

Building Production Systems with Agentic AI

AWS Agents of Impact 2026 · Boston · September 29, 2026

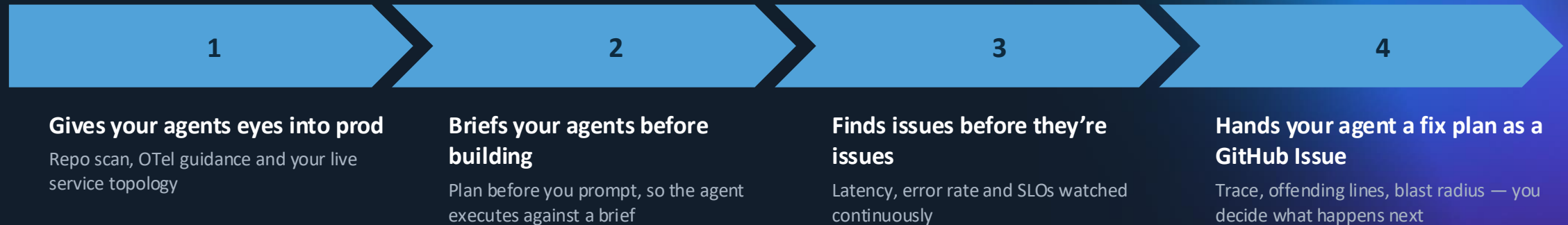


“We believe there will soon be billions of agents in the world, working alongside humans to augment their capabilities, accelerate innovation, and improve productivity across every industry. We’ll see them in consumer, enterprise, and industrial settings. They will not just manage simple, single-step tasks, but orchestrate sophisticated, multi-step processes that require understanding context, making decisions, and taking actions. ”

Matt Garman
CEO AWS

Today you will connect your agents to live production and take a change from signal to verified fix.

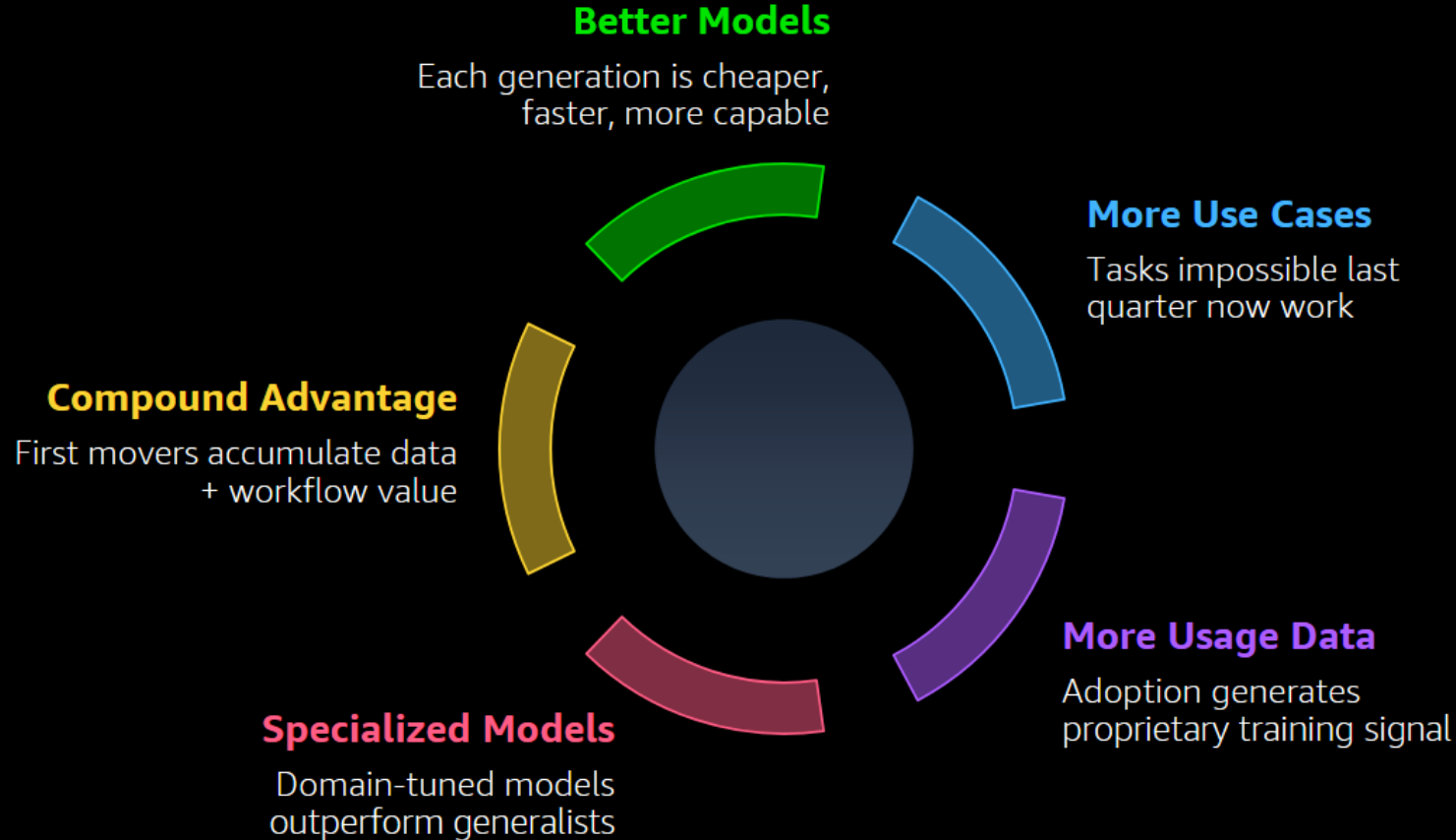
Two hands-on labs · your own lab environment · real telemetry



