



The winning formula for CDO success

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In today's data-powered world, Chief Data Officers (CDOs) play one of the most critical roles in their organization. They're responsible for building a top-down and bottom-up data-driven culture and demonstrating the value of data. But most still face substantial barriers to success, leaving CDOs asking themselves: is there a formula for success – or am I in this alone?

IN BRIEF

- ▶ The CDO role continues its upward trajectory as organizations recognize the commercial value of a solid data strategy.
 - ▶ Culture, not technology, is often a CDO's most significant barrier to success.
 - ▶ Successful CDOs focus equally on increasing data trust and identifying monetization strategies while embracing innovation and championing data democratization across the organization.
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In 2022, the CDO's role continues to grow exponentially. Just a decade ago, only 12% of organizations had a CDO. Today, surveys show that nearly 74% of organizations have a CDO.¹

It's clear that organizations today recognize what data leaders have known for years: a robust data strategy is one of the biggest differentiators in a competitive and volatile marketplace. In a post-COVID-19 world, it's imperative that CDOs focus on maintaining regulatory compliance, identifying data monetization opportunities, and cultivating a bold and innovative data mindset.

The path to success in the CDO role isn't straightforward and the formula for success isn't always clear.

CDOs must address a range of issues, including an alarming lack of data trust across most organizations. They need to create a strategic architecture that handles today's data needs with an eye to future needs. They need to employ their skills to help make the organization's data literacy and change management initiatives successful.

CDOs are smart, driven professionals who are passionate about solving data challenges and embedding data-driven cultures in their organizations. And yet, most CDO tenures are cut short, with little to show for their time.

So what's holding them back?

Four cultural challenges facing CDOs today

Ultimately, Chief Data Officers are responsible for establishing long-lasting, deep-rooted, data-driven cultures in their organizations. And yet, in a recent survey, only 26.5% of organizations identified themselves as data driven.¹

You might think technology is the culprit here. The technology landscape is littered with fit-for-purpose tools, from data warehouses and data lakes to automated data governance software. But a lack of suitable technology isn't the primary reason CDOs struggle to effect change. Instead, company culture – and internal resistance to change – is typically the greatest barrier to success.

Data challenges can have disastrous – and expensive – consequences.

In 1998, NASA lost communication with Mars Orbiter when it veered too close to Mars and was either destroyed by the atmosphere or began to orbit the sun. As it turns out, the culprit was poor data governance: the spacecraft team used customary US units for measurement while NASA used the metric system. The teams failed to convert the numbers at launch, leading to an inaccurate trajectory. This failed mission cost NASA \$327.6 million and, even more important, a loss of public trust.

Here are the four most common challenges CDOs face today:



BUSINESS LEADERS DON'T TRUST THE DATA TO AUGMENT THEIR DECISION-MAKING.

Building – or more typically rebuilding – data trust is the holy grail for CDOs. Unclear data lineage, poor quality data and missing data all lead to a lack of trust, further hampering CDOs' efforts to foster a data-driven culture.



DATA SILOS LEAD TO CONFUSION AND INTEGRATION CHALLENGES.

Data silos in business units are one of the biggest barriers to cross-functional analysis. Data silos further compound the data trust issue, as business units invariably start collecting duplicate data and presenting inconsistent metrics.

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Today’s data leader faces challenges on a scale never seen before. The extraordinary rise in data volumes, the growing pace of technological innovation and the push to increase velocity to unlock data have all combined to put the CDO in the hot seat.

But there’s also a massive opportunity for forward-thinking CDOs to leverage their business acumen, leadership skills and data expertise to effect lasting change in their organizations by solving real business problems and embedding data-driven decision-making in every line of business.

– **Patrick Siconolfi**, Partner
Data & Analytics, EY Canada



DATA ISSUES LEAD TO COST OVERRUNS IN CAPITAL PROJECTS.

Data cleansing and standardization post go-live are some of the highest cost overrun drivers in large IT projects. This problem repeats itself in every project. This high cost becomes a deterrent to digital transformation since it becomes cost prohibitive to innovate.



SPREADSHEETS STILL RUN CRITICAL BUSINESS FUNCTIONS.

Many organizations still use intricate spreadsheets that were built years ago by former employees. Without central, standardized reporting, multiple versions of the same spreadsheet – complete with subtle differences – tend to spread, leading to inconsistent metrics that only serve to confuse the organization.

