



Impact of Artificial Intelligence on Human Resource Decision-Making: The Mediating Roles of Ethical AI Practices and Human Oversight in Nepalese Organizations

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Abstract

The increasing use of artificial intelligence (AI) is currently transforming HRM by challenging the very nature of HR decision making. The study explores the effect of artificial intelligence on human resource decision making in Nepalese organizations with a specific focus on ethical AI and human oversight. The quantitative research method was used to gather data from 260 respondents (HR professionals, line managers, and employees) who represent different sectors in Nepal through the developed structured questionnaires. Descriptive, reliability, Pearson's product-moment correlation, multiple regression analyses, and bootstrapped mediation were performed to analyze the data. The results of the study revealed that adopting AI in human resource management, using AI-based analytics and automating HR processes will improve decision-making quality. Additionally, the indirect influence of general AI adoption, AI analytics, and decision-making effectiveness was partially mediated by ethical AI practices and moderated by human oversight of automated HR processes. On the contrary, there was no significant interaction between general AI adoption and human oversight on decision-making effectiveness. Overall, the study demonstrates that AI can be optimized in HR decision-making processes through ethical governance AI practices and human review. This includes the mediating role of ethical AI practices and the moderating role of human monitoring of AI-driven automated HR processes. This study contributes to the AI–HRM literature by providing empirical evidence from a developing economy context and some practical implications for responsible and human-enhanced AI decision making in organizations.

Keywords: Artificial intelligence, Human resource management, HR decision-making effectiveness, Ethical AI practices; Human oversight, Nepal

1. Introduction

Artificial intelligence (AI) is changing human resource management systems by challenging the very nature of HR decision-making. With the advent of machine learning, predictive analytics, and automation, organizations are witnessing a shift from subjective to data-driven decision-making processes. As a result, AI has become a strategic tool for enhancing decision-making effectiveness in human resource management (Budhwar et al., 2022; Dolan et al., 2022; Strohmeier, 2020).

Despite the potential benefits of implementing AI in human resource decision-making processes, there are significant ethical concerns regarding the use of such technologies in organizational settings. In fact, several studies have shown that without appropriate ethical governance, AI can reinforce discrimination and worsen inequality in the workplace (Jobin et al., 2019; Rigotti & Fosch Villaronga, 2024). Recent studies therefore stress the importance of evaluating AI's effectiveness in human resource management based on its capacity to perform tasks ethically and to meet strategic human resource management goals while being monitored by humans throughout its usage (Saqab et al., 2025; Fenwick et al., 2024).

Victor Shim and their collaboration with home-country colleagues. The study examines how artificial intelligence affects Nepalese organizations' human resource management practices. It investigates whether and how the application of AI in human resource management affects decision-making effectiveness, as well as the mediating and moderating mechanisms of ethical AI practice and human overseer-ship. The significance of this study lies in its ability to highlight practical implications for effective and ethical AI adoption in human resource management, as well as to contribute to the overall understanding of how such technologies can be optimized in various economic contexts.

Several works have focused on the influence of AI on human resource management in developed countries, while emerging economies have received much attention (Patterson, Byrka, & Doherty, 2010). Additionally, prior research has concentrated on the direct effects of AI on human resource management, with few studies investigating the processes by which AI affects human resource decision-making effectiveness. Moreover, few studies have explored the potential mediating and moderating roles of ethical AI practices and human oversight in the relationship between the adoption of AI-based HR analytics and decision-making effectiveness (Aguinis et al., 2024; Budhwar et al., 2022). Nepal is an emerging economy in which businesses are adopting AI-based human resource management systems. In the context of Nepal, where legal, financial, and human resources are limited, ethical AI practices and human oversight are critical

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success factors in AI-based human resource decision-making. In other words, AI-based HR systems are used as decision-support systems rather than as independent decision-makers. In this sense, studying how artificial intelligence affects human resource management practices in the context of Nepal may offer valuable insights into the ethical and human-centered aspects of such technologies' use in organizations.

In the context of Nepal, this study looks at the role of AI in human resource management, how it affects decision-making effectiveness, and how ethical practices and human oversight mediate and moderate this relationship, respectively. Based on the survey results, this article discusses the practical implications of the study's findings for the improvement of ethical and effective AI-based decision-making in human resource management. It further provides a managerial overview of the research findings, with an emphasis on the critical success factors that organizations should consider when adopting AI-based systems in human resource management.

2. Literature Review

2.1 Artificial Intelligence in Human Resource Management

AI is fast becoming a critical part of HR management, with companies leveraging it to automate time-consuming processes, analyze large volumes of workforce data and even support strategic HR decision-making. Previous studies suggest that AI technologies, including machine learning algorithms, predictive analytics and Robotic Process Automation (RPA), improve the effectiveness and consistency of HR activities by limiting human intervention and error (Strohmeier, 2020; Sivathanu & Pillai, 2018). Therefore, AI implementation is frequently associated with increased accuracy in hiring, more efficient performance appraisals and better manpower planning (Black & Van Esch, 2021; Palos-Sánchez et al., 2022).

However, researchers argue that not all practices are equally represented as organizations differ and their technology is at different stages of maturity. In developing markets, AI is most commonly deployed incrementally and used as decision supporting tool rather than completely autonomous system. This methodology is still highly dependent on human judgment (Deepa et al., 2024; Sharma et al., 2022). This heterogeneity underscores the need to explore AI-based HR decision-making outside of technologically sophisticated contexts.