The evolution of AI

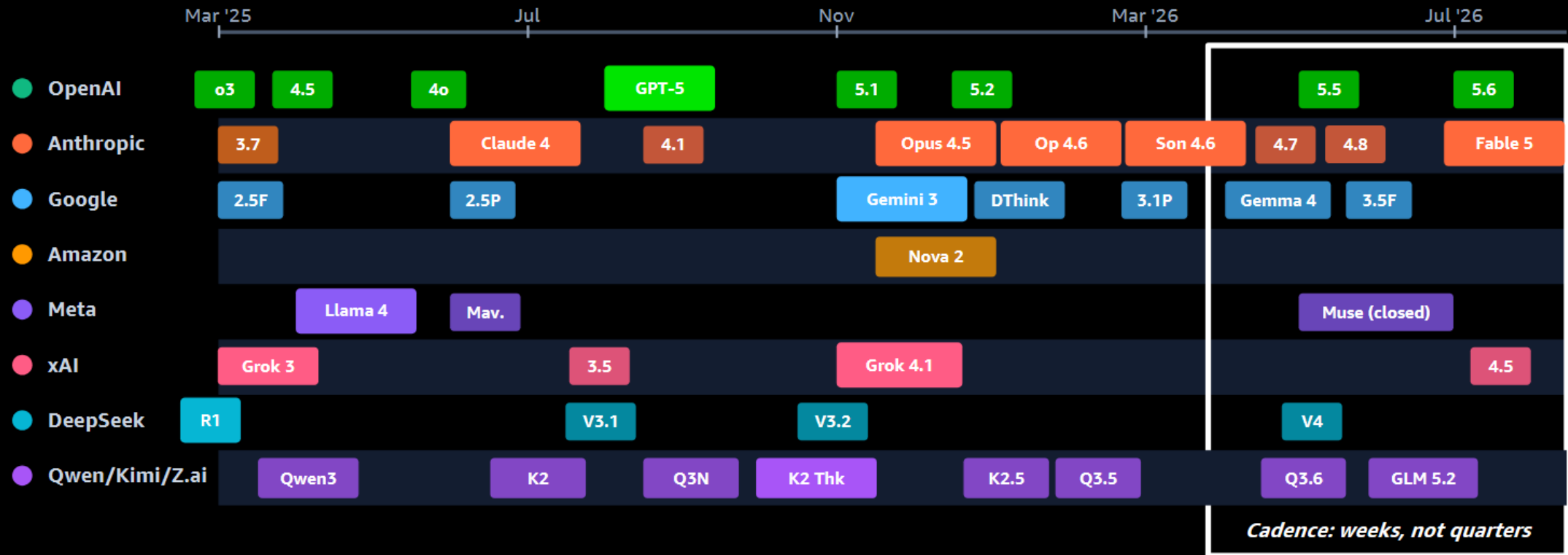


The Flywheel of Incremental LLM Improvement



The Model Release Avalanche

16 months of releases – cadence compressed from quarters to weeks with open weights leading the surge



Modular integration is survival; frontier today is commodity in weeks and open weights trails SOTA by ~3 months.

The New Speed of Software

Products that once took quarters are now shipping in days; built by AI, with AI

ANTHROPIC

10 days

Claude Cowork

COX AUTOMOTIVE + AWS

5 weeks

5 Agentic AI Products to Production

Increasing productivity across the software development lifecycle.



BUILD

Need to increase development velocity, but developers spend the majority of time on undifferentiated tasks instead of coding



