GenAI and the evolving landscape of satellite data in the enterprise

Data+AI Summit

June 2024

Building a better working world

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Today's speakers

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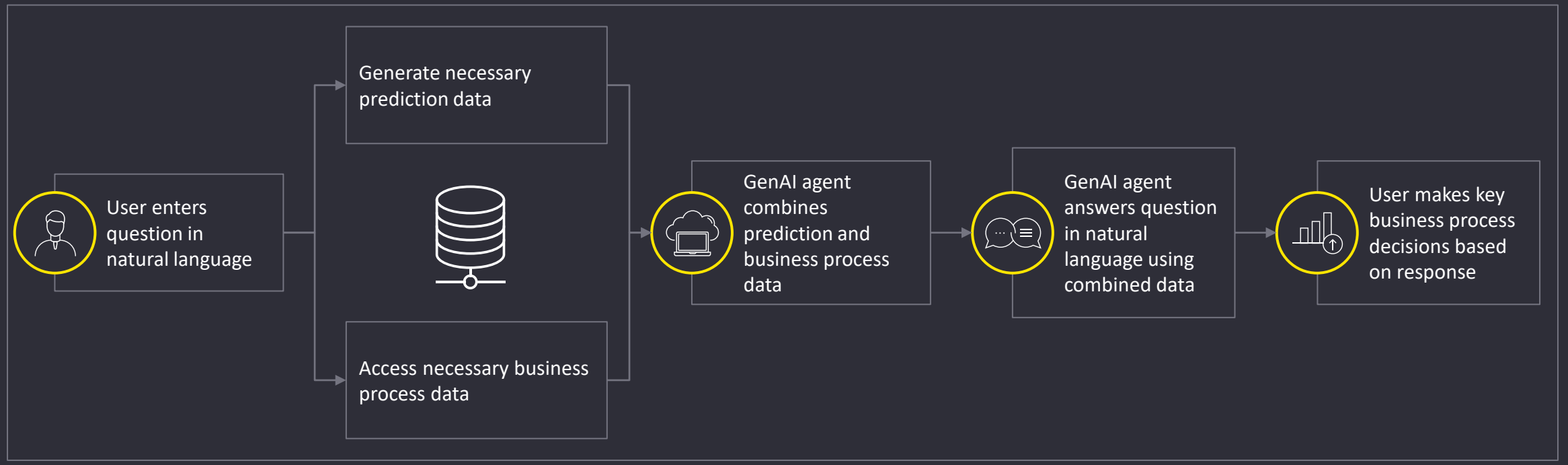
Why Generative AI (GenAI)

With a GenAI experience, end users can easily interact with machine learning (ML) models tied together with their enterprise data without the specialized knowledge normally required to interpret and make decisions using model output data.

- Make outputs from advanced data science models accessible with natural language
- Easily tie in business process data with outputs from ML models
- Enable support for key decisions with data



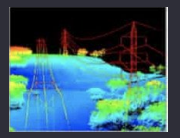
What is Geospatial GenAI and what are the challenges in working with Geospatial data?

What is Geospatial Gen AI?

Geospatial Generative AI (Gen AI) is the method of engineering satellite data and enterprise data to be AI ready and expose business insights through the power of Generative AI. This helps organizations make better,
more informed decision while utilizing previously obscure data and the power of industry-leading AI solutions.

Geospatial Use Cases

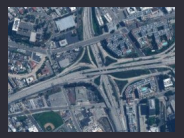
Vegetation



Crops

Shorelines

Critical Infrastructure



Site Selection

Enterprise Process Integration

Inventory Optimization, Demand Planning, Risk Analysis, Network Optimization, Financial Forecasting and Planning, Asset Management, Workforce Planning

Challenges in working with Geospatial Data

Image Complexity

Deciphering intricate geospatial visuals into meaningful information

Data Quality & Accessibility

Translating scientific terminology into common enterprise context

Specialized Tools

Navigating unique software demands to manipulate geospatial data effectively

Unlocking Satellite Insights

Extracting meaningful data from satellite imagery for informed decision making

Computation

Processing satellite imagery in a cost-efficient and time-effective manner

Vegetation Crops Shorelines Critical Infrastructure Site Selection

How is Ernst & Young LLP using Geospatial GenAI?