2.2 AI Adoption and HR Decision-Making Effectiveness

Other important aspects of HR decision-making effectiveness include whether HR decisions are accurate, fair, timely, in line with the organization's overall strategy and

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also the extent to which members of the workplace trust them. Previous studies have consistently reported that AI enables decision effectiveness through the use of evidence-based judgment, thereby mitigating judgment errors (Lo et al., 2015; Basu et al., 2023). AI-backed HR systems do provide faster access to relevant information and enable HR professionals to make more consistent, defensible decisions (Arslan et al., 2022). Additional empirical proof shows that AI influenced organizations enhance decision quality and strategic consistency, particularly when AI is embedded in core HR processes as opposed to being retained as separate activities (Budhwar et al., 2022; Dolan et al., 2022). In light of this assertion, one can deduce that the adoption of AI is bound to enhance the quality and efficiency of HR decision-making.

2.3 AI-Driven HR Analytics and Decision Quality

One approach to this has phenomenal potential is AI-powered HR analytics and it is one of the most significant use cases of artificial intelligence in human resource management (HRM). Using predictive and prescriptive analytics, in conjunction with big data has enabled organizations to more accurately predict emerging trends in the workforce, identify high-potential employees and assess risks of performance deterioration (Raman et al., 2024; Li et al., 2023). It has also been found that analytics-driven decision-making tends to outperform intuition-only ones in consistency, objectivity and strategic value (Murugesan et al., 2023).

Many researches emphasize that HR analytics is the key to driving strategic HRM. This transition allows HR to move beyond an administrative support function to enhancing their status as strategic partners in the organization (Cayrat & Boxall, 2023; Budhwar et al., 2022). This means that when combined with AI HR analytics, there is expected to be a strong positive effect of this tool on the effectiveness of HR decision-making.

2.4 HR Process Automation and Human Oversight

HR process automation uses system processes that are powered by AI to take on repetitive and transactional HR activity such as payroll, attendance tracking, or in some cases even first-pass candidate response screening. Existing studies have shown that such automation not only facilitates cost efficiency but also enhances decision-making consistency, enabling HR managers to focus on more strategic work (Mohamed et al., 2022; Sivathanu & Pillai, 2018).

However, researchers caution that we must ensure a higher level of human control to avoid errors, bias and overreliance on algorithms as technology advances (Fenwick et al., 2024; Charlwood & Guenole, 2022). Empirical studies have pointed out the need for

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human-in-the-loop mechanisms, i.e., authority to review and override automated decisions in order to avoid contestedness in automated HR processes (Lamper, 2026; Rydén & El Sawy, 2022). Thus, this could be the first step for improved performances of HR decisions by introducing better human control in automation.

2.5 Ethical AI Practices in HR Decision-Making

Ethical AI includes fairness, transparency, accountability and privacy in design and use of AI systems. Existing literature has alerted the academic community that HR decisions (made in AI) can advance notions like discrimination, bias be amplified if ethical protections are not integrated at an algorithmic level (Jobin et al., 2019; Rigotti & Fosch Villaronga, 2024). This has been followed by an increasing emphasis on ethical AI governance in AI–HRM research.

Empirical and conceptual research suggests that organizations that adopt strong ethical AI practices are more likely to cultivate trust in, and acceptance of, AI-based decisions among their employees (Panda et al., 2024; Bujold et al., 2024). Thus, ethical governance constructs are critical for translating AI use to ensure valid and legitimate HR decision-making outcomes (Saqab et al., 2025).

2.6 Human Oversight as a Mediating Mechanism

Human supervision refers to continuous presence of human judgement for reviewing, approving and overriding AI generated HR suggestions. Earlier studies highlight the effectiveness of AI systems when they supplement human-made decisions, rather than replace them (Fenwick et al., 2024; Lamper, 2026). Having a human in the loop reduces problems of automation bias and increases contextual sensitivity to HR decision-making (Charlwood & Guenole, 2022).

Recent work suggests that human intervention improves the fairness and effectiveness in AI-augmented HR decisions-- particularly when end users are operating in settings where the maturity of AI may be low, and safeguards primitive (Taslim et al., 2025). This indicates that human supervision is significant factor determining the efficacy with which AI-based HR systems can contribute to decision-making.

2.7 Research Gap and Hypotheses Development

There is a wealth of evidence in the available literature regarding both advantages and limitations of AI on HRM; however it also remains fairly fragmented. In the first place, there are relatively few empirical studies that investigate AI-driven HR decision making especially in developing countries. Second, the research to date is oriented towards a

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primary focus on how AI technology can impact directly without paying enough attention to those mediating ethical and human centered mechanisms which are vital for evaluating its impact. Third, there is a lack of research that tries to combine AI adoption, analytics and automation, ethical use of AI, and human control within an integrated empirical framework.

To fill this research gap, the current study formulates and tests an integrated model to study both the direct and the indirect impact of AI on HR decision-making effectiveness in a Nepalese context. Based on prior literature, the study develops hypotheses that connect AI implementation, AI-based HR analytics and automation of HR processes to effectiveness of HR decision-making by means of ethical use of AI and human oversight.

