

AI Essentials for Construction

Fast Alignment + Executive Framing

Practical guidance for immediate application

FACILITATOR: BRUNO MARTORELLI

What Today Is — And What It Is Not

Not This

A generic AI tour

Tool hype and vendor demos

Random prompts with no context

Vague inspiration with no output

This

Practical workflows you can use tomorrow

Role-specific use cases for construction

Governance and safe use principles

Hands-on outputs you take away

If you leave without a tested prompt, a reviewed output, and a pilot plan, we failed.

How We Will Work Today

The workshop spine



Align

Calibrate the room, set priorities



Safe Use + Governance

EU AI Act, data rules, accountability



Practical Workflow Method

Prompting, structuring, verifying outputs



Track Labs

Hands-on exercises by role



Pilot Plan

Pick 1 pilot, define next steps



AI is used as a junior analyst throughout — humans remain accountable for review and all decisions.

Agenda · Morning

AI FOR CONSTRUCTION PROFESSIONALS · FULL-DAY WORKSHOP · 09:30–15:30

1 / 3 · MORNING — ALIGN + UNDERSTAND

09:30–09:45

15 min

Welcome + Live Poll

Roles · approved tools · ground rules

09:45–10:10

25 min

AI in 2026 for Construction Leaders

What changed since March · why pilots stall

10:10–10:45

35 min

The Rules That Apply to You

EU AI Act after the Omnibus · Ireland · RICS

10:45–11:00

15 min

Break

By the break you know what changed this year and which rules apply to your firm.

Agenda · Late Morning

AI FOR CONSTRUCTION PROFESSIONALS · FULL-DAY WORKSHOP · 09:30–15:30

2 / 3 · LATE MORNING — WORKFLOW + LAB

11:00–11:20 20 min	The Core Workflow Extract → Structure → Summarise → Verify
11:20–12:00 40 min	Lab 1: Minutes to Report Site minutes → weekly report, actions, notices
12:00–13:00 60 min	Lunch

▢ Lab 1 uses the fictional project data in your pack — no real project data needed.

Agenda · Afternoon

AI FOR CONSTRUCTION PROFESSIONALS · FULL-DAY WORKSHOP · 09:30–15:30

3 / 3 · AFTERNOON — AGENTS + DECISIONS

13:00–13:25

25 min

Agents Now Ship in Your Tools

Procore · Microsoft 365 · skills · governance

13:25–14:15

50 min

Track Labs

Delivery · Commercial · Leadership

14:15–15:10

55 min

Show-back + Pilot Design

Pilot canvas by company · 30-day plan

15:10–15:30

20 min

Commitments + Close

Named owners · next steps · governance checklist

☐ This is a production workshop — not an AI tour. Every block ends with a tangible output.

What You'll Leave With

Every session produces a concrete output — not just ideas

Morning



Track Choice + Workflow List

Your top AI use case



Shared Mental Model

AI as a junior analyst — not an oracle



Risk Triage + Procurement Questions

EU AI Act checklist • vendor red flags

Late Morning



Visible Workflow Loop

Extract → Structure → Summarise → Verify



Weekly Report + Action List

Built in Lab 1 from the site minutes

Afternoon



Agent Blueprint Framing

One workflow mapped as an AI agent



Track Lab Output

Delivery, Commercial or Leadership



Best Prompts + QA Failures Logged

Pattern library from the room



Pilot Canvas + Pilot Plan

30-day plan with a named owner



Governance Checklist Completed

Named owners • next steps • sign-off ready

You leave with a tested prompt, a reviewed output, and a signed pilot plan — or we haven't done our job.

Choose Your Track



Delivery

- Weekly reports and programme lookaheads
- Minutes → actions, notices and early warnings
- RFIs, technical queries and submittals
- Commissioning and handover tracking



Commercial

- Tender review and scope gap analysis
- Change, variations and early warnings
- Valuations and payment applications
- Claims chronology from project records



Leadership

- Which AI tools and agents to allow, on what data
- AI register, approvals and sign-off
- Pilot ROI and cost per deliverable
- EU AI Act, Irish AI Act and RICS obligations

Ground Rules for the Day

How we work together to get the most out of this session

Use non-sensitive examples only — no live project data,
no client names

No personal data or live disputes — keep examples
generic and anonymised

Focus on repeatable workflows, not clever prompts —
we're building habits, not tricks

Challenge outputs, verify claims, keep human
accountability — AI assists, you decide

Your vote determines which examples we prioritise.

