# Optimizing Remote Work Performance Management: Ethical Implications of AI and AI Advancements

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## Abstract

As the main problem occurs because of the current trends of working from home, where organizations have to set up PMSs that take into account efficiency in individual performance measurement besides ethical issues in HRM. Current technology particularly AI can enable the use of such systems. Hence for organisations to accept performance management deals with remote working, they will need to set clear performance expectation from the employees so as to sustain in remote working environment, regular feedbacks and evaluation of performances. However, the shift to remote working arises new problems around the guarantee of communication among workers and the management of motivation. In this paper, we analyze the use of deep learning and decision tree algorithms to create PM Systems which consists of HR ethics alongside in the present work from home atmosphere. This article suggest that conventional ways of showing the management may not work in this case and instead suggests that human resource should modify itself to provide a just and ethical support to these employees. The work system proposed here comprises the use of deep learning techniques in examining employees and then using decision tree techniques to arrive at a fair/ethical decision. Therefore, the study indicated that this type of artificial intelligence method enhances the strategic human resources management roles to support employee and citizenship behaviours in a remote working environment.

**Keywords:** HR ethics, artificial intelligence, management system, deep learning, decision tree algorithm, HR technology integration.

## 1. Introduction

Human Resource ethics means the principles and values that explain how HR professionals should behave towards employees, management, or any third stakeholders. The importance of ethical behavior in business is about being a trusted corporate citizen and leading by example, which is really vital to creating and maintaining a healthy organizational culture for fairness and justice at work [1]. HR ethics have been a hot topic when it comes to recruitment and selection. HR professionals need to be ensure recruitment and selection processes are fair, transparent and merit-based. This means ensuring that job advertisements are accessible to all qualified candidates, that selection criteria are specific and relevant to the role, and that candidates are assessed fairly and objectively [2]. HR specialists also ensure that recruiting and

selection processes comply with the applicable rules and regulations. Let us discuss another unethical practice in HR which is performance management.

To ensure fairness, consistency and objectivity in these systems is the role of HR professionals. That means setting clear performance expectations, providing continuous feedback and coaching, and measuring employee performance against objective and reliable criteria [3]. HR practitioners, however, said the performance management process must not be used for anything other than rewarding or punishing people on the basis of their performance. Employee relation is another aspect of the ethics in HR. Promoting employee relations is the ideal role for HR practitioners, which means ensuring open communication between employees; addressing concerns and issues; treating employees with dignity and respect [3]. HR professionals also have to ensure that employees are not subject of harassment/discrimination and the disciplinary action is appropriate and consistent. The next ethics in HR matter that requires attention concerns compensation and benefits. HR specialists must ensure the fairness, equity and basis of salary and benefit systems [5]. This means ensuring employees are compensated fairly for the work they perform, benefits are offered uniformly to all workers and that compensation and benefits systems comply with all relevant laws. At last but not least, inclusion and diversity at workplace is one of the top ethical dilemma for HR. HR specialists say all employees should be treated with respect and decency, irrespective of race, sex, age, sexual orientation or any other trait [6]. It means driving diversity and inclusion through every aspect of the workplace, including hiring, selection, performance management, fostering constructive employee relations, pay and benefits. HR professionals should also ensure that workplace policies and practices are equitable and do not discriminate against any group of employees.

## 2. Performance Management System

Performance Management System (PMS) is a process to manage ability in the organization based on performance standards. This includes communicating expectations and objectives, giving feedback and coaching, as well performance appraisal and rewards for employees [7].

Components of that are within the performance management system and goal-setting, appraisal system, developmental aspect etc.[ 8] The purpose of it is to align the goals and objective of the individual with business strategy, to increase employee engagement and motivation and to assure that an employees performance serves the organizations goal. A good performance management system in a company enables the organization to identify and correct poor performers, rate high performers, & provide opportunities for growth [9].

