

Challenges And Possibilities Of Human Resource Readiness And AI Self-Efficacy For AI Adoption In Bangladesh's Ready-Made Garments Industry

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Abstract

Artificial intelligence (AI) is increasingly transforming human resource management; however, its application in labor-intensive sectors within developing countries remains markedly constrained. The ready-made garment sector in Bangladesh, which employs over four million working people and is pivotal to national exports, faces significant obstacles in adopting AI, including inadequate digital infrastructure, insufficient technical training, and constant organizational resistance to change. The challenges are intensified by inadequate AI expertise among human resource professionals and employees, gendered barriers to technology access, and widespread anxieties around job displacement, all of which hinder efficient human-centric implementation. This study aims to investigate how human resource readiness, AI self-efficacy, and perceptions of AI's value and usability are interconnected and influence adoption readiness in this context. This study employed a PRISMA-based scoping review process to systematically analyze peer-reviewed publications published between 2020 and 2025, sourced from platforms such as Scopus, Web of Science, Emerald, and Wiley. The analysis indicates that deficiencies in worker competencies, organizational misalignment, and infrastructural inadequacies substantially hinder adoption capacity. In contrast, theoretical insights suggest that fostering digital confidence and organizational readiness is crucial for mitigating resistance. This study proposes a novel conceptual framework that integrates organizational and human readiness attributes, offering insights into how developing countries might implement AI-driven human resource transformations. The novelty of the research lies in its thorough examination of AI adoption in Bangladesh's ready-made garments business, emphasizing human-centric and context-specific challenges often overlooked in existing studies. The practical implications require the prompt creation of equitable AI literacy programs, ethical governance frameworks, reskilling initiatives, and strategic policy measures to enable sustainable technology integration and AI adoption in ready-made garments. The analysis acknowledges its limitations, being geographically restricted to Bangladesh, reliant on secondary literature, and excluding grey sources; yet, it provides a foundation for comparative studies in similar emerging economies.

Keywords: Artificial Intelligence, Human Resource Readiness, AI Self-Efficacy, Ready-Made Garments, Bangladesh, AI Adoption

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I. Introduction

The global artificial intelligence (AI) market is witnessing unprecedented growth, with AI adoption in human resource management anticipated to reach USD 26.5 billion by 2033, rising at a spectacular compound annual growth rate of 16.2% (Market.us, 2024). Currently, 75% of enterprises globally have incorporated AI into at least one business function, with AI use in workplaces nearly doubling over the past two years, while 71% of employees remain anxious about AI adoption (Pendell, 2025; Lukan, 2024). This technological revolution has major ramifications for developing countries, particularly in labor-intensive industries where old human resource methods face increasing pressure to adapt. The impact of this change extends beyond mere operational efficiency; it profoundly reshapes worker dynamics, decision-making processes, and competitive positioning in global marketplaces.

The ready-made garments business, which employs over 4 million individuals and accounts for 81.16% of Bangladesh's total exports valued at \$32.86 billion in the financial year 2023-24, represents a vital economic sector necessitating technological advancement to maintain global competitiveness (BEPB, 2023). Despite extensive research on AI adoption in affluent economies, there are notable knowledge gaps regarding

implementation trends in labor-intensive industries within emerging nations. Current literature reveals that merely 32% of human resource professionals worldwide possess AI-related competencies, which remains significantly diminished in developing countries due to infrastructural deficiencies, skill shortages, and resource limitations that pose additional difficulties (CIPD, 2022). The study is contextualized within the distinct socio-economic framework of Bangladesh, where 55.57% of ready-made garment workers are female, digital literacy is insufficient, and conventional human resource practices prevail in organizational culture (Ministry of Labour and Employment, Bangladesh, 2024).

Existing studies predominantly focus on technology-centric perspectives, overlooking human-centric factors that are particularly crucial in developing economies where resistance to change, limited digital infrastructure, and concerns about job displacement create complex adoption barriers (Lombard, 2025). The Bangladesh ready-made garments sector faces specific challenges, including infrastructure limitations affecting 30% of factories, skill gaps impacting 30% of workers, and implementation costs of \$150,000 for basic Internet of Things systems that create substantial barriers for many organizations (Digital Transformation Study, 2025). Furthermore, only 9% of ready-made garment workers receive formal technical training, and 42% of enterprises lack AI adoption strategies, underlining the urgent need for a complete understanding of preparedness determinants (Labour Market and Skill Gap Analysis, 2023). The potential ramifications of tackling these difficulties extend beyond individual firms to national economic competitiveness, as Bangladesh's exit from Least Developed Country status in 2026 necessitates better productivity and innovative skills.

This study aims to address research gaps concerning the underexamined intersection of organizational readiness factors and individual psychological motivators in the adoption of AI within the manufacturing sectors of developing economies. The roles of perceived usefulness and perceived convenience in the relationship among human resource preparation, AI self-efficacy, and AI adoption are inadequately examined in labor-intensive businesses characterized by poor digital literacy and conventional management practices. Moreover, less research has been conducted on the relationship between AI self-efficacy—individuals' confidence in their ability to utilize AI technology effectively—and adoption outcomes in contexts characterized by technological anxiety and concerns about job displacement (Wang and Chuang, 2023). This research addresses these overlooked aspects by providing evidence from Bangladesh's ready-made garments business, enhancing both theoretical comprehension and practical methodologies for AI adoption in analogous developing market contexts. This paper examines these neglected elements by presenting evidence from Bangladesh's ready-made garments industry, thereby improving both theoretical understanding and practical approaches for AI implementation in similar emerging market environments. This research addresses a critical need to comprehend how emerging economies may effectively incorporate AI into their human resource systems while navigating particular challenges. This research primarily examines the issues, challenges, and opportunities associated with AI adoption and human resource preparedness in Bangladesh's ready-made garments sector, emphasizing essential factors such as human resource readiness, AI self-efficacy, perceived usefulness, and perceived convenience. It aims to furnish practical advice to ready-made garment firms, inform policymakers, guide industry associations, and provide evidence-based approaches for technological transformation. The research aims to raise productivity, improve working conditions, and preserve global competitiveness while retaining employment opportunities in labor-intensive industries.

The study follows a structured format, with Section 2 providing a comprehensive review of the relevant literature. Section 3 addresses the issues associated with AI integration in human resource management for the ready-made garment sector, emphasizing the study's core principles, as well as their development and explanation. Section 4 assesses the future possibilities of AI adoption within Bangladesh's ready-made garment sector, while Section 5 outlines the methodology employed in the study. Following this, Section 6 engages in a discussion about the implications and conclusions drawn from the study. Finally, Section 7 presents the limitations encountered and suggests directions for future research.

