

IBM watsonx Orchestrate

# Build, orchestrate & govern enterprise AI



AI adoption is [accelerating](#)

By 2028, one third of interactions with Generative AI services will use action models and autonomous agents.<sup>1</sup>

1/3

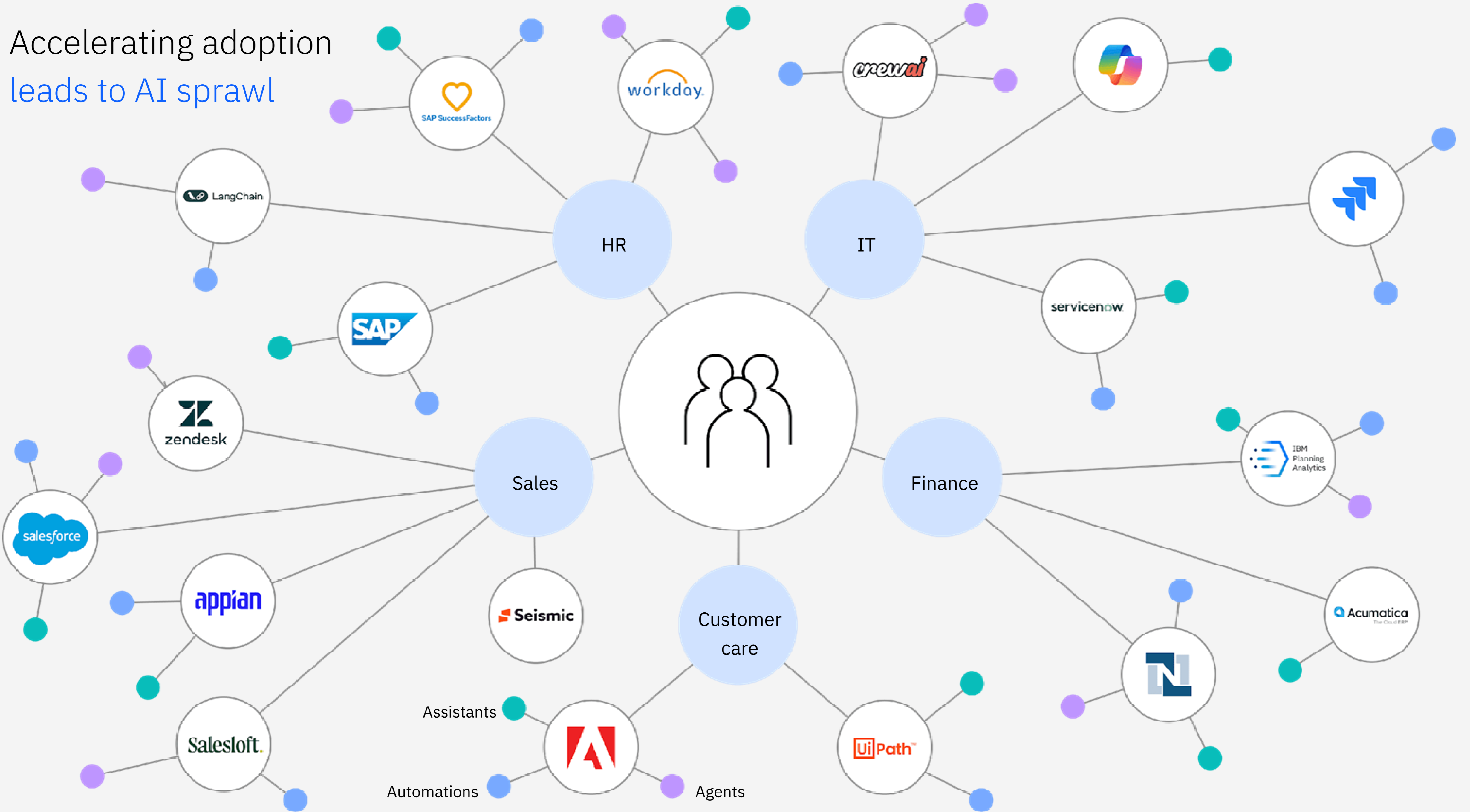
Yet today only 19% of Generative AI applications implement observability and production monitoring.<sup>2</sup>

19%

1. Gartner, March 11, 2024

2. IDC Global GenAI Technology Trends Survey, May 2025

Accelerating adoption leads to AI sprawl

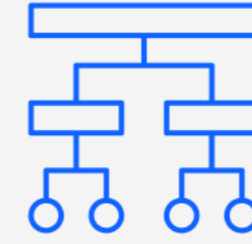


## AI sprawl results in complexity and risk



### Fragmentation and siloed AI

Agents and assistants are often deployed in functional silos like HR, Finance, and IT, but real business processes flow across these boundaries. Organizations struggle to connect these agents to deliver end-to-end value.



### Lack of coordination and orchestration

As agents and assistants multiply, managing, governing, and maintaining them becomes increasingly difficult, leading to inefficiencies and fragmented user experiences.



### The risks of poor governance

Many organizations lack consistent guardrails for how agents access data, make decisions, and interact with systems. Without strong governance and security controls, risks grow—from data leakage to unintended actions.

IBM is helping customer achieve business value through AI



Marketing

40%

reduction in query/insight generation time



Human Resources

80%

reduction in the talent transactional team's workload



IT

Reducing support from helpdesk personnel to zero.



Customer Service

25-35%

cost reduction in operations

North American Food Manufacturer

Sales

Hours to 5 minutes reduction in time to complete steps in sales agentic workflows.

