Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10, 746-759
2025
Publisher: Learning Gate
DOI: 10.55214/2576-8484.v9i10.10530

The role of artificial intelligence in transforming human resource practices: Quantitative evidence from the Saudi telecom companies

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Abstract: The rapid development of high technology has compelled many organizations to continuously seek new concepts, ideas, tests, and innovative solutions to improve their current technology, systems, processes, and products. Artificial intelligence (AI) is increasingly utilized by modern businesses to foster a more profitable and successful future. Integrating AI-powered solutions into human resource (HR) practices offers significant potential, especially as Saudi Arabia endeavors to meet the demands of economic diversification, transformation into a knowledge-based economy, and enhancement of societal well-being. This paper aims to examine the role of AI in transforming HR practices within Saudi telecom companies. The study focused on four HR practices: training and development, performance management, employee engagement, and selective hiring. A quantitative approach was employed, involving the design and distribution of a questionnaire to a sample of 130 managers working in Saudi telecom companies. The findings indicate that AI plays a substantial role in improving HR practices in these companies. Among the practices, selective hiring is most influenced by AI, followed by training and development, then performance management, and finally employee engagement. Based on these results, it is recommended that Saudi telecom companies develop a database utilizing AI to enhance the efficiency and quality of HR services and activities. Furthermore, these companies should address the challenges associated with AI implementation and ensure that the technology is applied ethically and equitably.

Keywords: *Artificial intelligence, human resource practices, Saudi telecom sector.*

1. Introduction

AI represents a paradigm shift in business management and will have a profound impact on the way employees work, especially in HR and recruitment [1]. AI technologies impact HR practices in multiple ways, from designing training and development plans to back-end processes [2]. These processes are computer-based operations that operate behind the scenes, without user intervention [3]. Typical tasks include big data or data analysis related to real-time hiring practices. AI refers to technology that uses intelligence to accomplish tasks [4]. In other words, it can be used to perform a task that requires a certain level of human skill [5]. HR is arguably one of the departments most affected by the significant corporate transformations brought about by the digital revolution today [6]. Organizational operations are being revolutionized by AI, and conventional systems and procedures are adjusting to this new integration [7]. Innovation and new advancements are made possible by AI, which increases the accuracy and efficiency of HR practices [8]. There are many opportunities to improve professionalism and knowledge across various fields and industries through AI. AI can enhance professional performance in multiple ways. Big data analysis using AI can generate insights that support more intelligent and efficient decision-making [9]. As a result, issues may be solved more creatively and successfully, and future possibilities and difficulties will be anticipated effectively. By enabling faster and more efficient data and information routing and analysis, AI can contribute to increased production and efficiency [10]. AI has the potential to improve both individual and organizational performance by streamlining procedures.

History: Received: 15 July 2025; Revised: 26 August 2025; Accepted: 29 August 2025; Published: 13 October 2025
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However, we also need to be mindful of potential difficulties and problems, such as the need to learn new skills to deal with new technologies and ethical and security concerns related to data and privacy [11].

In the meantime, there is a rare chance to improve employee experiences due to the combination of HR and AI [12]. AI-powered solutions can deliver data-driven insights that help guide HR decision-making, automate repetitive operations, and offer individualized support. A more contented, engaged, and productive staff may result from this synergy [13]. Career paths in HR are also affected by digital change. HR professionals must adjust by strengthening their skills in areas like data analytics, change management, and digital communication tools as businesses place a greater emphasis on digital efforts [4]. This transformation positions HR as a strategic partner in promoting corporate change, in addition to enhancing individual career opportunities. Furthermore, the changing environment requires HR directors to foster an environment where employees are continuously learning and adapting [14]. This entails putting in place training initiatives that give employees the digital skills they need while creating an atmosphere that encourages creativity and teamwork [15].

Given that the advantages of implementing AI in HR outweigh the noted difficulties, businesses continue to express great interest and make considerable efforts to integrate AI into HR activities despite these obstacles [16]. If businesses are willing to train their employees to work effectively with intelligent robots, they may reap the full benefits and promise of AI. There is no doubt that this process will take a lot of time, but the rewards will be tremendous [17]. For instance, HR departments prioritized agility, resilience, and recovery over performance during the lockdown and COVID-19 crisis. The crisis spurred digitization, and HR operations quickly shifted to an automated and digital platform; practically every stage of HR operations, including hiring, onboarding, and performance reviews, has been reimagined in the digital sphere [18]. AI applications improve HR practices by increasing their efficacy and efficiency, which enhances employee satisfaction and facilitates success in businesses [19].