II. Literature Review

Artificial Intelligence Adoption

Artificial Intelligence (AI) is a domain of computer science that enables machines to replicate human cognitive abilities, including learning, reasoning, problem-solving, perception, and decision-making (Russell and Norvig, 2021). In human resource management, the adoption of AI denotes the intentional integration of intelligent systems and algorithms to enhance, automate, and optimize diverse human resource functions, such as recruitment, talent acquisition, performance management, and employee engagement. The incorporation of AI in human resource management encompasses diverse applications, ranging from basic automation of administrative tasks to advanced predictive analytics and machine learning-driven decision support systems that analyze vast employee data to generate actionable insights (Duan et al., 2019). The importance of AI integration in human resource management lies in its ability to fundamentally transform traditional human resource practices by improving operational efficiency, reducing bias in decision-making, optimizing candidate-job alignment, and enabling data-driven strategic workforce planning (Marler and Fisher, 2013; TeamViewer, 2025). Organizations

that integrate AI into human resources experience significant benefits, including a 35% reduction in recruitment cycle time, a 28% enhancement in candidate-job alignment, and notable cost savings through the automation of repetitive processes (Brandon Hall Group, 2025).

Effective AI integration in human resource management demands a full organizational readiness framework that covers technology infrastructure, data governance, workforce competencies, and strategic alignment, as articulated by the technology-organization-environment framework (Baker, 2011). Organizations must possess solid technological infrastructure, including cloud computing capabilities, integrated human resource information systems, and secure data management platforms to support AI applications (Tornatzky and Fleischer, 1990). Data quality and accessibility form a key precondition, as AI systems require enormous volumes of structured and unstructured data to work successfully (Wang and Strong, 1996). Human capital preparedness entails growing AI literacy among human resource professionals, offering clear governance frameworks for ethical AI use, and fostering an organizational culture that encourages technology innovation (Rogers, 2003). Furthermore, organizations need executive leadership support, significant financial resources, and change management competencies to successfully navigate the AI adoption journey (Kotter, 1995). The Technology-Organization-Environment framework suggests that AI adoption success depends on the interaction between technological readiness (infrastructure and IT capabilities), organizational readiness (culture, skills, and leadership support), and environmental readiness (regulatory compliance and industry standards).

Prior research has fully explored AI adoption in human resource management using numerous theoretical approaches. Sajjadi et al. (2019) demonstrated that AI-driven performance management systems enhance predictive accuracy but raise concerns regarding privacy and fairness. Studies applying the Job Demands-Resources (JD-R) paradigm demonstrate that AI adoption presents both potential (increased efficiency, improved decision-making) and hurdles (skill gaps, resistance to change) for HR professionals (Bakker and Demerouti, 2017). Research in developing economies, particularly Bangladesh, indicates severe gaps in AI preparedness, with only 9% of ready-made garment workers gaining formal technical training and 42% of factories having no AI adoption strategies (Labour Market and Skill Gap Analysis, 2023). However, enterprises using AI in hiring report substantial gains, pointing out the importance of strategic AI integration to sustain global competitiveness in the constantly increasing digital environment. The integration of artificial intelligence in human resource management illustrates the transformative impact of technology on recruitment, training, performance evaluation, and decision-making processes. This investigation discusses the importance of organizational readiness to adopt AI-driven methodologies. The discourse inherently relates to human resource readiness, which assesses the ability of businesses and professionals to effectively embrace AI, ensuring sustainable integration within Bangladesh's ready-made garments industry.

Human Resource Readiness

Human resource readiness is an organization's entire capacity to manage technology transitions through strategic human capital development, cultural transformation, and systematic skill building (Armenakis and Harris, 2009). Various dimensions, including technological infrastructure, worker competencies, cultural flexibility, and leadership commitment, are essential for effective digital transformation (Weiner, 2020). Human resource readiness, a pivotal variable towards AI adoption, denotes an organization's potential to navigate technological transformations by upskilling human capital, aligning strategies with innovation, and assuring ethical governance. This architecture extends beyond traditional change management to incorporate digital literacy, data governance, and inclusive frameworks that guarantee fair access to technology advancement (Vakola, 2014). Globally, roughly 32% of human resource professionals hold AI-related competencies, enabling the use of predictive analytics, process automation, and data-driven recruitment (CIPD, 2022).

Successful AI deployment in human resource management involves an integrated preparedness ecosystem comprising four essential dimensions: technology infrastructure, human capital competency, cultural transformation, and ethical governance (Tornatzky and Fleischer, 1990). Organizations must establish robust foundations, including human resource information systems (HRIS), cloud platforms, and secure data architectures to allow AI integration (Broderick and Boudreau, 1992). Human capital preparation requires increasing AI literacy, analytical skills, and collaboration capacities among human resource professionals (Strohmeier, 2020). Cultural readiness demands a mindset that prioritizes learning, creativity, and inclusive change management to counter opposition (Rogers, 2003). In Bangladesh's ready-made garment industry, just 18% of human resource professionals achieve these competency levels (DU Management, 2022). Ethical preparation incorporates frameworks for ethical AI deployment, ensuring data privacy and bias prevention (Duan et al., 2019). Upskilling initiatives, AI governance policies, and continual feedback systems are also important (Kotter, 1995).

Previous studies confirm the intricate nature of human resource preparedness in digital transformation. Estradha et al. (2025) identify two essential elements: "perceptions of human resource system characteristics" and "perceptions of human resource system sustainability," both vital for enduring transformation. Research

utilizing the technology-organization-environment framework emphasizes human resource readiness as a significant factor influencing the outcomes of AI adoption (Tornatzky and Fleischer, 1990). Adeosun and Adegbite (2022) revealed that 73% of human resource professionals in developing nations lack adequate preparation, especially when it comes to current technologies. In Bangladesh's industrial sector, 61.17% of the workforce comprises women who encounter restricted access to digital tools and training (ILO, 2020). These insights emphasize the importance of inclusive, ethical, and competency-oriented human resource development for the efficient integration of AI in human resource management. Human resource readiness underscores an organization's preparedness to integrate AI, focusing on employee capabilities, infrastructure, and adaptability to technological changes. Understanding preparation is crucial for enabling effective AI-driven transformation. Other factors influencing AI adoption in the ready-made garment industry include AI self-efficacy and perceived usefulness and convenience, which emphasize the individual side by analyzing how employees' confidence in utilizing AI influences overall adoption and organizational success.

Artificial Intelligence Self-Efficacy

Artificial intelligence (AI) self-efficacy is a crucial psychological concept that applies Bandura's self-efficacy theory to the realm of artificial intelligence, denoting individuals' confidence in their capacity to proficiently utilize and interact with AI technology (Wang and Chuang, 2023). Grounded in Bandura's social cognition theory, it is influenced by four sources: mastery experiences, vicarious experiences, verbal persuasion, and physiological states (Bandura, 1977). In AI situations, these encompass proficient AI utilization, seeing others engage with AI, obtaining motivation, and regulating emotional reactions. Wang and Chuang (2023) delineate four components of AI self-efficacy: assistance, anthropomorphic engagement, comfort with AI, and technological proficiency. This notion is essential in organizational contexts, as it affects employees' willingness to embrace AI, their determination to acquire AI-related skills, and their performance in using AI systems.

In the professional environment, AI self-efficacy significantly facilitates AI adoption in human resource management. It serves as a bridge between AI utilization and performance outcomes, enhancing task-related, contextual, and adaptable performance. Employees possessing elevated AI self-efficacy tend to perceive AI as a manageable challenge rather than a threat, resulting in increased job satisfaction (Latikka et al., 2019). Regular utilization of AI has been shown to enhance work-related self-efficacy, thereby augmenting originality and adaptability skills. Furthermore, elevated AI self-efficacy correlates with more favorable perceptions of AI integration and enhanced psychological well-being in AI-enabled environments (Brunnlechner, 2025). AI self-efficacy clarifies how employees' confidence and belief in handling artificial intelligence applications affect their adoption behaviors. It emphasizes that inadequate self-confidence may impede the effective deployment of organizational readiness. This subject directly relates to perceived utility and ease of use, as individual views of technology significantly influence acceptance and integration within human resource systems of the ready-made garments sector.

