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Acceptance of artificial intelligence in selected manufacturing industries in San Pablo City: An input on human resource plan

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Abstract

This study focuses on developing a human resource (HR) plan for integrating Artificial Intelligence (AI) in HR management across selected manufacturing companies. It evaluated the AI literacy of HR employees, their perceptions of AI's usefulness and ease of use, the challenges they face with AI integration, and how AI is being developed within HR management. Employing a mixed-method design, the study gathered data from forty-eight (48) HR employees using a validated questionnaire and conducted thematic analysis on interviews with 10 selected participants. The findings revealed that HR employees are generally literate in AI and believe it enhances their work productivity and performance. Interestingly, their general knowledge of AI did not significantly affect their perceptions of its usefulness or ease of use. The main challenges identified included the cost of technology, integration difficulties, data privacy and security issues, and the need for further capacity building. The study resulted in a comprehensive HR plan designed to guide the integration of AI into HR practices. The plan is recommended for broader implementation, with suggestions for evaluating its effectiveness, engaging in partnerships, conducting cost-benefit analyses, and formulating continuous learning plans. It advises companies to develop their own AI strategies that prioritize ethical practices, continuous learning, and a culture of innovation and security.

Keywords: *artificial intelligence, compensation management, employee relationships, responsible artificial intelligence usage, usefulness and ease of use*

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1. Introduction

Artificial intelligence (AI) has a significant impact on society, industry, and the global economy. AI systems can accurately perceive outside input, learn from it, and adapt to achieve objectives, supplementing human tasks and activities (Kaplan & Haenlein, 2019). The rapid development of AI applications across various industries such as banking, healthcare, manufacturing, retail, and public services has necessitated organizational adaptations to new working models (Jaiswal et al., 2022). One major adaptation involves re-evaluating workforce skills, as automation may require retraining or developing new talents (Hancock et al., 2020).

Learning, despite of its dynamic nature (Gonzales & Villacruel, 2024), and continuous skills development are critical components of successful AI integration. As AI systems evolve, so too must the human skills required to interact with them effectively. Organizations are increasingly investing in AI-related training programs that focus on both technical competencies and adaptive skills, such as problem-solving and creativity (Zirar et al., 2023). The dynamic nature of AI technology necessitates a culture of lifelong learning, where employees are encouraged to regularly update their knowledge and skills to keep pace with technological advancements (Dalcher, 2022). This focus on learning not only enhances the ability of the workforce to utilize AI effectively but also fosters innovation and adaptability within the organization.

However, the implementation of AI in the workplace is not without challenges. Employees may resist change due to fears of job loss or anxiety about adapting to new technologies (Bashal & Wan, 2019). The integration of AI has the potential to automate tasks traditionally performed by humans, affecting both knowledge workers and manual laborers, and leading to concerns about job displacement (Leinen et al., 2020). While AI can enhance productivity and efficiency, it also necessitates a shift in the demand for certain skills, with problem-solving and critical thinking becoming increasingly important as routine tasks are automated (Chuang, 2022). Moreover, AI adoption is reshaping the labor market, with technical skills for utilizing AI systems and soft skills like critical thinking, analysis, and problem-solving expected to become more critical by 2025 (World Economic Forum, 2019).

At the OECD International Conference on AI, experts discussed the skills necessary for successful AI adoption, challenges in training managers and employees, and ways policymakers can support workers in gaining the required expertise (Acemoglu, 2022). As the labor market

evolves, there is less time for workers to acquire new skills. By 2025, the primary competencies expected to grow in importance include technical skills for utilizing AI systems and soft skills like critical thinking, analysis, problem-solving, and self-management (World Economic Forum, 2019).

Human Resource professionals today focus on blending manual and automated tasks to create a smooth, intuitive work environment that fosters creativity, intelligence, and empathy (Sucipto, 2024). By combining human resources with operational efficiency, companies can make the most of their workforce (Dhamija et al., 2019). AI helps by automating routine tasks, allowing HR to focus on strategic goals. Beyond automation, AI provides valuable insights and forecasts from large data sets, transforming traditional HR practices (Thames & Schaefer, 2016).

AI technology defines modern business operating paradigms, improving human intelligence by automating tasks and necessitating skill and knowledge upgrades (Sucipto, 2024). It enhances employee experience by handling large amounts of data efficiently in talent management and recruitment (Wisetsri et al., 2022). However, adoption challenges include high costs, limited free AI tools for HR tasks, and concerns about professional discrepancies in decision-making. Despite these challenges, AI's integration into HRM is growing rapidly, with significant transformations in recruiting, performance management, payroll processing, and onboarding (Palos-Sánchez et al., 2022).

As AI continues to define modern business operating paradigms, this study seeks to address these challenges by developing a Human Resource Plan that facilitates the effective integration of AI into HR management within the manufacturing sector. The objective is to create a framework that optimizes the synergy between human and AI-driven work, fosters a culture of continuous learning, and ensures the ethical use of AI technologies.

2. Literature review

2.1. Artificial Intelligence in the Philippines

The Philippines is increasingly influenced by artificial intelligence, with both public and private sectors weighing its benefits and drawbacks (Arasa, 2023). The government has been proactive in this area; according to Crismundo (2021), the Department of Trade and Industry's plan has made the Philippines one of the first 50 countries to establish a national AI roadmap. This roadmap aims to position the country as a regional AI leader. Malik et al. (2021) emphasized that

the next step is to create an environment that supports and retains AI talent locally. Strong local demand for AI applications is crucial for boosting job opportunities in the sector.

In the context of Filipino employees and employers, they have undoubtedly also been touched by the trends in the digital workplace. To remain relevant in their respective industries, both had to be technologically proficient and adaptable to this new working culture. In light of the manufacturing industry, automation has played a significant role to improve efficiency, product quality, and employees' safety (Shirota, 2021). Unfortunately, research indicates that companies have not done enough to assist employees in adjusting to digital developments in the workplace (Pestano, 2018).

There are significant challenges faced by human resources in San Pablo City, particularly in recruitment and employee selection. It is noted that while the workload for HR tasks is substantial, much of it could be streamlined through automation using appropriate applications. The industrial sector encounters various obstacles in digital transformation and AI initiatives, including insufficient AI skills, inadequate technology infrastructure and interoperability, data quality issues, real-time decision-making challenges, and concerns around edge deployments, trust, and transparency (Shirota 2020). Thus, one must consider external factors like employee AI literacy as well as the unique capabilities of the AI tools and systems being installed in order to establish the skills that will be required to apply AI in their work (Morandini et.al., 2023). These show the need for an in-depth understanding of how human resource management might benefit from the integration of artificial and human intelligence at work.

