



master.of.code GLOBAL

# The Agentic AI Encyclopedia:

## The Essentials Business Leaders Need to Know

**Technical Foundations**

**44 Use Cases** Across 9 Industries

**29 Real-World Examples**



**PART 1**

# Understanding Agentic AI:

A foundation for business leaders



# What is agentic AI?

An AI system that doesn't just respond but acts. Give it a goal, and it plans, uses tools, makes decisions, and executes tasks autonomously. Unlike a chatbot that answers questions, an agent completes workflows.

## McKinsey:

Agentic AI doesn't just generate text or code. It takes action.



## IBM:

AI system that can accomplish a specific goal with limited supervision.



## MIT Sloan:

AI agents execute multi-step plans, use external tools, and interact with digital environments to function as powerful components within larger workflows.



"Summarize the sales call and follow up with the client."

### GenAI chatbot

- ✓ Reads your prompt
- ✓ Writes a draft
- ✓ Stops. You do the rest.

### AI agent

- ✓ Reads call transcript + CRM history
- ✓ Drafts and sends the follow-up email
- ✓ Logs activity + sets next reminder

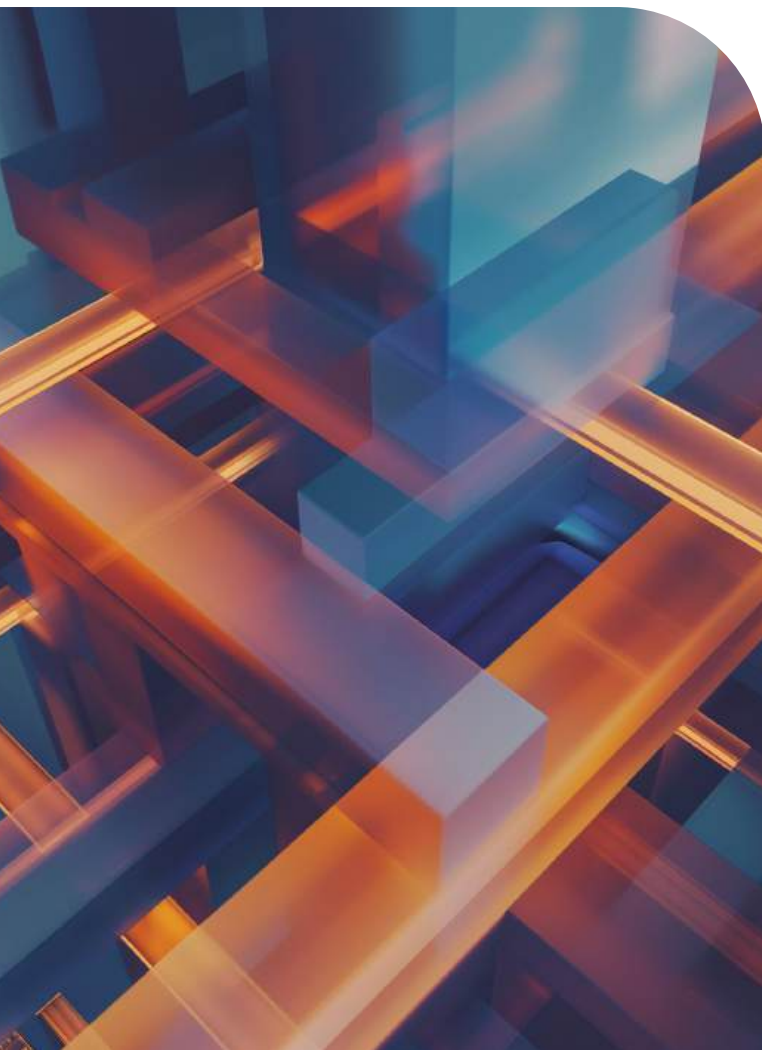
# How agentic AI differs from other AI

Type	What it does	Input	Output	Adapts?
Traditional AI	Predicts, classifies	Structured data	Score or label	No, retrain
RPA	Mimics clicks	Structured data	Scripted task	No, breaks
GenAI	Generates content	Prompt	Text/image/code	Per prompt
Agentic AI	Pursues goals, acts	Goal + tools	Completed workflow	Yes, in real time



## 7 properties that make a system truly agentic

- 1 Autonomy** – acts without constant human prompting
- 2 Goal-directedness** – optimizes toward an outcome, not a single output
- 3 Multi-step planning** – breaks goals into sub-tasks and sequences them
- 4 Tool use** – calls APIs, searches the web, runs code, queries databases
- 5 Short-term memory** – maintains context within an active session
- 6 Long-term memory** – retains knowledge across sessions via vector databases
- 7 Learning & adaptation** – refines behavior based on outcomes over time



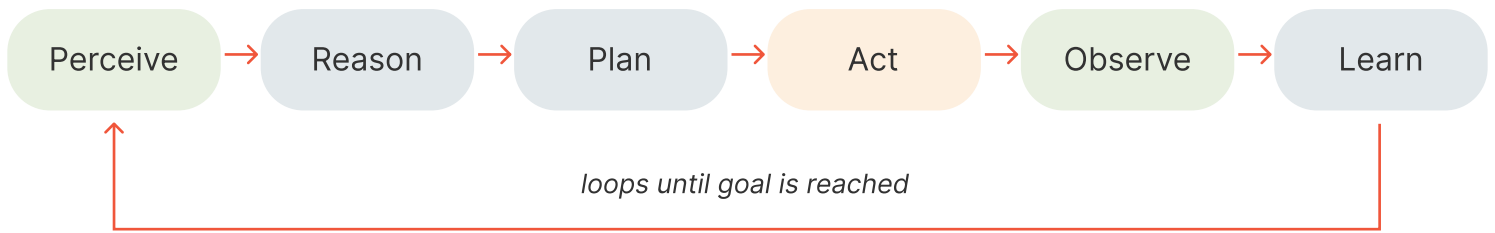
## How an agent works

Every agent runs a continuous loop until the goal is reached.

- 1 Perceive** – takes in input: user request, data, or result of last action
- 2 Reason** – interprets context, decides what needs to happen
- 3 Plan** – breaks the goal into steps
- 4 Act** – executes a step (calls a tool, writes output, triggers a system)
- 5 Observe** – checks the result against expectations
- 6 Learn** – updates understanding, loops back



This is called **the ReAct pattern** (Reasoning + Acting), developed by Google & Princeton researchers in 2022. The key idea: thinking and doing are interleaved, not separate – the agent checks real data at each step rather than guessing.

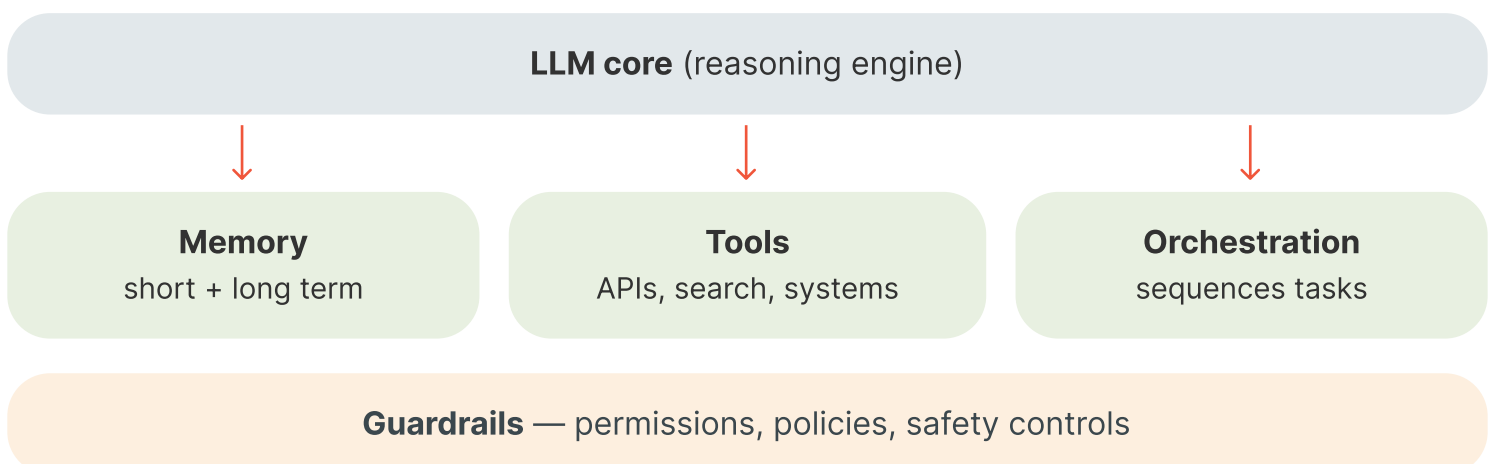


## What's inside an agent

Six components work together in every production agent system:



### AI agent





# Types of agents

There are two useful ways to categorize agents – one technical, one by job function.

