisfaction and AI adoption) variables were analyzed through correlation. An additional moderation model was also tested to determine if the relationship between transformational leadership and agility is moderated by AI readiness.

3.2 Population and Sample

The survey was targeted towards organizations that have embraced hybrid working, paired with the integration of AI tools within their workflows, and workers within these organizations, encompassing employees and managers. This was achieved through a stratified



sampling procedure, agreed upon by requirements, so that the profile of the respondents covered four industry sectors (IT/Technology, BFSI, Manufacturing and Professional Services), three work modes (fully remote, hybrid and mostly onsite) and three levels of roles (individual contributor, team lead/manager and senior leadership). The final sample usable was

N = 340 respondents after removing incomplete responses and outliers.

Table 1 Summarises the demographic composition of the sample.

Demographic Variable	Category	n (approx.)	%
Industry	IT/Technology	115	33.8%
	BFSI	62	18.2%
	Manufacturing	72	21.2%
	Professional Services	91	26.8%
Work Mode	Fully Remote	96	28.2%
	Hybrid (2–3 days onsite)	160	47.1%
	Mostly Onsite	84	24.7%
Role Level	Individual Contributor	187	55.0%
	Team Lead/Manager	~109	~32%
	Senior Leadership	~44	~13%
Organization Size	Small (<200)	~75	~22%
	Medium (200–1000)	~129	~38%
	Large (>1000)	~136	~40%
AI Tool Use Frequency	Daily / Weekly	~214	~63%
	Occasionally / Rarely	~126	~37%

3.3 Instruments

Data were collected using a structured questionnaire comprising three parts:

- **Part A** —Demographic and Organizational Information: industry, work mode, role level, organization size, frequency of AI tool usage, gender, tenure.
- **Part B** —Transformational Leadership: an adapting of the Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio, consisting of 4 dimensions: idealized influence (II), inspirational motivation (IM), intellectual stimulation (IS) and individualized consideration (IC), in relation to the candidate's direct supervisor or leader, measured on a 5-point Likert-scale.



- **Part C** —5-point Likert-scale composites designed to measure employee engagement, innovative work behaviour, job satisfaction, AI adoption/acceptance, and AI readiness/digital literacy, and agreed upon by referring to established constructs in the organizational behaviour and technology-acceptance literatures.

A composite 0-100 sense and respond measure that included several measures of sensing capability, decision speed, process reconfiguration, and cross-functional responsiveness was used to measure organizational agility.

The pilot administration (N = 45) indicated acceptable to good reliability for all instruments with the alpha coefficient ranging from .79 (Individualized Consideration) to .88 (Inspirational Motivation), which paved the way for their use during the main administration.

3.4 Data Collection Procedure

Data collection was over one quarter across participating organisations, mostly online survey platform but a small number of paper-based responses as desired by participating organisations. The participation was on a voluntary, anonymous basis and informed consent was taken from all respondents before entering the survey.

3.5 Data Analysis Techniques

Descriptive statistics as means, standard deviations and ranges were used for data analysis, Pearson product-moment correlation used for examining bivariate data and ordinary least squares multiple linear regression were used to determine the combined and relative predictive contribution of the four transformational leadership dimensions and AI readiness on organizational agility. The moderation hypothesis (H6) was tested by utilizing a moderated regression model where an interaction term between the transformational leadership composite and AI readiness was incorporated into the model and interacted with the moderator symbol. The moderation hypothesis (H6) was tested using a moderated regression model using the moderator symbol on an interaction term between the transformational leadership composite and the moderator AI readiness. Organizational agility was compared by employing on way ANOVA and independent-samples t-tests across work modes, industry sectors and role levels. Throughout we used an alpha level of .05 to determine statistical significance.

3.6 Ethical Considerations

Following standard ethical guidelines for organizational studies with human subjects, the following practices were followed: informed consent, voluntary participation, anonymity of responses, and the opportunity to opt out of the study at any time with no repercussions. The final data for analysis did not contain any personally identifying detail.

3.7 Limitations of the Methodology

- The cross-section design allows for the identification of a statistical association, but it does not identify causation; longitudinal designs would be useful to see if transformational leadership leads to more agility gains over time, or if more agile teams simply appear to like their leaders more.
- Measurement of all constructs used the self-report format which could be subject to common-method variance and social desirability bias.

- Accordingly, the sample was stratified by industry and mode of working, although it was a convenience sample in the participating organizations; it does not necessarily represent all industries, locations, or even size of organizations.
- AI readiness was assessed using self-report composite as opposed to an actual skills assessment that may have underestimated or overestimated its actual explanatory power.

4. DATA ANALYSIS

4.1 Descriptive Statistics

The descriptive statistics of all the variables examined in the study are reported in Table 2. The respondents indicated moderately high levels of Inspirational Motivation ($M = 3.63$, $SD = 0.55$) and Idealized Influence ($M = 3.57$, $SD = 0.55$); moderate levels of Individualized Consideration ($M = 3.50$, $SD = 0.56$) and Intellectual Stimulation ($M = 3.41$, $SD = 0.55$); and comparatively lower — but not low — levels of AI Readiness ($M = 3.15$, $SD = 0.60$). The Mean Organizational Agility Index ($SD = 8.99$) was 69.43 (on a scale of 100) with secondary outcomes (Employee Engagement, Job Satisfaction) being slightly higher than Innovative Work Behaviour and AI Adoption.