This paper is important in several aspects. AI has become one of the most significant and controversial topics in the telecom sector today, both in Saudi Arabia and internationally. Despite its importance, this field has been sparsely studied and researched, particularly in light of the developments taking place in the telecom sector in Saudi Arabia. This research paper aims to fill this gap by examining the relationship between AI and HR practices standards from the perspective of managers in telecom companies in Saudi Arabia. A deeper understanding of the anticipated results of implementing AI in HR and the connections between those results is required. Thus, the goal of this study is to examine scholarly contributions about the application of AI technologies in HR management, as well as to determine the possible results and how those results affect one another. Even though we are theoretically familiar with ideas like AI, automation, and robotics, there is still a lack of research on how AI might be used in HR practices. HR as a profession is facing a number of changes; scholars and HR professionals alike must pay attention and rethink HR practices. In this regard, HR exhibits inadequate fine-tuning as a subject of practice and study. Although Saudi telecom companies are aware that AI can reduce the time and effort required of HR managers by freeing up resources and time that could be strategically used to increase the organization's overall productivity, they lack a thorough understanding of these intelligent technologies and the effects of using them in HR at the organizational and individual employee levels. Adopting the AI workspace can result in increased productivity overall, better work-life integration, and happier employees.

Based on that, this research raises the following main question: What is the role of AI in transforming HR practices in Saudi telecom companies?

After the Introduction (Section 1), the study will examine the literature review on AI in HR and their results (Section 2) in order to answer the research questions. The paper also presents a conceptual framework diagram that shows the relationship between the possible results of implementing AI in HR, which is based on the thorough literature review (Section 3). Furthermore, depending on prior research, theory, or both, the study attempts to evaluate hypotheses regarding the link among the possible outcome variables in the methodology section (Section 4). In the findings (Section 5) and the discussion (Section 5), we will try to clarify the anticipated results of integrating AI technology in HR and provide insight

Edelweiss Applied Science and Technology
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Vol. 9, No. 10: 746-759, 2025
DOI: 10.55214/2576-8484.v9i10.10530

into the connections between the results. This paper concludes and offers suggestions for additional investigation (Section 6).

2. Literature Review

2.1. Artificial Intelligence

A group of researchers at Dartmouth College in 1956 solved algebraic problems and proved logical theorems, which are composed of questions posed by a referee and directed simultaneously to a computer and another person [5]. This marked the beginning of true AI. It should be mentioned that the science of AI is a combination of two fields: robotics science, or informatics science as it has been dubbed recently, and behavioral and brain sciences [3]. When the industrial sector began to experience financial difficulties, it became important to use current technology to solve these issues. As a result, AI was used, and a simplified robot was created [20]. Researchers were able to create computers that could make some judgments based on answers to pre-programmed issues in the middle of the 20th century, and developers took advantage of this innovation in real-world applications [21]. There are various perspectives on how to define AI, including those that rely on fundamental factors for categorizing and characterizing intelligence, such as reasoning, actions, decisions, and others, which are connected according to the knowledge vision [22].

2.2. Artificial Intelligence in Human Resource Practices

HR is changing dramatically as a result of digital transformation, especially in terms of career paths and the development of managerial abilities [12]. This change includes the incorporation of cutting-edge technologies and data-driven tactics that improve the skills of HR professionals while also streamlining HR procedures [23]. HR managers gain critical skills from digital transformation that is becoming increasingly important in a technologically advanced workplace [2]. To make wise choices about organizational strategy and people management, HR professionals need to develop their ability to analyze data analytics. In order to generate corporate outcomes, this entails comprehending workforce data, employee engagement statistics, and performance indicators. Also, Khandelwal et al. [24] illustrates that HR directors are entrusted with leading their staff through the digital transformations that enterprises are undergoing. To guarantee seamless adoption and reduce employee resistance, this calls for change management expertise. Niehueser and Boak [25] supported this idea as stated that it is essential to be able to quickly adjust to changing procedures and technologies. In order to encourage their staff to adopt new techniques that increase productivity, HR managers must cultivate a culture of ongoing learning and innovation [26].

