



Voice of the CDAO

A recurring conversation with CDAOs
on the modern data-driven enterprise



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CDAOs empower AI agents with governance and unstructured data

Our conversations with Chief Data and Analytics Officers (CDAOs) reveal insights into the artificial intelligence (AI) challenges and opportunities facing company leaders. As organizations navigate the complexities of AI adoption, CDAOs face hurdles in governing data for AI use while balancing innovation speed and regulatory compliance. There are diverse approaches to AI governance, including the three-line defense framework, as well as the critical role of data in enabling AI agents. With estimates suggesting that up to 80 percent of all data

is unstructured, organizations must develop advanced strategies for collecting, cleaning, and normalizing this data to unlock its value for agents. CDAOs are also grappling with integrating AI agents into existing workflows while managing return on investment (ROI) and cost pressures. Key considerations for CDAOs are enhancing their focus on data lineage and tying metrics to business outcomes. This summary provides an overview of the current landscape and future directions for CDAOs in the agentic era.

On the CDAO agenda

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AI governance

Governing data for AI use

Governing data is a complex challenge that impacts CDAOs in various ways, with data sharing being a significant hurdle.

“For our AI governance, it’s not like a one-size-fits-all,” noted the CDAO for an automaker. “We have a centralized AI team serving up APIs and new models. It’s all very centralized.”

Even in a large organization with a central clearinghouse for data requests, CDAOs must be able to govern. For example, individual business units may try to do their own thing or outside vendors may attempt to sell the company something that already exists in-house. CDAOs must be ready to arbitrate.

Some CDAOs are organizationally challenged with decentralized operations. The CDAO for an automotive supplier shared his setup.

“We have individual operating units that classify the data. Our councils are structured more around information sharing than approval authority. I maintain a data catalog, but I’m sure it’s incomplete.”

Banks and financial institutions leverage a three-line defense framework for data governance. The first line manages data governance while the second line manages data risk. The third line of defense is the internal audit, which provides independent

assurance on the effectiveness of data governance practices.

The CDAO for a major bank articulated the advantages of using the three-line defense framework.

“The three-line defense framework is a helpful tool for knowing where all the data is and what’s happening. The first line has visibility into everything that is enabled by large language models. We use the second line to manage AI models. The third line provides a strong backstop.”

Successfully preparing unstructured data for LLMs requires meticulous attention, from data collection, cleaning, and normalization to annotation/

categorization, contextualization, augmentation, and evaluation. CDAOs know these stages by heart.

Is there such a thing as too much governance? Speed is required for innovation, but an over-reliance on oversight can slow development and prevent experimentation. The leisure company CDAO conveyed her frustration with the slower pace.

“It feels like we waste a lot of time answering potential legal and privacy concerns that slows us down from AI development and technology tryouts.”

“Manage data for what it is—a strategic asset.”

—Matteo Colombo, KPMG, Global Leader for Cloud, Data & AI

Enabling agents

Data's critical role

The agentic era will emphasize autonomous AI systems. Unstructured data will play a critical role in enabling these systems to make informed decisions. As agent use grows, improvements in deep learning models and transfer learning will likely enhance the processing of unstructured data.

An investment management company CDAO knows all about governing unstructured data.

"We have a treasure-trove of unstructured data. One of the most powerful techniques we've hit on is using AI to unleash all that data."

Leveraging AI for unstructured data might be the elixir that CDAOs need

for what's on the horizon—agents. The telecommunications firm CDAO knows the drill with adopting agents.

"When we looked at enabling agents, we started to find data sources that we didn't know about. We used that as a catalyst for grabbing data sources for our agent transformation."

Organizations are trying to find the best spots in their workflows to implement agents. For most, it's better to engage an agent or agents in a new process or untapped service area. A tech company is pursuing a human-plus-agent hybrid model. Its CDAO shared how.

"We have a traditional sales team. At the same time, we have a lot of

unmanaged accounts covered by AI agents. We're trying to find uncharted segments or territories that can now be served by agents."

What will the organization chart look like in six months or a year? It's likely AI agents will be on process and workflow diagrams or RACI charts. The experience of the leisure company CDAO shows that agents deployed may take longer.

"We have so many legacy technologies, so it's difficult to make the jump into agentic development."

In addition to integrating with legacy technology being an issue, another challenge is finding use cases for

agents. White space and unserved makes sense but most companies are fully staffed with humans.

The CDAO for a mobility company put it this way. "We don't have processes with 500 people doing the same thing that we can take out by doing something agentic. We lack the killer use case. We just haven't gotten a tremendous amount of value from agentic developments."

"It's the stuff that I don't know about that concerns me."

—CDAO for a mobility company

ROI and cost pressures

Business drivers and data requirements

ROI and cost pressures are significant concerns when implementing AI agents. Even with tremendous gains promised from using agents, a substantial investment is required in technology, talent, and infrastructure. Integrating agents with systems can be complex and costly. Agents also require continuous maintenance, updates, and monitoring that often relies on a data corpus.

Matteo points out that sourcing agents aren't based on process anymore; it's based on skills. Matteo notes: "As agents move up in complexity, you start thinking about them as digital employees with skills. That means agents must prove their worth in terms of ROI."

The backdrop to the ROI discussion about agents is the current so-called productivity gains with GenAI. As one CDAO acknowledged: "Survey data says people save 30 minutes a week using GenAI tools, which translates into 60 full-time employees. There's no evidence of that, and it's very hard to prove."

That's a qualitative assessment where quantitative research would be more definitive. Matteo certainly understands the sentiment. "We all invest in GenAI and ROI, and efficiency has been elusive. Now we're getting ready for an agentic situation that is complex in several ways."

One way it's complex is that many human workers fear being replaced by digital employees. The organization chart was invented in 1855. In 2025, we could have nonhumans in a hybrid chart with agents and humans featured in workflows and processes. For CDAOs, the challenge is getting data ready for the agentic era.

Nobody knows that better than Danielle Beringer, who was a chief data officer herself before coming to KPMG in the role of partner in our Data Modernization practice.

"Key tasks to focus on include automated labeling and classification, enriching metadata across technical, business, and social domains. Notably,

synthetic data generation has gained significant traction among our clients that handle sensitive information or face privacy concerns."

The CDAO for a major bank shared her experience with unstructured data from customer phone call recordings and the obvious concern over account numbers and Social Security numbers.

"Our data scientists want us to pull out the key metadata or key features from the raw data, so they can use them in their models at scale."

The more CDAOs advance in working with unstructured data and helping pilots scale, the closer they'll be in having data ready for agents that deliver on ROI.

"What is the impact to the workforce when using an agentic teammate?"

—Danielle Beringer, KPMG, Principal, Advisory, Offering, Technology

Key considerations

- Audit data landscape
- Enhance focus on data lineage
- Tie metrics to business outcomes

Additional resources

[Data governance in the age of AI](#)

[Unlocking value with data products](#)

[You can with AI. \(podcast series\)](#)



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