

Dismantling the Black Box:

Why we need to Think Bigger About AI Integration

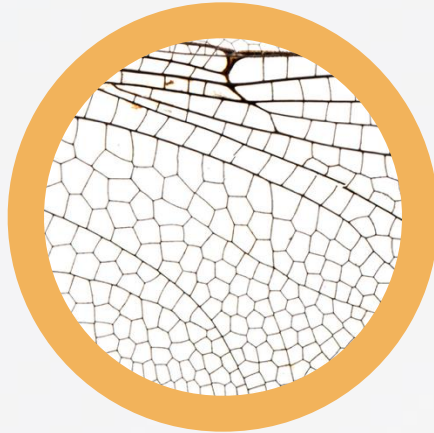


Christina Dinger
Sr. Director, Product
ThoughtSphere

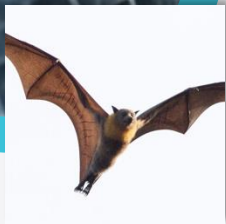


Joe Lebers
Product Manager
ThoughtSphere

Can you identify these images?

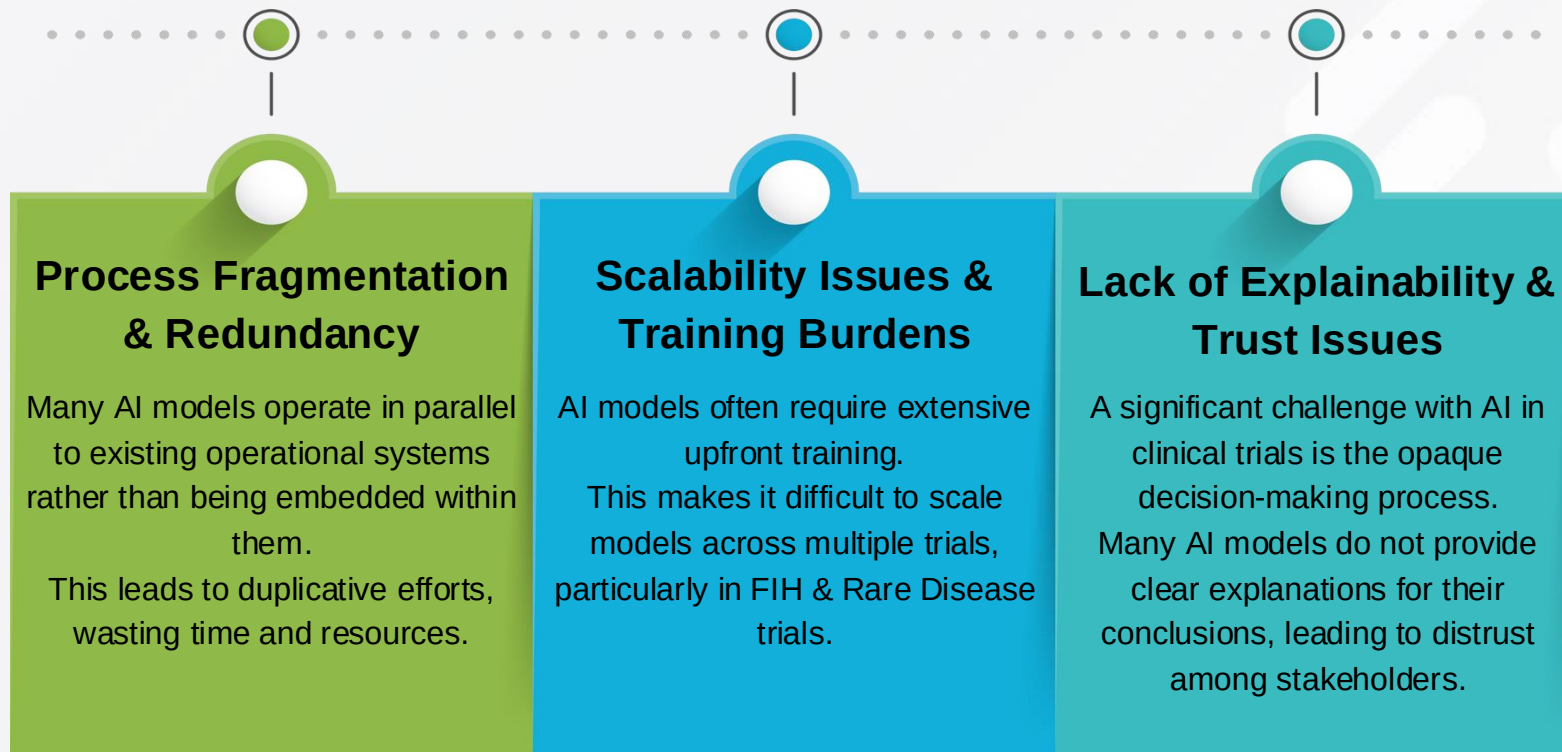


Can you identify these images?