OPERATE

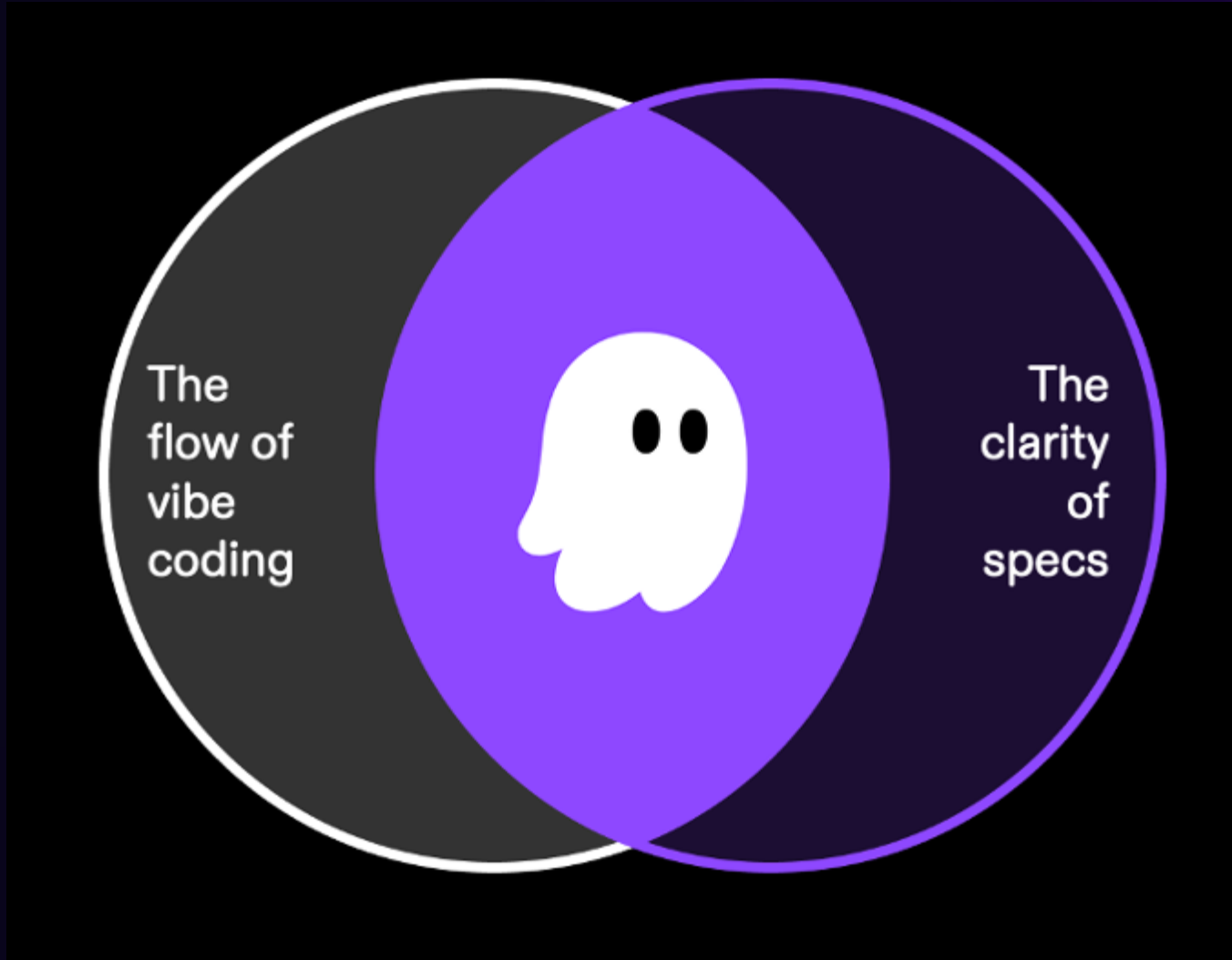
Need an efficient way to manage and optimize AWS cloud environments, resources, configurations, and costs across multiple accounts and services



TRANSFORM

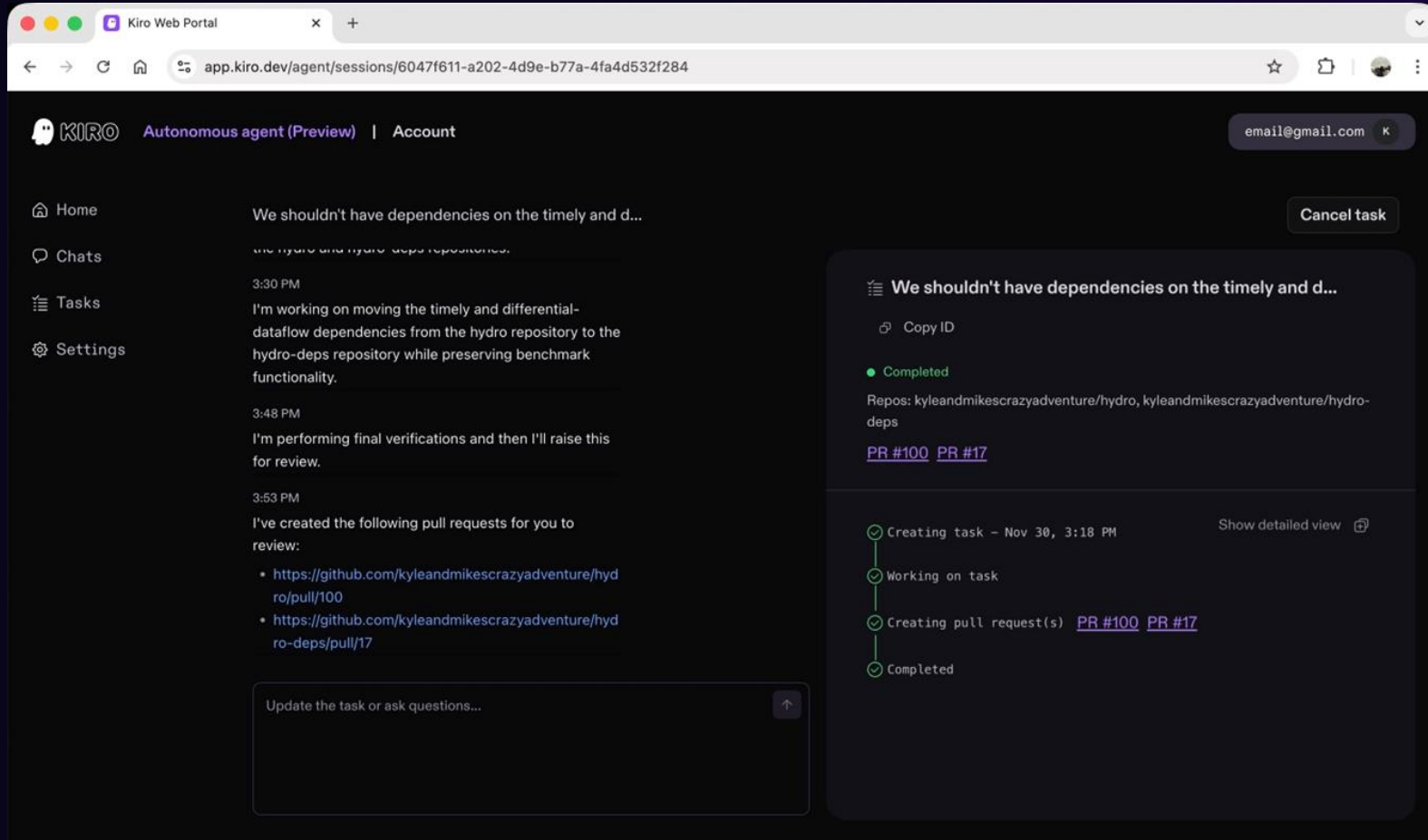
Need to modernize legacy workloads faster and reliably to save costs, improve performance, and drive innovation.