Conceptual Framework

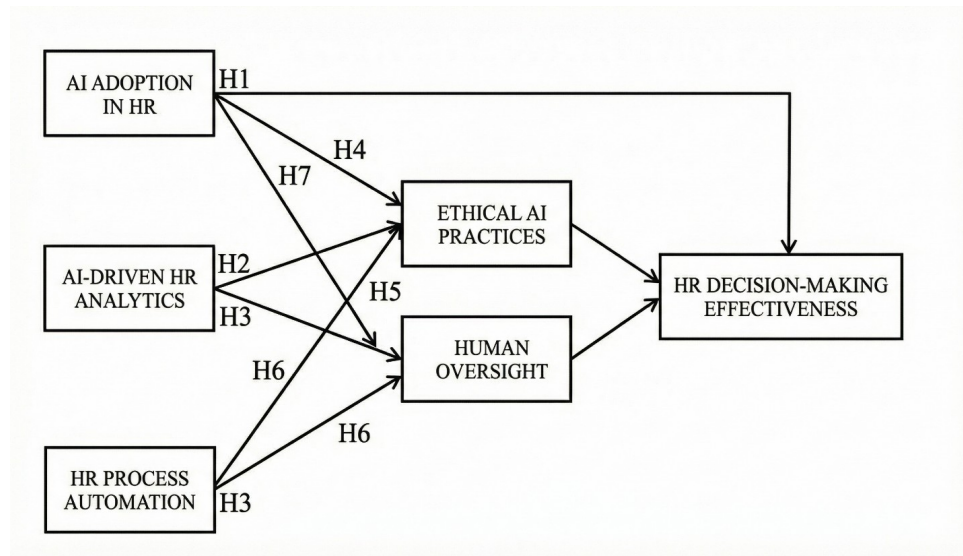
This study provides a model that explains how the use of Artificial Intelligence (AI) influences the effectiveness of human resource (HR) decision-making in organizations. Grounded in AI-supported HRM and human-centred decision-making theory, the framework conceptualises AI use in HR, AI-based HR analytics, and automation as the dominant technological drivers of HR thinking. These AI dimensions signal increased presence of intelligent systems within HR functions such as recruitment, performance appraisal, training and workforce planning.

However, the framework recognizes that AI is not conducted in a vacuum. We conclude that the impact of AI on the soundness of HR decision-making is not entirely a matter of technicality; rather, it depends on a country's governance and human contribution. As a result, the model includes ethical AI as mediating factors fairness, transparency, accountability, and data privacy as well as human supervision (human-in-the-loop). These steps of ethical AI help to ensure algorithmic decisions align with organizational values and legal requirements, while human oversight still maintains contextual judgment, empathy and accountability in complex or potentially ambiguous HR decisions.

The dependent variable HR decision making effectiveness evaluates the quality of HR decisions as measured by criteria such as accuracy, fairness, timeliness, strategic value and trust. By integrating technological capabilities and ethical governance and human judgement, this framework provides a balanced view that AI augmentation complements, instead of replaces HR decision making. This model is particularly relevant in the context of Nepalese organizations, considering that AI has made progress infiltrating various industries and questions pertaining to trust, ethics, and human

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oversight have gained salience.



Source: Budhwar et al. (2022), Strohmeier (2020), Panda et al. (2024), Fenwick et al. (2024), and Lamper (2026)

Hypotheses Development

Direct Effects

H1: The integration of AI in HRM has a positive and significant effect on the effectiveness of HR decision-making.

H2: The HR analytics supported by AI greatly enhance the effectiveness of HR decision-making.

H3: Automation of HR processes has a positive significant impact on the effectiveness of HR decision making.

The Mediating Role of Ethical AI Practices

H4: Ethical AI practices mediate the relationship between AI adoption in HR and the effectiveness of HR decisionmaking.

H5: Ethical AI practices moderate the relationship between HR analytics driven by AI and the effectiveness of HR decision-making.

Human Supervision Mediating Effects

H6: Human intervention moderates the impact of HR process automation on the effectiveness of HR decision-making.

H7: The moderation role of human intervention on the relationship between AI

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implementation in HR and effectiveness of HR decision-making.

3. Methodology

3.1 Research Design

The current research study employs the quantitative cross-sectional survey design that seeks to establish if the human resource decision-making process in Nepalese organizations is contingent on the impact of artificial intelligence. The research design was selected due to the nature of the research problem which requires testing empirical relationships among key constructs and mediating effects of a theorized framework. 2-Survey-based research designs have been widely applied in HRM and AI fields since survey research offers significant potential to capture the diverse perspectives of various organizational stakeholders (Creswell & Creswell 2023;Saunder et al., 2019).

The study's explanatory nature is argued on the basis that the research aims to discover a causal relationship between AI constructs and HR decision-making. The study's design allowed the researchers to integrate the key variables and investigate direct and indirect relationships which are consistent with recent studies on HR and AI (Budhwar et al., 2022; Dolan et al., 2022).

3.2 Population and Study Context

The study population consists of employees working in various industries in Nepal including the banking and finance sector, manufacturing organizations, education, healthcare, IT industry, and service providers. The context in which the current study is conducted is justified by the fact that Nepal is currently undergoing digital transformations and AI adoptions while sustaining high reliance on human judgment in organizational decision-making.

The current study sampled three different respondent groups in order to capture diverse perspectives of study constructs:

1. HR decision-makers who are in a position to take action on the studied phenomenon.
2. "Routine" employees who rarely interact with the HR system but provide advice to line managers on the study subject matter.
3. Employees who are the subjects of the HR decision-making process, whose attitudes are critical in building organizational trust and acceptance in the new policies.

The inclusion of various respondent groups aims to increase the study's accuracy and reduce various biases associated with using information from a single group of

population.

3.3 Sampling Technique and Sample Size

Purposive sampling technique was employed in the current study since the study focused on individuals with specific characteristics and experiences with AI enhanced HR systems. The sampling method is argued to be the best fit for the current study since it is designed to identify key population groups that possess the necessary information for the research (Etikan et al., 2016). As a result, the current study selected respondents on the following criteria:

- Employees working in organizations that have implemented automated or AI-driven HR systems.

The final sample size of 260 is adequate to perform multivariate statistical analysis including mediation analysis which is the focal point of the study. In addition, previous research recommendations indicate that a sample size larger than 200 is sufficient to perform regression analysis and organizational studies (Saunders et al., 2019). Similarly, the sample size conforms to recommendations made by various studies on AI- HRM (Basu et al., 2023; Roppelt et al., 2025).

3.4 Data Collection Instrument

A structured questionnaire was designed and employed as a data collection instrument. The research instrument was used to gather primary data on the research constructs. The questionnaire had two sections:

1. The first section collected demographic information from the respondents.
2. The second section consisted of items used to measure the study constructs.

