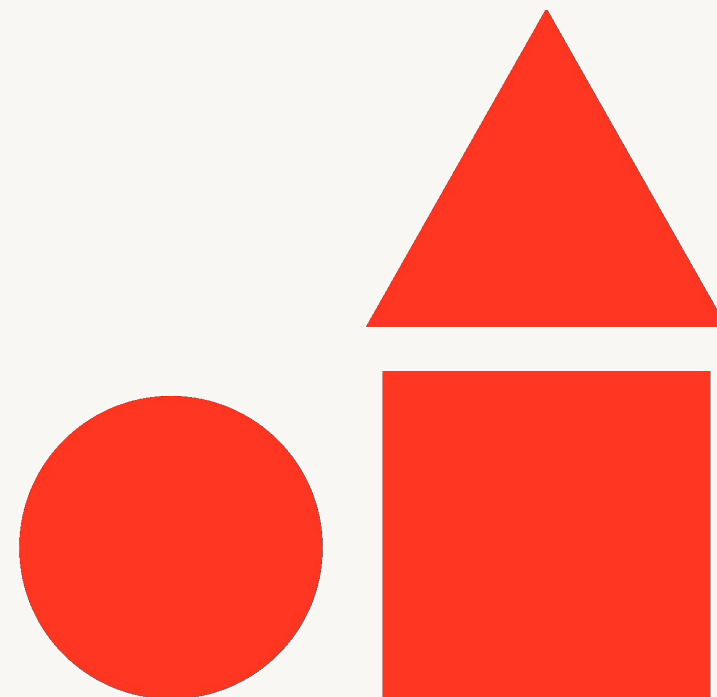


Elevating Enterprise Data Through Open Source LLMs

Zac Davies

Sr Solutions Architect, Databricks

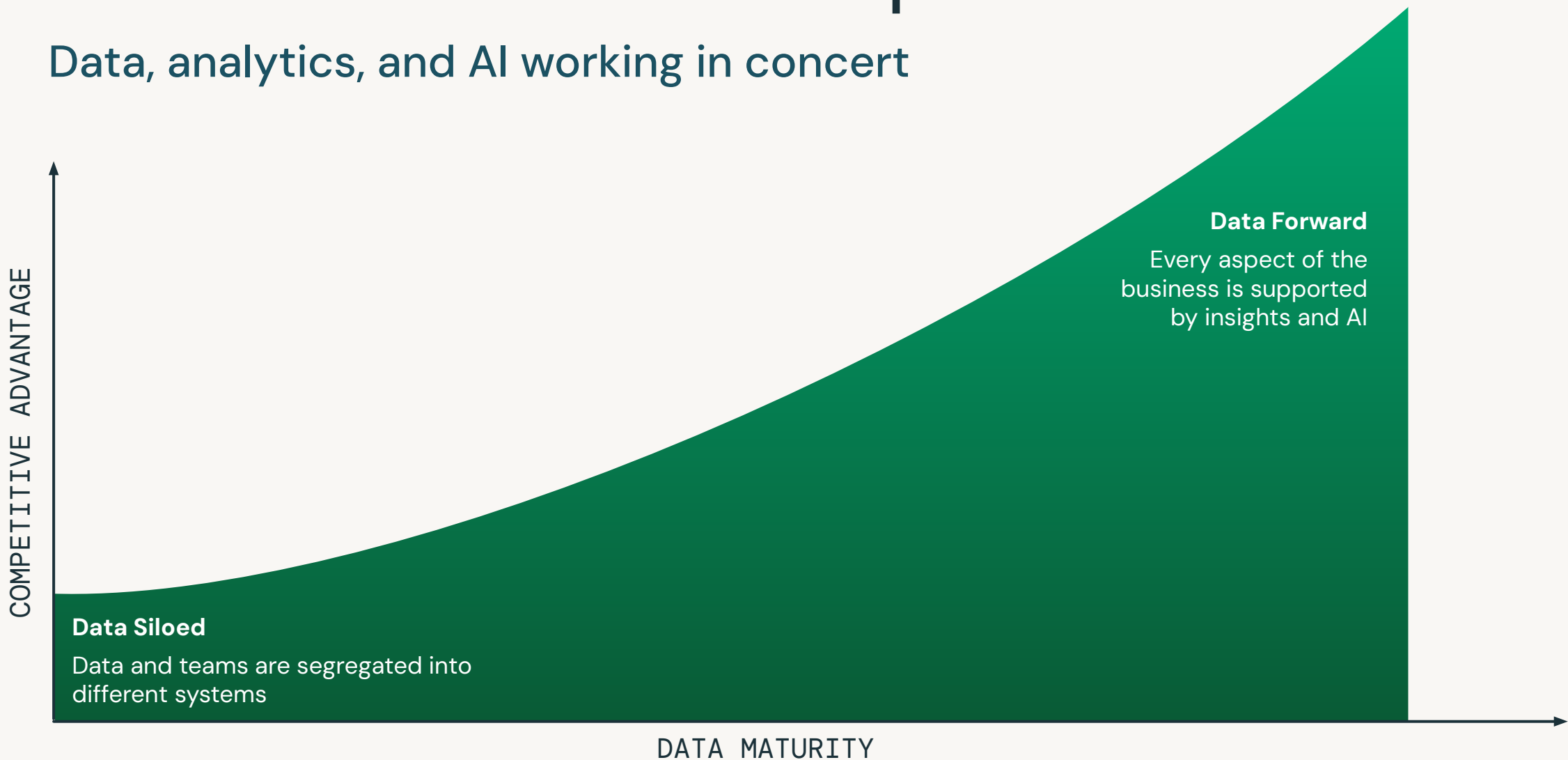


Companies have been
focused on data for years



The Data-Forward Enterprise

Data, analytics, and AI working in concert



“We need to be doing more with AI”

“Can we solve this problem with an LLM?”

“Leadership want to see AI features”



LLM + Proprietary Data + Data Governance



Retrieval Augmented Generation

LLM Only

Prompt

What is Positron?

LLM

Meta Llama 3.1 70B Instruct

Response

A positron is the antiparticle or the antimatter counterpart of an electron. It has the same mass as an electron but has a positive charge instead of a negative charge...

RAG Application

Prompt

What is Positron?

Relevant Sources

Documents, etc.

LLM

Meta Llama 3.1 70B Instruct

Response

Positron is a new Integrated Development Environment (IDE) developed by Posit, specifically designed for data science. It aims to combine the best features of RStudio and Visual Studio Code (VS Code) into a single, flexible environment...





