



CATHA PRACTICAL AI FOR CONSTRUCTION LIBRARY

The Construction AI Maturity Ladder

How Ready Is Your Construction Business to Scale AI?

Guide 2

Practical AI for Construction. Responsible. Outcome-driven.

Catha Construction Services | 2026 Edition

How to Use This Guide

This guide helps leadership identify the organization’s current AI operating maturity and the next responsible step.

Construction firms should mature from individual experimentation to governed operating capability. The correct level depends on data quality, workflow ownership, integrations, human controls and the consequences of an error.

Best use

Score the organization on actual operating practice, not ambition. A company is only at a level when the required controls and behaviors are consistently in place.

The Six Levels

Level	Name	What it looks like	Primary objective
0	Unprepared	No approved use; fragmented data; unclear ownership.	Create basic policy, ownership and process visibility.
1	Experimenting	Individuals use public AI tools for low-risk work.	Learn safely and identify repeatable use cases.
2	Assisted Work	Approved tools support named workflows; humans remain accountable.	Standardize effective assistance and measure outcomes.
3	Controlled Automation	AI is embedded in repeatable workflows with approvals, logs and exception handling.	Automate bounded work without losing control.
4	Integrated AI Operations	Multiple systems, teams and AI services operate under shared governance and observability.	Coordinate AI across the enterprise.
5	Governed Agentic Enterprise	Agents can execute multi-step work inside explicit authority, controls and recovery mechanisms.	Scale autonomy only where evidence supports it.

Level 0: Foundation

Check	Item	Notes
☐	Executive owner identified	_____
☐	Acceptable-use rules exist	_____
☐	Core processes documented	_____
☐	Sensitive data categories identified	_____

Level 1: Safe Experimentation

Check	Item	Notes
☐	Approved tools list	_____
☐	Basic employee training	_____
☐	No autonomous external actions	_____
☐	Examples of useful/unsafe use captured	_____

Level 2: Assisted Work

Check	Item	Notes
☐	Named workflow owners	_____
☐	Baseline and KPI for each use case	_____
☐	Human review points defined	_____
☐	Prompt/process standards	_____

Level 3: Controlled Automation

Check	Item	Notes
☐	Service identities and least privilege	_____
☐	Audit logs	_____
☐	Exception queues	_____
☐	Regression testing	_____
☐	Rollback/kill mechanism	_____

Level 4: Integrated Operations

Check	Item	Notes
☐	Central portfolio governance	_____
☐	Shared integration patterns	_____
☐	Model/vendor routing strategy	_____
☐	Cost observability	_____
☐	Enterprise incident response	_____

Level 5: Governed Agents

Check	Item	Notes
☐	Explicit authority registry	_____
☐	Agent-to-agent boundaries	_____
☐	Continuous evaluation	_____
☐	Independent review of irreversible actions	_____
☐	Proven recovery and fail-safe	_____

Check	Item	Notes
	behavior	

Maturity Scorecard

Dimension	0	1	2	3	4	5
Leadership & ownership	☐	☐	☐	☐	☐	☐
Use-case discipline	☐	☐	☐	☐	☐	☐
Data readiness	☐	☐	☐	☐	☐	☐
Security & access	☐	☐	☐	☐	☐	☐
Governance	☐	☐	☐	☐	☐	☐
Evaluation & monitoring	☐	☐	☐	☐	☐	☐
Human capability	☐	☐	☐	☐	☐	☐
Integration architecture	☐	☐	☐	☐	☐	☐
Cost management	☐	☐	☐	☐	☐	☐
Incident response	☐	☐	☐	☐	☐	☐

Do not average away a critical weakness

Your practical maturity level is usually limited by the weakest control required for the type of AI authority you intend to deploy. A company with excellent tools but weak access control is not “Level 4.”

How to Move Up One Level

1. Close the highest-risk prerequisite gap first.
2. Choose one or two workflows appropriate for the current level.
3. Measure outcome, failure and adoption data.
4. Standardize what worked into policy, templates and controls.
5. Only then introduce broader integration or autonomy.

Construction Applications

A contractor at Level 1 may use individual assistants. Level 2 standardizes assisted workflows. Level 3 integrates bounded automations. Level 4 operates governed cross-system workflows. Level 5 uses controlled agentic operations with formal evaluations, logging, authority boundaries and incident response.