## 3. Digital tools in hr

Digital tools are becoming increasingly popular in the field of Human Resources (HR) as they can streamline processes, save time, and improve communication between employees and HR professionals. Here are some examples of digital tools commonly used in HR as shown in figure 1:
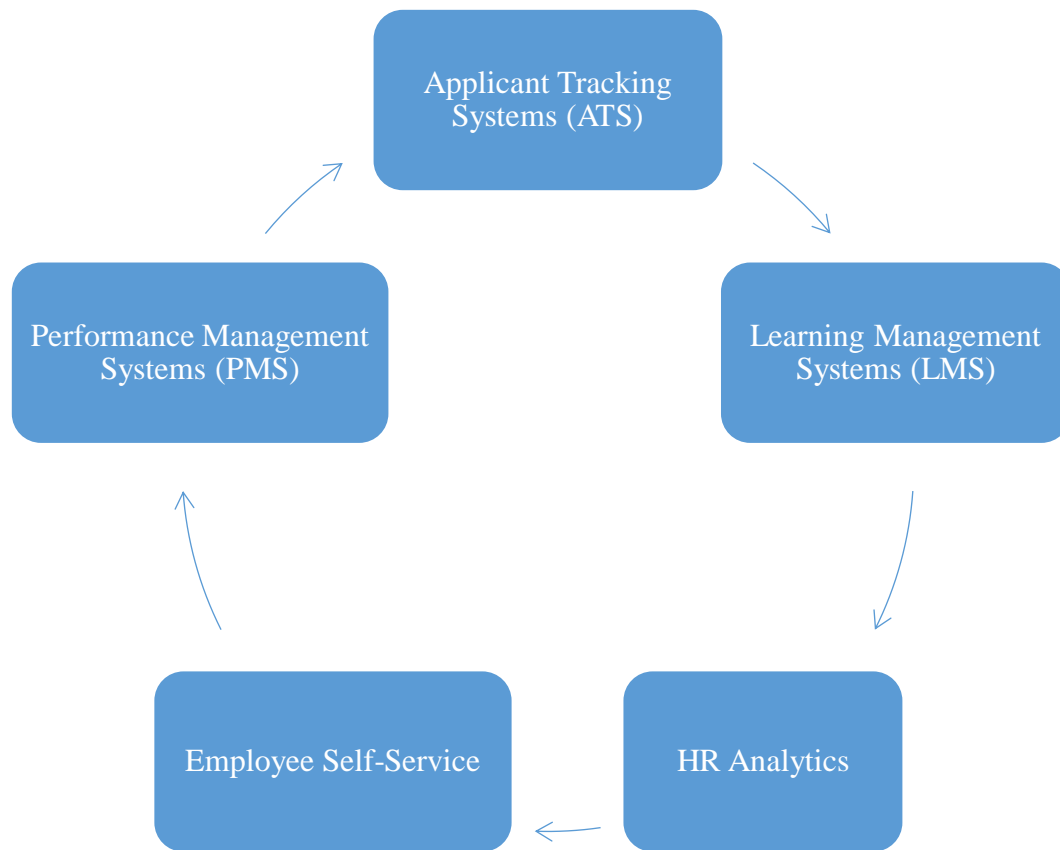
**Figure 1. Tools in HR**

**Applicant Tracking Systems (ATS) :** ATS software helps HR experts eliminate and organizes job postings, resumes, and applications making recruitment process automated. ATS software helps to filter and shortlist the top candidates, cut down recruitment costs and enhance the candidate experience.

**Learning Management Systems (LMS):** LMS solutions are utilized for managing employee training programs in addition to the system's ability to track progress and provide personalized learning experiences. It can be used to better employee skills and understanding, increase engagement as well as productivity, and reduce training costs [10].

**Performance Management Systems (PMS):** PMS software aids HR professionals with managing employee performance appraisals, goals and feedback. Right from addressing employee engagement with management communication tool building performance gap to business insight and promoting employee growth.

**HR Analytics:** Tools that use data to show patterns in people, engagement and performance. This information can guide HR professionals to make data-driven decisions which can enhance employee retention and identify areas of improvement.

**Employee Self-Service(ESS) Portals:** ESS portals enable employees to perform their own HR-related tasks, such as updating personal information, requesting time off and obtaining company

policies. This tool will also enhance the employee experience and alleviate the administrative burden from your HR professionals.

Such digital tools enable HR professionals to work with more efficiency, effectiveness and strategic relevance.Competitive advantage for better employee experience and a productive workforce at large.

## 4. Proposed system

The performances of the employees are evaluated on a decision tree algorithm which is an HR driven performance management system that considers objective metrics of the performances along with ethical considerations. It provides a decision tree algorithm that drives HR decision, following the predetermined criteria.

The performance goal and measures is the first step of the performance management system for every single organizaron. These can encompass productivity, communication skills, adaptability and time management. Performance data: Performance is measured through a range of sources, e.g., self-assessments, manager evaluations and performance metrics (11).

Therefore, each employee performance is evaluated based in the decision tree algorithm. We have to write out all of our labels in here so the algorithm knows both those qualitative performance data and blackballed ethical considerations we detected, like if it compromises privacy or is unclear, biased, unfair etc This way you make the process transparent and fair, because everyone is evaluated based on the same criteria.