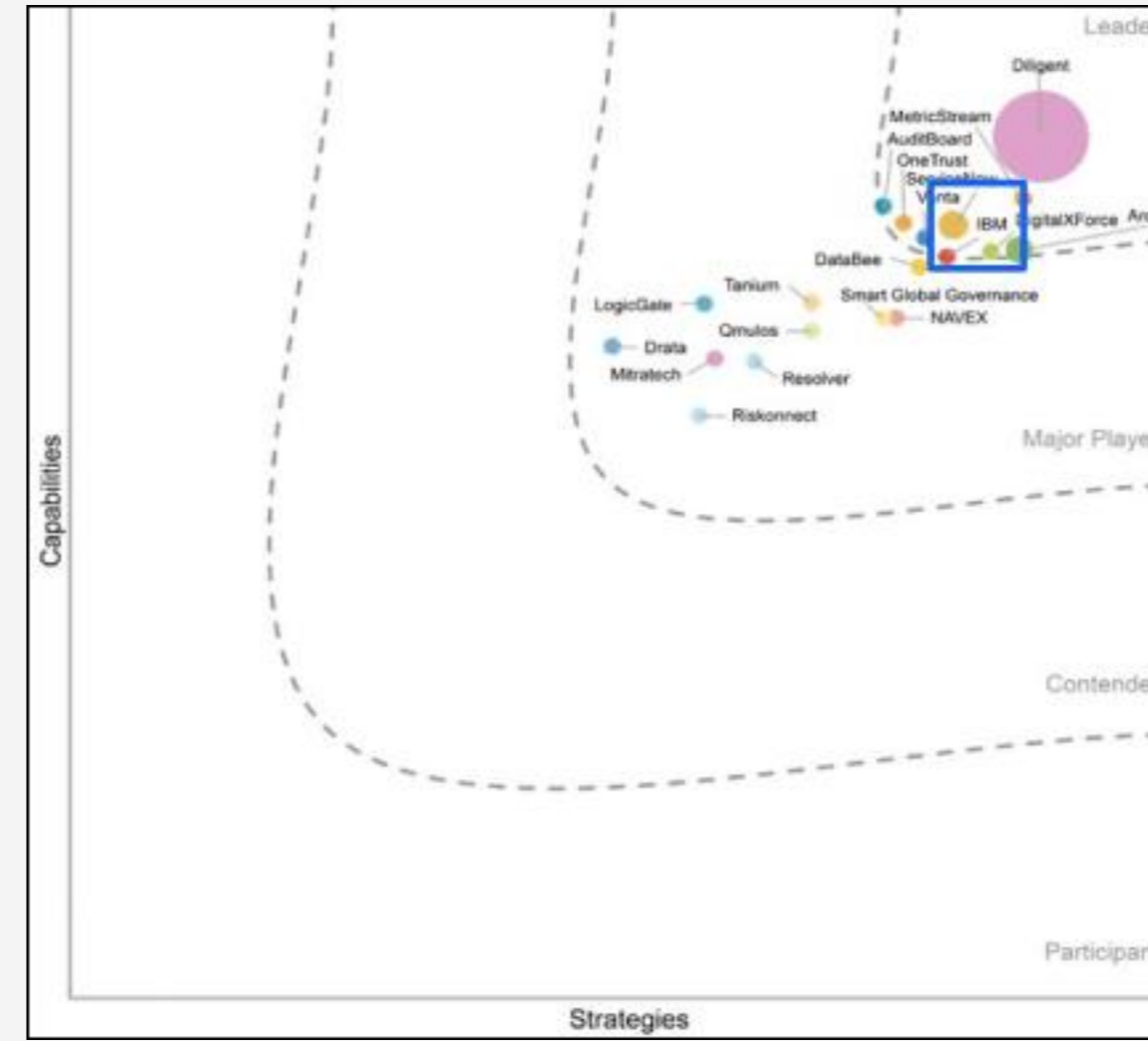
North American Insurer

Insurance

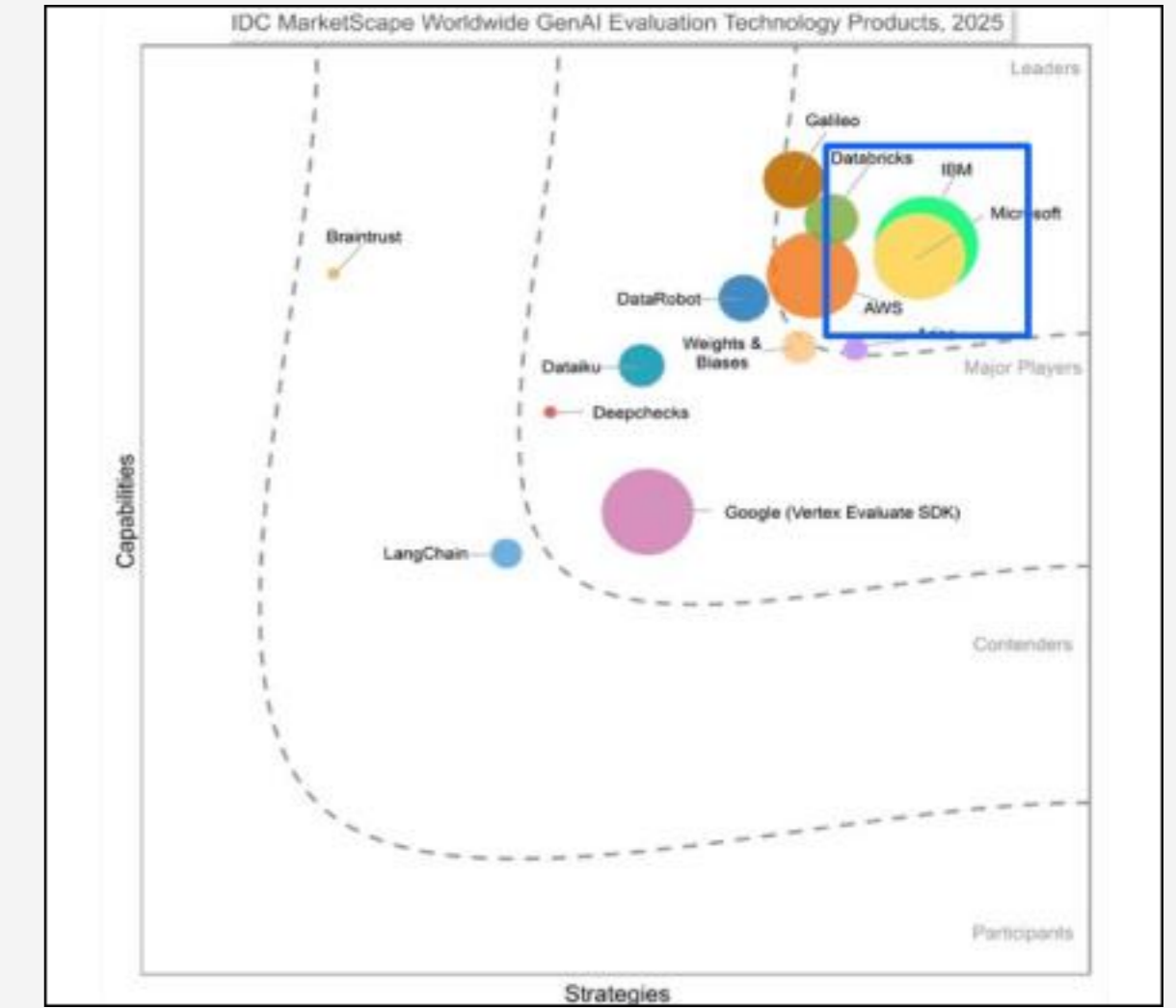
\$15 to \$1.95 call cost reduction with high quality performance

# Analysts agree

## IBM is a consistent leader in Agentic AI and Governance



IDC: Governance, Risk & Compliance SW, 2025



IDC: Gen AI Evaluation Tech Products, 2025



Everest: Agentic AI Products, 2025



IDC: Conversational AI Platforms, 2025



Gartner: AI App Dev Platforms, 2025

# watsonx Orchestrate

The platform to build, scale, orchestrate & govern enterprise AI



Agentic AI Orchestration with no vendor lock-in

A single solution that coordinates work across agents and any other tool, data, domain, and application across the enterprise.



Build and optimize agents with AI

No-code tooling allows business users to create agents fast. The Agent Development Kit (ADK), with support for Langflow, MCP, A2A and more, gives developers complete control. All with rigorous testing and optimization.



Deploy AI fast with prebuilt agents and tools

Prebuilt agents and tooling for optimized, distributed inferences accelerate time to value. Avoid months of development with out-of-the-box components, including container orchestration, message queues, multi-tenancy, cost monitoring and more.



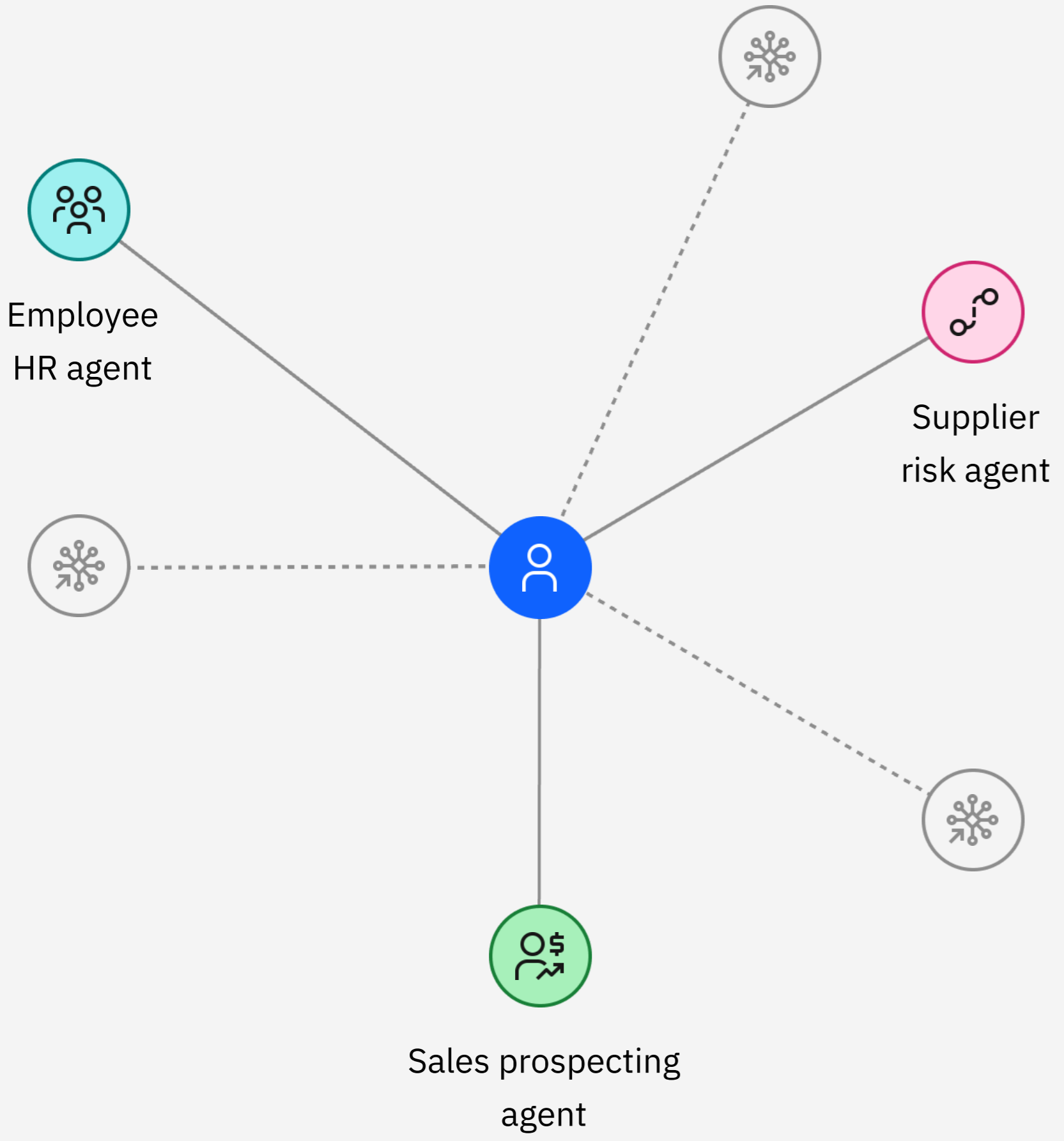
Governed and secure multi-agent systems

Govern and secure AI agents regardless of where they were built. Get comprehensive, real-time insights into agent interactions and health with Single-Sign-On authentication for seamless, secure, and fully attributable agentic AI.