On the other hand, Werner [27] clarified that there is a growing need for HR specialists with knowledge of analytics, technology, and strategic planning. Therefore, learning about AI, people analytics, and digital project management can help HR professionals become more employable [28]. Since organizations are investing in digital training that equips HR managers for strategic positions, AI creates a number of opportunities for career progression in HR. Due to the frequent integration of advanced AI technology into these programs, leaders can effectively guide their teams as they navigate digital environments [8]. Using AI, HR professionals can communicate and collaborate more effectively, enabling them to share their insights and best practices with others around the world. This communication contributes to professional development and job opportunities [23].

The integration of AI into HR practices has profound implications. AI tools streamline recruitment processes by automating candidate assessments and enhancing the onboarding experience [11]. This not only improves efficiency but also helps attract top talent who expect a seamless digital experience. A focus on AI enhances overall employee satisfaction by providing flexible work arrangements, personalized training opportunities, and efficient communication channels [29]. This leads to higher engagement levels and retention rates [30]. By leveraging AI technology, HR can foster a more agile workforce capable of responding swiftly to market changes. This adaptability is crucial for maintaining a competitive advantage in today's fast-paced business environment [24].

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New performance management processes have replaced traditional methods. Employees seek opportunities for professional development, effective management, and immediate feedback [31]. They also desire formal, future-oriented performance reviews, regular feedback, and clear goals. AI can help companies develop a personalized performance management plan that effectively contributes to improving employee performance. AI makes it easier to track individual performance, as well as the performance of the entire organization and each department. AI monitors performance indicators and notifies managers if employees are not on track to achieve target metrics when updating their progress toward goals [12]. It can then respond immediately by investigating the root causes of performance issues and providing assistance to enable each employee to achieve their goals [6]. Any subset of team members' historical performance data can be analyzed using effective AI performance management tools, which can identify goals and objectives [1]. These tools can also help organizations set SMART goals that assist in achieving their objectives while considering business conditions [27]. With AI, managing performance reviews becomes much easier [27]. Thus, organizations can balance formal and informal reviews by using AI to help establish a consistent frequency or cycle for the review process. It can automatically distribute reviews throughout the formal review cycle and even remind managers and employees to conduct reviews on time [29].

In order to improve employee engagement, companies can utilize AI to extract insights from employee data and predictive analytics to support workforce planning, performance reviews, hiring, and employee experiences [29]. By using AI algorithms on a vast amount of employee data, the company will be able to gain a deeper understanding of workplace factors that are affecting employees both favorably and unfavorably. Thus, managers and leaders can quickly receive insights that would otherwise require many hours of labor to extract, decode, and analyze [2]. This reduces the administrative load, expedites the process, and provides managers and leaders with more time to implement insights [28]. Experience gaps can be quickly identified, precisely targeted with effective actions, and addressed using AI-powered solutions in employee data. Many employees are wary of AI. Employees will notice the positive changes and improvements AI brings to their workplace and relationships, provided it is implemented correctly within a company [32]. That is by maintaining transparency, clarifying all aspects, and sharing the steps employees take as a result [25].

3. Proposed Conceptual Framework and Hypotheses

As shown in Figure 1, the proposed Conceptual model consists of AI as an independent variable and HR practices as dependent variables (training and development, performance management, employee engagement, and selective hiring).