2.2. Artificial Intelligence Challenges

Despite the advancements in the integration of AI into the manufacturing sector, it faces several unique challenges. One significant hurdle is the high cost of AI technologies and the associated infrastructure investments. Small and medium-sized enterprises (SMEs) often struggle with the financial burden of adopting advanced AI systems, which can be a barrier to entry (Schwaeke et al., 2024). Moreover, the implementation of AI in manufacturing requires substantial retraining of the workforce.

The shift towards automated processes demands new skill sets, including expertise in AI and data analytics. This skills gap poses a challenge for manufacturing firms, as they need to invest in training programs to upskill their employees (Morandini et al., 2023). The lack of specialized

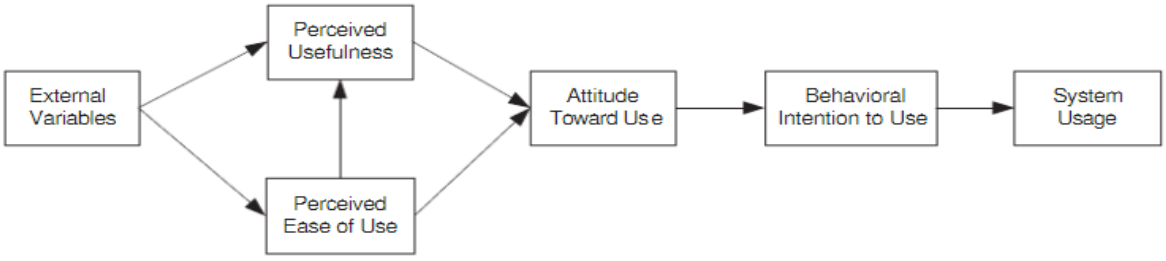
training resources and educational programs tailored to the manufacturing sector exacerbates this issue. Additionally, concerns related to data privacy and cybersecurity are prominent in the adoption of AI technologies. Manufacturing companies must address these concerns to ensure that sensitive data is protected against potential breaches and misuse. The integration of AI introduces complexities in data management and security, which require robust strategies and solutions to mitigate risks (Chen et al., 2021).

2.3. Theoretical framework

The study is anchored on the information system theory model, Technology Acceptance Model (TAM) by Fred Davis (1987). The model explains how people adopt and make use of technology. The characteristics Davis included in the original TAM are perceived usefulness (PU), perceived ease of use (PEOU), attitude, and behavioral intention to use. Moreover, it illustrates that one end-user's views about a technology are formed by the constructs PU and PEOU, which also predict an end-user's attitude toward the technology and its acceptance.

Figure 1

The Technology Acceptance Model of Davis, 1986



TAM's dimensions are specified as follows: External Variables plays a significant role in determining the attitude. When TAM is implemented, individuals will be willing to use technology and have the attitude to do so; Perceived Usefulness (PU) is the level of a person's belief that using a particular system would enhance their ability to perform their job. It refers to a person's perception of the technology's utility for their intended use; Perceived Ease of Use (PEO) is the extent to which someone thinks using a certain system would be effortless. The hurdles will be overcome if the technology is simple to use. No one has a positive opinion of something if the interface is difficult to use and confusing; Attitude (A) is the evaluation of the target behavior on a certain dimension by an individual. It captures the technology's overall impression; Behavioral Intention to Use (BI) is an element that influences people's decision to use technology is their

behavioral intention. It is a person's drive or readiness to put forth effort to engage in the desired conduct; and the actual system use is the endpoint where people use the technology.

3. Methodology

In this mixed-method study, both quantitative and qualitative approaches were employed to explore AI literacy among HR employees in San Pablo City. The quantitative component assessed AI literacy, perceived usefulness, and ease of use in various HR functions, using a validated research questionnaire (α=0.91). This approach aimed to measure AI literacy in terms of concepts, applications, and responsible usage, and to evaluate the perceived impact of AI on work productivity and performance. On the other hand, the qualitative component focused on identifying themes related to the challenges HR employees face in implementing AI technology. Semi-structured interviews were conducted with ten employees selected based on the lowest AI literacy scores to provide in-depth insights into these challenges.

San Pablo City, Laguna, was chosen for its relevance to the study's focus on HR practices within manufacturing firms. The study utilized complete enumeration sampling, encompassing all 48 active HR employees across the top 35 manufacturing companies. This approach was selected to ensure comprehensive and representative data, minimizing sampling errors and enhancing the reliability of the findings. Additionally, purposive sampling was employed for selecting interview participants, targeting those with the lowest AI literacy to ensure a focused examination of specific challenges.

Ethical considerations were central to the study. Participants were informed about the study's purpose, assured of voluntary participation, and guaranteed confidentiality. Informed consent forms were distributed, and all data were treated with high confidentiality to protect participants' privacy.

Data collection involved distributing questionnaires online and conducting interviews via video conferencing, facilitating a comfortable and flexible environment for participants. Quantitative data were analyzed using mean, standard deviation, Spearman Rank Rho, and Pearson r to explore relationships between AI literacy, usefulness, and ease of use. Qualitative data were analyzed thematically to identify key issues and challenges, guiding the development of a strategic AI integration plan for HR management.

This methodological approach, combining complete enumeration and purposive sampling, ensures both the breadth and depth of the study, providing a comprehensive understanding of AI literacy and its implications in the HR field.

4. Findings and Discussion

4.1. The Artificial Intelligence Literacy of the Human Resource Employees

An in-depth grasp of the HR employees' awareness and proficiency with AI concepts, applications, and ethical considerations can be seen on the tables below, which display the assessment of their level of AI literacy across key AI dimensions.