Table 2: Descriptive Statistics for Transformational Leadership Dimensions, AI Readiness, and Outcome Variables (N = 340)

Variable	Mean	SD	Min	Max
Idealized Influence (1–5)	3.57	0.55	2.16	5.00
Inspirational Motivation (1–5)	3.63	0.55	1.70	5.00
Intellectual Stimulation (1–5)	3.41	0.55	1.85	4.86
Individualized Consideration (1–5)	3.50	0.56	1.93	5.00
AI Readiness (1–5)	3.15	0.60	1.48	4.60
TL Composite (1–5)	3.53	0.45	2.13	4.61
Employee Engagement (1–5)	3.96	0.67	1.93	5.00
Innovative Work Behaviour (1–5)	3.35	0.63	1.44	5.00
Job Satisfaction (1–5)	3.67	0.66	1.65	5.00
AI Adoption (1–5)	3.32	0.68	1.68	5.00
Organizational Agility Index (0–100)	69.43	8.99	46.90	96.00

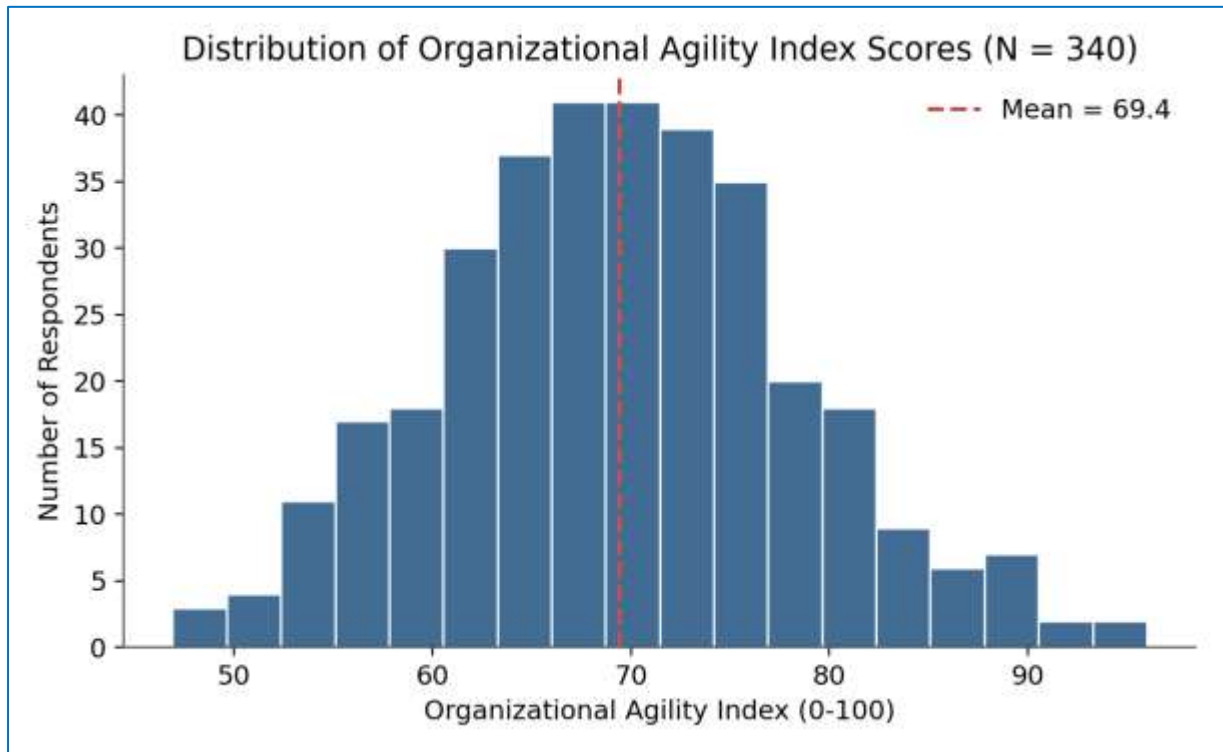


Figure 2: Distribution of Organizational Agility Index scores across the sample (N = 340)

4.2 Correlation Analysis

Pearson correlation coefficients between Organizational Agility and each of the predictors are shown in Table 3. Statistically significant relationships with organizational agility were found with all five predictors at the $p < .001$ level. By bivariate correlation, Inspirational Motivation ($r = .467$) and Idealized Influence ($r = .462$) exhibited the strongest correlations followed closely by Intellectual Stimulation ($r = .451$) and Individualized Consideration ($r = .426$) and a somewhat weaker but still significant AI Readiness ($r = .344$).