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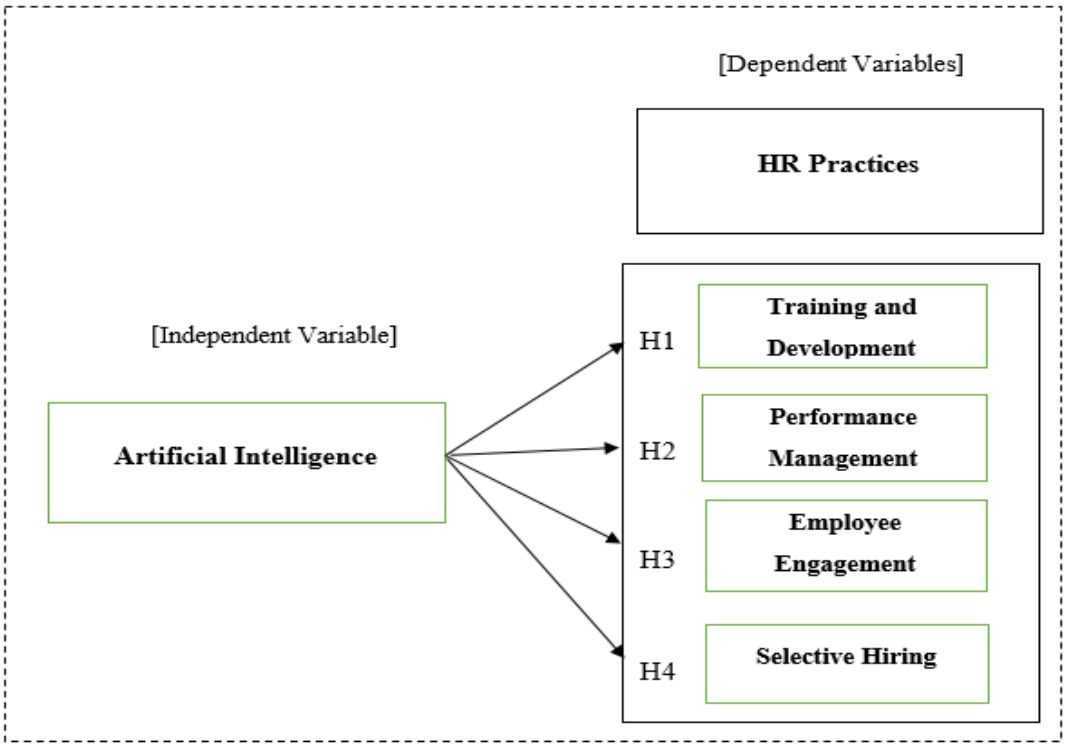

Figure 1.
The Proposed Conceptual Framework.

Based on the proposed conceptual framework, the following hypotheses can be derived:

H_1: There is a significant effect of AI on training and development in the Saudi telecom companies.
H_2: There is a significant effect of AI on performance management in Saudi telecom companies.
H_3: There is a significant effect of AI on employee engagement in Saudi telecom companies.
H_4: There is a significant effect of AI on selective hiring in Saudi telecom companies.

4. Research Methodology

The descriptive analytical method was used in this study. 130 managers from Saudi telecom companies made up the study sample, to whom a questionnaire was created and sent. After evaluating theoretical and field research, and studies conducted locally and globally, this questionnaire was developed. In addition to consolidating the foundations and starting points upon which the practical framework in this study is based, this was done to identify the most significant prior research that serves as a fundamental tributary to the study. The research sample's demographic data is displayed in Table 1.

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Table 1.
Demographic information of the research sample.

Variable	N (%)
Gender	
Male	88 (67.69%)
Female	42 (32.31%)
Age	
18-29	**5 (3.85%)**
30-39	23 (17.69%)
40-49	57 (43.85%)
50	45 (34.62%)
Education Level	
Bachelor	98 (75.38%)
Master	28 (21.54%)
PhD	4 (3.08%)
Years of Experience	
5-Jan	6 (4.62%)
10-Jun	12 (9.32%)
15-Nov	34 (26.15%)
Above 15	78 (60.00%)

4.1. Assessment of Construct Reliability

The Pearson correlation coefficient, which measures how closely each study construct is related to the total score of the questionnaire items and evaluates how well the tool's objectives have been realized, was used to analyze the validity of the questionnaire. Since Table 2 shows that the correlation coefficients between the dependent and independent factors included in this study are statistically significant at a level of $\alpha < 0.05$, all questionnaire variables are considered valid for the objectives for which they were designed.

Table 2.
Pearson correlation coefficient for the research variables.

	AI	Training and Development	Performance Management	Employee Engagement	Selective Hiring
AI	**1**				
Training and Development	0.432	**1**			
Performance Management	0.523	0.512	**1**		
Employee Engagement	0.564	0.601	0.511	**1**	
Selective Hiring	0.647	0.604	0.599	0.622	**1**

Furthermore, the fact that the questionnaire consistently produces the same results after repeated use is evidence of its reliability. It also demonstrates the degree to which the scale yields readings that are consistent, harmonious, and continuous when implemented repeatedly at different times. The researcher used the Cronbach's Alpha coefficient to evaluate the questionnaire's reliability. Table 3 shows the values of the Cronbach's Alpha coefficient for the research variables. The reliability coefficient of the research variables is high, as indicated by the Cronbach's Alpha coefficient values. This indicates that the variables are suitable for statistical analysis and, consequently, can be used to test the research hypotheses.