Table 1

Level of AI literacy of the HR employees in terms of artificial intelligence concepts

Indicators	Mean	SD	VI
1. I can easily distinguish between different levels of artificial intelligence, like basic AI, advanced AI, and super-smart AI.	2.75	0.89	Literate
2. I have a grasp of what machine learning is and how it's different from regular computer programs. It makes machines capable of performing tasks that usually require human-like thinking.	2.65	0.93	Literate
3. AI perceive the surrounding environment, detect patterns, and learn from these patterns and update understanding for future decisions.	2.75	0.91	Literate
4. I can distinguish between machine intelligence and human intelligence, considering the strengths and limitations of machines in HR tasks.	2.60	0.76	Literate
5. I comprehend the basic terms related to AI systems and how they operate in making decisions and processing information in HR tasks.	2.9	0.95	Literate
General Mean	**2.73**	**0.82**	**Literate**

***Legend**:* 3.51-4.00 Highly Literate; 2.51-3.50 Literate; 1.51-2.50 Slightly Literate; 1.00-1.50 Not Literate

The data from table 1 shows the overall assessment of the AI literacy of the HR employees in terms of AI Concepts. It can be seen that they are generally "Literate" when it comes to basic concepts pertaining to AI as shown in the overall mean of 2.73. Kelley (2022) mentions that a technology's definition is crucial because it influences how it is explored. Surprisingly new avenues for collaboration between employees and computers are being made possible by breakthrough AI capabilities that can identify context, concepts, and meaning. In some cases, machines can even help produce new experts by enhancing the expertise of their human collaborators. These systems are proving to be more reliable than the large data-driven systems

that came before them because they more closely resemble human intelligence. However, in order to fully capitalize on AI's potential, companies will need to redesign knowledge-work processes and jobs (Daugherty & Wilson, 2019).

Table 2

Level of AI literacy of the HR employees in terms of artificial intelligence applications

Indicators	Mean	SD	VI
1. I am aware of AI-powered virtual assistants, like chatbots or voice-activated systems, that can assist in HR-related tasks	3.56	0.62	Highly Literate
2. I understand the concept of recommendation systems that use AI to suggest relevant information, training programs, or resources for HR purposes.	2.77	0.75	Literate
3. I am familiar with the use of facial recognition technology in HR applications, such as attendance tracking or security.	3.29	0.82	Literate
4. I am aware that AI can be used for advanced analytics to gain insights into HR trends, employee performance, and workforce planning.	2.25	0.91	Literate
5. I understand that AI is utilized in recruitment tools for tasks like resume screening, candidate matching, and improving the hiring process.	3.06	0.91	Literate
General Mean	**2.99**	**0.59**	**Literate**

***Legend**:* 3.51-4.00 Highly Literate; 2.51-3.50 Literate; 1.51-2.50 Slightly Literate; 1.00-1.50 Not Literate

The AI Literacy level of the respondents is displayed in table 2. It shows that the HR employees are “Literate” (M= 2.99) in terms of AI Applications. This denotes a moderate level regarding how AI technologies can be implemented in practical scenarios, including recruitment, employee engagement, and operational efficiencies. This is because although AI-based recruitment strategies such as resume screening, candidate matching, video interviewing, chatbots, predictive analytics, gamification, virtual reality assessments, and social media screening offer significant potential benefits for organizations, including improved efficiency, cost savings, and better-quality hires. However, the use of AI in recruitment also raises ethical and legal concerns, including the potential for algorithmic bias and discrimination (Albassam, 2023). Ogolodom et al. (2023) found that employees have a good knowledge on AI applications and benefits in their field of specialization. On the contrary, Zhang (2023) stated that although artificial intelligence can offer analytics to present the perspective of the employee, enabling quicker and more informed decision-making by leveraging various structural data sets to produce new perspectives, not everyone is proficient with AI.

Table 3

Level of AI literacy of the HR employees in terms of artificial intelligence safety and security

Indicators	Mean	SD	VI
1. I am concerned about the potential security risks associated with AI applications, especially regarding the protection of personal data in HR processes.	2.83	0.75	Literate
2. I am aware of the risks of AI misuse, such as biases in decision-making or unintended consequences, and their potential impact on HR practices.	2.54	0.71	Literate
3. I understand that AI systems need robust security measures to prevent unauthorized access and protect sensitive HR information.	2.56	0.87	Literate
4. I believe HR departments should approach AI implementation cautiously, considering potential security threats and ensuring protective measures are in place.	2.85	0.80	Literate
5. I think it is essential for HR employees to be educated and aware of AI security risks to mitigate potential threats effectively.	2.69	0.90	Literate
General Mean	**2.70**	**0.68**	**Literate**

Legend: 3.51-4.00 Highly Literate; 2.51-3.50 Literate; 1.51-2.50 Slightly Literate; 1.00-1.50 Not Literate

Over-all the respondents were found to be “Literate” (M=2.70) in terms of Artificial Intelligence Safety and Security as shown in table 3. This indicates that HR professionals are somewhat cautious and critical in their approach to AI, recognizing that while AI offers significant opportunities, it also comes with its own set of challenges and limitations. AI systems should be reliable, safe, and secure for the duration of their lives so that they can operate as intended and not put users at undue risk of harm in situations like everyday use, anticipated use or abuse, or other unfavorable circumstances (OECD, 2023). It is important to have knowledge on these the potential for abuse of AI also includes the creation of increasingly complex malware and attack methods, data forgeries and manipulation, automated social media manipulation, sophisticated fraud schemes, and manipulation of drone or autonomous car navigation systems (Crews, 2023).

Table 5 presents the AI literacy level of the HR employees in terms of Responsible Artificial Intelligence Usage as “Literate” (M=3.05). The score indicates that HR professionals are more attuned to the social and ethical dimensions of AI usage in the workplace, reflecting a conscientious approach to leveraging technology responsibly. This implies that implies that by taking into account the social and ethical ramifications of AI, HR professionals can play a crucial role in ensuring its appropriate use (Floridi et al., 2018).

Table 5

Level of AI literacy of the HR employees in terms of artificial intelligence responsible artificial intelligence usage

Indicators	Mean	SD	VI
1. I believe it is important to use AI applications responsibly, understanding their limitations and potential impact on HR processes.	3.27	0.76	Literate
2. I make an effort to fact-check information generated by AI tools before relying on it for HR decision-making.	3.13	0.79	Literate
3. I consider the ethical implications of using AI in HR and take steps to ensure that its application aligns with ethical standards.	2.77	0.75	Literate
4. I actively question the reliability of content generated by AI in HR, seeking additional verification when necessary	2.98	0.67	Literate
5. I believe in promoting ethical AI practices within the HR department, fostering responsible use and addressing any potential biases or issues.	3.08	0.65	Literate
General Mean	**3.05**	**0.61**	**Literate**

Legend: 3.51-4.00 Highly Literate; 2.51-3.50 Literate; 1.51-2.50 Slightly Literate; 1.00-1.50 Not Literate

Contrary to this, Wang, et.al (2023) found that employee accountability is adversely impacted by the use of AI technology. When it comes to decision-making and its effects on careers, ethical issues become even more crucial due to the application of AI and changes in the way tasks and processes are completed. Thus, it is not only necessary to comply with regulations when using AI responsibly in companies; it is also morally required to make sure that these technologies improve the welfare of people and communities. (Aron, 2024).