BRUNO MARTORELLI

Founder, Digital Flow • Head of Digital and AI, MCORM

Bruno is the founder of Digital Flow, a BIM and AI consultancy for the built environment, and Head of Digital and AI at MCORM Architecture & Urban Design, which he joined in 2024. He brings over 15 years in architecture, engineering and construction. Graduating in Mexico, he has worked across South Africa, the United Kingdom and Ireland, leading multidisciplinary teams and putting new technology to work on live projects.

Digital Flow helps Irish firms put BIM and AI to work: practical implementation, workflow automation and AI strategy.



Before We Touch Tools, We Align on What Matters

01

Align on roles + AI maturity

Understand who's in the room and current experience levels

02

Choose today's top 2–3 workflows

Focus on what matters most to your daily work

03

Set guardrails

Establish safe AI use principles and human-in-the-loop requirements

04

Introduce the AI ladder

A diagnosis for each workflow — not a score for the firm

If we don't align first, this session becomes generic and someone leaves disappointed. Let's make this relevant to your actual work.



Let's Calibrate the Room

 LIVE POLL

Answer on your device — results appear live



 Mentimeter

Interactive presentation software

Interact with your audience using real-time voting. No installations or downloads required – and it's free!





AI Promise vs Reality

And Why Most Firms Stall

The Promise

Speed

Complete tasks in minutes instead of hours

Productivity

Free up time for higher-value work

Better Decisions

Data-driven insights at your fingertips

The Reality

Pilot Fatigue

Endless experiments with no clear outcomes

Weak ROI Proof

Difficulty demonstrating tangible value

Risk Concerns

Compliance, confidentiality, and accountability fears

AI fails when it's treated like a tool rollout. It succeeds when it's treated like a workflow + risk + ROI programme.

The blocker is rarely the technology itself — it's workflow clarity, commercial protection, and demonstrable return on investment.

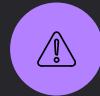


Use AI Like a Junior Analyst — Not an Expert



Great At

- Drafting initial content
- Summarising long documents
- Structuring information clearly
- Extracting key data points



Weak At

- Establishing truth without verification
- Understanding nuanced context
- Taking accountability for outputs
- Making high-stakes judgements

Human-in-the-loop is not bureaucracy — it's commercial protection.

Example: AI can transform a rough progress update into a clean narrative with clear actions in minutes. But let it draft contractual conclusions without review? That's commercial risk you can't afford.

The AI Maturity Ladder

A diagnosis for each workflow — not a score for the firm



Ad-Hoc Tool Use

Inconsistent personal prompts, no standardisation, outputs vary wildly by user



Repeatable Workflows

Standardised templates, defined inputs/outputs, clear review steps and quality gates

