

# TRANSFORMING PERFORMANCE MANAGEMENT WITH AI

## 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 proven that performance management systems have a positive correlation with organizational performance and success.

Performance management system involves identification of KRA, measuring individual and team performance against the standard sets which are in line with strategies, short term and long-term objectives set for an 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.

**Keywords:** Human Resource Management, Performance Management, Artificial Intelligence, Organizational success.

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## I. INTRODUCTION

In recent times the concept of performance management has gained popularity in the compass of Human Resource management. Business, markets, and society as large have changed greatly, but the concepts of management, its principles and practices of management are by and large still the same. As the concept of performance management system is evolved the nature of HR management in organizations has undergone drastic changes in the recent past. HR is becoming more and more proactive than the reactive one like earlier. Many organizations are shifting their performance evaluation system from performance appraisal to performance management. Which talks about continuous improvement and development in employee's performance.

The emphasis has been shifted from 'command and control system' towards a 'committed based system'.

This change echoes that organizations are becoming more employee centric and accepting the contribution and significance of employee's performance in organization success.

Performance management is a systematic and holistic approach which finds important parameters with priorities to define individual performance and ensure it is linked to the vision, mission statement. An effective performance management system makes sure that goals and objectives of the organization are being met in an effective and efficient manner. Performance management system contains sequence of steps like planning the objectives, managing and evaluation of the performance with continuous monitoring to achieve individual, team and eventually organizational objectives in the best possible manner. Its holistic as brings together many elements to make successful practice of HR management.

In performance management system it is possible to attain set objectives with required level of performance by setting clear communication system between subordinate and manager. Through this individual can very well understand how his work is contributing to achieving the organizations overall objectives. In recent years performance management has become a key strategy to competitive advantage of an organization. Performance management systems have an impact on all the important HR functions. The success of HR management as a system and organization as a corporate entity is highly dependent on the effectiveness of performance management. To sustain with new challenges and business demands encountered due to rapid change in business environment, organizations have to continually realine, modify and search new ideas to their performance management system

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 intellect in machines. AI software are developed in a such way that it will take decisions like human. 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.

## **II. REVIEW OF LITERATURE**

Integration of technologies in various processes has given boost to the performance of that department and HR is not left behind. Now a days HR is using advance technology in all the functions including Performance management. Use of Artificial intelligence in performance management has transformed the way employee's performance is assessed and given innovative solutions to the performance management. The Incorporation of AI software and platforms providing HR professionals with advanced capabilities for data analysis, reporting, and decision support.

Tomczak, Lanzo, & Aguinis, (2018) states that AI can rapidly analyse a huge dataset of employee's day do day activities, performance and even their behaviour, which gives accuracy and precisions to the appraisal of employee performance. It helps manager to assess accurately about how well employee is performing and achieving the objectives in each time frame. And it's essential in any businesses to increase productivity.

As per Dhir & Chhabra, in their study carried out in 2019 on automated employee evaluation explains that Artificial intelligent powered tools of performance management can generate personalised recommendations which are significant to their task.

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).