## By technical type (IBM)

### 1 Reflex agents

follow fixed rules, no memory. Good for simple, repetitive triggers.

### 2 Model-based agents

maintain an internal state; handle partially observable situations.

### 3 Goal-based agents

plan action sequences toward a defined objective.

### 4 Utility-based agents

weigh trade-offs across multiple criteria (speed, cost, risk) to optimize outcomes.

### 5 Learning agents

improve continuously through feedback. Most modern LLM-based agents fall here.

## By business function (The Information)

### 1 Business-task

Acts inside enterprise software — CRM, ERP, HR systems

### 2 Conversational

Handles customer support — resolves issues, not just routes them

### 3 Research

Gathers and synthesizes information from multiple sources

### 4 Analytics

Analyzes data and generates reports autonomously

### 5 Coding

Writes, reviews, debugs, and deploys software

### 6 Domain-specific

Embeds deep expert knowledge within a specific industry vertical

### 7 Browser / web

Operates a web browser autonomously — navigates pages, fills forms, extracts data



# Single agent vs. multi-agent

Start with one agent. Add more only when complexity demands it – multi-agent systems use significantly more compute and are harder to debug.

**Use a single agent when:** the task is well-defined, fits one domain, and has a clear set of tools.

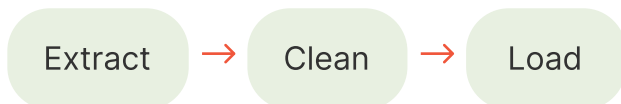
**Use multiple agents when:** tasks span different domains, benefit from parallelism, or require specialized expertise.

## Four patterns for how agents work together:

### Sequential

fixed pipeline, steps depend on each other

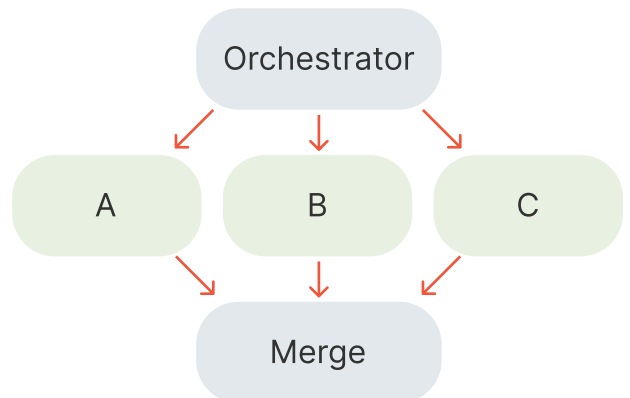
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### Parallel

subtasks run simultaneously, results merged

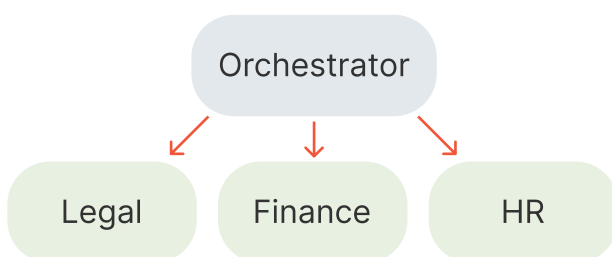
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### Hierarchical

orchestrator delegates to specialists

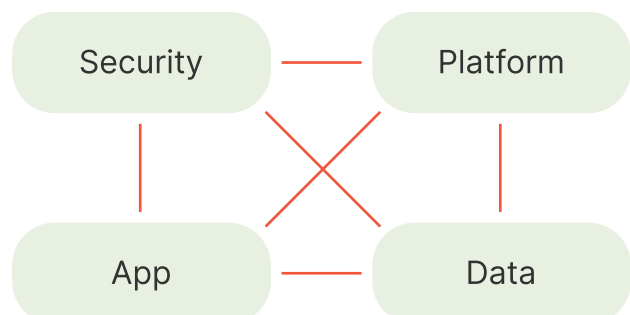
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### Network / mesh

agents communicate peer-to-peer

4





## Key protocols: MCP and A2A

### 1 MCP (Model Context Protocol)

created by [Anthropic](#), November 2024. An open standard that lets any AI agent connect to any external tool or data source without custom integration code. Often called "[USB-C for AI](#)."

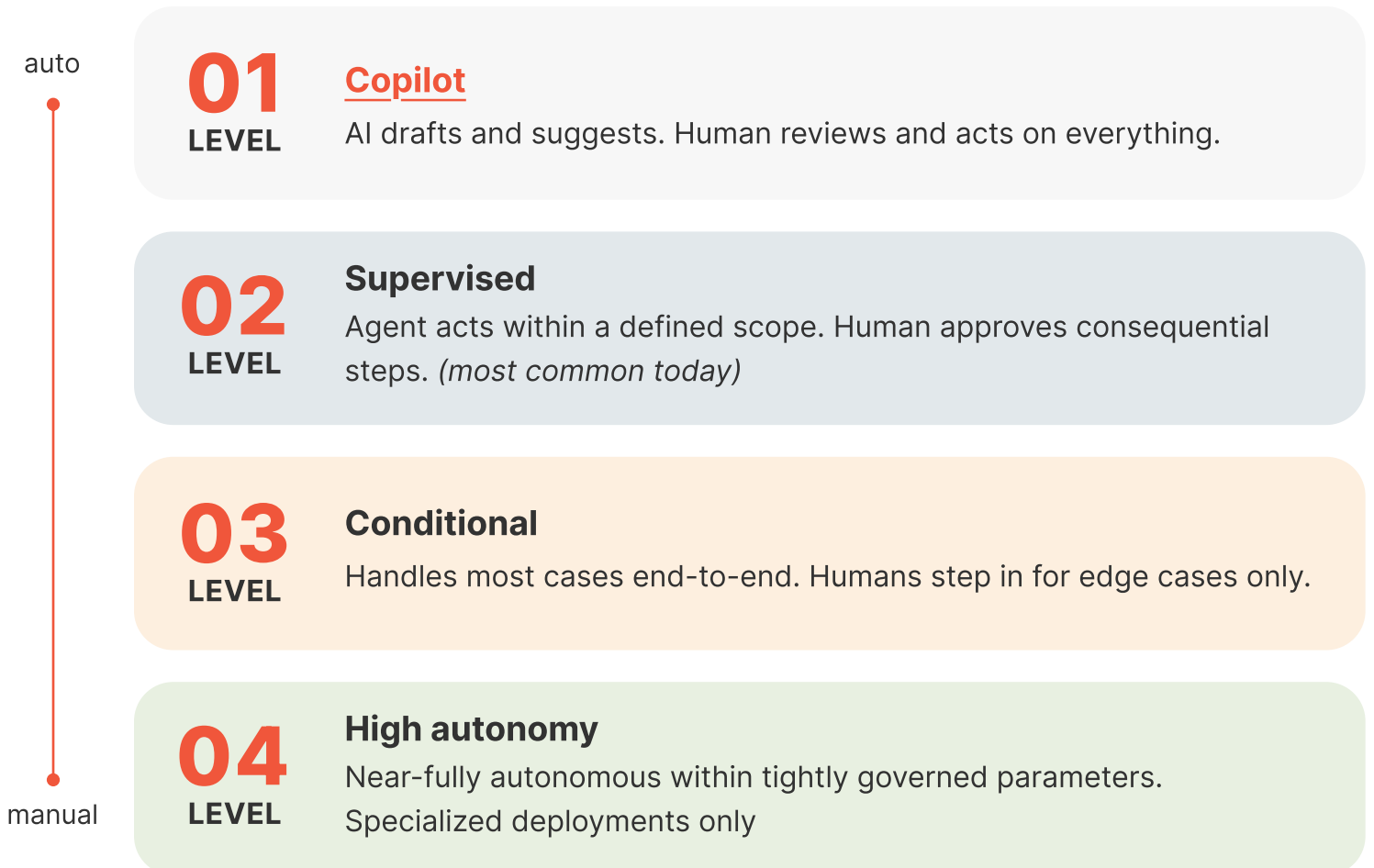
### 2 A2A (Agent-to-Agent Protocol)

created by [Google](#), April 2025. Lets agents from different vendors communicate directly with each other. Where MCP connects agents to tools, A2A connects agents to agents.

Together, these two protocols are the infrastructure layer that makes large-scale, cross-platform agent ecosystems possible.

## Levels of autonomy

Not all agents operate at the same level of independence. Most enterprise deployments today sit at level 2.





## Risks to know before deploying

### 1 Hallucination in action

errors aren't just wrong answers, they're wrong actions. An agent that misreads a data point can send incorrect quotes to thousands of customers.