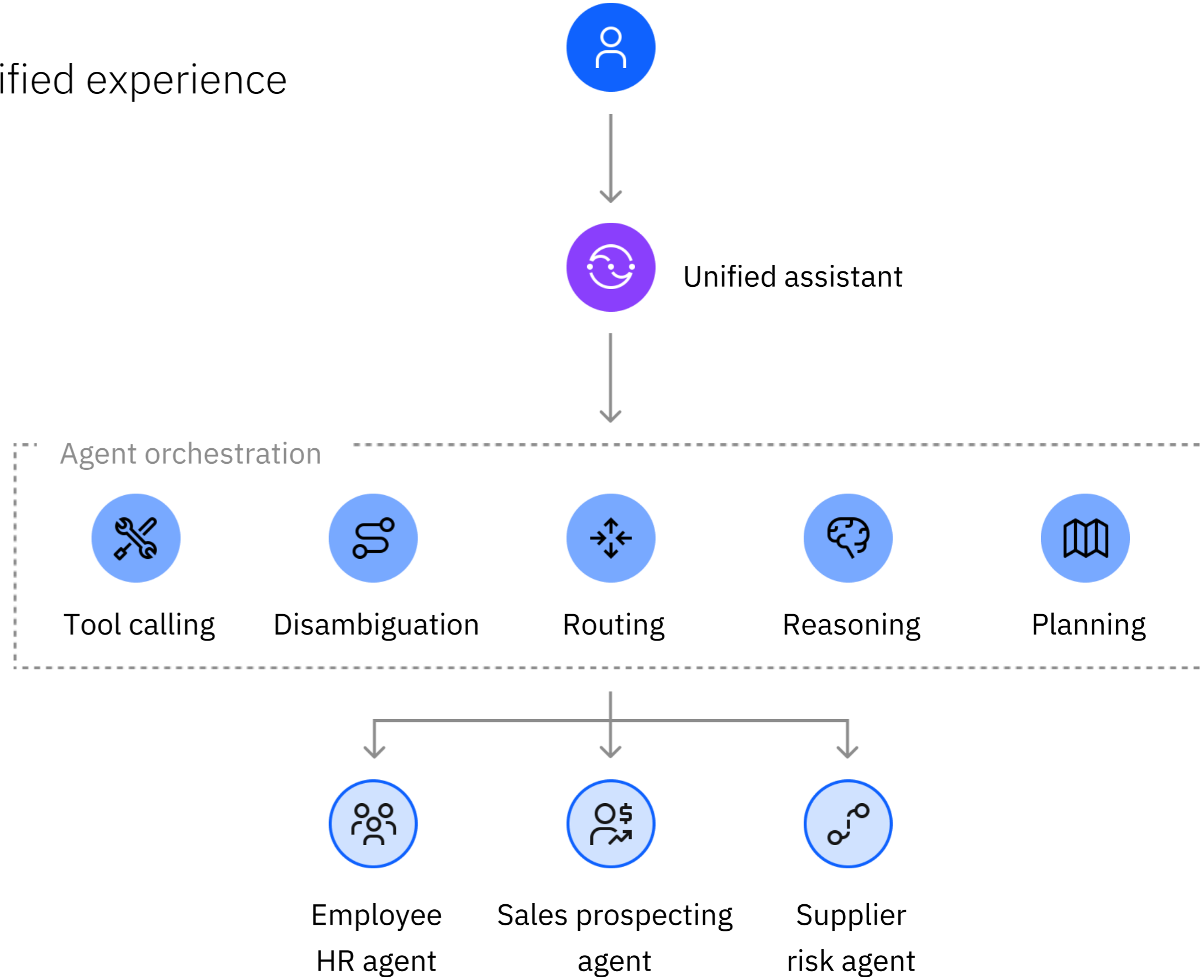
“We introduced a unified, AI-powered support layer built on watsonx Orchestrate to seamlessly connect fragmented systems. This **reduced response time by 95%**, transformed customer interactions and optimized daily workflows.”

# Agentic AI orchestration with no vendor lock-in

From  
Multiple entry points, fragmented experience

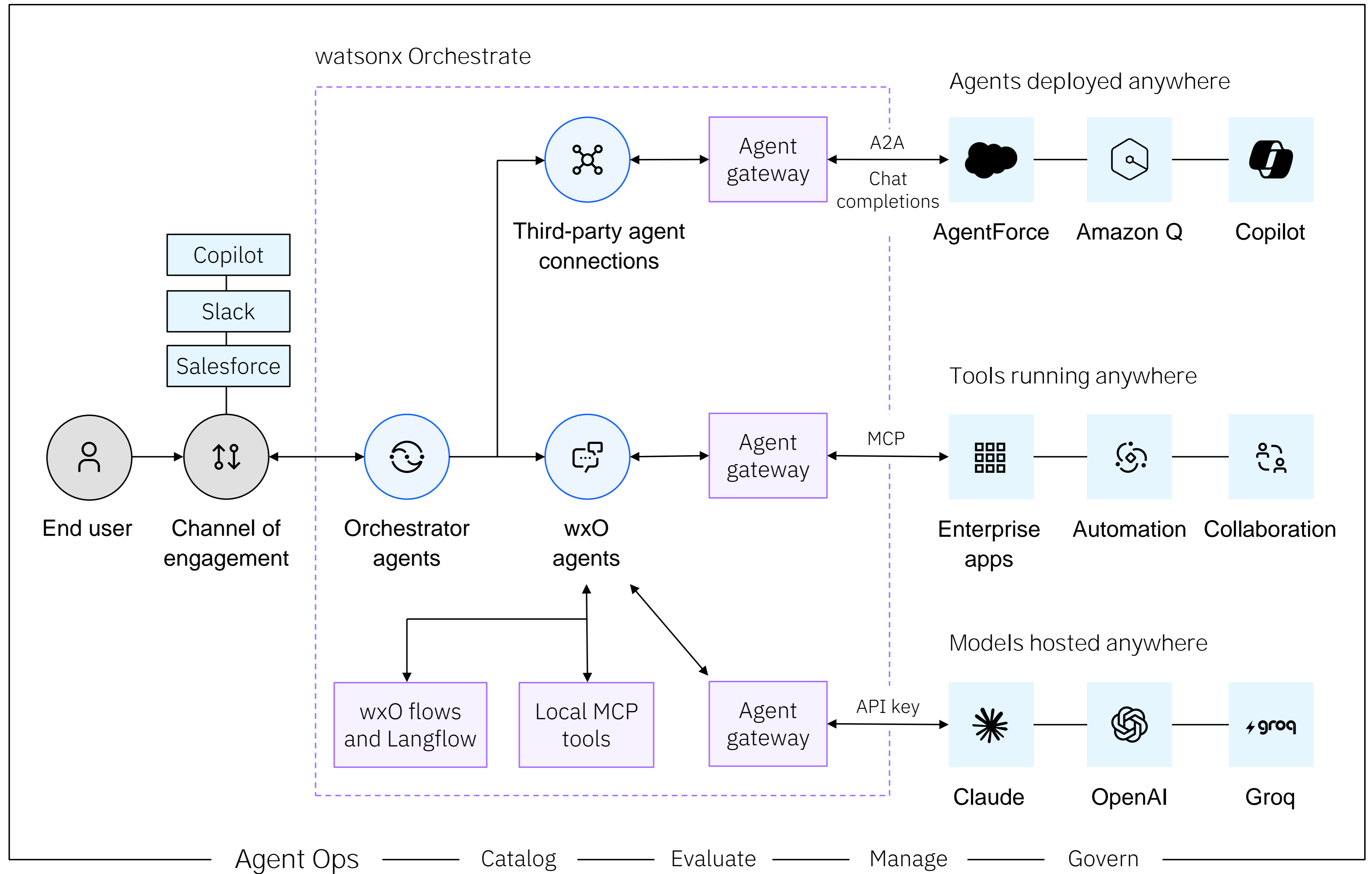


To  
Unified experience



# Open agentic framework

Open, interoperable and pluggable agentic orchestration with centralized governance for agents running anywhere

