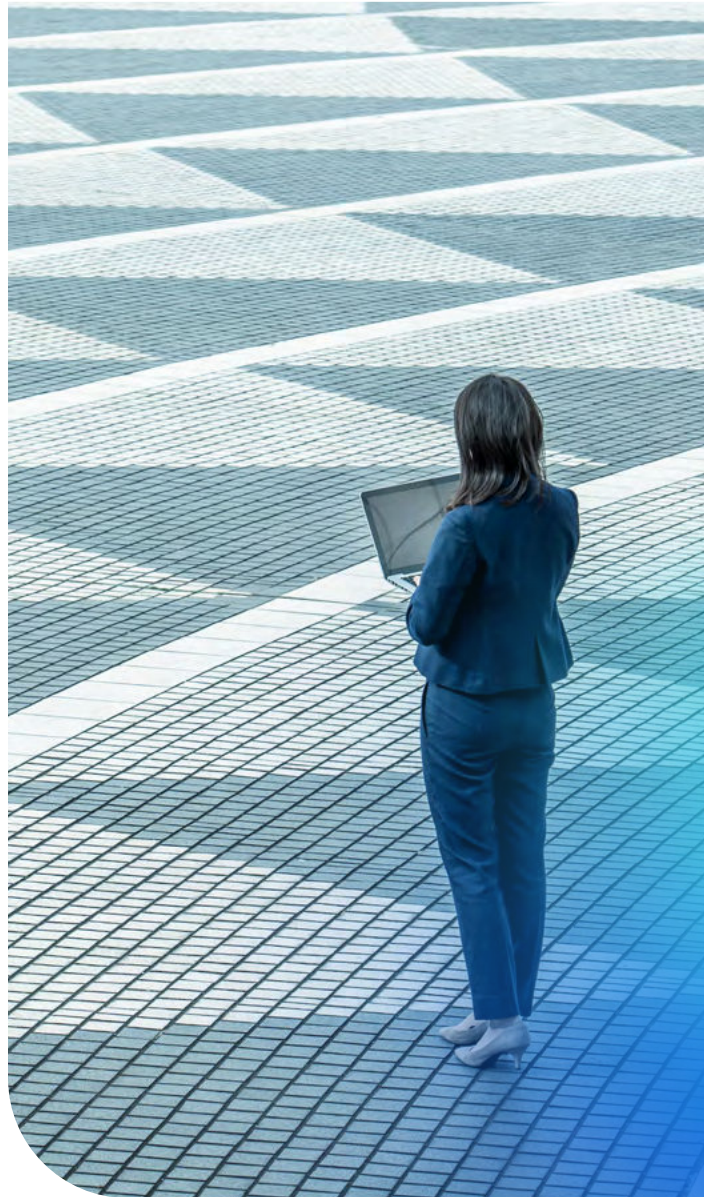


Seven Chief Data Officer (CDO) Priorities for 2025



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The data landscape of 2025 will be characterized by an explosion of data sources, the growing adoption of AI technologies, and an increasingly complex regulatory environment. In this context, the CDO will emerge as a crucial figure, tasked with navigating these challenges while unlocking the immense potential of data for their organizations.



From Back-Office Function to C-Suite Strategist

As we stand at the threshold of 2025, the role of data in shaping business strategy and driving innovation has never been more critical. The evolution of the CDO from a back-office functionary to a key C-suite strategist mirrors the journey of data itself—from a byproduct of business operations to a central asset driving competitive advantage.

The year 2025 will mark a turning point when organizations that have invested in robust data strategies will begin to separate themselves from the pack, much like how digital transformation separated innovators from reactionaries in the previous decade.

Between 2012 and 2023, companies having appointed a CDO grew from just 12.0% to 82.6%, with an expansion of responsibilities over time to include analytics (CDAO) and AI (CDAIO). Source: **Wavestone, 2023**


2025: The CDO as a Change Agent

In 2025, the CDO will no longer be just a data custodian but a business strategist, technology innovator, and ethical guardian rolled into one. When the Harvard Business Review says that “companies need a CDO to stay competitive,” it doesn’t mean organizations need to hire someone to build a few dashboards and manage basic data governance. The article presents a strong case that companies need an executive who can “leverage AI and draw upon petabytes of data” to stay ahead of the competition.

