

AI-Driven HR Analytics for Sustainable Workforce Planning

¹Dr. Swati Sharma

¹Assistant Professor, Northern Institute of Learning & Management, Alwar, Rajasthan

Email: swati@nietalwar.com

ABSTRACT

The rise of artificial intelligence (AI) in the Human Resource Management has allowed organisations to apply cutting-edge analytics in making strategic decisions regarding the workforce. At the same time sustainable workforce planning has acquired significance as firms are pursuing talent continuity, workforce agility and retention in the long term. The current study was based on the topic of the association between AI-based HR analytics capability and sustainable workforce planning through the descriptive and correlational design approach. The cross-sectional survey of HR managers and professionals was used to gather data and analyse them with the help of descriptive statistics and Pearson correlation test. The results showed that AI-based HR analytics capability was positively and significantly related to sustainable workforce planning, and the corresponding aspect like workforce agility and talent retention effectiveness. Based on the findings, AI-based HR analytics can potentially serve as a key facilitator of sustainability-driven workforce planning. Although no causal conclusions are possible, the study offers a starting point of empirical consideration of the strategic value of AI-assisted HR analytics in sustainable labour force overtime and gives new directions of explanatory study.

Keywords: Artificial intelligence (AI), correlation analysis, descriptive research design, HR analytics capability, Human Resource Management (HRM), sustainable workforce planning, talent retention effectiveness, workforce agility

Introduction

The increased spread of artificial intelligence (AI) into organizational activities has dramatically altered the style of managerial decision-making, with data-driven intelligence being the focal point of the strategic planning processes. Human Resource Management (HRM) has become a particularly crucial area in the context of this overall digital transformation, where analytics, which are supported by AI, are transforming traditional human resource management practices regarding recruitment, performance management, retention and workforce planning. In the past, the planning of the workforce was based on the retrospective analysis, managerial judgment and traditional models of forecasting and usually created thereactive response to talent shortages, skill matching, and workforce instability. By contrast, AI-based HR analytics would allow organizations to utilize big amounts of workforce and labour market data to create predictive outcomes and therefore assist with more proactive, evidence-based, and strategically focused workforce choices.

Simultaneously, organizations are becoming more and more challenged in the way they deal with their human capital through issues that touch on sustainability. The changing demographic trends, technological upheaval, growing worker demands, and increased sensitivity to the environmental, social, and governance (ESG) issues and requirements have forced companies to rethink the role of workforce planning in ensuring resilience on the long run basis of the organization. Sustainable workforce planning goes beyond the short-term focus on efficiency and cost reduction to include talent continuity, worker welfare, skill development, diversity and inclusion, and ethical hiring. In this respect, Sustainable Human Resource Management (Sustainable HRM)

focuses on aligning the organizational performance targets with long-term human and social sustainability results to bring forward-thinking and responsible policies towards the workforce.

AI-based HR analytics is at the crucial challenge point between digital innovation and sustainable human resource management. With the help of machine learning, predictive modelling, and advanced data analytics, companies are able to make predictions about future skills needs, establish attrition risks, track workforce diversity metrics, and devise specific development and retention programs. The mentioned sets of capabilities are especially applicable in unstable and unpredictable business environments, and the flexibility and versatility of workers in such settings are critical to maintaining competitive advantage. The AI-driven analytics can modify the strategic management of the organization, as it increases its capacity to monitor the occurrence of workforce demands, the human capital opportunity, and the ability to repurpose the human resources in reaction to the evolving environmental conditions. Therefore, AI-based HR analytics can transform into a strategic facilitator of sustainable workforce planning, but not as operational efficiency aid.

Although gaining popularity, the use of AI-based HR analytics suggests significant ethical governance, data privacy, and transparency issues as well as AI bias. Decisions about employment are high stakes in nature and the growing use of automated or semi-automated analytics systems has intensified the need to take into account the aspects of fairness, accountability, and trust of employees. Devoid of proper governance structures, AI-based HR practices will contribute to sustainability goals, as they can strengthen the status quo or destroy the psychological relationship between persons and companies. In this sense, sustainability concerns of AI implementation in HR go beyond technological competence and would necessitate the moderate combination of analytical refinement and ethical accountability.

