

**SOFTRAMS**



Platform Engineering 2024

A Practitioner's Playbook

# Building A Serverless GenAI Platform

Public Cloud Edition



# About Me



## *Murali* Mallina

- Building teams and software for over 25 years
- CTO, [Softrams](#)
- Founder & CEO, [Teaching For Good](#)
- Telecom, Supply Chain, EdTech, Healthcare and Civic Services
- Germany, UK, France, India, China, Russia and USA
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# About Us



Softrams is one of the fastest growing civic digital services firms, supporting a variety of mission critical workloads for various Federal Agencies.



# Hello



- Using GenAI for fun?
- Using GenAI @ Work ?
- Building new GenAI applications?
- Bringing GenAI experiences to existing applications?

# Before ChatGPT and After ChatGPT



Generated by ChatGPT4o



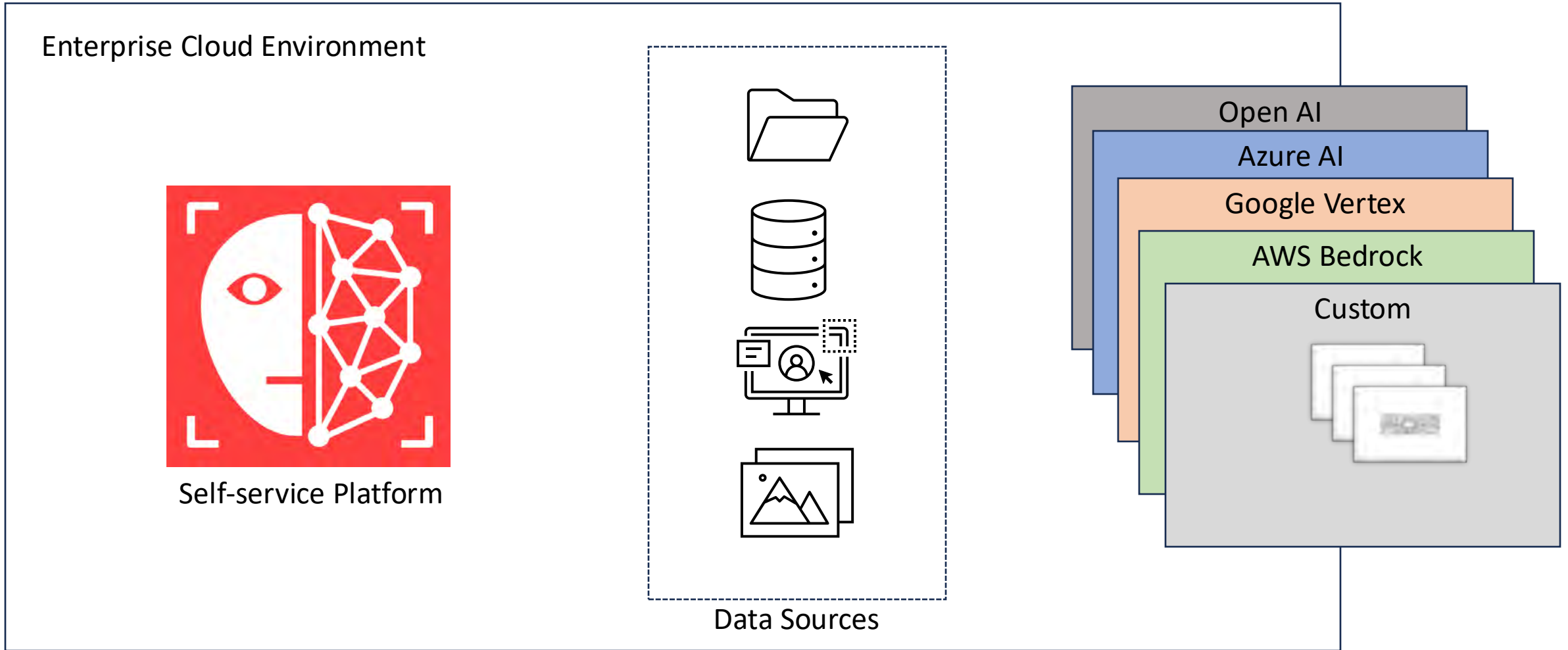
Natural language is the  
*new* programming language





Chat is becoming the  
*primary* interaction model

# Serverless GenAI Platform



Works securely with the enterprise data from **within and** leverages Foundational Models and custom models alike.