A company with a dedicated executive focusing on data strategy clearly has an edge over one that treats data as an afterthought or has responsibilities siloed across the organization. A company whose CDO can see when data quality is missing or declining can be more responsive—and even proactive—than one that relies on IT to manage databases. A company with an informed data leader is less likely to steer the business into a compliance nightmare and instead enable strategic growth than one where everyone is making decisions from incomplete or inaccurate data.

What started as a data custodian and governance guru has morphed into a strategic visionary and change agent. But at its core, the CDO’s value proposition remains the same—to give the organization a slight edge, hand after hand, decision after decision. It’s not flashy, and it won’t save a sinking ship overnight. But for companies willing to play the long game and truly become data driven, a good CDO just might be the ace up their sleeve.

Here are seven priorities shaping the chief data officer agenda as 2025 looms closer.



The Big Picture: Crafting a Unified Data and Analytics Strategy

Top considerations:

- Moving beyond siloed approaches to a unified data strategy
- Aligning analytics strategy with overall business objectives
- Overcoming resistance and gaining buy-in across the organization

My advice to CDOs is – Act like a CFO, deliver like a COO, and show up like the CEO. You'll be glad you did.

– **Source:** Data Leadership Collaborative

Crafting an enterprise-wide data and analytics strategy will become a critical imperative for CDOs in 2025. This isn't just about aligning disparate data initiatives; it's about fundamentally rewiring the organization to compete in the age of data and AI.

Forward-thinking CDOs are moving beyond siloed approaches to create a cohesive strategy that touches every corner of the enterprise. The key is to think like a CEO: how can data and analytics drive top-line growth, improve operational efficiency, and create sustainable competitive advantage? Successful strategies start with a clear vision of the organization's data-driven future, closely aligned with overall business objectives. They encompass not just technology and infrastructure, but also governance frameworks, talent development, and cultural transformation.

Leading CDOs are employing agile methodologies to develop and iterate on their strategies, allowing for rapid adaptation in a fast-changing data landscape. They're also fostering cross-functional collaboration, recognizing that the most impactful data initiatives often emerge at the intersection of different business units. By positioning data as a strategic asset and analytics as a core competency, these CDOs are not just supporting the business—they're reshaping it from the ground up to confidently face whatever is next.

Taming the Data Infrastructure Beast: Platforms vs. Point Solutions

Top considerations:

- The perils of tool sprawl in the data ecosystem
- Benefits - including cost savings - of a cohesive data platform
- Case studies: Organizations that got it right and the platforms that helped them get there

Get your complimentary copy of the **2024 Ventana Research Data Platforms Buyers Guide** that includes a 7-criterion evaluation complete with analysis and scoring to compare a technology provider's strengths and capabilities with an organization's specific needs.

As organizations grapple with an ever-expanding array of data sources and analytical needs, CDOs in 2025 will face a critical challenge: taming the beast of data tool sprawl. The proliferation of point solutions, each addressing a specific data need, has led to a fragmented landscape that hinders rather than helps data-driven decision making.

Forward-thinking CDOs are tackling this head-on by championing comprehensive data platforms over a patchwork of specialized tools. It's not just about simplification; it's about creating a cohesive ecosystem that unlocks the full potential of data across the enterprise. These leaders are thinking like architects, designing single, unified environments that seamlessly connect data integration, quality, storage and analysis. The key is to balance standardization with flexibility: how can organizations create a unified foundation while still allowing for specialized capabilities like governance?

Leading CDOs are leveraging cloud-native platforms that offer extensibility and integration with both on-premises and cloud tools, providing a "best of both worlds" approach. They're also focusing on data democratization, ensuring that data is accessible to both technical and business users. By consolidating tools and streamlining workflows, these CDOs are not just reducing IT complexity and costs; they're accelerating time-to-insight and fostering a truly data-driven culture across their organizations.

The Power of Context: Mastering Metadata Management

3

Top considerations

- Implementing consistent metadata practices across the organization
- Automating metadata capture and management
- Using metadata to improve data discovery and understanding

Organizations that adopt aggressive metadata analysis across their complete data management environment will decrease time to delivery of new data assets to users by as much as 70%.

– **Gartner Glossary**, Information Technology Glossary

Metadata has emerged as the secret weapon for CDOs looking to unlock the full potential of their organization's information assets. It's not just about tagging data; it's about creating a comprehensive knowledge graph that turns a sea of information into a well-organized library of insights.

