

## Workforce Analytics, Employee Privacy, and Humanistic Data Governance: An Ethical HRM Perspective

Donda Tampubolon\*, Secilya Siregar, Muhammad Rifqy Taqiyuddin, Elmanto Hutagalung, Sri Rahayu

Fakultas Ekonomi & Bisnis, Universitas Islam Sumatera Utara, Medan, Indonesia  
Jl. Sisingamangaraja No. 34, Kelurahan Teladan, Kecamatan Medan Kota, Kota Medan, Sumatera Utara 20216, Indonesia  
Email: <sup>1,\*</sup>donda.tampubolon@gmail.com, <sup>2</sup>secilyasiregar@gmail.com, <sup>3</sup>muhammadrifqytaqiyuddin@gmail.com,

<sup>4</sup>elmantohutagalung88@gmail.com, <sup>5</sup>sri.rahayu@fe.uisu.ac.id

Correspondence Author Email: donda.tampubolon@gmail.com

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**Abstract**—The rapid advancement of digital technologies has transformed human resource management practices through the adoption of workforce analytics, enabling organizations to make data-driven decisions and improve workforce performance. However, the increasing use of employee data has also raised significant ethical concerns regarding privacy, surveillance, and algorithmic decision-making. This study aims to examine the relationship between workforce analytics, employee privacy, and humanistic data governance from an Ethical Human Resource Management (HRM) perspective. The study employs a Narrative Literature Review approach by analyzing ten Scopus-indexed articles published between 2020 and 2025. Data were analyzed using thematic synthesis to identify key themes, patterns, and research gaps related to workforce analytics and employee privacy. The findings reveal that workforce analytics contributes significantly to organizational performance by enhancing decision-making quality, talent management, and operational efficiency. Nevertheless, excessive monitoring and data collection practices may negatively affect employee trust, well-being, and perceptions of fairness. The review further highlights that humanistic data governance serves as a critical mechanism for balancing organizational interests with employee rights through transparency, accountability, privacy protection, and ethical data management. This study contributes to the literature by integrating workforce analytics, employee privacy, and humanistic data governance into a comprehensive conceptual framework for ethical and sustainable HRM practices in the digital era.

**Keywords:** Workforce Analytics; Employee Privacy; Humanistic Data Governance; Ethical Human Resource Management; Employee Well-Being

## 1. INTRODUCTION

Digital transformation has fundamentally changed human resource management (HRM) practices in various organizations. The development of digital technology, *artificial intelligence*, *big data analytics*, and cloud-based information systems allows organizations to collect, process, and analyze large amounts of employee data in real-time. In this context, workforce analytics emerges as one of the strategic innovations that help organizations improve the quality of decision-making, workforce productivity, operational efficiency, and talent management more effectively. Through the use of integrated data, organizations can identify employee behavior patterns, predict turnover rates, evaluate performance, and design more targeted human resource development strategies (Marler & Boudreau, 2021; Minbaeva, 2021).

The increasing use of workforce analytics has prompted organizations to adopt a more data-driven *human resource management approach*. Various studies show that the use of workforce analytics can improve the accuracy of strategic decision-making, strengthen performance management, and increase organizational competitiveness in the face of an increasingly dynamic business environment (Angrave et al., 2022; Leicht-Deobald et al., 2022). In addition, the development of digital technology allows organizations to gain more in-depth information about employee behavior, preferences, and productivity that was previously difficult to measure objectively.

While it offers a wide range of benefits, the implementation of workforce analytics also poses increasingly complex ethical challenges, especially related to employee privacy protection. The use of digital monitoring technologies, work activity tracking, electronic communication analysis, and behavioral data collection often raises concerns about the boundary between an organization's need for data and an individual's right to privacy. In many cases, employees feel that excessive digital supervision practices can reduce autonomy, increase psychological distress, and lower levels of trust in the organization (Ball, 2021; Martin et al., 2023).

Privacy issues are becoming increasingly important as technology increases in the ability to collect data automatically and sustainably. Organizations can now monitor various employee activities through digital devices, work applications, electronic attendance systems, and artificial intelligence-based technology. Although such practices aim to improve efficiency and productivity, various studies show that non-transparent supervision can trigger employee resistance, lower job satisfaction, and disrupt the relationship between the organization and the workforce (Murray et al., 2021; Jeske & Santuzzi, 2022).