Build with Kiro



Tame complexity
with spec-driven
development,
advanced steering,
and custom agents

Bring context and coordination together with Kiro



- Autonomous work
- Persistent Context
- Cross-repo scope
- Improve with every interaction

The autonomous agent that extends your flow in Kiro, now available in gated preview for both individuals and teams.



Operate, manage, and optimize

AVAILABLE IN PREVIEW

AWS DevOps Agent

Drive operational excellence with a frontier agent that resolves and proactively prevents incidents

Always-on, autonomous incident response

Prevent future incidents

Access untapped insights in your operations and workloads

AWS Transform

The first agentic AI service for large-scale migration and modernization of...

GENERALLY AVAILABLE



VMware migrations



**Mainframe
modernization**



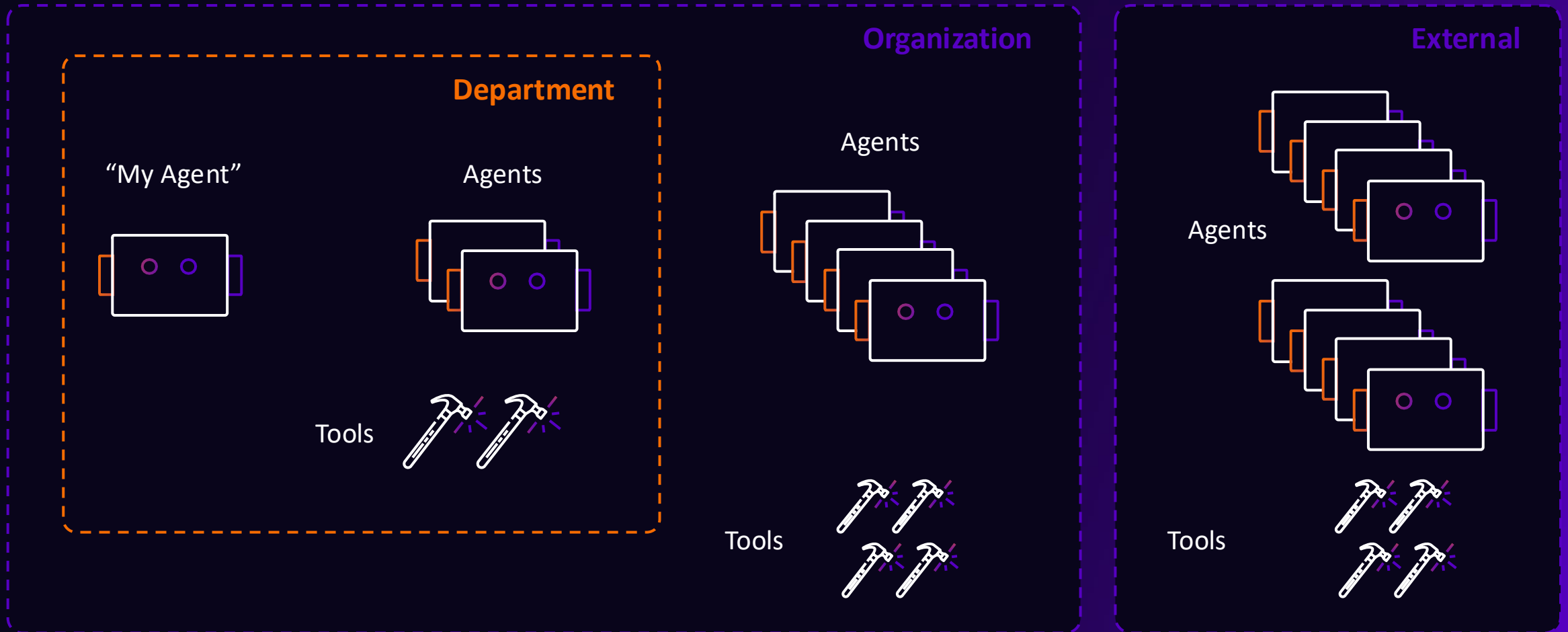
**Full-stack Windows
modernization**



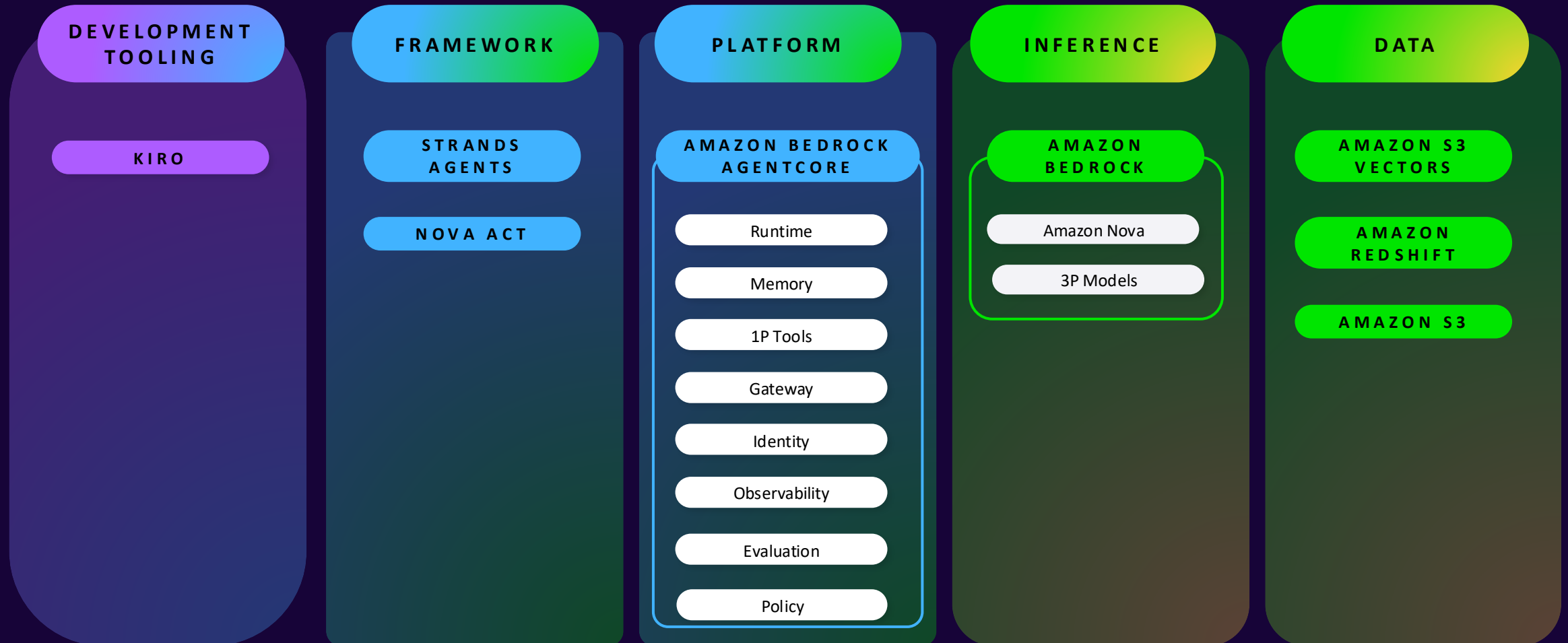
Custom transformations

for code, APIs, frameworks, and more with pre-built transformations (e.g., Java, Node, Python) and any-to-any capabilities

Building an agent is the start, production scale is the goal



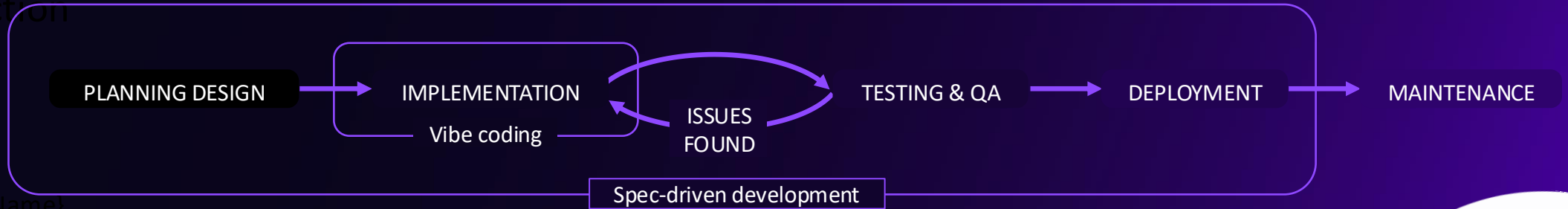
AWS Agentic AI Stack





