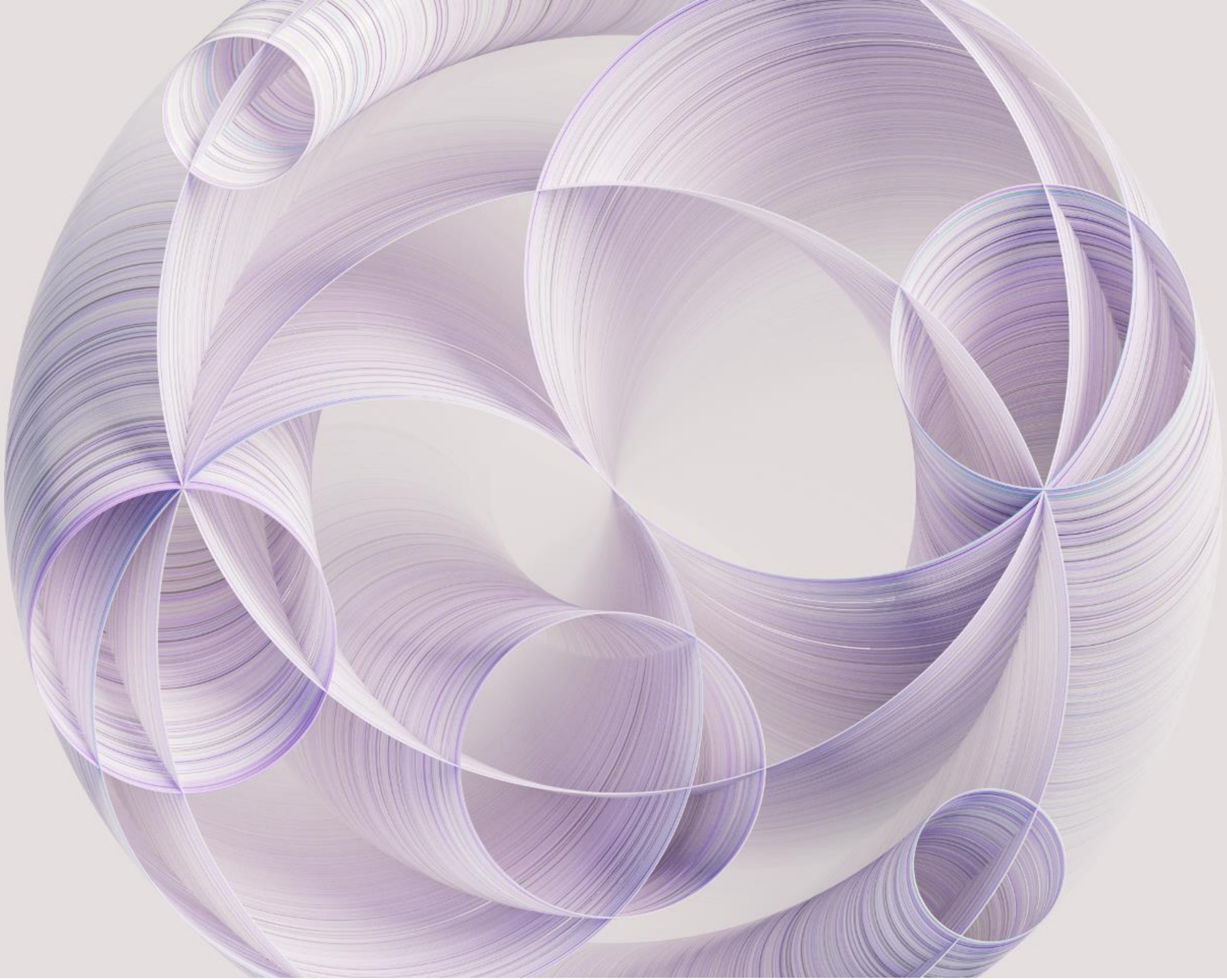
IBM’s vision for agentic AI

The future of AI is about agency and productivity



Hizkia Febianto
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AI capabilities are growing rapidly

AI that predicts

Machine learning

AI that creates

Generative AI

AI that chats

AI assistants

AI that does work

AI agents

With agentic AI, today’s front-end systems will become back-end systems.

AI agents will drive the next wave of knowledge worker productivity

25%

decrease in time to complete tasks when using AI tools[1]

12%

more tasks completed in total with the help of AI tools[1]

40%

higher quality in work completed with AI tools[1]

By 2028, 1/3 of interactions with generative AI will use autonomous agents for task completion.[2]

IBM’s Client 0 story – use cases powered by **watsonx**

AskIBM
A central unified interface for all IBMers, connecting to each domain assistant

IBM AskHR with **watsonx**

10M
Annual HR interactions fully resolved by AI

40%
Reduction of HR operating budget

+55
Improvement of HR NPS score

IBM AskIT with **watsonx**

100
Days to build + deploy AskIT from scratch

80%
Inquiries resolved via AskIT

50%
Reduction in support tickets after 12 month deployment

IBM AskSales with **watsonx**

180K
Hours per week saved in gathering account information and insights

5K
Seller questions answers per week (product guidance and persona targeting)

40%
Improvement in qualify of outreach content

IBM AskIncentives with **watsonx**

96%
Sales related inquiries contained within AI Assistant

90%
Greater accuracy in expense accruals

76%
Increase in productivity while serving 22k sellers

IBM Procurement with **watsonx**

85%
Orders now processed via ‘touchless procurement’

50%
Reduction in time spent on manual, repetitive tasks

15%
Enterprise workforce comprised of contractors

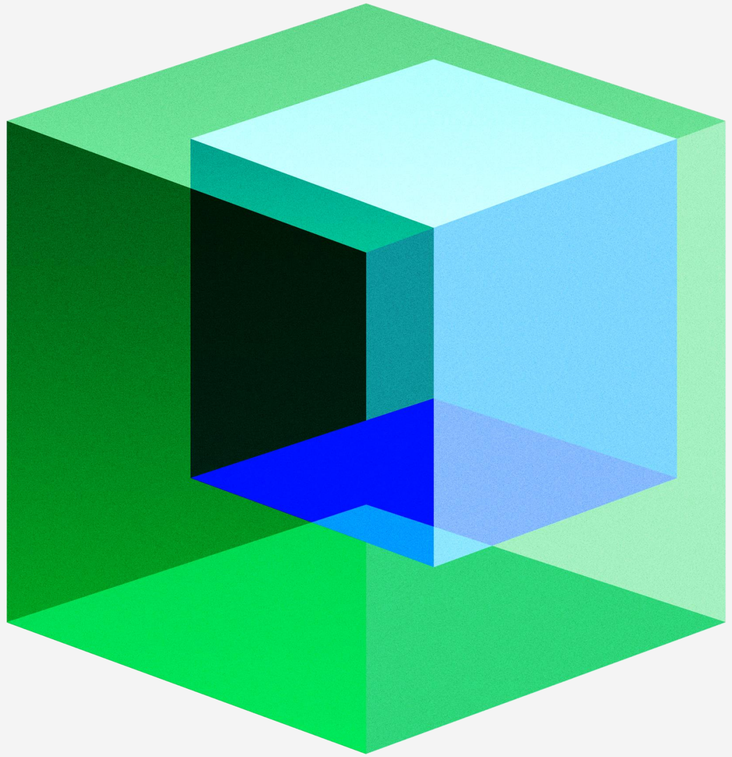
...

