



CATHA PRACTICAL AI FOR CONSTRUCTION LIBRARY

The Construction AI Implementation Workbook

From Construction Workflow Idea to Production

Guide 15

Practical AI for Construction. Responsible. Outcome-driven.

Catha Construction Services | 2026 Edition

How to Use This Guide

This workbook is a practical project plan for one AI-enabled workflow from discovery through production.

Use this workbook on one construction workflow at a time. Identify the process owner, baseline KPI, systems, project/company data, authority level, human controls, evaluation set, pilot users and rollback plan.

Best use

Complete each gate in order. A blank field is a signal that the project is not yet ready to advance.

Stage 1 - Outcome

Item	Owner	Status / decision
Business problem		
Process owner		
Baseline KPI		
Target KPI		
Non-AI alternative considered		

Stage 2 - Workflow

Item	Owner	Status / decision
Current process map		
Inputs		
Outputs		
Exceptions		
Human decisions		
Systems involved		

Stage 3 - Data

Item	Owner	Status / decision
Authoritative sources		
Data owner		
Access rules		
Data quality issues		
Freshness requirement		

Stage 4 - Solution

Item	Owner	Status / decision
Delivery model		
Model/tool choices		
Integration approach		
Human review design		
Authority level		

Stage 5 - Risk & Control

Item	Owner	Status / decision
Failure modes		
Sensitive data		
Security controls		
Approval gates		
Logs		
Rollback/kill mechanism		

Stage 6 - Evaluation

Item	Owner	Status / decision
Ground-truth test set		
Quality metrics		
Safety tests		
Operational tests		
Release thresholds		

Stage 7 - Pilot

Item	Owner	Status / decision
Pilot users		
Pilot duration		
Training		
Support channel		
Success/failure criteria		

Stage 8 - Production

Item	Owner	Status / decision
Owner on call		
Monitoring		
Incident runbook		
Change control		
Cost dashboard		
Review cadence		

Go/No-Go Gate

Check	Item	Notes
☐	Business owner approves the outcome and baseline	_____
☐	Security/data owner approves access	_____
☐	Evaluation thresholds are met	_____
☐	No critical control failures remain	_____
☐	Human users are trained	_____
☐	Incident/rollback path is tested	_____
☐	Full operating cost is understood	_____
☐	Production owner accepts ongoing responsibility	_____

30/60/90-Day Review

Review	Questions
30 days	Is adoption real? Are exceptions higher than expected? Any control failures?
60 days	Is measured value tracking to the business case? What needs redesign?
90 days	Scale, hold, change or stop? What evidence supports the decision?

Construction Applications

A workflow is not production-ready because a demo looked good. Advance only when acceptance criteria are met on representative construction work and operational ownership is clear.