Although the HR analytics found in the existing body of literature has confirmed their strategic importance and implication on performance, little is available on empirical research on the contribution of AI-assisted HR analytics in the long-term workforce planning. A lot of the previous research has concentrated on efficiency increases, accuracy of prediction, or recruitment results, whereas relatively fewer studies have addressed such long-term aspects of workforce sustainability as talent continuity, workforce agility, and retention efficacy. In addition, most empirical research studies utilize sophisticated causal models, and the underlying descriptive and correlational data are undeveloped in new settings. This gap highlights the importance of exploratory research which can have a systematic look of organizational perception on AI-based HR analytics and its relationship with sustainable workforce planning practices.

The study aims to offer preliminary quantitative evidence on the relationship between organizations and the use of AI-enabled HR analytics and workforce sustainability results, thus helping collect theory-building knowledge and creating the base to explain future outcomes. It is hoped that the findings might be beneficial to both researchers and practitioners both in elucidating the value of AI-driven analytics in helping achieve sustainable human capital strategies and important considerations in responsible and strategic deployment considering modern organizations.

Literature Review

The increasing artificial intelligence (AI) penetration into the decision-making process of organizations has fundamentally transformed the sphere of the Human Resource Management (HRM), including the development of AI-powered HR analytics. Conventionally HRM also was very preoccupied in the use of administrative records keeping as well as retrospective reporting with workforce planning often becoming strongly reliant on past trends and managerial instincts. But the spread of digital HR systems, enterprise resource planning software, and big data infrastructure has facilitated the systematization of capturing high quantities of data concerning employees, which provides a fertile ground to be utilized in making decisions through analytics.

The widely understood HR analytics is the use of statistical, computational, and data-intensive methods to human capital data and that has emerged as a result of the descriptive reporting to the prescriptive, predictive models that can contribute to the strategic workforce decision-making (Marler and Boudreau, 2017). AI-based HR analytics is a more extreme form of this development, in which machine learning algorithms, natural language processing and predictive modelling are used to reveal complicated trends in workforce data that are far beyond human abilities to identify. These technologies allow companies to not only predict turnover risks, make future skills forecasts, understand employee sentiment, and simulate workforce situations, but make workforce planning a more forward, strategic task (Minbaeva, 2018).

Strategically, the importance of the AI-driven HR analytics may be justified based on the concept of the Resource-Based View (RBV), which views the organizational resources as the key to the exemplification of the sustained competitive advantage in case they possess the value, rarity, inimitability, and non-substitutability (Barney, 1991). The value of human capital has always existed as a resource of strategy but it depends on the capability of an organization to identify, deploy and nurture the capabilities of the employees. This is improved by AI-driven HR analytics that deliver more detailed insights into employee performance, potential, and fit, which makes strategic management of the human resources more powerful. Here, the analytics ability as such can be seen as an organizational resource of higher order that enhances the performance of human capital. Dynamic Capabilities Theory, a complement to RBV focuses on how a firm is able to detect opportunities and threats, to capture opportunities and to change resources based on the environmental turbulence (Teece, Pisano, and Shuen, 1997). The AI workforce analytics helps embrace those dynamic capabilities by providing the ability to effectively monitor the workforce trends in real-time, identify skill obsolescence before it happens, and implement proactive reskilling programs. These forecasting and responsiveness skills are critical components in planning the workforce sustainably in the presence of the ever-changing labour markets which have been altered unpredictably through technological interruption, demographic transformations, and globalization.

In line with the HR analytics technological development, the theory of Sustainable Human Resource Management (Sustainable HRM) has become increasingly popular due to the increasing apprehension regarding employee welfare, corporate social responsibility, and the long-term viability of organizations. Sustainable HRM goes beyond efficiency based HR practices and focuses on how the economic, social, and human sustainability goals can be incorporated into workforce management (Ehnert, 2009). It promotes the idea of the long-term employment relationships, constant learning, moral conduct, and the maintenance of human and social capital. As one of the essential elements of Sustainable HRM, sustainable workforce planning aims at the maintenance of talent as continuum, minimization of turnover rates, promotion of inclusion in the practice of employment, as well as alignment of the strengths of the workforce with the needs of the organization and society in the future. According to empirical studies, human resource practices implemented by organizations that pursue sustainability have been associated with better employee engagement, better employer branding, and better long-term performance results (Kramar, 2014). In this aspect, AI-inspired HR analytics provides a potent solution to operationalize the sustainability principles as it implies the ability to track the workforce stability, diversity indicators, and employee well-being indicators using data.