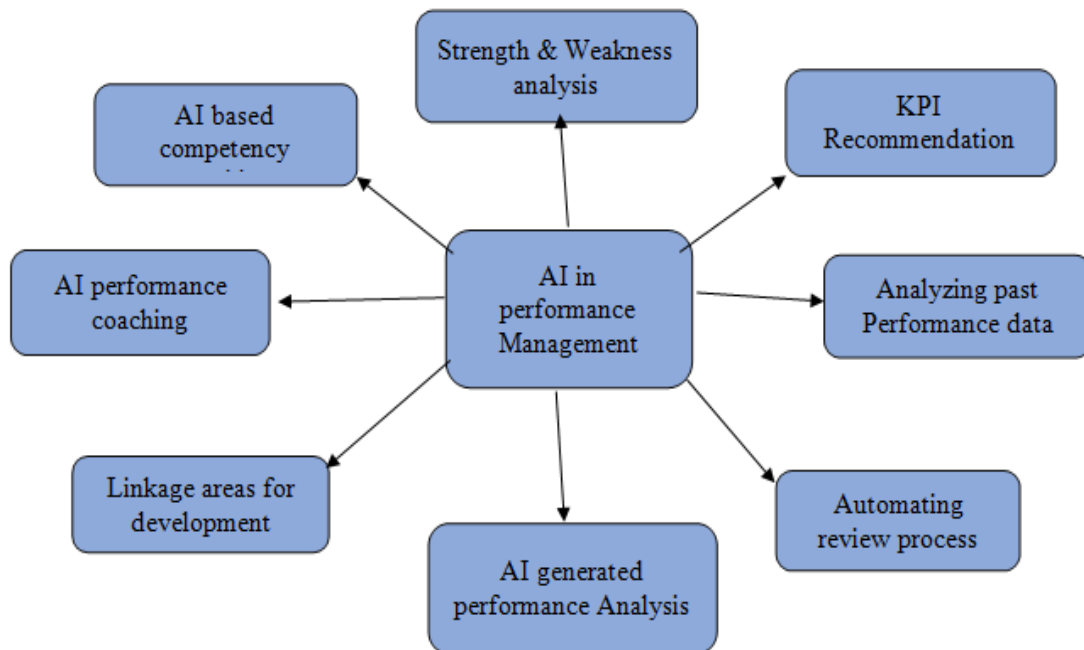
## **III. OBJECTIVES**

*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.*

## **IV. 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******Figure 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 matured enough to 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 respective employee's performance in time.

Employee database systems like HRMS or HRIS also have integrated data analysis tools including predictive analytics to automate performance tracking and reporting. Furthermore, 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 the 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 even employees to have better interaction during the appraisal time as it provides intelligent recommendations based on data collected through performance management system. The prompts are based on actual analysis of performance data, previous reports and the KRA defined for the respective employee. The report for assessor 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 powered tools analyse performance feedback and data given by the manager and identify the poor competencies, accordingly, recommend the concrete plan and opportunities to improve the performance in future. Competency coaching perfectly goes hand in hand with strength-based goals. With this results manager can coach his team members effectively by focusing on their strengths and can suggest a career path as they are dreaming for. Competency-based coaching extends to leadership roles as well.

**Benefits of Use of Artificial Intelligence 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. **Enhance Employee Productivity:** Performance feedback works at its best when provided when actual work is in progress. It gives chance to employees to apply immediately to improve the performance with set standards. Providing regular feedback especially post Covid in remote or hybrid settings is a real task.

When organization strengthen their performance system with AI, it enhances the overall performance and the productivity as employee get personalized feedback and performance insights during the work. When individual get accurate information and correct advice

Which is implemented then and there 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 biases free and factual which brings fairness and objectivity in the whole system. It gives a grate employee experience as 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:** AI provides reports which are data driven and evidence based. It helps individuals and managers to take better decisions. AI in PMS facilitate manager to coach their team members effectively. Overall it helps everyone to improve their performance as employees become more focus and deliver excellent outcome and higher productivity, which eventually lead to achieve organization success.

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

*After introduction of artificial intelligence in performance management, organization experienced a profound shift. AI empowers organization to collect, and analyse 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 HR department.
- 2. Bias and Fairness:** AI analyses the available performance data, hence, automatically considers perpetual biases which are present in the data. Hence, its very important for HR department to carefully design the data sets and customizes AI model to ensure fair evaluations.
- 3. Employee Acceptance and Trust:** AI model is complex and technical hence, difficult to interpret the reports specially for non-technical people. It is required that HR department should train their people about how AI works and reach to a particular conclusion and proposes 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:** For effective utilization of AI intervention in PMS it very much important to have the right balance between AI-driven insights and human judgment. High dependency on AI by eliminating human intervention may result to suboptimal decisions and further leads to dissatisfaction among the employees.
- 5. Ethical Considerations:** Employee performance data is very confidential and sensitive in nature. Hence, privacy and security of the data is utmost important. Also, algorithm used for the analysis need to choose carefully which will give faire output and should not be manipulated as future of the employee is dependent on his performance evaluation results.
- 6. Management Support:** Incorporating AI in performance management is a costly affaيرة. So, its 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.*

## V. CONCLUSION

*In current, ever changing, and dynamic business environment, effective performance management plays very important role for achieving organizational success. The objective of Performance Management system is to improve employee performance and eventually, the productivity of the organization. PMS is a wide ranging, and living system, includes continuous monitoring, mentoring, and mutual ownership.*

*With revolution in information technology, 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 empowered performance management is effective tool to leverage the optimum utilization of the performance management system. Also, incurred less cost for administer, provides data driven evaluation & solutions, predictive analytics of individual and organization performance, provided customized career development plans and coaching, ongoing performance feedback and monitoring.*

Amalgamation of AI in performance management system optimizes decision-making, fosters growth, and help to align individual goals with strategy and organization goals. Hence, Organizations must incorporate AI technology in Performance management to foster a culture of continuous improvement to drive performance which will lead to employee engagement, and organizational success.

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