Case Summary: In case 6, we see an individual named Mr. Diallo who was dismissed by an automated system. The system misinterpreted the entire situation, revoked all of Mr. Diallo's access, and ensured that he was removed from the premises as if he were a thief. As a result of this incident, Mr. Diallo was jobless for a period of time. It was later discovered that the entire situation was caused by a misjudgment made by the automated system.

1. Evaluation of the Sustainability Impacts (Operational, Economic, and Social)

A. Positive Contributions (Operational/Economic Sustainability)

- **Increased Efficiency and Speed:** The adoption of automation systems across HR functions leads to a significant increase in efficiency and speed. This is because automation removes many intermediaries and unnecessary manual processes, which significantly accelerates decision-making. Furthermore, automation enables concurrent activities within HR systems. For instance, if an employee requires access approval, the system can immediately determine eligibility and grant access, while simultaneously notifying relevant higher authorities. This eliminates the time-consuming process of a human analyzing, verifying, approving the request, drafting an email, and sending it to multiple stakeholders. All these steps can be completed concurrently within minutes, making a substantial increase in speed inevitable.

- **Consistency:** Consistency in HR is ensured through automation because it eliminates personal bias from decision-making processes. Since procedures are executed by a system rather than individuals, everyone affected by the automation is treated equally and consistently. Additionally, automation does not suffer from fatigue, meaning tasks are completed instantly regardless of the volume of requests being processed.

- **Reduced Operational Costs:** The economic sustainability of a company that adopts HR automation undoubtedly improves. Firstly, fewer employees will be required to handle routine administrative tasks. Secondly, the existing workforce gains more time to focus on other productive activities. Employees who previously spent time on processes like approving access requests can now redirect their efforts toward higher-value work. As a result, companies can achieve greater economic sustainability by optimizing labor usage and increasing overall workforce productivity.

B. Negative Impacts (Social/Reputational Sustainability)

- **Severe Social Harm and Trauma:**
  - Individuals like Mr. Diallo, who became victims of an automated system that misinterpreted the situation, not only suffer long-term psychological trauma but also face severe social backlash. Society is more likely to trust automation than an individual, under the assumption that machines are unbiased and objective. As a result, people may believe that the incident was somehow Mr. Diallo's fault, assuming he must have done something wrong for his access to be revoked. This leads to social stigma and reputational damage. Even though Mr. Diallo was reinstated after three months, the emotional trauma does not simply disappear. A lifetime of professional credibility and personal dignity can be severely affected by such an incident. Furthermore, this trauma extends beyond Mr. Diallo to his colleagues, who may fear that they could face the same misinterpretation at any time. Knowing that anyone could be wrongly punished by an automated system creates a persistent sense of insecurity in the workplace, making the culture socially unsustainable.

- **Operational Fragility:**
  - This case demonstrates poor system design and operational fragility. The automation system relied on a "perfect input chain," assuming that all inputs would always be accurate and predictable. However, human behavior is inherently unpredictable, and randomness is unavoidable when dealing with real-world scenarios. A robust system should anticipate such variability. In cases where randomness occurs—especially when someone's career, reputation, and access are at stake—human oversight should be mandatory. In this instance, the system encountered an unexpected input, failed to handle it appropriately, and immediately revoked Mr. Diallo's access while essentially labeling him a thief. This reflects critically poor system design and low operational reliability.

- **Erosion of Trust and Culture:**
  - Although Mr. Diallo was reinstated after three months, the trust between employees and the organization suffered irreversible damage. Once trust in an automated system is broken, it is extremely difficult to restore. Even if the system is later improved or made more fail-safe, employees may never fully trust it again. Workplace culture depends heavily on trust, fairness, and a sense of psychological safety. Incidents like this explain why, even today, fully automated HR systems are still not universally adopted. Delegating the complete authority to revoke someone's job or access to a machine remains risky because qualities like empathy and

forgiveness cannot be replicated by automation. While an employer may forgive mistakes or consider context, an automated system operates strictly on rules and lacks moral reasoning.

- **Legal/Financial Risk:**
  - Finally, such incidents expose organizations to significant legal and financial risks. Wrongful termination, reputational harm, and emotional distress can lead to lawsuits, compensation claims, and regulatory scrutiny. The organization may be held legally liable for damages caused by flawed automated decision-making, especially if no human oversight was in place. From a financial perspective, companies also risk losing talent. Employees may feel unsafe working in an environment where job security depends entirely on an automated system that has previously failed. Even if salaries remain the same, skilled workers are more likely to choose organizations where human judgment plays a role in critical decisions. This can lead to higher turnover, increased recruitment costs, and long-term damage to the company's reputation and stability.

