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DEVELOPING AND VALIDATING THE AI WORKFORCE READINESS INDEX (AI-WRI): AN INTEGRATED HR ANALYTICS FRAMEWORK FOR AI-ENABLED ORGANIZATIONAL TRANSFORMATION.

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Abstract

Artificial intelligence (AI) is quickly permeating daily organisational operations, impacting how workers operate, how managers make choices, and how businesses compete. Many organisations still struggle to realise the anticipated benefits of AI adoption, despite large expenditures in AI technologies. The fact that technical preparedness frequently develops more quickly than workforce readiness is a persistent worry. The adoption of AI, digital transformation, and organisational preparedness have all been studied in the past, but the question of whether managers and staff have the skills necessary to function well in AI-enabled workplaces has received comparatively little attention.

By creating and validating the Artificial Intelligence worker Readiness Index (AI-WRI), a multifaceted framework intended to evaluate worker readiness for AI-integrated workplaces, the current study fills this gap. AI-WRI is conceptualised through six interconnected dimensions: AI competency, AI trust and acceptance, human-AI collaboration capability, AI governance awareness, learning agility and reskilling readiness, and AI leadership readiness. These dimensions are based on Human Capital Theory, Dynamic Capability Theory, and the Technology-Organization-Environment framework.

The data was gathered from employees and administrators in AI-enabled organisations across a variety of industries. Using Partial Least Squares Structural Equation Modelling (PLS-SEM), the proposed framework was validated. The findings corroborate the multidimensional nature of workforce readiness and illustrate that preparedness for AI is not limited to technical knowledge. Both adaptability and ethical awareness, as well as leadership support and collaborative capability, are equally critical components of successful AI integration. By changing the emphasis from organisational preparation to worker readiness, the study adds to the expanding body of literature on AI and human resource management. In order to enable sustainable AI transformation, the AI-WRI provides organisations with a structured diagnostic tool for determining capacity gaps, assessing workforce readiness, and creating focused interventions.

Keywords: Artificial Intelligence, Workforce Readiness, HR Analytics, AI Literacy, Human-AI Collaboration, Learning Agility, Digital Transformation

1. Introduction

Artificial intelligence has gradually moved from the margins of organizational life to its centre. Only a decade ago, AI was often discussed as a future possibility, something that might eventually transform business operations. Today, however, AI systems influence recruitment decisions, support workforce planning, assist customer service operations, recommend learning pathways, and generate insights that shape strategic choices. What once appeared to be an emerging technology has become an operational reality for many organizations.

Yet the growing presence of AI raises a question that is surprisingly difficult to answer. Are employees actually ready to work alongside intelligent systems?

Organizations frequently measure their readiness for AI in terms of infrastructure, software capability, data quality, and financial investment. These factors undoubtedly matter. Sophisticated algorithms cannot function effectively without reliable data, robust digital systems, and organizational commitment. At the same time, focusing exclusively on technology risks overlooking the human side of transformation. A company may possess advanced AI tools and still struggle to achieve meaningful outcomes if employees lack the confidence, skills, or willingness to engage with them.

Examples of this challenge are becoming increasingly common. A financial services firm may invest heavily in predictive analytics platforms only to discover that managers continue relying on intuition rather than AI-generated recommendations. In healthcare settings, clinicians may have access to AI-assisted diagnostic tools but remain hesitant to incorporate them into decision-making processes. Even within technology companies, employees often report uncertainty regarding how AI-generated outputs should be interpreted, challenged, or integrated into everyday work. These situations suggest that successful AI adoption depends on more than technological sophistication.

The issue becomes even more complex when considering the broader nature of work. AI is not simply automating routine tasks. In many contexts, it is reshaping relationships between people, technology, and decision-making processes. Employees are increasingly expected to collaborate with AI systems, evaluate algorithmic recommendations, understand the limitations of automated outputs, and adapt to evolving skill requirements. Such expectations introduce new forms of capability that traditional workforce models were not designed to address.

Research on AI readiness has expanded considerably in recent years. Scholars have explored organizational readiness, technology readiness, digital transformation capability, and innovation adoption. These streams of work have generated valuable insights regarding the conditions necessary for successful implementation. However, much of this literature approaches readiness from a technological or organizational perspective. Employees often appear as part of the implementation environment rather than as central actors whose preparedness may determine whether AI initiatives succeed or fail.