Perceived Usefulness

Perceived usefulness, as defined by Davis (1989), denotes "the extent to which an individual believes that utilizing a specific system would improve his or her job performance." This concept is a fundamental element of the Technology Acceptance Model and serves as a significant predictor of technology adoption (Marikyan and Papagiannidis, 2024). The construct is based on the premise that enhanced work performance results in organizational rewards, such as promotions or bonuses, hence establishing a positive correlation between technology utilization and performance (Hassan, 2025). It also indicates that perceived usefulness exerts around fifty percent greater influence on technology adoption compared to perceived ease of use. The impact encompasses improvements such as diminished time-to-hire, augmented decision-making abilities, superior candidate-job alignment, and heightened hiring precision. Recent studies indicate that AI-driven recruitment solutions are deemed advantageous when they reduce screening time by as much as 75%, diminish human bias, and offer predictive analytics for more informed hiring decisions (Hassan, 2025).

The importance of perceived usefulness in AI adoption for human resource management cannot be overemphasized, acting as a crucial intermediary between technological attributes and user acceptance behaviors. Research repeatedly reveals that perceived usefulness strongly correlates with both current and future usage intentions across many technological contexts (Davis, 1989). The construct becomes particularly significant in AI adoption because it directly determines whether human resource professionals regard artificial intelligence as a strategic advantage or as another technological burden. When human resource practitioners perceive AI systems as genuinely useful for improving recruitment efficiency, enhancing candidate evaluation, and supporting data-driven decision-making, they are more likely to develop positive attitudes toward adoption and demonstrate higher behavioral intentions to integrate these technologies into their workflows. Furthermore, perceived usefulness serves as a buffer against potential opposition to change, helping firms overcome traditional recruitment procedures and cultural biases that may initially limit AI implementation.

Several crucial aspects are necessary to ensure perceived usefulness for successful AI implementation in human resource management practices. User experience design and perceived convenience strongly influence usefulness perceptions, since research suggests that when systems are convenient, consumers are more likely to regard them as useful (Hassan, 2025). Organizational support and management commitment play significant moderating roles, with studies demonstrating that strong leadership endorsement and proper resource allocation boost employees' perceived usefulness of AI systems. Training and skill development programs are vital, as human resource employees who receive comprehensive training and build confidence in using AI tools report higher levels of perceived usefulness. Additionally, outcome demonstrability and visible evidence of performance improvements are crucial, with studies suggesting that concrete, measurable advantages from AI adoption directly enhance perceived usefulness among human resource practitioners (Venkatesh and Davis, 2000). Cultural considerations and organizational preparation can influence perceived usefulness, particularly in emerging countries where traditional recruitment procedures and resource restrictions may first hinder awareness of AI benefits. Hence, the perceived usefulness and simplicity of use are essential determinants in employee adoption of AI, as they affect work performance and corporate efficiency.

Perceived Convenience

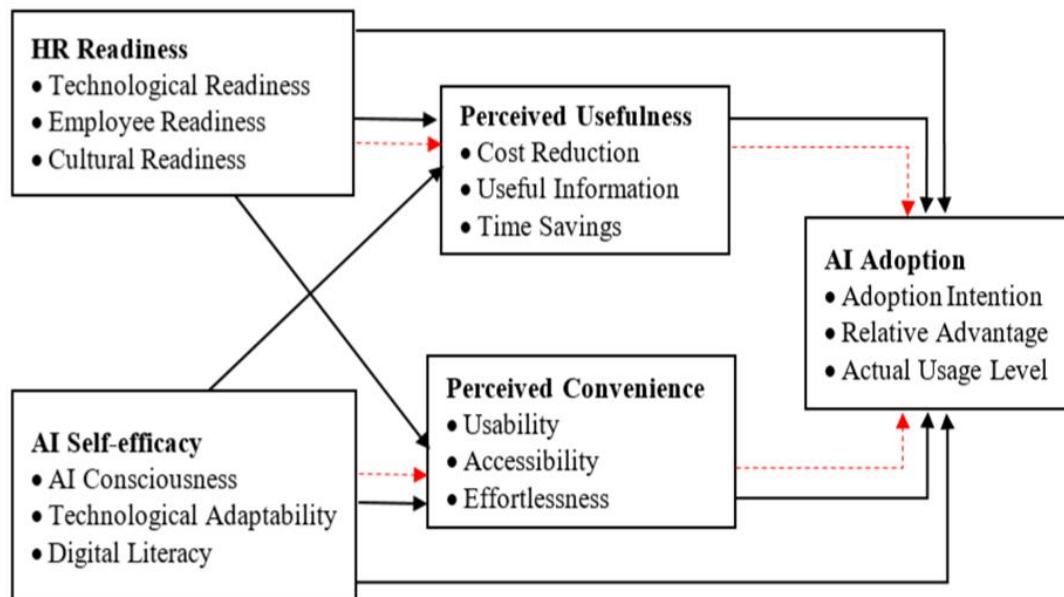
Perceived convenience, as articulated by Davis (1989), denotes “the extent to which an individual believes that utilizing a specific system would require minimal effort.” This is a fundamental element of the Technology Acceptance Model, reflecting users' anticipations that a system is user-friendly and requires low physical or cognitive exertion (Henderson and Divett, 2003). Based on Bandura's self-efficacy theory, it represents situation-specific convictions regarding one's capacity to proficiently interact with new technology (Davis, 1989). In AI contexts, this expectation includes perceptions of intuitive interfaces, low learning demands, and smooth integration with existing workflows. Studies consistently show that perceived convenience directly influences technology acceptance and indirectly affects it through its strong association with perceived usefulness (Venkatesh and Davis, 2000). When users locate AI systems convenient, they are more likely to perceive them as beneficial, especially during the early stages of adoption.

In the context of human resource management, perceived convenience is a crucial psychological factor influencing whether human resource professionals accept or resist AI technologies. It significantly shapes both attitudes and behavioral intentions, with research demonstrating strong correlations between convenience and positive attitudes toward AI (Hassan, 2025). Since human resource professionals juggle diverse responsibilities, the ease with which AI systems can be used becomes vital for sustained engagement. Complicated systems often deter adoption, especially if they disrupt established workflows (Vardarlier and Zafer, 2019). Furthermore, perceived convenience serves as a facilitator in the relationship between technology features and consumer happiness. Individuals who find AI systems more user-friendly report enhanced experiences and increased job satisfaction. It also mitigates reluctance to change; employees who perceive AI products as user-friendly are more likely to substitute conventional processes with automated alternatives. In many circumstances, convenience has become the predominant factor in technology adoption, particularly for users who prioritize efficiency and usability. Multiple critical aspects affect the perceived convenience of AI adoption in human resource management. User interface design and system usability are critical factors; intuitive and accessible designs improve perceptual convenience. Training and skill enhancement are crucial for augmenting usefulness perceptions and diminishing effort expectations in AI-driven workflows (Venkatesh and Bala, 2008). The integration with current human resource systems and organizational assistance mitigates technological obstacles. System attributes, personalization, and previous technology experience also influence user perceptions. Commitment from management and a supportive organizational atmosphere cultivate attractive environments that promote user adoption. The perceived convenience influences overall acceptance and willingness to use AI.

