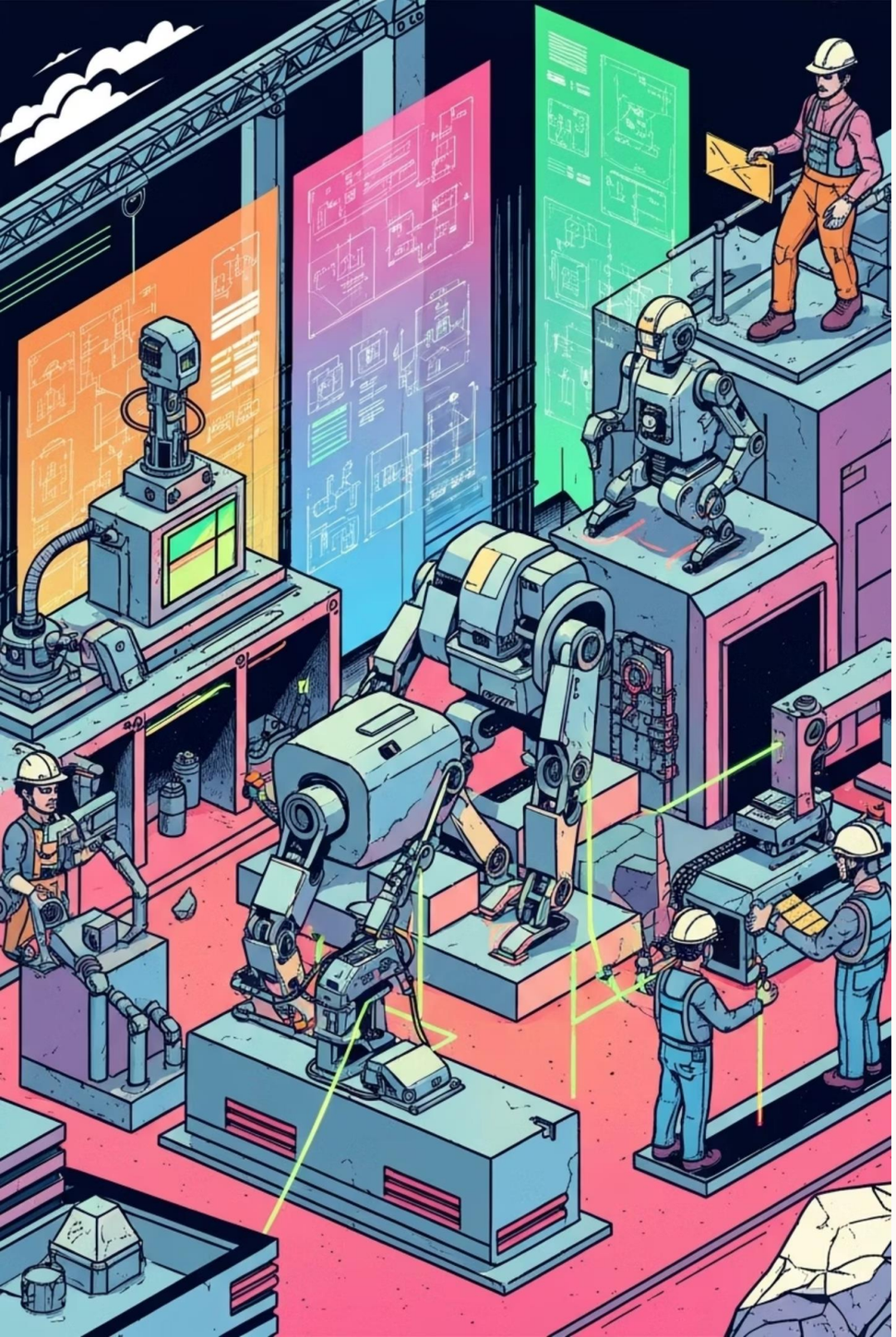


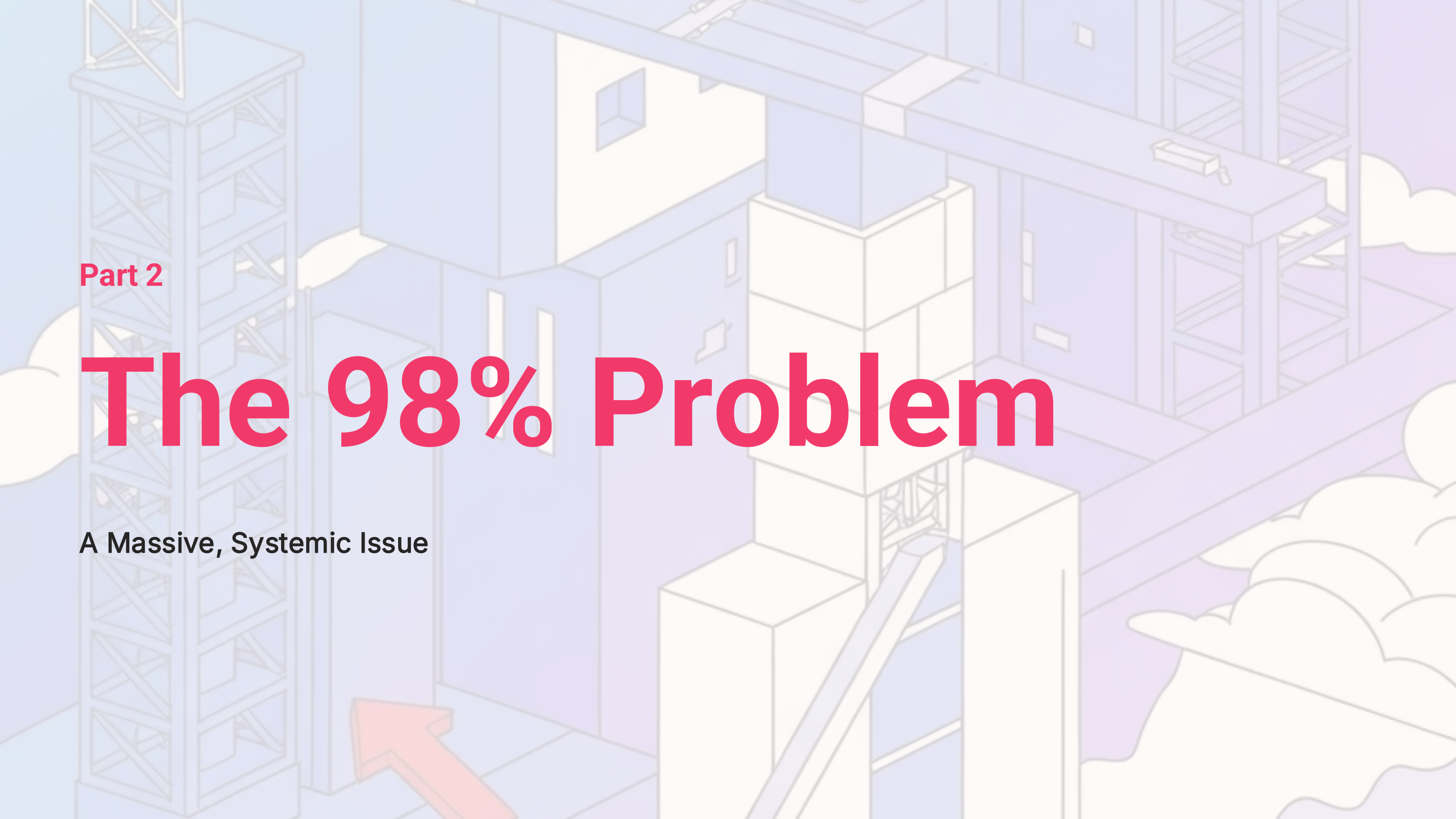
AI Agents: Rebuilding AEC from the Ground Up