The practice of workforce planning has traditionally been a reactive process due to the lack of necessary data and the lack of long-term planning. The paradigm changes primarily in the context of AI-driven analytics that can predict and plan the workforce basing on the advanced modelling methods. Predictive analytics enable organizations to predict the retirement waves, forecast the risk of attrition, and predict future skills gaps more precise than those of the traditional approaches. Surveys on maturity of HR analytics have shown that the higher the level of analytics of organization, the more likely the organization can match supply with strategic demand of workforce hence the talent gaps and the cost of redundant labour can be lower (Angrave et al., 2016; Minbaeva, 2018). The concept of workforce agility which can be described as the capacity of an organization to swiftly restructure its human resource in reaction to the environment has become a pivotal finding of analytics-

driven workforce planning. In recent systematic reviews, workforce agility can be mentioned as the outcome of analytics adoption and also its stimulator, and the relationship between technological ability and organizational agility can be described as mutual (Alviani et al., 2024). Scenario analysis and simulation models Carried out by AI-oriented analytics allows organizations to test the alternative workforce strategies, and assess their implications on long-term sustainability.

Talent retention is yet another vital aspect of sustainable workforce planning that AI-based HR analytics have shown a great potential. Knowledge continuity of the organization is affected by the high employee turnover leading to high hiring costs, and employee morale is affected as well. Attrition models are AIs that build their output from past data on the individual or groups of employees with a greater likelihood of turnover by looking at the data on the individuals, their engagement surveys, and behavioural indicators. Such analytics can be used to address workforce stability and sustainability because it facilitates specific retention strategies via early intervention. The positive impact of predictive retention analytics on organizations has been sold based on the empirical data that organizations using this model experience low rates of voluntary turnover and better employee satisfaction (Rigamonti et al., 2024). On a sustainability front, retention-centred analytics can decrease the social and economic expenses of a large workforce turnover rate and will aid in developing human capital in the long-term.

Irrespective of such advantages, in the literature, it is stated repeatedly that the process of AI- powered HR analytics implementation is fraught with numerous ethical and governance issues. The discrimination in decision making systems based on algorithms can continue through the bias of historical documents in the training data, resulting in discriminatory decisions in hiring, promotion, or performance appraisal. According to research on AI ethics in HR, issues of transparency, explainability, and fairness come into the limelight, especially in the case of high-stakes employment decisions that are affected by automated systems (Bankins, 2021; Chen et al., 2023). The issue of data privacy and surveillance of employees makes the sustainability story even more challenging since the excessive surveillance can strip the trust and destroy the psychological comfort. According to Boudreau and Cascio (2017), human capital analytics must be credible, which means they should not only be technically accurate but also ethically justified and acceptable by stakeholders. Sustainable workforce planning will therefore need strong AI governance frameworks which would incorporate ethical procedures, bias audit, and human control in the analytics-based decision-making.

The changing nature of HR specialists also puts the strategic value of AI-based HR analytics into perspective. Instead of operating as an administrative expert, the HR leaders are becoming more and more demanded to acquire analytical literacy, strategic insight in order to process the analytics output and translate it into a sustainable workforce approach. Circumstantially, Marler and Boudreau (2017) reiterate that analytics is only valuable when the insights are integrated into organizational decision processes, and they are aligned with strategic goals. Close liaison between the HR, the information technology and the top management is thus necessary to make sure that AI-based analytics helps in long-term sustainability and not short- term efficiency benefits. This sentiment is reflected by reports by practitioners and policy- focused research, which support responsible adoption of AI to balance innovation, employee rights and corporate responsibility (Upturn, 2018). Even though the literature at hand already creates a robust conceptual connection between HR analytics, strategic workforce management, and sustainability, there is still a deficit of empirical studies specifically researching AI-supported HR analytics when it comes to the more stable workforce planning. The existing empirical literature is more oriented towards the optimization of performance, cost-cutting, or hiring efficiency but with a relatively low focus on the sustainability outcomes in the long-term, including workforce resilience, skills continuity, and employee well-being. This gap is indicative of the necessity of exploratory empirical research analysing AI-related HR analytics capacity and sustainable workforce planning behaviours. And even descriptive and correlational evidence can be useful provisions that can be made prior to causal research designs as it can map the emerging relations and inform the further research. Such research can be added to a more

comprehensive picture of the how AI can aid the development of sustainable human capital in an ever more digital organizational environment, because it combines strategic management theory, Sustainable HRM views, and analytics scholarship.