Internal Guidelines



Legal



Security

Enforced SSO for authentication

Data must remain within organisation tenancy

Access controls

Monitoring & Logging

Encryption

Control & Trust

Data Residency

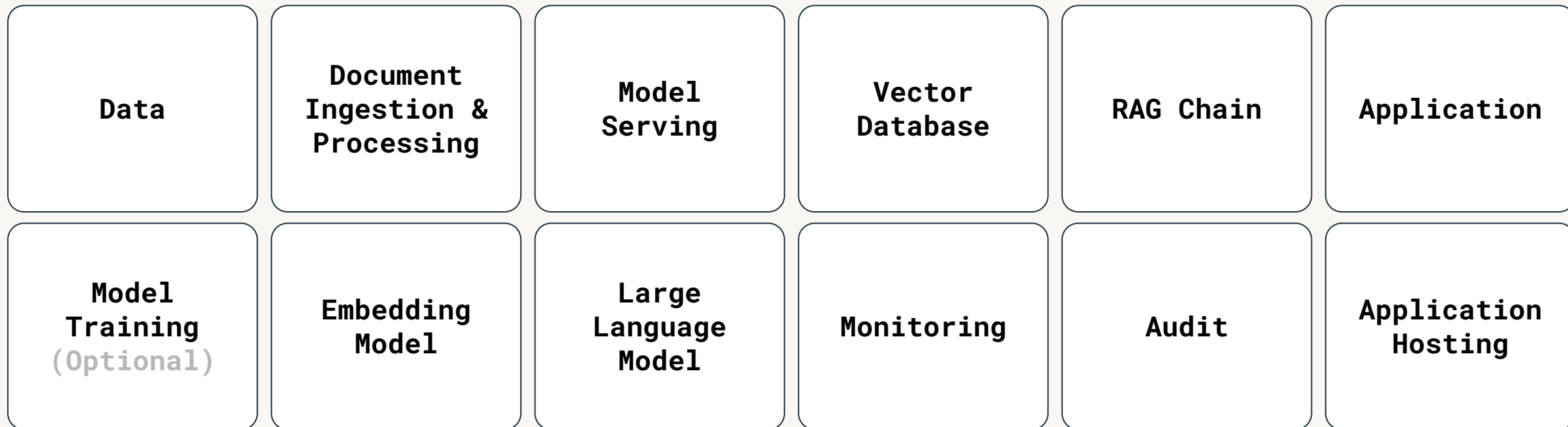
Industry Specific
Regulation Compliance

Audit Logs

Permissive model license



What components are required?