The winning formula – a framework to address data challenges

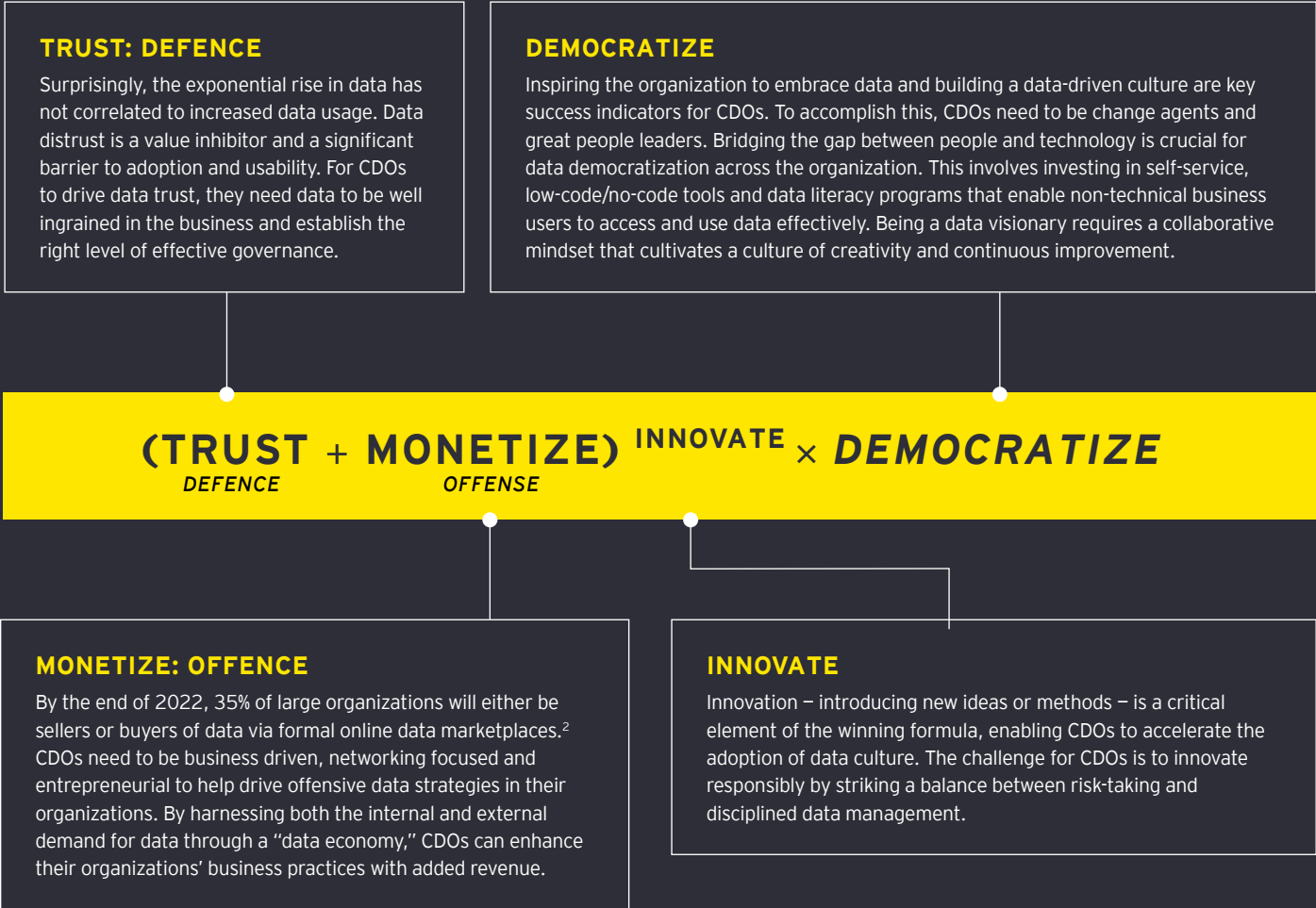
How can CDOs build data-driven cultures when they face so many challenges? Business leaders don't trust their data. Data is siloed by departments. Data cleansing projects overrun their budgets. And business units lack centralized and standard reporting tools.

Every organization and data leader is different. There's no one-size-fits-all solution to CDOs' many challenges. We've learned this based on years of experience as data and analytics consultants helping CDOs define and execute data strategies.

However, in those years of experience, we've also identified a simple and effective "winning formula" that CDOs can use as a framework when building their data strategy.

With the winning formula framework, CDOs are encouraged to use trusted data to support their data monetization efforts. These efforts are then rendered exponentially more effective when supported by innovative strategies and technology. The value of these defensive and offensive strategies is multiplied when everyone in the organization can access, understand and analyze the data.