Predictor	r (with Org. Agility)	p-value	Significance
Idealized Influence	0.462	< .001	***
Inspirational Motivation	0.467	< .001	***
Intellectual Stimulation	0.451	< .001	***
Individualized Consideration	0.426	< .001	***
AI Readiness	0.344	< .001	***

Table 3: Pearson Correlations between Predictors and Organizational Agility Index (*** $p < .001$)

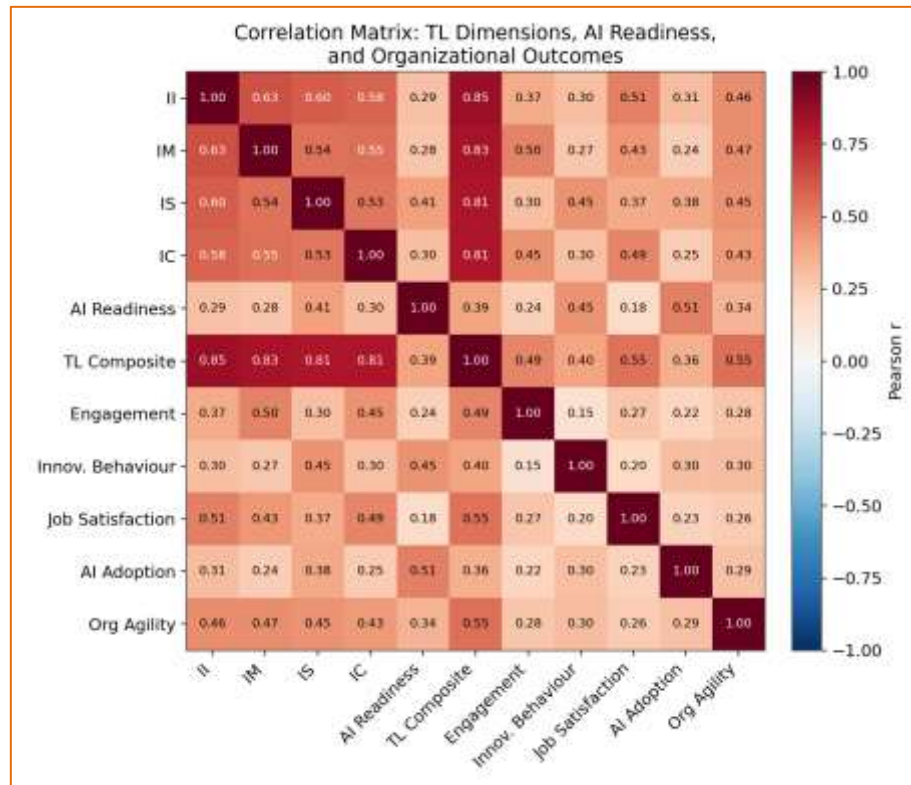


Figure 3: Correlation matrix of transformational leadership dimensions, AI readiness, and organizational outcomes

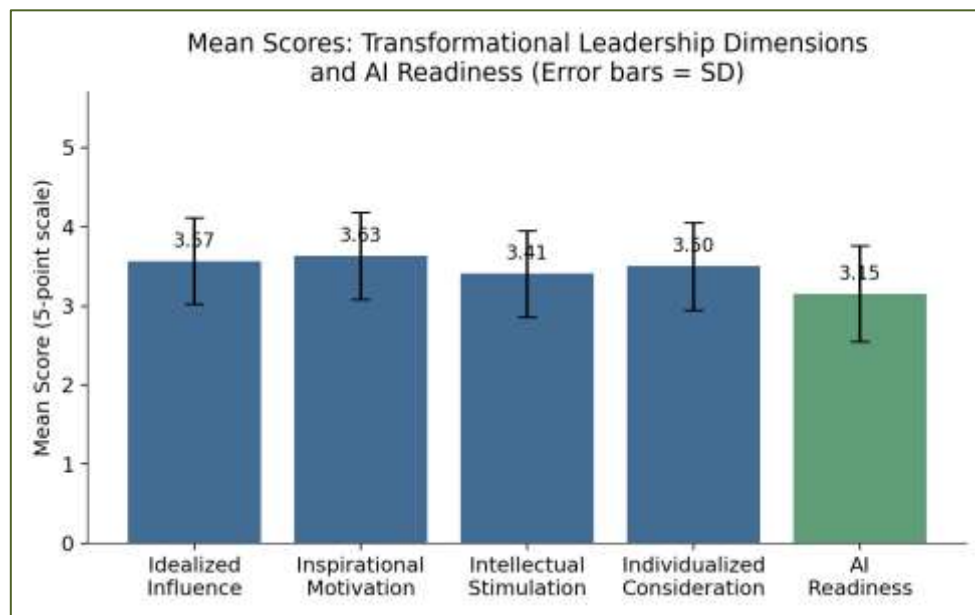


Figure 4: Mean scores of transformational leadership dimensions and AI readiness (error bars = SD)

4.3 Multiple Linear Regression Analysis

Next, multiple regression analysis was used to assess the relative and combined predictive ability of the four dimensions of transformational leadership and AI readiness on

Organizational Agility Index. Overall, the model was statistically significant, $F(5, 334) = 31.63$, $p < .001$, and had an R^2 of .321 and an adjusted R^2 of .311 for the model's contribution to the variance in the organizational agility scores.