### 2 Prompt injection

malicious instructions hidden in content the agent reads (emails, documents, web pages) can hijack its behavior. No fully reliable defense exists at the model level alone.

### 3 Accountability gaps

when an agent acts and something goes wrong, ownership must be defined before deployment, not after.

### 4 Scope creep

agents with broad tool access and vague goals tend to do more than intended.

### 5 Audit blindness

without action logging, there's no way to review what the agent did or why.



**The 80/20 reality:** MIT Sloan research on real-world deployments found that less than 20% of effort goes into the model itself. The other 80% is data integration, governance, workflow design, and stakeholder alignment. The technology is the easy part.



**PART 2**

# Where Agentic AI Works:

44 Use Cases Across 9 Industries



# Financial Services



## KYC / AML Compliance

The agent autonomously verifies customer identities by cross-referencing internal records, credit bureaus, sanctions databases, and public registries. It flags anomalies, generates compliance reports, and escalates suspicious cases to human reviewers.

- ✓ Reduces manual review time per case
- ✓ Lowers compliance breach risk
- ✓ Scales verification without adding headcount

## Fraud Detection & Response

Monitors transactions in real time, detects anomalous patterns, and autonomously triggers responses – blocking a transaction, alerting the customer, or freezing an account.

- ✓ Faster response time vs. rule-based systems
- ✓ Reduces false positives through contextual reasoning
- ✓ 24/7 availability across all transaction channels

## Portfolio Rebalancing

Continuously monitors portfolio drift against target allocations and market conditions. Executes buy/sell orders to maintain balance, sequencing trades to minimize tax impact and transaction costs.

- ✓ Removes latency between market movement and portfolio adjustment
- ✓ Decreases manual workload for wealth advisors
- ✓ Improves allocation accuracy at scale

# 33%

**of enterprise software will include agentic AI by 2028, enabling 15% of daily work decisions to be made autonomously.**



## Credit Risk Assessment

Pulls data from CRM systems, payment history, banking records, and credit bureaus to evaluate loan eligibility. Generates a risk score, drafts a recommendation, and routes the case for final human approval.

- ✓ Shortens assessment turnaround time
- ✓ Standardizes scoring criteria across cases
- ✓ Frees analysts for higher-complexity decisions

## Financial Close & Reporting

Reconciles data across ERP systems, identifies discrepancies, generates period-end reports, and flags items requiring human sign-off. Runs on a defined schedule without manual triggering.

- ✓ Accelerates monthly and quarterly close cycles
- ✓ Reduces reconciliation errors
- ✓ Produces audit-ready documentation automatically

**93%**

**of IT leaders plan to introduce autonomous agents within 2 years.**

**45%**

**already implemented.**





# Healthcare



## Prior Authorization

The agent initiates insurance verification, submits prior authorization requests to payer systems, tracks status, and escalates incomplete or complex cases. Handles the full submission cycle without manual input.

- ✓ Cuts approval turnaround from weeks to days
- ✓ Reduces administrative burden on clinical staff
- ✓ Lowers claim denial rates through complete, timely submissions

## Revenue Cycle Management

Manages end-to-end billing workflows – medical coding, eligibility checks, claims submission, and appeals. Learns from prior denials to improve future submission accuracy.

- ✓ Accelerates collections and reduces days in accounts receivable
- ✓ Decreases coding errors and rejected claims
- ✓ Frees billing teams for exception handling and process improvement

# 35%

**of organizations had adopted  
AI agents by 2023**

# 44%

**planned to deploy shortly.**

## Patient Flow Optimization

Monitors real-time data across departments – bed occupancy, scheduled procedures, discharge timelines – and coordinates staff allocation, scheduling, and logistics to minimize bottlenecks.

- ✓ Reduces patient wait times
- ✓ Improves bed utilization rates
- ✓ Supports staffing decisions with real-time operational data



# 68%

AI agent usage  
rate healthcare  
has already.

# 84%

of survey respondents  
comfortable with AI  
making end-to-end  
autonomous decisions.

## Clinical Documentation

Transcribes and structures clinical notes from physician dictation, integrates data from lab systems and wearable devices, and updates electronic health records automatically after each patient encounter.

- ✓ Reduces time physicians spend on documentation
- ✓ Improves record completeness and accuracy
- ✓ Enables faster handoffs between care teams

## Adverse Event Monitoring

Continuously scans patient records, lab results, and medication logs to detect early signs of adverse events or deteriorating conditions. Alerts the relevant care team member when intervention thresholds are met.

- ✓ Earlier detection of at-risk patients
- ✓ Reduces preventable complications
- ✓ Supports clinical teams without replacing clinical judgment





# Retail & E-Commerce



## Cart Recovery

Detects abandonment signals, determines the most relevant **recovery approach** per customer, and autonomously sends personalized follow-up communications across email, SMS, or push – with timing and offer optimized per profile.

- ✓ Recovers a measurable share of abandoned revenue
- ✓ Reduces reliance on generic bulk campaigns
- ✓ Operates without manual campaign setup

# 45%

**of Fortune 500 companies are actively piloting agentic systems.**

## Inventory & Demand Forecasting

Monitors stock levels, sales velocity, supplier lead times, and external signals such as seasonality or trends. Triggers replenishment orders, reallocates stock between locations, and flags supply risk before it becomes a problem.

- ✓ Reduces out-of-stock and overstock situations
- ✓ Lowers carrying costs
- ✓ Improves supplier coordination

## Personalized Shopping Experience

Analyzes real-time browsing behavior, purchase history, and contextual signals to surface relevant product recommendations, adjust promotions, and tailor the experience per customer across online and in-store channels.

- ✓ Increases conversion rates through relevance
- ✓ Raises average order value
- ✓ Improves customer retention over time



## Returns & Refunds Processing

Receives return requests, validates eligibility against policy, initiates refund or exchange workflows, updates inventory, and communicates status to the customer – end to end without human handling for standard cases.

- ✓ Reduces processing time per return
- ✓ Lowers customer service workload on routine cases
- ✓ Improves post-purchase customer experience

## Dynamic Pricing

Monitors competitor pricing, demand signals, stock levels, and margin targets in real time. Adjusts prices across SKUs and channels automatically within defined business rules.

- ✓ Protects margin during demand fluctuations
- ✓ Stays competitive without manual repricing
- ✓ Responds faster than rule-based engines



# 25%

of companies using  
GenAI launched  
agentic pilots in 2025.

# 50%

doubling by 2027.



# Manufacturing & Supply Chain



# 56%

**of finance functions plan to increase AI investments by  $\geq 10\%$  in next 2 years.**

## Supply Chain Disruption Response

Monitors supplier performance, logistics data, and external risk signals such as weather or geopolitical events. When disruption is detected, identifies alternative suppliers or routes and initiates rescheduling workflows.

- ✓ Reduces lead time impact from disruptions
- ✓ Shortens response time vs. manual monitoring
- ✓ Maintains continuity with less human coordination overhead

## Predictive Maintenance

Continuously monitors sensor data from equipment and machinery. Detects anomalies that indicate wear or failure risk, schedules maintenance proactively, and coordinates with operations to minimize downtime.

- ✓ Reduces unplanned equipment downtime
- ✓ Extends asset lifespan
- ✓ Lowers emergency repair costs

## Quality Control

Analyzes production line data, inspection results, and defect patterns in real time. Flags deviations from quality thresholds, identifies root causes, and triggers corrective actions or line adjustments.

- ✓ Catches defects earlier in the production cycle
- ✓ Reduces waste and rework costs
- ✓ Builds a continuous record for compliance and audits