Following the assessment, we give feedback to every member of your team and help formulate an action plan for improvement where necessary. The company constantly scans the system for improvement and makes changes to keep the good side clean.

In conclusion, In this paper we proposed a performance management system using an HR with one type of decision tree algorithm that is structured and fair to evaluate employee Performance taking into ethical constraints. This can help standardize the evaluation of all employees and enforces a culture where any potential ethics complaints are handled promptly and properly [12].

## 4.1 Performance analysis

The implementation of a performance management system in HR using a decision tree algorithm involves several steps, which are described in detail below in figure 2:

Establish Performance Goals & KPIs —Define performance goals and metrics: The initial step is setting the right performance goals for every employee. This includes deciding on what specific behaviours and performances are for each employee and standard by which they will be evaluated [13]. Performance goals, meeting sales targets or finishing projects as scheduled.

Gather performance data: After defining the performance goals and metrics, collect data on how each employee has done. This could also be derived from performance evaluations, sales reports, project completion rates etc. [14].

Identify possible ethical issues: One aspect of implementing the framework is to consider any ethical challenges that might arise as part of the performance evaluation process [15]. That could involve challenges around privacy, transparency, bias and fairness.

Create a decision tree algorithm: Depending on what was stated in the performance aims and metrics, as well as for ethical problems that may arise, make a call to an algorithm that uses a decision tree algorithm [16]. The decision tree algorithm is intended to advise HR decision-making on the basis of established measurement points that incorporate both objective performance data and the ethical considerations [17].
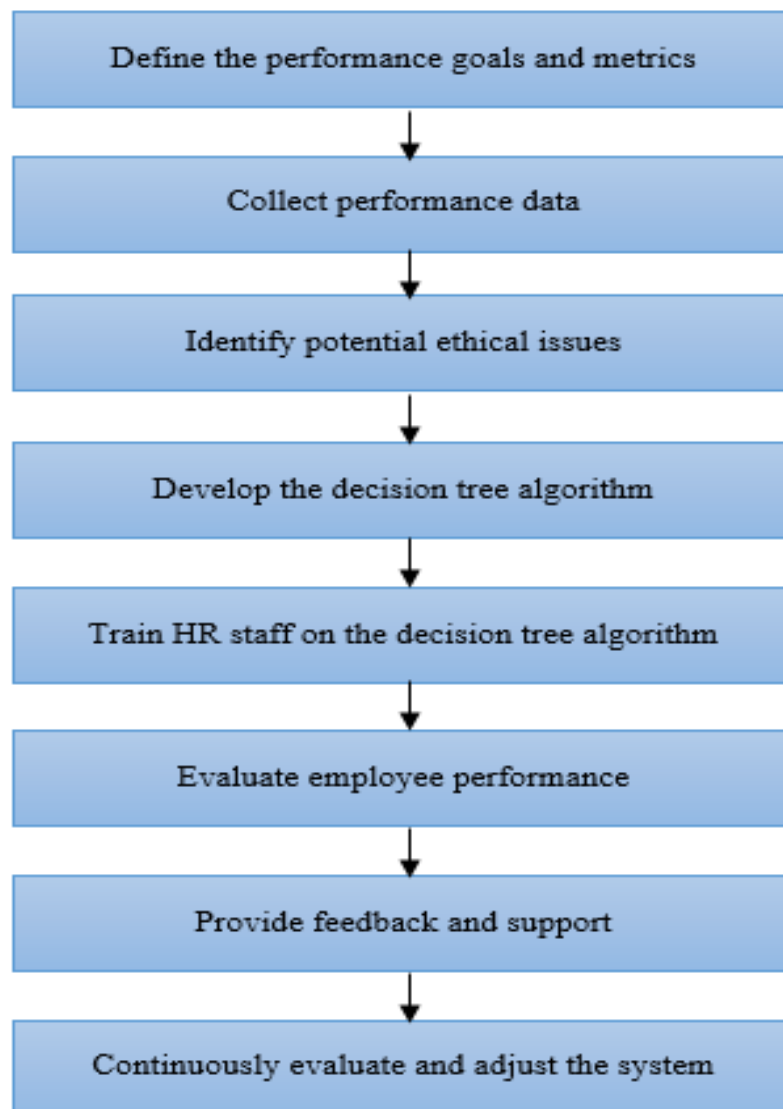


**Figure 2. Stages in the Proposed system**

Develop decision tree algorithm on how to rank applications and hire HR staff: After you have developed your decision tree algorithm, the next step is to train HR staff. One example:

explaining the algorithm criteria and how it should be used to evaluate employee performance [18])(

Performance of the employee assessment: It assesses the performance of an employee by using a decision tree algorithm. It proposes a way to reduce bias from the human evaluation process and implement the results in a standardized and fair treatment based on both objective performance numbers, and agreed ethical considerations [19].

