

What type of Chief Data Officer does your company need?

Overview

The Chief Data Officer is the newest member of the C-suite and is increasingly seen as essential for the future success of any business. Yet research shows that many CDOs are failing and companies are not yielding the expected benefits. In this paper we explore the reasons companies are struggling and lay out a framework for defining what type of CDO your company needs, based on four key archetypes – the Founder, the Builder, the Evangelist and the Innovator.

Introduction

The term ‘big data’ is ubiquitous and as a society we are only just beginning to understand how we can harness it to drive significant changes and improvements across many areas of our lives. The global digital universe is doubling in size every two years and this year alone people and connected objects will generate 40 trillion gigabytes of data. Data is not new; businesses large and small have been using it to drive productivity and leverage competitive advantage since the Industrial Revolution. The difference now is that rather than being used as a retrospective tool to tell us what happened in the past, it is now being used to predict the future, rapidly accelerate business processes, and create new business models.

It is no surprise therefore that the role of the Chief Data Officer – the newest member of the C-suite – is one which will grow ever more important as companies embark on this journey. However, as with any new role, there will be missteps along the way. This paper looks at how the role is evolving, why some CDOs are failing, and what companies can do to maximize the chances of success.

In his book “Bezonomics”, author Brian Dumaine explains how two decades of Amazon honing its artificial intelligence expertise has created “the first and most sophisticated AI-driven business model in history, one that gets smarter and bigger on its own”. Dumaine goes on to explain that if other organizations fail to leverage data and AI in the way Amazon have done, we will be left with a handful of global oligopolies that

dominate every element of our lives. It is important to note that not every company needs to be as advanced or sophisticated as Amazon to turn data into a competitive advantage and many organizations and sectors are beginning to realize the benefits. For example, in Life Sciences, sequencing a human genome, which denotes an individual’s unique DNA sequence, used to take years to achieve. Now it takes less than a week. In addition, and whilst this is by no means an article about COVID-19, it is a real-world and real-time example of how the fight against the pandemic is being driven by data. AI/machine learning and other technology is rapidly helping us to analyze data to help those on the frontlines prepare, mitigate, and respond to the threat of COVID-19 as well as understand how to better manage future pandemics.

Industry disruptors such as Facebook, Amazon, Apple, Netflix and Google (FAANG) are creating new business models and more agile and innovative offerings that are increasing the pressure on more traditional organizations to begin to leverage their data in an effective and profitable way. The International Institute for Analytics estimated that businesses using data will see \$430 billion in productivity benefits over competitors who are not using data effectively. Hiring a Chief Data Officer (CDO) is increasingly the solution that boards and C-Suites are choosing to ensure that they can continue to navigate and compete in this new data intensive world. Back in 2016 Gartner stated that by 2020 90% of organizations will have identified the need for a Chief Data Officer. They also stated that by 2020, 50% of CDOs would be seen to have failed. Whilst it is hard to gauge how accurate this prediction is, it is certainly true to say that the role of Chief Data Officer has been widely adopted across most sectors, however many CDOs continue to face new challenges and greater demands, leading many to fail.

Why are CDOs failing?

At Korn Ferry we see huge variety in CDO roles - a lack of understanding of the scope of the position and unrealistic expectations are consistently setting up firms to fail. The change from using data to measure past performance to now using it to predict behavior, identify new patterns and drive efficiencies has meant the role of managing this function has become both more complex

Figure 1: Chief Data Officer archetypes

The Founder	The Builder	The Evangelist	The Innovator
<p>Organizations with immature data platforms that do not yet fully understand the strategic importance of data should look to hire the Founder</p> <ul style="list-style-type: none"> • Typically comes from a strong IT background • Deep experience in data management and data engineering • Internal focus taking unstructured data and building a data lake • Strong data governance focus • Some experience of evangelizing around the topic 	<p>Organizations with significant amounts of unstructured data but with top down sponsorship to drive a strategic data agenda should hire the Builder</p> <ul style="list-style-type: none"> • Require an understanding of how to build a robust data platform and implement a data governance program • Combine this with "offensive" programs to demonstrate strategic value of data to the organization • Build out of data science and analytics teams to focus on strategic projects 	<p>Organizations with a mature data platform and mature governance processes but with very little awareness of the value of data should look to hire the Evangelist</p> <ul style="list-style-type: none"> • Less focus on data engineering/data architecture • Requires top down sponsorship from board and c-suite to embed a data driven culture • Focus on strategic high value projects to demonstrate value • Increasingly less common as many organizations now have some awareness as to the value of data 	<p>When an organization has a mature data platform, backing from the executive and the culture is truly "data driven", they are ready for an Innovator</p> <ul style="list-style-type: none"> • Using data to drive new business models, strong customer centricity and genuine ROI • Build a cutting-edge data science capability to drive truly innovative and high value programs - Deep understanding of AI/ML • Usually a member of the executive committee

