

Introduction to CDO 2.0

As their role evolves and data becomes increasingly important to government missions, CDOs may need new tools and resources to succeed

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Managing the growing importance of data to the mission

In 2018, Deloitte introduced the first version of the [Chief Data Officer \(CDO\) Playbook in Government](#). But in the past five years, government's relationship with data transformed significantly.¹ Data has become an increasingly valuable tool to help governments improve their mission performance. Data can play a vital role in everything from directing needed public services to training artificial intelligence (AI) models. As its role in government missions is expected to only get bigger, the role of their CDOs is undergoing a similar shift. CDOs are not simply back-office technology leaders; they play a core role in mission enablement.

A new role demands new tools. This research intends to provide CDOs with a new playbook to help them drive change across their organizations and make data-driven accomplishment a goal throughout.

The state of data in government

The volume and importance of data in government organizations have both increased dramatically in the past five years. AI has driven a significant portion of this shift. The recent emergence of generative AI models has shed light on the importance of the vast volumes of data needed to train generative models. While AI adoption may vary across government, most are now seeing it as a critical enabler. In a 2018 Deloitte survey, 43% of public sector respondents stated that AI was, at most, minimally important to achieve their organization's success.² In 2021, the response rate more than doubled

with 92% federal and 97% state respondents agreeing that AI was important for mission outcomes.³ And government organizations are investing real dollars when it comes to managing data. Federal investment in cloud technology has increased from US\$5.2 billion in 2018 to an estimated US\$8.1 billion in 2021.⁴ The change hasn't been purely technical either. During this time, government organizations have developed [data strategies](#), [data literacy programs](#), and [data-sharing initiatives](#).

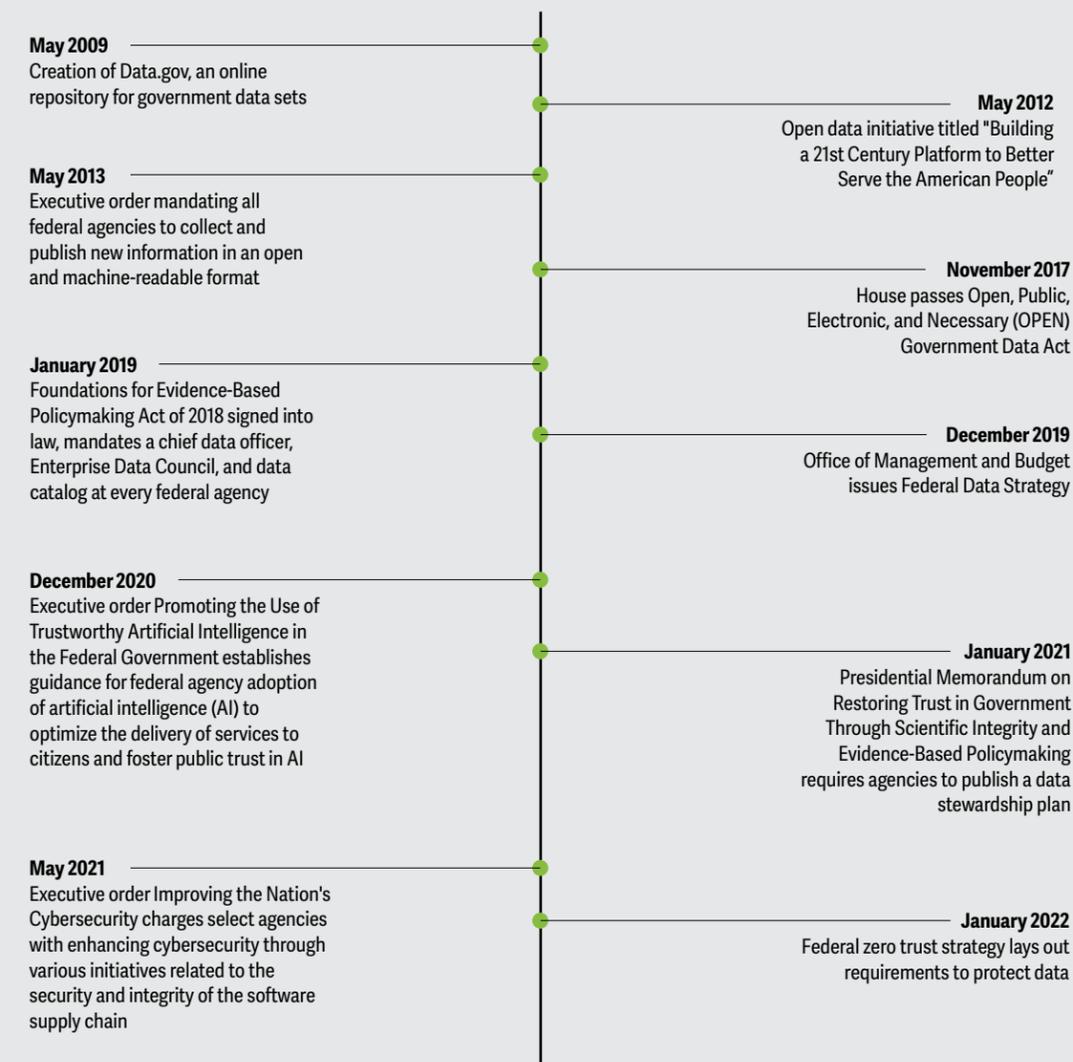
But the sum of these changes is not just more data, but data bringing real mission impact. Government agencies got a glimpse of this playing out during the COVID-19 pandemic when they experienced a surge in the amount of health data being gathered, analyzed, and shared.⁵ However, more technology and a greater reliance on data have also shifted the role of CDOs in government.