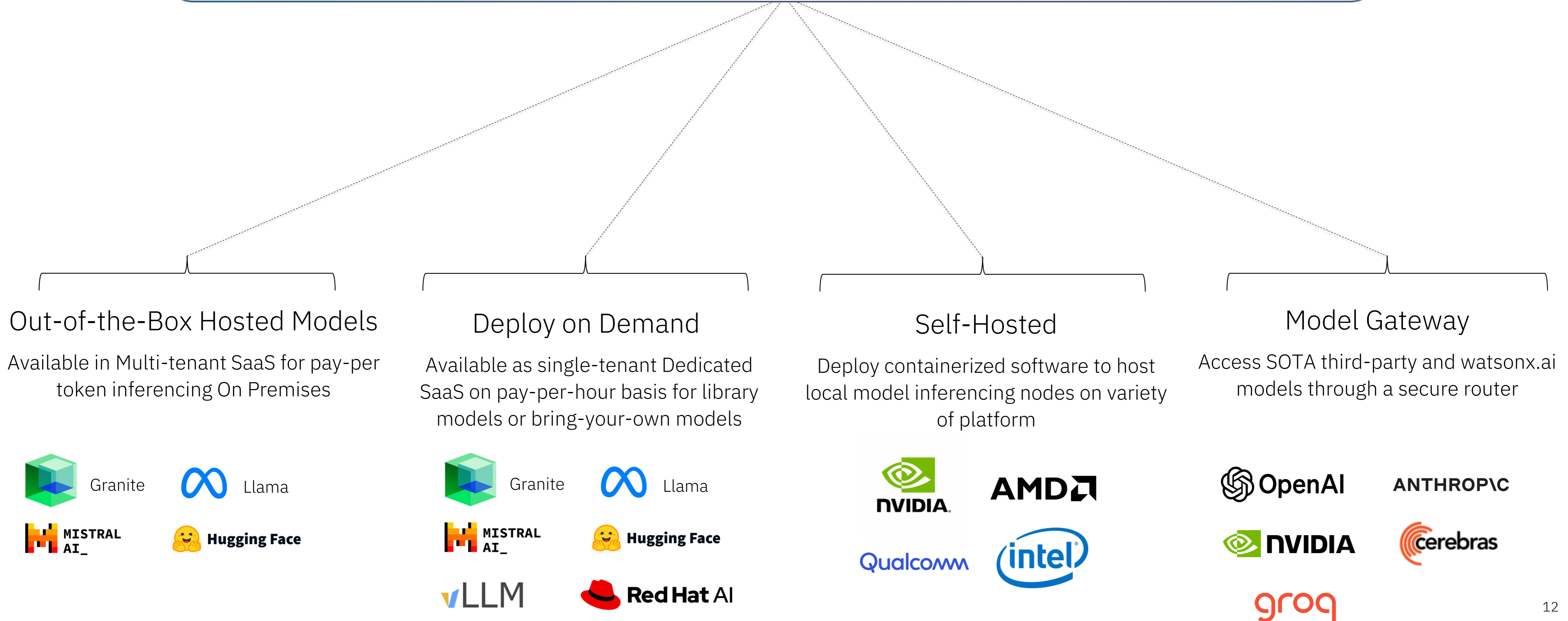




Orchestrate everything

# watsonx Orchestrate

## Model inferencing strategy



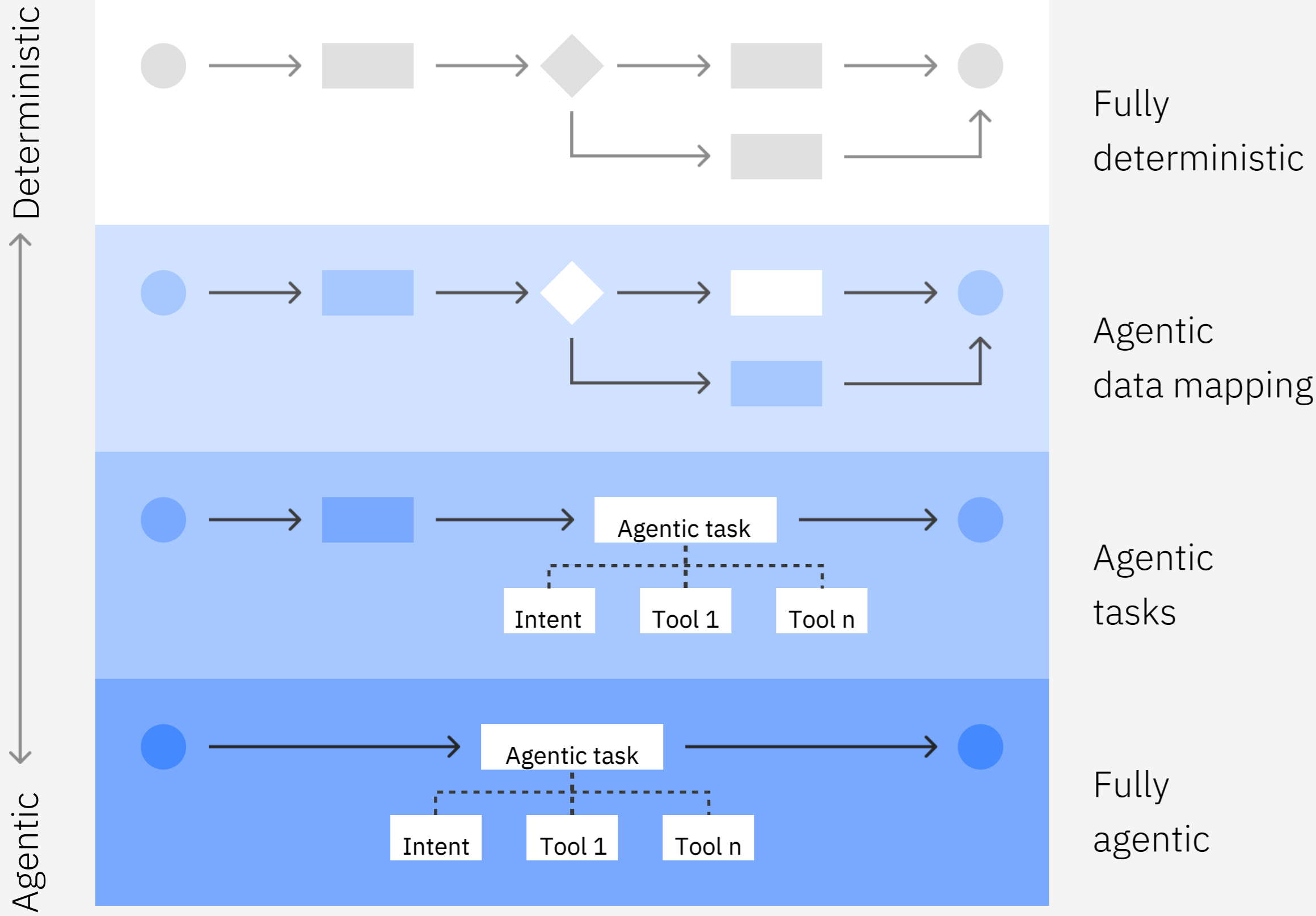
## Enterprises require a flexible approach to building agents

No-code	Intuitive, simple-to-use UI for nontechnical users allows you to create an agent in minutes.
Chat to build	Create an agent via a natural-language prompt with IBM Project Bob integration.
Pro-code	Our Agent Development Kit allows developers granular control over the build experience from a CLI.
Flow-builder	Native integration with Langflow allows rapid prototyping of workflows.
Third-party agents	Integrate third-party agents and tools via A2A and MCP.

### Building teamwork

Our flexible approach to agent and tool creation allows technical and nontechnical users to collaborate.

# Balance agentic & deterministic approaches for faster time to value



## Example: Procurement Workflow

- Deterministic process
- Agentic process

- 1. Request creation** ●  
User fills out purchase request form with category, budget and supplier. System checks for budget limits and approvals automatically.
- 2. Supplier selection** ●  
If no approved supplier fits, an agent searches past vendors, gathers risk and cost data, and recommends the best match.
- 3. Contract setup** ●  
The agent drafts a statement of work using templates and past examples, flags risky terms and routes it for quick review.
- 4. Purchase order** ●  
Once approved, the system automatically issues the purchase order in the ERP tool.
- 5. Invoice & payment** ●  
Matching the invoice to the PO and payment rules happens automatically.
- 6. Issue handling** ●  
If the invoice doesn't match or delivery is delayed, the agent investigates, contacts the supplier and proposes a resolution.

# Agent catalog

## Discover agents and tools

The **agent and tool catalog** allows agent builders to discover and connect to a multitude of agents, collaborators and tools to enhance agent capabilities in an easily searchable and intuitive interface

**Easily discover** and connect to a myriad of pre-built and custom-built agents and tools from IBM and our partners, such as Salesforce, 11x, ServiceNow and more.

**Click into agents** to see what tools they use and edit based on desired characteristics.

**Use agents as templates** for customization and faster deployment.

### Discover and use everything you need effortlessly with the Catalog

The catalog offers agents and thousands of Tools to help you efficiently accomplish your tasks.

#### Type

- Agents
- Tools

#### Categories

- HR
- IT
- Procurement
- Productivity
- Sales

#### Apps

- Amazon
- AWS
- Asana

#### Agents

A specialized Agent focused on executing specific tasks using a defined set of Tools and domain knowledge. Select an Agent to see their details. [View all →](#)

##### Compensation

Tools focused on sourcing and hiring top talent to meet organizational needs, ensuring role alignment.

10 Tools

By: IBM HR

##### IT Support & Helpdesk

Provides technical assistance to resolve software, hardware, and network issues for employees or customers.

23 Tools

By: IBM IT

##### Inventory Management

Monitors stock levels and coordinates with suppliers to ensure adequate supply without overstocking.

2 Tools

By: IBM Procurement

##### Performance evaluator

Automates performance tracking, review scheduling, and provides insights to help align employee goals with company objectives.

12 Tools

By: IBM HR

##### Infrastructure management

Manages and maintains the organisation's IT infrastructure, including servers, networks, and data centres.

12 Tools

By: IBM IT

##### Benefits administration

Manages employee benefits like health insurance, retirement plans, and wellness programs.

20 Tools

By: IBM HR

#### Tools

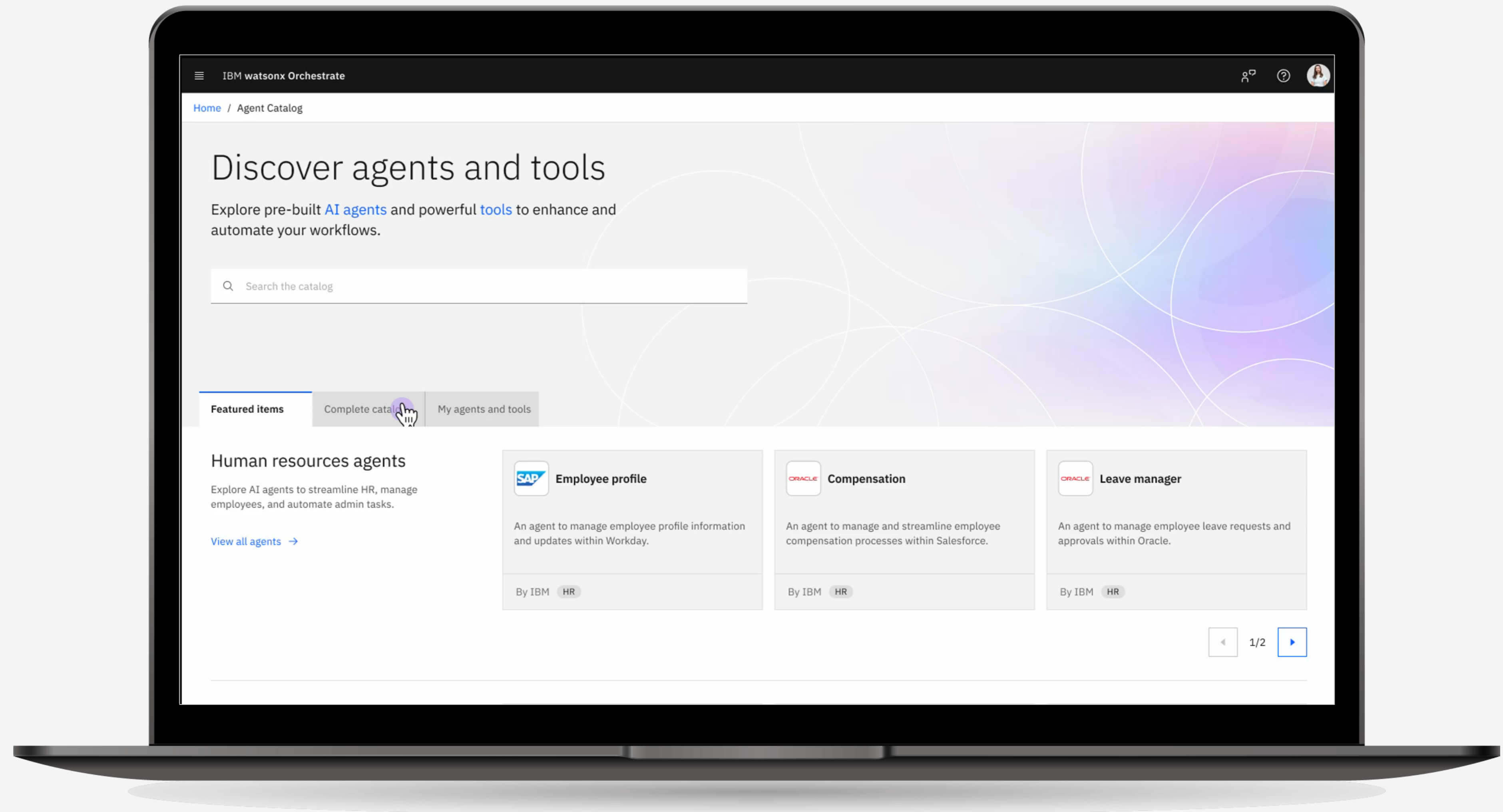
A Tool is a capability that can be used to start specific actions or retrieve information. Select a tool to see its details. [View all →](#)