and more critical to company performance. This change has seen the role elevate rapidly up the corporate hierarchy, however overly optimistic projections, mismanaged expectations and a lack of understanding of the talent is resulting in uneven results across companies and industries. Many organizations struggle to know where to place data & analytics talent, as commented on by Carlos Soares, Chief Data & Analytics Officer at Diageo: "In most companies, the job family doesn't exist and therefore there is often confusion about where people should sit and how they interact with the broader organization." On top of this, the war for talent and the necessary shift to a younger "digital native" workforce is tearing up the norms of employee experience and retention.

Clearly there is a need to move to a deeper understanding of the Chief Data Officer role and how the organization is structured ahead of any recruitment, to make sure they are set up to succeed. It is a highly bespoke position that, in order to achieve maximum ROI, must be very specifically tailored to the organization, its ambitions, structures, and technical maturity. No two Chief Data Officers will look the same and this will be dictated by both the background of the Chief Data Officers themselves and the sector, ambition, and maturity of the organization. Once these factors have been considered it becomes considerably easier to scope out the type of Chief Data Officer that is required and where they should sit in the organization and therefore offer a better chance of success.

The CDO archetypes.

At Korn Ferry, given our extensive experience recruiting CDOs we have developed four archetypes of Chief Data Officers – the Founder, the Builder, the Evangelist and the Innovator – which we use to help organizations

scope out, structure and place the right Chief Data Officer role within their organization (see Figure 1.).

Whilst the model is in itself a simplification of the distinctions and nuances of each individual CDO role, we have found in our discussions with CEOs and their management teams that it is a hugely helpful model to position the role in the context of an individual organization's requirements. It helps to shape questions such as:

- What data does the organization own or have access to?
- What platforms/technologies does the organization have or need, to store, categorize and exploit the data?
- How mature is the organization in its approach to capturing and utilizing data today?
- What is the organization looking to achieve through data?

The answers to these questions and the archetype that should be pursued, will largely be dictated by the sector and ambition of the organization as well as the level of maturity of the technical platforms. Of course each archetype lends itself to certain structures and set-ups and these can be tweaked and changed depending on the specifics of an organization or sector. At Korn Ferry, we have found these archetypes are useful in moving the conversation towards a more nuanced and clear understanding of the role, and can ultimately help organizations mitigate some of the risk in hiring a Chief Data Officer and ensure a successful transformation.

"Immature organizations will often require an individual responsible for promoting data vision and specific projects jointly with business owners."

- Luca Zuccoli

Sector, ambition & technical maturity.

Whilst the sector usually informs the ambition and technical maturity of an organization's data capability, there are of course laggards, early adopters and innovators in each sector. That said, when defining the archetype it is impossible to ignore the sector in which the business operates. Historically some sectors have leveraged data more successfully than others and are therefore more likely to have a mature technical platform as well as a more ambitious data strategy. Figure 2 shows that the sectors where there is an immediate and tangible payoff – Gaming & Betting, Financial Services and Telecommunications – usually focused directly on the customer – have tended to display the most sophisticated data capabilities. Whilst B2B companies are beginning to leverage techniques from a B2C data driven marketing perspective, the advancement in technology is allowing many of these organizations to take advantage of data in other ways. For example, Shell is creating the “data-driven oil field” which is allowing it to significantly reduce its drilling costs, whilst Adidas is investing heavily in robotics and developing automated factories. More broadly, IoT and AI technologies are beginning to provide both operational efficiency and revenue generating opportunities for industries such as consumer electronics, manufacturing, and energy.