This research presents a conceptual framework, as depicted in Figure 1, anchored to the existing literature. The theoretical framework presented in this research (Figure 1) illustrates that the objective to implement AI in human resource management practices within Bangladesh's ready-made garments sector may be achieved by enhancing human resource preparedness, AI self-efficacy, perceived usefulness, and perceived convenience. The framework assists managers and owners in implementing AI by fostering technological, workforce, and cultural readiness. These managers and owners utilize an AI self-efficacy strategy to enhance AI awareness, technological adaptability, and digital literacy among employees, transforming them into optimal contributors to AI integration in human resource management. This proposed approach guarantees optimal AI integration in human resource management within Bangladesh's ready-made garments sector by amalgamating human resource preparedness, AI self-efficacy, perceived usefulness, and perceived convenience. This platform establishes a distinct connection among AI adoption in manufacturing organizations through human resource preparedness, AI self-efficacy, perceived usefulness, and convenience. Perceived usefulness and convenience exhibit both direct and indirect relationships with the intention to employ AI. They exert a direct influence on the

acceptance of AI. They also accelerate the connections among human resource preparation, AI self-efficacy, and AI adoption.

Figure 1: Proposed Research Framework of the Study



III. Issues And Challenges For AI Adoption In Ready-Made Garments Industry

Numerous psychological, strategic, and technological aspects shape the intention to embrace AI in human resource management (Lombard, 2025). One notable concern is technostress. It is defined as stress arising from the use of new technology. Research suggests that stressors can play a dual role: when managed successfully, challenge stressors can boost motivation and positively influence technology adoption, while hindrance stressors, such as AI-induced fear, tend to lower interest and engagement (Chang et al., 2024). Another important challenge is strategic misalignment. Many firms use AI tools without aligning them with business objectives, resulting in lost investments and inefficient outcomes (Kathuria, 2025). Complexity in AI design and integration makes it harder for decision-makers, especially those inexperienced with AI's capabilities, to advocate for adoption (Lombard, 2025). Cost worries also persist; while AI offers long-term returns, quantifying return on investment in human resource management areas such as employee satisfaction or strategic decision-making remains a difficulty (Apriorit, 2024). This makes firms hesitant to fully invest in AI adoption.

Human resource readiness refers to an organization's ability to effectively incorporate AI tools; however, many human resource departments lack the essential elements required for transformation (Mwita and Kitole, 2025; Park, 2025). These core aspects include a supportive company culture, governance policies, sufficient resources, technical infrastructure, and clearly defined strategic goals. A key challenge is poor data literacy. Many human resource professionals are unable to evaluate AI results, identify relevant use cases, or participate in strategic planning (Lombard, 2025). The existing human resource tech stack (HRIS, ATS, and payroll systems) typically generates friction when incorporating AI, particularly when platforms are obsolete or incompatible. Infrastructure limits, especially in underdeveloped nations, make issues worse by restricting access to cloud computing and real-time data (Ogba-Amaugo, 2024). Skill shortages are another important worry. Without proper technical training and strategic upskilling, human resource workers struggle to use AI products effectively (Opatha and Dooradarshani, 2024).

AI self-efficacy is the belief in one's ability to use AI technology effectively. It is important to achieve successful adoption, but it faces major psychological and structural challenges (Chang et al., 2024; Watanabe et al., 2025). Technical self-efficacy can alleviate the negative impact of hindrance stressors, but insufficient levels of AI literacy among human resource professionals continue to inhibit development. Park (2025) reveals that persons with little AI literacy are six times more likely to feel uncomfortable and seven times more likely to fear AI. This emotional response hinders experimentation, curiosity, and receptivity to learning. As AI continues to evolve, personnel who lack digital preparedness fall behind, creating a widening skills gap (Ogba-Amaugo, 2024). Organizations typically fail to provide proper training and coaching, leaving staff unequipped to create trust in AI utilization (Brandon Hall Group, 2025). The fear of job displacement also relates to low self-efficacy, as employees regard AI as a threat to employment rather than a tool for advancement (Lombard, 2025; Chang et al.,

2024). Without organized support systems, like mentoring and peer-learning environments, it becomes difficult to inculcate AI confidence throughout human resource departments.

Perceived usefulness can be defined as the extent to which users perceive that AI helps their performance. It is a major indicator of adoption. However, significant concerns challenge this perception. A major issue is algorithmic bias; AI systems educated on skewed datasets risk reinforcing discrimination in recruitment, promotions, and performance evaluations (Lombard, 2025; Nelson Connects, 2025). The opaque aspect of AI decision-making procedures contributes to mistrust, as personnel are unwilling to trust advice they cannot interpret. Errors in judgment are also widespread, particularly in complex, human-centric human resource functions like dispute resolution, where empathy and context matter (Mwita and Kitole, 2025). Integration difficulties with existing systems may lead to data loss, duplicate entries, or process disruptions, making AI tools appear more tedious than advantageous (Lombard, 2025). AI solutions have limited flexibility in meeting specific needs, like customizing pay packages. It also affects perceived value. Furthermore, excessive reliance on quantifiable outcomes may cause firms to miss soft skills, cooperation, and organizational culture (Mwita and Kitole, 2025).

Perceived convenience refers to how readily users may engage with AI systems. Technological complexity and poor system design sometimes inhibit perceived convenience, which is crucial for fostering initial acceptability (Opatha and Dooradarshani, 2024). Many human resource professionals lack technical training, which leads to a challenging learning curve when interacting with AI systems (Lombard, 2025; Ogba-Amaugo, 2024). Poorly designed user interfaces further worsen the problem, necessitating longer onboarding and increasing irritation levels. Integration challenges across traditional human resource platforms typically involve human workarounds, which contradict the purpose of automation (Lombard, 2025). The fast-evolving nature of AI products compels users to constantly adapt to new capabilities, adding to cognitive overload. Moreover, limited information technology assistance means customers often lack timely help when confronting challenges (Opatha and Dooradarshani, 2024). Organizations that fail to provide continual training and easily accessible materials suffer chronic resistance in adoption due to low convenience perceptions.

The ready-made garments sector in Bangladesh suffers a unique confluence of global AI issues and localized limits (Nadim, 2025; Uddin, 2025; Rummon, 2025). Infrastructure issues are pervasive. Many workplaces lack steady internet, current information technology systems, or the technical assistance essential for efficient AI deployment. The workforce has low digital literacy, aggravated by the absence of formal training and development initiatives (Khan, 2024). Financial constraints are considerable, particularly for small and medium enterprises, as the high costs of deployment, maintenance, and unknown return on investment constitute major adoption obstacles (Rafid et al., 2024). Cultural resistance to automation is also prevalent in traditional leadership approaches, and worker skepticism about job loss hampers technological acceptance (Plexus, 2025). The sector's strong concentration on cost-efficiency leads to underinvestment in long-term innovation (TDS, 2025). Furthermore, a lack of dependable human resource data systems impairs AI's potential to offer significant results (Rummon, 2025). Compliance with Bangladesh's labor laws and global buyer standards adds another layer of challenge, as AI integration must cross complex ethical and legal landscapes (Khan, 2024). Nevertheless, some forward-thinking ready-made garment organizations have begun deploying AI-powered systems for quality control and personnel tracking, demonstrating that focused interventions can enable gradual change (Das, 2024). Consequently, substantial barriers to AI adoption in the intensely competitive garment industry are emerging from issues such as human resource preparedness, AI self-efficacy, perceived usefulness, and perceived convenience.

