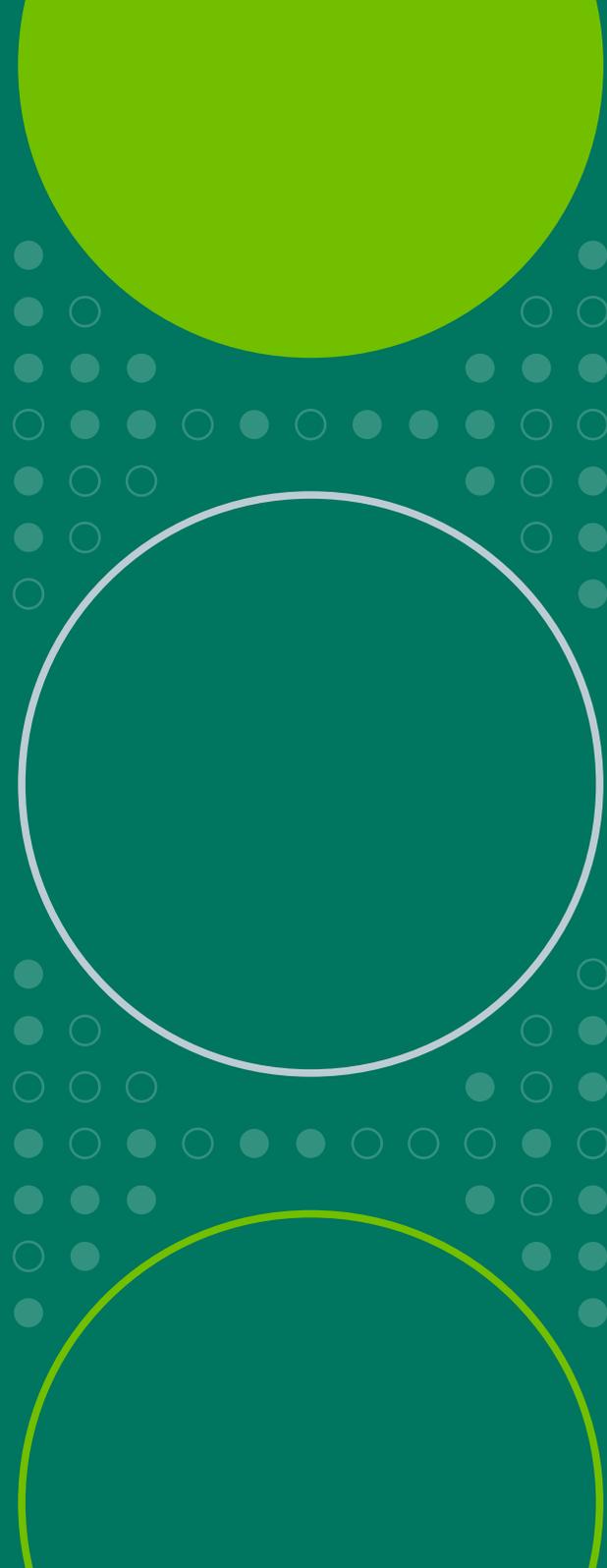




The ultimate 2020 vision for the

Chief Data Officer





There is a new(ish) generation of executives on the block.

They oversee the collation, analysis and distribution of data from high up in the corporation. These executives come from a wide range of educational and professional backgrounds. The singular term for this position: **Chief Data Officer, or CDO.**

But outside of the title, there's still little consensus to the core responsibilities of a CDO. Their background is not the only aspect of their professional lives to show diversity. In fact, few had true clarity into what the CDO job even entailed when they first took it; many of them currently have different responsibilities and reporting structures; and it's entirely possible that a year from now, those priorities will diverge even more.

Over

2.5 quintillion bytes

of data are created every single day, and it's only going to grow from there. By 2020, it's estimated that 1.7MB of data will be created every second for every person on earth.

<https://www.domo.com/solution/data-never-sleeps-6>

Some of this was to be expected. With over 2.5 quintillion bytes of data being created on a daily basis, the idea that any one executive in a large organization will have full control over it is unrealistic. However, we're in an unprecedented operating environment: Regardless of where it is generated and how it is disseminated (within compliance guidelines, of course), data now belongs to, and brings more knowledge to, every knowledge worker. Data is the ultimate asset and a competitive differentiator. Governance is critical, but it must also be used to fuel productivity in how human beings connect and collaborate. Organizations must help people find it, build on it, share it and above all, trust it.

This is a dynamic discipline — in a year's time, we might look back and find the issues discussed here are obsolete, or established best practices. What we do know is that a data-centric culture is vital, and the CDO is entrusted to help make it happen.

