

# Transforming Performance Management with AI

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## Abstract

No organization can be successful and sustained in the current business scenario if its human resources are not performing well. To perform their best, it's important that employee's work is very well aligned with the organization's strategy and overall objective. Many researchers have shown the positive correlation between performance management systems and organizational performance and success.

Performance management is defined as a continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals of the organization. It means the process is continuous and arranged in the sequence starting with defining key result areas, implementation of the plan which continuously monitored by the supervisors and ultimately employees' output is evaluated, and feedback discussed for the further improvement.

The current development and advancement in technology and introduction of artificial intelligence has improved many businesses processes. Hence, researchers have proposed using AI in performance management to make the process flexible. This research aimed to find out how integration of artificial intelligence changes and benefits the process of performance management.

**Key Words-** Human Resource Management, Performance Management, Artificial Intelligence, Organizational success.

## Introduction

The concept of performance management has been the most significant development in the sphere of HR management in recent times. Business, markets, and society have changed but by and large, the principles of management, the methods, and the concepts have not. With the evolution of the concept of performance management, the nature of HR management in organizations has undergone drastic changes in the recent past. Performance management is now an accepted HR management practice in many organizations. The emphasis has been shifted from 'command and control system' towards a 'committed based system'. This change reflects the growing importance of employees and their work performance to the attainment of objectives and strategy of organization.

Performance management is a systematic and holistic approach to identify critical dimensions of performance and to carry out activities necessary to ensure that the mission, objectives, goals, vision, and values of the organization are being met in an effective and efficient manner. It is systematic because it follows a sequence of steps from planning, managing, appraising, and monitoring with the objectives of meeting individual and organizational needs in the best possible manner. Its holistic as brings together many elements to make successful practice of HR management.

In this changed scenario, it is now possible to achieve performance levels once thought unattainable, but only when managers and employees establish clear lines of communication and understand how their jobs contribute to the goals of both them and the organization. Performance management is a key strategy of HR management aimed at improving organizational performance to attain and sustain its competitive advantage amidst stiff domestic and international competition. Performance management affects all the major HR sub systems of the organization. The success of HR management as a system and organization as a corporate entity is highly dependent on the effectiveness of performance management.

Orlikowski (2000) has argued that for organisations to achieve competitive advantages, they must keep abreast of society technological developments that enable them to develop their business, so it is necessary to utilize technologies such as AI to develop and improve the performance appraisal system and encourage employees by providing accurate and honest results of the evaluation system (Sholihin, 2013).

Artificial intelligence (AI) refers to the imitation of human intelligence in machines that are programmed to learn and make decisions like humans. It involves the use of algorithms and machine learning to analyse data, identify patterns, and make predictions. AI-powered systems can process vast amounts of data, learn from it, and provide insights that can help organizations make informed decisions.

As the HR landscape evolves, AI emerges as a valuable tool for enhancing the efficiency and effectiveness of performance management. Involving AI in performance management is not about replacing human judgment but rather augmenting it to create a more productive and inclusive work environment., Use of AI in performance management system can help HR professionals to stay ahead of their competition and focus on more strategic, value-adding activities.

## **Review of Literature**

The intersection of HR technologies and AI has given rise to innovative solutions for performance management, revolutionizing the way employee appraisals are conducted and evaluated. The integration of AI-powered tools and platforms provides HR professionals with advanced capabilities for data analysis, reporting, and decision support.

Tomeczak, Lanzo, & Aguinis, (2018) states that AI can rapidly analyse a large amount of data on employees' activities and behaviour, thereby boosting the accuracy of performance appraisals. Accurate information on how much and how well employees work has always been seen by business management as a crucial road to increased job productivity.

As per Dhir & Chhabra, in their study carried out in 2019 on automated employee evaluation explains that AI can generate recommendations that are more relevant for each employee on jobs with well-structured tasks. The power of AI analytics to quickly analyse massive amounts of data enables it to provide "personalized" advice at scale, that is, to make accurate and personalised recommendations.