Transforming the oldest industry with the newest technology

Part 2

The 98% Problem

A Massive, Systemic Issue



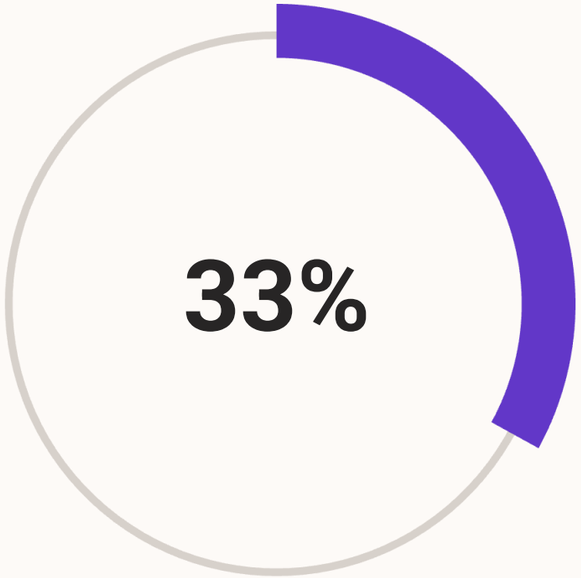
98%

The Mega Project Crisis

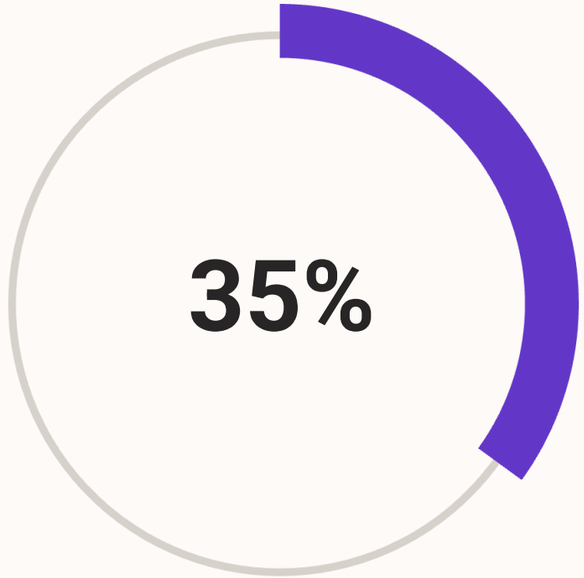
Mind-blowing 98% of all mega projects end up with massive cost overruns or huge delays