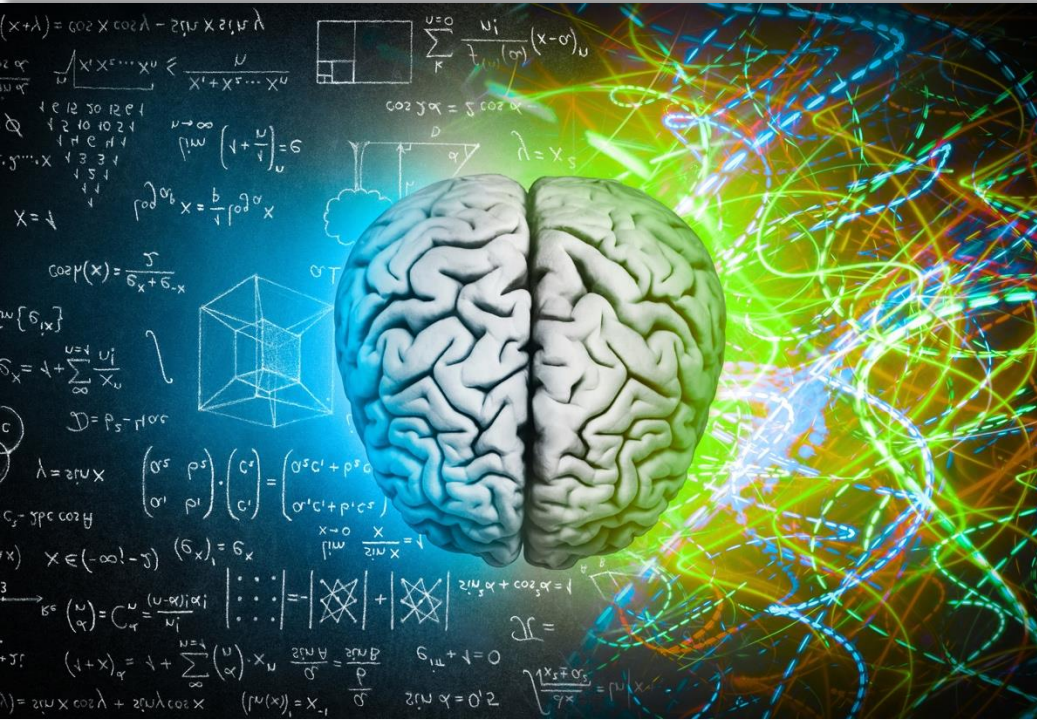


When presented with limited data and/or processing apparatuses, meaningful interpretation is hampered.