To make maximize the use of AI generated performance management, HR professionals must establish robust data governance frameworks and transparent communication channels to address concerns and build trust among employees (Schneider I 2020).

## Objectives

To study the concept of performance management in today's business scenario

To understand how AI can incorporated in performance management and benefits of the same.

## Research Methodology

Research methodology is an important part of every research. Research methodology means collecting the information that can be used to analyse and to make use of those inferences to improve the business-related decisions. This paper is conceptual and based on the secondary data from research papers, publication, HR blogs, survey reports and other sources.

## AI in Performance Management: Key Applications

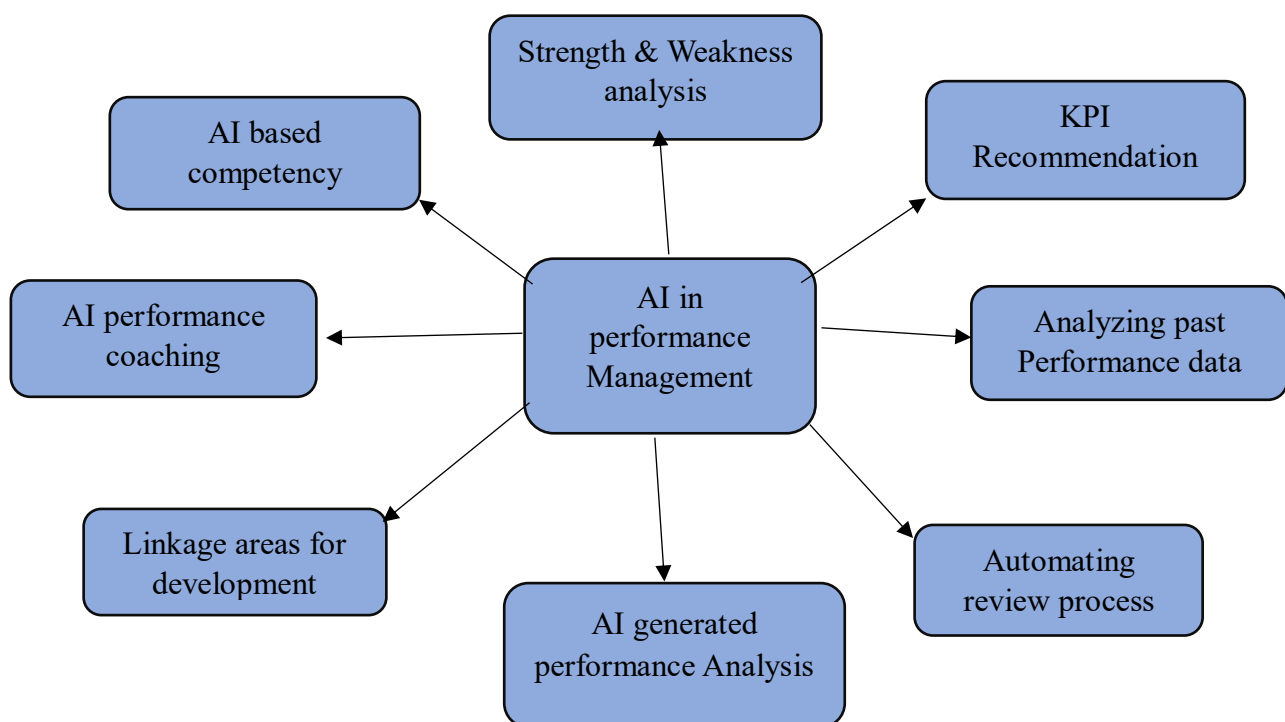


Fig 1.1 AI in Performance Management: Key Application

- **Strength & Weakness Analysis:**

AI system able to track the performance and behaviour of the employees. Which will give the idea to supervisor that who are performing well and who needs push to perform. AI based PMS give the detailed list of top skills of respective employees. This skill matrix helps to identify team's skills, spot strengths, talent density and development opportunities without any manual work.