Each item was rated on a five-point Likert scale from 1 strongly disagree to 5 strongly agree. Previous studies on HR and technology utilization justify the use of a five-point Likert scale (Budhwar et al., 2022; Panda et al., 2024). Prior to finalizing the measurement tool, content validity was established by consulting experts in the field to ensure that the instrument was relevant and easy to comprehend by the targeted audience in the Nepalese context. A pilot study was conducted among a sample of the targeted population to evaluate the relevance and clarity of the research instrument. As a result, some items were revised according to the respondents' suggestions.

3.5 Measurement of Variables

AI Adoption in HR

AI Usage of AI was operationalized according to the extent to which organizations apply

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artificial intelligence in human resource-related activities including recruitment, performance appraisal, and employee training. The current study adopted items previously used in AI and HR studies (Palos-Sánchez et al., 2022; Budhwar et al., 2022).

AI-Driven HR Analytics

AI-Based HR Analytics was operationalized based on the extent to which organizations use predictive and data-driven analytics and decision support systems in managing their human resources. Items used in the current study were adapted from prior research on AI-driven analytics and decision support systems in human resource management (Raman et al., 2024; Murugesan et al., 2023).

HR Process Automation

The degree to which organizations apply automated systems in accomplishing routine HR tasks was used to operationalize HR process mechanization. The current study followed the robotic process automation and advanced HR systems literature in developing items used in the study (Mohamed et al., 2022; Strohmeier, 2020).

Ethical AI Practices

The extent to which organizations practice ethical AI in the management of their human resources was used to operationalize ethical AI. Ethical AI was conceptualized according to principles that guide responsible AI including accountability, bias mitigation, and transparency in decision-making processes.

The items used were adapted from prior research on ethical AI practices and responsible human resource management (Jobin et al., 2019; Panda et al., 2024; Veshne & Jamnani, 2024).

Human Oversight

The extent to which human input in the form of oversight is practiced in AI-enabled decision-making was used to operationalize human oversight. The study operationalized human oversight based on the degree of human discretion in the decision-making process as well as human judgment over AI decisions. The items used were adapted from human-in-the-loop and human-centric HR literature (Fenwick et al., 2024; Lamper, 2026).

HR Decision-Making Effectiveness

The study operationalized decision-making effectiveness based on employees'

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perception of the accuracy and time of decision-making, strategic nature of decisions made, fairness of decisions, and level of employee trust in the decision-making process. The measurement items were adapted from various studies on HR decision-making effectiveness and governance (Budhwar et al., 2022; Rodgers et al.

3.6 Data Analysis Techniques

Descriptive statistics were generated using SPSS software to summarize the basic features of the data collected. In addition, reliability analysis was performed to establish the reliability of measures used in the study. Items with Cronbach's Alpha > 0.7 were considered reliable for analysis. In addition, a correlation analysis was conducted to establish relationships between study variables. The study finally applied multiple regressions and mediation analysis to establish the model's theoretical relationships. The study applied mediation analysis to establish the mediating effect of ethical practices and human oversight in the relationship between independent and dependent variables. Various approaches established in organizational research were utilized in performing the analysis. The techniques were appropriate in analyzing the mediation effect using cross-sectional data.

3.7 Ethical Considerations

The current research was performed in accordance with ethical guidelines. Firstly, the study was voluntary, and participants were reminded that they could withdraw from the study at any moment. In addition, the anonymity and confidentiality of the participants were maintained throughout the research process. Since personal information was not collected, no identifying details were utilized in the research. Finally, the study respected the ethical principles of social science research by ensuring that the data collected were used for research purposes only.

4. Results

4.1 Sample Profile

Table 1 Demographic and organizational characteristics of 260 respondents from Nepalese organizations, which are diversified in nature. The sample has a mix of HR professionals, line managers and employees to reflect the main stakeholders in HR decision-making. Most of the respondents were male (62.3%) and belonged to the economically active age brackets: 26–35 and 36–45 years. This demographic indicates a workforce group that is most likely to interact with digital and AI-supported HR practices. The sample consists of different industries in Nepal (banking, IT, service/

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manufacturing/education/health care) which suggest that the results are applicable not only to an individual industry but also other organizations sector of Nepal. Moreover, 65 percent said their organizations are already using AI-powered HR systems, and the other respondents said they have plans to do so. In general, these diverse roles and industries and life experience levels suggest that the findings can be generalized and that we can continue with our as yet unsubstantiated assumption that Einsteins should know how to perform in their organization of employment.

Table 1: *Sample characteristics (N = 260)*

Characteristic	Category	N	%
Gender	Male	162	62.3
	Female	98	37.7
Age Group	Below 25	21	8.1
	26–35	99	38.1
	36–45	77	29.6
	46–55	52	20.0
	Above 55	11	4.2
Position	HR Professional	63	24.2
	Line Manager	73	28.1
	Employee	124	47.7
Industry	Banking	44	16.9
	Manufacturing	34	13.1
	Education	37	14.2
	Healthcare	33	12.7
	IT	44	16.9
	Service	56	21.5
	Other	12	4.6
Experience	<5 yrs	76	29.2
	5–10 yrs	95	36.5
	11–15 yrs	51	19.6
	>15 yrs	38	14.6
AI Use	Yes	169	65.0
	In process	91	35.0

Source: SPSS

4.2 Reliability and Descriptive Statistics

Reliability coefficients and descriptive statistics for all study constructs are shown in Table 2. The Cronbach's alpha coefficients for the variables are all higher than the recommended value of 0.70 (ranging from 0.899 to 0.911). This suggests that the measurement scales have high internal consistency and are successful in measuring what they intended to measure. The average scores for AI adoption, AI-based HR analytics, automation of HR processes, ethical applications of AI and human oversight are distributed around the midpoint of 3.0 indicating a moderate level of AI maturity among Nepalese organizations. This is consistent with the wave of AI integration, as opposed to widespread implementation. The criterion variable, HR decision-making effectiveness, likewise has a moderately positive mean ($M = 3.07$), which indicates an adequate level of variance for exploring correlational relationships. These results also validate the use of our data for correlation, regression, and mediation analyses.