2. Analyzing the Ethical Challenges of the Algorithmic Solution

A. Accountability

- **The Accountability Gap:**
  - The automation system in this case creates a complex accountability gap, though the primary responsibility ultimately lies with the manager. The system designer built the automation based on specified managerial requirements; however, the manager, who oversees operations and defines policy implementation, failed to require mandatory human oversight for critical, high-impact decisions like revoking access or termination. Had a human been involved in reviewing such decisions, the automated system's error could have been intercepted, preventing the catastrophic outcome for Mr. Diallo. While the manager bears the ultimate governance responsibility, the designer holds partial accountability. A competent designer must anticipate the inherent randomness of real-world inputs and should explicitly warn managers—especially those lacking a technical background—about the potential catastrophic failure modes of a system without human intervention. In conclusion, while accountability is distributed between the user (manager) and the creator (designer), final authority over system boundaries and necessary human safeguards rests with the managerial level.
- **Lack of Human Oversight:**

- ○ Removing humans from the decision-making loop in automated systems—especially for serious, life-altering decisions—creates a significant ethical dilemma. While automation can reduce human bias, it simultaneously introduces new ethical concerns because such systems are ultimately deciding a person's future. When an employee works for an organization, they are hired, evaluated, and interacted with by other humans, not by an automated system. When termination or access revocation is handled solely by a machine, it creates an imbalance: a human is hired by people but dismissed by a machine. This inconsistency raises fundamental ethical concerns about fairness, dignity, and responsibility. A more ethical approach would be a hybrid system where automation handles routine decisions while humans retain authority over critical outcomes. The complete lack of human oversight in this case directly contributed to the harmful outcome. Furthermore, when a system causes lifelong trauma and social backlash by removing someone from their job, there must be accountability and explanation. An automated system cannot provide meaningful justification, empathy, or dialogue. Mr. Diallo could not question or appeal to the machine because it lacks the capacity to explain its reasoning or respond to moral concerns.

B. Transparency (Opacity of the Process)

- **Process Opacity:** If the entire process had been transparent, Mr. Diallo would have been able to identify where the system misinterpreted his situation. He could have either prevented the issue or immediately notified the operations manager that an error was occurring and that this misinterpretation was the reason for his dismissal. Such transparency could have prevented the long-term psychological and social trauma he experienced. Transparency is essential in automated decision-making systems. When employees depend on automation for their work and job security, they have a fundamental right to understand how the system operates, what rules it follows, and how decisions are made. Without this knowledge, employees are powerless when something goes wrong. In this case, Mr. Diallo should not have had to wait three months for an operations manager to discover that the system had made a mistake.

- **Rule-Based Opacity:** Moreover, relying entirely on managerial judgment to override automated decisions is risky. What if the operations manager had fully trusted the system's output and assumed it was correct, as automated systems are often perceived to be? In such a scenario, the error might never have been identified. To prevent this, transparency must be built into systems that otherwise operate as opaque "black boxes." If the system follows a rule-based model, those rules should be clearly documented and accessible to all employees. Providing employees with explicit guidelines

ensures they do not unknowingly violate system constraints and face severe consequences such as access revocation or termination. Additionally, these rules should be developed and reviewed with input from key stakeholders to ensure fairness, shared responsibility, and institutional transparency.

3. Examine Societal and Legal Implications & Responsibilities

A. Societal Implications

- **Automation Anxiety:**
  - Automation anxiety becomes a serious concern when automation is introduced into HR systems. As seen in Mr. Diallo's case, an employee lost his job due to a system misinterpretation, and the possibility of such errors occurring again creates constant fear among employees. When machines make critical decisions without human oversight, employees are likely to feel insecure about their job stability. This anxiety can have significant financial consequences for organizations, as skilled employees may avoid or leave companies where their livelihoods depend entirely on automated decisions. While automation may reduce bias, critical decisions such as termination or security access revocation should always involve human intervention or, at minimum, final approval from a manager. Without this safeguard, employees are likely to experience ongoing automation anxiety.