IV. Possibilities Of AI Adoption In Ready-Made Garments Industry

The future of AI integration and human resource preparedness in Bangladesh's ready-made garments sector offers substantial prospects and intricate obstacles that are anticipated to transform operational structures and labor dynamics. The sector is poised for technological transformation, with the integration of artificial intelligence presenting significant opportunities to improve supply chain management, manufacturing efficiency, and human resource management techniques (TDS, 2025). The transition to AI implementation is accelerating as ready-made garment companies seek to maintain competitive advantages in a global marketplace where efficiency, quality, and sustainability are crucial for foreign purchasers (Shubham, 2024). The goal to implement AI in the ready-made garments sector indicates a favorable perspective, with increasing acknowledgment of AI's capacity to improve analytics, automation, and quality control (Munmun, 2023). Numerous progressive firms are implementing AI-driven quality control with computer vision and machine learning for defect detection with enhanced accuracy and rapidity (Das, 2024). These pilot programs have yielded quantifiable advantages, including diminished rework expenses and enhanced preventive quality techniques (Uddin, 2025). The usage of AI is expected to increase as technological expenses decrease and successful implementations yield significant returns, especially in forecasting, inventory management, and automation (Rafid et al., 2024).

Human resource readiness for AI integration in the ready-made garments sector is now at an intermediate stage, demonstrating the need for expanded infrastructure, workforce skills, and organizational capacities to

properly use AI technologies (Sharmin, 2022). Future enhancements in preparedness depend on strategic investments in training, digital literacy, and infrastructure (Munmun, 2023). Collaborative efforts among government agencies, industry groups, and academic institutions are important to address skill gaps and build AI-ready talent (Kabir, 2024). Reskilling programs and continuous learning platforms will play a vital role in educating human resource professionals to handle AI-driven transformation successfully, assuring employee welfare and sustainable practices (Munmun, 2023). AI self-efficacy among human resource professionals and workers is emerging as a vital factor for effective AI deployment. Developing confidence in utilizing AI necessitates meticulously organized training programs that address both the technical and psychological dimensions of technology application (Hossain, 2024). Research demonstrates that more AI exposure enhances perceived competence and task performance, leading to better outcomes (Brunnlechner, 2025). Future success will depend on initiatives that develop both digital abilities and self-belief, particularly among lower-skilled workers and middle managers.

The perceived usefulness of AI in the ready-made garments sector is projected to expand as real applications reveal clear benefits across operational sectors. With the worldwide fashion AI industry anticipated to reach \$4.4 billion by 2027, ready-made garment manufacturers are recognizing AI's utility in maximizing resources, decreasing waste, and boosting monitoring capabilities (Premiere Vision, 2024; TDS, 2025). AI tools such as generative design, 3D modeling, and virtual prototyping will alter production by lowering dependency on physical samples and enhancing sustainability (TLD Apparel, 2025). As successful use cases emerge, perceived usefulness will strengthen, especially in areas such as supply chain forecasting and compliance with international standards. Perceived convenience is also set to improve through user-centric design, intuitive interfaces, and supported training. Technological improvements are making AI technologies more accessible, especially for consumers with minimal digital literacy (Kalpoe, 2020). Features like augmented reality, speech recognition, and natural language processing are predicted to ease human-AI interaction (Munmun, 2023). Ongoing support systems are also being built to help workers navigate and utilize AI systems efficiently, overcoming present challenges linked to complexity and lack of guidance (Kabir, 2024). Enhancing ease of use is vital, as research consistently links usability with increased acceptance and better implementation outcomes in industrial contexts. Consequently, the future of AI implementation in Bangladesh's ready-made garments industry relies on a cohesive strategy encompassing human resource readiness, AI self-efficacy, perceived usefulness, and perceived convenience. Challenges encompass elevated expenses, a deficiency of competence, technological resistance, and inadequate infrastructure in these areas.

V. Methodology

This study employs a scoping review technique to identify and analyze publications that examine the relationship between human resource readiness, AI self-efficacy, perceived usefulness, perceived convenience, and AI adoption in the ready-made garments industry. The review technique follows the manner described by Thorpe et al. (2005) and Rahman et al. (2025), ensuring a systematic and transparent process that minimizes bias and strengthens reliability. This method was chosen for its flexibility and ability to comprehensively capture the breadth of relevant interdisciplinary research in a field that remains emergent and underexplored. Overall, the scoping review methodology offers a structured yet adaptable approach that is well-suited for mapping existing knowledge, capturing evolving research trends, and informing future investigations regarding human resource readiness and AI adoption in Bangladesh's garment sector. The authors rigorously searched numerous scholarly databases, including Scopus, ScienceDirect, Emerald, Web of Science, Wiley, and Google Scholar, to obtain a thorough perspective. Among these, Scopus was preferred because of its wide coverage of peer-reviewed literature, particularly within management and business sectors that are closely tied to human resource practices (Harzing and Alakangas, 2016). Web of Science's esteemed reputation as a high-quality citation index, characterized by stringent journal selection criteria, justifies its inclusion. It offers authoritative and globally acknowledged coverage across the domains of science, social science, and humanities (Falagas et al., 2007). ScienceDirect was selected to facilitate access to Elsevier's extensive portfolio of applied and technical journals, encompassing fields such as management, information systems, and industrial engineering (Burnham, 2006). Emerald Insight was chosen due to its specialization in management, business, and human resources-related publications. It is suitable for investigating human resource readiness and AI adoption within an industrial context (Adams et al., 2016). The search strategy was created around terms linked with the research objectives, focusing on AI adoption, human resource readiness, and the obstacles of human resource-driven transformation in Bangladesh's ready-made garments industry. The process of locating, screening, and choosing relevant literature follows PRISMA guidelines to maintain rigor and transparency. Ultimately, 54 research studies met the inclusion requirements, providing a reliable platform for synthesizing insights on the difficulties, challenges, and future directions of AI adoption in the ready-made garments sector. The entire methodology is detailed in Table 1.