4.2. Perceived Usefulness of AI in the Human Resource Management Workplace

A mean score of 3.34 for work productivity suggests that HR employees assessed that AI is “Useful” in enhancing the productivity of work within the HRM domain. This shows a recognition among HR professionals that AI technologies can lead to improvements in operational efficiency. These also reflects a cautious optimism, implying that while there is acknowledgment of AI's potential to streamline tasks and reduce manual workload, there may still be uncertainties or experienced limitations regarding the extent of productivity gains achievable through AI integration. In fact, a finding of Organisation for Economic Co-operation and Development (OECD, 2021) stated that higher exposure to AI may be a good thing for workers, as long as they have the skills to use these technologies effectively. This suggests that workers who have strong digital skills may have a greater ability to adapt to and use AI at work and, hence, to reap the benefits that these technologies bring. By contrast, there is some indication that higher exposure

to AI is associated with lower growth in average hours worked in occupations where computer use is low (OECD, 2021).

Table 6

Level of Perceived Usefulness of AI in the Human Resource Management Workplace

Indicator	Mean	SD	VI
Work Productivity			
1. AI helps my current workspace in terms of comfort and functionality.	3.44	0.62	Useful
2. AI helps me have access to the necessary tools and resources to perform my job efficiently.	3.27	0.64	Useful
3. AI helps me be able to prioritize tasks effectively.	3.48	0.58	Useful
4. AI help me manage and balance my workload so that I won't feel stressed due to work pressure.	3.19	0.79	Useful
5. AI helps foster team collaboration and focused team discussions.	3.31	0.78	Useful
Over-all Mean	**3.34**	**0.62**	**Useful**
Work Performance			
1. AI helps have the necessary knowledge and skills to perform my job effectively.	3.50	0.65	Useful
2. AI helps me consistently produce high-quality work and meet the established standards.	3.56	0.58	Very Useful
3. AI helps me effectively communicate with colleagues and clients.	3.31	0.72	Useful
4. AI help me collaborate well with my team members and contribute positively to team projects.	3.44	0.68	Useful
5. AI helps me be more proactive in identifying issues and finding solutions without constant supervision.	3.31	0.78	Useful
Over-all Mean	**3.45**	**0.59**	**Useful**

Legend: 3.51-4.00 = Very Satisfactory; 2.51-3.50 = Satisfactory; 1.51-2.50 = Good; 1.00-1.50 = Needs Improvement

Thus, the over-all mean score of 3.45 for work performance indicates that among HR employees perceive AI to be "Useful" on enhancing the overall performance of HR-related tasks and activities. This encompasses not only the efficiency but also the effectiveness of HR processes, including improved accuracy in candidate selection, enhanced employee experience through personalized engagement, and more informed decision-making through analytics and AI-driven insights. The score suggests that HR professionals see AI as a valuable tool that can contribute to higher quality outcomes in HR processes and initiatives. Include AI-capable tools in an

organization's technology stack can boost team performance. Employees will have more time to concentrate on the most important aspects of their work when AI reduces the number of manual activities they must accomplish (Zhang, 2023).

4.3. Perceived Ease of Use of Artificial Intelligence in the Human Resource Management Workplace

The level of perceived ease of use of Artificial Intelligence (AI) in the Human Resource Management (HRM) workplace across various domains—strategic HR planning, performance management, recruitment and deployment, training and development, employee relations, and compensation management—provide valuable insights into how HR professionals view the integration and usability of AI technologies within their specific functional areas.

Table 7

Level of perceived ease of use of artificial intelligence in the human resource management workplace in terms of strategic HR planning

Indicators	Mean	SD	VI
1. The HR planning software/tools I use are user-friendly.	3.58	0.58	Very Easy
2. I find it easy to navigate through the features of the HR planning software/tools.	3.54	0.62	Very Easy
3. Entering HR data into the system is straightforward and efficient.	3.52	0.62	Very Easy
4. Retrieving specific HR data or reports from the system is quick and hassle-free.	3.42	0.71	Easy
5. The HR planning technology seamlessly integrates with other systems used in the organization	3.50	0.65	Easy
6. The technology is compatible with various devices and operating systems.	3.08	0.67	Easy
7. The HR planning technology allows customization to meet the specific needs of our organization	2.83	0.66	Easy
8. I can easily modify reports and settings within the HR planning technology without extensive technical knowledge	3.48	0.62	Easy
General Mean	**3.37**	**0.45**	**Easy**

***Legend**:* 3. 51-4.00 Very Easy; 2.51-3.50 Easy; 1.51-2.50 Slightly Easy; 1.00-1.50 Not Easy

Table 7 shows the assessment of the HR employees on AI's ease of use in the strategic planning tasks. It can be seen that they perceive it to be generally "Easy" (M= 3.37). This suggests that HR professionals find AI tools relatively more user-friendly or beneficial in strategic planning

activities. AI applications in strategic HR planning might include data analytics for workforce planning, talent management forecasting, and organizational development strategies. The relatively higher score indicates that HR professionals may perceive AI as an asset in enhancing decision-making processes by providing data-driven insights.

Organizations now operate in a complex and dynamic environment where they must continuously innovate and adapt in order to maintain a competitive advantage. This is due to the increasing availability of information and the rapid pace of change (Fountaine et al., 2019). In such an instance, artificial intelligence (AI) can provide insightful information that helps businesses make better decisions and create more successful strategies (Davenport et al., 2020). In fact, Stanke (2023) pointed out that AI can be of help in developing strategic plan in an organization in terms of collecting and analyzing data, generating and evaluating ideas, and creating and executing plans.

Table 8

Level of perceived ease of use of artificial intelligence in the human resource management workplace in terms of recruitment and deployment

Indicators	Mean	SD	VI
1. The recruitment and deployment software/tools I use are user-friendly.	3.21	0.65	Easy
2. Creating and posting job openings on the platform is a straightforward process.	3.28	0.67	Easy
3. The system provides effective tools for advertising job vacancies to relevant platforms.	3.06	0.63	Easy
4. The system allows me to filter and shortlist candidates based on specific criteria.	2.94	0.76	Easy
5. Automated reminders and notifications help in ensuring interview attendance.	2.88	0.73	Easy
6. I find the assessment tools integrated into the platform valuable in the candidate selection process.	2.83	0.83	Easy
7. The technology facilitates smooth onboarding and deployment of new hires.	2.92	0.79	Easy
General Mean	**3.03**	**0.60**	**Easy**

Legend: 3. 51-4.00 Very Easy; 2.51-3.50 Easy; 1.51-2.50 Slightly Easy; 1.00-1.50 Not Easy

Table 8 shows that AI is “Easy” (M=3.03) to use in the HR task concerning recruitment and deployment. The table also exhibits a mean score of 3.38 (“Easy”) on the item “Creating and posting job openings on the platform is a straightforward process” suggests that they find AI technology to be of use in informing potential candidates about a new opening and attract them to

apply. In fact, even when the need for employment is always growing, AI can help expedite the process (Skil, 2020). It can also be used to streamline the hiring process during recruitment (Sanyaolu & Atsaboghena, 2022). Additionally, they find the AI assessment tools valuable in the candidate selection process but still got the lowest mean score of 2.83 (“Easy”). This reflects a cautious optimism but also indicates potential concerns about the effectiveness and fairness of AI in accurately assessing and selecting candidates without bias. AI systems may resemble "black boxes," making it challenging for employees (and even applicants) to understand the reasons behind a choice they make. Concerns regarding bias may arise from this lack of transparency, particularly if the AI was trained with biased data.