Fragmented AI = More Silos, More Complexity, More Computing



Insufficient Tech Foundation to Support AI

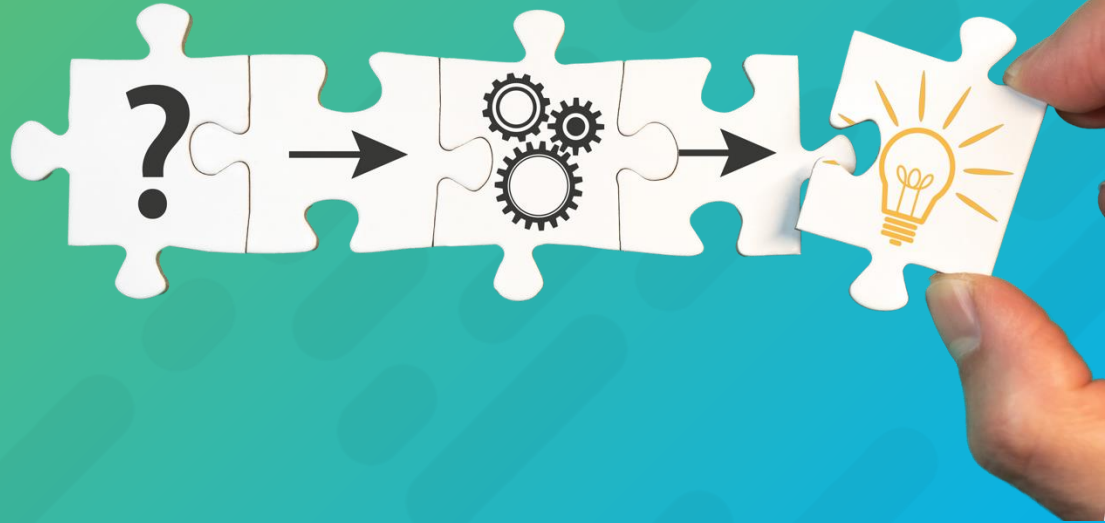


Only **22%** of Organizations have a data architecture capable of supporting AI workloads

48% of Data Engineers spend most of their time addressing data source connections & interoperability challenges

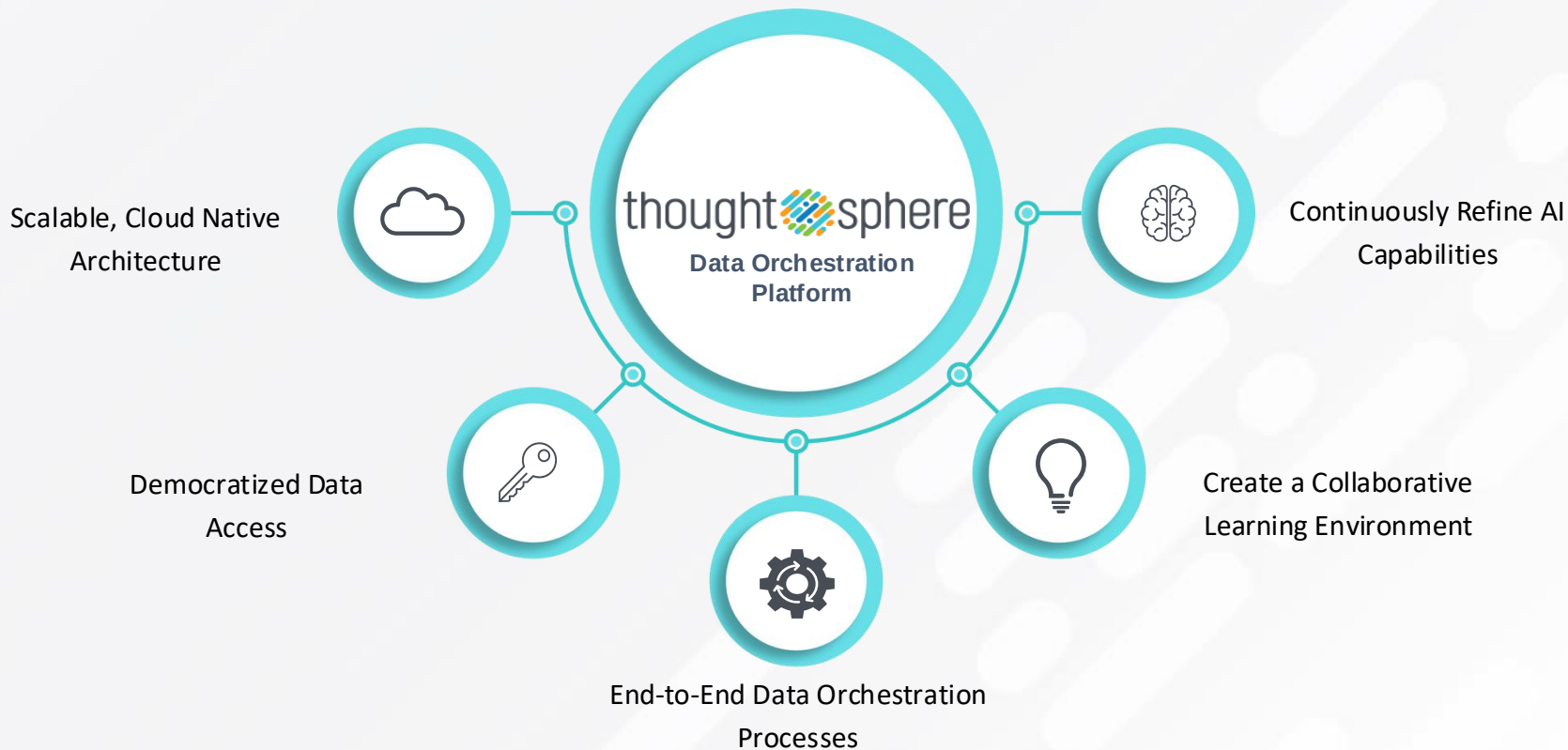
Source: [Unlocking enterprise AI: A global study of 1,100 technologists—plus 28 CIO interviews | Databricks](#)

So how do we overcome this?