helps you do your best work by bringing structure to AI coding with spec driven development

Agentic AI development environment from prototype to production



{Speaker Name}





requirements.md

design.md

tasks.md ×



.kiro > specs > email-opt-in > tasks.md > implementation plan

Spec: email-opt-in 1 Requirements 2 Design 3 Task List

1 # Implementation Plan

⚡ Start task

2 [] 1. Set up backend API foundation

- 3 - Create subscription data types and interfaces in the Hono server
- 4 - Set up in-memory storage structure for subscribers
- 5 - Configure CORS middleware for frontend-backend communication
- 6 - [_Requirements: 2.1, 2.2, 2.3_](#)

⚡ Start task

8 [] 2. Implement backend subscription endpoint

⚡ Start task

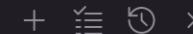
- ### 8 [] 2.1 Create POST /api/subscribe endpoint with request validation
- Implement email format validation
 - Add request body parsing and validation
 - [_Requirements: 2.1, 2.2_](#)

⚡ Start task

[] 2.2 Implement subscriber storage and duplicate prevention

- Create subscriber storage functions
- Add duplicate email detection logic
- Implement subscription status management

New Session ×



Let's build

Plan, search, or build something

Vibe

Chat first, then build.
Explore ideas and iterate
as you discover needs.