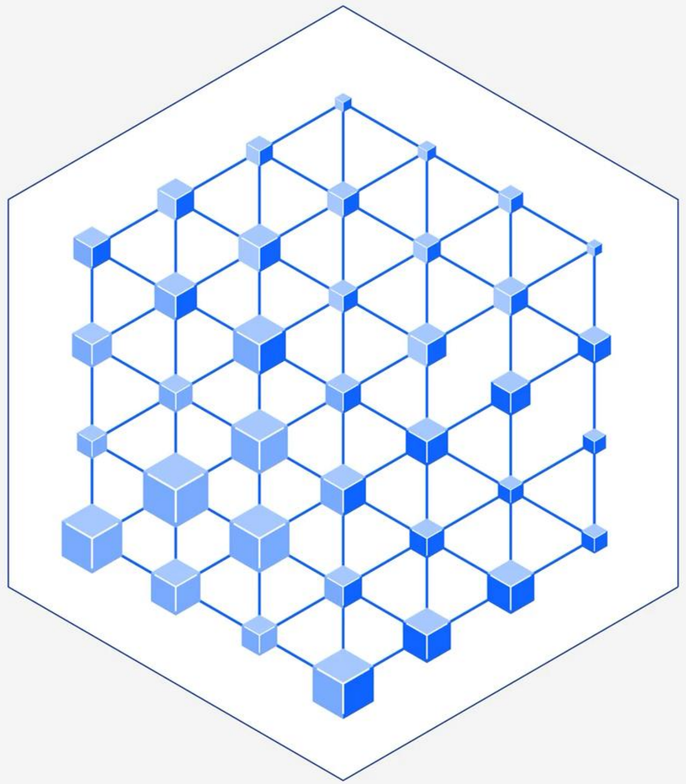
watsonx @ 2025 IBM Corporation

What is an AI agent?

An AI agent is an application that acts autonomously to understand, plan, and execute a request (from a human or another agent).

AI agents use LLMs to reason and can interface with tools, other models, and other IT systems to fulfill user goals.





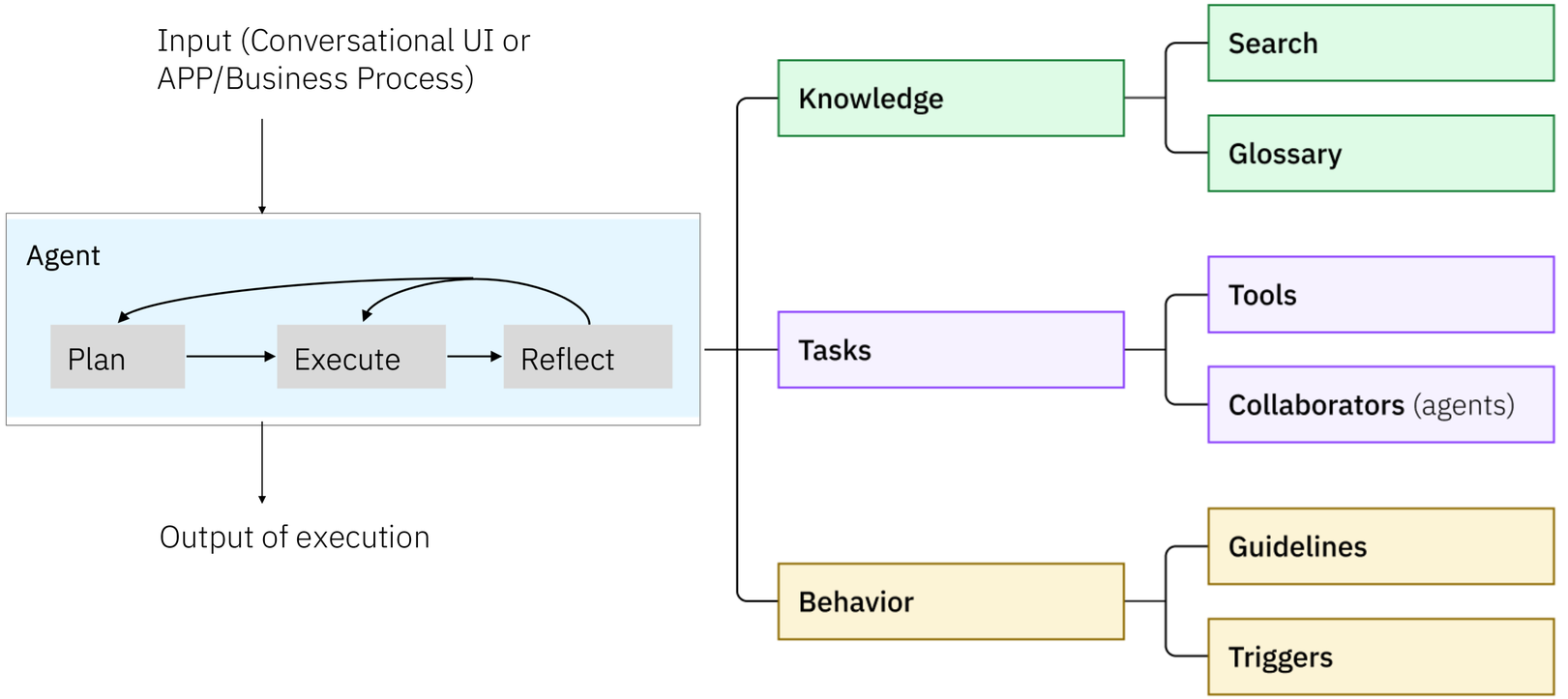
What is agentic AI?

Agentic AI is a framework for accomplishing goals with limited supervision that consists of AI agents.

In multiagent systems, each agent performs a specific subtask that’s required to reach the goal.

AI Agents

An AI agent is an autonomous system that can use tools and collaborate with other agents to plan and act on tasks. After it acts, the agent reflects on the results of its actions, learning iteratively and refining its approach to better align with its defined objectives.