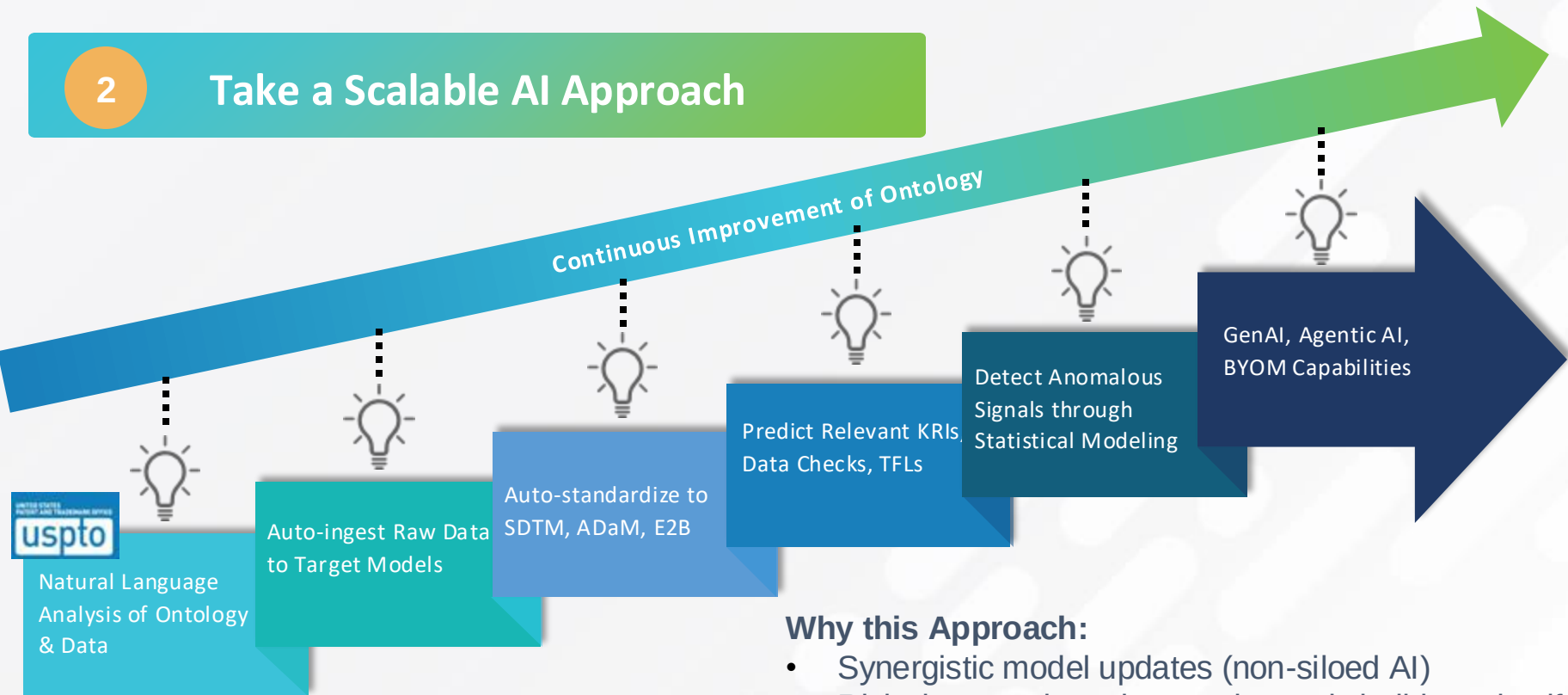
1

Build the Right Ecosystem for AI



2

Take a Scalable AI Approach



Why this Approach:

- Synergistic model updates (non-siloed AI)
- Rich data ontology that continuously builds on itself
- Optimized tech stack to reduce tech & computing \$\$
- Collaborative AI with HITL, RAG, and explainability

3 Establish Safeguards for AI Model Maturation



- **Retrieval-Augmented Generation (RAG)**
- **Just-in-time Human-in-the-loop**
- **Model Explainability / Transparency**
- **Bayesian Inference**

Deliver: Integrated Intelligence

Data & AI Democratization



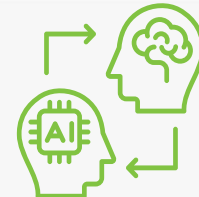
Establish a robust data architecture to support operational, clinical, and real-world evidence (RWE) data.