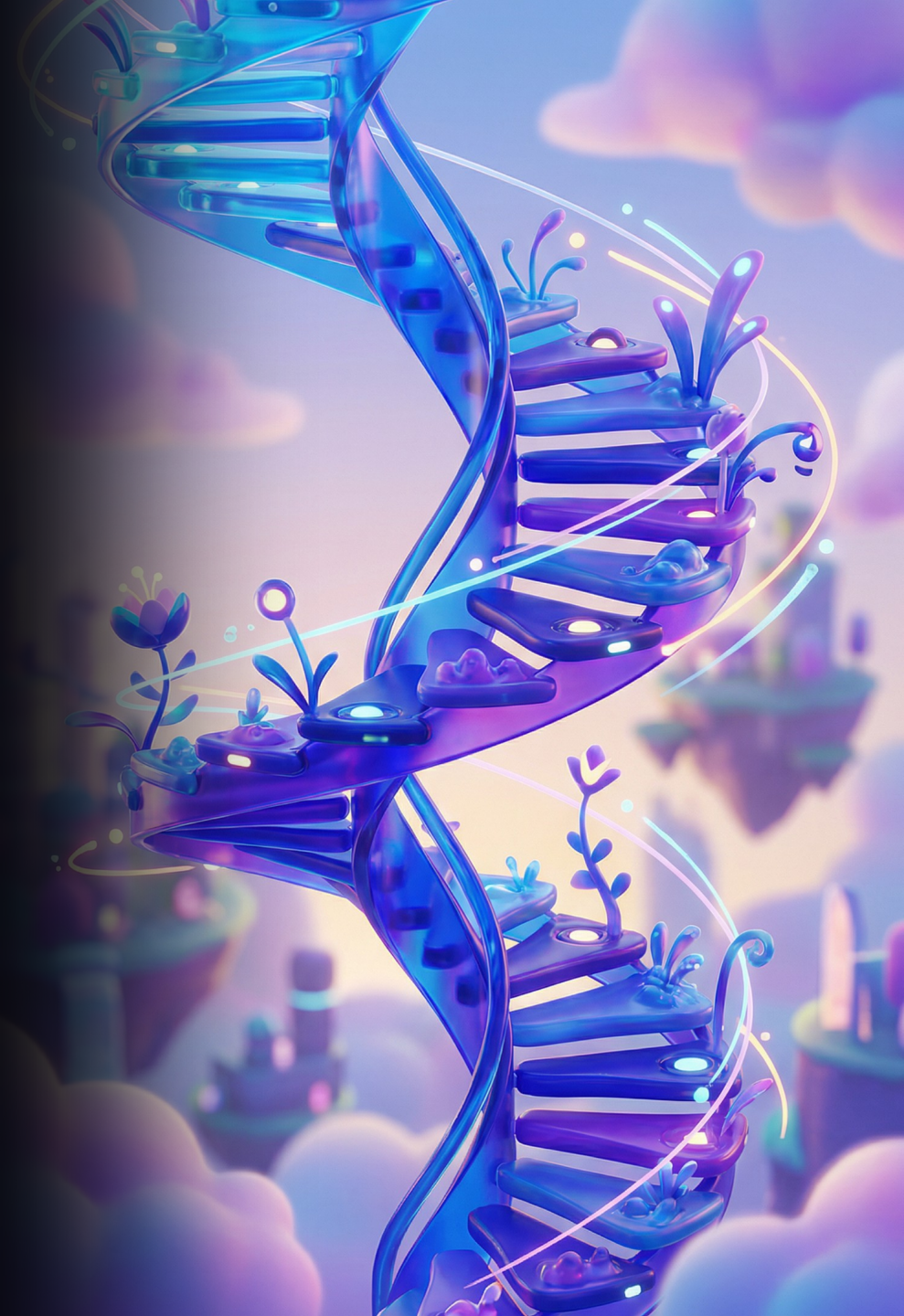


Agents & Automation

Multi-step automation across tools with robust governance and integration



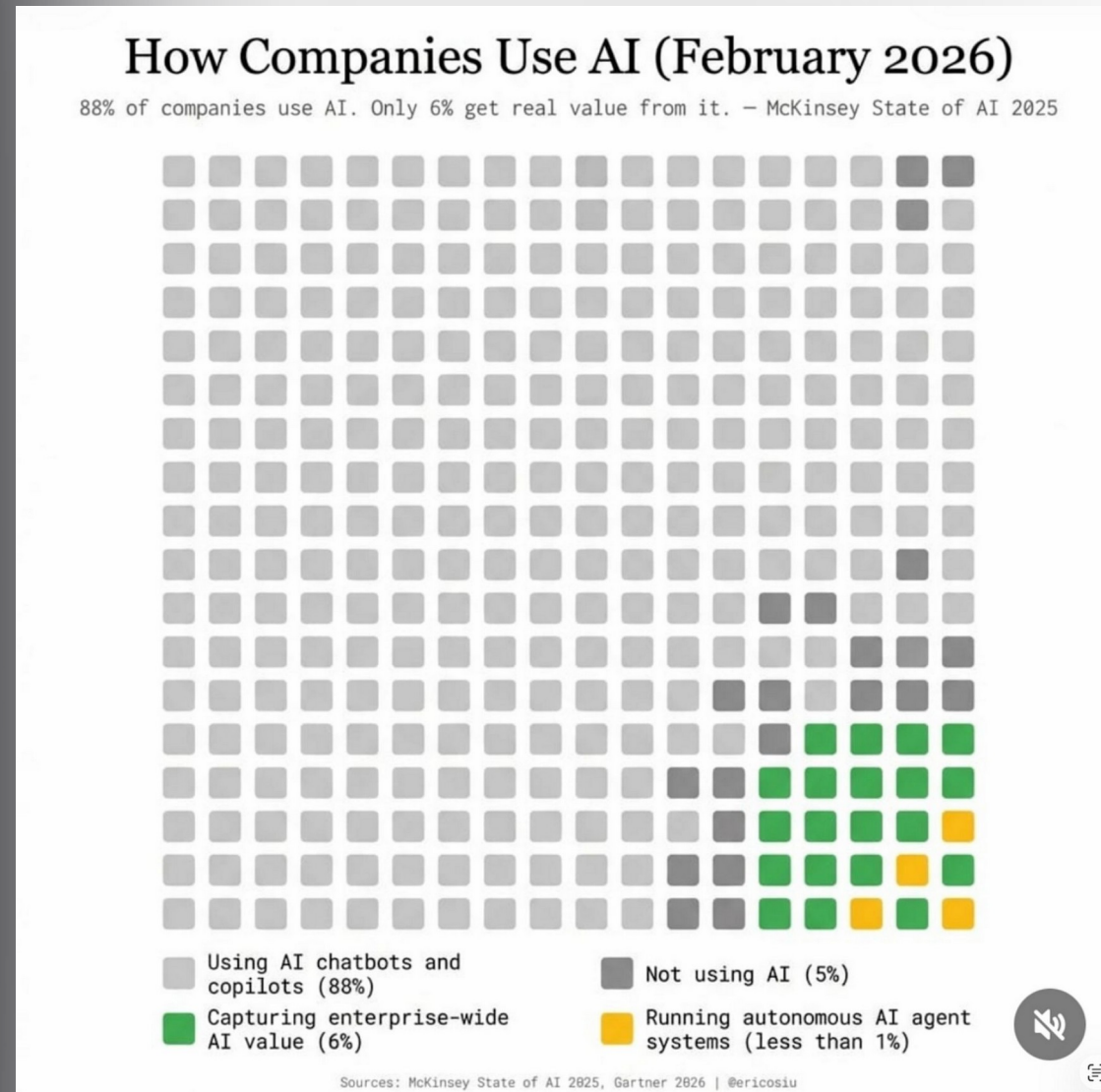
Today's focus: Step 2 — repeatable workflows. Agents are now arriving inside the tools you already use, so the workflow and governance work can't wait. Walk before you run.



88% Are Using AI. Only 6% Are Getting Value.

The gap isn't access — it's workflow discipline.

Source: McKinsey State of AI 2025 • Gartner 2026



Construction Has One of the Largest Gaps Between AI Capability and Actual Use

The opportunity isn't theoretical — it's sitting unused.

□ **Architecture & Engineering and Construction** show high theoretical AI coverage but among the lowest observed usage — meaning the tools exist, but the workflows don't.

Source: Anthropic / Claude — Theoretical Capability and Observed Usage by Occupational Category