Spec

Plan first, then build.
Create requirements and
design before coding
starts.

Great for:

- Thinking through features in-depth
- Projects needing upfront planning
- Building features in a structured way

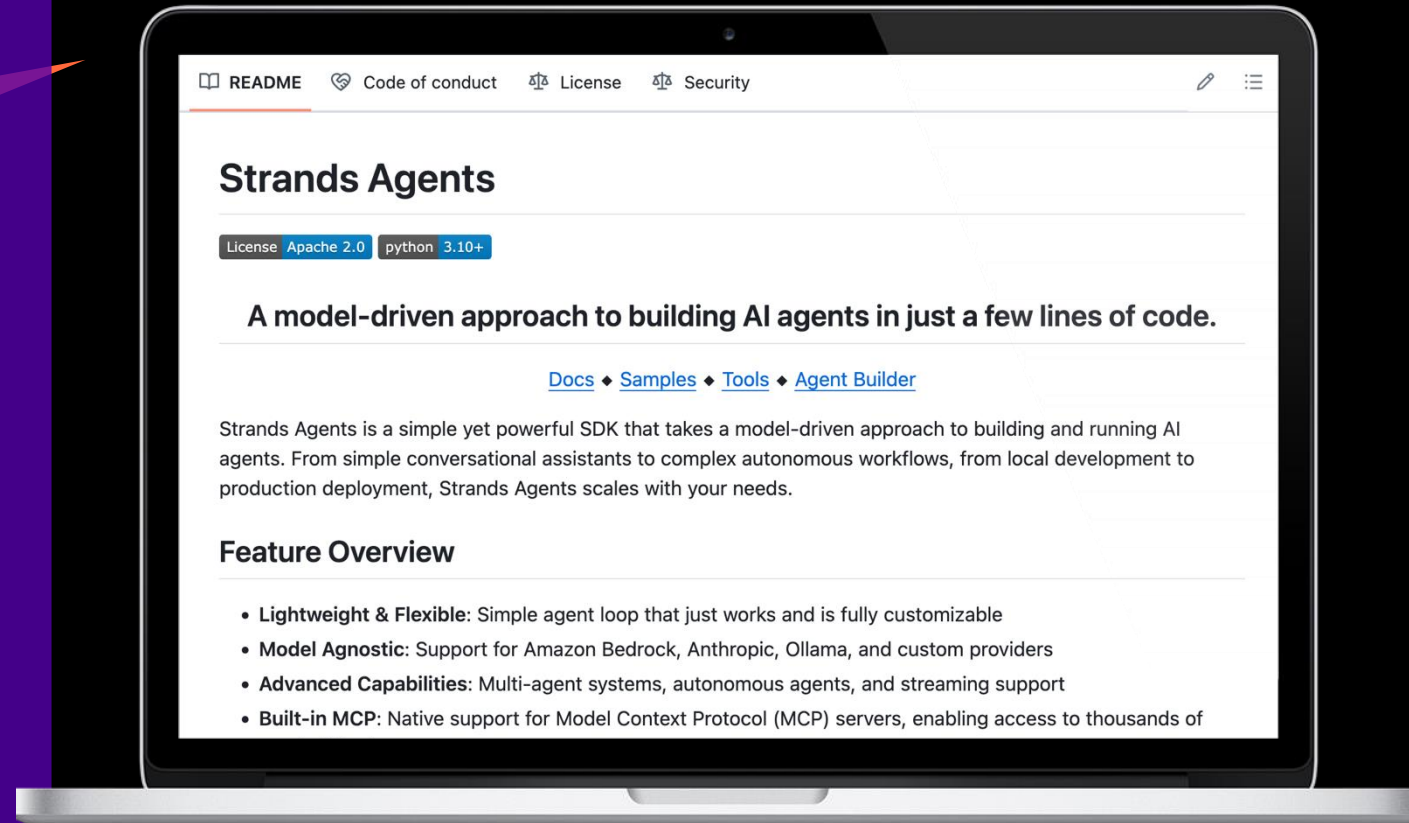
Ask a question or describe a task



< Hello, World! >

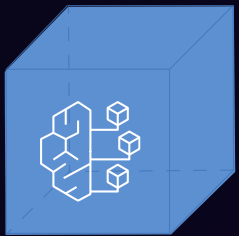
Strands Agents

Strands Agents is an open source SDK
for building agents using just a few
lines of code