- **Shift from Rule-Following to Rule-Enforcing:**
  - In any organization, some rules are flexible or negotiable due to the inherently unpredictable nature of human behavior. Employees may occasionally violate minor or negligible rules, and HR professionals often exercise discretion by allowing exceptions based on context, performance, or intent. However, automated systems typically operate in binary terms—yes or no, true or false, revoked or not revoked. This rigid approach transforms rules into strict enforcement mechanisms rather than guidelines supported by human judgment. Humans do not operate purely on binary logic. High-performing or long-serving employees may occasionally be granted exceptions as recognition of their contributions. Automation systems lack the ability to understand such context, intent, or goodwill. Even if certain rules are labeled as negligible within the system, complex rule hierarchies may still trigger severe consequences, such as revocation, for minor infractions. Removing a valuable employee over a single, insignificant rule violation would be irrational and harmful to an organization. For ethical and practical

reasons, especially in HR, automation should support human decision-making rather than replace it entirely.

B. Legal Implications

- **Wrongful Dismissal:**
  - ○ This automated dismissal can be considered a case of wrongful termination because it lacked fundamental elements of legal and corporate due process. The action was taken without factual basis—the termination was caused by an administrative error (a missing approval) rather than employee misconduct or performance failure. Furthermore, the action lacked proportionality, applying the most severe penalty (public removal and job loss) for a minor system input failure. Since the organization is legally responsible for the actions of its systems, the dismissal was unauthorized and not for "just cause," opening the company up to significant liability.
- **Negligence in Design:**
  - ○ The primary evidence for legal negligence lies in the failure to incorporate standard safety measures into a high-consequence system. The organization had a duty of care to its employees, which it breached by deploying a system that could unilaterally and irreversibly revoke an employee's livelihood without any mandatory human-in-the-loop (HITL) review. Designing a system with zero human veto on a final, destructive outcome (like termination or public removal) suggests a reckless disregard for the potential for error and the severity of the harm, which meets the criteria for design negligence.

C. Responsibilities of Engineers and Organizations

Stakeholder	Responsibility to Ensure Safety, Fairness, and Compliance (Question Focus)	
Engineers/Developers	Engineers must proactively identify risks, limitations, and ethical concerns, and clearly communicate them to management, who may lack	

	technical background. They should design systems with continuous monitoring and regular performance evaluation to detect anomalies. Critically, engineers must build an explicit human-in-the-loop mechanism so that for critical decisions (termination, access revocation), the system only provides recommendations, and final approval is always retained by a human manager.	
Organizations/Management	Organizations and management must establish governance policies that prioritize due process by assigning trusted human decision-makers to oversee automation for high-impact outcomes. They should employ a dedicated team for monthly audits and performance evaluations to review system metrics and ensure the system is not producing harmful results. This ensures accountability and mitigates damage to employee trust.	
Regulators/Legal Bodies	External regulatory bodies play a crucial role by setting	

	legal standards that mandate human oversight for all high-stakes employment decisions. Regulations should require transparency and explainability in automated systems and enforce strict accountability when harm, such as unjust termination, occurs due to system error. This prevents organizations from using automation as an excuse to abdicate responsibility under labor law.	

In conclusion, automation systems can significantly improve efficiency, save time, and enhance financial sustainability for organizations by reducing bias and promoting consistency and fairness. However, when it comes to critical decisions, such as terminating employment or revoking security access, the final authority must remain with a human. A human decision-maker should always be responsible for clicking the final "yes" or "no" button in such high-impact situations. Organizations also have a responsibility to be fair and transparent with their employees regarding the use of automated systems. Employees must be clearly informed that such systems are in place and understand the strategic rules governing their operation. These rules should be discussed before hiring and formally communicated, through written documents or official emails, to ensure transparency and informed consent. Furthermore, designers and engineers of automation systems must go beyond simply following managerial instructions. While they build systems according to organizational requirements, they also have an ethical responsibility to identify risks, misinterpretations, and potential harms. When such issues are detected, engineers must actively notify the organization and advocate for safeguards. A strong ethical stance from engineers is essential to ensure that humans and automation systems work collaboratively and responsibly. Ultimately, automation should exist to improve human life, not to harm it. No individual should suffer lifelong trauma or social backlash due to system misinterpretations. A balanced, human-centered approach, where automation

supports decisions but does not replace human judgment, is essential for ethical, fair, and sustainable use of automated systems in HR.