- **KPI Recommendations**

AI Technology is evolving every day, now it has reached to a point where it can analyse employees past data and easily recommend the Key performance indicators for the respective employees which are linked with organization success factors.

- **Analyzing Past Performance Data and Predictive Analysis**

Analyzing past data does not end with recommending KPI, it further analyses how long an employee will take to finish the task in a normal and critical work environment. Time taking tools of AI makes accurate predictions about individual's performance in time.

Human resource information systems also have integrated predictive analysis tools to automate performance tracking and reporting. Some advanced tools also suggest the steps and initiatives to be taken to improve employee performance based on their current track.

- **Automating the review process**

The best part of AI using in performance management is automated review of employees' performance. AI based performance review allows employees to focus on factual details as it's free from biases and human errors. It gives real time insights into an individual's performance. AI based PMS generates report of recent feedback system from the scratch, create a check-in template and summarizes feedback for reviewees and reviewers.

- **Complete AI generated performance appraisal.**

Reviewing comments and feedback of self-review and peer review for each reviewee is really a tedious and time-consuming job which further leads to human errors. The AI generated performance report will have a summarization of all the inputs which can be discussed by manager during the appraisal review meeting which is fair and transparent.

- **Linking areas of development with training resources**

Identifying training gaps is the most crucial task of the manager. AI based performance management not only identify the top skills of employees but also identify the weak areas. It also suggests what type of training is to be provided to improve their performance in future. Advanced AI based Performance management tools also create a career path for the individual employee by connecting the dots between current performance, people skills and training opportunities.

- **AI performance Coaching**

When there is a regular performance conversation between employee and the manager gives a productive, engages and confident individual. Due to time constraints and other responsibilities

of the manager, hardly half of the employees will have such positive interaction with their managers.

Generative AI helps manager and employees to have better interaction by providing intelligent prompts for managers on employee data collected from the PMS. These are based on real-time analysis of employee performance, past conversations and the objectives set for an individual. The result for managers is tailored guidance so they can have meaningful personal interactions with their reports and be more effective coaches with less effort.

- **AI competency-based coaching**

AI can analyse performance feedback and data, suggest concrete goals, and provide coaching opportunities to develop new missing or lacking competencies. Competency coaching perfectly goes hand in hand with strength-based goals. They focus on expanding people's skills and competencies to get them closer to their ideal career goals. Competency-based coaching extends to leadership roles as well.

## **Benefits of AI in performance management**

In the evolving settings of human resource management, technology is making a significant whitecap like generative AI, ChatGPT etc. HR professionals are widely using AI for the functions like recruitment and selection, employee communication, employee engagement, learning and development etc. but quite reluctant to incorporate AI in performance management system due to concern of sensitive feedback process and confidentiality. However, there is a growing realization of the potential benefits that AI can bring to this oft-maligned aspect of HR. Here are listed benefits of incorporation of AI in performance management.

### **1. Summarizing and Collecting Performance Data:**

AI summarizes the employee's performance data from various sources, formal and informal, which automatically avoids recency bias as data is collected constantly. And provides a comprehensive view of employee performance.

### **2. Enhancing Communication and Collaboration:**

AI analyses communication and collaboration patterns of the employees within the organization, which safeguards comprehensiveness and configuration among the teams. It becomes a powerful organizational network analysis tool, monitoring conversations across various communication platforms.

### **3. Streamlining Performance Reviews:**

AI converts bulleted lists and notes into organised performance review drafts, allows managers to focus on refining feedback rather than drafting it from scratch. This streamlining of the administrative process enables more meaningful one-on-one discussions between managers and employees.

### **4. Improved employee productivity**

When performance feedback works best when it's provided in the flow of work. It gives chance to employees to apply immediately in real time. Providing regular feedback especially post Covid in remote or hybrid settings is a real task.