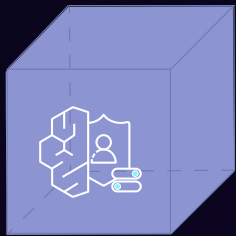


Amazon Bedrock AgentCore

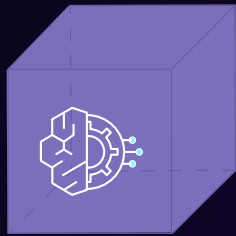
Comprehensive agentic platform: Everything you need for getting agents into production



Memory



Identity



Gateway



Code
Interpreter



Browser



Observability



Policy



Evaluations

Unlocking potential with data and protocols

- Enable agents to access, process, and reason about information
- Interact with data sources, maintain memory, and share information effectively
- Provide contextual awareness for informed decision making

Model Control Protocol (MCP)
Agent to Agent (A2A)
Agent Client Protocol (ACP)

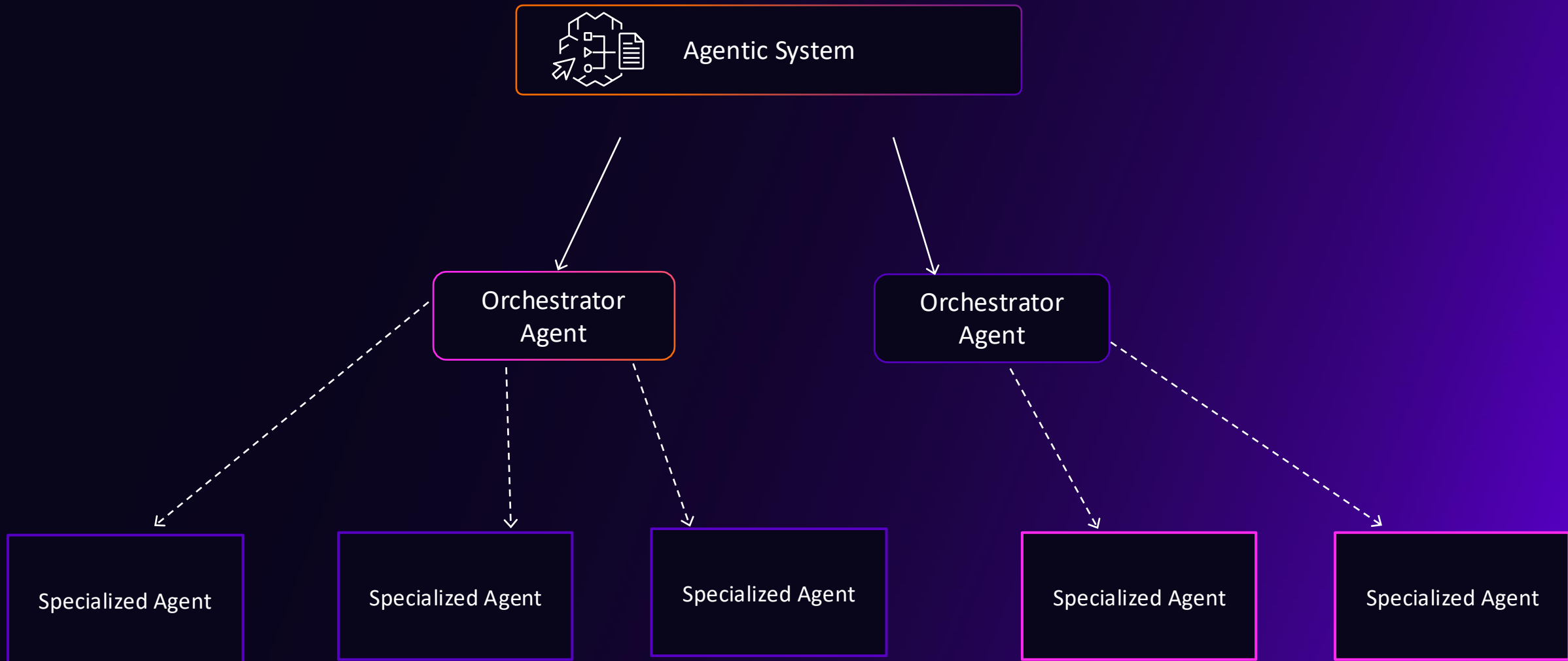
Amazon S3 Vectors
Amazon Redshift

Hyperpersonalization with Agents

- Providing each user with their curated experience
- Continuous personalization rather than configured
- Better understanding of intent
- Adaptive over time to feedback