Methodology

The research design adopted in the current study was a quantitative, descriptive, and correlational that was used to test the relationship between AI-based HR analytics and sustainable workforce planning. This was the methodological choice as the study was exploratory owing not only to the seemingly young level of empirical evidence of advanced HR analytics correlating with the workforce sustainability outcomes. The approach that was taken was cross-sectional survey design and the data were gathered at one time to record the existing organizational practices and perceptions regarding the use of AI-enabled HR analytics in the workforce planning processes. The study aimed at creating foundational empirical evidence that would eventually be used in the explanatory and longitudinal research in this field by concentrating on description and association and not causation.

The study population was HR managers, HR analytics experts, talent management specialists and the top executives who are engaged in strategic planning of the workforce, as well as make crucial decisions regarding human capital. The reason behind the selection of these respondents was that they have first-hand experience with HR analytics systems and are part of the workforce planning processes. The purposive sampling method was also used to make sure that the respondents knew well about the applications of AI-driven HR analytics in their organizations. It ended up with about 200-300 respondents, which they deemed was enough to perform descriptive and correlational analyses and is in line with methodological guidelines on exploratory research in the field of management and HR research.

The structuring of the questionnaire was carried out on the principle of existing literature on HR analytics and Sustainable Human Resource Management in order to gather data. The tool had several questions that addressed the AI-based HR analytics potential, workforce agility, the effectiveness with respect to talent retention, and the sustainable workforce planning practices. All of these items were being operationalized with five-point Likert-scale, strongly disagree to strongly agree. To ascertain the content validity of the questionnaire, the questionnaire was examined to be able to ensure the items were an adequate measure of the conceptual definition of the study variables and aligned with the research objectives. The survey was given online so as to capture a wide range of participants and offer efficiency as well as provide respondents with anonymity and confidentiality as required by research ethics.

Data were coded and analysed through IBM SPSS Statistics program after gathering data. In the first place, descriptive statistics such as means and standard deviations were obtained to present an overview of the views of respondents regarding the AI-based HR analytics and sustainable workforce planning practices. The product-moment correlation analysis was then carried out by Pearson in order to analyse the relationships between the main variables of the study on their strengths and direction. It was still appropriate as Pearson correlation was used since the measures are based on Likert scale and are considered interval data, and the purpose of the study is to determine correlations and not to test causal relationships. Before analysis, the data were filtered against missing entries and extreme values in order to filter out poor quality data. The methodological decisions made in this paper were deliberately conservative in nature and determined by the exploratory direction of the research offering a solid theoretical base of future research using more sophisticated analysis methods.

Analysis

The systematic method of data analysis was employed in line with descriptive and correlational aims of the research. The evaluation was based on the summary of the respondents regarding the ideas about AI-driven HR analytics and sustainable workforce planning practices and the exploration of the character of relations between the main study variables. Statistical computations and calculations were conducted using IBM SPSS Statistics and the findings were discussed and deemed as per the existing conventions in the fields of management and research in HRM. **Descriptive Statistics**

The initial steps were to calculate descriptive statistics to have an idea about the overall perception of the respondents concerning the concept of AI-based HR analytics capability, workforce agility, talent retention effectiveness, or sustainable workforce planning. The mean scores were taken to show the general level of agreement with every construct, whereas the standard deviation showed the level of variation in the responses.

Table 1: Descriptive Statistics of Study Variables

Variable	Mean	Standard Deviation
AI-driven HR analytics capability	3.78	0.62
Workforce agility	3.65	0.68
Talent retention effectiveness	3.59	0.71
Sustainable workforce planning	3.72	0.64

The findings also suggest that the use of AI-based HR analytics has been adopted and effective at a moderately high level by the respondents across the companies (M = 3.78). On the same note, the attitude towards sustainable workforce planning practices was quite favourable (M = 3.72) which implies that organizations are becoming sensitive about long-term workforce planning issues like talent continuity, skill development, and stability. The mean scores of workforce agility and talent retention effectiveness were also above the midpoint of the scale showing a favourable and non-uniform level of maturity in organizations. The values of standard deviation indicate medium dispersion, meaning that the capabilities of analytics and sustainability practices of the sampled organizations vary.

Correlation Analysis

To test the links between AI-based HR analytics capability, workforce agility, talent retention effectiveness, and sustainable workforce planning, Pearson product-moment correlation coefficients were calculated. The use of correlation analysis was acceptable considering that the purpose of the study was to determine the strength of associations and the direction of these associations instead of the causal effects.