Forward-thinking CDOs recognize that consistent metadata practices are the foundation for effective data discovery, understanding, and utilization across the enterprise. The key is to think like a master librarian in the digital age: how can CDOs catalog and contextualize their vast data holdings in a way that makes them instantly accessible and meaningful to every user?

Leading CDOs are implementing AI-powered metadata management platforms that automate the capture and enrichment of metadata, ensuring consistency and completeness at scale. They're fostering a culture of metadata stewardship, where the creation and maintenance of high-quality metadata is seen as a critical business function rather than a technical chore. These innovators are leveraging advanced natural language processing to bridge the gap between technical and business metadata, making data assets discoverable through intuitive, context-aware search interfaces.

By treating metadata as a strategic asset, these CDOs aren't just improving data discovery; they're enhancing data literacy across the organization, enabling users at all levels to quickly find, understand, and derive value from the right data at the right time. In doing so, they're transforming their organizations into truly data-driven enterprises, where insights are just a search away and every decision is informed by the full power of the company's collective knowledge.

The Trust Equation: Data Quality, Governance, and Privacy

4

Top considerations

- Why data trust is the new currency
- Implementing robust data governance frameworks
- Techniques for ensuring and improving data quality

Data governance remains a top focus for CDOs, ahead of GenAI data strategy.

– Source: **MIT Sloan, 2024**

Trust has emerged as the new currency for CDOs. It's not just about having vast amounts of data; it's about ensuring that data is reliable, accurate, and used responsibly.

Forward-thinking CDOs recognize that data trust is the foundation upon which all data-driven initiatives are built. They're not just data custodians; they're trust brokers, responsible for instilling confidence in data across the entire organization. The key is to implement robust data quality and governance frameworks that balance control with accessibility: how can CDOs ensure data integrity without stifling innovation and agility?

Leading CDOs are leveraging AI and machine learning to automate data quality checks, catching and correcting errors in real-time. They're implementing comprehensive data lineage tools, providing full transparency into data origins and transformations. These leaders are also going beyond technical solutions, fostering a culture of data stewardship where every employee feels responsible for data quality.

They're partnering with CPOs to establish clear data governance policies and educating staff on ethical data use, ensuring compliance with ever-evolving data protection laws and regulations such as GDPR, CCPA, and HIPAA. By prioritizing good data governance and privacy practices, these CDOs aren't just mitigating risks; they're unlocking new opportunities, enabling confident decision-making and positioning their organizations to fully capitalize on the promise of AI—without the risks.

"AAH gains the confidence with its scale and agility to stay ahead of emerging market trends."

– **Ranjit Gill, CIO, AAH**

Fueling the AI Revolution: Preparing Trusted Data for GenAI

5

Top considerations:

- The symbiotic relationship between data and AI
- Data requirements for successful GenAI implementations
- Ethical considerations in AI-ready data preparation

72% of leading organizations note that managing data is one of the top challenges preventing them from scaling AI use cases.

– Source: **McKinsey Digital, 2024**

The advancement of GenAI represents both an immense opportunity and a significant challenge for CDOs. As we approach 2025, GenAI has emerged as a transformative force, reshaping industries and redefining what's possible with data. For CDOs, preparing data for GenAI isn't just a technical challenge; it's a strategic imperative that could determine their organization's competitive edge. The key is to think like an AI architect: how can organizations invest in the right data infrastructure to fuel the next generation of AI models?

Leading CDOs are going beyond traditional data preparation approaches, focusing on creating diverse, high-quality datasets that can train GenAI models to understand context, nuance, and creativity. They're implementing advanced semantic cataloging techniques, leveraging human expertise alongside AI-powered tools to create richly annotated datasets. These forward-thinking leaders are also tackling the ethical dimensions head-on, developing frameworks to detect and mitigate biases in training data. They're reimagining data governance for the GenAI era, implementing safeguards to ensure AI-generated content aligns with brand values and regulatory requirements. By treating data as the lifeblood of GenAI, these CDOs aren't just preparing for the future; they're actively shaping it.