Unlocking data outside of geographic information systems and transforming it into AI-ready data to be used by mainstream data science tools

Creating data science, data engineering, ML operations, large language model operations and solution architecture accelerators for geospatial GenAI

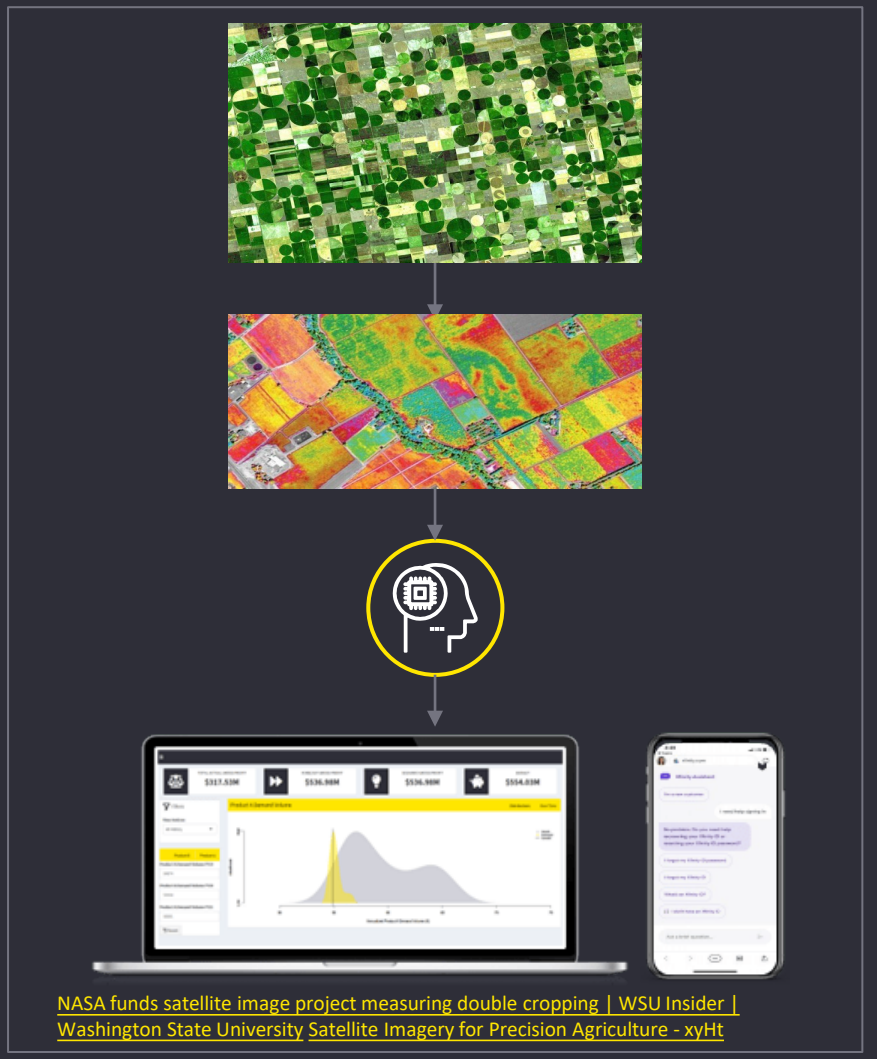
Considering the impact of change in environment around assets, infrastructure and financial planning