# Generative AI Applications



## Chatbots

Bots with grounded knowledge

## Agents

Autonomous *chatbots*  
with access to tools and APIs

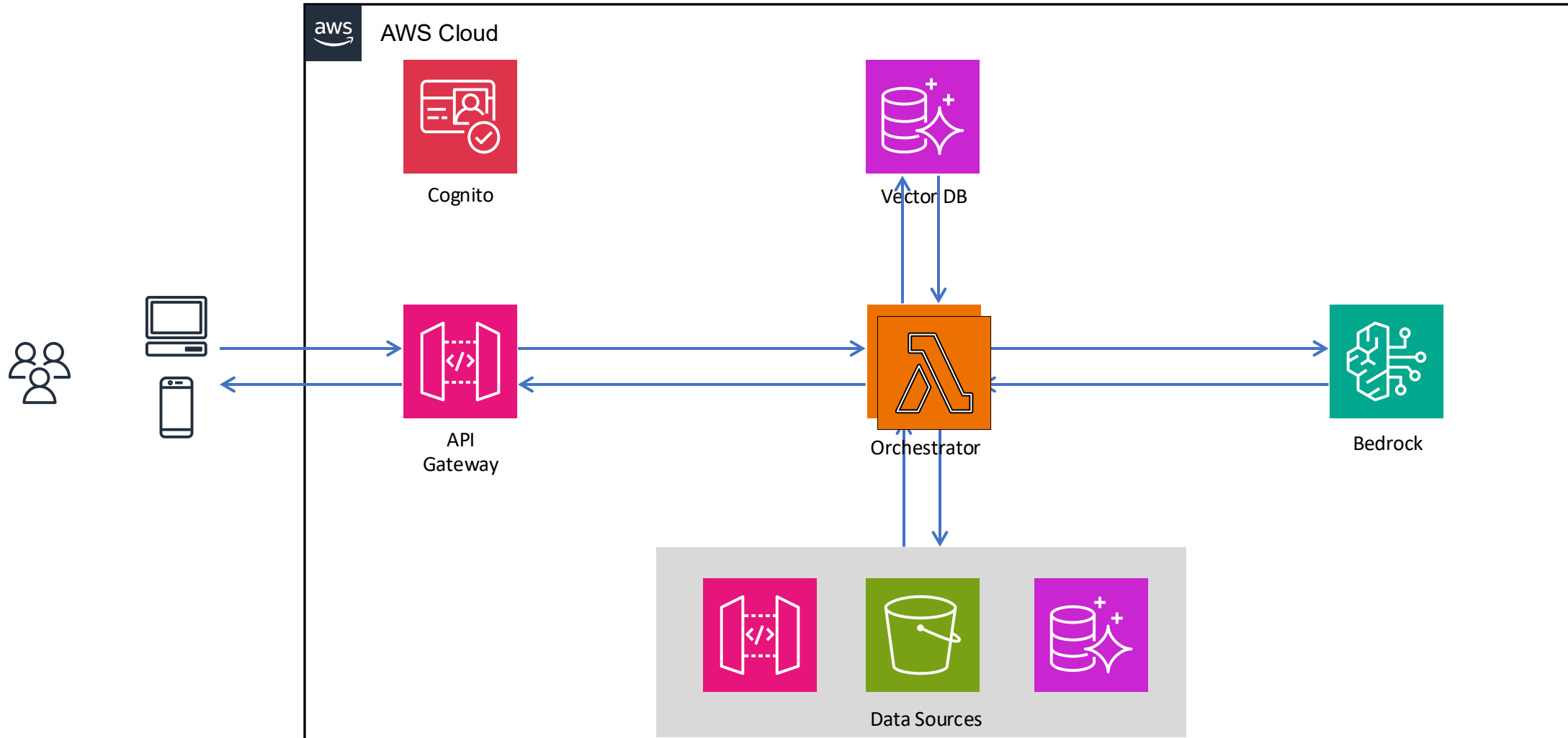
## AI for BI

*Agents* with data access  
for Business Intelligence

## Agentic Crews

A team of self-organizing *Agents*

# Simplified Architecture



# Our Playbook



## Education

- Week of AI
- Threat Modeling
- Prompt Engineering
- Use Cases

## Experimentation

- CoPilot
- ChatGPTs
- Hackathons

## Platform

- Application Types
- Threat Models
- Model Validation
- Guardrails
- Observability

# Summary



- Provide a safe and secure sandbox for your teams to experiment
- **Optimize** experiences for non-technical users
- Be generous with observability to cater to variety of users
- Facilitate learning from each other (Shareable Prompts, Catalogs, Templates)
- GenAI applications are naturally indeterministic
- Traditional testing strategies do not work
- It is **critical** to put boundaries to generic Foundation Models



"You never change things by fighting the existing reality. To change something, **build a new model** that makes the existing model obsolete."

R. Buckminster Fuller