

Human-in-the-Loop (HITL) Checklist

Designed for corporate teams and capstone students, this workflow document operationalizes Human-in-the-Loop oversight into four concrete verification stages. It ensures every AI-assisted asset undergoes rigorous data privacy, factual accuracy, bias mitigation, and human accountability checks before publication.

Stage 1: Data Privacy & Security Verification

- ☐ **PII & Sensitive Data Redaction:** Verify no Personally Identifiable Information (names, emails, financial records, SSNs) or sensitive data is present in model inputs or outputs.
- ☐ **Proprietary & Confidential Data Protection:** Ensure internal company data, trade secrets, or confidential capstone research are protected and not exposed to unauthorized third-party public models.
- ☐ **Data Retention & Vendor Compliance:** Confirm that data retention and model training policies of the AI tools used comply with organizational agreements and privacy policies.
- ☐ **Regulatory & Institutional Alignment:** Validate compliance with applicable data privacy laws (e.g., GDPR, CCPA, HIPAA) and academic IRB guidelines.

Stage 2: Factual Accuracy & Source Verification

- ☐ **Primary Source Verification:** Cross-reference all facts, figures, statistics, quotes, and dates against verified primary sources.

- [ ] **Hallucination & Fabrication Screening:** Audit for invented references, non-existent URLs/DOIs, fake quotes, or fictitious citations.
- [ ] **Mathematical & Logical Consistency:** Manually verify calculations, data tables, code logic, and quantitative conclusions.
- [ ] **Currency & Relevance:** Ensure all referenced facts reflect up-to-date knowledge and current context.

Stage 3: Bias Mitigation & Tone Alignment

- [ ] **Algorithmic & Stereotype Bias Audit:** Review text and visual outputs for unfair bias, cultural stereotypes, or exclusionary language across demographic categories.
- [ ] **Brand & Academic Voice:** Ensure the tone, style, and formatting align with corporate communications guidelines or academic writing standards.
- [ ] **Balanced Perspective:** Verify that complex topics are presented with objective balance and unsupported assumptions are removed.
- [ ] **Contextual Nuance:** Check that subtle cultural, domain-specific, or situational nuances are accurately represented.

Stage 4: Human Accountability & Final Authorization

- [ ] **AI Disclosure & Attribution:** Properly document and disclose AI tool usage in accordance with corporate policies or academic integrity codes.
- [ ] **Subject-Matter Expert (SME) Review:** Obtain formal review and validation from relevant technical, legal, domain, or academic advisors.
- [ ] **Risk & Impact Assessment:** Evaluate potential operational, legal, or reputational risks associated with deploying or publishing the asset.
- [ ] **Human Sign-Off & Responsibility:** Assign explicit final ownership and accountability to a named human author/reviewer prior to release.

Sign-Off & Governance Record

Verification Role	Designated Reviewer	Verification Date	Approval Status
Primary Author / Lead	Person	Date	Completed
Subject-Matter Expert (SME)	Person	Date	Completed
Final Publishing Authority	Person	Date	Pending