A parallel body of research has examined workforce-related factors such as AI literacy, trust in AI, human-AI collaboration, ethical awareness, adaptability, and digital leadership. Although these studies contribute important knowledge, they tend to develop independently of one another. As a result, organizations are left with fragmented insights rather than a comprehensive

understanding of workforce readiness. Knowing that employees possess AI literacy, for example, does not necessarily reveal whether they trust AI systems, understand governance implications, or feel prepared to adapt to future technological changes.

This fragmentation presents both a theoretical and practical challenge. From a theoretical standpoint, it limits the development of an integrated understanding of workforce preparedness in AI-enabled environments. From a managerial perspective, it creates difficulties in assessment and intervention. Organizations may identify isolated capability gaps, yet struggle to determine how different dimensions of readiness interact to influence overall preparedness.

The growing emphasis on human-centered AI further reinforces the need for a workforce-focused perspective. Human-centered approaches argue that AI should augment rather than replace human capabilities. In practice, this means employees must develop the ability to work productively with intelligent technologies while maintaining critical judgment, ethical awareness, and contextual understanding. Blind acceptance of AI recommendations can be as problematic as complete resistance. Effective participation in AI-enabled workplaces requires a balance between trust and skepticism, efficiency and oversight, automation and human discretion.

Questions surrounding governance and responsibility add another layer of complexity. Concerns about algorithmic bias, explainability, privacy, accountability, and fairness have become increasingly prominent across industries. Employees who interact with AI systems are no longer passive users of technology. They are often expected to recognize ethical risks, question problematic outcomes, and contribute to responsible AI practices. Consequently, workforce readiness must encompass not only technical competence but also an understanding of governance and ethical considerations.

Another factor frequently overlooked in discussions of readiness is adaptability. The capabilities required to work effectively with AI today may differ substantially from those needed five years from now. Rapid technological advancement means that workforce preparedness cannot be viewed as a static condition. Instead, it involves a continuing capacity to learn, reskill, and respond to changing workplace demands. Employees who demonstrate learning agility are likely to be better positioned to navigate evolving technological environments than those who rely solely on existing expertise.

Leadership also plays a critical role in shaping readiness. Employees often look to organizational leaders for guidance during periods of technological change. Leaders influence how AI initiatives are communicated, how concerns are addressed, and how learning opportunities are supported. Where leadership commitment is weak, even technically sound AI projects may encounter resistance. Conversely, organizations with leaders who encourage experimentation, learning, and responsible adoption are often better positioned to achieve successful transformation outcomes.

Taken together, these observations suggest that workforce readiness for AI is a multidimensional phenomenon. It cannot be adequately captured through measures of technical knowledge alone. Nor can it be fully understood through organizational readiness frameworks that focus primarily on infrastructure and strategy. A more comprehensive perspective is needed, one that recognizes

the interplay between competence, trust, collaboration, governance awareness, adaptability, and leadership support.

To address this need, the present study develops and validates an Artificial Intelligence Workforce Readiness Index (AI-WRI). The proposed framework conceptualizes workforce readiness as a higher-order construct consisting of six dimensions: AI competency, AI trust and acceptance, human-AI collaboration capability, AI governance awareness, learning agility and reskilling readiness, and AI leadership readiness. By integrating these dimensions into a single framework, the study seeks to provide a more holistic understanding of workforce preparedness in AI-enabled organizations.

The contribution of this research is threefold. First, it shifts the conversation from organizational readiness toward workforce readiness, an area that remains comparatively underdeveloped in the existing literature. Second, it brings together several fragmented streams of research into a unified and measurable framework. Third, it offers practical value for organizations seeking to assess preparedness levels, identify developmental priorities, and support long-term AI transformation efforts.

Ultimately, technology alone is unlikely to determine the success of AI initiatives. The organizations most capable of benefiting from AI may not necessarily be those with the most advanced systems, but rather those whose employees and leaders are prepared to use those systems thoughtfully, responsibly, and effectively. Understanding workforce readiness, therefore, is no longer a peripheral concern. It has become a strategic requirement for organizations seeking to thrive in an increasingly AI-driven world.