**25%** ONLY of AI initiatives delivered expected ROI

**16%** ONLY scaled enterprise-wide.

### Production Scheduling

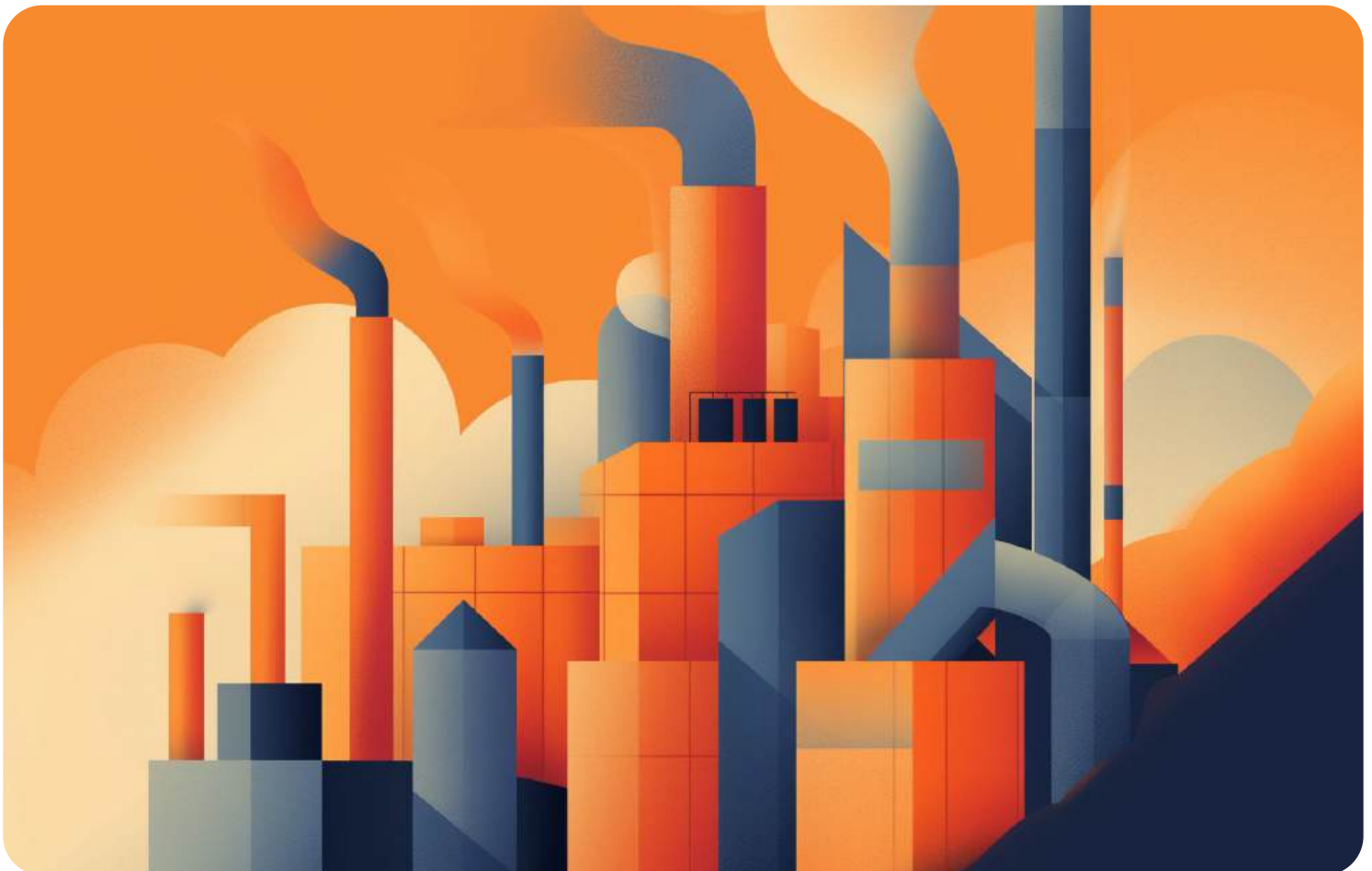
Balances orders, machine capacity, material availability, and workforce constraints to generate and adjust production schedules dynamically. Re-plans automatically when conditions change.

- ✓ Improves on-time delivery rates
- ✓ Reduces idle time and bottlenecks
- ✓ Replaces time-intensive manual planning cycles

### Vendor & Procurement Management

Manages routine procurement workflows – purchase order generation, vendor communication, invoice matching, and compliance verification – across multiple suppliers simultaneously.

- ✓ Shortens procurement cycle times
- ✓ Reduces manual processing errors
- ✓ Frees procurement teams for strategic sourcing





# Automotive



## Dealer Operations Support

Assists dealership staff with inventory queries, financing option generation, service scheduling, and follow-up workflows. Handles routine customer interactions and surfaces relevant information for sales teams in real time.

- ✓ Reduces time sales staff spend on administrative tasks
- ✓ Improves response speed to customer inquiries
- ✓ Supports consistent experience across dealer network

## **Connected Vehicle Data Management**

Collects and processes real-time data from vehicle sensors across a fleet. Identifies patterns related to performance, safety, and usage behavior. Feeds insights to product, engineering, and service teams.

- ✓ Enables proactive service notifications to vehicle owners
- ✓ Informs product development with real-world usage data
- ✓ Supports OTA update targeting based on vehicle condition

## **Warranty & Claims Processing**

Receives warranty claims, validates eligibility, cross-references repair history and parts data, and processes approved claims. Flags complex or potentially fraudulent cases for human review.

- ✓ Accelerates claims resolution for customers and dealers
- ✓ Reduces fraudulent claim exposure
- ✓ Lowers administrative cost per claim

# 60%

**of brands will use agentic AI for one-to-one interactions by 2028.**



## Autonomous Fleet Management

Monitors fleet vehicle location, fuel levels, maintenance status, and driver behavior. Optimizes routing, scheduling, and dispatch in real time across the full fleet.

- ✓ Reduces fuel and operational costs
- ✓ Improves fleet utilization rates
- ✓ Enables real-time rerouting based on conditions

## Regulatory & Homologation Compliance

Tracks regulatory requirements across markets, monitors product specifications against compliance criteria, and flags gaps when regulations change or new markets are entered.

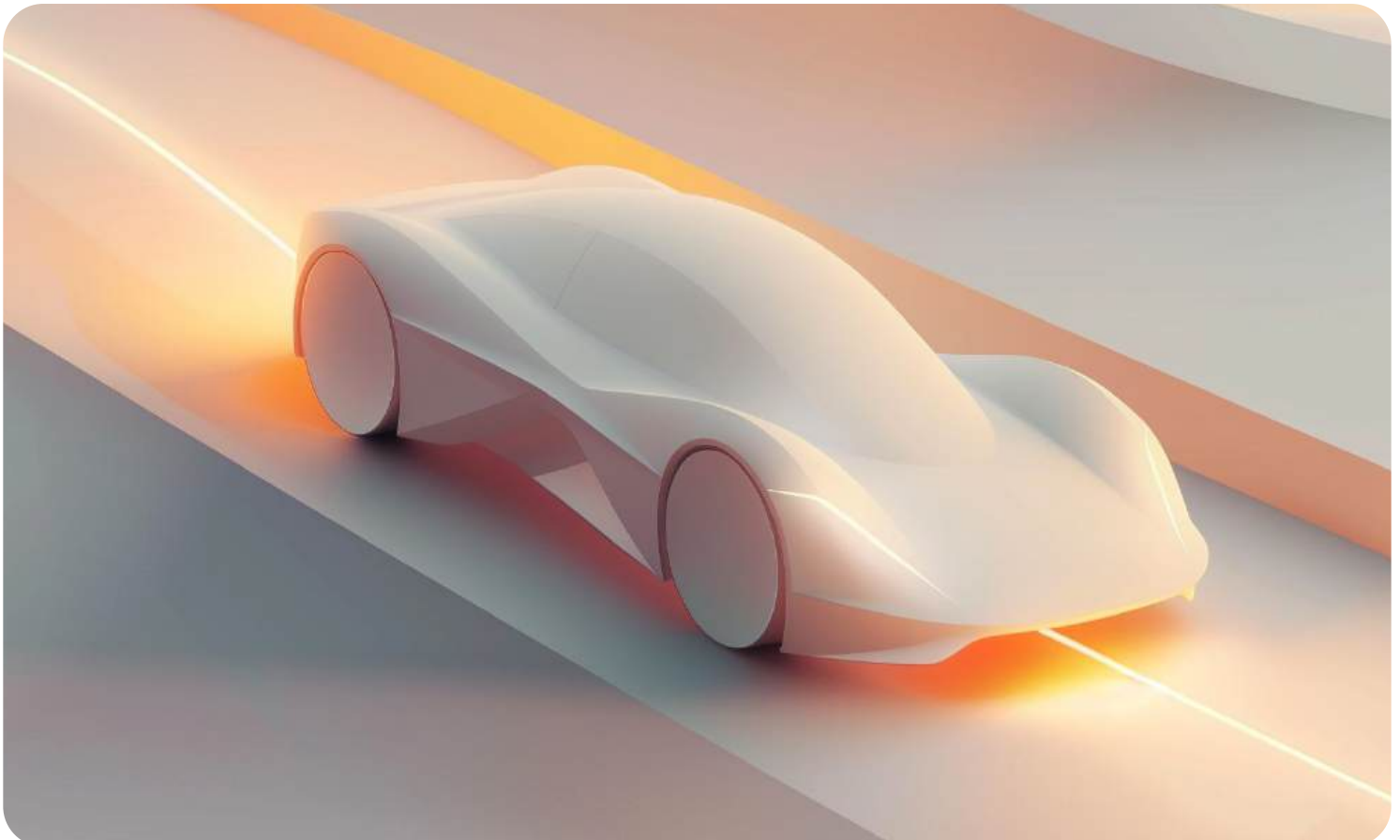
- ✓ Reduces time-to-compliance for new market entries
- ✓ Lowers risk of regulatory penalties
- ✓ Keeps engineering and legal teams aligned on requirements

# 30-50%

business processes acceleration can be achieved by AI agents.