Table 2: *Reliability and descriptive statistics*

Construct	Items	Cronbach's α	Mean	SD
AI Adoption in HR	5	0.900	3.06	1.15
AI-Driven HR Analytics	5	0.903	2.91	1.22
HR Process Automation	5	0.906	2.94	1.21
Ethical AI Practices	5	0.899	3.00	1.23
Human Oversight	5	0.911	2.97	1.25
HR Decision-Making Effectiveness	5	0.907	3.07	1.22

Source: SPSS

4.3 Correlation Analysis

Bivariate relationships between the study constructs were tested by Pearson correlations. Table 3 shows that all the key AI mechanisms (adoption, analytics and automation) are positively and significantly related to effectiveness of HR decisions making. Furthermore, both ethical AI practices and human oversight as mediators have a strong association with the outcome. This is consistent with the theoretical notion that governance and human judgment mechanisms may increase AI-enabled HR decision quality.

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Table 3: Correlations among constructs (Pearson *r*)

(*p* < .05*, *p* < .01**, *p* < .001***)

	AI Adoption	AI Analytics	HR Automation	Ethical AI	Human Oversight	Decision Effectiveness
AI Adoption	1.000	0.424***	0.346***	0.369***	0.274***	0.447***
AI Analytics	0.424***	1.000	0.414***	0.342***	0.382***	0.469***
HR Automation	0.346***	0.414***	1.000	0.192**	0.536***	0.416***
Ethical AI	0.369***	0.342***	0.192**	1.000	0.249***	0.376***
Human Oversight	0.274***	0.382***	0.536***	0.249***	1.000	0.465***
Decision Effectiveness	0.447***	0.469***	0.416***	0.376***	0.465***	1.000

Source: SPSS

Two themes stand out as particularly valid and relevant for the main article and extant findings: AI-Driven HR Analytics demonstrates the strongest bivariate link with HR decision making effectiveness (*r* = .469***). This is consistent with the idea that predictive and evidence-based decision support will improve the quality of HR decisions. Further, HR Process Automation is closely related to human moderation (*r* = .536***), which means that along with rising automation, organizations are also paying more attention to the human review and control (also consistent with “human-in-the-loop”).

4.4 Hypotheses Testing: Direct Effects (H1–H3)

Hypotheses H1 to H3 were tested by means of multiple regression analysis with HR decision-making effectiveness as a dependent variable, and the three AI drivers as predictors. Estimates presented are standardized coefficients (β).

Table 4: Regression results for direct effects (DV: HR Decision-Making Effectiveness)

Predictor	β	<i>t</i>	<i>p</i>
AI Adoption in HR	0.259	4.487	<.001
AI-Driven HR Analytics	0.271	4.553	<.001
HR Process Automation	0.214	3.732	<.001
Model fit	$R^2=0.332, \text{Adj. } R^2=0.324, F=42.33, p<.001$		

Source: SPSS

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As presented in Table 4, all three aspects of AI have a significant impact on the quality of HR decision-making. Firms that exhibit greater reliance on AI and usage of AI-based analytics, as well as a greater degree of automation implement HR decisions that have higher quality measured in terms of accuracy, fairness, timeliness, strategic impact and trust. Of the predictors AI-analyses are the most influential ($\beta = .271$), which can be attributed to the added value of decision-support tools and predictive features. This conclusion is consistent with the main idea of the base article, which discusses gains in decision-based truth and strategy-making through an analytic approach.

4.5 Mediation Preconditions: Predicting the Mediators (Paths “a”)

As for the test of mediation, the first condition is that independent variable must correlate significantly with mediators itself (i.e., ethical AI practices and human oversight). Two regressions models were constructed: in one model the dependent variable (DV) was Ethical AI practices, while in the other model Human Oversight was used as the DV.

Table 5: *Predictors of mediators (standardized coefficients)*

(A) DV: Ethical AI Practices

Predictor	β	t	p
AI Adoption in HR	0.272	4.257	<.001
AI-Driven HR Analytics	0.225	3.408	<.001
HR Process Automation	0.005	0.079	.937
Model fit	$R^2=0.178, \text{Adj. } R^2=0.169, F=18.50, p<.001$		

Use of AI and analyzing data with AI are major predictors to ethical use of AI. This suggests that, the more organisations are making decisions through AI and analytics in HR, the more likely they will be to show a greater degree of ethics (contained in fairness, transparency, accountability and privacy). Automation, in turn, does not reveal any relevant relationship to ethical AI practice. This suggests that ethical governance is more about how decisions support and the system are implemented than how much automation is used.

(B) DV: Human Oversight

Predictor	β	t	p
AI Adoption in HR	0.044	0.752	.453
AI-Driven HR Analytics	0.179	2.986	.003
HR Process Automation	0.446	7.707	<.001
Model fit	$R^2=0.319, \text{Adj.}R^2=0.311, F=40.05, p<.001$		

Source: SPSS

The automation of HR processes has a strong effect on monitoring by humans ($\beta = .446, p < .001$). This is theoretically noteworthy: while organisations move towards more automation, they favour review mechanisms, albeit that override authority and human accountability are not directly supported. In an additional step, AI analytics is also a predictor of human oversight ($\beta = .179, p = .003$) indicating that as reliance on recommendations based on analytics increases, human validation becomes more important. But the widespread uptake of AI is a poor predictor for oversight once other facets of AI are considered.