Table 1: Flowchart of Literature Selection

SPAR-4-SLR (PRISMA)	Consideration	Decision
Assembling (Identification)	Search Focus	Artificial intelligence adoption in the ready-made garment industry
	Search Keywords	<ul style="list-style-type: none"> • Ready-Made Garment Industry • Artificial Intelligence • Artificial Intelligence Adoption • Human Resource Readiness • Perceived Usefulness • Perceived Convenience
	Search Database	Scopus, ScienceDirect, Emerald, and Wiley
	Search Field	Article title, abstract, and keywords
	Search Result	773 Documents
Arranging (Screening and Eligibility)	Search Period	2020 to 2025
	Subject Area	“Artificial Intelligence”, “Business and Human Resource Management”, “ Technology Adoption and Digitalization”, “Organizational Behavior”, and “Social Sciences” 429
	Document Type	“Article” 286
	Publication Stage	“Final” 252
	Source Type	“Journal” 238
	Language	“English” 212
	Developing Nation	“Bangladesh, India, China, Vietnam, Thailand, Indonesia, etc.,” 54
	Final search result	54 Documents

The extracted data was thematically synthesized, resulting in comprehensive insights into the present state of AI adoption and HR readiness in the RMG sector, focusing on the distinct challenges encountered by developing economies such as Bangladesh in navigating digital transformation while promoting workforce inclusivity and operational efficiency.

VI. Implications And Conclusion

This study comprehensively examined AI adoption in Bangladesh's ready-made garments industry, revealing the complicated dynamics of technology acceptance in developing nations. The global AI in the human resource market is expected to reach USD 26.5 billion by 2033, although emerging nations' restrictions will considerably impact adoption trajectories (Market.us, 2024). The conceptual framework of the study showed how human resource preparation and AI self-efficacy impact technology adoption intentions through perceived usefulness and convenience. Only 18% of human resource experts in Bangladesh's ready-made garments business are competent, while 30% of factories have infrastructural issues, and 30% of workers have skill gaps (DU Management, 2022). These outcomes emphasize the imperative for intentional technology- and human-focused initiatives to effectively incorporate AI in labor-intensive industries. AI literacy initiatives are essential for firms to bridge the skills disparity and enhance employee happiness. These programs must include technical skill development with confidence-boosting elements to foster AI self-efficacy. Human Resources departments must also mitigate anxiety related to artificial intelligence, including concerns about job displacement. Inclusivity and gender-based access disparities are also significant. The effective implementation of AI can shorten recruitment processes and improve job compatibility, underscoring its competitive advantage.

The implications of policy are equally significant, particularly as Bangladesh nears its transition from Least Developed Country status in 2026. Policymakers must address infrastructural deficiencies that impede AI implementation, including those in the internet and cloud computing (Ogba-Amaugo, 2024). The outcomes suggest regulatory frameworks that include infrastructure development, education, and ethical standards to promote responsible AI utilization (Folorunso et al., 2024). Effective governance is crucial for ensuring data integrity, security, and privacy, which are critical for building trust (Nugraha, 2024). Policymakers ought to promote public-private partnerships to consolidate resources and stimulate technical advancement. International collaboration is essential for facilitating knowledge exchange and technology transfer that connects global expertise with local development goals.

This research enhances academic literature by offering a conceptual framework for developing nations and revealing the impact of human resource readiness, AI self-efficacy, perceived usefulness, and convenience on AI adoption intention. It is among the first thorough studies focused on AI integration in labor-intensive sectors within emerging countries. The conceptual model established can be modified for future comparative studies in similar economic environments. Future studies should investigate the long-term effects of AI on worker dynamics, pay, and skill development, as well as evaluate the success of training and change management initiatives. Systems must have intuitive interfaces to accommodate users with limited digital literacy (Hassan,

2025), while also supporting integration with existing human resource infrastructure. Researchers must incorporate flexibility, linguistic adaptation, and customization to align with diverse user requirements.

VII. Limitations And Future Directions

The research on AI implementation in the ready-made garments industry of Bangladesh contains constraints, such as the geographical and industrial contextual scope and dependence on secondary sources. The framework may inadequately represent the socio-economic dynamics of labor-intensive businesses in developing nations, and the study's focus on organizational readiness may have downplayed individual psychological barriers. Subsequent research ought to emphasize longitudinal studies, cross-national comparative analyses, mixed-methods approaches, and context-specific measurement tools. It is recommended to analyze training and change management strategies, public-private partnership frameworks, and the assistance of international development organizations in promoting inclusive AI adoption. It is advisable to research sector-specific AI governance frameworks and ethical standards.

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References

- [1]. Adams, R. J., Smart, P., & Huff, A. S. (2016). Shades Of Grey: Guidelines For Working With The Grey Literature In Systematic Reviews For Management And Organizational Studies. *International Journal Of Management Reviews*, 19(4), 432–454. <https://doi.org/10.1111/ijmr.12102>
- [2]. Adeosun, O. T., & Adegbite, W. (2022). Human Resource Professionals And Readiness For The Future Of Work. *EUREKA: Social And Humanities*, (5), 39-50. <https://doi.org/10.21303/2504-5571.2022.002486>
- [3]. Apriorit. (2024). Challenges In AI Adoption And Key Strategies For Managing Risks. <https://www.apriorit.com/dev-blog/ai-adoption-challenges-and-strategies>
- [4]. Armenakis, A. A., & Harris, S. G. (2009). Reflections: Our Journey In Organizational Change Research And Practice. *Journal Of Change Management*, 9(2), 127-142.
- [5]. Baker, J. (2011). The Technology–Organization–Environment Framework. *Information Systems Theory*, 28, 231–245. https://doi.org/10.1007/978-1-4419-6108-2_12
- [6]. Bakker, A. B., & Demerouti, E. (2017). Job Demands–Resources Theory: Taking Stock And Looking Forward. *Journal Of Occupational Health Psychology*, 22(3), 273.
- [7]. Bandura, A. (1977). Self-Efficacy: Toward A Unifying Theory Of Behavioral Change. *Psychological Review*, 84(2), 191.
- [8]. BEPB. (2023). Export Statistics FY 2023-24. Bangladesh Export Promotion Bureau, Government Of Bangladesh.
- [9]. Brandon Hall Group. (2025). HR's Readiness To Embrace AI. Brandon Hall Group Research. <https://brandonhall.com/hrs-readiness-to-embrace-ai/>
- [10]. Brandon Hall Group. (2025). AI In Talent Acquisition: Performance Metrics And ROI Analysis. Brandon Hall Group Research.
- [11]. Broderick, R., & Boudreau, J. W. (1992). Human Resource Management, Information Technology, And The Competitive Edge. *Academy Of Management Perspectives*, 6(2), 7-17.
- [12]. Brunnlechner, H. (2025). AI Usage, Self-Efficacy, And Employee Performance: Balancing Productivity Gains And Unintended Consequences (Master's Thesis, University Of Twente).
- [13]. Burnham, J. F. (2006). Scopus Database: A Review. *Biomedical Digital Libraries*, 3(1). <https://doi.org/10.1186/1742-5581-3-1>
- [14]. Chang, P. C., Zhang, W., Cai, Q., & Guo, H. (2024). Does AI-Driven Technostress Promote Or Hinder Employees' Artificial Intelligence Adoption Intention? A Moderated Mediation Model Of Affective Reactions And Technical Self-Efficacy. *Psychology Research And Behavior Management*, 413-427.
- [15]. Chatzoglou, P., Frigidis, L., Chatzoudes, D., & Symeonidis, S. (2016). Critical Success Factors For ERP Implementation In Smes. In 2016 Federated Conference On Computer Science And Information Systems (Fedcsis) (Pp. 1243-1252). IEEE.
- [16]. CIPD. (2022). People And AI: Driving Responsible Adoption. Chartered Institute Of Personnel And Development, CIPD Publications.
- [17]. Das, S. (2024). The Impact Of AI On Bangladesh's Ready-Made Garment Industry And Its Future, Part 1. <https://www.linkedin.com/pulse/impact-ai-bangladeshs-ready-made-garment-industry-its-sunayan-das-X1ghc>
- [18]. Davis, F. D. (1989b). Perceived Usefulness, Perceived Ease Of Use, And User Acceptance Of Information Technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>
- [19]. Digital Transformation Study. (2025). Digital Transformation In Bangladesh's RMG Supply Chains: Challenges And Opportunities. *RSI International Journal*.
- [20]. DU Management. (2022). HR Competency Assessment In Bangladesh's Manufacturing Sector. University Of Dhaka Management Studies.
- [21]. Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial Intelligence For Decision Making In The Era Of Big Data – Evolution, Challenges And Research Agenda. *International Journal Of Information Management*, 48, 63-71.
- [22]. Estradha, R., Eryanto, H., Eliyana, A., Suhud, U., Widayastuti, U., & Wibowo, A. (2025). Determinant Factors For The Readiness Of Human Resource Information Systems (HRIS) In Public Organizations. *Interdisciplinary Journal Of Management Studies*, 18(2), 209-223.
- [23]. Falagas, M. E., Pitsouni, E. I., Malietzis, G. A., & Pappas, G. (2007). Comparison Of Pubmed, Scopus, Web Of Science, And Google Scholar: Strengths And Weaknesses. *The FASEB Journal*, 22(2), 338–342. <https://doi.org/10.1096/fj.07-9492lsf>