Below, we break down each element of the formula.

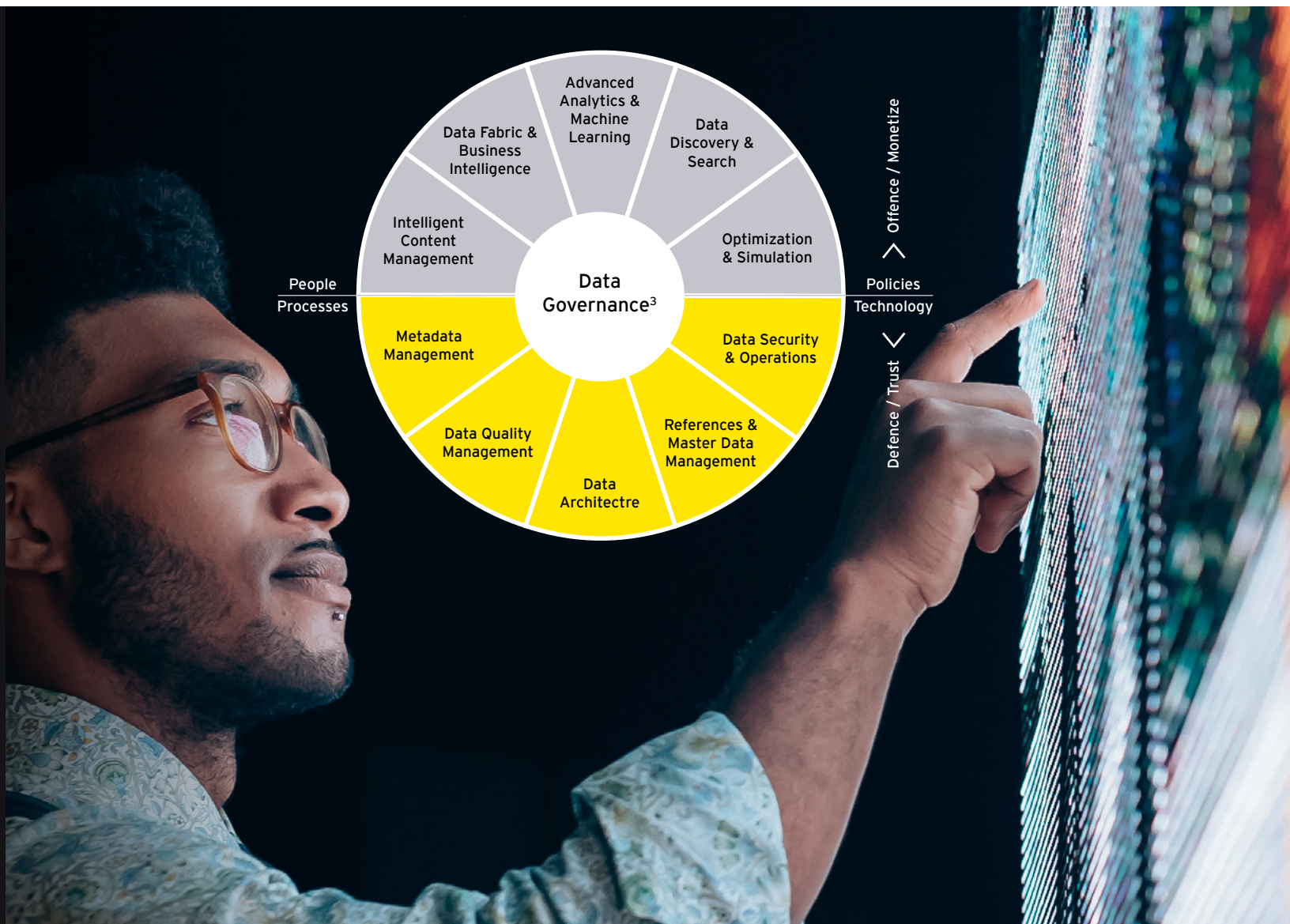


Establishing a trusted data foundation is table stakes for CDOs. So we think of “trust” – the defence side of the formula – as the CDO’s substance.

Generating business value from that trusted data foundation requires a more nuanced, personal approach. So we consider “monetize” – the offence side of the formula – as the CDO’s style.

Successful CDOs should understand, embrace and implement both offensive and defensive data capabilities. However, every organization will have a bias for either offence or defence, depending on culture, business strategy and market conditions. Great CDOs cultivate an innate business understanding and steer their data strategy in the right direction based on organizational relevance while still promoting balance.