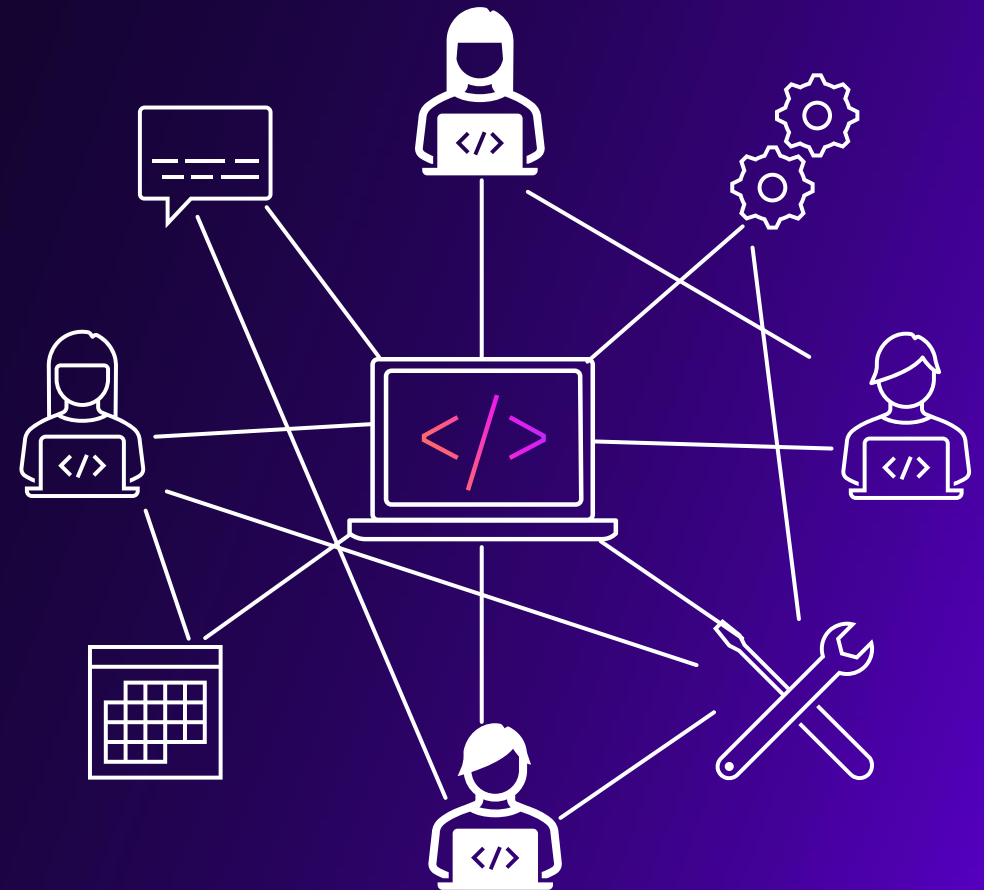


Agents are the new microservices



Shifting the developer cognitive load

- Communication is more important now than ever
- Shift from writing code to reviewing
- Developing intuition and judgement takes time
- Learning a new language (prompts) takes time



ACTION: confirm demo owner, or cut this slide (133 MB video)

EXPLORER

▼ KIRO-AGENTCORE-QUICKSUI...    

≡ Power: Build an agent with Strands SDK x



Build an agent with Strands SDK

Build AI agents with Strands SDK using Bedrock, Anthropic, OpenAI, Gemini, or Llama models by AWS

 Try power

 Uninstall

 Check for updates

Description

#agents

#ai

#llm

#bedrock

#anthropic

#openai

#gemini

#strands

#tools

Build AI agents with Strands SDK using Bedrock, Anthropic, OpenAI, Gemini, or Llama models

 GitHub Repository

MCP Configuration

Open powers config

Third-party powers disclaimer

Kiro powers provided by third parties operate independently from the core Kiro service and may be subject to their own license terms. Kiro does not test or evaluate these tools across all use cases, so users should install only from trusted sources and review any associated documentation and licensing.



Let's build

Plan, search, or build anything

 Vibe

Chat first, then build. Explore ideas and iterate as you discover needs.

 Spec

Plan first, then build. Create requirements and design before coding starts.

Great for:

- Thinking through features in-depth
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Ask a question or describe a task...

Claude Opus 4.6 v Autopilot 

> APPLICATION BUILDER



OUR VISION

To provide the best place to build the world's most useful AI agents, empowering organizations to deploy reliable and secure agents at scale



Our Journey Today

Topic	Time
Registration, breakfast and networking	10:00 – 10:30 AM
Opening keynote: Building Production Systems with Agentic AI	10:30 – 11:15 AM
Technical deep dive: From build to on-call with Kiro and AWS DevOps Agent	11:15 AM – 12:00 PM
Networking break and live demonstrations	12:00 – 12:15 PM
Dynatrace session: Giving your agents eyes into production	12:15 – 12:45 PM
Lunch and networking	12:45 – 1:30 PM
Hands-on lab: Accelerating investigation and remediation with AWS DevOps Agent and Dynatrace	1:30 – 3:00 PM
Networking break and live demonstrations	3:00 – 3:15 PM
Hands-on lab: Enhancing developer productivity with Bluebox by Dynatrace and Kiro	3:15 – 4:45 PM
Customer conversation and audience Q&A	4:45 – 5:15 PM
Closing remarks and next steps	5:15 – 5:30 PM
Networking reception	5:30 – 6:30 PM



Next we have ...

Jason Mimick
Partner Solutions Architect
AWS



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Thank you!



Open items — internal, delete before presenting

- Slide 1 — confirm the keynote speaker name and title
- Slide 15 — fill the {Speaker Name} placeholder
- Slide 23 — confirm an owner for the Kiro to AgentCore demo, or cut the slide (its video is 133 MB of this file)
- Still open from review: slide 12 (AWS Transform) and slide 20 (Hyperpersonalization) do not serve either lab
- Keynote runs 45 minutes for 27 content slides — about 1.7 min a slide

Every other slide is now native and editable: slides 1, 2, 4–7, 25 and 27 come from Melanie's Austin deck, slides 8–24 from the developer-experience deck, slides 3 and 26 built to match.