- [24]. Folorunso, A., Olanipekun, K., Adewumi, T., & Samuel, B. (2024). A Policy Framework On AI Usage In Developing Countries And Its Impact. *Global Journal Of Engineering And Technology Advances*, 21(1), 154–166. <https://doi.org/10.30574/Gjeta.2024.21.1.0192>
- [25]. Harzing, A. W., & Alakangas, S. (2016). Google Scholar, Scopus And The Web Of Science: A Longitudinal And Cross-Disciplinary Comparison. *Scientometrics*, 106(2), 787–804.
- [26]. Hassan, B. F. Y. (2025). Adoption Of AI In Talent Acquisition: A Quantitative Study On HRM Practitioners Using The Technology Acceptance Model (TAM). *Scientific Journal For Financial And Commercial Studies And Research*, 6(1), 1289–1316.
- [27]. Henderson, R., & Divett, M. J. (2003). Perceived Usefulness, Ease Of Use And Electronic Supermarket Use. *International Journal Of Human-Computer Studies*, 59(3), 383–395. [https://doi.org/10.1016/S1071-5819\(03\)00079-X](https://doi.org/10.1016/S1071-5819(03)00079-X)
- [28]. Hossain, R. (2024). AI Transforming Bangladesh's Textile And Garment Industry: Driving Innovation, Efficiency, And Sustainability. *Linkedin*. https://www.linkedin.com/posts/Ruman-Hossain41_Ai-Transforming-Bangladeshs-Textile-And-Activity-7242731742657216512-Ftkp
- [29]. ILO. (2020). *Women And Men In The Informal Economy: A Statistical Picture* (3rd Ed.). ILO Publications.
- [30]. Kabir, T. (2024). AI Advancements Essential For Bangladeshi Textile Factory. *Textile Learner*. <https://textilelearner.net/Ai-Advancements-Essential-For-Bangladeshi-Textile-Factory/>
- [31]. Kalpoe, R. (2020). Technology Acceptance And Return Management In Apparel E-Commerce. *Journal Of Supply Chain Management Science*, 1(3–4), 118–137. <https://doi.org/10.18757/Jscms.2020.5454>
- [32]. Kathuria, A. (2025). AI In Human Resources: Trends, Challenges, And Solutions. <https://www.linkedin.com/pulse/Ai-Human-Resources-Trends-Challenges-Solutions-Anuj-Kathuria-Acmvf>
- [33]. Khan, N. A. (2024). HR In The RMG Sector Plays A Key Role In Balancing Productivity With Employee Well-Being Which Directly Affects Overall Efficiency And Brand Reputation. *Textile Focus*. <https://textilefocus.com/Hr-In-The-Rmg-Sector-Plays-A-Key-Role-In-Balancing-Productivity-With-Employee-Well-Being-Which-Directly-Affects-Overall-Efficiency-And-Brand-Reputation/>
- [34]. Kotter, J. (1995). Leading Change: Why Transformation Efforts Fail. *Harvard Business Review*, 73(2), 59–67.
- [35]. Labour Market And Skill Gap Analysis. (2023). *Ready-Made Garments Sector In Bangladesh: Skills Assessment Report*. Ministry Of Labour And Employment, Bangladesh.
- [36]. Latikka, R., Turja, T., & Oksanen, A. (2019). Self-Efficacy And Acceptance Of Robots. *Computers In Human Behavior*, 93, 157–163. <https://doi.org/10.1016/J.Chb.2018.12.017>
- [37]. Lombard, N. (2025). 9 Challenges Of AI In HR & How To Address Them. *AIHR*. <https://www.aihr.com/blog/challenges-of-ai-in-hr/>
- [38]. Lukan, E. (2024). 154 Eye-Opening AI Statistics Of 2024. *Synthesia.io*; Synthesia LTD. <https://www.synthesia.io/post/Ai-Statistics>
- [39]. Marikyan, D., & Papagiannidis, S. (2024). *Technology Acceptance Model: A Review*. Theoryhub Book. Retrieved From <https://open.ncl.ac.uk>
- [40]. Market.us. (2024). AI In HR Market Size, Share, Trends | CAGR Of 16.2%. <https://market.us/report/Ai-In-Hr-Market/>
- [41]. Marler, J. H., & Fisher, S. L. (2013). An Evidence-Based Review Of E-HRM And Strategic Human Resource Management. *Human Resource Management Review*, 23(1), 18–36. <https://doi.org/10.1016/J.Hrmr.2012.06.002>
- [42]. Ministry Of Labour And Employment, Bangladesh. (2024). State Minister Informs Parliament Of Number Of Workers In RMG Sector - RMG Bangladesh. *RMG Bangladesh*. Retrieved From <https://rmgbd.net/2024/06/state-minister-informs-parliament-of-number-of-workers-in-rmg-sector/>
- [43]. Munmun, I. (2023). Redefining Garment Manufacturing: Exploring The Role Of Technology In Shaping Bangladesh's RMG Industry. *International Journal Of Advances In Engineering And Management (IJAEM)*, 5, 141. <https://doi.org/10.35629/5252-0507141149>
- [44]. Mwita, K. M., & Kitole, F. A. (2025). Potential Benefits And Challenges Of Artificial Intelligence In Human Resource Management In Public Institutions. *Discover Global Society*, 3(1), 35. <https://doi.org/10.1007/S44282-025-00175-8>
- [45]. Nadim, M. I. (2025). AI And Robotics In Bangladesh Garment Factories. *Bangla News*. <https://inews.zoombangla.com/Ai-And-Robotics-In-Bangladesh/>
- [46]. Nelson Connects. (2025). The Benefits And Challenges Of Using AI In Human Resources. *www.nelsonconnects.com*. <https://www.nelsonconnects.com/learning-center/blogs/the-benefits-and-challenges-of-using-ai-in-human-resources>
- [47]. Nugraha, T. (2024). AI Adoption In Developing Countries: Opportunities, Challenges, And Policy Pathways. *Modern Diplomacy*. <https://moderndiplomacy.eu/2024/10/17/Ai-Adoption-In-Developing-Countries-Opportunities-Challenges-And-Policy-Pathways/>
- [48]. Ogba-Amaugo, I. M. (2024). The Use Of Technology In Human Resources Management: Opportunities And Challenges For Organizations. https://econpapers.repec.org/article/bcpjournal/V_3a8_3ay_3a2024_3ai_3a4_3ap_3a1164-1181.htm
- [49]. Opatha, P. J., & Dooradarshani, N. (2024). Assessing The Influence Of Perceived Usefulness And Ease Of Use Of HRIS On Employee Attitude And Turnover Intention: An Empirical Investigation In A Sri Lankan Tiles Manufacturing Enterprise. *Journals.Sjp.Ac.Lk*. <https://doi.org/10.31357/Sljhrm.V14.6778>
- [50]. Park, L. (2025). Top Obstacles To AI Readiness For HR Professionals | SAP. *Sap.Com*. <https://www.sap.com/Finland/Research/Hr-Ai-Readiness>
- [51]. Pendell, R. (2025). AI Use At Work Has Nearly Doubled In Two Years. *Gallup.Com*. <https://www.gallup.com/workplace/691643/Work-Nearly-Doubled-Two-Years.aspx>
- [52]. Plexus, J. (2025). HRM Practices In Garments Sector In BD. *Jibika Plexus*. <https://www.jibikaplexus.com/Hrm-Practices-In-Garments-Sector-In-Bd/>
- [53]. Premiere Vision. (2024). Fashion Meets AI: The Future Of An Augmented Industry. *Premiere Vision*. <https://www.premierevision.com/en/articles/7e56f2a0-75fa-ef11-90cb-00224888722c/fashion-meets-ai-the-future-of-an-augmented-industry>
- [54]. Rafid, M., Binta Mostafa, T., Wasi, R. H., & Avi, R. I. (2024). Harnessing Big Data And AI For Supply Chain Resilience In The Garments Industry: A Comparative Analysis Of Bangladesh And China. *Proceedings Of The International Conference On Industrial Engineering And Operations Management*. <https://doi.org/10.46254/Ba07.20240228>
- [55]. Rahman, M., Sima, S. A., & Hossain, M. T. (2025). Sustainable Organizational Performance And Khulna's Jute Industry: Issues, Challenges, And Opportunities. *Journal Of Business And Management Studies*, 7(4), 351–363. <https://doi.org/10.32996/Jbms.2025.7.4.20.24>
- [56]. Rogers, E. M. (2003). *Diffusion Of Innovations* (5th Ed.). Free Press.
- [57]. Rummon, M. (2025). Artificial Intelligence (Ai) Integration In The Garment Industry: Navigate The Changes And Assess The Impact Of The Future -A Case Study Based On The Bangladesh Garments Sector. 02 (03), 249–256. <https://doi.org/10.61552/Jai.2025.03.006>