Strategic Combination of Digital Tools



Leverage interconnected AI capabilities across various modules to maximize value & automation.

Evolution of AI into Integrated Intelligence



Transition from fragmented applications to an integrated intelligence layer that spans the value chain.

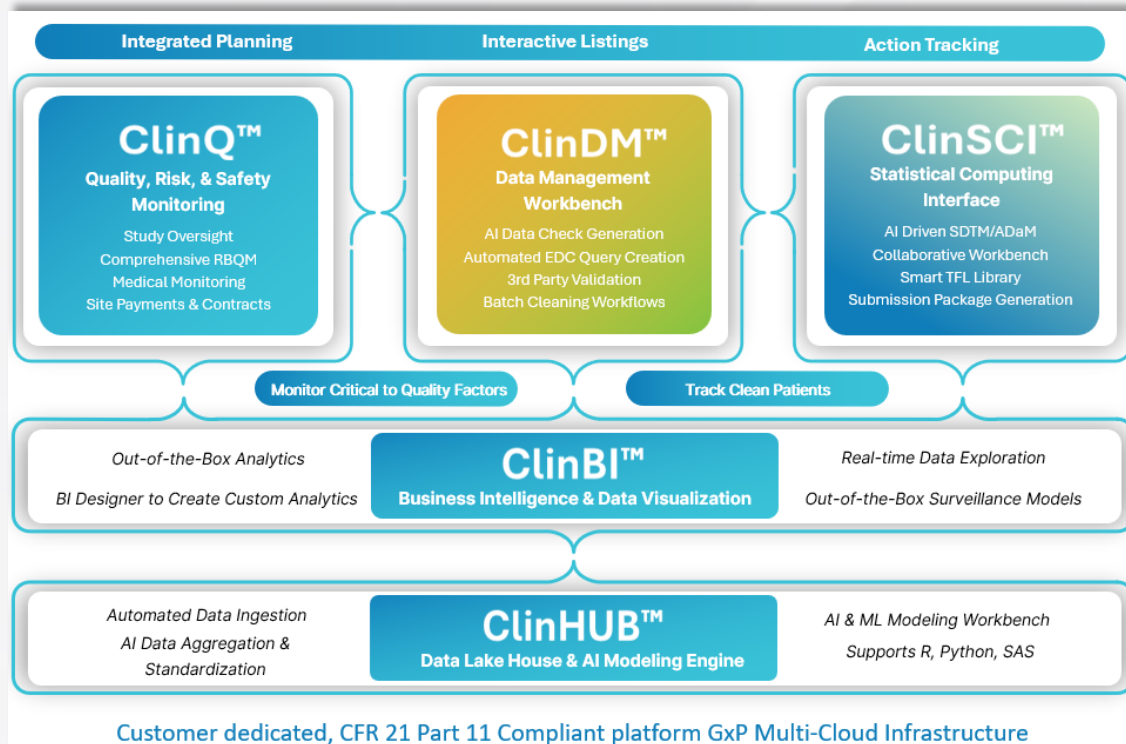


The Rise of Agentic AI

- **Medicine is both an Art & Science**
- **Clinical Development is unlike many other industries – we're redefining what is possible**
- **Relying solely on LLMs trained on past data limits the potential for true innovation.**
- **The future of AI in clinical trials is about fostering a true partnership between AI and Human Experts**

An Intelligent Data Orchestration Platform

- **Unified Data Lake & AI Engine:** ClinHUB™ centralizes and standardizes data, enabling seamless integration and access to data & models
- **Powerful Insights:** ClinBI™ delivers no-code dashboards with 150+ built-in reports for actionable insights.
- **Comprehensive Monitoring:** ClinQ™ provides real-time study oversight, risk management, and automated payment tracking for compliance and safety.
- **AI-Enhanced Data Management:** ClinDM™ automates data cleaning and compliance, saving time and ensuring accuracy.
- **Flexible Statistical Tools:** ClinSCI™ offers customizable analytics for regulatory submissions, including ADaM and TLF outputs.



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Platform Demonstration





Questions

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Thank you!

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