4.6 Full Mediation Model: Predicting Decision Effectiveness with Mediators (Paths “b” and Direct Effects)

A last regression model was created with HR decision making effectiveness as dependent variable. This model included the AI predictors and both mediators simultaneously. This model is used to investigate whether when controlling for AI drivers, the addition of ethical AI practices and human oversight explain further variance.

Table 6: Full model with mediators (DV: HR Decision-Making Effectiveness)

Predictor	β	t	p
AI Adoption in HR	0.206	3.623	<.001
AI-Driven HR Analytics	0.193	3.289	.001
HR Process Automation	0.107	1.752	.081
Ethical AI Practices	0.154	2.853	.005
Human Oversight	0.239	4.024	<.001
Model fit	$R^2=0.396, \text{Adj.}R^2=0.385, F=33.37, p<.001$		

Source: SPSS

Several important insights are obtained from the analysis: both mediators significantly predict decision effectiveness. Ethical AI practices ($\beta = .154, p = .005$) as well as those from human ($\beta = .239, p < .001$) improved HR decisions additively. This is in line with main argument that AI most effectively enhances the quality of HR decision-making if

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appropriate governance and mechanisms for human judgment are in place. Mediation increases the explained variance significantly when including all mediators, with R^2 climbing from 0.332 in the direct model to 0.396 in the full mediation model. It means that ethical AI use and human oversight explain a significant extra variance beyond just using AI. What is more, the direct impact of HR automation and oversight reduces. Automation was significant under the direct model (Table 4), but became less significant under the full model ($p = .081$). Such a tendency coincides with mediation: Mediation makes better decisions by automating oversight and control processes.

4.7 Bootstrapped Indirect Effects (Mediation Tests)

Mediation was evaluated using a bootstrap analytic approach with resampling-based confidence intervals. Indirect effects are considered significant when the 95% bootstrap CI does not include zero.

Table 7: *Bootstrapped indirect effects (95% CI)*

Mediation Path	Indirect effect	95% CI	Decision
AI Adoption → Ethical AI → Decision Effectiveness (H4)	0.042	[0.012, 0.083]	Supported
AI Analytics → Ethical AI → Decision Effectiveness (H5)	0.035	[0.008, 0.075]	Supported
HR Automation → Human Oversight → Decision Effectiveness (H6)	0.107	[0.053, 0.167]	Supported
AI Adoption → Human Oversight → Decision Effectiveness (H7)	0.010	[-0.018, 0.041]	Not supported

Source: SPSS

The mediation findings provide strong evidence in support of your integrated theoretical model with regard to the mediating role played by ethical AI practices: Ethical AI practices exert a highly significant mediating effect on both the adoption and analytics of AI in HR decisions (H4 and H5 are supported). This is consistent with the four values including fairness, accountability, privacy, and transparency (FT) identified in [1] as key factors in generating trust in HR decisions using AI. In addition, human control is an important mediator of the relationship between HR automation and decision effectiveness (H6 is supported). This finding is in agreement and supportive of the integrated paper's argument (Lamper style argument): automation improves performance when humans retain ultimate control, context dependent reasoning, overriding capability. On the other hand, H7 is not supported when full mediation condition is tested because

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there is no significant increase in oversight for general AI adoption, while including other aspects of AI. In practical terms, this means that the mere “AI adoption” does not translate into larger proportions of human-in-the-loop work but rather oversight is more likely to increase when automation is intense and recommended action generated through analytics must be validated.

4.8 Multicollinearity and Diagnostic Checks

We also checked for multicollinearity using VIF to guarantee the stability of the regression estimates. All the predictors in the full model showed VIFs lower than 1.23–1.56). These low levels indicate that multicollinearity is the minor issue and there is no real danger, thus ensuring stable coefficient estimates.

Finally, a one-factor diagonal test item-level variance showed that no single factor affected most of the variance and that with 35% (1st factor) explained this ratio. This result suggests that common-method bias is not a serious threat to the validity of the relationships that we observed.

4.9 Summary of Hypotheses Results

Table 8: *summarizes the hypothesis testing results*

Hypothesis	Statement	Result
H1	AI Adoption → Decision Effectiveness	Supported
H2	AI Analytics → Decision Effectiveness	Supported
H3	HR Automation → Decision Effectiveness	Supported
H4	Ethical AI mediates AI Adoption → Decision Effectiveness	Supported
H5	Ethical AI mediates AI Analytics → Decision Effectiveness	Supported
H6	Human Oversight mediates HR Automation → Decision Effectiveness	Supported
H7	Human Oversight mediates AI Adoption → Decision Effectiveness	Not supported

Source: SPSS

The results of the hypothesis test are presented in Table 8. The results reveal that AI enhances the HR decision-making efficiency through both direct and indirect paths. Crucial factors highlighted are: 1) ethical AI processes and human oversight to ensure that the use of AI in HR leads to more effective decisions that we can trust. Overall, the findings highlight that this is crucial for an appropriate HR decision making process to be followed in Nepalese organizations where AI are used – and involved human-in-the-loop systems.

5. Discussion

The effect of AI on HR decision making's being mediated by ethical AI practices and human oversight was also explored in the Nepalese context. The results are generally consistent with previous contributions in the AI-HRM research stream and extend them by validating (at an empirical level) governance combined with human-centered mechanisms within a developing country setting.

Consistent with previous research, AI Usage, HR-Analytics using AI and Automation of HR Process significantly enhance effectiveness of HR-decision making through increasing precision, efficiency and strategic focus (Budhwar et al., 2022; Dolan et al., 2022; Saqab et al., 2025). Within these dimensions, AI-based HR analytics was found to be the most powerful predictor, providing evidence that predictive and data-driven insights can offer more value than mere automation (Raman et al., 2024; Basu et al., 2023). This result substantiates that HR interventions based on analytics are superior to those drawing on intuition in different types of organisations.