# 25-40%

reduced low-value work time





# Hospitality & Travel

## Personalized Trip Planning

Takes traveler preferences, budget, and dates as input. Researches options across flights, accommodation, and activities, builds an itinerary, and handles booking workflows end to end.

- ✓ Reduces time customers spend on trip research and booking
- ✓ Increases upsell opportunity through contextual recommendations
- ✓ Improves satisfaction through relevance

## **Dynamic Room & Rate Management**

Monitors occupancy, booking pace, competitor rates, and demand signals. Adjusts room pricing and availability across channels in real time to maximize revenue per available room.

- ✓ Improves RevPAR during both peak and low-demand periods
- ✓ Responds faster to market changes than manual revenue management
- ✓ Reduces dependence on static pricing rules

up to **86%**

**human task time can be saved by agentic AI in multi-step workflows.**

## **Guest Experience Agent**

Handles pre-arrival communication, in-stay requests, service coordination, and post-stay follow-up. Manages interactions across messaging channels and escalates when human attention is needed.

- ✓ Reduces front desk workload on routine requests
- ✓ Improves response time to guest needs
- ✓ Generates post-stay feedback data for operations



## Disruption & Rebooking Management

Detects travel disruptions – cancellations, delays, overbookings – and autonomously identifies and offers alternative options to affected customers, prioritizing by loyalty tier or trip urgency.

- ✓ Reduces customer effort during disruptions
- ✓ Lowers volume of inbound service contacts
- ✓ Improves loyalty outcomes in high-stress moments

## Housekeeping & Operations Scheduling

Coordinates housekeeping assignments based on check-in/check-out patterns, room status, staff availability, and special requests. Adjusts dynamically throughout the day as conditions change.

- ✓ Improves room turnaround times
- ✓ Reduces scheduling conflicts and idle time
- ✓ Supports staff allocation decisions in real time





# Energy & Utilities

## Grid Load Balancing

Monitors energy demand and supply across the grid in real time. Adjusts distribution, activates reserves, and coordinates with renewable sources and storage systems to maintain stability without manual intervention.

- ✓ Reduces risk of outages during demand spikes
- ✓ Improves integration of variable renewable energy sources
- ✓ Lowers operational cost of grid management

## Energy Consumption Optimization

Monitors consumption patterns across commercial or industrial customers. Recommends and in some cases autonomously adjusts usage – HVAC, lighting, industrial loads – to reduce cost and meet sustainability targets.

- ✓ Lowers energy costs for commercial clients
- ✓ Supports carbon reduction commitments with measurable data
- ✓ Identifies efficiency opportunities across large property portfolios

## Predictive Infrastructure Maintenance

Analyzes sensor and inspection data from pipelines, substations, and grid infrastructure. Identifies degradation patterns and schedules maintenance before failures occur.

- ✓ Reduces unplanned outages and emergency repair costs
- ✓ Extends infrastructure lifespan
- ✓ Improves safety compliance records

up to **12x**

**more complex tasks can be completed by AI agents compared to traditional LLMs**



## Outage Detection & Response

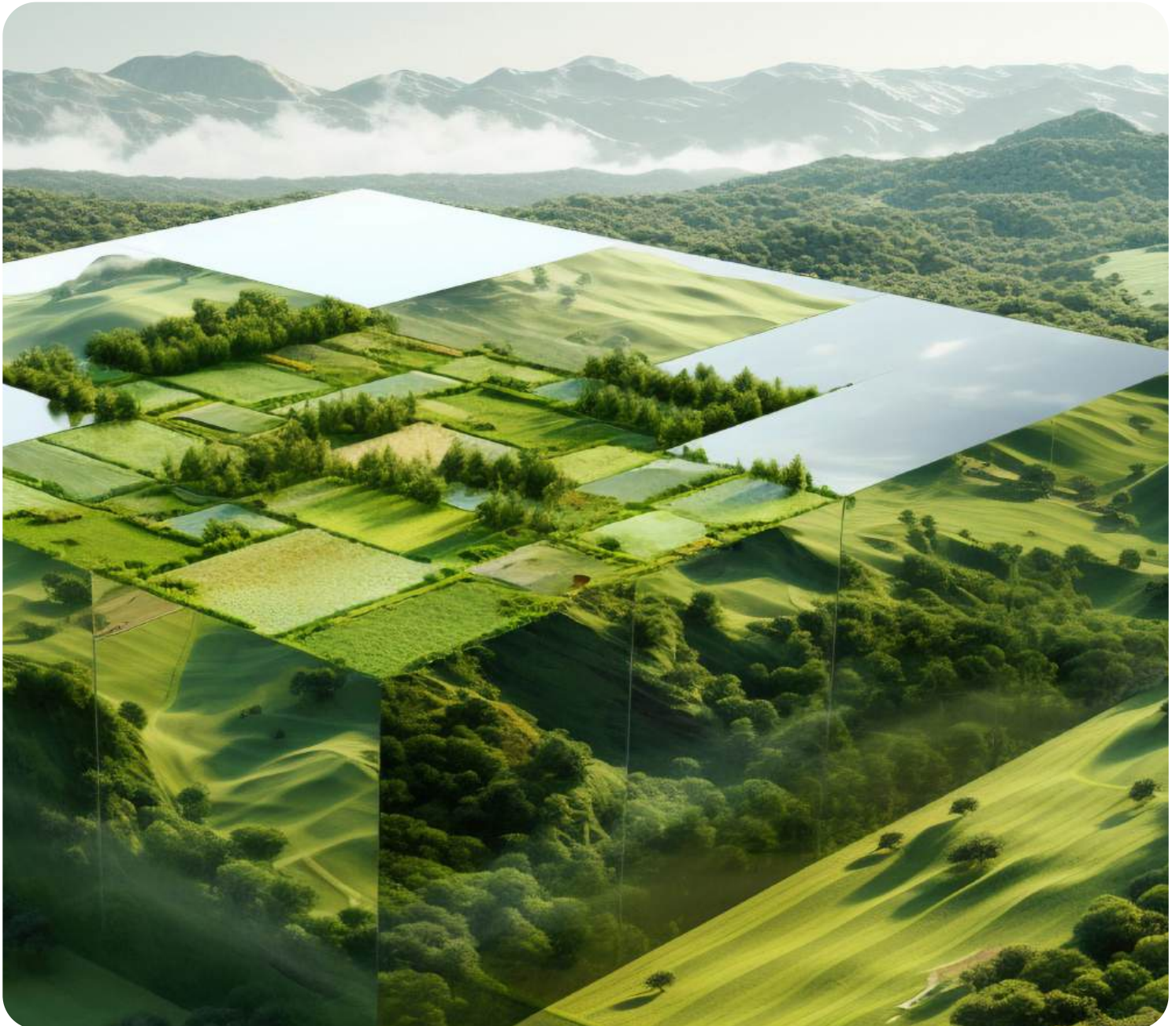
Detects outage events, triangulates affected areas from sensor and customer report data, dispatches field crews, and communicates status updates to affected customers – all within minutes of detection.

- ✓ Shortens mean time to restoration
- ✓ Reduces inbound call volume during outages
- ✓ Improves customer communication during service disruptions

## Regulatory Reporting & Compliance

Aggregates operational data, maps it against reporting requirements, and generates submissions for energy regulators on the required schedule. Flags data gaps or anomalies before submission.

- ✓ Reduces time spent on manual report preparation
- ✓ Lowers compliance risk through consistent, timely submissions
- ✓ Creates an auditable record of operational data





# Real Estate

## Lease & Contract Management

Manages lease lifecycle workflows – drafting, review flagging, renewal reminders, and compliance checks. Tracks key dates across a portfolio and initiates relevant actions ahead of deadlines.

- ✓ Reduces missed renewal and break clause dates
- ✓ Lowers legal review time on standard lease documents
- ✓ Improves portfolio visibility for asset managers

# 88%

**of senior executives plan to increase AI budgets in next 12 months due to agentic AI.**

## Lead Qualification & Nurturing

Engages inbound leads across digital channels, qualifies them based on budget, timeline, and property criteria, and routes high-intent leads to agents. Maintains ongoing contact with longer-term prospects autonomously.

- ✓ Increases share of leads converted to viewings
- ✓ Reduces time agents spend on unqualified outreach
- ✓ Keeps prospects engaged without manual follow-up

## Property Valuation & Market Analysis

Aggregates data from listings, transactions, planning applications, and market indices. Generates property valuations and market reports for agents, investors, or lenders on demand.