Pre-built agents  
accelerate time to production

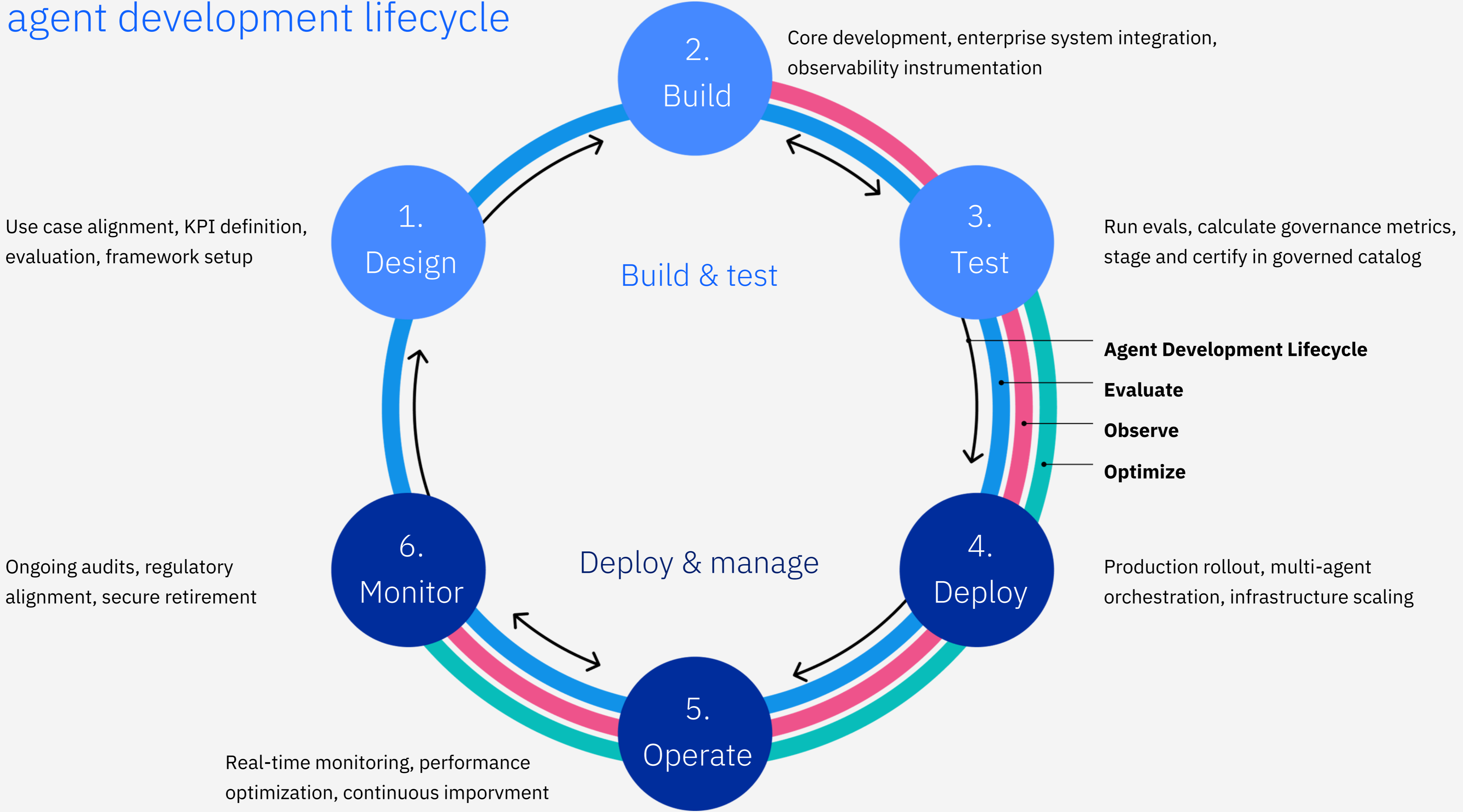
**Pre-built agents** are packaged with tools and integrations to instantly add value in that domain

They come with **deep, native integrations** to the most essential applications that businesses rely on today, including SAP, Oracle, Salesforce and many more

All these critical integrations are **maintained and kept up to date** by IBM



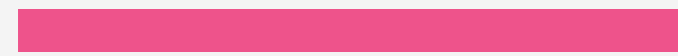
# Agent Ops provides complete visibility across the **agent development lifecycle**



# End to end AI governance for orchestrating large, complex agentic estates safely and responsibly



## Observability



### Runtime, not just uptime

Monitor accuracy, drift, context relevance, and cost

### Seamless telemetry

OOTB integrations auto-ingest/stream agent telemetry for monitoring & evaluation.

### Auditability by design

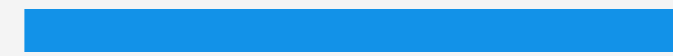
Capture reasoning traces—LLM chains, vector queries, tool calls, and orchestration.

### Unified risk view

Deliver an end-to-end risk-management layer that brings monitoring, compliance, and security together in a single view.



## Evaluation



### Pre-production stress tests

Large, representative test sets and bulk evals are still manual and error-prone.

### Versioning with confidence

Quantify performance changes, prevent regressions, and reproduce past behaviors for audits or disputes.

### Independent safety guardrails

Test for prompt injection, jailbreaks, and poisoning, red teaming, without embedding constraints in agent code.



## Optimization



### Cost-performance tradeoffs

Visibility into resource use and predictive budgeting is limited; teams must balance accuracy, latency, cost, and trust.

### From noise to insight

Logs need AI-driven issue detection, root-cause analysis, and actionable recommendations beyond raw data.

# Govern and secure multi-agent systems with [role-based access control](#)



## Authentication

Support for different authentication schemes

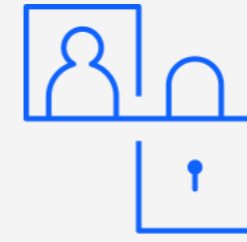
- Basic authentication
- API key-based authentication
- Bearer token authentication
- Key-value pair authentication
- OAuth 2.0 variants



## Credentials

Credentials for teams and individuals

- Secure credentials
- Secure networking
  - Encrypted
  - Isolated
  - Integrated with external credential management systems
  - IBM Cloud Satellite connectors
  - Secure VPN configurations
  - Private IP access
  - IP whitelisting



## Authorization

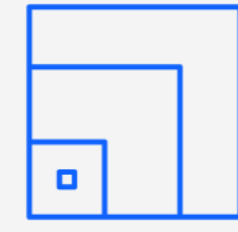
- Federated identity and single-sign-on
  - Continuity of user context across systems
  - Consistent authorization enforcement
  - Full traceability of agent actions as extensions of the authenticated user



## Compliance and isolation

- Data isolation offering
- Compliance
  - SOC2, ISO27K, PCI, HIPAA

# How organizations are approaching AI productivity today



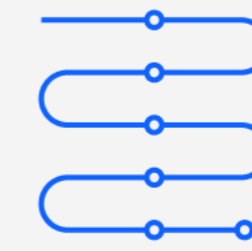
## Domain specific solutions

- ✓ Provide co-pilots/assistants as a layer on top of their platforms.
- ✗ Each team ends up with its own "mini agent" that doesn't communicate or coordinate with other agents and departments
- ✗ No way to integrate existing investments in automation or custom-built assistants and assistants



## Build solutions with cloud providers

- ✓ Leverages your current cloud investments - ideal if you've standardized on a single cloud environment
- ✗ Locked into one cloud stack – leads to lack of flexibility and interoperability
- ✗ Costly, requires deep expertise to build, slowing down innovation and time to production



## Traditional business automation platforms

- ✓ Proven for structured, mature workflows where logic rarely changes (e.g., approvals, routing)
- ✗ Not designed for dynamic reasoning, learning from context, or operating autonomously across complex systems

# Client zero: The path to \$4.5B (and counting)

## AI productivity gains since 2023

### AskIBM

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

#### IBM AskHR

10M

Annual HR interactions fully resolved by AI

40%

Reduction of HR operating budget

+55

Improvement of HR NPS score

#### IBM AskIT

80%

Inquiries resolved via AskIT

100

Days to build + deploy AskIT from scratch

50%

Reduction in support tickets after deployment

#### IBM AskSales

180K

Hours per week saved in gathering account insights

5,000

Seller questions answers per week

40%

Improvement in quality of outreach content

#### IBM Procurement

85%

Orders now processed via 'touchless procurement'

50%

Reduction in time spent on manual, repetitive tasks

15%

Enterprise workforce comprised of contractors

#### IBM AskIncentives

96%

Sales related inquiries contained within AI Assistant

90%

Greater accuracy in expense accruals

76%

Increase in productivity while serving 22k sellers

# IBM's unique approach



## Open & hybrid

No vendor lock-in

Open, hybrid and vendor-agnostic architecture

Works with your current tools, data, and models

No ecosystem dependency

Support for multiple validated models, applications and more



## One platform

Unified management for AI from any ecosystem

A single place to build, manage, and observe your AI agents across business functions

Manage agents and tools from any vendor, all in one place



## Trusted & reliable

Built-in governance for AI you can trust

Governance and guardrails are built-in, so you stay in control.