The mediation analysis highlights the crucial role of ethical AI practices on leveraging the adoption and analytics of AI into sound HR decisions. The result is in accordance with the prior literature where fairness, transparency, accountability and data privacy appeared to be key determinants of trust perception for AI based HR systems (Jobin et al., 2019; Panda et al., 2024). The study is thus putting forward quantitative findings which adds to the highly theoretical debate of ethical AI, such as that governance mechanisms are not add-on but core drivers for good decision making. One interesting finding is that HR automation which includes automated recruitment and machine-based allocation, does not have a significant predictive power for ethical AI practices. This implies that ethical concerns are more relevant to evaluative and analytic applications of AI rather than low-level automation.

The results also point to the significant value of human intervention in auto HR systems. In particular, the automation of HR processes does well to predict the need for human oversight, which also indicates that as the level of automation becomes more intense, organizations are placing greater value on review and validation and on the ability to override decisions. It is in line with the human-in-the-loop approach, considering AI as supporting human judgment but not replacing it (Lamper et al., 2026; Fenwick and Gigerenzer, 2024). The mediating role of human oversight between automation and decision-making effectiveness in disaster response: Automation benefits only when humans are in control.

It is interesting to note that there is no human moderation effect between general AI application and decision performance. This is at least in part a function of the local

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context, since in Nepal using AI generally means using assistive technologies whose use does not threaten to subvert decision-making authority. This result highlights that it is important to explore the use of AI in more detail and that the adoption of AI cannot be considered as a black box.

The findings, in sum, recommend a balanced socio-technical view of the way AI technologies improve HR decision-making best through embedding it within ethical governance frameworks and maintaining ongoing human involvement.

Conclusion

The study found that the introduction of AI leads to better HR decision-making through ethical AI behaviors and human control in Nepalese firms. Indeed, AI technologies, analytics, and automations are indeed a natural extension of the drive towards more effective decisions. However, ethical governance and human-in-the-loop are critical success factors that make such technology more advantageous. The study found that the AI technologies were regarded as supportive rather than autonomous decision-makers. Therefore, this research makes theoretical contributions by demonstrating how ethical AI usage and human governance mediate the relationship between decisions made with AI assistance.

At the same time, it is essential for firms to consider investing in AI-driven analytics, maintaining strong ethical governance, and being aware of the importance of humans in the loop to maximize the advantages of utilizing the technologies. This is especially true for countries with weak AI governance and technological capabilities.

The study is limited by the cross-sectional design and self-reported data, which do not allow strong conclusions about the causal relationships or individual perceptions. Future studies would benefit from utilizing a mixed-methodology approach, longitudinal design, and analyzing broader decision contexts, including cultural differences or regulatory environments. The analysis would be more comprehensive if conducted across different countries and populations.

References

- Aguinis, H., Villamor, I., & Ramani, R. S. (2024). Artificial intelligence and human resource management: A research agenda. *Journal of Management*, 50(1), 1–29. <https://doi.org/10.1177/01492063231187435>
- Alnsour, M., Tayeh, B., & Abu-Rumman, A. (2024). Artificial intelligence adoption in human resource management: Opportunities and challenges. *International Journal of Human Resource Management*, 35(4), 623–647. <https://doi.org/>

Impact of Artificial Intelligence on Human Resource Decision-Making: The Mediating Roles of Ethical AI Practices and Human Oversight in Nepalese Organizations

10.1080/09585192.2023.2279841

- Arslan, A., Golgeci, I., Khan, Z., & Al-Tabbaa, O. (2022). Artificial intelligence-driven HRM and employee outcomes. *Human Resource Management Review*, 32(4), 100880. <https://doi.org/10.1016/j.hrmr.2021.100880>
- Ban, J., Kim, S., & Park, H. (2024). Employee resistance to AI-driven automation in HRM. *Employee Relations*, 46(2), 312–330. <https://doi.org/10.1108/ER-09-2022-0401>
- Basu, S., Sharma, A., & Ghosh, S. (2023). Predictive analytics and AI-enabled HR decision-making. *Journal of Business Research*, 154, 113347. <https://doi.org/10.1016/j.jbusres.2022.113347>
- Black, J. S., & Van Esch, P. (2021). AI-enabled recruiting: What is it and how should a manager use it? *Business Horizons*, 64(2), 215–226. <https://doi.org/10.1016/j.bushor.2020.12.001>
- Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., & Varma, A. (2022). Human resource management in the age of artificial intelligence. *Human Resource Management Review*, 32(4), 100903. <https://doi.org/10.1016/j.hrmr.2022.100903>
- Bujold, A., Masse, S., & Paquet, M. (2024). Explainable AI and trust in algorithmic HR decisions. *Human Resource Management Journal*, 34(1), 85–102. <https://doi.org/10.1111/1748-8583.12489>
- Charlwood, A., & Guenole, N. (2022). Can HR analytics compete with algorithms? *Human Resource Management Journal*, 32(3), 527–543. <https://doi.org/10.1111/1748-8583.12397>
- Cayrat, C., & Boxall, P. (2023). Strategic HRM and artificial intelligence: Implications for decision-making. *Academy of Management Perspectives*, 37(3), 455–472. <https://doi.org/10.5465/amp.2021.0179>
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). Sage.
- Deepa, R., Goyal, P., & Verma, S. (2024). Digital transformation and AI adoption in emerging economies. *Technological Forecasting and Social Change*, 195, 122850. <https://doi.org/10.1016/j.techfore.2023.122850>
- Dolan, S. L., Ruiz, R., & Cooper, C. L. (2022). Artificial intelligence, HRM and the future of work. *Journal of Business Research*, 137, 439–450. <https://doi.org/10.1016/j.jbusres.2021.08.049>
- European Commission. (2025). *Ethics guidelines for trustworthy artificial intelligence*. Publications Office of the European Union.