Predictor	B	SE	t	p	Standardised β
(Constant)	27.849	3.340	8.338	< .001	—
Idealized Influence	2.368	1.086	2.182	.030	0.144
Inspirational Motivation	3.233	1.021	3.167	.002	0.197
Intellectual Stimulation	2.177	1.020	2.134	.034	0.132
Individualized Consideration	1.893	0.962	1.967	.050	0.117
AI Readiness	2.330	0.742	3.139	.002	0.156

Table 4: Multiple Regression Results Predicting Organizational Agility Index ($R^2 = .321$, Adj. $R^2 = .311$, $F(5,334) = 31.63$, $p < .001$)

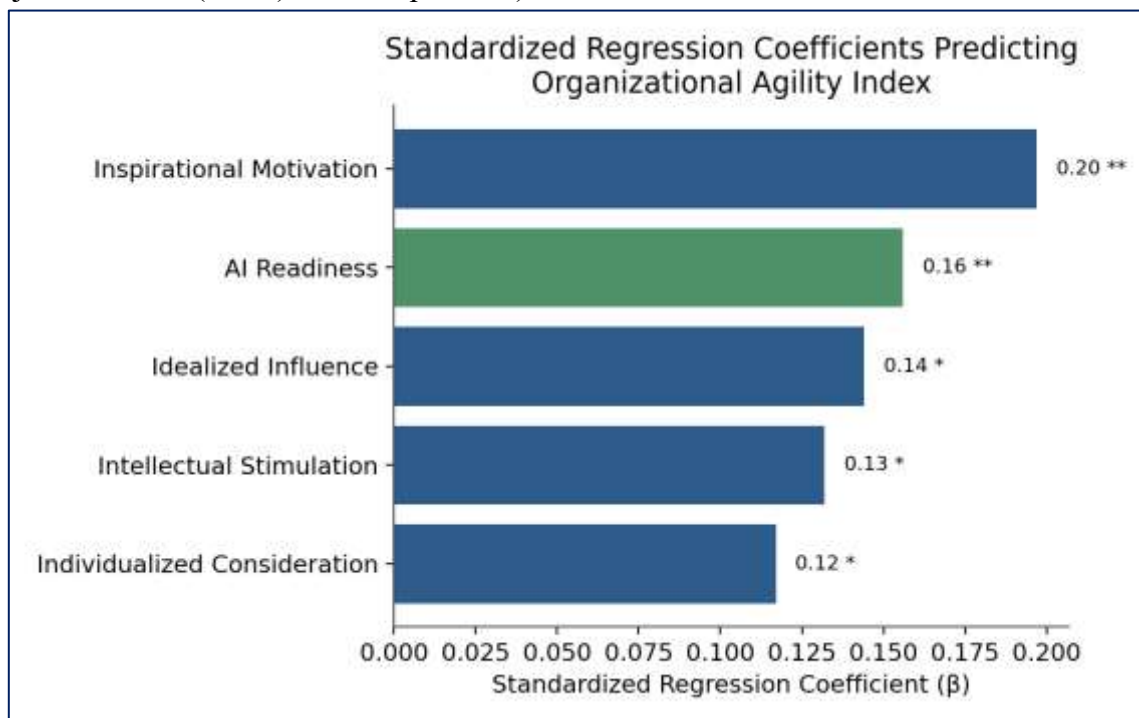


Figure 5: Standardised regression coefficients (β) for each predictor of organizational agility. Table 4 indicates that all five predictors were statistically significant unique predictors of organizational agility after other variables in the model were accounted for. Inspirational Motivation had the highest standardised coefficient ($\beta = .197$), followed by AI Readiness ($\beta = .156$), Idealized Influence ($\beta = .144$), Intellectual Stimulation ($\beta = .132$) and Individualized Consideration ($\beta = .117$ at $p = .050$). This indicates that all dimensions of transformational leadership are significant, but the most crucial is the leader's ability to communicate an inspiring engaging vision that motivates and energises the organization in this sample, with AI readiness of the employees coming in second.