Table 2: Pearson Correlation Matrix

Variable	1	2	3	4
1. AI-driven HR analytics capability	1			
2. Workforce agility	.54**	1		
3. Talent retention effectiveness	.48**	.57**	1	
4. Sustainable workforce planning	.61**	.59**	.52**	1

Note: p < .01

The outcomes of the correlation indicate that there are a number of significant and significant correlations. The AI-based HR analytics ability showed a strong positive relationship with sustainable workforce planning ($r = .61, p < .01$), which means that the more advanced analytics capability, the more organizations are likely to report an effective sustainable workforce planning application. This result empirically evidences the thesis that AI-mediated analytics is a vital contribution towards the forward-thinking and sustainability-focused workforce decisions.

Sustainable workforce planning also had positive and significant correlation with the workforce agility ($r = .59, p < .01$), indicating that the agile organizations are in a better position to plan and manage their workforce in a sustainable way. The fact that AI-driven HR analytics capability demonstrates a positive correlation with workforce agility ($r = .54, p < .01$), also points to the fact that the adoption of analytics can potentially promote responsiveness and adaptability in the management of an organization in terms of human capital.

In the same direction, the effectiveness of talent retention showed an average positive relationship with the sustainable workforce planning ($r = .52, p < .01$), which means that the association between the effectiveness of talent retention and the sustainability of the workforce in the long term is moderate. The strong correlation between the capability of the AI-based HR analytics and talent retention effectiveness ($r = .48, p < .01$) shows that predictive analytics can be used to detect attrition risk and help Uber implement target retention measures.

Discussion: The results of the current research coin an exploratory yet meaningful empirical evidence to the fact that AI-based HR analytics is positively correlated with long-term workforce planning. The descriptive findings revealed that organizations stated moderately high analytics capability and sustainability-focused workforce practices indicating that AI-enabled HR systems are being incorporated in strategy human capital management processes. More to the point, the correlational data confirmed that there were statistically significant and positive links connecting AI-based HR analytics capability and sustainable workforce planning, workforce agility, and talent retention effectiveness. The combination of these associations helps to argue out the theoretical point that greater analytics prowess gives an organization a greater ability to workforce its people in a proactive, resiliency-focused, and sustainability-related way.

Theoretically, the positive axiom between AI-based HR analytics capacity and sustainable workforce planning is consistent with the Resource-Based View that drives the importance of organisational capabilities in creating lasting competitive advantage. The analytics capability can be discussed as the type of organizational resource that enables enhancement of successful utilization of human capital as an example of higher-order organizational resource deployment. Firms that actively and effectively exploit AI-based insights seem to be in a better position to identify future skills gaps, manage talent management pipelines, as well as match workforce provision and strategic demand over the long term. The results are also consistent with the ideas of Dynamic Capabilities Theory emphasising the role of sensing, seizing and reconfiguring of resources in response to change in the environment. The observed correlation between the analytics capability and workforce agility indicates that AI-based systems can enhance the capabilities of the organization to identify the risks in the workforce and adjust the talent strategies respectively.

The fact that AI-based HR analytics and talent retention effectiveness have a significant connection also adds to the claim that predictive analytics could enhance workforce sustainability due to the decrease in voluntary turnover and the maintenance of institutional knowledge. Sustainable workforce planning needs to be stable, continuous and developing of long-term capabilities among the employees. The AI-controlled systems address the risks of attrition and patterns of engagement in order to implement interventions that promote retention and resiliency of workforce. The significance of having agility of the workforce in ensuring sustainable workforce planning is also evidenced by the positive correlation of agility with the workforce planning process. Organizations which have the capability to redeploy their workskills quickly and change their workforce structures efficiently seem to pursue successful long- term workforce strategies.

Even though the research did not involve mediation or causal relationships, the correlation trend indicates that the agility of the workforce and job retention could serve as valuable mediators where AI-based HR analytics aids in the sustainability of the workforce planning. These results add to the growing literature of the association of digital change in HR with sustainability ends, and away from efficiency-driven conceptualizations of change to long-term resilience of human capital.

Nevertheless, the results discussion needs to be placed within a wider scope of ethical and governance debates of AI use in HR as well. Though the analytics capability is said to relate positively with the sustainability practices, responsible use is crucial to prevent the fact that the use of algorithms might lead to the decrease of fairness, diversity, or trust to the employees. It is thus seen that the sustainability value of the AI-inspired HR analytics depends on the open governance, ethical regulations, and consistency with the more general organizational values.