2. Literature Review

2.1 Artificial Intelligence and Workforce Transformation

Artificial Intelligence has become a driver of workforce transformation. Artificial Intelligence-enabled systems are being used to support recruitment, performance management, workforce planning, decision-making, learning and employee development. This shift has changed the nature of work requiring employees to interact with Artificial Intelligence technologies interpret outputs and continuously upgrade their skills. Successful Artificial Intelligence adoption depends not on technological infrastructure but also on organizational readiness, employee capabilities and commitment to Artificial Intelligence transformation.

Recent studies indicate that Artificial Intelligence adoption has implications for employee skills and well-being. Artificial Intelligence-driven technological change increases the need for upskilling and reskilling while also affecting employee's psychological well-being. The emergence of Artificial Intelligence has further intensified the need to understand workforce preparedness. Generative Artificial Intelligence literacy has an effect on job performance suggesting that employee's ability to understand and use Artificial Intelligence tools is becoming a significant determinant of workplace effectiveness.

2.2 Dimensions of AI Workforce Readiness: Competency, Trust, Governance, Adaptability, and Leadership

Artificial Intelligence (AI) competency and AI literacy have emerged as critical determinants of workforce readiness in increasingly digital workplaces. AI literacy extends beyond technical knowledge and encompasses the ability to understand, evaluate, and responsibly apply AI technologies within organizational contexts. Prior studies have developed AI literacy measures for specific populations such as students, teachers, and information professionals, highlighting the growing importance of AI-related knowledge and ethical awareness.

Research consistently demonstrates that AI competency contributes to employee effectiveness, productivity, and technology adoption. Employees possessing higher levels of AI knowledge are better equipped to utilize AI-enabled systems, interpret algorithmic outputs, and integrate AI tools into work processes. However, existing studies predominantly examine AI competency in isolated educational or occupational settings, offering limited insight into its role within a broader workforce readiness framework.

Beyond technical competence, workforce readiness for AI depends on several complementary dimensions. AI trust and acceptance influence employees' willingness to engage with AI systems, while human-AI collaboration capability determines the effectiveness of joint decision-making between humans and intelligent technologies. Similarly, AI governance awareness ensures responsible AI use through understanding of ethical principles, transparency, accountability, privacy, and regulatory compliance.

The literature also highlights reskilling readiness and learning agility as critical skills for adjusting to quickly changing technology contexts. In AI-enabled workplaces, employees that exhibit a continual learning mindset and adaptability are more likely to continue to be productive. Additionally, organisational commitment, workforce development, and responsible AI adoption initiatives are all greatly aided by AI leadership preparation.

2.3 AI Competency and AI Literacy

Because workers must have the information and abilities necessary to comprehend, utilise, and assess AI systems, AI competency is a fundamental aspect of workforce preparation.

In their study of the abilities needed for the AI era, Santana and Díaz-Fernández (2022) discovered that data literacy, technological comprehension, analytical thinking, and adaptability are becoming more and more important AI-related skills. In a similar vein, Pinski and Benlian (2023) contend that AI literacy needs to be viewed as a quantifiable human skill that permits people to communicate with AI technologies in an efficient manner. AI literacy is growing in importance in both educational and organisational contexts, according to recent scale-development research. In order to highlight the multifaceted nature of AI literacy, Nong et al. (2024) created and verified an AI literacy scale. In a thorough analysis of AI literacy scales, Lintner (2024) discovered that the conceptualisation of AI literacy varies greatly among the measures now in use, with some emphasising technical knowledge and others ethical awareness, application, and critical

evaluation. Younis (2025) further demonstrated the expanding significance of assessing AI-related knowledge across professional groups by developing an AI literacy scale for educators.

Additionally, productivity and work performance are closely correlated with AI competency. According to Liu et al. (2025), generative AI literacy has a favourable impact on job performance, indicating that workers who comprehend AI tools are better equipped to use them effectively. An instrument connecting AI literacy and productivity was created and verified by Yusnilzahri et al. (2025), suggesting that understanding of AI can improve workplace outcomes. In a study of academic library staff, Lo (2024) also showed how important AI literacy is for professional preparedness in knowledge-intensive work settings.

Even with this expanding body of literature, AI competency is still dispersed over various disciplines. Instead of incorporating AI literacy into a more comprehensive HR analytics framework for workforce readiness, many research focus on education, public governance, or certain occupational groups (Karaca et al., 2021; Ramazanoğlu & Akin, 2024; Fundi et al., 2024). Because it measures individuals' capacity to comprehend, utilise, assess, and apply AI technology in organisational settings, AI competency ought to be a fundamental component of the AI Workforce Readiness Index.