An expanded role of the CDO

In 2018, CDOs were largely beginning their journey in government. Since then, the presence and standardization of CDOs in government have expanded significantly (figure 1). The number of state CDOs has increased from 18 in 2018⁶ to 31 in 2022.⁷ The federal government has also implemented the Foundations of Evidence-Based Policymaking Act and Federal Data Strategy, which not only required federal agencies to designate a CDO but also to regularize the accessibility, quality, and usefulness of federal data.⁸ During this period, the Federal CDO Council was created to establish leading practices for data usage, which has provided resources for government CDOs, including a data ethics framework, COVID-19 guide, and data skills training program toolkit.⁹

Figure 1

The past five years have seen dramatic change for government CDOs



Source: Deloitte analysis.

The number of CDOs as well as their responsibilities in government have grown. Many government organizations have tasked CDOs with AI and other mission-focused analytics. As data becomes more critical to missions, many CDOs may find themselves working

more and more with mission leaders to help make the entire organization more data-driven. Even at Deloitte we have felt this shift, prompting us to create our own Office of the CDO for our government practice.

New journey and new opportunities

As CDOs navigate their journey toward data-driven change, many are experiencing numerous obstacles. First, given the relative newness of the role, many CDOs struggle with ambiguous responsibilities and expectations from leadership. A 2022 Data Foundation survey found that only 52% of federal CDOs surveyed reported that their responsibilities within their organization are “very” or “completely” clear.¹⁰

CDOs are often tasked with driving change in how an organization uses data to accomplish the mission. But strong cultures and rigid structures may pose a challenge to change. A 2022 CDO survey fielded by the Federal CDO Council found that 44% of respondents agreed that cultural barriers or limited leadership support were obstacles to using data to support their agency’s mission,¹¹ up from 40% in 2021.¹²

Without clear understanding and cultural buy-in, CDOs may struggle to get sufficient budget and appropriate staff needed to help drive change. A 2022 survey found that only 17% of federal CDOs feel they have all the resources necessary to succeed.¹³

Given these challenges, CDOs could be feeling the pressure. While many CDO roles in government are new, in most private organizations, CDOs have among the shortest tenures of any C-suite executive. The average CDO lasts roughly two and a half years in their role in the private industry¹⁴ compared with an average C-suite tenure of almost five years.¹⁵ This could make providing CDOs with the clarity, resources, and tools they need to be successful all the more important.

The CDO playbook: Tackling the CDO’s expanded portfolio; a new vision and destination

In 2018, the CDO role was new and needed help in defining itself and finding its value.¹⁶ In today’s data-rich world, the challenges tend to be more in how to overcome the technical and organizational barriers that can stand in the way of achieving data-driven mission success.

As a result, we have decided to create a new playbook for the expectations of the government CDO role. Based on conversations with CDOs from the government, public services, and across private industry, the playbook aims to shed light on opportunities and evolving expectations and responsibilities of the government CDO role.

This playbook is structured around four strategic points in the CDO’s journey and covers various functions that they likely need to manage while addressing the data needs of their organization. The specific approach CDOs take can depend on the organization’s data maturity level, organizational structure, and the specific mission they are working toward. However, an understanding of these functions can help CDOs strategize better to harness the power of data:

- **Section 1: CDOs organize a strategic vision** to instigate transformational changes. This section includes articles on establishing data offices, executing a data strategy, and securing appropriate funding.
- **Section 2: CDOs function as planners** to align strategies and **set future state priorities**. This section includes articles on establishing and implementing initiatives for defensive and offensive priorities.
- **Section 3: CDOs partner** across the organization to **design for the journey ahead**. This section includes articles focused on establishing data-sharing and partnerships.
- **Section 4: CDOs drive the organization forward** through efficient services and solutions. This section includes articles that demonstrate how to implement data culture and the creation of data products.

While the primary audience for this playbook is CDOs in government, professionals in many industries can find insights that could help make their organization more data-driven. We encourage you to revisit this resource at any point in your evolving data journey and hope that you find this playbook engaging and informative.

Endnotes

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