Being over budget and behind schedule is the **norm**, not the exception

Where Construction Goes Wrong



Projects fail due to poor comms



Time spent on non-productive outcomes

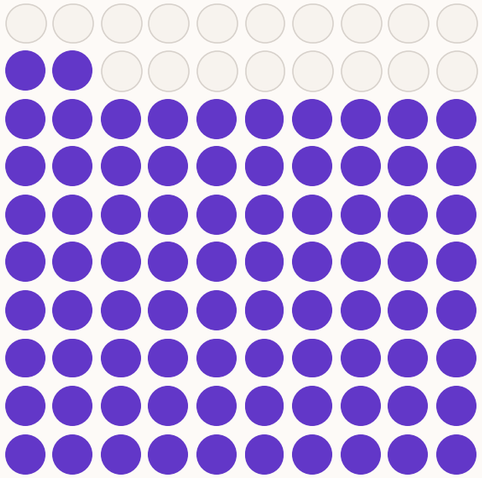
Part 2

The Great Disconnect

Ambition vs Reality

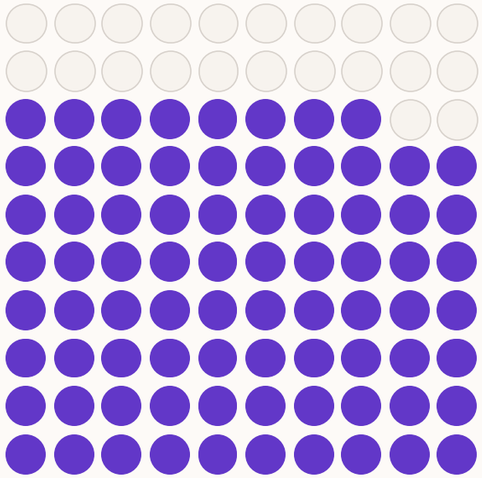
The Great AI Disconnect

The Optimism



82%

Believe AI Will Transform Everything

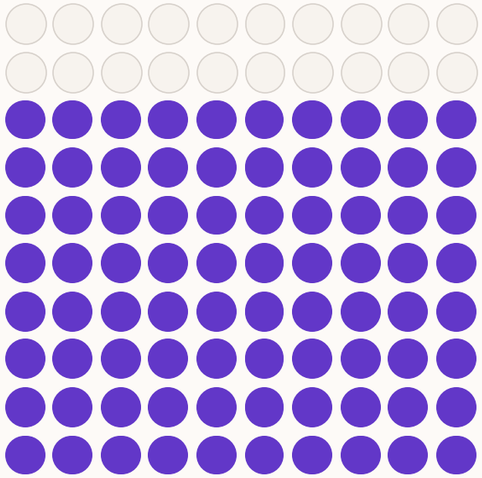


78%

Think It'll Happen in 5 Years

The Great AI Disconnect

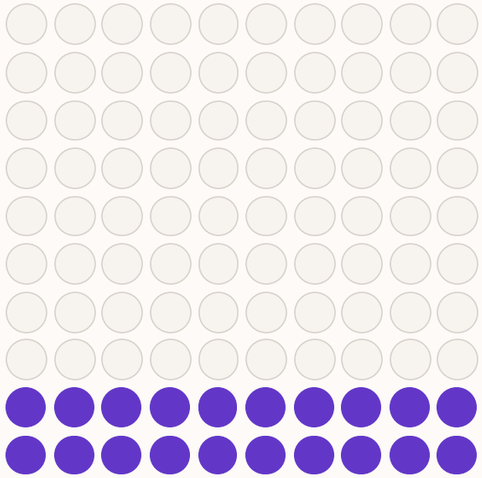
The Reality



80%

Stuck in Early Stages

Just pilot projects



20%

Actually Using AI Meaningfully

Real implementation

The Real Villain: The Business Case

91%

of firms say proving ROI is their number one roadblock

Trapped in vicious cycle: failed experiments → no ROI → leadership pulls funding

Part 3

Your Digital Colleague

The AI Agent

AI Agent

Software programs capable of performing tasks autonomously by analysing data and making decisions.

01

Understands Environment

Analyses context and available resources

02

Makes Decisions

Evaluates options independently

03

Takes Action

Executes complex multi-step jobs

How AI Agents Actually Work

Step 1: Prompt

User send a prompt or task to the agent (host)

Step 2: Discover

Client queries the server for a list of available tools

Step 3: Execute

Client invokes the selected tool via the server, which executes the task

Step 4: Respond

Agent sends a result or plan back to the user

The Universal Plug: Model Context Protocol

> Think of MCP like a USB port, but for AI—one universal plug that connects agents to any tool

Part 4

The Strategic Playbook

A Phased Implementation

Your Specialist Digital Team

Reporting Agent

Handles stakeholder updates automatically

Cost Tracker

Watches every penny in real time

Safety Agent

Scans job sites for potential hazards

Schedule Optimizer

Predicts delays before they happen

The Implementation Playbook

Phase 1 - Foundation (1-6 months)

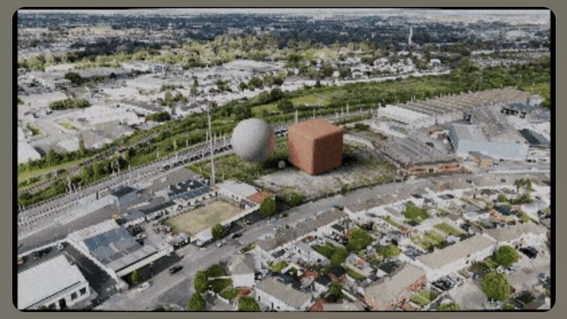
Execute low-risk, high-impact 'quick-win' pilots and measure ROI

Phase 2 - Scaling (6-18 months)

Integrate successful pilots into core production workflows

Phase 3 - Culture Phase (18+ months)

