



CATHA PRACTICAL AI FOR CONSTRUCTION LIBRARY

What Construction AI Really Costs

The Full Cost of Ownership Guide for Contractors

Guide 13

Practical AI for Construction. Responsible. Outcome-driven.

Catha Construction Services | 2026 Edition

How to Use This Guide

The visible subscription or token price is only one part of AI operating cost. The largest costs often come from integration, human review, maintenance, change and exceptions.

Construction companies should budget AI as an operating capability, not only a seat license. Include implementation, integration, API/model usage, human review, support, security, testing, maintenance and exception handling.

Best use
Use planning ranges first, then replace them with quotations and measured production usage before approval. Vendor prices change frequently.

Eight Cost Buckets

Bucket	Examples
Seats/subscriptions	AI assistants, vertical SaaS, productivity tools
Model/API usage	Tokens, images, audio, embeddings, search
Automation/integration	Workflow platforms, connectors, middleware
Infrastructure	Hosting, databases, vector stores, observability
Implementation	Design, development, migration, testing
Governance/security	Access reviews, logging, assessments, controls
Human operations	Reviewers, exception handling, support, training
Maintenance/change	Prompt/model updates, regression tests, vendor changes

Illustrative Planning Scenarios

Scenario	Typical shape	Planning range - not a quote
Individual/team productivity	5-50 seats, minimal integration	\$30-\$100+ per active user/month plus training/admin
Department workflow	1-5 workflows, SaaS + automation/API	\$1k-\$15k+/month after implementation depending on volume and tools
Custom AI operations	Multiple integrations, monitoring, governance	\$10k-\$100k+/month depending on scale, support and authority
Enterprise/agentic	High volume, multiple systems/models, formal controls	Budget as an operating capability, not a software license; six figures+ annually is common

Unit Economics That Matter

Metric	Formula
Cost per successful case	Total AI + human operating cost ÷ successful cases

Metric	Formula
Cost per 1,000 transactions	Total monthly cost ÷ volume × 1,000
Human review burden	Reviewer hours ÷ AI-handled cases
Exception cost	Exception count × average resolution cost
Cost of failure	Incidents × average business impact
Value/cost ratio	Measured gross benefit ÷ total operating cost

Hidden-Cost Checklist

Check	Item	Notes
☐	Vendor implementation fees	_____
☐	Minimum commits	_____
☐	Overage pricing	_____
☐	Premium connectors	_____
☐	Data egress/storage	_____
☐	Sandbox/test usage	_____
☐	Human review labor	_____
☐	Support tier	_____
☐	Security tooling	_____
☐	Monitoring	_____
☐	Model migration work	_____
☐	Renewal increase	_____
☐	Exit/migration cost	_____

Cost discipline

The best model is not the cheapest per token. It is the lowest total cost system that meets the required outcome, reliability and risk threshold.

Construction Applications

Compare cost per successful workflow outcome: cost per qualified lead, estimate package reviewed, project-admin case, customer follow-up, document set processed or management report produced.