

A STUDY ON AI AND HR ANALYTICS IN IMPROVING HR COMPLIANCE AND EMPLOYEE OUTCOMES

Mr. T. GANESH¹

¹PG Student, School of Management Studies, Sathyabama Institute of Science and Technology, Chennai

ABSTRACT

Artificial Intelligence (AI) and HR Analytics have become essential tools in modern Human Resource Management, especially in the context of implementing new labour codes in India. This study aims to analyse the role of AI and HR analytics in improving HR compliance and employee outcomes. The research examines factors such as awareness of AI, adoption of HR analytics, compliance efficiency, employee satisfaction, and organizational performance. Data was collected from over 100 respondents using a structured questionnaire. Statistical tools such as percentage analysis, Chi-square test, and ANOVA were used for analysis. The findings indicate that AI and HR analytics significantly improve HR compliance, reduce manual work, and enhance decision-making. However, challenges such as high cost, lack of skills, and resistance to change affect adoption. The study concludes that AI and HR analytics play a crucial role in improving HR efficiency and ensuring compliance with labour laws.

Key Words: Artificial Intelligence, HR Analytics, Labour Codes, HR Compliance, Employee Outcomes

1. INTRODUCTION

In today's rapidly evolving business environment, organizations are increasingly adopting advanced technologies to improve efficiency and decision-making. Artificial Intelligence (AI) and HR Analytics have emerged as powerful tools in Human Resource Management. AI helps automate HR functions such as recruitment, payroll, and compliance monitoring, while HR analytics enables data-driven decision-making.

The introduction of new labour codes in India has simplified labour regulations but also created challenges for organizations in terms of compliance and implementation. Traditional HR practices are often inefficient and prone to errors, making it difficult to manage compliance effectively.

AI and HR analytics help organizations overcome these challenges by automating processes, improving accuracy, and providing real-time insights. This study focuses on analysing how these technologies improve HR compliance and employee outcomes

2. BODY OF PAPER

2.1 Objectives of the Study

1. To analyse the role of AI in improving HR compliance
2. To study the impact of HR analytics on decision-making
3. To evaluate the effectiveness of AI in implementing labour codes
4. To assess the impact on employee outcomes
5. To identify challenges in adopting AI in HR.

2.2 Review of Literature

Jabbarzadeh et al. (2024) highlighted the role of AI in improving compliance and decision-making in organizations. Maharana and Lathabhavan (2023) found that Industry 4.0 technologies enhance HR efficiency and workforce performance.

Tiwari et al. (2018) emphasized the importance of big data analytics in improving decision-making processes. Mehrotra (2021) analysed the impact of labour codes on employee welfare, while Bhalotra et al. (2022) discussed challenges in labour law reforms.

Davenport and Ronanki (2018) explained how Artificial Intelligence is used in organizations to improve efficiency and reduce manual work. They found that AI helps in automating routine HR tasks and improves accuracy in work. The study also shows that AI helps organizations maintain better compliance by reducing human errors and improving data management.

Marler and Boudreau (2017) studied the importance of HR analytics in organizations. They found that HR analytics helps in analyzing employee data and improves decision-making. It also helps organizations plan better, reduce risks, and improve employee performance. The study shows that HR analytics plays an important role in improving overall organizational performance.

Vial (2019) explored the concept of digital transformation and its impact on organizational processes. The study concluded that digital systems improve efficiency, reduce manual effort, and enhance communication, although proper training and user acceptance are necessary for successful implementation.

2.3 Research Methodology

The study adopts a descriptive research design. Primary data was collected from approximately 102–103 respondents using a structured questionnaire. Secondary data was collected from journals, books, and online sources.

The sampling technique used is convenience sampling. Statistical tools such as percentage analysis, Chi-square test, and ANOVA were used to analyse the data and test the hypotheses.

2.4 Key Benefits

1. Improved HR Compliance

AI and HR analytics help organizations maintain accurate records and follow labour laws effectively, reducing the risk of legal issues.

2. Better Decision-Making

HR analytics provides data-driven insights that help management take better and faster decisions regarding employees and operations.

3. Increased Transparency

AI systems provide clear and real-time information, improving transparency in HR processes and decision-making.

4. Time Saving

Automation of routine HR tasks helps save time and allows HR professionals to focus on strategic activities.

5. Improved Employee Experience

AI tools help personalize employee services, improving satisfaction and overall work experience.

2.5 Major Obstacles

1. Data Privacy Concerns

Organizations face challenges in protecting employee data while using AI and analytics systems.

2. Dependence on Technology

Over-reliance on AI systems may create issues if there are technical failures or system errors.

3. Lack of Awareness

Some employees are not fully aware of AI tools and labour codes, affecting implementation.

4. High Implementation Cost

The cost of adopting AI systems is high for some organizations.

5. Skill Gap

Lack of technical knowledge creates difficulty in using AI effectively.

2.6 Suggestions

- Organizations should invest in AI and HR analytics tools to improve compliance and efficiency
- Training programs should be conducted to improve awareness and skills
- HR analytics should be integrated into decision-making processes
- Organizations should improve data management systems
- Regular updates and employee feedback should be encouraged

3. CONCLUSIONS

The study concludes that AI and HR analytics play a significant role in improving HR compliance and employee outcomes. These technologies help organizations automate HR processes, reduce errors, and enhance efficiency.

Despite challenges such as cost and lack of skills, the adoption of AI and analytics is essential for modern organizations. Effective implementation can lead to improved compliance, higher employee satisfaction, and better organizational performance.

REFERENCES

1. Jabbarzadeh, A., et al. (2024). Application of artificial intelligence in organizational compliance systems.
2. Andaloussi, B. (2024). Digital transformation and analytics in organizational operations.
3. Maharana, S., & Lathabhavan, R. (2023). Industry 4.0 technologies in HR functions.
4. Tiwari, S., et al. (2018). Big data analytics and decision-making.
5. Bhalotra, S., et al. (2022). Labour law reforms in India.
6. Mehrotra, S. (2021). Social Security Code and employee welfare.
7. Gupta, A., & Sharma, R. (2020). HR role in labour law compliance.
8. Kumar, V., & Singh, P. (2021). Labour compliance and employee outcomes.