The Orchestrator Agent is a multi-agent, multi-tool supervisor, router, and planner, facilitating complex task execution

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AI agents will give knowledge workers superpowers

Transform enterprise functions

Knowledge workers

Empower knowledge workers

Customer care

Customer self-service (ie. billing and returns)
Proactive problem solving

Human resources

Streamline recruiting processes
Personalized career development

Marketing and sales

Research prospects
Personalized outreach campaigns
Opportunity management

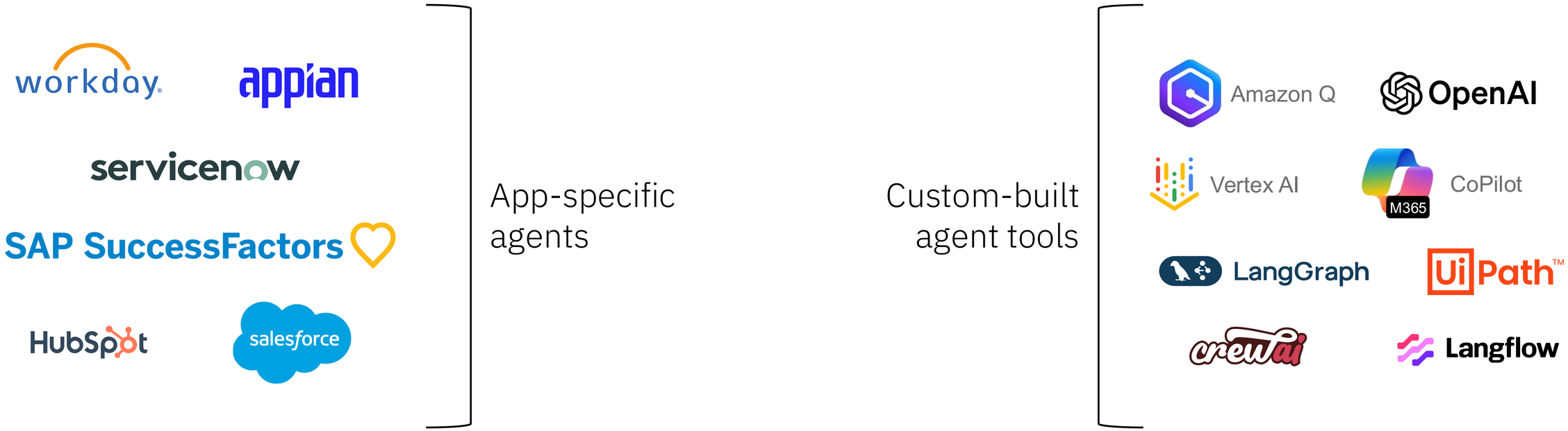
Procurement

Online searches for the best values
Simulate different sourcing scenarios
Monitor global supplier performance

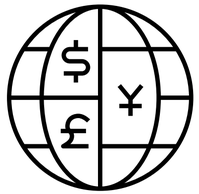
Software development

Development workflow orchestration
Autonomous testing and code validation

AI agents are going to be everywhere

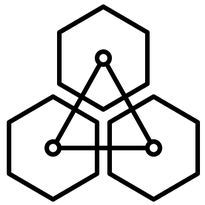


Be deliberate about where you start and how you scale



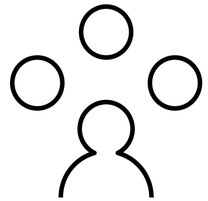
Business Value

Ensuring tangible business value is being driven from agentic use cases is critical for success