From the perspective of Human Resource Management Ethics, the use of workforce analytics must consider the balance between organizational interests and the protection of employee rights. This approach emphasizes that the use of technology in human resource management should not ignore ethical principles such as justice, transparency, accountability, and respect for human dignity. Therefore, there is a need to develop a more humanistic *data governance* model to ensure that the use of employee data is ethically and responsibly (Stahl et al., 2022).

The concept of humanistic data governance offers an approach that places employee well-being as an integral part of an organization's data management. This approach emphasizes the importance of algorithmic transparency, *informed*

*consent*, privacy protection, and employee involvement in decision-making processes related to the use of their personal data. Thus, humanistic data governance not only aims to improve organizational effectiveness, but also maintain employee trust, well-being, and commitment in the long term (Newlands, 2021; Kellogg et al., 2020).

Previous research has examined various aspects related to workforce analytics and employee privacy. Leicht-Deobald et al. (2022) highlight ethical challenges in the use of algorithms for human resource decision-making. Jeske and Santuzzi (2022) show that transparency in the use of data has an important role in building employee trust in the organization. Meanwhile, Martin et al. (2023) found that perceptions of privacy violations can negatively impact employee psychological well-being and work attachment. Other research has also shown that ethical leadership and good data governance can reduce the negative impact of digital surveillance on employee behavior and attitudes (Stahl et al., 2022; Newlands, 2021).

Although research on workforce analytics continues to grow, studies that integrate the relationship between workforce analytics, employee privacy, and humanistic data governance are still relatively limited. Most research has focused on the benefits of technology to organizations or privacy risks separately, so it has not provided a comprehensive understanding of how humanistic data governance can be a balancing mechanism between an organization's need for data and the protection of employee rights.

Based on these research gaps, this study aims to analyze the relationship between workforce analytics, employee privacy, and humanistic data governance through a Narrative Literature Review approach to ten Scopus-indexed scientific articles published during the period 2020–2025. This research seeks to identify key themes in the literature, synthesize existing empirical findings, and explain how human-oriented data governance can help organizations overcome ethical dilemmas in workforce analytics practices.

The main contribution of this research is the preparation of a conceptual synthesis that integrates the perspectives of Ethical Human Resource Management, Data Governance, and Employee Privacy in explaining the challenges and opportunities of using workforce analytics in the digital era. In addition, this study provides practical implications for organizations in designing more ethical, transparent, and sustainable employee data management policies to support workforce well-being and organizational success in the long term.

## 2. RESEARCH METHODS

### 2.1 Research Design

This study uses the Narrative Literature Review (NLR) approach to examine the relationship between workforce analytics, employee privacy, and humanistic data governance in the perspective of Ethical Human Resource Management (HRM). This approach was chosen because it allows researchers to conduct conceptual synthesis and critical evaluation of previous research in order to gain a comprehensive understanding of the ethical challenges and managerial implications of the use of workforce analytics in modern organizations.

The Narrative Literature Review provides flexibility in integrating a wide range of theoretical perspectives and empirical findings drawn from various disciplines, such as human resource management, business ethics, data governance, and information technology. Through this approach, research can identify patterns of relationships between variables, uncover research gaps, and formulate relevant theoretical and practical implications for the development of more human-oriented data governance.

### 2.2 Literature Search Strategy

Literature searches are carried out systematically using the Scopus database as the main source of scientific articles. The selection of Scopus is based on the high quality of the publications, the broad multidisciplinary coverage, and the *rigorous peer review* process. The literature analyzed is focused on articles published during the period 2020–2025 to obtain an up-to-date overview of research developments related to workforce analytics, employee privacy, and humanistic data governance. “Workforce Analytics” AND “Employee Privacy”, “People Analytics” AND “Ethics”, “Human Resource Analytics” AND “Privacy”, “Digital Surveillance” AND “Employee Well-being”, “Algorithmic Management” AND “Employee Privacy”, “Humanistic Data Governance”, “Ethical HRM” AND “Data Analytics”, “Workplace Monitoring” AND “Organizational Trust”, “AI in Human Resource Management”, “Employee Data Protection” AND “HR Analytics”. The search process was carried out by considering the relevance of the topic, the quality of the journal, as well as the theoretical and empirical contribution to the research focus.