Enabling geospatial GenAI for various use cases across multiple industries

Reducing data engineering time and cost for data to be AI-ready

Demo Overview

- Collect satellite imagery of target areas (current and historical) based on requirements of the business and stakeholders
- Quantify business risk using multiple indices, paired with historical satellite & relevant enterprise data to perform opportunity detection
- Leverage machine learning and generative AI to identify patterns and trends and perform risk assessment
- Synthesized information to provide actionable insights via dashboards, internal chatbots in web and mobile application, and many other tools



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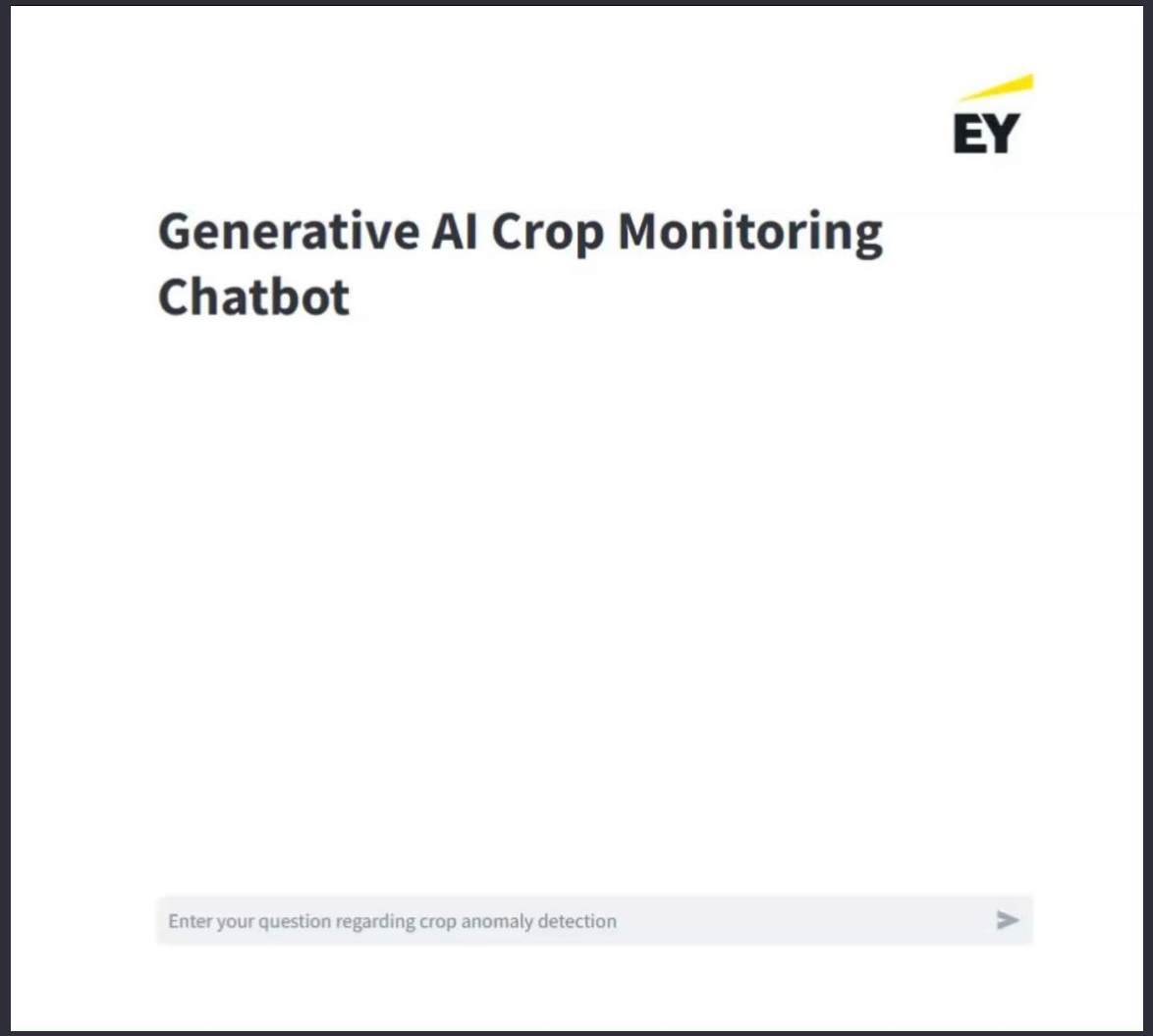
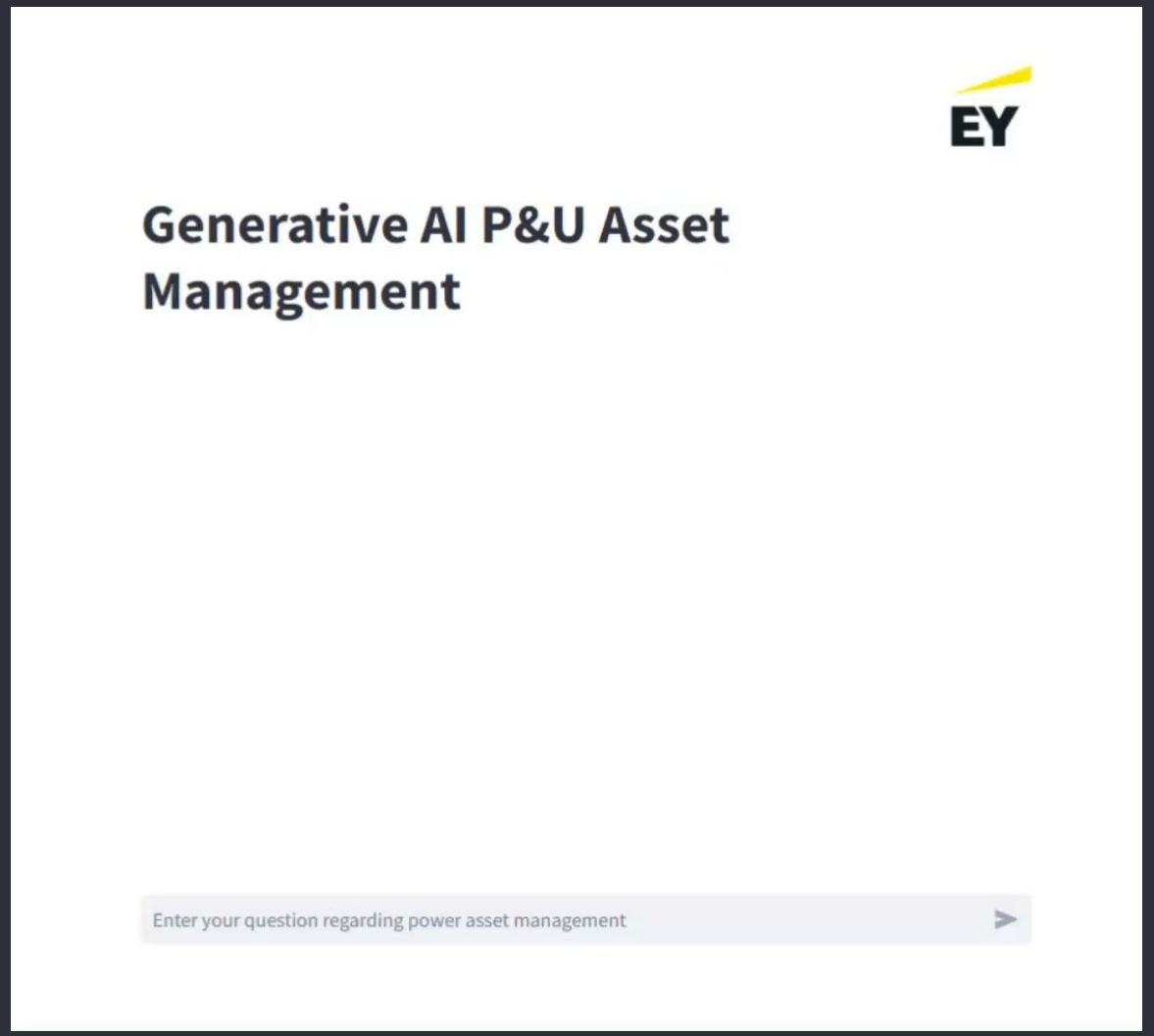
Generative AI Crop Monitoring Demo