Comprehensive data preparation helps ensure GenAI use cases and applications deliver trustworthy results. The stakes are high. An **Action survey** found that the vast majority of organizations—a **whopping 98%**—were implementing, planning, or considering deploying GenAI for mission-critical use cases. Most rated themselves "above average" or "outstanding" for data quality, preparation, management, and governance. But, according to the Gartner "**We Shape AI, AI Shapes Us: 2023 IT Symposium/Xpo Keynote Insights**," only **4%** of people in charge of AI data readiness said they were ready.

Accelerating Insights: Turbocharging Decision-Making in the Data Age

6

Top considerations:

- The need for speed: Why faster insights will be critical in 2025
- Techniques for reducing time-to-insight without sacrificing quality
- Balancing human expertise with AI-powered decision support

Up to 73% of company data goes unused for analytics.

– Source: **Forrester**

The ability to make quick, data-driven decisions is not just an advantage—it's a necessity. For CDOs, the challenge isn't just about speed; it's about accelerating decision-making without compromising on quality.

Forward-thinking CDOs are reimagining the entire data-to-decision pipeline, leveraging platforms to dramatically reduce time-to-insight. The key is to think like a Formula 1 pit crew: how can CDOs optimize every step of the process while ensuring precision and reliability?

Leading CDOs are implementing real-time data integration and quality capabilities, enabling instant access to trusted information. They're leveraging advanced AI and machine learning algorithms to automate data analysis and surface key insights, allowing analysts to focus on high-value interpretation and decision-making.

These leaders are also fostering a culture of data fluency across their organizations, equipping business users with self-service analytics tools and the skills to use them effectively. They're implementing agile data governance frameworks that maintain data quality and compliance without creating bottlenecks. By striking the right balance between speed and accuracy, these CDOs aren't just accelerating decision-making; they're enhancing its quality, enabling their organizations to swiftly stay ahead of market changes.

"The optimization of data processing by Actian gives us confidence because of our swift data queries, and ensures the stability of Seyfor's ERP systems in daily operations."

– **Daniel Sturm**, CMO, Seyfor

From Cost Center to Profit Driver: Demonstrating ROI on Data Investments

7

Top considerations:

- The challenge: Quantifying the value of data and analytics
- Beyond cost savings: Identifying revenue-generating opportunities
- Building a comprehensive ROI framework for data initiatives

88% of CEOs and other business executives struggle to capture value from their technology investments.

– Source: **PwC Pulse Survey, August 2023**

As data and analytics investments continue to grow, so does the pressure on CDOs to demonstrate tangible returns. This isn't just about justifying budgets; it's about positioning data as a strategic asset that drives business value. The challenge lies in quantifying the often intangible benefits of data initiatives.

Forward-thinking CDOs are moving beyond traditional cost-saving metrics to identify and quantify revenue-generating opportunities. They're thinking like CFOs, developing comprehensive ROI frameworks that account for both direct financial impacts and indirect benefits such as improved decision-making speed and accuracy. The key is to tie data initiatives directly to business outcomes: how much additional revenue was generated? How much cost was avoided? How much faster can organization now respond to market changes?

Leading CDOs are leveraging advanced analytics and AI to track and predict the impact of data investments in real-time, allowing for continuous optimization. They're also adept at communicating value in the language of business, translating technical metrics into boardroom-ready insights. By demonstrating clear, measurable returns, these CDOs are transforming the perception of data from a cost center to a profit driver, securing their seat at the strategy table and positioning their organizations to thrive in the data economy.

"We have confidence in our data and our systems because of our partnership with Actian. They have been there for and with us from the very beginning."

– **Bill Flouders, Ph.D.**, Executive Director, Marvell Nanofabrication Laboratory at the University of California, Berkeley

Beyond 2025: The CDO as a Business Transformer

Beyond 2025, the CDO will increasingly be seen as a key driver of business transformation. They will need to:

- Leverage GenAI to automate work and generate new business insights
- Invest in foundational data quality and governance initiatives for GenAI success
- Embrace the data-as-a-product mindset to convert data into a revenue-generating asset

In this evolving landscape, the successful CDO will be one who can navigate the complex interplay of technology, ethics, and business strategy, positioning data and AI as central to the organization's competitive advantage and societal impact.

About Actian

Actian makes data easy. We deliver cloud, hybrid, and on-premises data solutions that simplify how people connect, manage, and analyze data. We transform business by enabling customers to make confident, data-driven decisions that accelerate their organization's growth. Learn more about Actian, a division of HCLSoftware: www.actian.com.