Deals with ethics: If any ethical concerns arise during a performance evaluation they must be dealt with honestly and equally. This could entail re-evaluating a decision tree algorithm to see if it is biased or unfair, or giving more training / support for employees who might be struggling [20].

Evaluate and Support: Once the evaluation is done, feedback for every employee along with the support to empower themwith a plan of action to improve in case it were required. Such action may range from the provision of further training and resources for under-performing staff [21].

Review and refine the system: At last, the system is repeatedly reviewed and updated if need be to make sure it remains fair and moral. This could entail changes to the decision tree algorithm or adjustments to performance objectives and metrics, more training for HR staff [22].

## 4.2 Experimental outcome

A decision tree algorithm is a mathematical expression in a performance management system as below:

X1, X2, X3, ......,Xn : performance metrics of an employee (for n metrics)

We can build a decision tree as follows: the internal nodes of this tree indicate the metric to be used at that branch point. There is a branch for each potential outcome of the decision a given node faces, and these branches connect to other nodes [23].

The algorithm at each node selects the metric that results into highest information gain in terms of separating high and low-performing employees. To do so, we would calculate the entropy for each metric to select the one with the greatest reduction in entropy when it is used as a decision criterion [28].

The final decision node in the tree is the rating of absolute performance (based on how other choices turn out).

The decision tree can be represented mathematically as:

**Node 1:**

If X1 >= a1, go to node 2

If X1 < a1, go to node 3

**Node 2:**

If X2 >= a2, go to node 4

If X2 < a2, go to node 5

**Node 3:**

If X3 >= a3, go to node 6

If X3 < a3, go to node 7

**Node n-1:**
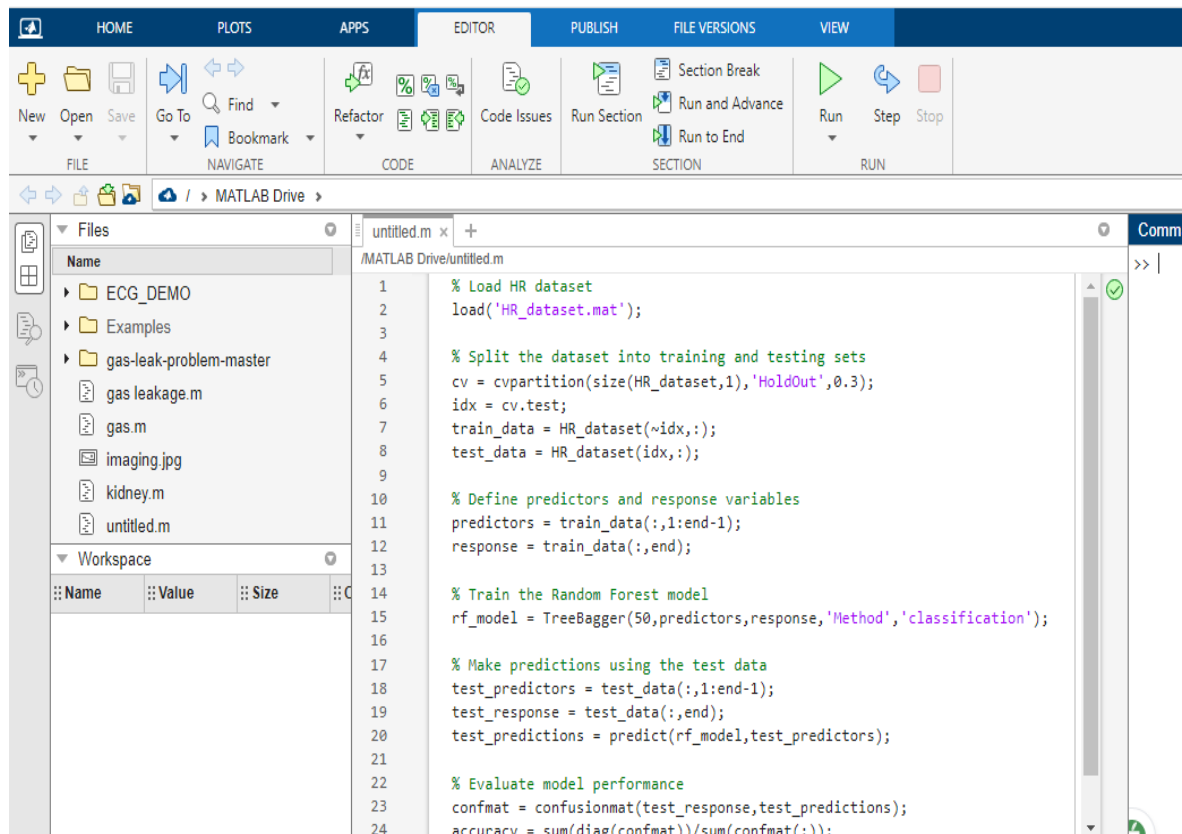
If Xn >= an, go to node 2n-2

If Xn < an, go to node 2n-1

**Node n:**

If performance >= a, assign rating R1

If performance < a, assign rating R2

In this representation, a1, a2, a3, ..., an-1, and an are the decision thresholds for each metric, and a is the decision threshold for the overall performance rating. R1 and R2 are the two possible performance ratings.

## 5. Simulation results

The proposed system is implemented in Matlab Simulink and obtained the optimum output as shown in figure 3.



**Figure 3. Matlab implementation**

### 5.1  Need for AI in HR

The need for artificial intelligence in human resources is demonstrated in figure 4.

For a remote work environment key to survival is Communication There needs to be clarity in communication and the employees should have all that they need to efficiently do their tasks [25]. It is, the responsibility of the HR professionals to see that such remote workers are providing with tools and resources necessary to convey their issues and grievances against their peer, teams, managers or even the HR [26].

**Feedback and performance review:** It is mandatory that remote team members are working according to the set goals and performing well [21]. HR professionals should create mechanisms to inform remote workers with performance feed-back and review based on specific schedule [28].

**Ethical considerations:** HR practitioners should take into account any ethical issues of performance management in a remote work setting. For example, that performance review criteria have been proper and fair, employee privacy has been protected, and remote employees are not exposed to any discrimination or harassment [29].
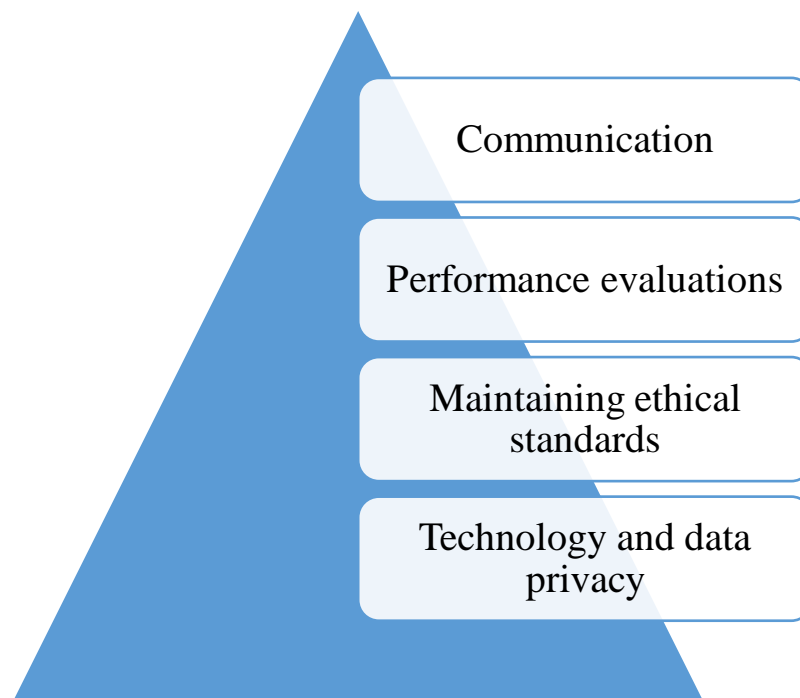


**Figure 4. Role of Ai in HR**

**Technology And Data Privacy:** If remote work requires the use of technology, then HR professionals need to ensure that performance management tools and systems are secure enough to preserve employee data and privacy.

## 6. Conclusion

Actually, decision tree algorithms may work in some HR fields (like recruitment and employee selection) but it is not applicable to conclude the effectiveness of performance management systems. Performance management is not one linear thing; After all, it involves communication, goal setting, feedback and evaluation. Instead of leaning on a decision tree algorithm, HR leaders should adapt their performance management strategy to align with the needs and context set forth by their organization and its employees. For instance, this might mean establishing an in-house performance management system that combines several mechanisms including structured check-ins, goal-setting, 360 peer feedback and self-assessments.

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