Across App Ecosystems

How do you build agents that work across multiple agentic application ecosystems

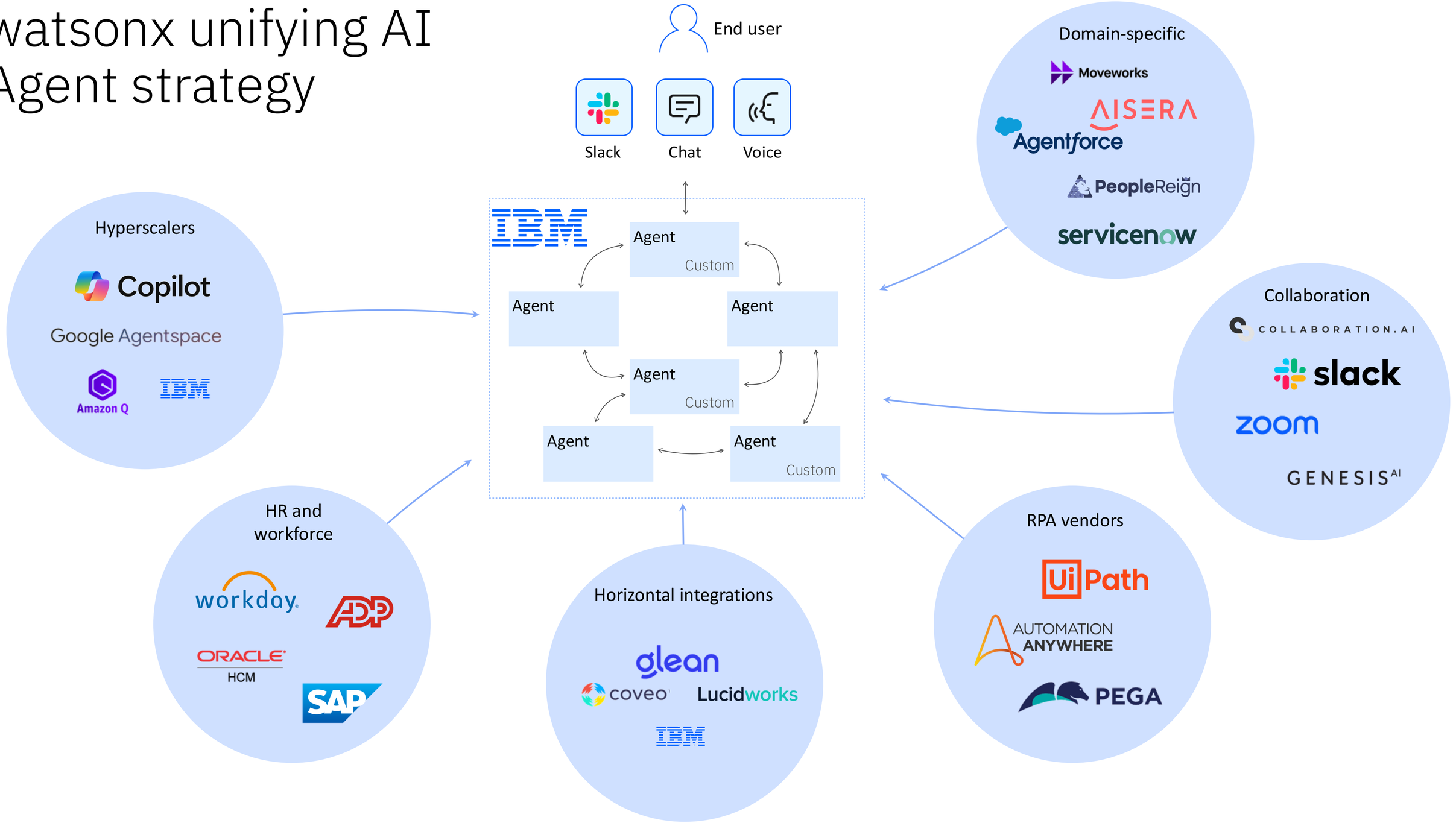


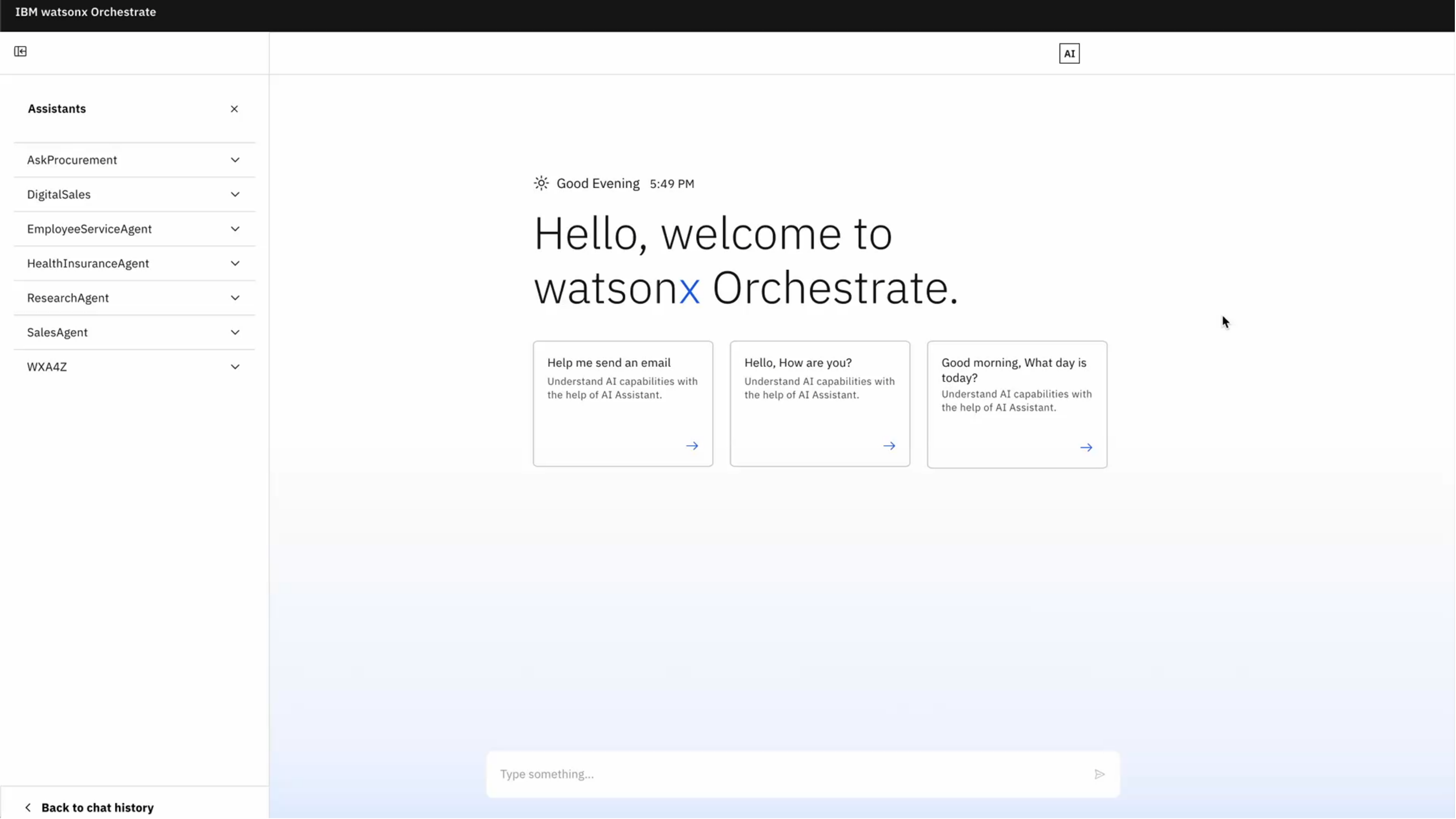
Scaling on Day 2

How do you ensure agent deployments are optimized, scale accurately, safely, and cost efficiently

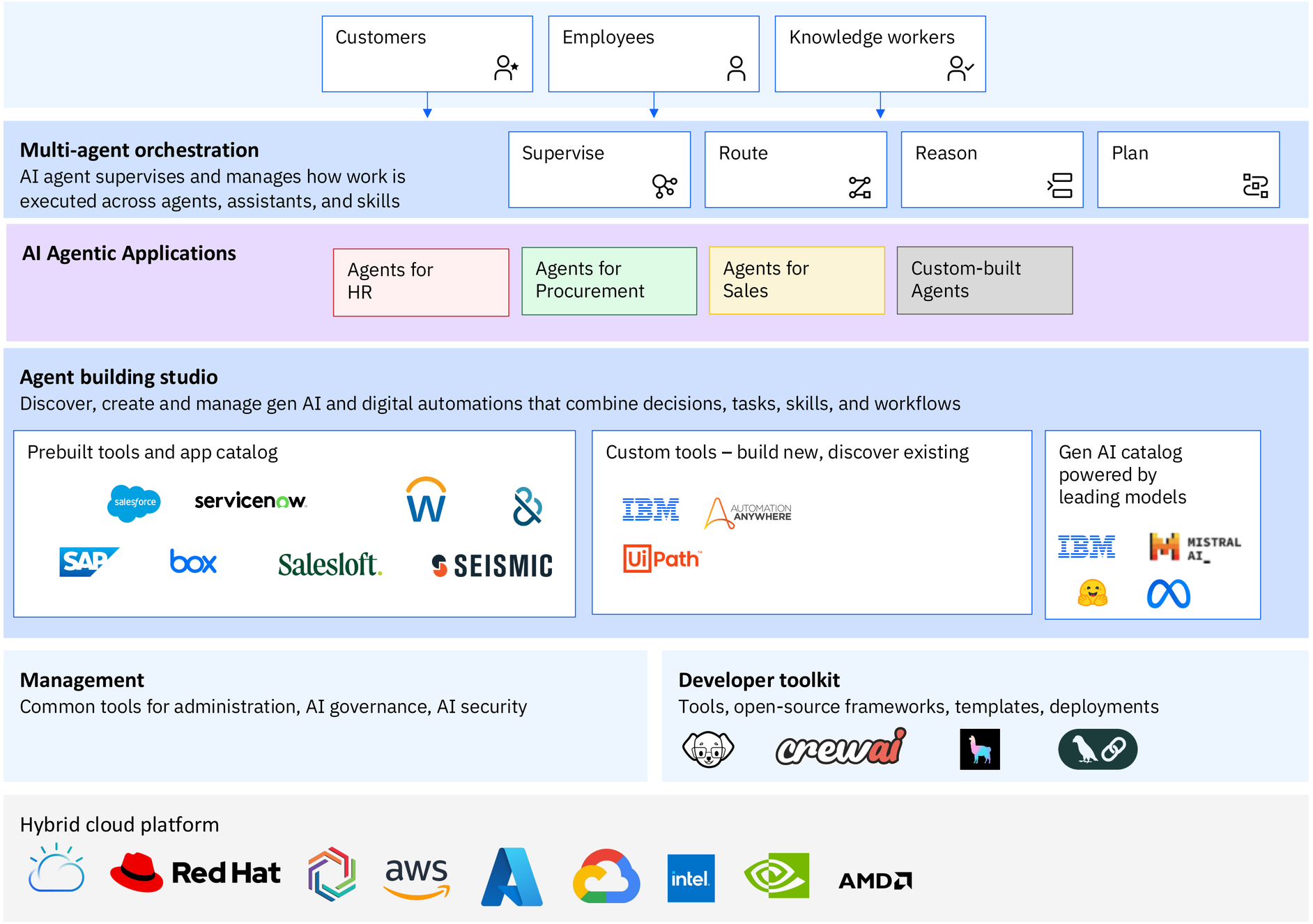
38% of workers share sensitive work information with AI tools without their employers' permission[1]