- [58]. Russel, S., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach (4th Ed.). Prentice Hall.
- [59]. Sajjadi, S., Sojourner, A. J., Kammeyer-Mueller, J. D., & Mykerez, E. (2019). Using Machine Learning To Translate Applicant Work History Into Predictors Of Performance And Turnover. *Journal Of Applied Psychology*, 104(10), 1207.
- [60]. Sharmin, S. (2022). IR 4.0 Readiness Of Apparel Industry In Bangladesh. *Asian Journal Of Social Sciences And Legal Studies*, 148–159. <https://doi.org/10.34104/Ajssls.022.01480159>
- [61]. Shubham. (2024). The 4th Industrial Revolution: How AI Is Transforming Ready-Made Garments Sector Of Bangladesh - Groyyo Consulting. Groyyo Consulting - Building Strategies, Inspiring Confidence & Growing Business. <https://consulting.groyyo.com/the-4th-industrial-revolution-how-ai-is-transforming-ready-made-garments-sector-of-bangladesh/>
- [62]. Strohmeier, S. (2020). Digital Human Resource Management: A Conceptual Clarification. *German Journal Of Human Resource Management*, 34(3), 345-365. <https://doi.org/10.1177/2397002220921131>
- [63]. TDS. (2025, January 27). Utilising AI In Bangladesh's RMG Sector. The Daily Star Opinion. <https://www.thedailystar.net/opinion/views/rmg-notes/news/utilising-ai-bangladeshs-rmg-sector-3809616>
- [64]. Teamviewer. (2025). Global Workforce AI Adoption Survey: Trends And Insights. Teamviewer Research Institute.
- [65]. Thorpe, R., Holt, R., Macpherson, A., & Pittaway, L. (2005). Using Knowledge Within Small And Medium-Sized Firms: A Systematic Review Of The Evidence. *International Journal Of Management Reviews*, 7(4), 257-281.
- [66]. TLD Apparel. (2025). AI In The Garment Manufacturing Industry By 2025. TLD Apparel News. <https://tld-apparel.com/news-inspired/ai-in-the-garment-manufacturing-industry/>
- [67]. Tornatzky, L. G., & Fleischer, M. (1990). The Processes Of Technological Innovation. Lexington Books.
- [68]. Uddin, M. (2025). Utilising AI In Bangladesh's RMG Sector. The Daily Star. <https://www.thedailystar.net/opinion/views/rmg-notes/news/utilising-ai-bangladeshs-rmg-sector-3809616>
- [69]. Vakola, M. (2014). What's In There For Me? Individual Readiness To Change And The Perceived Impact Of Organizational Change. *Leadership & Organization Development Journal*, 35(3), 195-209. <https://doi.org/10.1108/LODJ-05-2012-0064>
- [70]. Vardarlier, P., & Zafer, C. (2019). Use Of Artificial Intelligence As Business Strategy In Recruitment Process And Social. *Digital Business Strategies In Blockchain Ecosystems: Transformational Design And Future Of Global Business*, 355.
- [71]. Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 And A Research Agenda On Interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- [72]. Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension Of The Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186-204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- [73]. Wang, R. Y., & Strong, D. M. (1996). Beyond Accuracy: What Data Quality Means To Data Consumers. *Journal Of Management Information Systems*, 12(4), 5–33. <https://doi.org/10.1080/07421222.1996.11518099>
- [74]. Wang, Y., & Chuang, Y. (2023). Artificial Intelligence Self-Efficacy: Scale Development And Validation. *Education And Information Technologies*, 29(4), 4785–4808. <https://doi.org/10.1007/s10639-023-12015-w>
- [75]. Watanabe, Y., Nakayama, M., Takemura, K., & Uchida, Y. (2025). AI Feedback And Workplace Social Support In Enhancing Occupational Self-Efficacy: A Randomized Controlled Trial In Japan. *Scientific Reports*, 15(1). <https://doi.org/10.1038/s41598-025-94985-0>
- [76]. Weiner, B. J. (2020). A Theory Of Organizational Readiness For Change. In *Handbook On Implementation Science* (Pp. 215-232). Edward Elgar Publishing