



AI Risk Assessment Register Template

(Aligned with ISO/IEC 42001 & ISO 19011)

General Information

- **Organization:** _____
- **AI System / Project Name:** _____
- **Version / Model ID:** _____
- **Owner / Department:** _____
- **Assessment Date:** _____
- **Assessed by (Name & Role):** _____
- **Reviewed by (Auditor / Risk Manager):** _____

Risk Assessment Table

Risk ID	Risk Description	Lifecycle Phase (Design / Training / Deployment / Monitoring)	Category (Ethical, Technical, Legal, Security, Societal)	Likelihood (1–5)	Impact (1–5)	Risk Rating (LxI)	Mitigation / Control Measures	Responsible Party	Status (Open / Closed / Under Review)	Evidence / Notes
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R-001	Bias in training data leading to unfair outcomes	Training	Ethical / Societal	4	5	20 (High)	Implement bias detection tools; diversify training datasets	Data Scientist	Open	
R-002	Model vulnerability to adversarial attacks	Deployment	Security / Technical	3	4	12 (Medium)	Regular penetration testing; adversarial robustness techniques	Security Officer	Under Review	
R-003	Violation of data privacy regulations (GDPR, ISO/IEC 27701)	Design / Data Collection	Legal / Ethical	2	5	10 (Medium)	Apply privacy by design; anonymization techniques; data governance	Compliance Officer	Closed	
R-004	Lack of explainability in AI decisions	Deployment / Monitoring	Ethical / Transparency	4	4	16 (High)	Implement explainable AI models; maintain documentation; user-facing explanations	AI Engineer	Open	

R-005	Environmental impact of large-scale model training (high energy use)	Training	Sustainability	3	3	9 (Medium)	Optimize algorithms; use green data centers; carbon offsetting	Project Manager	Open	
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Risk Scoring Guide

- Likelihood (1–5):**
1 = Rare, 2 = Unlikely, 3 = Possible, 4 = Likely, 5 = Almost Certain
- Impact (1–5):**
1 = Negligible, 2 = Minor, 3 = Moderate, 4 = Major, 5 = Severe
- Risk Rating (LxI):**
1–5 = Low | 6–12 = Medium | 15–25 = High

Corrective & Preventive Actions (CAPA)

- Nonconformity / Risk Triggered:** _____
- Corrective Action Taken:** _____
- Preventive Action Planned:** _____
- Owner:** _____ **| Deadline:** _____
- Follow-up Required:** ☐ Yes ☐ No

Approval

- Risk Owner Signature: _____ Date: _____
 - Lead Auditor / Reviewer Signature: _____ Date: _____
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☒ This template allows organizations to:

- Identify and document AI-specific risks at each lifecycle phase.
- Score risks based on **likelihood and impact**.
- Track **mitigation actions, accountability, and audit status**.
- Maintain a clear, auditable record consistent with **ISO/IEC 42001 & ISO 19011 principles**.