Table 9

Level of perceived ease of use of artificial intelligence in the human resource management workplace in terms of compensation management

Indicators	Mean	SD	VI
1. The compensation management software/tools I use are user-friendly.	3.27	0.76	Easy
2. I can efficiently manage and update various compensation elements such as bonuses, allowances, and benefits	3.35	0.60	Easy
3. The technology supports linking compensation to individual and team performance	3.33	0.69	Easy
4. I find it easy to input and track performance metrics that influence compensation decisions.	3.35	0.67	Easy
5. The system helps ensure compliance with relevant laws and regulations related to compensation.	3.35	0.64	Easy
6. I am confident that the technology assists in adhering to industry standards and legal requirements.	3.35	0.67	Easy
7. The technology has adequate measures to protect employee compensation information from unauthorized access.	3.08	0.65	Easy
General Mean	**3.30**	**0.57**	**Easy**

***Legend**:* 3. 51-4.00 Very Easy; 2.51-3.50 Easy; 1.51-2.50 Slightly Easy; 1.00-1.50 Not Easy

The level of perceived ease of use of artificial intelligence in the human resource management workplace in terms of compensation management is displayed on table 9. It shows that overall, they find the utilization of AI in their workplaces is “Easy” (M=3.30). This implies that HR professionals find AI to be a useful and accessible tool in managing complex compensation data and processes efficiently.

AI is capable of analyzing a huge amount of salary data in order to ensure internal pay parity and assist companies in maintaining their competitiveness in the labor market by recommending suitable compensation packages. Additionally, AI is able to recognize and reduce any biases in salary choices that result from racial or gender-based characteristics. AI is capable of creating personalized compensation plans that are more appealing and encouraging to employees by taking into account each employee's individual performance, abilities, and experience.

Table 10

Test of relationship between the level of AI literacy and perceived level of ai usefulness

Level of AI Literacy	Perceived Level of AI Usefulness					
	Productivity			Performance		
	r_s	p	Interpretation	r_s	p	Interpretation
Artificial Intelligence Concepts	-0.160	0.28	Not Significant	-0.177	0.23	Not Significant
Artificial Intelligence Applications	0.316	0.03	Significant	0.206	0.16	Not Significant
Artificial Intelligence Hype vs. Reality	0.390	0.01	Significant	0.295	0.04	Significant
Artificial Intelligence Safety and Security	0.307	0.03	Significant	0.328	0.02	Significant
Responsible Artificial Intelligence Usage	0.583	0.00	Significant	0.686	0.00	Significant

Legend: $p < 0.05$ *Significant;* $p \geq 0.05$ *Not Significant*

The relationship between the level of AI literacy and level of perceived AI usefulness is show in table 10. It can be gleaned that the assessed level of AI literacy in terms of Artificial Intelligence concepts is not significantly related to their perceived level of AI usefulness in terms of work productivity (p = 0.28). This indicates that the HR employees' understanding, or knowledge of AI concepts does not directly influence their perception of how useful AI can be in improving their work productivity. Employees might recognize the benefits and usefulness of AI in enhancing productivity based on outcomes they observe or hear about, rather than their depth of understanding of AI technology. However, a significant relationship between the level of AI literacy in terms of Artificial Intelligence Applications (p = 0.03), Artificial Intelligence Hype vs. Reality (p = 0.01), Artificial Intelligence Safety and Security (p = 0.03), and Responsible Artificial Intelligence Usage (p = 0.00) and the Level of Perceived AI Usefulness was established.

This indicates that a deeper understanding and literacy in AI can lead to a more positive perception of AI's usefulness. When employees are literate in AI applications, can critically assess AI's realistic capabilities versus its hype, understand its safety and security implications, and are aware of the importance of responsible usage, they are likely more likely to see AI as a beneficial tool for enhancing productivity. This informed perspective enables employees to envision practical AI applications within their work, leading to a more optimistic view of AI's role in improving efficiency and effectiveness. People who are more literate about AI tend to trust AI more and have more positive opinions about its potential. Moreover, a deeper understanding of AI enables individuals to appreciate both its advantages and disadvantages, resulting in a more complex and favorable opinion.

A lack of significant relationship between level of the assessed level of AI literacy in terms of Artificial Intelligence concepts ($p = 0.23$) and Artificial Intelligence Applications ($p = 0.16$) and in their work performance was revealed. This might point to a disconnect between what employees know about AI and how they perceive its relevance or applicability to the human resource workplace. This could mean that employees understand AI in a general sense but do not see how it translates into tangible benefits for their daily tasks or overall work performance, possibly due to a lack of practical examples or clear demonstrations of AI's impact in their specific work context.

The perceived usefulness of AI in work performance might also be heavily influenced by the organizational culture and the level of support provided for AI integration. A culture that actively promotes innovation and provides ample support in terms of training and resources for AI adoption can enhance the perceived usefulness of AI, irrespective of the individual's baseline AI literacy. A study of Benhamou (2022) revealed that although employees knew what AI was, many found it difficult to relate this broad knowledge to their specific job context. Understanding AI's broad application doesn't translate into immediate benefits in day-to-day work. For employees to understand the practical usefulness of AI, they might require more specific examples and demonstrations of how it might be used in their particular roles. Nonetheless, based on the results, Artificial Intelligence Hype vs. Reality ($p = 0.04$), Artificial Intelligence Safety and Security ($p = 0.02$), and Responsible Artificial Intelligence Usage ($p = 0.00$) and the Level of Perceived AI Usefulness established a significant relationship.