The Founder, the Builder, the Evangelist and the Innovator are all very different types of CDO profiles and whichever one is chosen should be heavily informed by

the ambition and technical maturity of an organization. They will also require differently structured functions and usually have different reporting lines. Many CDOs agree that the best reporting line, regardless of the archetype, should be into the CEO to emphasize the strategic importance of data to the organization. However, in reality this does not always suit every company and their legacy structures or the maturity of the nascent data function. Our recommendation is that the seniority of the reporting line should mirror both the strategic ambition as well as the technical maturity of an organization. It does, therefore, not always make sense for ‘the Founder’ to report to the CEO when the core focus of the role is on embedding the technical foundations and data management/governance processes. The Chief Information Officer is often a more appropriate reporting line for this archetype. Conversely, “the Innovator”, with a focus on highly strategic topics to create new business models and revenue streams from data would be constrained reporting anywhere but the CEO (see Figure 3.).

Wherever the CDO reports however, it is important that the reporting line does not create an environment where the data organization is siloed or operates in isolation. It is important to democratize the use and ownership of data across the organization. One way to do this is to create ‘data champions’ within different areas of a business to act as points of contact or cheer leaders for the CDO. “Immature organizations will often require an individual responsible for promoting data vision and

Figure 2: Types of CDOs by industry

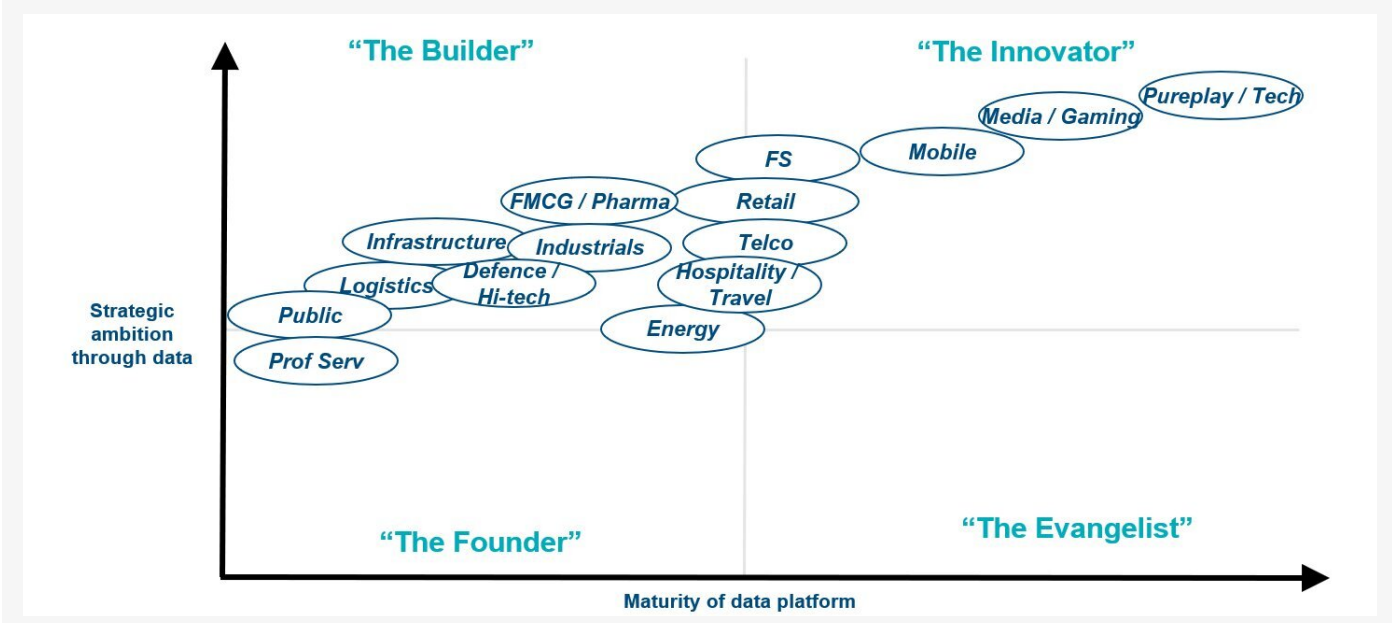
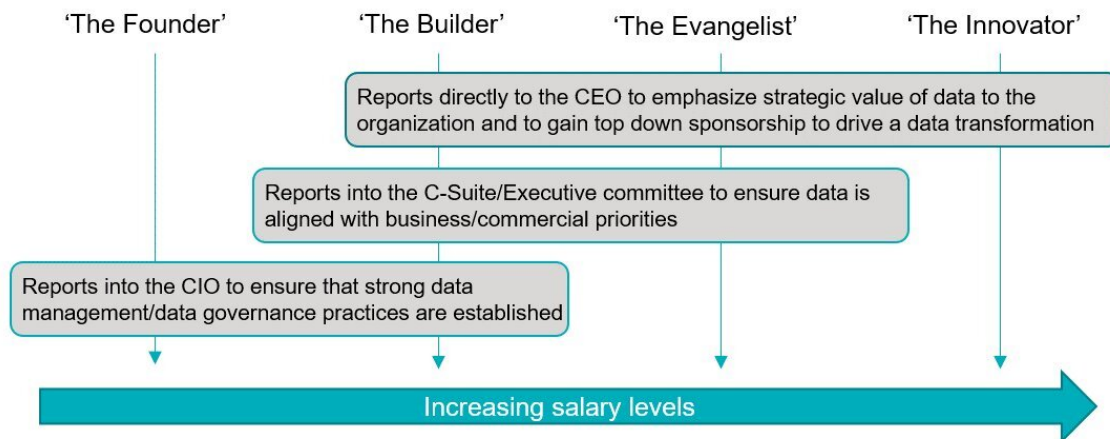