Great CDOs have both style and substance.



Three cautionary tales and a winning formula success story

As we've seen in the winning formula, CDOs must cultivate a diverse set of hard and soft skills. Critical hard skills include technical expertise and a deep understanding of data management. But "softer" qualities – like leadership skills and the ability to facilitate collaboration between technology teams and end users – are just as important.

Even with the right set of skills, many leaders have underestimated the challenges in applying the winning formula, which has led to high turnover in the role.

A Gartner survey and Harvard Business Review article says a CDO's average term is only two and a half years, while the average tenure for other C-suite positions is twice as long.⁴ Almost 60% of organizations report that the CDO function is still in the early stages of development.¹

EY teams have advised CDOs across the globe and in multiple sectors and have witnessed first-hand the common pitfalls data leaders often fall into. We've also seen how leveraging the winning formula leads to success.



POLICY OVER FLEXIBILITY.

A long-serving public servant was elevated into a data leadership role in a public sector organization. The agency had grand visions of breaking down data silos and setting up the foundations for a data marketplace. Unfortunately, the data leader focused solely on defensive strategies and ran the data organization as a policy shop concentrated on processes, policies and checklists. This approach led to gridlocks in the data value chain.

In our winning formula, they lacked the balance between offence and defence and could not become the enabler the organization desperately needed.

Business units sought ways to work around this structure, and the CDO eventually lost their relevance and influence at the organization.



NEW DATA SILOS.

Another CDO inherited a common problem: The organization had lost trust in its data. Different business units had their own "trusted" data repositories and executives could not trust that their metrics were accurate.

The new CDO created a data governance program to combat this lack of trust. Unfortunately, they underestimated the power of democratizing trusted data and approached the program as a tool for the data office to tightly control the organization's data. Although this control-centric approach gave the organization better control over the security and privacy of data, it accomplished little else and lacked the balance advocated by the winning formula. Teams were forced to find alternative ways to use the data they needed, leading to process inefficiencies, spreadsheet proliferation and a wave of territorialism over data stewardship.

The CDO left after only a year with the organization.



INNOVATION WITHOUT TRUST.

A newly appointed CDO was determined to show value quickly. Unfortunately, by focusing purely on short-term wins at the expense of developing a strategic roadmap, this data leader could not create foundational, lasting changes.

There's no question that data governance should be established on a prioritized use-case basis. But achieving quick wins without also understanding the intricate details of the data problems at play, their root causes and the systematic changes needed to be solved before moving forward with offensive strategies didn't yield the necessary momentum or ROI.

For this CDO, over-indexing on innovative monetization opportunities and not building data trust severely diminished the overall value of data – and the CDOs' value to their organization.



TRUST + MONETIZATION TO THE POWER OF INNOVATION, MULTIPLIED BY DEMOCRATIZATION = CDO SUCCESS.

A forward-thinking Canadian energy company hired a CDO who is applying the winning formula to successfully rebuild and execute an ambitious new data strategy. The organization is on a transformative journey to increase its business performance and meet an ambitious free cash flow generation goal. It has determined that being "data informed" is foundational to meet these goals. The CDO has held multiple leadership roles in their 20-year career and leverages their business knowledge and relationships to relentlessly pursue monetization opportunities. Additionally, the CDO has been instrumental in convincing senior leaders to take ownership of critical data and drive data democratization. This allowed the CDO's data team to establish a data stewards network to take data quality seriously and drive initiatives to improve data trust.

This CDO is flourishing because their passion for innovation and their out-of-the-box approach to solving business problems is matched by their desire to solve foundational data challenges.

Summary

As organizations recognize the importance of their data strategy in a competitive and volatile market, Chief Data Officers have become increasingly important.

But CDOs still face substantial cultural challenges as they work to embed data-driven cultures in their organizations. Data leaders face common challenges: rebuilding data trust, unlocking data silos and establishing a culture that embraces data democratization.

CDOs have a greater chance of success if they apply the winning formula. This involves balancing offensive and defensive approaches with a bold, innovative mindset and an eye toward establishing a data-driven culture in the organization.

HOW EY TEAMS CAN HELP

Our team of data and analytics strategists have helped many organizations successfully build and execute on data strategies. We bring together practical experience and leadership to work with you in defining your data roadmap and can work with you to accomplish your goal.

To explore how our team can help you, contact one of our advisors today.



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⁴ Davenport, T; Bean, R; King, J. (2021, August 19). [Why Do Chief Data Officers Have Such Short Tenures? Harvard Business Review](#).

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