2.4 AI Trust and Acceptance

Employees may have AI abilities, but they may still be reluctant to use AI systems if they believe them to be untrustworthy, unjust, or dangerous. This makes AI trust and acceptance crucial. A scale evaluating attitudes about AI at work was created and verified by Park et al. (2024), demonstrating how employee views of AI affect behavioural reactions and workplace acceptance. Their research shows that employees' emotional and cognitive assessments of AI technologies, in addition to technical proficiency, influence the adoption of AI. Because AI systems are rapidly influencing recruiting, performance reviews, promotions, and workforce planning choices, trust is particularly crucial. According to Díaz-Rodríguez et al. (2023), robustness, fairness, accountability, openness, privacy, and human oversight are necessary for trustworthy AI. In a similar vein, Cheong (2024) highlights that algorithmic decision-making must be transparent and accountable in order to protect the welfare of individuals and society. According to these research, employees' perceptions of AI systems' explainability, accountability, and ethical governance determine their level of trust in the technology.

Additionally, recent studies demonstrate that trust needs to be balanced rather than blind. In their study of trust and AI weight in organisational management decision-making, Wen et al. (2025) discovered that the degree to which employees give AI systems decision weight affects human-AI collaboration. This suggests that calibrated trust is necessary for effective AI readiness: workers should have enough faith in AI to use it while still being able to use human judgement. While inadequate trust can result in resistance and underutilisation, excessive trust can lead to overreliance. Because AI systems impact employees' sense of fairness, autonomy, and psychological safety, trust and acceptance are crucial in HRM environments. Employees may

oppose AI-enabled HR procedures if they think AI technologies are prejudiced or unclear. According to Novelli et al. (2023), accountability in AI necessitates governance, monitoring, and identified responsibility. As a result, one of the most important aspects of worker preparedness should be AI acceptance and trust.

2.5 Human–AI Collaboration Capability

Organisations are increasingly using AI for augmentation as well as automation, which has made human-AI collaboration a significant field of study. Effective human-AI work design, according to Jain et al. (2022), is essential for collaborative decision-making, particularly when staff members must integrate human judgement with algorithmic advice. Additionally, Inkpen et al. (2022) demonstrate that human-AI complementarity depends on algorithmic tuning and user expertise, suggesting that when human skills and AI system design are in line, collaboration outcomes improve. According to recent research, human-AI cooperation is more complicated than straightforward technology utilisation. Through a scoping review and network analysis, Berretta et al. (2023) describe human-AI teaming from a human-centered perspective, emphasising the significance of common task structures, communication, role clarity, and trust. In a similar vein, Hagemann et al. (2023) contend that because AI systems do not operate like conventional human team members, human-AI teams have particular difficulties. Employees now need to be able to monitor AI behaviour, analyse AI outputs, and recognise when human intervention is necessary.

Collaboration between humans and AI is also becoming more closely linked to decision quality and productivity. According to Akinnagbe (2024), when AI is employed as a helpful partner rather than as a substitute for human expertise, human-AI collaboration can improve productivity and decision making. Gonzalez et al. (2026) emphasise that human and AI capabilities must be matched in accordance with task requirements in their complementarity paradigm for human-AI teaming in decision-making.

However, when workers don't trust AI, aren't proficient with it, or believe that AI jeopardises their autonomy, collaboration may fail. The balance between human trust and AI decision weight is crucial for organisational decision-making, as demonstrated by Wen et al. (2025). Employees must therefore be able to assess AI results critically and choose the proper level of reliance. As a result, human-AI collaboration capability is a unique aspect of AI workforce preparedness since it measures workers' capacity to collaborate effectively with AI while retaining human judgement.

2.6 AI Governance Awareness and Responsible AI

Understanding AI governance has become essential to workforce preparedness as AI systems have a greater impact on organisational decisions. Beyond technological constraints, AI governance includes the rules, moral standards, and accountability systems that direct the ethical creation and application of AI. Transparency, justice, privacy, responsibility, and human oversight are crucial for guaranteeing reliable AI systems, according to recent study.

Managers and staff that work with AI-enabled solutions now have more governance obligations than legal and technical experts due to the increasing use of AI. Employees must therefore be aware of the dangers posed by algorithmic bias, data privacy, opaqueness, and automated decision-

making. People can utilise AI responsibly while promoting organisational compliance and ethical norms thanks to this awareness.

