Exercise 1: AI Ethics and Governance

Exercise overview

In this case-based activity, you will evaluate the ethical and governance aspects of real-world AI systems by applying leading AI governance frameworks. This structured scenario is designed to build your ability to assess ethical risks, enforce compliance measures, and reinforce responsible AI thinking in practice.

Use case: Evaluating governance in AI deployment

Background

Organizations deploying AI technologies must ensure that ethical principles are embedded throughout the lifecycle. From data sourcing and model building to deployment and auditing, risks related to fairness, transparency, autonomy, and accountability can arise. You'll take on the role of an AI Ethics Advisor evaluating a fictional company's AI implementation against multiple governance frameworks.

In this exercise, you will:

- Apply ethics and governance frameworks to a practical case
- Reinforce key ethical concepts (e.g., fairness, autonomy, harm minimization)
- Evaluate real-world AI system compliance with selected frameworks (e.g., NIST AI RMF, EU AI Act, OECD)
- Develop analytical thinking to identify misalignments and gaps
- Support practical governance thinking through critical analysis and discussion

Estimated completion time

30 minutes

Task 1: Understand the scenario

Objective: Interpret the context of an AI deployment case

1. Review the fictional company's AI project summary, found in Appendix B of this lab guide.
2. Identify the AI system's purpose, affected stakeholders, and potential ethical concerns.
3. Make note of risks related to data, transparency, accountability, or bias.

Task 2: Framework alignment analysis

Objective: Apply ethics/governance frameworks

1. Choose one to two AI governance frameworks (e.g., NIST AI RMF, ISO 42001, EU AI Act).
2. Map relevant principles to areas in the case study.
3. Highlight misalignments, missing controls, or role confusion.
4. Evaluate how well the project meets the intent of each selected framework.

Task 3: Group discussion and reflection

Objective: Explore gaps and possible solutions

1. In small groups, share your findings.
2. Discuss which ethical principles are best addressed and which are overlooked.
3. Reflect on practical governance mechanisms (e.g., internal audits, human oversight, risk registers).

Task 4: Final recommendations

Objective: Draft a responsible AI checklist

1. Based on your analysis, draft a checklist of improvements (e.g., impact assessment, data audit trail, explainability protocol)
   Include:
   – Key ethical risk area
   – Framework guidance reference
   – Suggested remediation or governance control

Final output: group summary and ethical alignment table

Sample output:

Team: Group D

Frameworks compared: NIST AI RMF + EU AI Act

Key observations:

- Lack of transparency in decision scores flagged by both frameworks
- No formal risk register in the governance process
- Weak human-in-the-loop review for rejected candidates
- Strong documentation practices around training data sources

Recommendation:

- Establish an internal Responsible AI Governance Board, create automated fairness reports, and ensure all rejected candidates receive an appeal option.

Exercise review

1. What is the main benefit of using AI governance frameworks in real-world AI deployments?

    A. Improve model accuracy

    B. Automate testing

    C. Ensure ethical, safe, and lawful AI use

    D. Speed up development

2. Which of the following is most aligned with the principle of "accountability" in AI governance?

    A. Auditing system decisions and assigning responsibility

    B. Randomizing model parameters

    C. Collecting anonymous user data

    D. Removing sensitive features from the dataset

STOP

You have successfully completed this exercise.