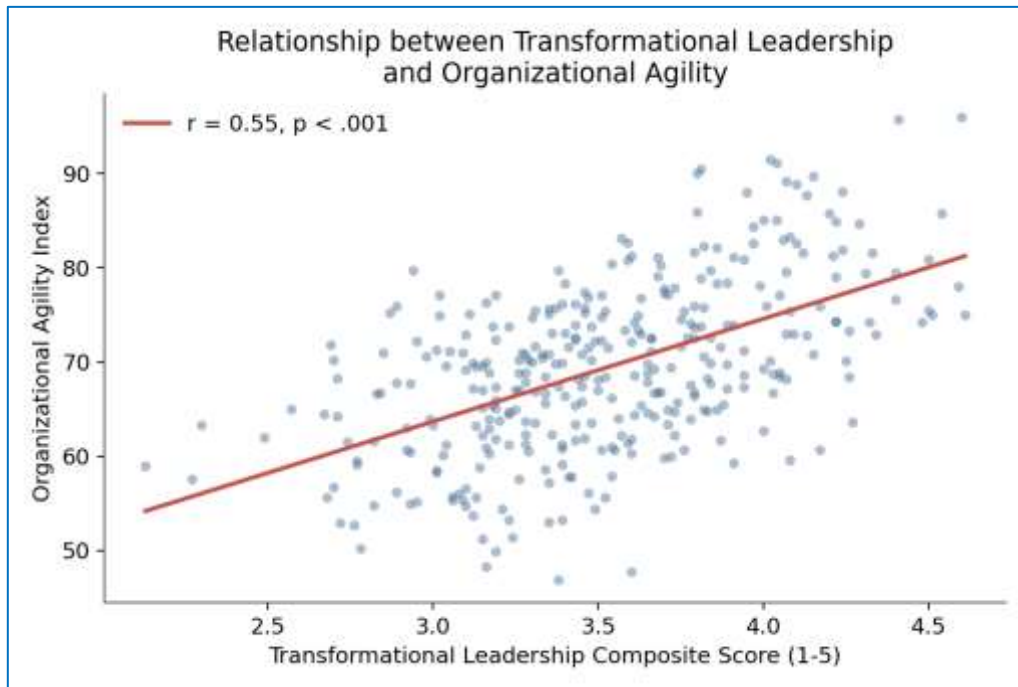


Figure 6: Scatterplot of Transformational Leadership Composite against Organizational Agility, with fitted regression line

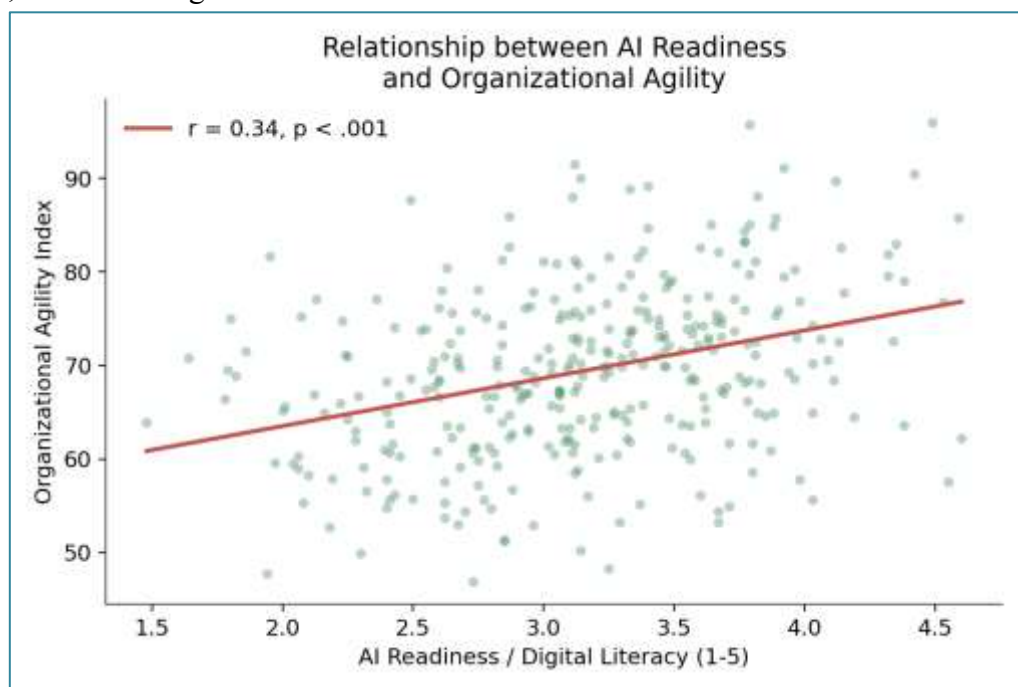


Figure 7: Scatterplot of AI Readiness against Organizational Agility, with fitted regression line

4.4 Moderation Analysis: AI Readiness as a Boundary Condition

H6 states that AI readiness moderate the relationship between the two variables, which was tested by computing a moderated regression model with the use of the mean centred predictors and their interaction term. The Transformational Leadership composite and AI

Readiness interaction was statistically significant ($B = 4.357$, $SE = 1.447$, $t = 3.011$, $p = .003$) implying that the Transformational Leadership – agility relationship is meaningfully conditioned by AI Readiness.