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Table 3.
Cronbach's Alpha for the Questionnaire.

Scale	Item number	Cronbach's Alpha (%)
AI	10	0.812
Training and Development	5	0.793
Performance Management	5	0.753
Employee Engagement	5	0.843
Selective Hiring	5	0.826
Entire Questionnaire	30	0.843

4.2. Descriptive Statistics

4.2.1. Descriptive Statistics for Artificial Intelligence Construct

The table 4 shows the arithmetic means and standard deviations of AI items, which reflect the extent of the study sample's agreement with these items.

Table 4.
Artificial Intelligence Construct.

Statement	Mean	SD
Current uses of AI in the Saudi telecom companies include:		
1. Data analysis.	3.78	1.180
2. Decision support.	3.81	1.111
3. Cost reduction.	3.98	1.080
4. Enhanced quality & safety.	3.64	1.113
5. Customer experience.	3.91	1.205
6. Recruitment process.	3.77	1.183
7. Employee satisfaction.	3.85	1.101
8. Onboarding new team members.	3.80	1.187
9. Employee engagement initiatives.	3.92	1.157
10. Talent development and training.	4.02	1.258
Total Mean and Standard Deviation	3.85	1.115

The table 4 shows that the total mean of the AI construct was high, as the total mean was 3.85, with a standard deviation of 1.115. The tenth statement had the highest arithmetic mean of 4.02, which reflects the significant role of AI in talent development and training. This indicates that AI has the potential to be a helpful tool in HR departments' efforts to find and nurture talent for Saudi telecom companies. Since talent acquisition is a result of organizational goals, it may be a good starting point when mapping the effects of AI. The required responsibilities and the characteristics of qualified candidates are thus limited by Saudi telecom companies' priorities.

4.2.2. Descriptive Statistics for HR Practices Construct

The arithmetic means and standard deviations of HR practices across its four criteria training and development, performance management, employee engagement, and selective hiring are displayed in Table 5. These indicate the level of agreement within the study sample regarding the questionnaire items.

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Table 5.
HR Practices.

Statement	Mean	SD
Training and Development		
1. AI gives businesses the ability to create highly customized learning programs that adapt to the particular roles, abilities, and career objectives of each individual.	4.07	.955
2. AI contributes to the development of training materials and strategies by automating task allocation, tracking procedures, and managing assessments.	3.77	1.105
3. AI provides real-time feedback and tailors learning experiences for employees with specific skill gaps.	3.92	1.074
4. AI uses individual data analysis to create personalized training materials that keep employees engaged and committed to their professional growth.	3.99	1.094
5. AI helps employees train to enhance their core human qualities, such as emotional intelligence, resilience, and critical thinking.	4.00	1.045
Total Mean and Standard Deviation	3.95	1.025
Performance Management		
1. AI can help companies develop a personalized performance management plan that effectively contributes to improving employee performance.	3.52	0.805
2. AI makes it easier to track individual performance, as well as the performance of the entire organization and each department.	3.88	1.353
3. AI monitors performance indicators and notifies management if employees are not on track to achieve target metrics when they update their progress toward goals.	3.92	1.045
4. They can also help organizations set SMART goals that assist in achieving their objectives while considering business conditions.	3.81	1.014
5. AI helps organizations establish a consistent frequency or cycle for the review process.	3.74	1.126
Total Mean and Standard Deviation	3.77	1.017
Employee Engagement		
1. AI enhances overall employee satisfaction by providing flexible work arrangements, personalized training opportunities, and efficient communication channels.	3.60	1.147
2. AI contributes to better employee confidence in the workplace and in their relationships.	3.65	1.221
3. AI-driven recognition technologies guarantee prompt recognition of employees' contributions.	3.81	1.032
4. AI allows companies to set up automated notifications or awards for employees to commemorate their achievements.	3.70	1.037
5. AI provides a thorough picture of employees' well-being using information from surveys, feedback, and other sources.	3.72	1.112
Total Mean and Standard Deviation	3.70	1.136
Selective Hiring		
1. AI saves recruiters time by automating complex tasks.	4.05	1.152
2. AI improves hiring quality by matching job requirements to experience.	4.02	1.005
3. AI enhances the candidate and employee experience by providing interactive, personalized, and innovative solutions.	3.98	0.994
4. AI simplifies the hiring process by scanning resumes and extracting information from them quickly.	3.88	0.976
5. AI facilitates the process of attracting talent.	4.00	0.967
Total Mean and Standard Deviation	3.99	0.993