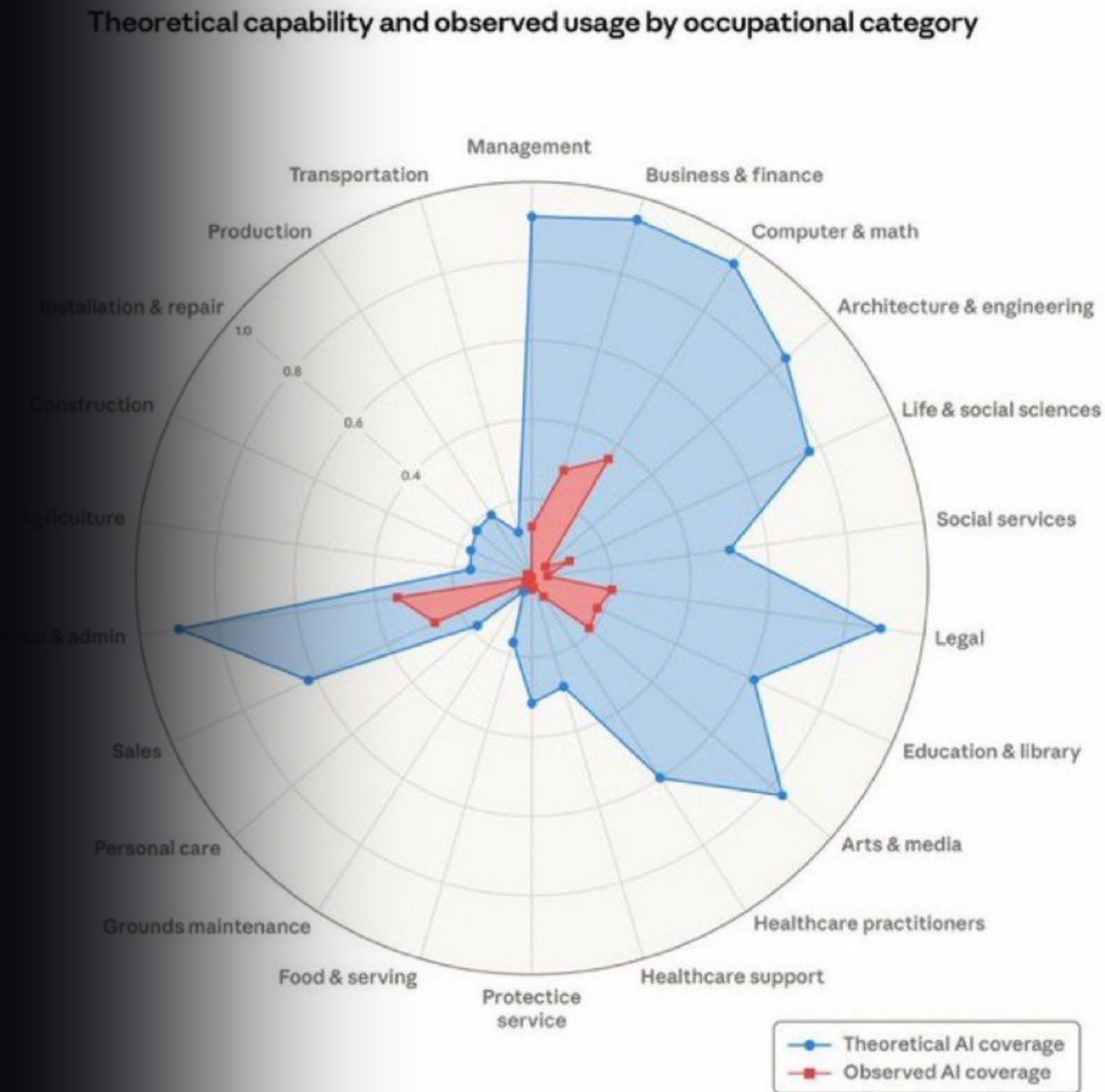


Figure 2: Theoretical capability and observed exposure by occupational category

The figure shows the share of job tasks that LLMs could theoretically perform (blue area) and our own job coverage measure derived from usage data (red area).

Start Small, Then Repeat



Phase 1: Foundations

Safe, low-risk wins with clear guardrails



Phase 2: Scale

Embed into delivery processes with governance



Phase 3: Repeat

Take what worked to the next workflow — one at a time

Mini Exercise: Define Your 30-Day Pilot

Pick one workflow you touch weekly and define the following:

Input Documents

What goes in?

Output Needed

What comes out?

Time Spent Today

Current hours/effort

Failure Mode Today

Where does it break?

What 'Better' Means

Speed / quality / risk reduction?



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If you can't define the workflow and metric, you don't have an AI project — you have a toy.