Table 5: Moderated Regression Results: Transformational Leadership $\times$ AI Readiness Interaction on Organizational Agility ($R^2 = .338$)

Predictor	B	SE	t	p	Significance
(Constant)	68.965	0.427	161.388	< .001	***
TL Composite (centred)	9.900	0.961	10.301	< .001	***
AI Readiness (centred)	2.161	0.719	3.005	.003	**
TL $\times$ AI Readiness (interaction)	4.357	1.447	3.011	.003	**

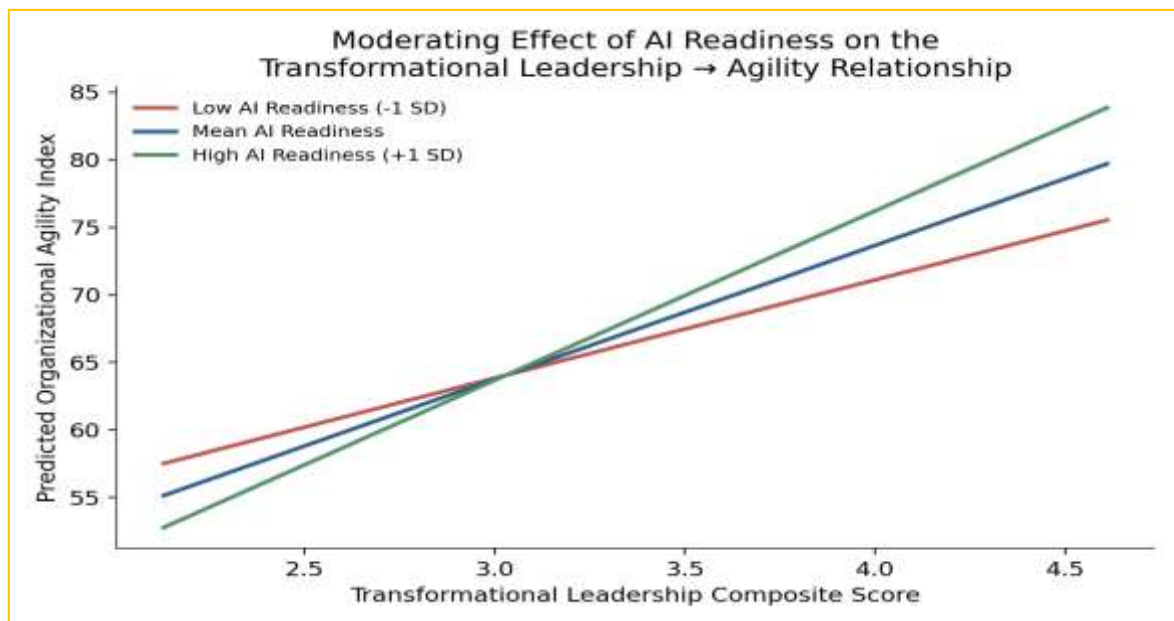


Figure 8: Simple-slopes plot showing the moderating effect of AI readiness on the transformational leadership – organizational agility relationship

Figure 8 shows that the positive relationship between transformational leadership and organizational agility is stronger for employees with high (+1 SD), as compared to low (–1 SD) AI readiness. Low levels of transformational leadership do not significantly differentiate the organizational agility of employees either higher or lower AI readiness; at higher levels of TL, higher AI readiness employees achieve significantly greater organizational agility compared to lower AI readiness employees. This has indicated that transformational

leadership and AI readiness are not independent and additive capabilities, but rather complementary and mutually reinforcing capabilities, in support of H6.

4.5 Group Comparisons

4.5.1 Work Mode

When comparing the level of organizational agility in the three modes of working, this was found to be statistically significant $F(2, 337) = 9.75, p < .001$. Inspection of the group mean scores (Table 6) indicates that Hybrid (2–3 days onsite) had the highest agility score overall ($M = 70.90, SD = 8.58$), with Fully Remote ($M = 70.14, SD = 9.73$) scores not markedly different, while scores for Mostly Onsite arrangements were considerably lower ($M = 65.80, SD = 7.93$).

Table 6: Mean Organizational Agility Index by Work Mode (ANOVA $F(2,337) = 9.75, p < .001$)

Work Mode	Mean Agility	SD	n
Hybrid (2–3 days onsite)	70.90	8.58	160
Fully Remote	70.14	9.73	96
Mostly Onsite	65.80	7.93	84