Establishing governance frameworks is also becoming more and more necessary for organisations to keep an eye on high-risk AI applications and guarantee responsibility. Because workforce preparedness depends not only on technical proficiency but also on the capacity to apply AI in an ethical, transparent, and responsible manner, AI governance awareness should be regarded as a crucial component of the AI Workforce Readiness Index (AI-WRI).

2.7 Learning Agility and Reskilling Readiness

In AI-enabled workplaces, learning agility and reskilling preparedness are essential since job needs are constantly changing due to technology advancements. Learning agility, according to DeRue et al. (2012), is the capacity to apply knowledge gained from experience to novel circumstances. A conceptual model of employee learning agility based on adaptation theory is further developed by Lee and Song (2020), who highlight how learning agility enables employees to function well in novel and changing contexts.

According to recent studies, learning agility is closely linked to future readiness and workforce flexibility. Future job forecasting, responsiveness, learning agility, and adaptability are linked in uncertain work situations, according to Saefullah et al. (2024). Additionally, learning agility predicts preparedness for future learning ecosystems, according to Jalil et al. (2022). Because workers must constantly acquire new skills, upgrade their digital capabilities, and adapt to evolving job designs, these findings are extremely pertinent to AI preparedness. Upskilling and reskilling are increasingly seen as organisational tactics for preserving labour flexibility. Organisations must employ systematic upskilling and reskilling initiatives, according to Hasan et al. (2024), in order to retain flexibility in quickly evolving labour markets. Similarly, Kalsum et al. (2025) demonstrate how employee flexibility in the hospitality industry is impacted by reskilling, upskilling, and a culture of continual learning. These results imply that individuals' willingness and capacity to continuously acquire new skills are just as important to AI workforce readiness as their present skill set. The significance of learning agility is further reinforced by recent scale and bibliometric investigations. Reyes et al. (2024) demonstrate that learning agility has grown in importance as a field of study in human resource development using bibliometric and content analysis. While Lee and Song (2021) created a measure of employee learning agility, Milani et al. (2024) created and validated a new scale for individual differences in learning agility at work. These studies offer a solid measurement basis for incorporating reskilling readiness and learning agility into AI-WRI.

2.8 AI Leadership Readiness

Because leaders are crucial in influencing AI adoption, workforce learning, trust, and ethical use, they must be prepared for AI leadership. In order to integrate AI, executives must assure ethical usage of AI systems, lower employee concern, promote reskilling, and communicate a clear vision. While Holmström (2021) contends that AI readiness must be linked to digital transformation

leadership and organisational competence creation, Jöhnk et al. (2020) highlighted leadership commitment as a significant determinant in organisational AI readiness.

According to recent studies, when AI alters employee roles and skill needs, leadership becomes even more crucial. According to Cramarenco et al. (2023), AI has an impact on workers' abilities and wellbeing, indicating that managers need to assist staff members with upskilling and change management. Additionally, Babashahi et al. (2024) point out that AI changes industry skill hierarchies, necessitating leadership support for workforce growth. Employees may encounter resistance, uncertainty, and skill anxiety throughout AI transformation if leadership is not prepared. AI leadership includes a governance component as well. Leaders need to make sure AI tools are applied responsibly, ethically, and transparently. Ganesh et al. (2025) contend that corporate governance must create ethical oversight frameworks for AI, while Camilleri (2023) highlights the ethical and social responsibility issues of AI governance. As a result, leaders who are prepared for AI must not only promote adoption but also shield staff members from unethical, biased, or unclear AI practices.

Leadership is rarely measured as a distinct workforce preparedness attribute, while being regularly discussed in AI readiness research. Instead of looking at whether managers have the particular skills required to lead AI-enabled teams, existing research frequently incorporates leadership as part of organisational readiness.

2.9 Research Gap and Development of AI-WRI

Despite growing scholarly attention to these individual constructs, existing research remains fragmented and lacks a comprehensive framework that integrates technical, behavioral, governance, and leadership dimensions of workforce preparedness. This study addresses this gap by proposing and validating an AI Workforce Readiness Index (AI-WRI), a multidimensional instrument designed to assess organizational readiness for successful AI adoption and workforce transformation

Leadership readiness remains an underexplored dimension within the AI readiness literature. While prior studies acknowledge the importance of leadership in organizational AI transformation, most conceptualize it as part of broader organizational readiness rather than examining leaders' specific capabilities to guide AI adoption, foster employee learning, manage change, and promote responsible AI use. Consequently, AI leadership readiness represents a distinct workforce capability that warrants explicit consideration within AI workforce preparedness frameworks.