These significant relationships suggest that a nuanced understanding of AI, particularly the ability to discern hype from reality, recognize the importance of safety and security, and understand the ethical considerations of AI use, directly contributes to perceiving AI as more

useful in the workplace. Employees who are well-informed about these aspects of AI are likely to have more realistic expectations of AI technologies and can better appreciate the genuine value they offer, leading to a higher perceived usefulness of AI for enhancing work performance.

The findings imply the need for comprehensive AI education programs within organizations that cover more than just the technical aspects of AI. By educating employees on how to differentiate between exaggerated claims and realistic AI capabilities, understand AI risks, and implement AI responsibly, organizations can foster a more informed and critically thinking workforce. This education can lead to more effective and responsible AI adoption, with employees better able to leverage AI technologies to improve work performance. According to PwC Report (2021), a comprehensive grasp of AI's possible disadvantages, capabilities, and risks is necessary for its effective implementation, in addition to knowledge of technology. Through the provision of thorough training, companies can enable their employees to: Identify situations in which AI can be advantageous and prevent over-reliance; Apply AI responsibly and address any potential ethical issues; Use AI effectively to improve their own job performance and support the organization's successful adoption of AI.

Table 11

Test of relationship between the level of AI literacy and perceived AI ease of use

Level of AI Literacy	Perceived AI Ease of Use																	
	Strategic HR Planning			Performance Management			Recruitment and Deployment			Training and Development			Employee Relations			Compensation Management		
	r_s	p	VI	r_s	p	VI	r_s	p	VI	r_s	p	VI	r_s	p	VI	r_s	p	VI
Artificial Intelligence Concepts	.1	.5	Not Sig	.06	.7	Not Sig	.2	.17	Not Sig	.05	.74	Not Sig	-.08	.58	Not Sig	-.11	.46	Not Sig
Artificial Intelligence Applications	.31	.03	Sig	.49	0	Sig	.49	0	Sig	.32	.03	Sig	.4	.01	Sig	.41	0	Sig
Artificial Intelligence Hype vs. Reality	.44	0	Sig	.59	0	Sig	.84	0	Sig	.63	0	Sig	.51	0	Sig	.46	0	Sig
Artificial Intelligence Safety and Security	.43	0	Sig	.6	0	Sig	.66	0	Sig	.99	0	Sig	.58	0	Sig	.4	.01	Sig
Responsible Artificial Intelligence Usage	.73	0	Sig	.67	0	Sig	.55	0	Sig	.45	0	Sig	.79	0	Sig	.76	0	Sig

Legend: $p < 0.05$ *Significant;* $p \geq 0.05$ *Not Significant*

Table 11 displays the relationship between the level of AI literacy and perceived AI ease of use. It can be seen that the level of AI literacy in terms of Artificial Intelligence concepts is not significantly related to the level of their perceived AI ease of use in terms of Strategic HR Planning ($p = 0.50$), Performance Management ($p = 0.70$), Recruitment and Deployment ($p = 0.17$), Training and Development ($p = 0.74$), Employee Relations ($p = 0.58$), and Compensation Management ($p = 0.46$). This finding implies that the complexity and specificity of HR tasks may require more than just a general understanding of AI. HR functions like strategic planning, recruitment, and compensation management involve nuanced decisions that heavily rely on human judgment and understanding of organizational culture and values. Moreover, a general AI literacy may not directly translate to perceived ease of use or effectiveness in these areas, highlighting a gap between broad AI knowledge and its practical application in specialized HR tasks. Furthermore, general AI knowledge may not equip HR professionals with the insights needed to effectively select, implement, and utilize AI tools in their specific domains of work.

On the other hand, AI literacy in terms of AI applications posed a significant relationship with the level of perceived AI ease of use in terms of Strategic HR Planning ($p = 0.03$), Performance Management ($p = 0.00$), Recruitment and Deployment ($p = 0.00$), Training and Development ($p = 0.03$), Employee Relations ($p = 0.01$), and Compensation Management ($p = 0.00$). This means that understanding AI applications makes it clearer how these technologies can be leveraged to address real-world HR needs, improving perceptions of AI's relevance and utility. This knowledge helps HR professionals perceive AI not as a distant or abstract technology but as a practical tool that can be integrated into daily HR tasks to improve outcomes and efficiency. Additionally, having knowledge on AI applications allows HR employees personalized learning paths, skills assessment, and career development can transform how organizations approach employee growth and competency development.

A significant relationship was also established between the level of AI literacy in terms Artificial Intelligence Hype vs. Reality and Responsible Artificial Intelligence Usage and the level of perceived AI ease of use in terms of Strategic HR Planning ($p = 0.00$), Performance Management ($p = 0.00$), Recruitment and Deployment ($p = 0.00$), Training and Development ($p = 0.00$), Employee Relations ($p = 0.00$), and Compensation Management ($p = 0.00$). Likewise, the level of AI literacy in terms Artificial Intelligence Safety and Security and the level of perceived AI ease of use in terms of Strategic HR Planning ($p = 0.00$), Performance Management ($p = 0.00$), Recruitment and Deployment ($p = 0.00$), Training and Development ($p = 0.00$), Employee

Relations (p = 0.01), and Compensation Management (p = 0.01). This proposes that when HR professionals are well-versed in these areas of AI literacy, they are better equipped to select and implement AI tools across a range of HR functions, from strategic planning to employee relations.

This highlights the need for ongoing education and training in AI, focusing not just on the technological aspects but also on practical applications, ethical considerations, and safety and security concerns. Such a holistic approach to AI literacy can empower HR professionals to harness AI technologies more effectively, leading to improved HR practices and contributing to organizational success. This was supported by Davenport et al. (2018) that HR managers must be competent in analytics, including artificial intelligence (AI), in order to manage personnel successfully. It highlights how important data-driven decision-making is to HR tasks like hiring, performance reviews, and employee relations. HR workers may better grasp the potential of AI technologies to improve efficiency and effectiveness in these areas by having an in-depth knowledge of the technology.

