Accountability

The last but equally important of the seven requirements on **Ethics Guidelines for Trustworthy AI** refers to "Accountability".

Mechanisms should be put in place to ensure **responsibility** and **accountability** for AI systems and their outcomes. **Auditability**, which enables the assessment of algorithms, data and design processes plays a key role therein, especially in critical applications. Moreover, adequate an accessible **redress** should be ensured.

The key requirement of "Accountability" ensures that **AI systems are designed and implemented with clear mechanisms for responsibility, oversight, and redress.** Assessing this requirement involves several key aspects to ensure that accountability is embedded throughout the lifecycle of AI systems.

Governance Structures and Roles

First and foremost, it is essential to clearly define roles and responsibilities of individuals and teams (e.g., **Data Protection Officer, AI Ethics Officer**, etc.) involved in the development, deployment, and maintenance of AI systems.

This also includes the responsibility of elaborating of risk/impact assessment of the AI system, considering, considering stakeholders that are (in)directly affected, to identify and mitigate risks.

Legal and Regulatory Compliance

AI systems must comply with relevant **laws and regulations, following ongoing policies and procedures that ensure compliance**. Mechanisms much be in place for legal and regulatory compliance checks and updates in response to changes in regulation.

Transparency and Documentation

Maintaining detailed documentation of the AI system's development process, decision-making logic, outcomes reasoning, and data handling practices is crucial for accountability. For "Accountability", it is important to also document potential

tensions among the other six requirements, trade-offs, as well as any decision taken to address them. And of course, the documentation **should be accessible to stakeholders, including developers, users, and regulators.**

To allow for such transparent documentation, AI systems should have **traceability mechanisms in place to track and log their operations and decisions**. This enables both internal and external audits and investigations to understand and address any issues that arise, further ensuring accountability and transparency.
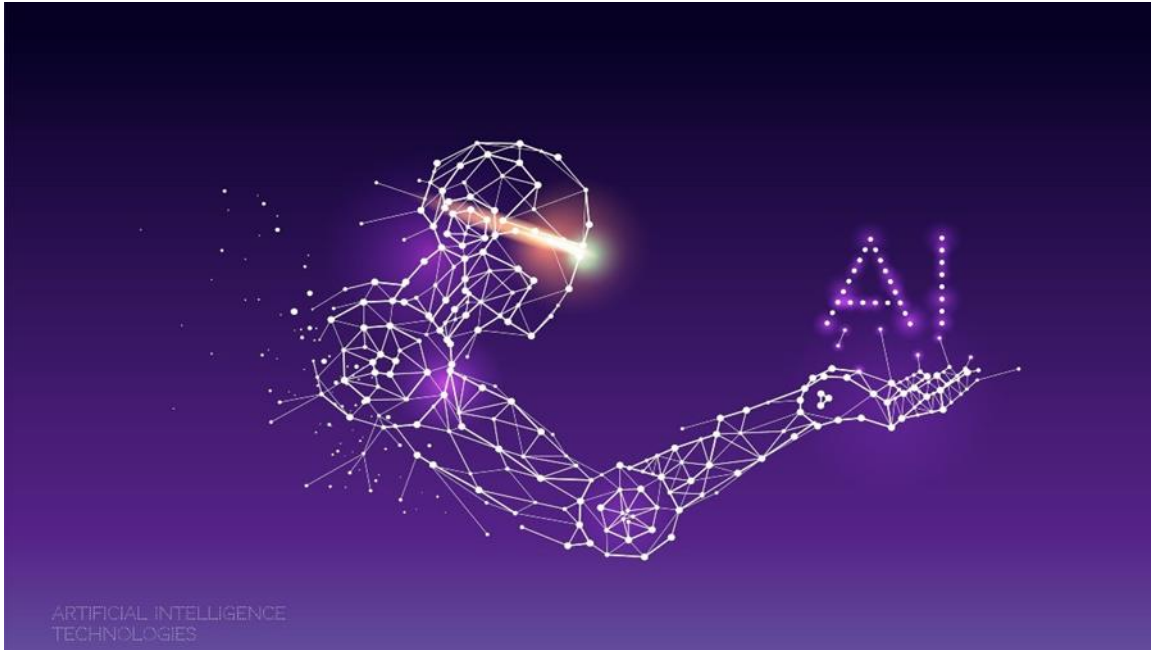
Ethical and Impact Assessments

Regular ethical reviews and impact assessments help identify and mitigate potential risks associated with AI systems. These reviews should involve diverse stakeholders to ensure a broad perspective on ethical implications.

A structured risk/impact assessment of the AI system considering stakeholders that are (in)directly affected must be elaborated early in the design phase of the AI system and revisited during the implementation, deployment and maintenance.

Redress Mechanisms

There must be **clear procedures** for users and **affected parties to report risks**, issues and **seek redress**. This includes having accessible channels for filing complaints and mechanisms for addressing and resolving these complaints, following a transparent and well-structured approach.

Continuous Monitoring and Improvement

Accountability also involves continuously **monitoring the AI system's performance and impact to ensure it remains aligned with ethical standards and regulatory requirements.** Regular updates and improvements should be made based on monitoring results and feedback.

Continuous monitoring should also cover information generated through feedback mechanisms that incorporate findings from user feedback to allow effective response to reported risks and negative effects and their translation into system improvements that **minimize risks, negative effects, and potential harm.**

Accountability in MANOLO

In MANOLO, **Arcada University of Applied Sciences** leads a dedicated task, that runs in parallel and together with the implementation activities, ensuring that all AI systems or components developed under MANOLO will adhere to the above principles. Arcada, together with the other technical partners, will ensure that the **"Accountability" requirement can be addressed at any given time, from the design, development, deployment, and maintenance within the cloud-edge continuum.**

Wrap up

Assessing the requirement of "Accountability" involves a comprehensive approach that includes establishing clear governance structures, ensuring legal and ethical compliance, maintaining transparency and documentation, implementing traceability mechanisms, conducting regular ethical reviews, providing mechanisms for redress, and continuously monitoring and improving the AI system. **By systematically addressing these areas, organizations can ensure that their AI systems operate responsibly and ethically, fostering trust and reliability in AI technologies.**