## Build how you want

Multiple agent & tool creation methods

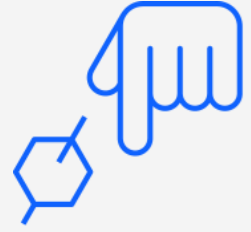
No-code tooling allows business users to create agents fast

Agent Development Kit, with support for Langflow, MCP, A2A and more, gives developers the control they need

Prebuilt agents and tooling for optimized, distributed inferences accelerate time to value in common domains

## Next steps

# Four ways to get started with watsonx Orchestrate



### Free trial

Test out watsonx to build AI models, customize agents, and accessing data across your organization.

[Link →](#)



### Client briefing

Discussion and custom demonstration of IBM's gen AI capabilities. Understand where gen AI can be used now for impact in your business.

2–4 hours

[Link →](#)



### Agentic AI bootcamp

Learn top Agentic AI skills and best practices resulting in a functional prototype which addresses an enterprise use case.

1–2 days

[Link →](#)



### Pilot program

Engagement with a multi-disciplinary IBM team to jointly innovate and prove the business value of generative AI solutions using watsonx.

1–4 weeks

[Success story →](#)

# Thank you

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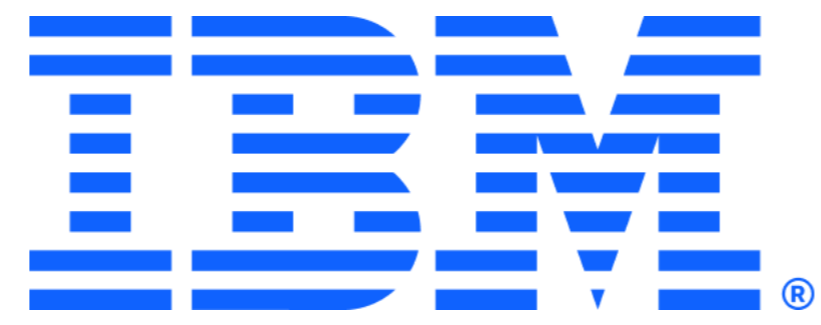
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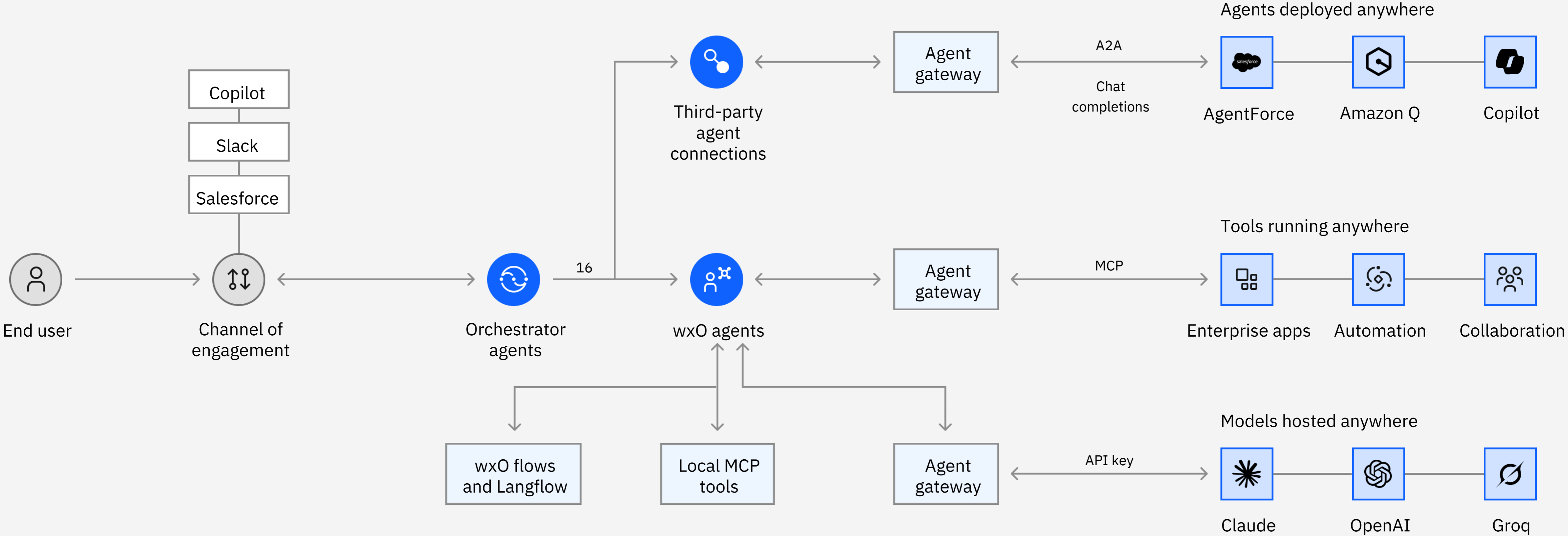
The client is responsible for ensuring compliance with



# watsonx Orchestrate

Build & deploy smart agents, ready for the enterprise

1. Multiple, complementary methods to build and deploy agents within our open, interoperable and pluggable agentic framework

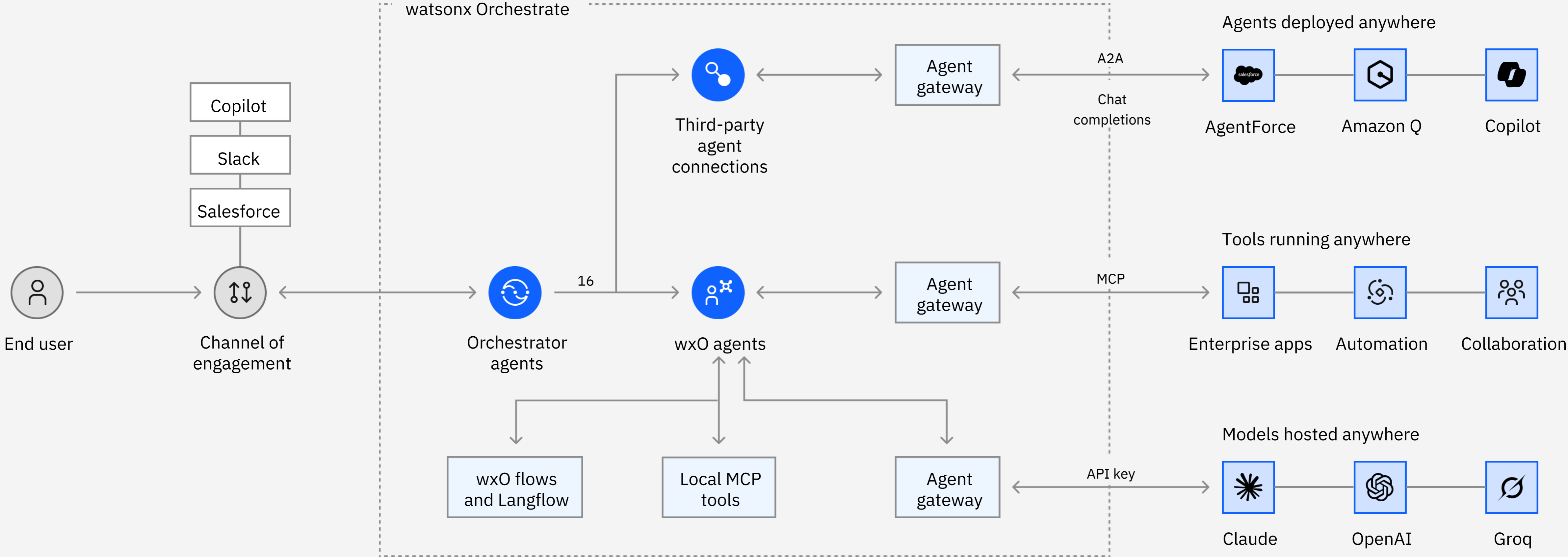


# watsonx Orchestrate

## Orchestrate everything

1. Multiple, complementary methods to build and deploy agents within our open, interoperable and pluggable agentic framework