Table 12

Challenges and issues encountered by the HR employees in utilizing artificial intelligence technology in their respective workplace

Theme	Sub-Themes	Coded Response
Challenges in AI integrations experienced in terms of ethical concerns, data quality, cost, skill, and usability Issues	Privacy and Data Security	P1: The primary challenge we face is the ethical concerns around privacy and data security. Employees are understandably worried about how their data is being used and stored.
	Quality and Integration Issues	P2: The main challenge is data quality and integration. AI is only as good as the data fed into them.
	Cost of AI Tools and Integration	P3: The cost that comes into integrating AI in the workplace is a challenge. This is why we use only the basic AI tools that are free on the internet. P4: The amount spent in availing and maintaining a personalized AI system for our company is an issue. Our company doesn't prioritize this kind of costing. P5: We use the basic AI tools that can help ease our everyday tasks in the HR Department. However, we only have limited access to those tools or platforms that are really intended for HR tasks because it costs a lot. P9: The amount we spend on AI tools in training is very costly.
	Training and Familiarity	P6: Our co-workers are not that well-versed in using some basic AI tools. They do not maximize the use of those that are available. P10: We found difficulty in integrating AI fully in our workplace because there are no orientations and training provided regarding this technology. P11: We are not introduced to the technology yet; we only use it based on our knowledge and its free availability.
	Functionality and Content	P7: We often use these in making communication letters and some basic tasks. However, we often face some challenges with the content it provides us. P8: We really need to check and verify the data it provides.

The study highlights several key challenges HR employees face when integrating AI technology into their workplaces. Privacy and data security concerns were prominently mentioned, reflecting a broader issue in AI adoption where employees are wary of how their data is used and protected. This concern aligns with existing research that underscores the importance of robust data protection mechanisms to build trust and mitigate privacy fears (Wylde et al., 2022).

Data quality and integration issues were also significant, with participants noting that the effectiveness of AI tools is heavily dependent on the quality of the data they process. Poor data quality can lead to unreliable AI outputs, which affects decision-making and operational efficiency, as supported by previous studies (Marr, 2024). Additionally, the cost of AI tools and their integration emerged as a major barrier. High expenses associated with advanced AI technologies and their maintenance limit their adoption, particularly in organizations with tighter budgets.

Finally, the lack of training and familiarity with AI tools was identified as a critical issue. Without adequate training and support, employees struggle to fully utilize AI technologies, which hinders their integration and effectiveness. This finding is consistent with literature emphasizing the need for comprehensive training programs to enhance AI utilization (Mcghee, 2022). Addressing these challenges through better data management, cost-effective solutions, and targeted training can improve AI adoption and enhance its benefits in HR practices.

5. Conclusion and Recommendations

AI literacy is crucial for effectively leveraging technology in the workplace. However, merely understanding AI concepts is not enough; a comprehensive grasp of practical applications, realistic expectations, safety protocols, and ethical considerations is essential. This nuanced understanding allows employees to evaluate and utilize AI tools more effectively, enhancing productivity while also recognizing AI's limitations and risks. Such awareness builds trust, fosters realistic expectations, and promotes the adoption of AI technology. For HR practitioners, deep AI literacy is vital for selecting and implementing AI solutions across various functions, from recruitment to strategic planning. Emphasizing practical applications and ethical considerations in AI training ensures that HR professionals can harness these technologies to improve HR processes and organizational performance. Ultimately, a thorough understanding of AI and its implications supports better decision-making and maximizes the benefits of AI in the workplace.

Future research should focus on exploring the specific ways in which AI literacy influences various HR functions, such as employee recruitment, performance management, and strategic planning. Additionally, studies could investigate the effectiveness of different training programs designed to enhance AI literacy among HR professionals, assessing their impact on AI adoption and workplace productivity. Comparative analyses across industries and geographical regions could also provide valuable insights into how contextual factors influence the implementation and perception of AI technologies. Future studies can contribute to more tailored and effective strategies for integrating AI into HR practices.

References

Acemoglu, D. (2022). Conversation with Daron Acemoglu on AI, automation and skills. In International Conference on AI in Work, Productivity and Skills (AI-WIPS). *OECD, Berlin, Germany*. https://www.oecd-events.org/2022-ai-wips/session/f0a87214-4d83-ec11-a507-a04a5e7d20d9

Albassam, W. (2023). The power of artificial intelligence in recruitment: An analytical review of current ai-based recruitment strategies. *International Journal of Professional Business Review. 8* (6). https://doi.org/10.26668/businessreview/2023.v8i6.2089

Arasa, D. (2023). AI's impact on the Philippines: Today, BPOs. Tomorrow, other sectors. *Inquirer, Artificial Intelligence*. https://technology.inquirer.net/125497/

Aron, S. (2024). *Responsible and ethical use of AI in organizations*. https://www.financialexpress.com/opinion/responsible-and-ethical-use-of-ai-in-organizations/3413539/

Basyal, D. K., & Wan, P. D. J. (2020). Employees' resistance to change and technology acceptance in Nepal. *South Asian Studies, 32*(2), 351 – 365.

Benhamou, S. (2020). Artificial intelligence and the future of work. *Revue d'économie industrielle, 169*, 57-88. https://doi.org/10.4000/rei.8727

Chen, J., Ramanathan, L., & Alazab, M. (2021). Holistic big data integrated artificial intelligent modeling to improve privacy and security in data management of smart cities. *Microprocessors and Microsystems, 81*, 103722. https://doi.org/10.1016/j.micpro.2020.103722

Chuang, S. (2022). Indispensable skills for human employees in the age of robots and AI. *European Journal of Training and Development 48* (1/2), 179-195. https://doi.org/10.1108/EJTD-06-2022-0062

Crews, J. (2023). *AI's dark side: The potential misuses of artificial intelligence & why you should be concerned*. https://www.linkedin.com/

Crismundo, K. (2021). *AI processing seen as next BPO for PH*. https://www.pna.gov.ph/articles/1151550

Dalcher, D. (2022). Rediscovering innovation in project management: A post-crisis perspective. *PM World Journal 9* (4), 1-4.

Daugherty, P. & Wilson, H. (2019). Using AI to make knowledge workers more effective. *Harvard Business Review*. https://hbr.org/2019/04/using-ai-to-make-knowledge-workers-more-effective

Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science, 48*(1), 24-42. https://doi.org/10.1007/s11747-019-00672-z

Davenport, T. H., Harris, J., & Shapiro, J. (2018). Competing on talent analytics. *Harvard Business Review, 96*(5), 52-63.

Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review, 96*(1), 107–116.

Dhamija, P., Gupta, S., & Bag, S. (2019). Measuring of job satisfaction: The use of quality of work life factors. *Benchmarking: An International Journal*, 26, 871-892. https://doi.org/10.1108/BIJ-06-2018-0155

Floridi, L., Cowls, J. & Beltrametti, M. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds & Machines 28*, 689–707. https://doi.org/10.1007/s11023-018-9482-5

Fountaine, T., McCarthy, B., & Saleh, T. (2019). Building the AI-powered organization. *Harvard Business Review*, 97(4), 62-73.