- ✓ Reduces turnaround time for valuation and appraisal workflows
- ✓ Improves consistency across large property portfolios
- ✓ Supports faster investment decision-making



## Tenant Support & Maintenance Coordination

Receives maintenance requests, classifies urgency, assigns contractors, tracks resolution, and updates tenants on status. Handles routine queries about lease terms, payments, and building services.

- ✓ Reduces response time on maintenance issues
- ✓ Lowers property management overhead on routine interactions
- ✓ Improves tenant satisfaction and retention rates

## Due Diligence Automation

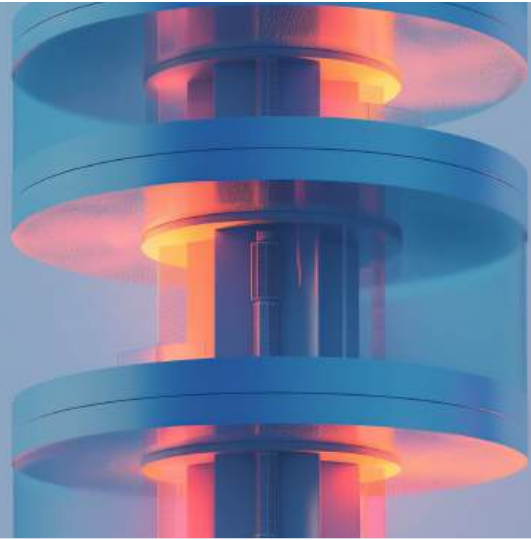
Gathers and reviews documents required for property transactions – title searches, planning history, environmental reports, survey data – and flags issues or gaps for the legal or advisory team to review.

- ✓ Shortens transaction timelines
- ✓ Reduces manual research time for legal and advisory teams
- ✓ Lowers risk of missing material information in complex deals





# Telco



## Network Fault Detection & Resolution

Monitors network performance data across infrastructure in real time. Detects faults, identifies root causes, and autonomously initiates resolution workflows – rerouting traffic, restarting services, or dispatching field engineers.

- ✓ Reduces mean time to detect and resolve network issues
- ✓ Lowers impact of faults on end customers
- ✓ Decreases dependency on manual NOC monitoring

## Customer Onboarding & Provisioning

Manages end-to-end onboarding for new customers – identity verification, plan activation, device configuration, and service provisioning – across systems without manual handoffs.

- ✓ Shortens time from sale to active service
- ✓ Reduces provisioning errors and follow-up contacts
- ✓ Improves first-week customer experience

# 80%

**of common customer service issues will autonomously resolve agentic AI by 2029, cutting costs 30%.**

## Churn Prediction & Retention

Analyzes usage patterns, billing history, service complaints, and contract proximity to identify customers at high churn risk. Triggers personalized retention interventions at the right moment.

- ✓ Improves retention rates among at-risk segments
- ✓ Reduces revenue loss from preventable churn
- ✓ Enables proactive outreach before cancellation intent forms



## Billing Dispute Resolution

Receives billing queries, retrieves relevant account and usage data, identifies the source of the discrepancy, and resolves standard disputes autonomously. Escalates complex or high-value cases to human agents.

- ✓ Reduces average handling time for billing contacts
- ✓ Lowers cost per dispute resolution
- ✓ Improves customer satisfaction on a high-friction interaction

## Spectrum & Capacity Planning

Analyzes traffic demand patterns, network utilization, and growth projections across geographies. Generates capacity recommendations and supports spectrum allocation decisions with data-driven scenario modeling.

- ✓ Improves network investment prioritization
- ✓ Reduces over- and under-provisioning in target markets
- ✓ Supports regulatory spectrum submissions with structured data





**PART 3**

# Real-World Examples:

24 Verified Deployments

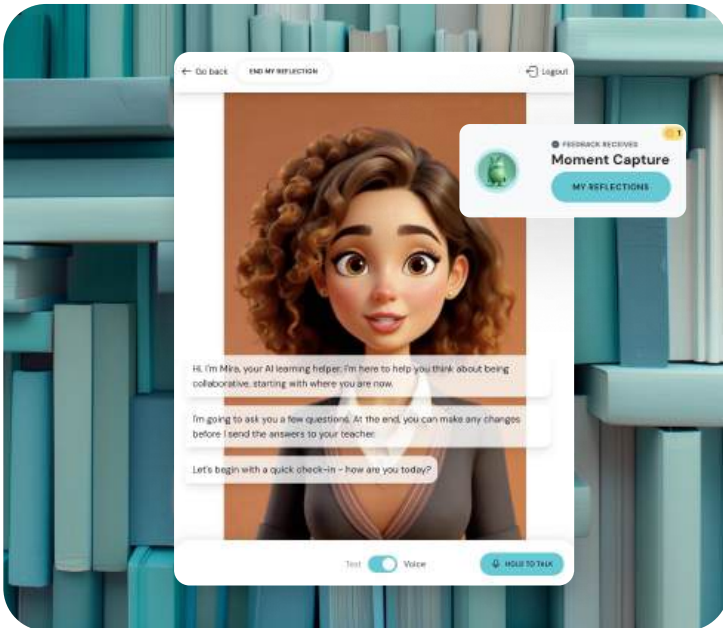
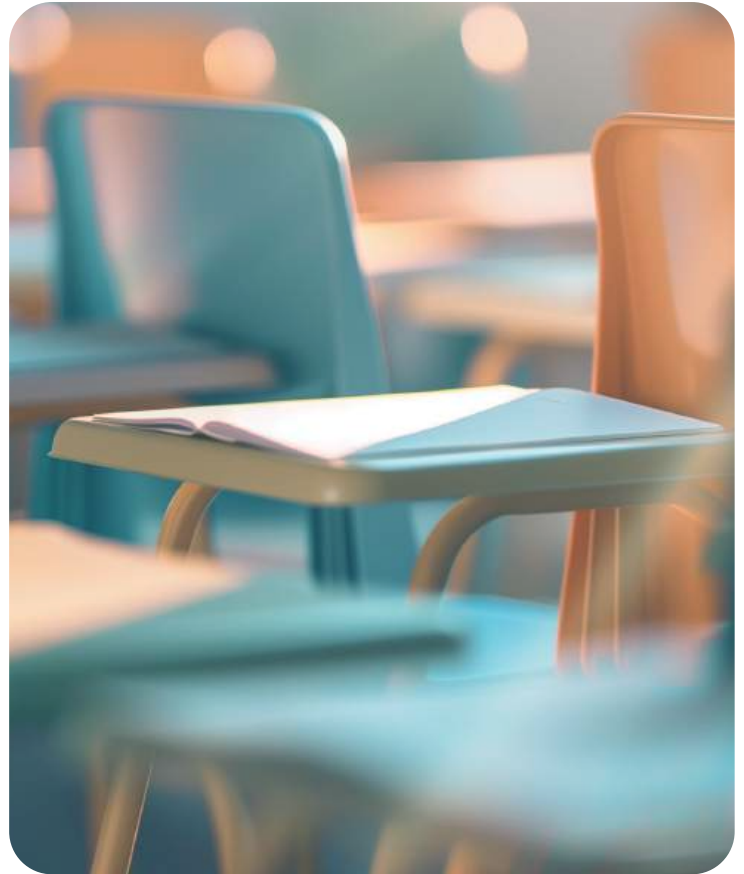


# Mira – AI Reflection Assistant for Nord Anglia Education



## Problem:

**Nord Anglia** wanted to help students develop metacognitive skills – the ability to reflect on their own thinking – without adding pressure on teachers or disrupting existing learning processes.



## Solution:

Master of Code Global built Mira, an AI-powered assistant that guides students through reflective conversations using voice and text, while automatically generating structured summaries and draft feedback for teachers.