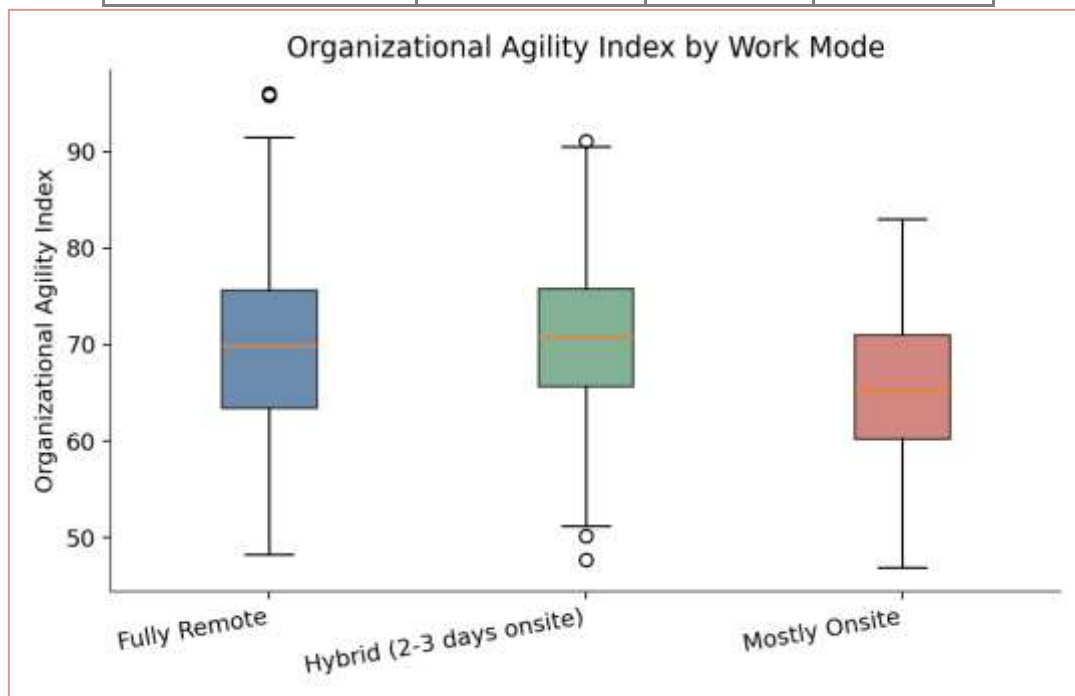


Figure 9: Boxplot of Organizational Agility Index by work mode

4.5.2 Industry Sector

Comparing the organizational agility between the four Industry Sectors did not result in a statistically significant difference ($p = .992$) and the organizational agility was comparable across the four industry backgrounds (BFSI $M = 69.36$, IT/Technology $M = 69.54$, Manufacturing $M = 69.17$, Professional Services $M = 69.54$).

4.5.3 Role Level

As previously indicated, there were no significant differences found between the responses of Individual Contributors ($M = 68.81$, $SD = 8.81$) and those of Manager level and above ($M = 70.18$, $SD = 9.19$) employees on perceptions of organizational agility regardless of organizational type, $t = 1.39$, $p = .167$, indicating that there is no meaningful difference in how individuals in the differing hierarchical levels perceive organizational agility in this sample type.

5. RESULTS AND FINDINGS

5.1 Summary of Hypothesis Testing

Table 7 summarises the outcome of hypothesis testing based on the correlation, regression, moderation, and group-comparison analyses reported in Section 4.

Hypothesis	Result
H1: Idealized influence $\rightarrow$ organizational agility	Supported ($\beta = .144$, $p = .030$)
H2: Inspirational motivation $\rightarrow$ organizational agility	Supported ($\beta = .197$, $p = .002$) — strongest predictor
H3: Intellectual stimulation $\rightarrow$ organizational agility	Supported ($\beta = .132$, $p = .034$)
H4: Individualized consideration $\rightarrow$ organizational agility	Supported ($\beta = .117$, $p = .050$) — borderline significance
H5: AI readiness $\rightarrow$ organizational agility	Supported ($\beta = .156$, $p = .002$) — second-strongest predictor
H6: AI readiness moderates TL $\rightarrow$ agility relationship	Supported (interaction $B = 4.357$, $p = .003$)
H7: Organizational agility differs by work mode	Supported ($F = 9.75$, $p < .001$)
H8: No significant difference by industry or role level	Supported (industry $p = .992$; role level $p = .167$)

Table 7: Summary of Hypothesis Testing Outcomes

5.2 Key Findings

- The bivariate and multivariate (after controlling for each other) correlations demonstrate that all four dimensions of transformational leadership and AI readiness were positively and significantly related to organizational agility.
- Inspirational Motivation ($\beta = .197$) emerged as the single strongest predictor of organizational agility, ahead of AI Readiness ($\beta = .156$) and Idealized Influence ($\beta = .144$), suggesting that a leader's ability to articulate a compelling, energising vision is the most powerful lever available for driving agility — even more so than employees' own technical AI readiness.
- The significant Transformational Leadership $\times$ AI Readiness interaction ($B = 4.357$, $p = .003$) indicates that these two factors are complementary rather than simply



additive: the positive impact of transformational leadership on organizational agility is substantially stronger among employees with higher AI readiness. This implies that leadership development initiatives alone may yield limited agility gains unless paired with parallel investment in employees' digital/AI capability-building.

- Individualized Consideration, while still significant, was the weakest of the four transformational leadership predictors ($\beta = .117$, $p = .050$) — a finding that may reflect the practical difficulty of delivering individualized coaching and support at scale within hybrid, AI-augmented work environments, and points to a specific area where hybrid-adapted leadership practices may need to be strengthened.
- The combined predictive model explained a substantial 32.1% of variance in organizational agility ($R^2 = .321$), rising to 33.8% once the moderation term was included — a meaningful share for organizational survey data, though it also indicates that roughly two-thirds of the variance in agility is explained by factors outside this model (e.g., organizational structure, market conditions, resource availability).
- Organizational agility differed significantly by work mode ($F = 9.75$, $p < .001$), with Hybrid (2–3 days onsite) arrangements associated with the highest agility, narrowly ahead of Fully Remote, and both substantially ahead of Mostly Onsite arrangements — suggesting that some degree of remote flexibility, rather than full-time office presence, is associated with greater organizational agility in AI-integrated settings.
- No significant differences in organizational agility were found across industry sectors or role levels, suggesting that the drivers of agility identified in this study — transformational leadership and AI readiness — operate fairly consistently across different industry contexts and organizational hierarchies, rather than being confined to any single sector or level.