The Table 5 shows that all HR practices have achieved high means from the point of view of managers in Saudi telecom companies. The results also showed that selective hiring is the practice most affected by AI, followed by training and development, then performance management, and finally employee engagement. This is in line with the findings of Li and Yeo [26]; Yorks and Jester [2]; Malik et al. [28], and Niehueser and Boak [25], which illustrated that AI can enhance the candidate and employee experience by providing interactive, personalized, and innovative solutions, such as chatbots, virtual interviews, and job coaching. These solutions can help increase engagement, satisfaction, and loyalty for both candidates and employees, provide useful and immediate information and feedback, and improve performance and professional development. Quality of hiring has emerged as a crucial recruitment KPI as

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HR data has become easier to gather, access, and evaluate over time. AI's capacity to use data to match candidates' experience and talents with job criteria is what makes it a valuable tool for boosting hiring quality.

4.3. Hypotheses Testing

4.3.1. Testing the First Main Hypothesis (H1)

H_1: There is a significant effect of AI on training and development in the Saudi telecom companies.

Table 6.
Regression analysis findings concerning AI's impact on training and development in the Saudi telecom companies.

Model		Sum of Square	df	Mean Square	F	Sig.
1	Regression	51.515	1	12.129	20.256	0.000
	Residual	14.367	129	.117		
	Total	65.882	130			

Table 7.
Model Summary to Test the First Hypothesis (H1).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.183	.225	.217	0.123

The Table 6 shows that the p-value at ($\alpha = 0.05$) is 0.000, which indicates a significant effect of AI on training and development in Saudi telecom companies. Additionally, the F-test statistic value (20.256) exceeds the critical F-value of 3.94, supporting the acceptance of the first main hypothesis (H1). Table 7 reveals that the R-squared value is 0.225, meaning AI explains 22.5% of the variance in training and development, while 77.5% is attributable to other HR practices.

4.3.2. Testing the Second Main Hypothesis (H2)

H_2: There is a significant effect of AI on performance management in Saudi telecom companies.

Table 8.
Regression analysis findings concerning AI's impact on performance management in the Saudi telecom companies.

Model		Sum of Square	df	Mean Square	F	Sig.
2	Regression	49.256	1	10.623	18.279	0.000
	Residual	13.456	129	0.126		
	Total	62.702	130			

Table 9.
Model Summary to Test the Second Hypothesis (H2).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.145	0.199	.192	0.189

The Table 8 shows that the p-value at ($\alpha = 0.05$) is 0.000, which indicates a significant effect of AI on performance management in Saudi telecom companies. Additionally, the F-test statistic value (18.279) exceeds the critical F-value from the F-table, which is 3.94, leading to the acceptance of the second main hypothesis (H2). Table 9 reveals that the R-squared value is 0.199, meaning AI explains 19.9% of the variance in performance management within these companies, while 80.1% is attributable to other HR practices.

4.3.3. Testing the Third Main Hypothesis (H3)

H_3: There is a significant effect of AI on employee engagement in Saudi telecom companies.

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Table 10.
Regression analysis findings concerning AI's impact on employee engagement in the Saudi telecom companies.

Model		Sum of Square	df	Mean Square	F	Sig.
3	Regression	47.110	1	9.2589	17.256	0.000
	Residual	11.260	129	.104		
	Total	58.370	130			

Table 11.
Model Summary to Test the Third Hypothesis (H3).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	0.113	0.154	0.148	0.201

The Table 10 shows that the p-value at ($\alpha = 0.05$) is 0.000, which indicates a significant effect of AI on employee engagement in Saudi telecom companies. Additionally, the F-test statistic value (17.256) exceeds the critical F-value of 3.94, supporting the acceptance of the third main hypothesis (H3). Table 11 reveals that the R-squared value is 0.154, meaning AI explains 15.4% of the variance in employee engagement, while 84.6% is attributable to other HR practices.