Tooling



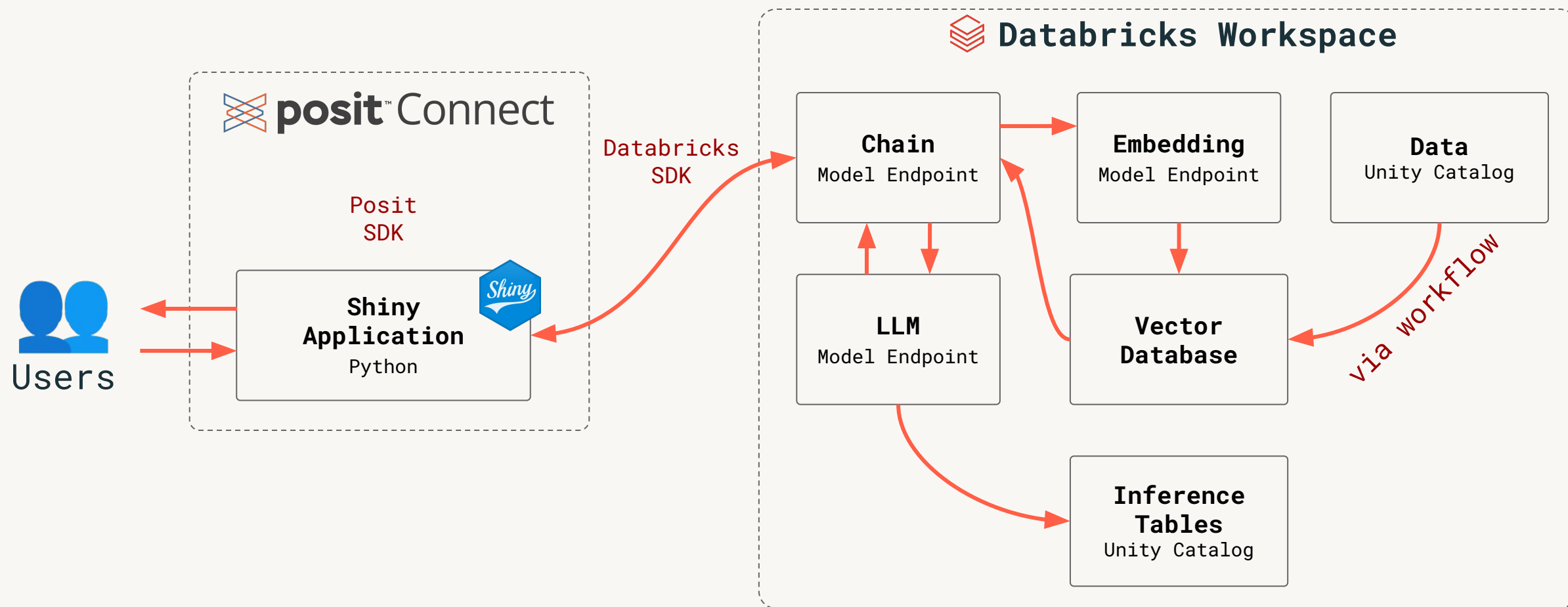
LangChain



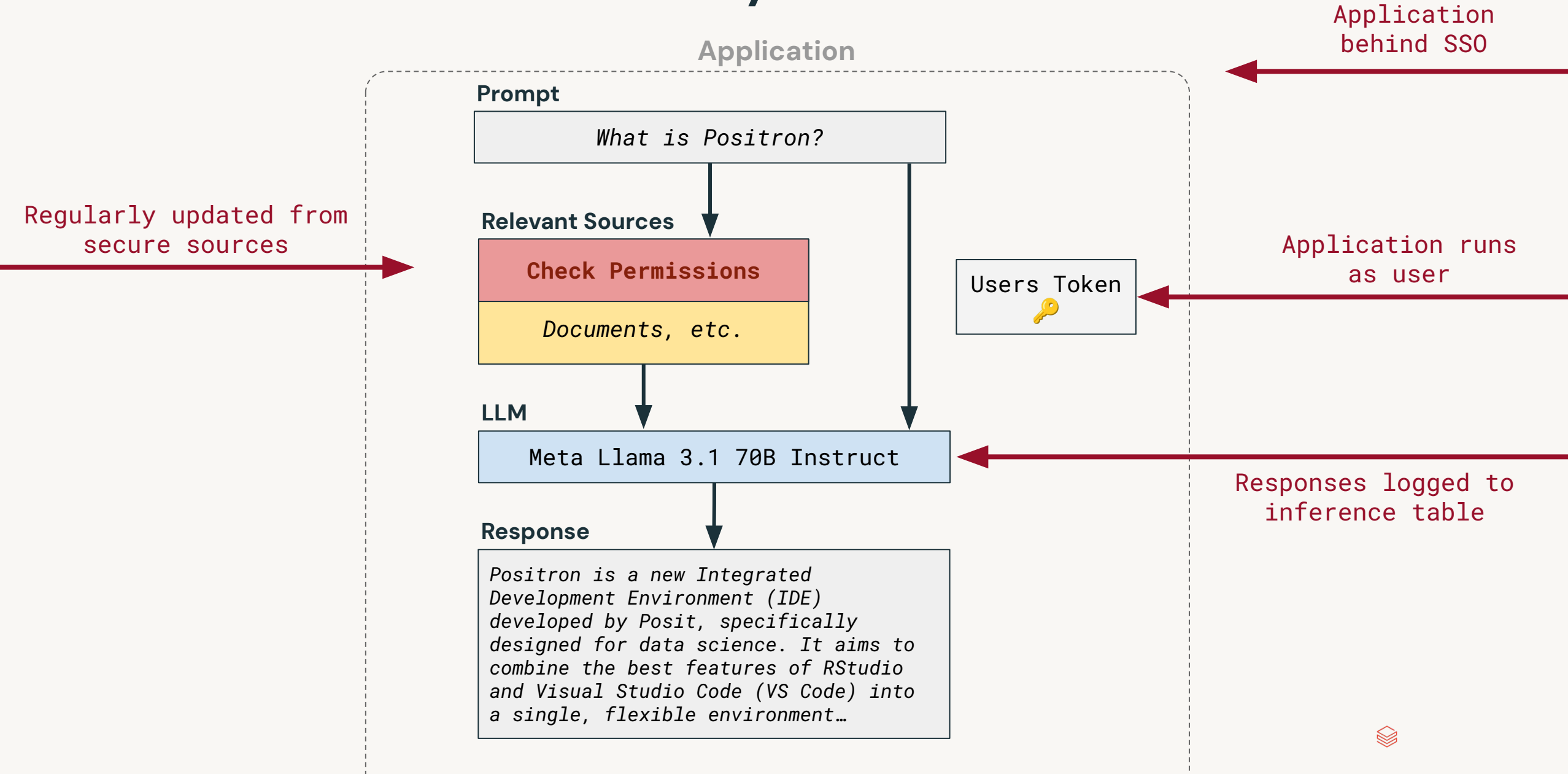
Demo



Architecture



Governance & Security



Summary

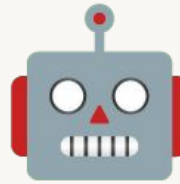


Data

Data is your competitive advantage

LLMs combined with your data

Create a feedback loop to generate more data



Open Models

Permissive license

End to end control

Customise as required



Governance & Security

Application secured behind user authentication

Access controls

Audit logging



Thank You

QR code for Slides

Further Reading & Resources

- [A Compact Guide to RAG](#)
- [Mosaic AI Agent Framework](#)
- [Example RAG LLM Chatbot](#)
- [Databricks GenAI Cookbook](#)
- [Posit SDK Credential Example](#)

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