watsonx unifying AI Agent strategy




IBM watsonx Orchestrate
AI
Assistants
AskProcurement
DigitalSales
EmployeeServiceAgent
HealthInsuranceAgent
ResearchAgent
SalesAgent
WXA4Z
Back to chat history
Good Evening 5:49 PM
Hello, welcome to watsonx Orchestrate.
Help me send an email
Understand AI capabilities with the help of AI Assistant.
Hello, How are you?
Understand AI capabilities with the help of AI Assistant.
Good morning, What day is today?
Understand AI capabilities with the help of AI Assistant.
Type something...

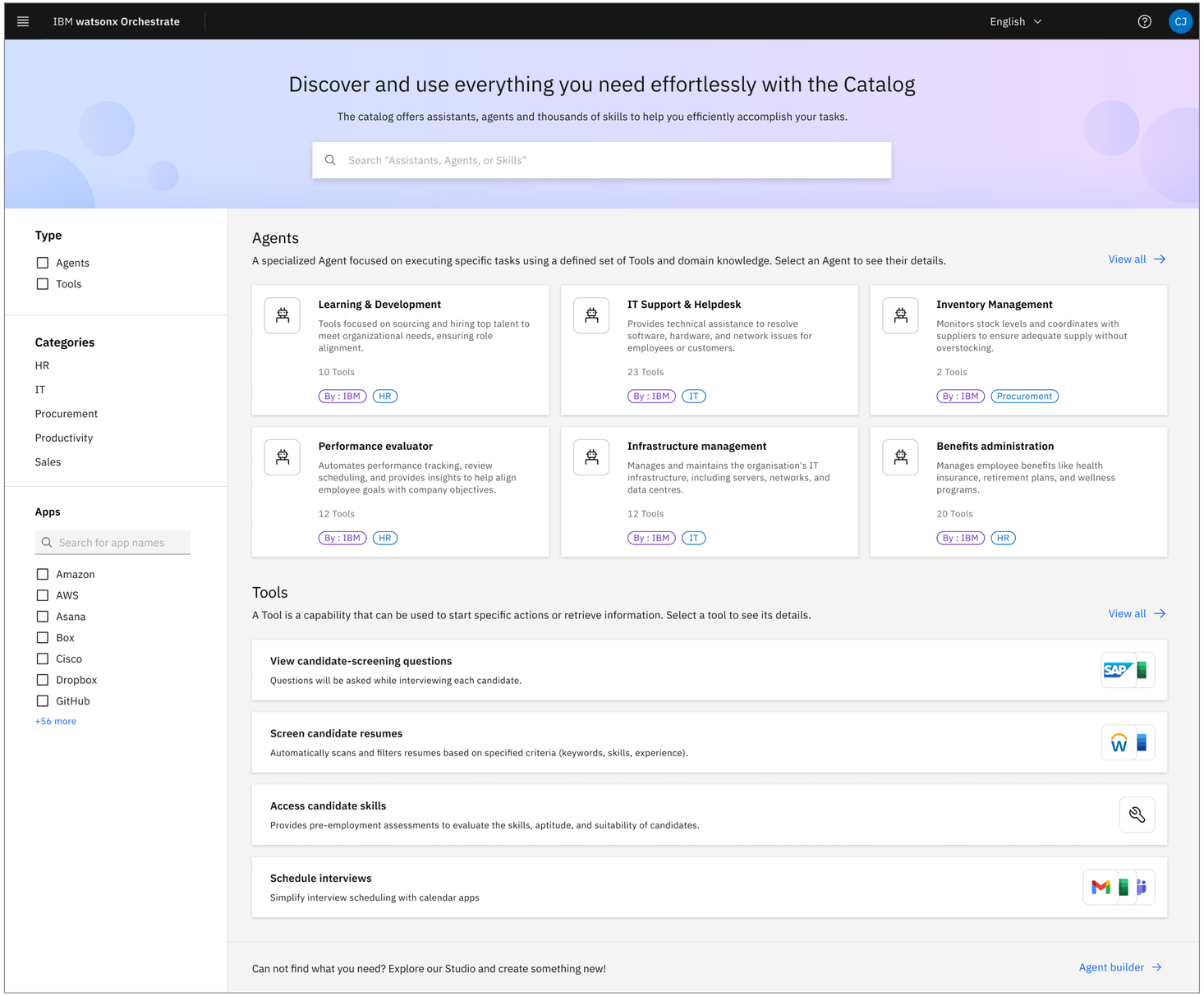
IBM’s architecture for a scalable and responsible agentic AI practice with watsonx



Coming soon at Think

IBM watsonx Agent Catalog

An enterprise catalog of pre-built domain agents and tools for sharing, reuse, and distribution



Strategy for AI agent building

Use existing AI agents

Use existing agents available within the enterprise

Build on best-in-class agent frameworks and plug and play (external agents)

Custom-build AI agents with simplified SDK

Technical teams can build custom-designed agents

Use the Agent Builder SDK to configure, customize and launch AI agents that can fulfill tasks.