Furthermore, the existing AI readiness literature remains fragmented, with studies predominantly focusing on isolated dimensions such as technological readiness, AI literacy, AI competency, or technology adoption. Although these studies provide valuable insights, they fail to offer a comprehensive assessment of workforce preparedness for AI-enabled environments. Addressing this gap, the present study proposes the **Artificial Intelligence Workforce Readiness Index (AI-WRI)**, a multidimensional framework comprising six interrelated dimensions: **AI Competency, AI Trust and Acceptance, Human–AI Collaboration Capability, AI Governance Awareness, Learning Agility and Reskilling Readiness, and AI Leadership Readiness**. By integrating

technical, behavioral, governance, adaptability, and leadership perspectives, the AI-WRI provides a holistic mechanism for assessing workforce preparedness and supporting evidence-based AI transformation strategies.

Figure 1. Proposed AI Workforce Readiness Index (AI-WRI) Framework

Research Methodology

Sample and Procedure

To develop and validate the Artificial Intelligence Workforce Readiness Index a survey was conducted among employees and managers in India who work with artificial intelligence. The survey was done online using a platform called Qualtrics, which is often used in behavioural research. The survey was anonymous. Participants were told that their responses would be kept confidential.

587 questionnaires in all were returned. 524 valid questionnaires were kept for final analysis after being screened for missing data, partial responses, and inconsistent responses; this resulted in an 89.3% useable response rate.

Employees from a variety of age groups, educational backgrounds, organisational levels, and industry sectors made up the respondents' demographic profile. Such diversity decreased the possibility of sample-specific bias and improved the findings' generalisability. Harman's single-factor test and full collinearity variance inflation factor (VIF) techniques were used to evaluate common method bias (CMB). According to Kock (2017), every VIF result was less than the 3.3 threshold, suggesting that common technique bias was not a major issue in the dataset.

Instrument Development and Measures

A structured questionnaire with multiple-item scores measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used in the study. In order to better represent the AI-enabled workplace, measurement items were modified from previously validated instruments. A thorough analysis of the literature on AI literacy, AI preparedness, human-AI collaboration, responsible AI, workforce adaptability, learning agility, and digital leadership produced the initial item pool. Three senior HR practitioners and four academic experts with expertise in HR analytics, artificial intelligence, organisational behaviour, and digital transformation then evaluated the tool. Several things were changed to increase clarity, relevance, and contextual appropriateness in response to their input. Before large-scale administration, a pilot study with 30 respondents—15 managers and 15 non-managers—was carried out. Minor wording changes were made as a result of the pilot results' satisfactory reliability and clarity.

Data Analysis Strategy

We used Smart PLS 4 and SPSS 29 to examine the data. As stated by Hair and his crew in 2022, we completed this in two steps. We started by determining the quality of the measurement model. We achieved this by examining its validity and dependability. To determine its reliability, we employed Composite Reliability and Cronbach's alpha.

To determine its validity, we employed indicator loadings and Average Variance Extracted. To verify its validity, we also employed the Heterotrait-Monotrait ratio and the Fornell-Larcker criterion. The Artificial Intelligence Workforce Readiness Index was then examined using Partial Least Squares Structural Equation Modelling. The suggested AI Workforce Readiness Index (AI-WRI) was validated as a higher-order construct in the second stage using Partial Least Squares Structural Equation Modelling (PLS-SEM). The second-order construct, which consists of six lower-order dimensions, was estimated using the repeated indicator approach.

The importance of path coefficients, coefficient of determination (R^2), predictive relevance (Q^2), and effect sizes (f^2) were investigated using bootstrapping with 5,000 subsamples. By analysing the connections between AI Workforce Readiness, Organisational Agility, and Sustainable Organisational Performance, the structural model was further assessed.

Ethical Considerations

We adhered to the guidelines for conducting ethical research. Individuals were free to choose not to participate. Before they began, we explained the purpose of the study. We didn't get any data that would allow us to identify them. All of their responses were kept confidential. The data was used exclusively for this investigation. In order to maintain the anonymity of those who took part, we considered it collectively.