Cultivate an AI-first culture through firm-wide training and experimentation



Real-World Success: MCORM Architects

AI Sandbox Approach

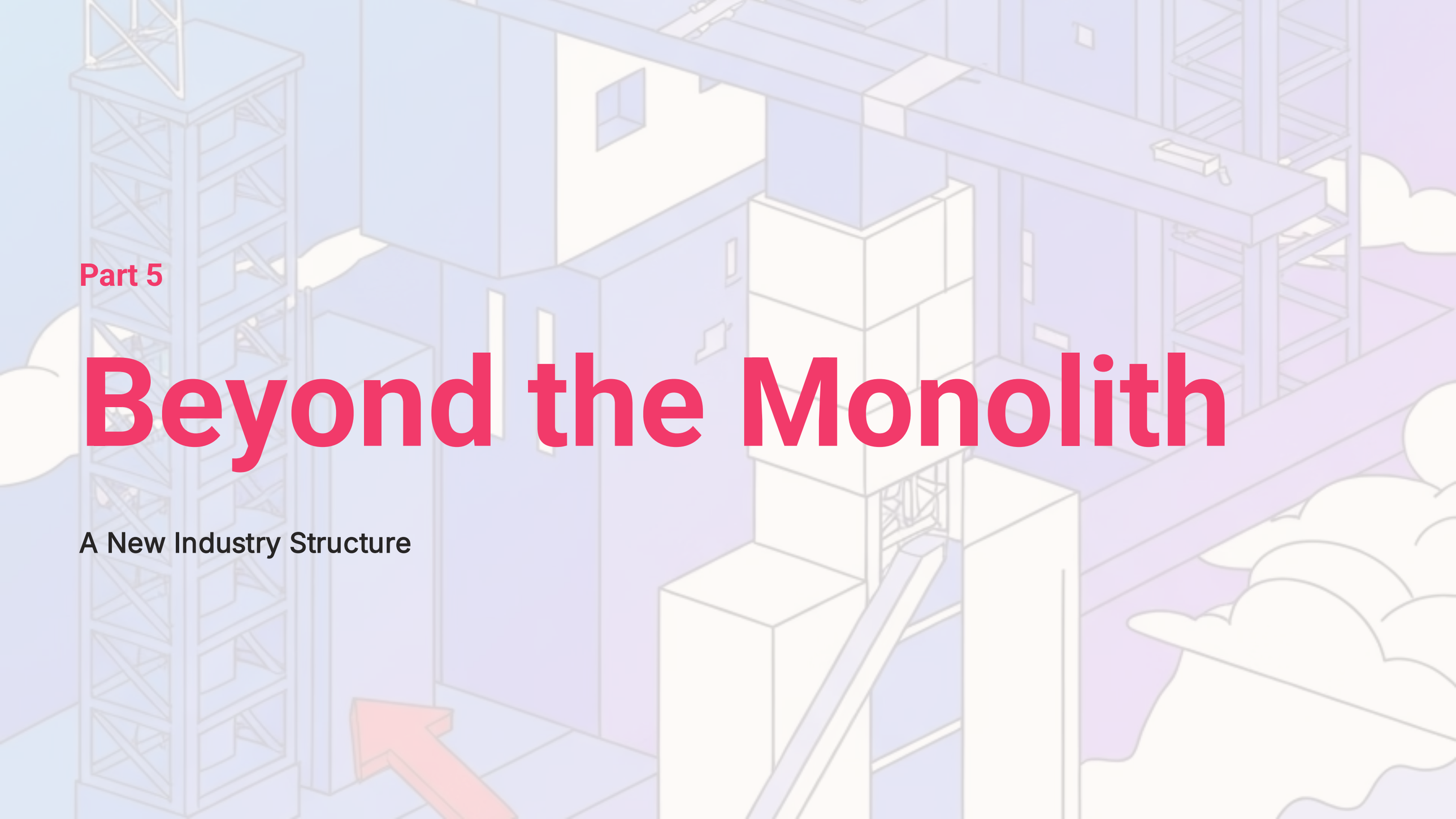
Controlled experiments on non-mission-critical projects

Risk-Free Learning

Discover AI capabilities without risking client projects

Smart Scaling

Masterclass in innovation implementation



Part 5

Beyond the Monolith

A New Industry Structure

Beyond the Monolith

Old Way

- Giant all-in-one programs
- Proprietary file formats
- Information silos
- Vendor lock-in

New Way

- Open data lakes you control
- Specialised AI agent swarms
- Collaborative systems
- Data ownership

In 1439, you had to go to a **priest** for information. Then the **Gutenberg press** was invented.

How do we access this data without complex tools?

AI builds your workflow

1

Describe

Tell an AI what you need in plain english

2

Create

The AI writes and updated pipeline in a simple JSON

3

Execute

Run this file into a free platform like n8n and run it locally

Instant answers, no propietary data, in minutes - no code

Key Advantages

No Code

Just describe what you need.

Completely Free

Uses powerful, open-source platforms.

Secure & Local

Your data never leaves your computer.

Infinitely Repeatable

Apply to any number of future projects.

Now that you can talk to you data, what will you ask?

Part 6

Building The Future

Your 5 Essential Steps

Your 5-Step Action Plan

1

Establish a Clear AI Roadmap

Connect every AI project to real business goals

2

Adopt Incremental, value driven Use Cases

Value-driven projects that build momentum

3

Mantain a Human in the Loop Mindset

Augment experts, don't replace them

4

Invest in Data Infrastructure and Governance

Build robust data infrastructure

5

Upskill and align your Workforce

Prepare for human-AI collaboration era

Is your business ready to build the future ?

Find me in Linkedin