4.3.4. Testing the Fourth Main Hypothesis (H4)

H_4. There is a significant effect of AI on selective hiring in the Saudi telecom companies.

Table 12.
Regression analysis findings concerning AI's impact on selective hiring in the Saudi telecom companies.

Model		Sum of Square	df	Mean Square	F	Sig.
4	Regression	50.957	1	11.784	21.007	0.000
	Residual	13.596	129	0.116		
	Total	64.553	130			

Table 13.
Model Summary to Test the Fourth Hypothesis (H4).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
4	0.426	0.483	0.477	0.155

The Table 12 shows that the p-value at ($\alpha = 0.05$) is 0.000, which indicates a significant effect of AI on selective hiring in Saudi telecom companies. Additionally, the F-test statistic value (21.007) exceeds the critical F-value of 3.94, leading to the acceptance of the fourth main hypothesis (H4). Table 13 reveals that the R-squared value is 0.483, meaning AI explains 48.3% of the variance in selective hiring within Saudi telecom companies, while 51.7% is attributable to other HR practices.

5. Discussion

The results showed that AI played a significant role in transforming HR practices in Saudi telecom companies. This result is consistent with Khandelwal et al. [24]; Wang and Pashmforoosh [8]; Presbitero and Teng-Calleja [31]. Through advanced analytics, AI tools help Saudi telecom companies better understand how effective their training programs are. HR relies on it to design programs that develop employees' skills and abilities and help them improve their work efficiency. In this regard, the use of AI helps achieve each employee's goals in developing their skills and abilities. It also helps the HR department identify the needs of each trainee by providing them with the necessary reports after reviewing their resumes. The ability to reduce both costs and time is one of the biggest advantages of incorporating AI into training. It can be used to track procedures, provide assessments, and automate the distribution of content, freeing up trainers to concentrate on creating training materials and tactics. Using AI techniques, Saudi telecom companies may build training materials that are both highly engaging and

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relevant by analyzing current trends and practices. Training in essential human qualities like emotional intelligence, flexibility, and critical thinking is becoming more necessary as AI takes over repetitive tasks. By identifying shortages in these areas and creating focused programs to fill them, AI helps L&D prepare staff members to handle the challenges of swift technological change. Collaboration, creativity, and resilience are fostered via training in these areas and are critical for a workforce that must continuously adjust to new challenges and technologies in Saudi telecom companies.

One way AI enhances performance management in Saudi telecom companies is that it can assist in the idea generation process, providing insights from data. Another benefit is that using AI systems, novel solutions can also be found as the system looks at information in a given problem from a different angle and is able to recognize non-intuitive patterns. However, caution must be taken that it may also reduce the freedom required to generate innovations on its own. The use of AI significantly enhances task performance through real-time data analysis, pattern recognition, and optimal solutions, and thus significantly improves decision-making ability. While there are other positive effects that suggest improved task performance through increased information processing, there are also several studies that indicate no or even negative effects on task performance. For example, the availability and accessibility of multiple options can limit a system's ability to operate efficiently. AI systems with relatively flexible characteristics and the availability of multiple functions may provide greater benefits when managerial effort is high. Real-time tracking of milestones and accomplishments by these technologies sets up automated notifications or awards for managers to commemorate accomplishments. For example, the system can suggest incentive alternatives or send personalized acknowledgment letters when an employee meets a goal or routinely goes above and beyond. Positive behavior is reinforced and motivation is increased when it is acknowledged right away.

AI can both enable and disrupt new communication among employees. On one hand, AI can improve collaboration because it provides environments with tools for learning and communication. However, it also has the downside of reducing face-to-face communication, which diminishes overall social and emotional skills within teams. Further empirical studies are needed regarding the impact of implementing knowledge-sharing technology on employee communication. AI solutions help free up HR staff time, allowing them to focus on employee development and performance management. In the future, AI is expected to take over recruitment processes, automatically selecting the most suitable and qualified candidates for the job without intervention from the HR department. AI is also anticipated to play a key role in data analysis, as well as contributing to employee performance management and individual assessment. The increased reliance on AI aligns with the general trend toward adopting technology and technological systems in the HR field. By automating tasks associated with candidate search and hiring, talent can be acquired faster, enabling recruiters to focus their energy on building relationships. Use predictive analytics to optimize job postings and ensure they align with regulatory standards and retention goals. The starting point for mapping the impact of AI could be the area of talent acquisition, which is a function of organizational objectives. This means that the organization's priorities narrow down the desired roles and the profile of suitable applicants. Developing a long-term human capital strategy also requires adopting a talent management program for current employees. Talent management involves implementing coordinated methods or processes aimed at promoting the continuous professional development of individuals, retaining existing talent, and adapting to the organization's current and future needs.