Meet the CDO

The origin story of the Chief Data Officer goes back to at least 2002, when financial services provider Capital One (at the time a young monoline bank) designated a senior executive to that post. There were others, but it was a full decade before the corporate world really woke up to the need for a C-level officer dedicated to managing the torrents of data being created, collated, stored and secured, all without being actually used.

We could actually go back even further: In the 1980s, the role of Chief Information Officer got traction when budgets for Information Technology began dominating the corporate spend. But if the title referred to the 'information,' it was the 'technology' that took center stage. (The Chief Technology Officer made the distinction even more specific.)



Now it's a whole new world.

But what are these executives really doing, and what are they supposed to do? Are they change agents or established insiders? Do they have true oversight or is accountability spread out over multiple constituencies? Is the role mainly defensive, as in governance, compliance and security? Or is it more proactive, ensuring that the right data is effectively disseminated throughout the enterprise to drive decision-making and deliver quantifiable value?

The answer is... yes.

70%

**of Fortune 1,000 corporations
have a CDO.**

Source: The 2019 edition of the "NewVantage Partners Big Data and AI Executive Survey"

**In 2010, there were perhaps 15
CDOs within large enterprises;
by the end of 2020, there will
be over**

10,000

So What Do You Do?

It's almost hard to believe that, even with hundreds of high-visibility executives now in this role, the CDO job is still so open to definition. It may be even more surprising to realize that we're not going to get much consensus anytime soon.

There's even disagreement on the core mission. For instance, the NewVantage Partners' report shows that a 34% of executives at Fortune 1,000 enterprises believe that a successful CDO should be a change agent bringing a fresh perspective. That seems to make sense, but almost the same number, 32%, say exactly the opposite: It should be a company veteran well-versed in the organizational culture.

Specific responsibilities are similarly amorphous. In a typical enterprise, the CDO will set data strategy, oversee data management, enforce guidelines for data governance and ensure data quality. However, at least some of those areas frequently enter the turf of other C-level executives or line-of-business heads. As just one example, many aspects of governance can be within the purview of legal counsel or compliance chiefs.



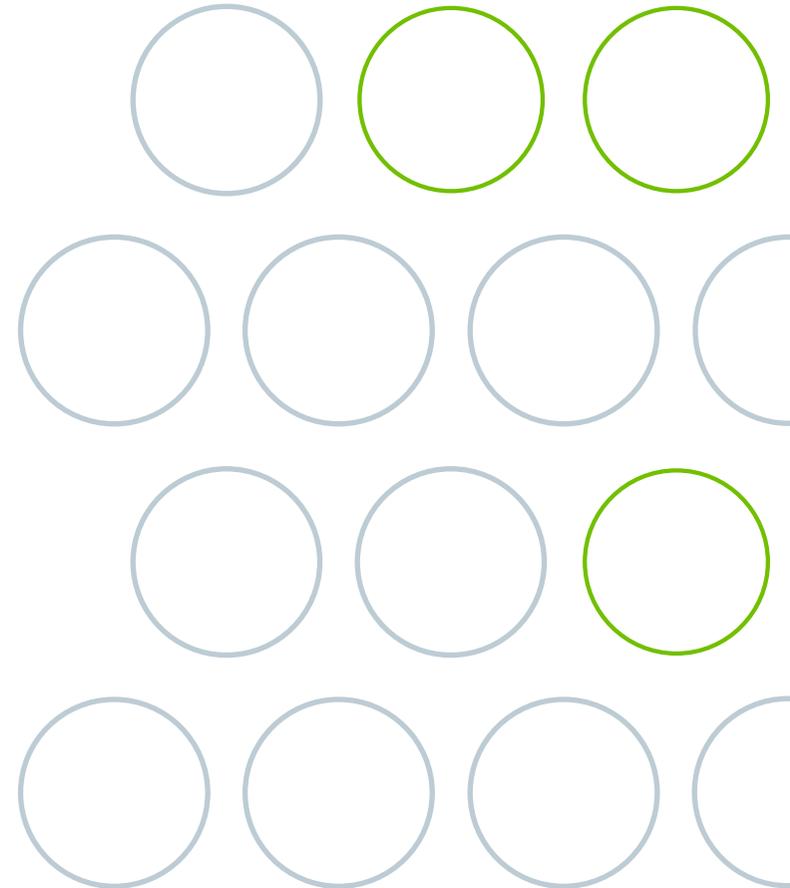
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The area of data analytics, which is so vital in the digital era, is particularly fractious. It seems like a natural fit with the CDO position, and many executives in this role do have control of the analytics being fed to decision makers across the organization. However, some companies also have a Chief Analytics Officer, typically someone who came up through the data analytics ranks. In this model, analysis is a specialty independent of other data-related functions.