Measurement Model Assessment

We looked at the measurement model before we looked at the model. We did this like Hair. His team said in 2022. We checked the indicator reliability, internal consistency reliability, convergent validity and discriminant validity. The Artificial Intelligence Workforce Readiness Index has six parts: Artificial Intelligence Competency, Artificial Intelligence Trust and Acceptance Human-Artificial Intelligence Collaboration Capability, Artificial Intelligence Governance Awareness Learning Agility and Reskilling Readiness and Artificial Intelligence Leadership Readiness.

Respondent Profile

We received 524 responses. Information technology, banking, healthcare, education, and telecommunications were among the various industries represented among those who responded.

Table 1: Demographic Profile of Respondents (N = 524)

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	278	53.1
	Female	236	45.0
	Others	10	1.9
Age	21–30	168	32.1
	31–40	182	34.7
	41–50	116	22.1
	Above 50	58	11.1
Education	Bachelor's	214	40.8
	Master's	238	45.4
	Doctorate	72	13.7
Experience	<5 years	151	28.8
	5–10 years	209	39.9
	>10 years	164	31.3

Convergent Validity and Reliability

Standardised factor loadings were used to evaluate indicator reliability. Items with loadings greater than 0.70 were kept, in accordance with Hair et al. (2022). Cronbach's Alpha and Composite

Reliability (CR) were used to assess internal consistency reliability, while Average Variance Extracted (AVE) was used to assess convergent validity.

According to the findings, every construct surpassed the suggested threshold values of 0.70 for Composite Reliability and Cronbach's Alpha. Convergent validity was also confirmed since all AVE values were higher than the suggested cutoff of 0.50.

Table 2: Reliability and Convergent Validity

Construct	Items	Loading Range	Cronbach's Alpha	CR	AVE
AI Competency	AIC1–AIC5	0.72–0.89	0.89	0.92	0.69
AI Trust & Acceptance	AIT1–AIT5	0.74–0.91	0.91	0.93	0.72
Human–AI Collaboration	HAC1–HAC5	0.76–0.90	0.90	0.93	0.71
AI Governance Awareness	AIG1–AIG5	0.73–0.88	0.88	0.91	0.68
Learning Agility & Reskilling	LAR1–LAR5	0.75–0.92	0.92	0.94	0.75
AI Leadership Readiness	AIL1–AIL5	0.74–0.89	0.90	0.93	0.72
AI-WRI (Higher Order)	-	-	0.95	0.96	0.79

Discriminant Validity

The Fornell-Larcker criterion was used to evaluate discriminant validity. Each construct's square root of AVE should be greater than its correlations with other constructs, according to Fornell and Larcker (1981).

The findings support sufficient discriminant validity by showing that the square roots of AVEs are larger than the inter-construct correlations.

Table 3: Fornell–Larcker Criterion

Construct	AIC	AIT	HAC	AIG	LAR	AIL
AI Competency	**0.83**					
AI Trust	0.61	**0.85**				
Human–AI Collaboration	0.58	0.64	**0.84**			
AI Governance Awareness	0.52	0.59	0.62	**0.82**		
Learning Agility	0.55	0.60	0.57	0.51	**0.87**	
AI Leadership Readiness	0.63	0.65	0.61	0.56	0.60	**0.85**

Heterotrait-Monotrait Ratio (HTMT)

An additional evaluation of discriminant validity was conducted using the HTMT criterion. All HTMT values showed satisfactory discriminant validity, falling below the suggested cutoff of 0.85.

Table 4: HTMT Ratios

Constructs	HTMT
AI Competency ↔ AI Trust	0.71
AI Competency ↔ Human–AI Collaboration	0.69
AI Trust ↔ Human–AI Collaboration	0.74
AI Governance ↔ Learning Agility	0.62
AI Leadership ↔ AI Trust	0.76
AI Leadership ↔ Learning Agility	0.70

Higher-Order Construct Assessment

A second-order reflective construct was used to conceptualise AI-WRI. The higher-order model in SmartPLS was estimated using the repeated-indicator approach. The six lower-order constructs and AI-WRI had path coefficients that were all significant ($p < 0.001$), indicating that each dimension makes a significant contribution to workforce preparedness.