Davis, F. D. (1987). *User acceptance of information systems: the technology acceptance model* (TAM). https://deepblue.lib.umich.edu/bitstream/handle/2027.42/35547/b1409190.0001.001.pdf

Gonzales, S.M. & Villacruel, P.D. (2024). Exploring students' experiences in the dynamic learning program model. *International Journal of Educational Management and Development Studies, 5* (2), 1-26. https://doi.org/10.53378/353051

Hancock, J. T., Naaman, M., & Levy, K. (2020). AI-mediated communication: Definition, research agenda, and ethical considerations. *Journal of Computer-Mediated Communication, 25*(1), 89-100. https://doi.org/10.1093/jcmc/zmz022

Jaiswal, A., Arun, C. J., & Varma, A. (2022). Rebooting employees: Upskilling for artificial intelligence in multi-national corporations. *International Journal of Human Resource Management, 33(*6), 1179-1208. https://doi.org/10.1080/09585192.2021.1891114

Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons, 62*(1), 15-25. https://doi.org/10.1016/j.bushor.2018.08.004

Kelley, S. (2022). Employee perceptions of the effective adoption of AI principles. *J Bus Ethics 178*, 871–893. https://doi.org/10.1007/s10551-022-05051-y

Leinen, P., Esders, M., Schütt, K. T., Wagner, C., Müller, K. R., & Tautz, F. S. (2020). Autonomous robotic nanofabrication with reinforcement learning. *Science Advances, 6* (36), eabb6987. https://doi.org/10.1126/sciadv.abb6987

Marr, B. (2024). The biggest challenges and pitfalls of data-driven, AI-Enabled HR. https://www.forbes.com/sites/bernardmarr/2024/01/12/the-biggest-challenges-and-pitfalls-of-data-driven-ai-enabled-hr/?sh=1004ba8c777f

Malik, A., De Silva, M. T., Budhwar, P., & Srikanth, N. R. (2021). Elevating talents' experience through innovative artificial intelligence-mediated knowledge sharing: Evidence from an IT-multinational enterprise. *Journal of International Management, 27*(4), 100871. https://doi.org/10.1016/j.intman.2021.100871

Mcghee, R. (2022). *How to implement new technology training*. https://unboxedtechnology.com/

Morandini, S., Fraboni, F., De Angelis, M., Puzzo, G., Giusino, D., & Pietrantoni, L. (2023). The impact of artificial intelligence on workers' skills: Upskilling and reskilling in organisations. *Informing Science, 26*, 39-68. https://cris.unibo.it/handle/11585/917132

OECD (2021). *Artificial intelligence and employment*. https://www.oecd.org/en/topics/policy-issues/future-of-work.html

Ogolodom, M.P., Mbaba, A.N., Johnson, J., Chiegwu, H.U., Ordu, K.S. & Okej, M.C. (2023). Knowledge and perception of healthcare workers towards the adoption of artificial intelligence in healthcare service delivery in Nigeria. *AG Salud 1* (16).

Palos-Sánchez, P.R., Baena-Luna, P., Badicu, A. & Infante-Moro, J.C. (2023) Artificial intelligence and human resources management: A bibliometric analysis. *Applied Artificial Intelligence, 36*:1. https://doi.org/10.1080/08839514.2022.2145631

Pestano, T. (2018). How technology is changing the Filipino workplace. *Manila Recruitment*. https://manilarecruitment.com/manila-recruitment-articles-advice/technology-changing-filipino-workplace/

PWC Report (2021). Artificial intelligence in HR: a No-brainer. https://www.pwc.nl/nl/assets/documents/artificial-intelligence-in-hr-a-no-brainer.pdf

Sanyaolu, E. & Atsaboghena, R. (2022). *Role of artificial intelligence in human resource management: Overview of its benefits and challenges*. http://dx.doi.org/10.13140/RG.2.2.22297.29283

Schwaeke, J., Peters, A., Kanbach, D. K., Kraus, S., & Jones, P. (2024). The new normal: The status quo of AI adoption in SMEs. *Journal of Small Business Management*, 1–35. https://doi.org/10.1080/00472778.2024.2379999

Shirota, Y., Fujimaki, M., Tsujiura, E., Morita, M., & Machuca, J. A. D. (2021). A SHAP value-based approach to stock price evaluation of manufacturing companies. *In 2021 4th International Conference on Artificial Intelligence for Industries (AI4I)* (pp. 75-78). IEEE. https://doi.org/10.1109/AI4I51902.2021.00026

Skil AI (2020). *AI recruiter Bot for candidate acquisition*. Chatbots Life. https://chatbotslife.com/ai-recruiter-bot-for-candidate-acquisition-467812712262

Stanke, B. (2023). *How AI can help develop a strategic plan*. https://www.bobstanke.com/blog/ai-for-strategic-planning

Sucipto, H. (2024). The impact of artificial intelligence (AI) on human resource management practices. *Management Studies and Business Journal (PRODUCTIVITY), 1*(1), 138-145. https://doi.org/10.62207/xey9mx18

Thames, L., & Schaefer, D. (2016). Software-defined cloud manufacturing for industry 4.0. *Procedia cirp, 52*, 12-17. https://doi.org/10.1016/j.procir.2016.07.041

Wang, B., Rau, P., & Yuan, T. (2022). Measuring user competence in using artificial intelligence: validity and reliability of artificial intelligence literacy scale. *Behaviour & Information Technology*. https://doi.org/10.1080/0144929X.2022.2072768

Wisetsri, W., Donthu, S., Mehbodniya, A., Vyas, S., Quiñonez-Choquecota, J., & Neware, R. (2022). An investigation on the impact of digital revolution and machine learning in supply chain management. *Materials Today: Proceedings, 56*, 3207-3210. http://dx.doi.org/10.1016/j.matpr.2021.09.367

World Economic Forum. (2019). World Economic Forum Annual Meeting [Conference session]. https://www.wefo-rum.org/events/world-economic-forum-annual-meeting-202

Wylde, V., Rawindaran, N., Lawrence, J., Balasubramanian, R., Prakash, E., Jayal, A., & Platts, J. (2022). Cybersecurity, data privacy and blockchain: A review. *SN computer science*, 3(2), 127. https://doi.org/10.1007/s42979-022-01020-4

Zhang, L. (2023). How to use AI to improve employee performance and engagement? *Fastcompany*. https://www.fastcompany.com/90834773/how-to-use-ai-to-improve-employee-performance-and-engagement

Zirar, A., Ali, S. I., & Islam, N. (2023). Worker and workplace Artificial Intelligence (AI) coexistence: Emerging themes and research agenda. *Technovation, 124*, 102747. https://doi.org/10.1016/j.technovation.2023.102747