The management implications derived from the results of this study provide useful advice for businesses looking to implement AI in HR to save costs and time. Organizations should invest in AI systems that provide dependable data analysis and decision-making capabilities in order to prioritize accuracy and precision and optimize the benefits of AI technology in HR. Managers should deliberately identify and automate repetitive work within HR operations to take advantage of this time-saving and cost-reduction opportunity. Organizations may optimize their workforce and deploy resources more efficiently, which will increase operational efficiency and minimize expenses, by redirecting HR professionals' time from administrative duties to more strategic initiatives. Leveraging AI in HR is not

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 746-759, 2025
DOI: 10.55214/2576-8484.v9i10.10530

merely about adopting new technologies; it is about fundamentally reshaping how managerial skills are developed and how careers are advanced within the field.

This study has a number of limitations. First, there are not many research and specialized references that discuss HR practices in Saudi telecom companies. The second is the nature of the subject matter, which is distinguished by obscure elements that go beyond field practice and legal documents. Third, it is possible that some HR managers were hesitant to divulge confidential company information. Fourth, access would have been challenging due to the remote locations of some Saudi telecom businesses. This geographic factor unintentionally prolonged the data collection procedure and raised related expenses.

6. Conclusions and Recommendations

This paper concludes that HR is evolving as a result of AI, which assists HR teams in making data-driven decisions, streamlining procedures, and enhancing the overall work experience. In the current competitive landscape, using AI in HR is no longer optional. The automation, machine learning, and predictive analytics capabilities of AI technology have the potential to enable HR professionals to dedicate more time to high-impact projects and less time to routine tasks. As HR departments increasingly leverage AI technology to improve HR processes, including performance management, employee engagement, onboarding, and talent acquisition, the nature of work is changing. Although AI may appear neutral and objective, it can reflect biases or discrimination present in the data it is trained on. If the data is biased against a particular group based on age, gender, race, religion, disability, or other factors, it could lead to unfair decisions. This may result in talent loss, reduced diversity, legal risks for the company, or damage to credibility. Based on these conclusions, this paper recommends the following:

1. AI has revolutionized the employment landscape. However, Saudi telecom companies must consider the challenges it poses and ensure that the technology is applied ethically and fairly.
2. There is a difference between using AI tools for quotation and using them to facilitate tasks, so Saudi telecom companies must begin by informing employees of the tools they are allowed to use and in what context.
3. Saudi telecom companies must build a database that uses AI to enhance the efficiency and quality of services and work performed by HR practices, on one hand, and foster a collaborative environment between machines and people, allowing employees to feel more secure in their jobs, on the other hand.

AI is essentially revolutionizing management performance at the highest executive levels by improving decision-making and efficiency, as well as facilitating innovation. However, for this to be successful, AI implementation must take into account its strengths and weaknesses. Therefore, only competent, trustworthy, ethical, and empathetic systems can enable leadership to fully realize AI's potential. Further research on this topic and integration with direct teams across multiple domains are needed to create positive environments for organizational and personal AI. Ultimately, this will lead to a future where computers and individual expertise harmonize to achieve organizational goals. Furthermore, this study was strictly conducted in Saudi telecom companies only. Future research should cover other sectors in Saudi Arabia, including banking, logistics, healthcare, energy, etc. Future research could use qualitative data collection techniques such as interviewing HR managers. Additionally, the difficulties of integrating AI into HR management procedures should be a focus of future studies. An examination of the driving forces for the application of AI in different fields and businesses could also yield valuable insights.

Funding:

The author extends appreciation to the Deanship of Postgraduate Studies and Scientific Research at Majmaah University for funding this research work through the project number (R2025-1999).

Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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Vol. 9, No. 10: 746-759, 2025
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Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 746-759, 2025
DOI: 10.55214/2576-8484.v9i10.10530