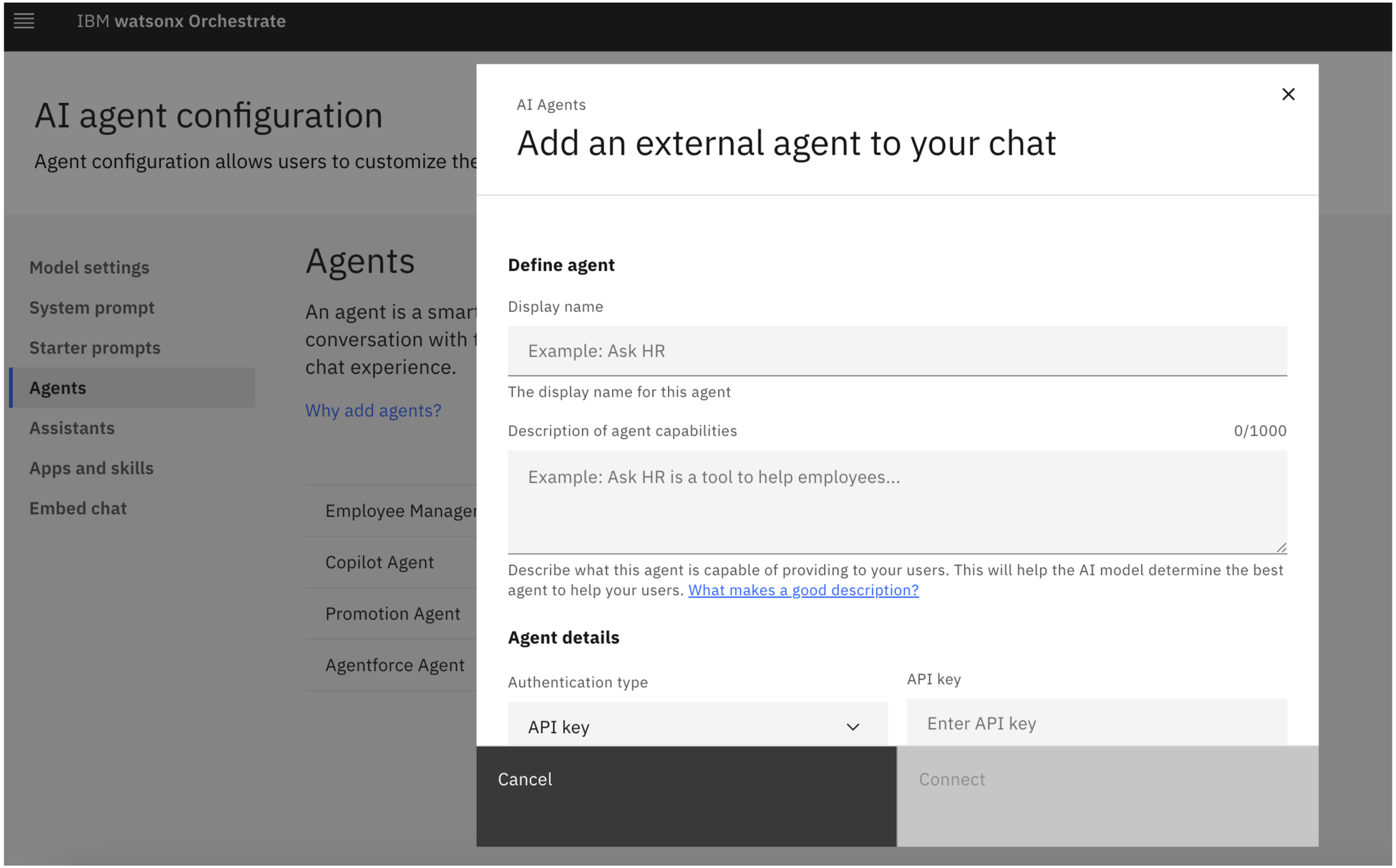
LoB users configure AI agents in no-code studio

Business teams can quickly configure AI agents

Quickly configure domain specific AI agents by connecting them to pre-built and custom tools tied to domain specific systems.

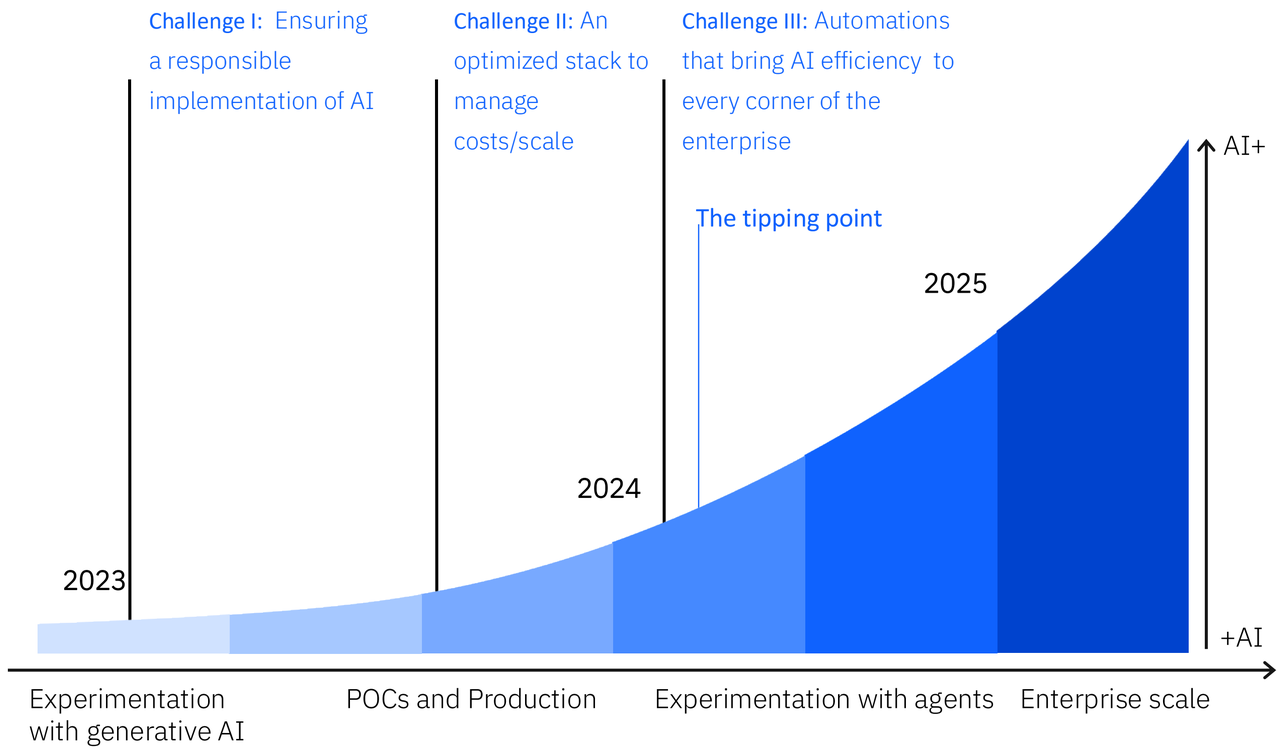
Use existing AI agents

Enterprises can add existing AI agents they built in watsonx.ai or 3rd party developer studios.