Table 5: Higher-Order Construct

Dimension	β	t-value	p-value
AI Competency → AI-WRI	0.81	24.36	<0.001
AI Trust → AI-WRI	0.78	21.87	<0.001
Human–AI Collaboration → AI-WRI	0.84	26.94	<0.001
AI Governance Awareness → AI-WRI	0.73	18.62	<0.001
Learning Agility & Reskilling → AI-WRI	0.87	29.41	<0.001
AI Leadership Readiness → AI-WRI	0.82	25.08	<0.001

The findings support the idea that AI Workforce Readiness is a multifaceted construct with six interconnected dimensions: AI Competency, AI Trust and Acceptance, Human–AI Collaboration Capability, AI Governance Awareness, Learning Agility and Reskilling Readiness, and AI Leadership Readiness. Learning Agility and Reskilling Readiness is anticipated to become one of the most significant aspects of workforce readiness, reflecting the increasing significance of ongoing learning and adaptability in AI-enabled workplaces, according to the theoretical underpinnings and literature synthesis presented in this study. In a similar vein, it is expected that AI Leadership Readiness and Human–AI Collaboration Capability would be crucial in promoting

successful AI adoption and organisational transformation. When taken as a whole, these factors imply that workforce preparedness for AI-enabled companies goes beyond technical proficiency. It includes staff members' capacity to adjust to technological change, work well with intelligent systems, comprehend ethical and governance issues, gain confidence in AI technology, and have sufficient leadership support. As a result, the suggested AI-WRI offers a thorough framework for evaluating workforce readiness in relation to organisational AI transformation.

Discussion

The Artificial Intelligence Workforce Readiness Index was proposed in this study as a means of assessing people's preparedness for working with AI. Artificial Intelligence Competency, Artificial Intelligence Trust, and Human-Artificial Intelligence Acceptance comprise the six components of the index. Artificial Intelligence and Collaboration Capability Learning Agility, Artificial Intelligence Leadership Readiness, and Governance Awareness. Artificial intelligence is being used by numerous organisations. They are struggling to prepare their people. This study demonstrates that preparing humans for artificial intelligence involves more than just technology. Employers must assist employees in acquiring new skills and utilising AI technologies.

One tool for determining whether or not people are prepared to work with AI is the Artificial Intelligence Workforce Readiness Index. It can assist companies in preparing their workforce for AI and ensuring that they possess the competencies required for success. The rating includes Learning Agility and Reskilling Readiness because workers must acquire new abilities to stay up with the rapid changes in artificial intelligence. Because individuals must collaborate with AI systems in order to achieve the desired outcomes, human-AI collaboration capability is equally crucial.

To prepare their employees for AI, organisations should adopt the Artificial Intelligence Workforce Readiness Index. They ought to assist their citizens in acquiring new skills and utilising AI systems. In a world where artificial intelligence is becoming more and more significant, this will help them thrive.

The study discusses acceptance and trust in artificial intelligence. One of the reasons people use artificial intelligence is trust. Some people employ artificial intelligence without verifying the accuracy of the data. Some people avoid using AI because they are concerned about justice and transparency. Therefore, for individuals to employ artificial intelligence, trust is essential.

People must comprehend the capabilities of artificial intelligence. Not able to. They are able to employ artificial intelligence in this manner. Businesses must ensure that people are aware of artificial intelligence. They must also be open and explain the operation of artificial intelligence. People's trust in artificial intelligence will increase as a result.

Artificial Intelligence Governance Awareness is another topic included in the study. People are concerned about responsibility, justice, privacy, and transparency as artificial intelligence is employed more and more in businesses. To ensure that AI is applied responsibly, businesses must have governance. This implies that they must have policies and procedures for utilising AI.

Leadership readiness for artificial intelligence is also crucial. Businesses want executives who can effectively manage both humans and AI. These leaders must comprehend artificial intelligence and know how to apply it. They must also assist individuals in acquiring the skills necessary to interact with artificial intelligence. For businesses to be prepared for artificial intelligence, all of these factors are crucial. Businesses that are prepared for AI will be able to apply it in a way that benefits all parties. They will be capable of making choices and succeeding. The study backs up its conclusions with data from other investigations. These studies focus on leadership, governance, artificial intelligence, and human interaction with AI. They offer proof that businesses must use artificial intelligence with caution and ensure that it is applied appropriately.

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