2. The orchestration layer enables seamless routing between all your agents, tools, applications and data



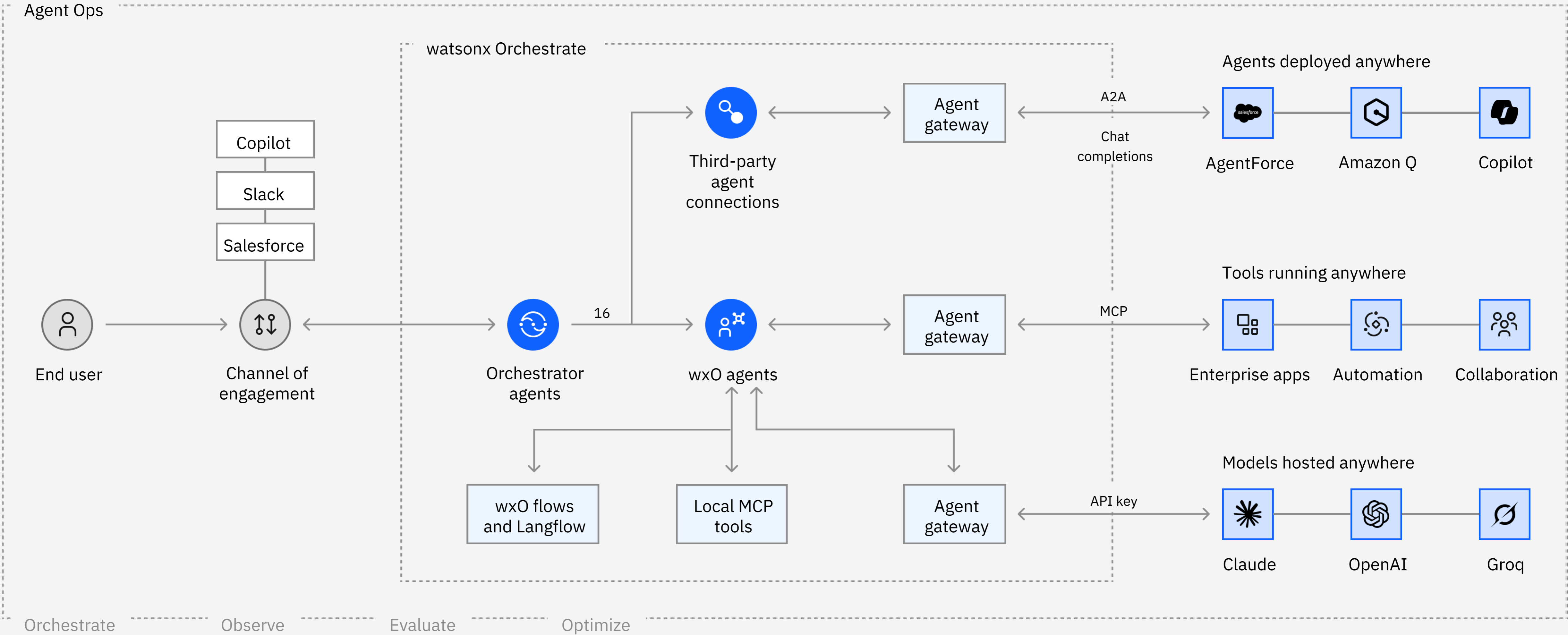
# watsonx Orchestrate

## Managing agentic sprawl

1. Multiple, complementary methods to build and deploy agents within our open, interoperable and pluggable agentic framework

2. The orchestration layer enables seamless routing between all your agents, tools, applications and data

3. Governing autonomous agents and ensuring that they perform as expected is essential and a core, integrated component of Orchestrate





40%

reduction in query/insight generation time

3x

increase in volume of insights generated

Boosting fan engagement with powered insights

### Solutions

IBM watsonx Orchestrate

IBM watsonx.governance

IBM Granite

UFC partnered with IBM to build the "Insights Engine", powered by the IBM watsonx portfolio.

By embedding automation into insight generation, UFC dramatically increased content volume, shortened turnaround times and enabled deeper fan engagement across digital and broadcast channels.



**Franchise Brokers  
Association**

**75%**

reduction in listing-  
creation time (from  
~4 hours to ~1 hour)

**0**

calculation errors thanks  
to automated financial  
analysis

AI Productivity

Solutions

IBM watsonx Orchestrate

“Watsonx Orchestrate isn't just our  
document parser—it's our 24/7  
compliance watchdog.”

Chris Wall  
President and COO  
Franchise Brokers Association

# Agentic dual-mode Customer Care solution for a large airline

This solution supports two tightly integrated modes, self-Service (Autonomous AI agent) and agent assist (Human agent + AI assist agent).

The system captures live conversations, processes them with AI agents, and delivers transcripts, summaries, and next-best actions to agents in real time via a dashboard embedded in Genesys.

## Agent Runtime with Dual Agent Model (Core Intelligence Layer)

- Runs LangGraph-based agents
- Hosts both autonomous agents (self-service) and assist agents (human-in-the-loop support)
- Maintains conversation context, transcript correlation, and summarization logic

## Transcript-Centric, Event-Driven Data Layer

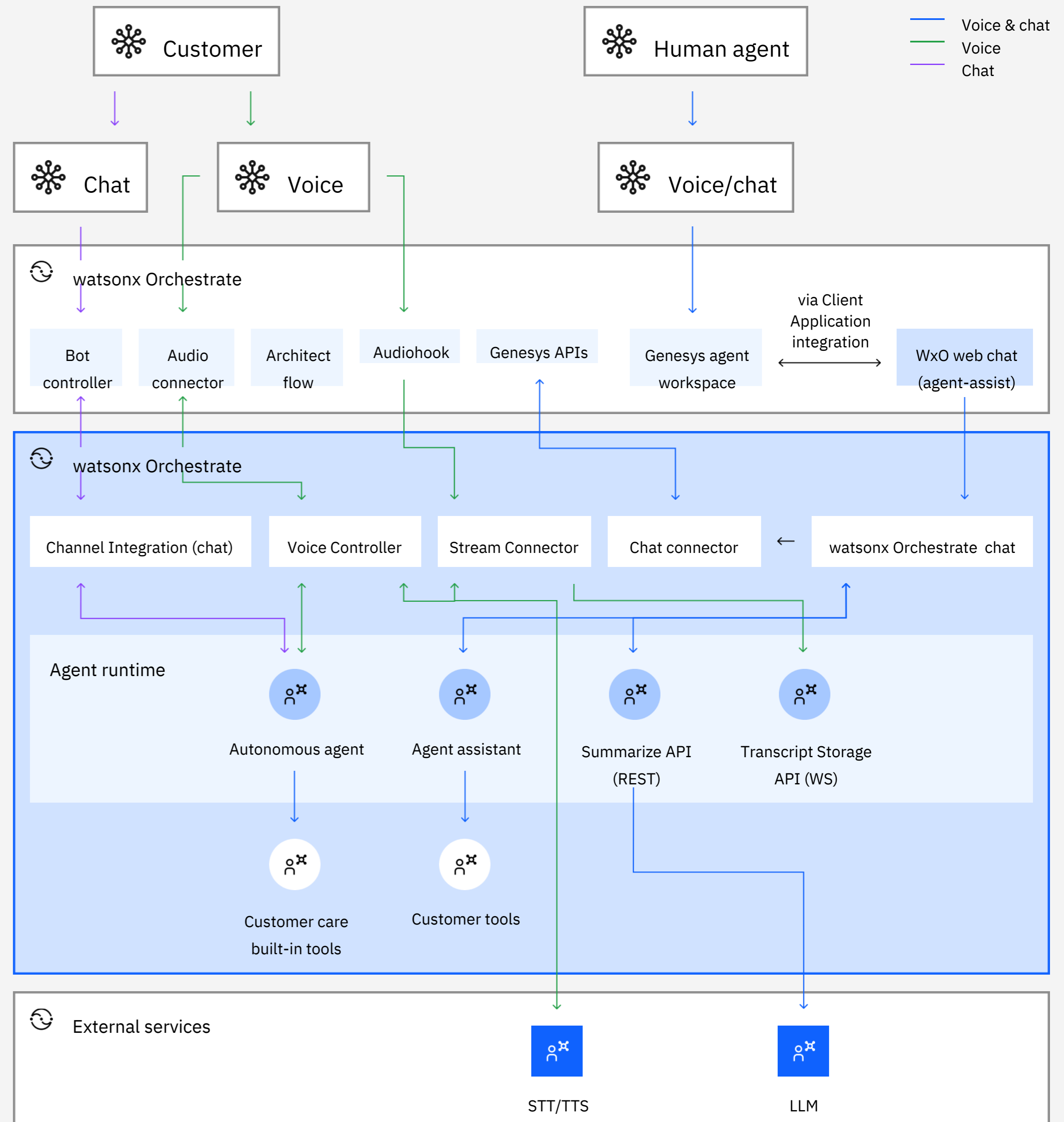
- Transcripts are the source of truth for summaries, next-best actions, agent context, analytics
- Enables late-joining agents, pre-generated summaries, accurate handoffs between AI and humans

## Real-Time Delivery Pipeline (Redis Streams + WebSockets + Dashboard)

- This is how insights reach agents at the moment they're needed.
- Decouples producers (connectors, agents) from consumers (UI), supports reconnects, replay, and async workflows, makes the system resilient and scalable

## Key Capabilities Demonstrated

- Live Voice Transcription (Dual-Channel)
- Real-Time Chat Ingestion & Monitoring
- Next-Best Action (NBA) Recommendations
- On-Demand & Event-Triggered Conversation Summaries
- Human-in-the-Loop Governance Model
- Extensible Tooling & Connectors



# Unified employee experience for a global food & beverage company

## Unified multi-agent architecture

Provide employees with a single-entry point in M365 Copilot for HR, IT and future enterprise requests.