# 11,6x

increase in words per reflection compared to the traditional tool

# 2x

deeper thinking demonstrated in every session

# Highest

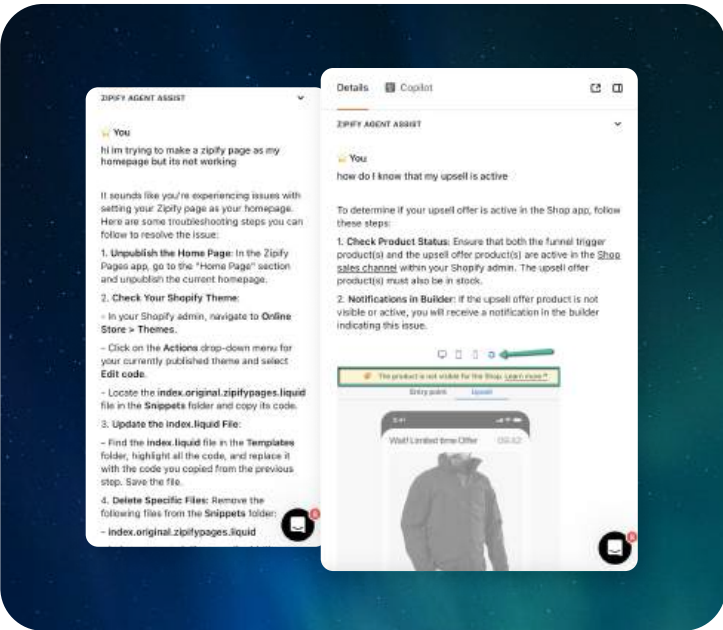
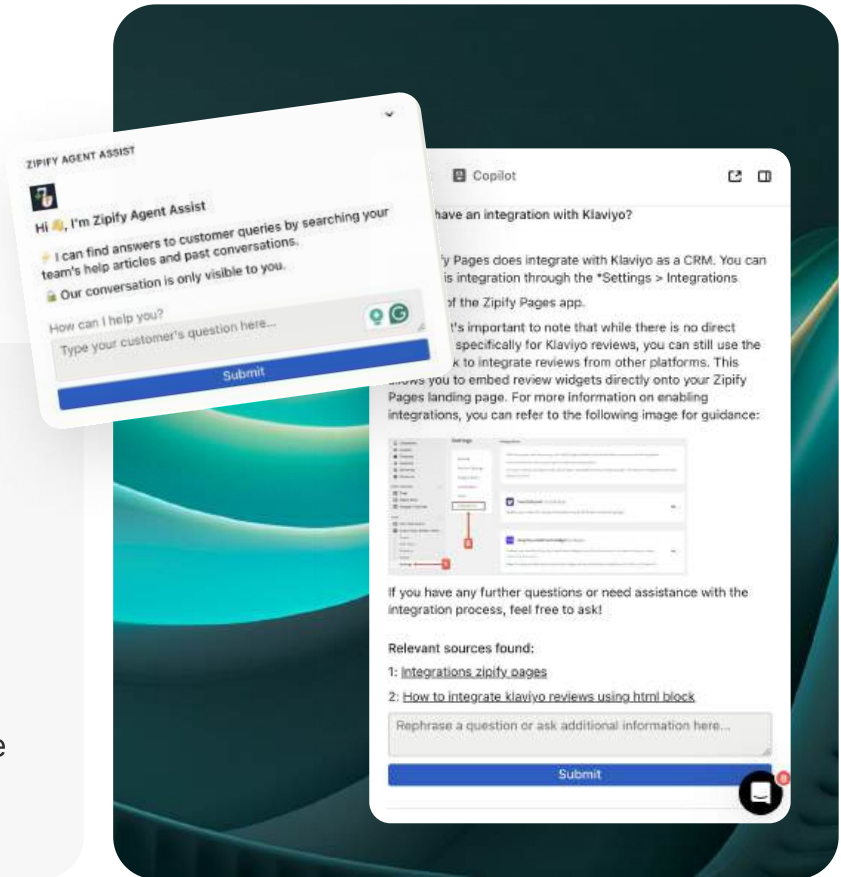
average scores across all 7 measured metacognitive indicators



# Agent Assist – AI Support Co-Pilot for Zipify

## Problem:

Zipify's support team was handling large volumes of repetitive inquiries without a centralized way to track trends or agent performance, and general-purpose AI tools didn't capture the nuance of their specific workflows.



## Solution:

Master of Code Global built a two-part solution: an AI virtual assistant that retrieves contextual answers and generates ready-to-send responses in under 3 seconds, and an analytical dashboard tracking 18+ performance metrics.

**65%**

faster response time

**2x**

faster time to close tickets

**30%**

lower operating costs

**24%**

higher customer satisfaction

**2.8x**

improvement in response speed

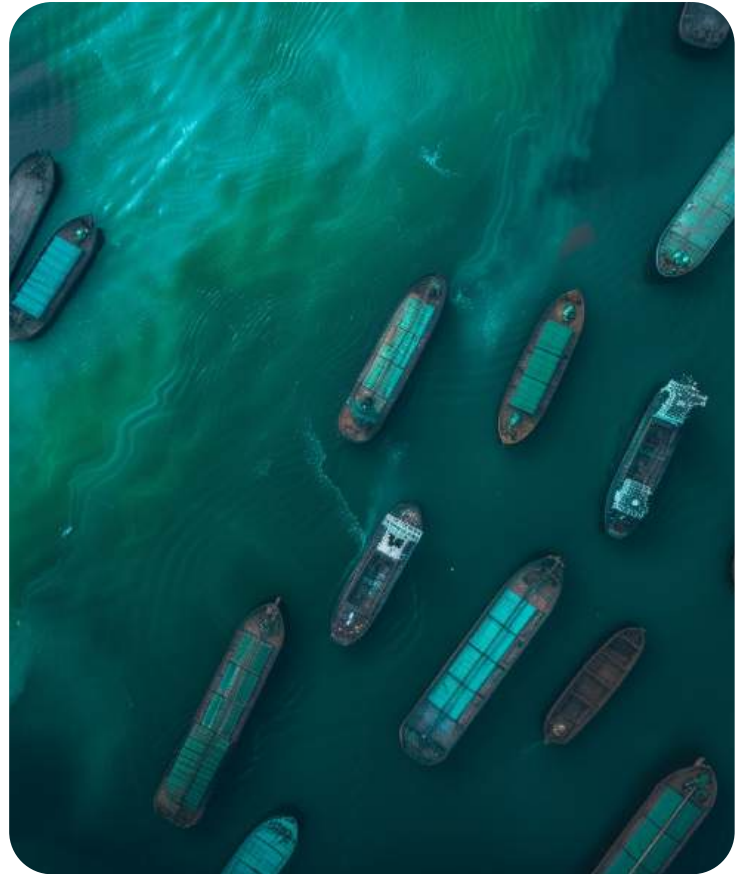


# Data Discrepancy Reconciliation Tool for a US Energy Company



## Problem:

A US-based energy company was spending significant operational time manually reconciling inconsistencies between water and oil readings across data sources.



## Solution:

Master of Code Global developed a standalone web application with an embedded agentic AI that automatically detects discrepancies, applies pre-defined validation rules, and delivers plain-language explanations of each issue directly in the interface.

### Eliminated

hours of manual data reconciliation per case

### Reduced

human error in the discrepancy detection process

### Freed

operational staff to focus on higher-value tasks



# Network Troubleshooting Agent for a Major Telecom Provider



## Problem:

**Support staff** were repeatedly asking the same diagnostic questions across every customer interaction, creating bottlenecks and frustrating customers.



## Solution:

Master of Code Global built an AI agent that collects diagnostic data through natural conversation, skipping questions already answered, and delivering structured summaries to human agents before they even engage.

# +25%

more network issues resolved without escalation to specialists

# -18%

reduction in average handling time per case

# +10

NPS points improvement in customer satisfaction

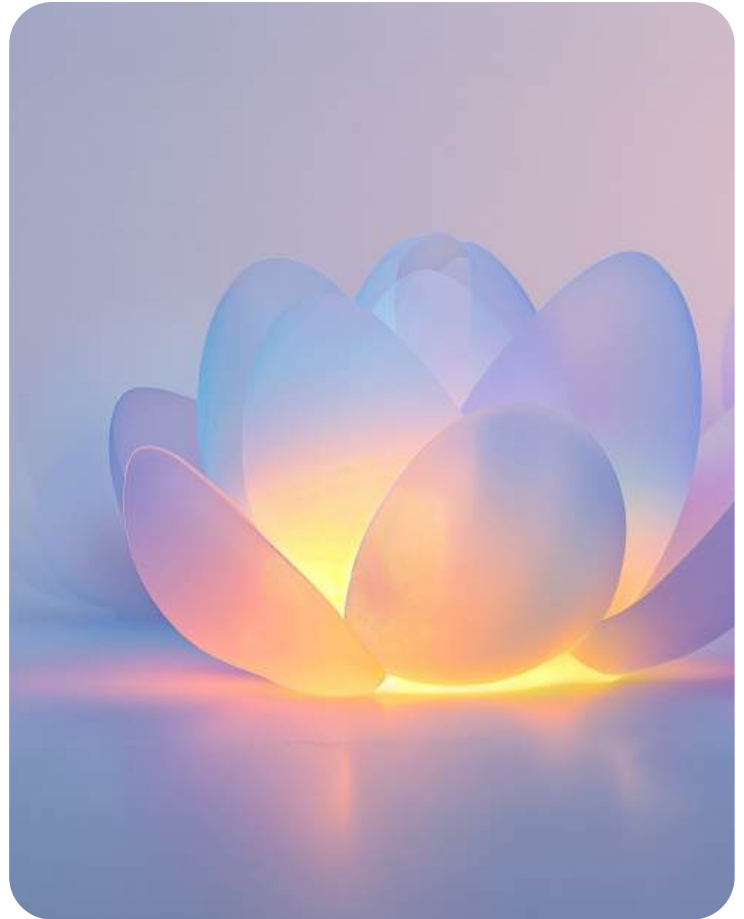


# GenAI Conversion Optimization for a Wellness Provider



## Problem:

A wellness services provider was losing a significant share of website visitors during account creation and provider search. Conversion rates were declining despite consistent traffic, and scaling human support to close the gap wasn't economically viable.