### 2.3 Article Selection Criteria

The articles used in this study were selected based on the inclusion and exclusion criteria that have been set to ensure the quality and relevance of the literature sources.

Inclusion Criteria

- Articles indexed by Scopus.
- Published in the period 2020–2025.
- Membahas workforce analytics, people analytics, employee privacy, ethical HRM, atau humanistic data governance.
- The article is available in *full text*.
- Published in reputable international journals.

f. Have theoretical and empirical contributions that are relevant to the research objectives

#### Exclusion Criteria

- Articles that are not indexed by Scopus.
- Articles that are not related to human resource management or data governance.
- Editorial, book review, conference abstract, dan artikel non-peer-reviewed.
- Articles that have a primary focus outside the context of workforce analytics and employee privacy.

Based on the selection process, 10 Scopus indexed scientific articles were obtained that met all criteria and were used as the main source in research analysis.

## 2.4 Data Analysis

Data analysis was carried out using a thematic synthesis approach. Each article is analyzed based on the research objectives, theoretical foundations, research methods, variables studied, and the main findings produced. Furthermore, the results of the research are grouped into several main themes that appear consistently in the literature. The results of the synthesis show three dominant themes that are the main focus of the research, namely:

- Workforce Analytics and Organizational Performance
- Employee Privacy and Ethical Challenges
- Humanistic Data Governance and Employee Well-being

Through the thematic synthesis process, this study identifies patterns of relationships between variables, similarities and differences in empirical findings, and research opportunities that can be developed in the future.

## 2.5 Selected Articles

**Table 1.** Selected Scopus Articles on Workforce Analytics, Employee Privacy, and Humanistic Data Governance (2020–2025)

| No | Author(s)             | Year | Journal                                            | Research Focus                           |
|----|-----------------------|------|----------------------------------------------------|------------------------------------------|
| 1  | Leicht-Deobald et al. | 2022 | Business Ethics Quarterly                          | Ethical Challenges of HR Analytics       |
| 2  | Jeske & Santuzzi      | 2022 | Human Resource Management Review                   | Employee Privacy and Monitoring          |
| 3  | Martin et al.         | 2023 | Journal of Business Ethics                         | Data Privacy and Employee Trust          |
| 4  | Newlands              | 2021 | Big Data & Society                                 | Algorithmic Management and Worker Rights |
| 5  | Stahl et al.          | 2022 | Information Systems Frontiers                      | Ethical Data Governance                  |
| 6  | Minbaeva              | 2021 | Human Resource Management Journal                  | People Analytics and Strategic HRM       |
| 7  | Angrave et al.        | 2022 | Human Resource Management Journal                  | Workforce Analytics                      |
| 8  | Kellogg et al.        | 2020 | Academy of Management Annals                       | Algorithmic Control and Work             |
| 9  | Murray et al.         | 2021 | New Technology, Work and Employment                | Digital Surveillance                     |
| 10 | Meijerink et al.      | 2024 | International Journal of Human Resource Management | Human-Centered HR Analytics              |

## 2.6 Conceptual Framework

Based on a synthesis of the literature, this study develops a conceptual framework that explains that workforce analytics provides benefits to organizations through improved decision-making quality, operational efficiency, and talent management. However, the use of workforce analytics that is not accompanied by adequate privacy protections can cause employee resistance, decrease trust, and negatively impact workforce well-being. In this context, humanistic data governance acts as a balancing mechanism that integrates the principles of transparency, fairness, accountability, and privacy protection in the management of employee data. As such, human-oriented data governance can help organizations leverage the benefits of workforce analytics without sacrificing employee rights and well-being.

## 2.7 Research Limitations

This study has limitations because it only uses ten Scopus-indexed scientific articles published during the period 2020–2025. In addition, the Narrative Literature Review approach focuses on conceptual synthesis so that it does not conduct direct empirical testing. Nevertheless, this study provides a comprehensive understanding of the relationship between workforce analytics, employee privacy, and humanistic data governance and offers research directions that can be developed in the future.

# 3. RESULTS AND DISCUSSION

## 3.1 Results

Based on an analysis of ten Scopus-indexed scientific articles published during the period 2020–2025, it was found that the use of workforce analytics has developed into one of the strategic instruments in modern human resource management.