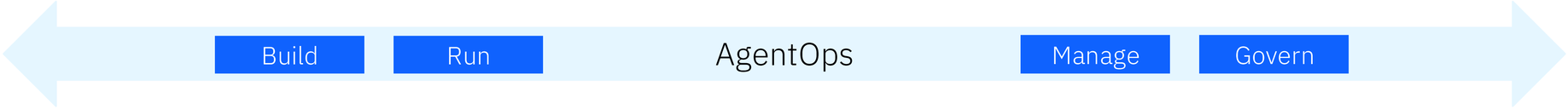


The Need for AgentOps

The market is evolving rapidly, and so are the **enterprise challenges**



Building performant, reliable and trustworthy agents requires empowering the developers



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Cost-Performance Optimizations with watsonx.ai

Model selection

+ Custom Model import

1000+ SOTA models

Model Customizations

From PE to PT, Full FT,
PEFT, InstructLab Alignment

Frameworks selection

LlamaIndex

AutoGen

Tool selection

pre-built, 3rd-party custom tools

1500+ prebuilt skills in watsonx Orchestrate

Build | Run | AgentOps | Manage | Govern

61%

of enterprises are building custom generative AI solutions

IBM32: Is your enterprise developing custom AI solutions or using pre-built solutios? Sample size: Enterprise AI Developers = 1,063n

Cost-Performance Optimizations with watsonx.ai

Post-eval optimizations	Cost-performance trade-Off management Parameter and model configuration tuning Optimizing tool and API usage Failure pattern detection and test case generation Data source and retrieval optimization
Build-time evals	Evaluation SDK/API Tracing SDK/API Experiment management system

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+ Custom Model import

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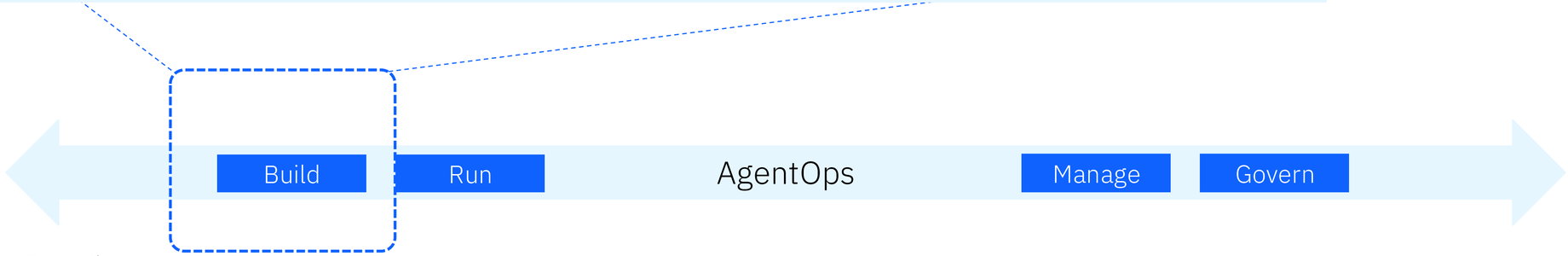

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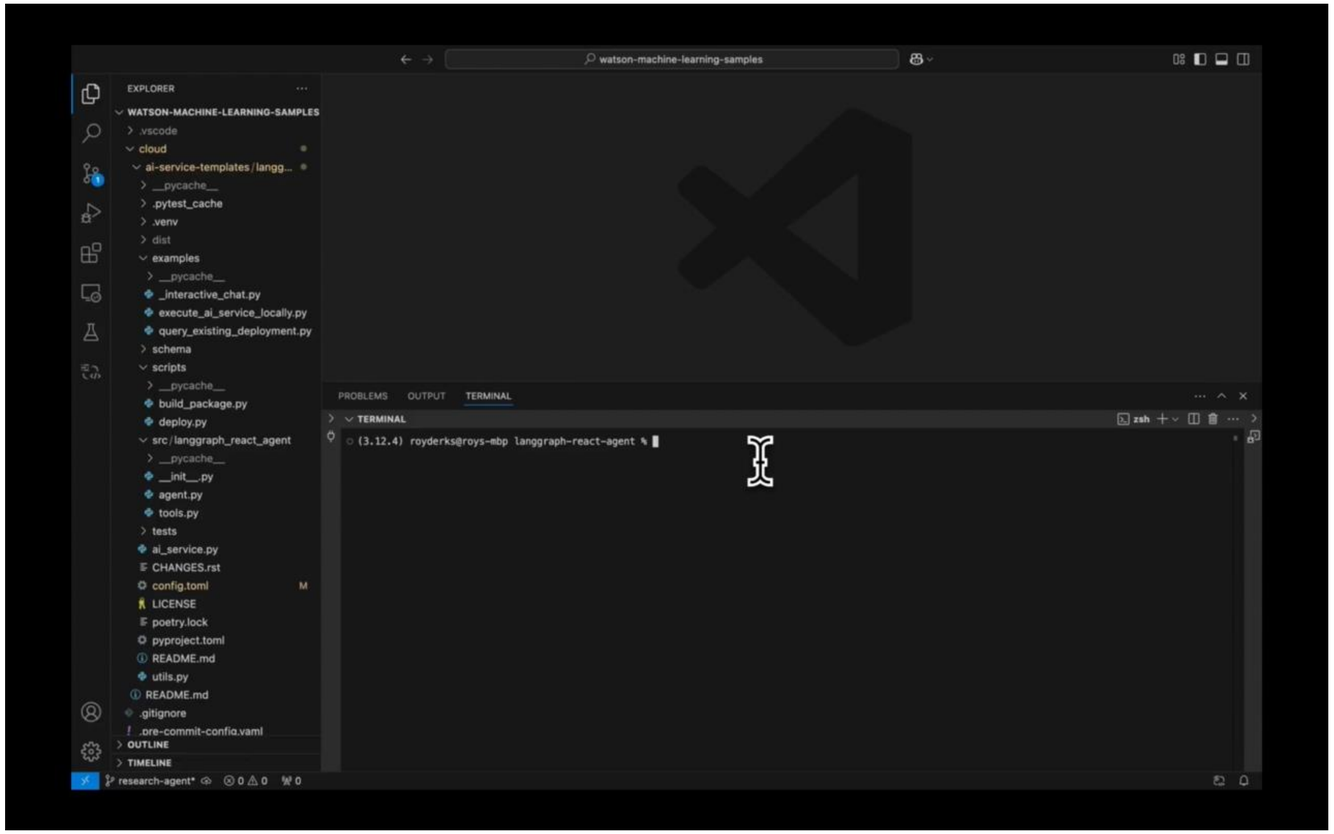
Accelerated Deployment of Agents as Scalable, **Production-Ready API Endpoints**