Figure 3: CDO reporting lines


specific projects jointly with business owners,” says Luca Zuccoli, a leader in the digital and data space. “They will often not come from a technical background, rather they maybe a highly connected insider, and therefore will not be responsible for implementation.” These individuals can help ensure data programs produce real business value whether it is in new sales, new revenue, cost savings, or retention.

Conclusion

The success of companies such as Amazon are threatening the existence of many traditional organizations and whilst the ambition and intention to transform to a data driven operating model is often present, too many organizations are still not seeing the results. Ultimately, a data strategy and the ensuing implementation is far from simple and many organizations have failed with the best of intentions. As companies move towards a more data centric approach it is critical the entire enterprise embraces the change. For too long, data has been seen as an isolated technical function, pushed to the back office with no real links into the business – and dealing only with the past instead of predicting future behaviors and shaping customer conversations. The importance of technology in this new world (AI, ML etc.) tends to be overemphasized – it is critical, therefore, to frame technology as well as people and processes in the new operating model created by data. Companies should be looking to integrate the data function into all aspects of the business. It therefore falls to senior management teams to invest the time and money to set the organization up for success. The Korn Ferry archetypes provide a simple and consistent model to help senior executives and hiring managers to frame the problem and recruit the right Chief Data Officer at the right time, to define and lead this transformation.

Robert Diamond, the founder of Emnos, a data solutions provider, uses the analogy of flying a plane to explain the importance of data to today's companies. “50 years ago, you could fly a plane through clear skies with no problem; today with the emergence of trends such as omnichannel, cross border shopping and COVID-19, the

skies have suddenly become cloudy and full of other planes. Data provides the instruments and radar to navigate safely through the cloudy and perilous conditions to a safe landing.” With an increasingly complex and global economic, geographical and political landscape, the failure of companies to effectively harness their data is becoming an existential issue; whether it is the Founder, the Builder, the Evangelist or the Innovator, a successful Chief Data Officer can genuinely move the needle and help companies both reposition themselves in the digital era, keep pace with competition and in some cases, even become the leader in their sector.



Freddie Montagu

Principal, EMEA
Technology Officers
Practice

freddie.montagu@kornferry.com

About Korn Ferry

Korn Ferry is a global organizational consulting firm. We work with organizations to design their organizational structures, roles, and responsibilities. We help them hire the right people and advise them on how to reward, develop, and motivate their workforce. And, we help professionals navigate and advance their careers.