**M365 Copilot**  
Front-end chat interface where the user submits queries.

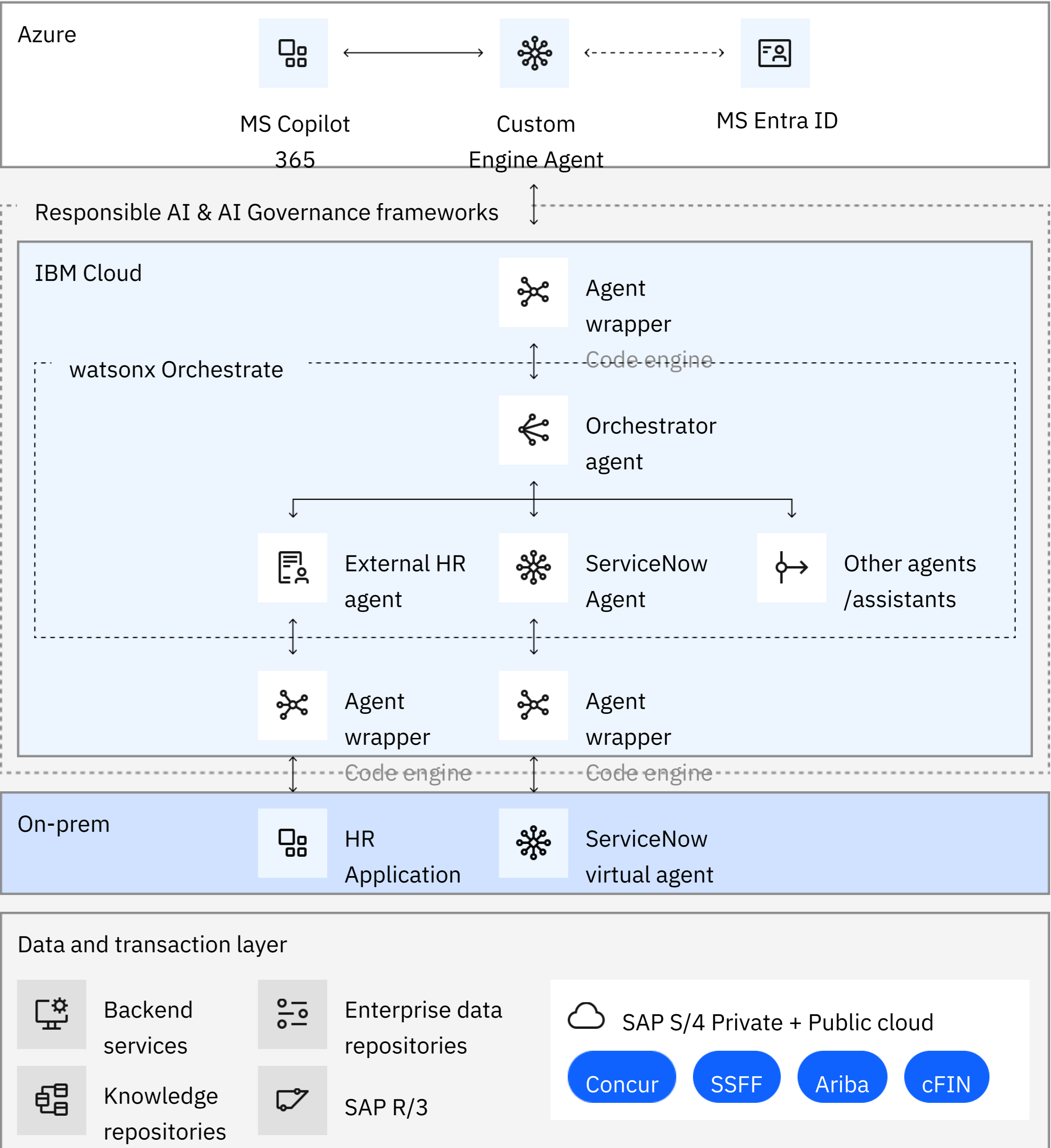
**Custom engine agent (Azure)**  
 - Receives requests from Copilot  
 - Authenticates via MS Entra ID  
 - Maintains and forwards user context  
 - Sends enriched requests to IBM systems

**Secure proxy service**  
 - Bridges Azure to IBM Cloud  
 - Handles authentication, routing and payload transformation

**IBM watsonx Orchestrate (wxO)**  
 Downstream agents (via Agent Connect Framework)  
 - Performs intent detection  
 - (HR vs. IT vs. other)  
 - Routes to the correct backend system  
 - Maintains end-to-end user identity and personalization  
 - Amelia (HR) & ServiceNow Virtual Agent (IT)  
 - Wrapper components ensure standardized I/O and context propagation

**Response path**  
 Backend - wxO - Proxy - Azure Custom engine - Copilot UI (Adaptive Cards)

**Key capabilities enabled**  
 - Unified employee experience inside M365  
 - Seamless HR + IT orchestration across Azure & IBM Cloud  
 - Consistent identity/context across all systems  
 - Reusable integration pattern for future agents



# Multi-agent autonomous workflow for a large global logistics and package delivery company

## Agentic Franchise Consultant technical architecture

A multi-agent, autonomous workflow using watsonx Orchestrate to support Franchise Consultant operations.

User Request → Orchestration Layer  
Headless trigger (no chat UI). Request enters the Primary Orchestrator.

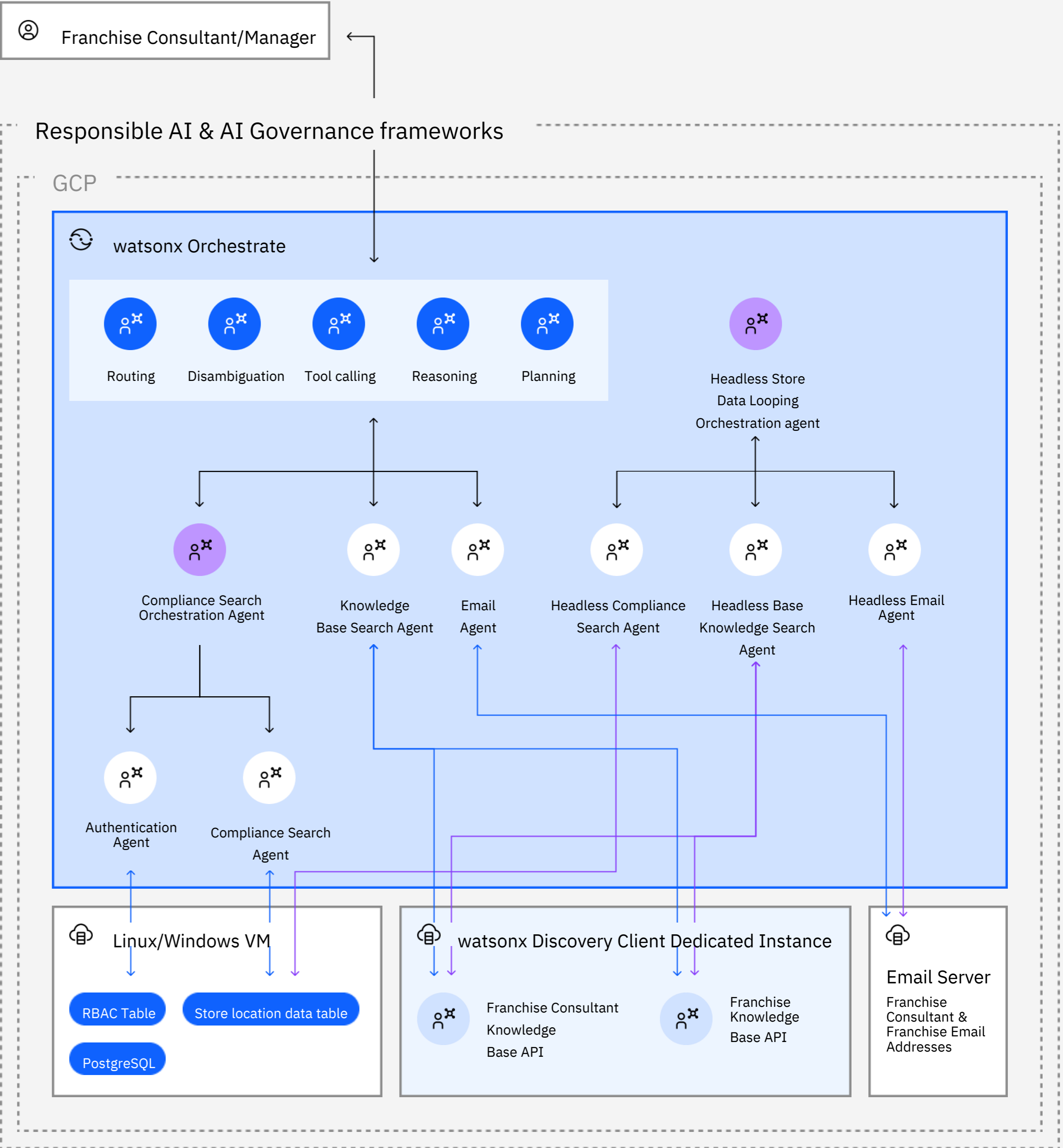
### Primary Orchestration Agent

- Authentication Agent
  - Directs workflow steps
  - Invokes authentication
  - Passes context across all downstream agents
  - Handles branching & fallback logic
- Separate orchestration agent validating credentials before workflow continues.

- Data Retrieval Agent (Multi-Tool)
  - Business Logic / Evaluation Agent (watsonx.ai)
    - Pulls from two X-Discovery indexes
    - Aggregates store/franchise knowledge from multiple sources
    - Demonstrates multi-tool agent pattern
  - Performs performance scoring, summarization, and FC recommendations.

Output Delivery  
Returned to FC interface; designed for web-embedded, headless experiences via the Orchestrate ADK.

- Key Capabilities Demonstrated
  - Headless agent workflows
  - Multi-layer orchestration (agents calling agents)
  - Multi-tool agents retrieving from multiple data sources
  - Orchestrate + watsonx.ai integration
  - TechZone prototype built for GCP production handoff



# IBM's 2026 agentic roadmap



## Reimagined interactions

Work through context-aware agents instead of siloed apps  
Build agents with natural language  
Advanced conversations with rich widgets, speech, handing over to live agents and agent assist



## Deterministic to autonomous

Automate business processes by bridging deterministic and autonomous agents with human-in-loop workflows  
Scheduled events, agentic workflows, multi-user activities, dynamic forms



## Orchestration intelligence

Multi-agent orchestration with context, knowledge & memory for highly effective agents  
Support for multiple models, providers, MCP servers, open-source  
Lang+ integration, bidi A2A



## Trustable agents

Trusted evaluations, optimizations, model recommendations  
Workspaces for builders and access management  
  
Agent identities, more IDPs, more Auth options



## Prebuilt ecosystem

Agent Lifecycle through Catalog – discover, try, buy and build, publish, monetize  
  
MCP connectors in Catalog along with Agents and Tools



## Hybrid

On-prem, hybrid cloud and SaaS  
Global expansion  
High availability design