Impact of Artificial Intelligence on Human Resource Decision-Making: The Mediating Roles of Ethical AI Practices and Human Oversight in Nepalese Organizations

- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fenwick, M., McCahery, J. A., & Vermeulen, E. P. M. (2024). Human-in-the-loop governance of artificial intelligence. *Journal of Business Ethics*, 189(2), 345–360. <https://doi.org/10.1007/s10551-023-05345-1>
- França, J. F., Silva, R., & Monteiro, P. (2023). Artificial intelligence and strategic human resource decision-making. *Management Decision*, 61(7), 1765–1783. <https://doi.org/10.1108/MD-03-2022-0314>
- Ivanova, I., Strand, R., & Leydesdorff, L. (2019). Responsible innovation and AI governance. *Technological Forecasting and Social Change*, 146, 112–121. <https://doi.org/10.1016/j.techfore.2019.05.012>
- Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389–399. <https://doi.org/10.1038/s42256-019-0088-2>
- Lamper, Á. (2026). Impacts of artificial intelligence on an HR generalist role. *Human Resource Development International*, 29(1), 1–19.
- Li, J., Wang, X., & Zhao, Y. (2023). AI-powered analytics and HR decision quality. *Management Decision*, 61(9), 2291–2310. <https://doi.org/10.1108/MD-02-2022-0217>
- Lo, C. K. Y., Tang, C. S., & Zhou, Y. (2015). Organizational learning and decision-making effectiveness. *Decision Sciences*, 46(3), 437–469. <https://doi.org/10.1111/deci.12132>
- Mohamed, A. F., Yousef, S., & Abdallah, A. (2022). Robotic process automation in HRM. *Employee Relations*, 44(5), 1082–1101. <https://doi.org/10.1108/ER-04-2021-0198>
- Murugesan, S., El-Haddadeh, R., & Weerakkody, V. (2023). Artificial intelligence in HR analytics. *Information Systems Frontiers*, 25(5), 1691–1708. <https://doi.org/10.1007/s10796-022-10273-1>
- Palos-Sánchez, P., Saura, J. R., & Debasa, F. (2022). Artificial intelligence in human resource management. *Technological Forecasting and Social Change*, 182, 121845. <https://doi.org/10.1016/j.techfore.2022.121845>
- Panda, A., Upadhyay, P., & Khandelwal, U. (2024). Ethical AI practices in HRM. *Journal of Business Ethics*, 190(1), 55–72. <https://doi.org/10.1007/s10551-023-05421-6>
- Piwowar-Sulej, K., Walecka-Jankowska, K., & Kolodziejczyk, M. (2024). HR analytics

Impact of Artificial Intelligence on Human Resource Decision-Making: The Mediating Roles of Ethical AI Practices and Human Oversight in Nepalese Organizations

- and ethical decision-making. *Human Resource Management Review*, 34(1), 100914. <https://doi.org/10.1016/j.hrmr.2023.100914>
- Raman, R., Budhwar, P., & Varma, A. (2024). AI-driven HR analytics and decision-making. *Human Resource Management*, 63(2), 181–199. <https://doi.org/10.1002/hrm.22119>
- Rigotti, G., & Fosch Villaronga, E. (2024). Bias and fairness in AI-driven HR decisions. *AI and Ethics*, 4(1), 21–34. <https://doi.org/10.1007/s43681-023-00274-9>
- Roppelt, L., Hauff, S., & Richter, N. (2025). Algorithmic decision-making in recruitment. *Personnel Psychology*, 78(1), 45–78.
- Rydén, P., & El Sawy, O. A. (2022). Data-driven decision-making and analytics capability. *MIS Quarterly Executive*, 21(4), 299–318.
- Saqab, M. R., Hussain, S. S., Ala-Ud-Din, M., & Naveed, M. (2025). The impact of artificial intelligence on HR decision-making: Opportunities, challenges and ethical consideration. *Journal of Management & Organization*, 31(2), 245–266.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Saeidnia, H. (2024). Ethical governance of AI in human resource management. *AI & Society*, 39(1), 157–170. <https://doi.org/10.1007/s00146-023-01622-4>
- Sharma, A., Dhar, R., & Tyagi, A. (2022). Digital HR transformation in emerging economies. *International Journal of Human Resource Management*, 33(12), 2461–2485. <https://doi.org/10.1080/09585192.2021.1948894>
- Sivathanu, B., & Pillai, R. (2018). Smart HR 4.0. *International Journal of Manpower*, 39(6), 784–800. <https://doi.org/10.1108/IJM-02-2018-0065>
- Strohmeier, S. (2020). Artificial intelligence in human resource management. *International Journal of Human Resource Management*, 31(4), 1–30. <https://doi.org/10.1080/09585192.2019.1686401>
- Tarafdar, M., Pullins, E. B., & Ragu-Nathan, T. S. (2019). Technostress and employee outcomes. *Journal of Management Information Systems*, 36(4), 1080–1104. <https://doi.org/10.1080/07421222.2019.1661091>
- Taslim, M., Ali, M., & Khan, F. (2025). Human-centered AI governance in HR. *Journal of Business Research*, 163, 113956.
- Veshne, A., & Jamnani, R. (2024). Data privacy and accountability in AI-enabled HR systems. *Information & Management*, 61(2), 103750. <https://doi.org/10.1016/j.im.2023.103750>
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, and HRM. *International Journal of Human*

Impact of Artificial Intelligence on Human Resource Decision-Making: The Mediating Roles of Ethical AI Practices and Human Oversight in Nepalese Organizations

Resource Management, 33(18), 1–30. <https://doi.org/10.1080/09585192.2020.1871398>