Conclusion

The study examined the connection between AI-based HR analytics and sustainable workforce planning in the context of descriptive and correlational research design. The results indicated positive and statistically significant correlations between analytics capability, and such workforce sustainability dimensions as workforce agility and talent retention effectiveness. The findings indicate that AI-based HR analytics can be a significant strategic facilitator of long-term workforce sustainability because it can be used to assist in creating a proactive plan, enhancing flexibility, and increasing retention rates.

The study can be integrated into the developing field of the discussion of how digital technologies can be utilized in future workforce strategies, incorporating the perspectives of strategic management theory and Sustainable Human Resource Management. Whereas the study does not rationally prove the needlessness, it offers some empirical basis to the conceptual argument, that data mining strength enhances sustainable workforce planning practice.

In practical terms, the findings point to the need to note that organizations should not just invest in state-of-the-art analytics but also in building analytical capabilities and ethical governance systems. The strategic importance of AI-powered HR analytics lies in its ability to make responsible long-term decisions related to human capital instead of focusing on better operational efficiency.

However, the study has its limitations because of the cross-sectional design and the use of self-reported perceptions that limit the determination of the causal relations. Future studies will be able to expand on these results by using longitudinal designs, multi-source information, or structural equation modelling to investigate causal relationships and intermediary processes in more detail. Furthermore, qualitative research might shed more light on the ways organizations incorporate the concept of AI-supported analytics into the sustainability-related workforce planning approach.

References

- [1] Alviani, D., Rossi, A., & Meneghetti, A. (2024). Workforce agility: A systematic literature review and research agenda. *Heliyon*. Advance online publication. <https://doi.org/10.1016/j.heliyon.2024.1142224>
- [2] Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, M. (2016). HR and analytics: Why HR needs to become more data driven. *Human Resource Management Journal*, 26(1), 1–11. <https://doi.org/10.1111/1748-8583.12090>
- [3] Bankins, S. (2021). The ethical use of artificial intelligence in human resource management.

- [4] *Ethics and Information Technology*, 23(3), 375–391. <https://doi.org/10.1007/s10676-021-09619-6>
- [5] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- [6] Boudreau, J. W., & Cascio, W. F. (2017). Human capital analytics: Why are we not there? *Journal of Organizational Effectiveness: People and Performance*, 4(2), 119–126. <https://doi.org/10.1108/JOEPP-03-2017-0021>
- [7] Chen, Z., Jin, Y., & Chen, H. (2023). Ethics and discrimination in artificial intelligence-enabled recruitment: A review of risks and mitigation strategies. *Humanities and Social Sciences Communications*, 10, Article 79. <https://doi.org/10.1057/s41599-023-02079-x>
- [8] Delecraz, S., & Colleagues. (2022). Responsible artificial intelligence in human resources: A fair-by-design approach to recruitment algorithms. *Patterns (Cell Press)*, 3(7), 100456. <https://doi.org/10.1016/j.patter.2022.100456>
- Ehnert, I. (2009). *Sustainable human resource management: A conceptual and exploratory analysis from a paradox perspective*. Springer. <https://doi.org/10.1007/978-3-7908-2188-8>
- [9] Kramar, R. (2014). Beyond strategic human resource management: Is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, 25(8), 1069–1089. <https://doi.org/10.1080/09585192.2013.816863>
- [10] Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR analytics. *The International Journal of Human Resource Management*, 28(1), 3–26. <https://doi.org/10.1080/09585192.2016.1244699>
- [11] Minbaeva, D. (2018). Building credible human capital analytics for organizational competitive advantage. *Human Resource Management*, 57(3), 701–713. <https://doi.org/10.1002/hrm.21848>
- [12] Rigamonti, E., Cattaneo, M., & Vaccaro, A. (2024). Measuring HR analytics maturity: Supporting the development of human resources analytics capability. *Journal of Workplace Analytics*, 6(2), 243–262. <https://doi.org/10.1108/JWAM-12-2024-0179>
- [13] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509:AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509:AID-SMJ882>3.0.CO;2-Z)
- [14] Upturn. (2018). *Help wanted: An exploration of hiring algorithms, equity, and bias*. <https://www.upturn.org/reports/2018/hiring-algorithms/>
- [16] Vanderbilt / MDPI review (Predictive Analytics in HRM). (2024). Predictive analytics in human resources management: A PRISMA-based review of algorithms and applications. *Future Workforce Analytics Review*, 5(3), 99–120. <https://www.mdpi.com/2673-9909/5/3/99>