Augmenting performance management with AI can increase employee productivity by facilitating personalized feedback and performance insights — all in the flow of work. While employees get sound advice they can immediately implement for better outcomes.

### **5. Increased fairness and objectivity**

Rating errors and biases during performance evaluation skew the managers' perception about employee's performance. AI-generated performance reviews are bias-free and factual, which brings fairness and objectivity in the whole system. It gives a great employee experience as it reduces the subjective judgement due to data-driven feedback and document conversations.

### **6. Goal Setting and Personalized Development Plans:**

AI assists in setting performance goals based on defined criteria, creating action plans to accompany these objectives. It generates personalized learning plans based on performance reviews and individual career paths, facilitating continuous development.

### **7. Empowering Employees for Reviews:**

Employees can use their performance data and accomplishments and prepare themselves better for the performance review meetings.

### **8. Greater Organizational success**

Because AI helps organizations improve their performance management through data-driven insights, managers can make better judgments about coaching employees to improve and develop their strengths. This can ultimately lead to increased organizational success, as employees are focused on the areas with the biggest payoff and deliver better outputs for the business.

## **Challenges of implementing AI in Performance Management**

After the introduction of artificial intelligence in performance management, organizations experienced a profound shift. AI empowers organizations to collect and analyze the data to enhance employee's performance, facilitate managers in decision making and foster employee and ultimately organizational growth.

However, incorporating AI in performance management has several benefits, but has numerous challenges to HR as mentioned below.

1. **Data quality:** For accurate data analysis, AI is highly dependent on the quality of data. Ensuring data quality, consistency, reliability is a crucial challenge to the HR department.
2. **Bias and fairness:** AI analyzes the available performance data, hence, automatically considers perpetual biases which are present in the data. Hence, it's very important for the HR department to carefully design the data sets and customize the AI model to ensure fair evaluations.
3. **Employee acceptance and trust:** The AI model is complex and technical, hence, difficult to interpret the reports specially for non-technical people. It is required that the HR department should train their people about how AI works and reach to a particular conclusion and propose the recommendation in performance management. It will help

to gain the acceptance and trust of employees for using AI and effective utilization of the AI in performance management system.

4. **Human-AI balance:** Striking the right balance between AI-driven insights and human judgment is crucial. Overreliance on AI without considering human context and expertise may lead to suboptimal decisions and employee disengagement.
5. **Ethical considerations:** Ethical implications such as privacy, data security, and algorithmic fairness need to be carefully managed when implementing AI in performance management processes.
6. **Management Support:** Incorporating AI in performance management is a costly affair. So, it's crucial for HR to convince management about the benefits and effectiveness of using AI models for performance management.

## **AI Tools and Techniques used in Performance management.**

Artificial Intelligence (AI) has become a game-changer in performance management, providing organizations with powerful tools and techniques to enhance the effectiveness of their performance management processes. Some of the key AI tools and techniques used in performance management are as follows:

- Data Analytics
- Machine learning
- Natural language processing
- Sentiment analysis
- Recommender systems
- Chatbots and virtual assistance
- Bias detection and mitigation.

## **Conclusion**

In current, ever changing, and dynamic business environment, effective performance management plays very important role for achieving organizational success. The goal of PMS is to help boost employee performance and ultimately, the productivity of the organization. Performance management system is a broad, sweeping, living system, characterized by ongoing interactions, feedback and mutual ownership.

With IT revolution, the paradigm of organizational system has changed drastically. Given stiff competition, cost containment is a major paradigm of organizations intending to stay competitive. The AI enabled performance management comes as an effective tool to leverage the full benefits of the system at a comparatively much lesser cost of administration, data driven evaluations, intelligent performance analytics, personalized development and coaching, continuous feedback and performance monitoring, and predictive performance management.

Effective AI implementation optimizes decision-making, fosters employee development, and aligns efforts with strategic goals. Organizations must navigate challenges and foster a culture of continuous improvement to drive performance, engagement, and success.

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