watsonx.ai AI Services

One-click/single command deployment of services

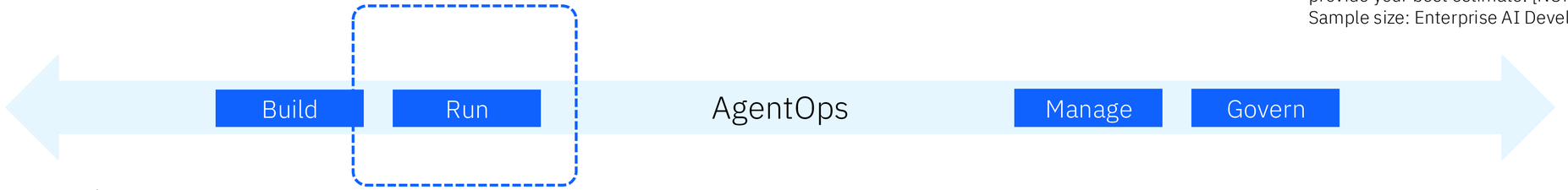
Production-ready API endpoint allowing to import in Orchestrate for orchestration with enterprise workloads



18 hours

average time spent by a developer deploying an AI solution

IBM2: During a typical project cycle, how many hours do you spend on the following tasks/stages? Please provide your best estimate. [NUMERIC OPEN END]
Sample size: Enterprise AI Developers = 1,063n



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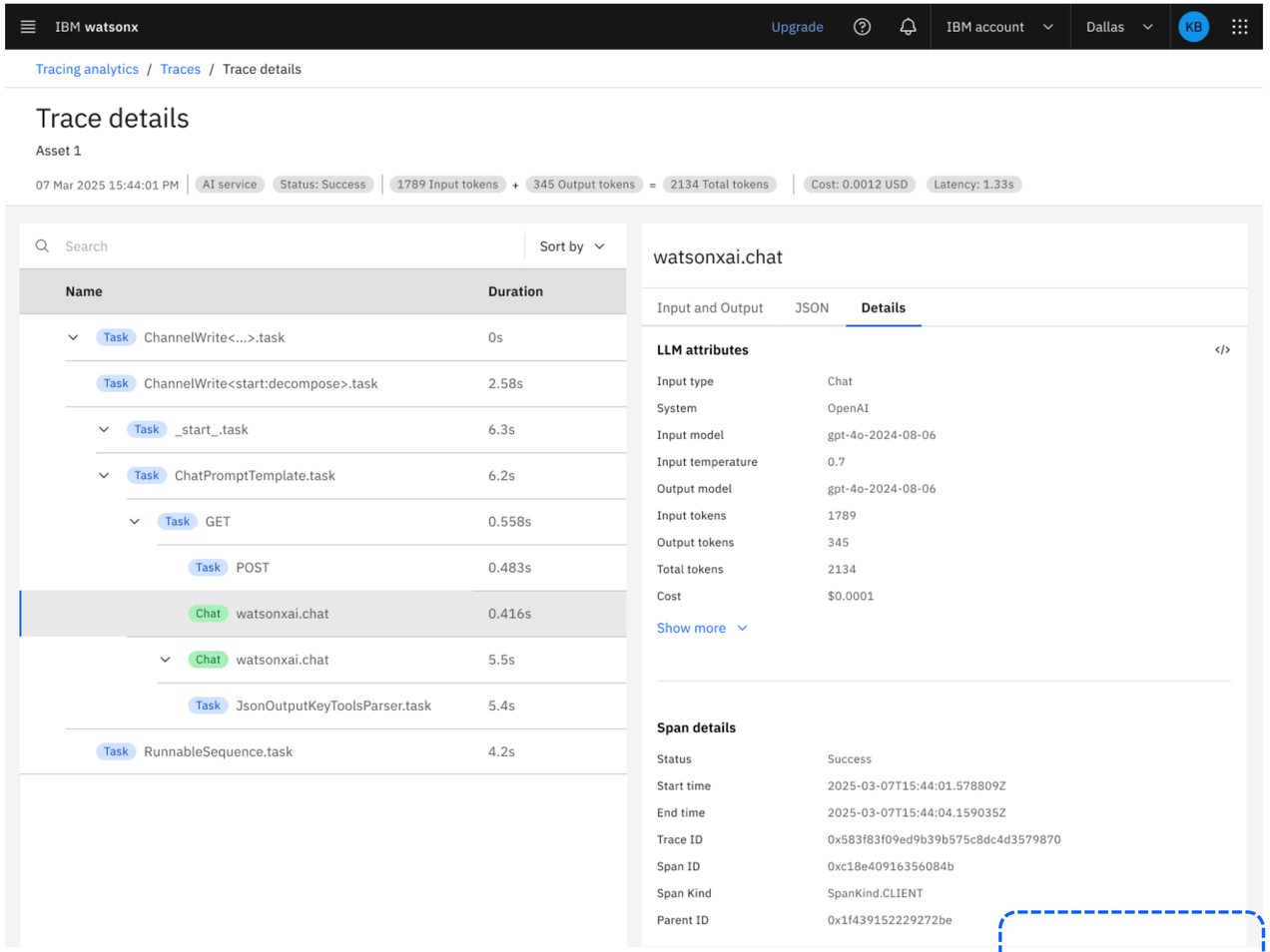
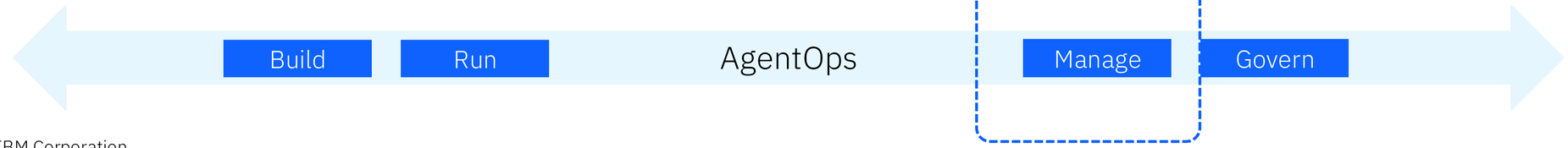
Coming soon

Deep Visibility into LLM Applications through Comprehensive **Tracing and Visualizations**

watsonx.ai tracing

Track and monitor vital metrics