Organizations are increasingly leveraging employee data to support more accurate decision-making, increase productivity, manage talent, and predict workforce behavior. However, these developments also raise various ethical challenges related to privacy protection, data use transparency, and employee welfare.

The results of the literature synthesis show that there are three main themes that dominate research on workforce analytics, namely: (1) workforce analytics as a tool to improve organizational performance, (2) employee privacy as an ethical challenge in the use of employee data, and (3) humanistic data governance as a mechanism to balance organizational interests and employee rights. These findings indicate that the success of the implementation of workforce analytics is not only determined by technological capabilities, but also by the quality of data governance implemented by the organization.

**Table 2.** Main Findings of Selected Literature

| Theme                      | Main Findings                                                                   | Supporting Studies                            |
|----------------------------|---------------------------------------------------------------------------------|-----------------------------------------------|
| Workforce Analytics        | Improving the quality of decision-making and the effectiveness of HR management | Minbaeva (2021); Angrave et al. (2022)        |
| Employee Privacy           | Excessive digital surveillance can lower employee trust and well-being          | Jeske & Santuzzi (2022); Martin et al. (2023) |
| Algorithmic Management     | Algorithms improve efficiency but potentially reduce worker autonomy            | Newlands (2021); Kellogg et al. (2020)        |
| Humanistic Data Governance | Transparency and data protection increase trust and acceptance of technology    | Stahl et al. (2022); Meijerink et al. (2024)  |

### 3.2 Workforce Analytics and Organizational Performance

The literature shows that workforce analytics makes a significant contribution to improving organizational performance. Through labor data analysis, organizations can obtain more accurate information about productivity, work engagement, training needs, and potential employee turnover. This capability allows organizations to make more *evidence-based decisions* than traditional managerial approaches.

Minbaeva (2021) explained that workforce analytics has changed the function of human resources from just an administrative activity to a strategic partner that supports the achievement of organizational goals. By leveraging integrated data, companies can identify factors that affect individual and organizational performance more effectively. Similar findings were put forward by Angrave et al. (2022) who showed that workforce analytics are able to improve decision-making accuracy related to recruitment, employee development, and workforce planning.

In addition, the development of artificial intelligence and *machine learning* technology allows organizations to make predictions about various workforce behaviors that were previously difficult to identify. Therefore, workforce analytics is seen as a source of competitive advantage that can help organizations adapt to an increasingly dynamic and complex business environment.

### 3.3 Employee Privacy and Ethical Challenges

While workforce analytics provides significant benefits to organizations, the literature shows that its implementation also raises a variety of ethical issues, especially those related to employee privacy. The use of digital monitoring technology allows organizations to collect data on work activities, communication, location, and individual behavior in real-time. This practice often raises concerns about the boundary between an organization's need for data and an individual's right to privacy.

Jeske and Santuzzi (2022) found that excessive digital supervision can lower employee levels of trust in the organization. When employees feel that their activities are being monitored without adequate transparency, they tend to experience higher psychological distress and show lower levels of job satisfaction. The findings are reinforced by Martin et al. (2023) who suggest that perceptions of privacy breaches can negatively impact an organization's psychological well-being and commitment.

From the perspective of Ethical Human Resource Management, the use of employee data must consider the principles of fairness, transparency, and respect for human dignity. Therefore, organizations need to ensure that the process of data collection and use is done openly, obtains clear consent from employees, and has ethically accountable goals.

### 3.4 Algorithmic Management and Employee Well-Being

The development of workforce analytics has also encouraged the emergence of algorithmic management practices, which is the use of algorithms to manage, monitor, and evaluate workforce performance. This practice is increasingly applied in digital organizations because it is able to increase efficiency and objectivity in decision-making.

Newlands (2021) explained that algorithmic management provides benefits in the form of increased consistency and efficiency in the human resource management process. However, the overuse of algorithms also has the potential to reduce employee autonomy and create a high reliance on automated systems. This condition can cause feelings of loss of control over work and increase work stress.

Kellogg et al. (2020) found that workers often develop various forms of resistance to algorithmic systems that are perceived as non-transparent or unfair. In some cases, employees even make certain behavioral adjustments to avoid the

consequences generated by the algorithm. These findings show that the success of the implementation of the technology is not only determined by the sophistication of the system, but also by the level of acceptance and trust of users towards the technology.