Generative AI Power & Utilities Asset Management Demo



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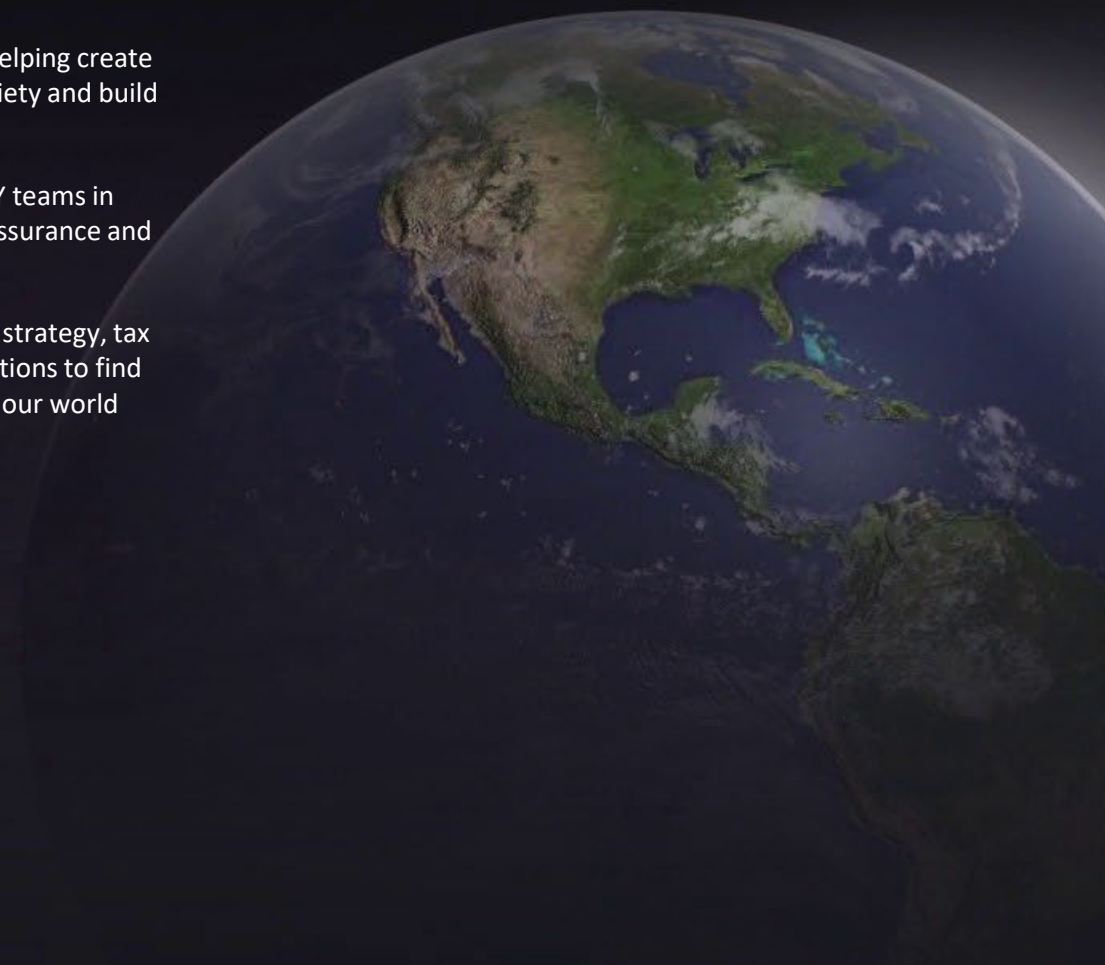

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