AI Use Case Assessment
for Explainability

Type: Assessment Tool

Target Audience: AI Product Managers, Compliance, Legal

This tool helps determine the required level of AI transparency and explainability based on the stakes of the application. Not all AI systems require the same level of interpretability.

Use Case Information

Field	Details
AI System Name	
Use Case Description	
Assessment Date	
Assessor	

1. Consequentiality Analysis

Assess the impact level of AI decisions on individuals.

Impact Level	Description	Examples	Select
Low	Minimal impact; easily reversible	Content recommendations, spell check, search ranking	[ ]
Medium	Noticeable impact; reversible with effort	Customer service routing, pricing optimization	[ ]
High	Significant impact on opportunities	Loan pre-screening, job filtering, insurance pricing	[ ]
Critical	Affects rights, safety, or life outcomes	Criminal risk scoring, medical diagnosis, benefits	[ ]

2. Stakeholder & Rights Identification

Identify who is affected and what rights may be at stake.

Affected Stakeholders (check all that apply)

☐ Employees (hiring, evaluation, termination decisions)
☐ Customers/Consumers (pricing, service, access decisions)

☐ Patients (medical decisions, treatment recommendations)
☐ Citizens (government services, benefits, law enforcement)
☐ Vulnerable populations (children, elderly, marginalized groups)

Rights Potentially Affected (check all that apply)

☐ Privacy / Data protection
☐ Non-discrimination / Equal treatment
☐ Due process / Right to appeal
☐ Right to human review

3. Regulatory Requirement Mapping

Identify legal explainability obligations based on jurisdiction and sector.

Regulation	Scope	Explainability Requirement	Applies?
EU AI Act	High-risk AI systems in EU	Transparency and human oversight required	[ ]Y [ ]N
GDPR Art. 22	Automated decisions affecting EU individuals	Right to explanation of logic involved	[ ]Y [ ]N
US ECOA/FCRA	Credit decisions	Adverse action notice with specific reasons	[ ]Y [ ]N
NYC Local Law 144	Employment decisions in NYC	Bias audit + notice to candidates	[ ]Y [ ]N
Colorado AI Act	High-risk decisions in Colorado	Impact assessment + disclosure	[ ]Y [ ]N

4. Feasibility Study

Evaluate trade-offs between interpretable and complex models.

Consideration	Interpretable Model	Complex Model (Black Box)	Assessment
Performance	May have lower accuracy	Often higher accuracy	
Explainability	Inherently explainable	Requires post-hoc methods	
Regulatory	Easier to demonstrate compliance	May require additional docs	
User trust	Higher transparency	May face skepticism	

Performance Gap Assessment: Can an interpretable model achieve acceptable performance?

[ ] Yes, interpretable model is sufficient [ ] No, complex model required [ ] Testing needed

5. Explainability Level Decision

Based on the assessment above, determine the required explainability level.

Level	When Appropriate	Implementation	Select
None Needed	Low-stakes, no regulated domain, no affected rights	No specific explainability requirements	[ ]
Post-hoc Explanations	Medium stakes, user trust needed, some regulatory	SHAP, LIME, feature importance, counterfactuals	[ ]
Inherently Interpretable	High/critical stakes, strong regulatory, affected rights	Decision trees, linear models, rule-based systems	[ ]

Assessment Summary

Consequentiality Level: [ ] Low [ ] Medium [ ] High [ ] Critical

Regulatory Requirements: [ ] None [ ] Disclosure [ ] Explanation [ ] Interpretable required

Recommended Explainability Level: _____

Justification: _____

Assessor Signature: _____ **Date:** _____