Therefore, organizations need to ensure that the algorithms used in workforce analytics are transparent, *explainable*, and do not result in discriminatory decisions against certain groups.

### 3.5 Humanistic Data Governance as a Strategic Solution

One of the main findings in the literature is the importance of applying humanistic data governance as a solution to ethical dilemmas that arise from the use of workforce analytics. Humanistic data governance is a data governance approach that places humans at the center of the decision-making process related to the use of data and technology.

Stahl et al. (2022) explain that human-oriented data governance should be based on the principles of transparency, accountability, privacy protection, and employee participation. This approach aims to ensure that the use of data not only benefits the organization, but also protects the rights and well-being of the individuals whose data is used.

Meijerink et al. (2024) found that transparency in the use of workforce analytics has a positive influence on the level of trust and acceptance of technology by employees. When organizations clearly explain the purpose of data use and provide adequate protection of privacy, employees tend to show higher levels of engagement and commitment.

Thus, humanistic data governance can serve as a balancing mechanism that allows organizations to benefit from workforce analytics without sacrificing employee rights.

### 3.6 Discussion

The results of the literature synthesis show that the relationship between workforce analytics, employee privacy, and humanistic data governance is interrelated and inseparable. Workforce analytics provides strategic benefits to organizations through improving the quality of decision-making and the effectiveness of human resource management. However, the use of such technology also poses ethical risks related to privacy, digital surveillance, and employee well-being.

The findings of this study show that the successful implementation of workforce analytics is highly dependent on the organization's ability to develop ethical and human-oriented data governance. Humanistic data governance serves as a mechanism that integrates an organization's need for data with the protection of individual rights. Through adequate transparency, accountability, and privacy protections, organizations can build employee trust while maximizing the benefits of technology.

Theoretically, the results of the study expand the perspective of Ethical Human Resource Management by showing that the sustainability of the use of workforce analytics is not only determined by technological aspects, but also by the quality of governance and the protection of employee rights. These findings confirm that investment in analytics technology must be balanced with the development of data governance policies that are transparent, fair, and oriented towards workforce welfare.

Overall, the results show that the future of workforce analytics depends not only on the organization's ability to utilize data, but also on its ability to strike a balance between technological innovation, employee privacy, and human values in human resource management practices.

## 4. CONCLUSION

This study analyzes the relationship between workforce analytics, employee privacy, and humanistic data governance in the perspective of Ethical Human Resource Management (HRM) through the Narrative Literature Review approach to ten Scopus indexed scientific articles published in the period 2020–2025. The results of the literature synthesis show that workforce analytics has become a strategic instrument that is able to improve the quality of decision-making, the effectiveness of human resource management, and organizational performance through the use of data and digital technology. The research findings reveal that the benefits of workforce analytics are inseparable from the various ethical challenges related to employee privacy protection. The intensive use of labor data, digital supervision, and the application of algorithms in the human resource management process have the potential to pose risks to employee trust, welfare, and rights if they are not managed in a transparent and responsible manner. Therefore, privacy protection is an important factor in ensuring the sustainability of workforce analytics implementation in the modern work environment. The results of the study also show that humanistic data governance plays a role as a strategic mechanism that is able to balance organizational needs for data utilization with the protection of individual rights. Data governance based on the principles of transparency, accountability, fairness, and respect for human dignity can increase employee trust and strengthen acceptance of the use of analytics technology in organizations. Thus, humanistic data governance is an important foundation in realizing ethical and sustainable human resource management practices. Theoretically, this study enriches the literature on Ethical HRM, employee privacy, and data governance by integrating these three concepts in one comprehensive analytical framework. The main contribution of this study lies in the affirmation that the success of the implementation of workforce analytics is not only determined by technological capabilities, but also by the quality of data governance and the protection of employee rights. This study is limited to ten Scopus indexed articles published during the period 2020–2025. Therefore, further research is recommended to conduct empirical testing in various organizational and industry contexts to evaluate the relationship between workforce analytics, employee privacy, humanistic data

governance, and their impact on organizational trust, employee well-being, and organizational performance. The findings are expected to strengthen the development of more ethical, inclusive, and sustainability-oriented human resource management practices in the digital era.

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