Some of this is understandable because the field is so dynamic: There are always new data streams from new channels in new formats, all matched with new regulatory mandates and new market priorities. When the ground is always shifting, it's hard to establish rock-solid parameters. But the situation is now so flexible that two CDOs from different companies of the same size in the same vertical may have very different portfolios.

If there's one characteristic that will help, it's curiosity. Many tech-related functions require constant learning, but the data gig is in a league of its own. Just as end users constantly discover new devices, apps and communication channels (and expect the IT function to keep pace), the office of the CDO must stay on top of all incoming data streams, make informed decisions on their business value, and drive connections between people, processes and data. That's what it takes to build a data culture.



View from the Top

There's politics in every role, but the fluidity of the CDO position makes it more tenuous than most. To achieve Data Intelligence — the optimal state in which data is trusted, leveraged and appropriately shared by all business users — companies need true leadership, with a commitment to allocate the right resources and a willingness to change. If the CDO is to (help) drive digital transformation, the boardroom and executive suite need to be appropriately involved and fully supportive.

Here's one key question: Who does the CDO report to? In a large enterprise it doesn't have to be the CEO, but is there a clear line to the top? As the function inevitably brushes up against other constituencies — marketing, sales, finance, product development — does the CDO team have the authority to mandate changes to business procedures as needed? Can a new generation of data analytics truly supersede veterans' gut instincts?





As with the CIO function when that role emerged, evangelizing the potential of data-driven decision making is critical. This extends not only upwards to the executive suite but laterally to every line of business and operating unit.

One company that Collibra works with has a ‘walking-around’ deck to highlight examples of data-enabled business initiatives. This requires a significant time commitment, and can even mean showing up uninvited to intra-departmental meetings. The goal is always to encourage individuals to speak up and ask specific questions about how the volumes of incoming data can be a boon rather than a burden.

In many cases, the first few questions are tied to specific problems — users have a data cache they need help leveraging, or don’t know how to collaborate without falling foul of compliance. A few quick solutions and business users embrace the notion that, within guidelines, they own the data, they can build on it and share it and they have a new competitive advantage. The CDO isn’t there to take it away but to give them greater power to use it.



Offense v. Defense

Deriving business value and achieving digital transformation are nice, but there are more mundane concerns too. For all that data to be leveraged, it must first be collated, managed and above all protected. And that's a big job.

On one hand, there's the constant fear of data breaches. It might be a lone 'hactivist' or a sophisticated cybercriminal gang, but it's always a problem. The regular headlines in this field can be a sobering thought for any data-sensitive enterprise.

But even when the data is safe, there's the potential for misuse, which is very close to abuse. There have been millions of dollars in fines doled out for violations or alleged violations against the General Data Protection Regulation, or GDPR, the sweeping legislation mandating data privacy for everyone in and from Europe. (Keep in mind GDPR regulators can demand comprehensive audits, enforce changes in every business process and extract up to 4% of a company's entire global revenue.) And as the California Consumer Privacy Act (CCPA) begins enforcement, it will likely spur other states to enact mandates of their own.

So what should a CDO do? Focus on data governance in a defensive crouch, or seek new and compliant options to derive value?

It's not a binary choice, but it's clear that different industries have particular challenges. For example, a Swiss-based multinational financial services firm, which operates in a heavily regulated industry, says the company commits up to 75% of assets on what might be seen as defensive tasks. But there's value there too: it streamlines processes, cuts operating costs and lays the groundwork to aggressively pursue new business opportunities. Through it all, the organization has strict metrics to quantify the value being derived. Meanwhile, one American multinational retail organization has a more open mandate: Maybe 20% is spent on defense, 10% on compliance and making "legal folks nervous" and the rest on heavy offense.

Underlying this problem is the issue of accountability. When data travels between different departments to serve a variety of purposes, whose responsibility is it to ensure constant compliance? The CDO is one obvious candidate, but does this executive have the authority needed to control every level of data access? Is there a Chief Compliance Officer, a Chief Digital Officer, a Chief Risk Officer, a Chief Information Security Officer or some equivalent, and are they accountable too? There are no easy answers, but the questions need to be front-of-mind.



There's no question that for many reasons, the structure will keep changing. But the CDO equivalent will be the one to make sure there actually is a structure.

The CDO of the Future

So what lies ahead for the executive star of the moment? Will the CDO take on greater power in an operating environment where data doesn't just guide decisions but actually make them? Or is the position too broad to have a long future?

In sum, the title is less important than the responsibility. There's always going to be more data — much more — but it will not always add more value. Organizations will need executives who can create processes to extract the right data, ensure that it is packaged and conveyed to the right constituencies, and build a dynamic culture that adapts to new channels and formats. If it's true, as Gartner projects, that optimal use of data will cause organizations to reinvent or even eliminate 80% of all processes and even products from just the past decade, then those organizations must be prepared to handle the change.