## Solution:

Master of Code Global built **a custom three-layer AI agent** combining intelligent conversation routing, RAG-powered knowledge retrieval trained on the client's proprietary data, and a data collection layer that gathers onboarding information naturally throughout the conversation without repetitive questioning.

**+22%**

increase in conversion rate from website visitor to paying customer

**-17%**

reduction in customer acquisition cost

**+20%**

improvement in engagement success rate



## Vodafone – AI Hiring Manager Agent

**Built an AI agent** that produces a full recruitment package from a single intake request – job descriptions, LinkedIn posts, interview guides, and assessment exercises – without human intervention at each step.



## Coca-Cola Consolidated – IT Service Desk Agent

**"Bottlecap"** serves as the unified IT support entry point – intercepting tickets, diagnosing issues, and resolving or routing them autonomously without a human in the loop at each step.



## Goldman Sachs – Autonomous Coding Agent

Became the first major bank to deploy **"Devin,"** an autonomous software engineering agent, using it to update legacy code and manage migrations under human-in-the-loop oversight.



## Billerud – Invoice Processing Agent

Rebuilt accounts payable around **an AI agent** that reads invoices from any channel, extracts line-item data, and matches against purchase orders autonomously. Over 90% of PDF invoices are now auto-validated; manual review dropped from 15% to 9% of cases; total monthly invoice costs fell by 25%.



## UBS – Contract Review & Legal Intelligence Agent

**LAIA** queries 26 million multilingual documents, giving legal teams instant access to relevant precedents and clauses across the bank's full document database – synthesizing answers to complex legal queries across multiple sources autonomously.

## Morgan Stanley

### Morgan Stanley – Sales Meeting Intelligence Agent

**"Debrief"** transcribes meetings, drafts follow-up emails, and automatically pushes structured notes into Salesforce CRM – completing the full post-meeting workflow without manual input.



## Commerzbank – Advisory Documentation Agent

Built on Google Gemini, the system automates advisory protocol documentation for corporate-client sales advisors – converting voice calls directly into structured CRM-ready records, removing the manual write-up step entirely.



## Nestlé – Sales Enablement Agent

A virtual sales assistant built on agentic AI automates up to 40% of routine field sales tasks, delivering 20–35% time savings across pilot markets.



## BMW Group – Procurement Intelligence Agent

"Alconic" is a multi-agent platform with 10 specialized agents covering supplier quality control, contract specifications, and procurement processes. Now used by 1,800+ employees running over 10,000 searches.



## Unilever – Marketing Content Operations Agent

An AI and digital twin-powered workflow autonomously generates, adapts, and publishes product shoot assets. The Beauty & Wellbeing division pilot delivered up to 55% cost savings and 65% faster content turnaround compared to traditional production methods.



## DHL Supply Chain – Logistics Coordination Agent

HappyRobot autonomous agents handle appointment scheduling, driver follow-ups, and warehouse coordination simultaneously across phone, email, and messaging – without human initiation at each touchpoint.



## BMW Group – Factory Fault Diagnosis Agent

"Factory Genius" gives engineers natural-language access to fault diagnosis across production plants – drawing from multiple data sources to deliver actionable answers to maintenance queries in real time.



Mercedes-Benz

## Mercedes-Benz – Quality Deviation Agent

At the Berlin-Marienfelde Digital Factory Campus, **an AI agent** autonomously analyzes quality deviations and generates corrective action recommendations, replacing a manual diagnosis cycle.



## Coca-Cola Consolidated – IT Service Desk Agent

**"Bottlecap"** serves as the unified IT support entry point – intercepting tickets, diagnosing issues, and resolving or routing them autonomously without a human in the loop at each step.

## SIEMENS

### Siemens – Engineering Agent

**"Eigen"** is a purpose-built engineering agent delivering up to 50% higher efficiency, 2–5x faster task execution, and up to 80% higher solution quality compared to manual workflows.

## Unilever

### Unilever – Manufacturing Process Optimization Agent

**An AI pilot** at the Poznań foods plant continuously monitors production data and autonomously optimizes machine cleaning cycles. Saved €100,000 per year, cut cleaning time by 20%, and reduced utility usage by 10%.



### Marriott International – Room Upgrade Automation Agent

**The Automated Complimentary Upgrade system** evaluates guest eligibility, checks room availability, applies upgrade logic, and executes assignments across systems autonomously – completing in a fraction of a second a process that previously took front desk staff hours.



### Wendy's – Drive-Thru Voice Agent

**"FreshAI"** handles drive-thru orders end-to-end through multi-turn natural language conversation, improving order accuracy and raising company-operated restaurant margins. Now being expanded to 500 locations.



## Bayer – Preclinical Research Agent

**"PRINCE"** is a multi-agent knowledge engine that queries 18,000+ preclinical studies, giving researchers instant synthesized answers across the organization's full research history.



## Novartis – Clinical Trial Operations Agent

**"Development Assistant,"** built on AWS, reached a production-ready MVP in six months and is scaling to 1,000+ users. Running document drafting, site feasibility assessments, and regulatory filings concurrently, it contributes to a target of up to 19 months reduction in overall drug-development cycle time.



## Moderna – Clinical Dose Selection Agent

**"Dose ID"** integrates and visualizes large datasets from multiple sources to support evidence-based dosing decisions in clinical trials – autonomously synthesizing data and generating recommendations for clinical teams.

## Klarna:

### Klarna – Customer Service Agent

**An AI agent** handled 2.3 million customer service chats in its first month – equivalent to the work of 700 full-time employees. Resolved issues in 2 minutes on average versus 11 minutes for human agents, drove a 25% drop in repeat inquiries, and contributed to a projected \$40M profit improvement.



## Deutsche Telekom – Real-Time Agent Assist

**An AI system** deployed across 8,000 frontline staff surfaces contextual information and next-best responses during live customer interactions without the employee needing to search or initiate each step. Delivered a 2% reduction in call transfers and a 10% increase in first-time resolution rates.



## BT Group – Customer Service Agent

**"Aimee"** handles tens of thousands of customer service conversations weekly, autonomously resolving queries end-to-end with automation success rates reaching approximately 50%.



**PART 4**

# **Test Your Agentic AI Idea Without the Risk of a Full Build**



## AI Pilot Program:

A 30-day engagement to validate your AI idea technically and commercially

### Problems We Solve

- ✓ No clear starting point
- ✓ Prototypes without business validation
- ✓ High risk before full build
- ✓ AI-generated plans that don't work in reality

### What You Walk Away With

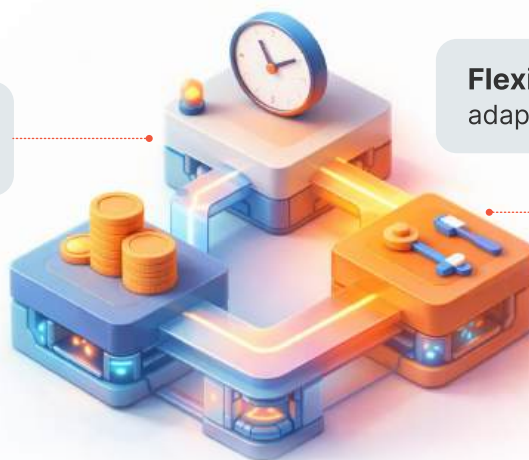
- ✓ Working AI solution with minimum functionality
- ✓ KPI tracking dashboard
- ✓ Legal & security assessment
- ✓ Clear scale-up roadmap

### How AI Pilot Works

**Fixed Timeline** → delivered in 30 days

**Fixed Budget** → no surprises

**Flexible Scope** → adapts during validation



## What Happens in 30 Days



### Discovery 🔍

- ✓ Architecture assessment
- ✓ ROI & business logic
- ✓ Use case validation
- ✓ Legal & security review

### Proof of Value 💎

- ✓ Build a working solution
- ✓ Measure against KPIs
- ✓ Test with real users

[Validate My AI Idea](#)

In 30 days, you go from idea to a validated, working AI solution – with the architecture for the full product launch already defined, so you're not starting from scratch.

**Talk to our team, and we'll scope your pilot together**



## About Master of Code Global

**Master of Code Global** is an AI implementation partner specializing in custom AI development, including Generative AI, AI agents, voice, and large-scale enterprise-grade systems.

The company works with organizations to design and deploy AI solutions aligned with real business needs, supporting adoption, integration, and long-term operational use across complex environments.



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