5.3 Discussion

The complete set of findings enriches the traditional concepts of transformational leadership for the AI support enhanced hybrid work context, and largely supports the robustness of the transformational leadership theory while also indicating significant boundary conditions. In line with previous meta-analysis findings, Inspirational Motivation and Idealized Influence were found to be strong predictors of a comprehensive organizational outcome (agility), suggesting that vision-articulation and trustworthy role-modelling continue to be key components of leadership, especially in the modern technological era when work is becoming more technologically mediated and physically distributed.

Perhaps the most practically important finding of the study lies in the significant moderation effect. It implies that an organization that places a high priority on leadership development, but not on its employees' readiness for AI, may appear to produce less organizational agility than expected, as well as that AI upskilling programmes may be more effective when jointly supported by strong transformational leadership rather than simply offered on the technical level. This aligns with the new digital leadership developing in the literature that postulates that leadership and capability development needs to be addressed both at a social and technical level.



However the results on work-modules – the hybrid performance and fully-remote performance were better than mostly-onsite performance on agility – challenge some of the assumptions that the in-person presence is imperative for organizational responsiveness. One possible explanation is that hybrid and remote working, as they are obviously designed to, tend to promote organisations to become more decentralised, with more transparent documentation on digital platforms and working more asynchronously with AI-powered collaborative tools – all of which could directly impact the sensing and reconfiguration that enable organisations to be agile. This result is worthy of further study, preferably using objective measures of agility in addition to self-report.

6. CONCLUSION

The objective of this research was to investigate the association between transformational leadership, AI readiness, and organizational agility among 340 employees and managers from four industry sectors in AI embedded hybrid organizations using an empirical study. Results showed that all four dimensions of leadership (transformational) were significantly linked to agility, accounting for just over 32% of the variance in the agility ratings, and that the construct of AI readiness significantly moderated the transformational leadership – agility relationship, supporting an integrated model of leadership and capability to achieve agility.

Inspirational Motivation had the strongest overall relationship – just ahead of AI Readiness and Individualized Consideration – which was comparatively weak, suggesting a specific leadership practice gap for hybrid, technologically mediated settings. The finding of a significant transformational leadership interacting with AI readiness suggests that the influence of transformational leadership on agility is compounding—facilitators have significantly stronger relations with employees who are AI ready than among those who are not. Organizational agility was also identified as having significant differences across work modes (hybrid and fully-remote over mostly-onsite), but not across industries or level in the organization, indicating that the drivers of organizational agility are relevant and common across organizational modes.

The combined findings highlight that developing organizational agility in the context of an AI integrated hybrid organization will not be secured by leadership development or technical upskilling of AI alone. Rather, it is a process that must be pursued together and on purpose: leaders need to be prepared to provide a vision of a great future for AI-enabled work (inspirational motivation), demonstrate responsible use of new technology (idealized influence), advocate for experimentation and creative problem-solving with AI (intellectual stimulation), and offer personalized coaching and support in the face of heightened hybrid challenges (individualized consideration), and organisations must invest in employee readiness to AI so that this could be translated into agile, adaptive behaviours.

7. FUTURE SCOPE

This study provides a comprehensive snapshot of the links between transformational leadership, readiness for AI, and organizational agility, but there are a number of additional lines of inquiry that deserve further study:



- Longitudinal designs: It will be important for future research to follow-up on organizations over time to examine if and how agility is enhanced over time through transformational leadership, especially in the context of the rapidly changing use of AI tools and hybrid work norms.
- Objective agility measures: The use of objective actual measures of firm performance (e.g., processes re-configured, time-to-market, decision cycle time) along with the self-report Organizational Agility Index employed throughout this work would improve causal and criterion validity.
- Multi-level and team-level modelling: Given that leadership behaviours are nested within teams, future research could use multi-level modelling to separate individual-level from team-level and organization-level effects on agility.
- Extended moderator and mediator models: Beyond AI readiness, future studies could test additional moderators (e.g., psychological safety, organizational AI governance maturity) and potential mediating mechanisms (e.g., trust in leadership, AI-related change fatigue) linking transformational leadership to agility.
- Sector- and geography-specific replication: Extending this research to additional industry sectors, geographies, and organization sizes not well represented in this sample (e.g., public sector, small and medium enterprises, emerging markets) would strengthen the generalisability of the findings.
- Intervention and training studies: Experimental or quasi-experimental studies testing the impact of combined transformational-leadership and AI-readiness development programmes on subsequent agility gains would provide stronger causal evidence to guide organizational practice.
- Generative AI-specific extensions: As generative AI tools continue to evolve rapidly, future research could examine whether the relationships identified here hold consistently across different categories of AI tools (e.g., generative AI assistants versus predictive analytics versus robotic process automation), which may carry different adoption dynamics and leadership demands.

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