

Ai Panthiya - Ai Beginner Starter Pack

Use this pack to move from “I want to use Ai” to a clear, testable and responsible first project.

1. Learning route

1. Learn Ai, Machine Learning, Deep Learning and Generative Ai distinctions.
2. Learn data, features, labels, training, validation, testing and inference.
3. Define one real problem and the people affected by it.
4. Check whether Ai is necessary and whether suitable data or evidence exists.
5. Select a simple baseline before a complex method.
6. Build a small prototype.
7. Evaluate quality, failure cases, fairness, privacy, cost and usefulness.
8. Document the result and decide whether to improve, deploy or stop.

2. Problem definition

- User or stakeholder:
- Current problem:
- Current process:
- Desired outcome:
- Why the problem matters:
- Evidence that the solution worked:
- What must never happen:
- Why Ai may be more suitable than a fixed rule:

3. Ai Solution Canvas

- Users and affected people:
- Input data or instructions:
- Ai capability required:
- Proposed model, algorithm or service:
- Output and user action:
- Human review point:
- Evaluation metrics:
- Privacy, fairness, security and safety risks:
- Deployment environment:
- Monitoring and ownership:

4. Use-case quick score

Score each area from 1 (weak) to 5 (strong): value, data readiness, technical feasibility, user adoption and measurability. Reverse-score risk and implementation effort. Stop if privacy, legality, safety or verification cannot be handled responsibly.

5. Responsible-use gate

- ☐ The purpose and affected people are clear.
- ☐ Required data can be used lawfully and appropriately.
- ☐ Important outputs can be verified.
- ☐ Human oversight has real authority.
- ☐ Failure and misuse scenarios are documented.
- ☐ Users understand important limitations.
- ☐ A simpler solution was considered.

6. First-method guide

- Category prediction → Logistic Regression or Decision Tree baseline.
- Numerical prediction → Linear Regression or Decision Tree Regressor baseline.
- Group discovery → k-Means plus cluster-quality review.
- Time-based prediction → Naive Forecast before advanced forecasting.
- Similar-item recommendation → Content-Based Recommendation baseline.
- Generated text with private knowledge → RAG prototype with evidence checks.

Always compare the chosen method with a simple baseline and real user needs.