Who Should the CDO Report To?

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Data Leadership Collaborative

BY TABLEAU SPONSOR

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Who Should the CDO Report To?

Executive reporting lines communicate political status, power dynamics, and the possibility of effectiveness in organizations. As a relatively new role that can seem to span the enterprise while also being isolated to data analytics, the Chief Data Officer (aka the Chief Data and Analytics Officer) may report to the CIO, CFO, COO, CEO, the Board, or even the Head of Product. But which reporting structure makes the most sense, and how does this vary based on industry or size of organization?

Data Leadership Collaborative gathered five data leaders from across technology, healthcare, automotive, and financial services to further flesh out the definition of a CDO and discuss issues such as the unique responsibilities of the CDO role, the dynamics CDOs may face as they try to secure a seat around C-Suite table, and whether organizations need a Chief Artificial Intelligence Officer?

Panelists

Randy Bean
Author of the book: Fail Fast, Learn Faster: Lessons in Data-Driven Leadership in an Age of Disruption, Big Data, and AI

Heidi Lanford
Former Chief Data Officer, Fitch Group; former Enterprise Head of Data & Analytics, Red Hat

Linda Avery
Former Chief Data & Analytics Officer & Senior Vice President, Verizon; former Chief Data Officer, SVP & Head of Data and Statistics, Federal Reserve Bank of New York

Dr. Andy Moore
Chief Data Officer, Bentley Motors

Christy O'Gaughan
Chief Data Officer, GE HealthCare

What Defines the CDO Role?

Data Leadership Collaborative (DLC): As you all know, the Chief Data Officer is a relatively new title compared to the rest of the C-suite. Let's start by laying out the Chief Data Officer definition and hearing about the unique responsibilities of the CDO — or Chief Data and Analytics Officer, as it's increasingly known — that differentiate its remit from other C-Suite roles.

Linda Avery: I would put a primary responsibility on ensuring that there is an AI strategy and a supporting data strategy that aligns with business strategy. And I don't think that there's anybody else in the C-suite who has that kind of responsibility. So that to me would be a differentiator.

Heidi Lanford: I would concur with Linda. I'd say if you want to dive into a little bit more granularity, I have played different roles as a business-enabling CDAO and a product-enabling CDO. What I mean by that is one that helps the organization utilize their data to better run the company, which could involve sales and marketing, finance, HR, product, or supply chain. And then there are CDAOs who can support the product side, particularly if that company has data or analytics as a product. And I've served in both those types of scenarios.

Another dimension I would add is, is the organization looking for a transformational role, meaning is their maturity developing and do they need somebody to come in and really up-level the organization versus they're in a steady state and they need a CDAO to come in and help operationalize those things? The deliverables, responsibilities and types of people you need on your team can be very different depending on those scenarios and maturity levels within an organization.

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What I've seen in varying degrees over the past decade is great subject matter experts are elevated into the C-Suite, but it's a completely different game they have to play in terms of communications and having sharp elbows.

– Randy Bean

Author, *Fail Fast, Learn Faster: Lessons in Data-Driven Leadership in an Age of Disruption, Big Data, and AI*

Who Should the CDO Report To?

DLC: Randy, you've written about the arc of the CDO and how many CDOs started out in a defensive posture working around risk and compliance and so on, but now are becoming more offensive. The assumption is this would also have an influence on what the reporting structure is.

Randy Bean: Yeah, the actual people that have sat in the CDO role can speak better to the nuances of it, but I can bring a lot of data points because I've been conducting the survey of data leaders for a dozen years. So just a couple data points to the questions that you asked in terms of the newness of the role.

When I started the survey in 2012, only 12% of organizations had appointed a Chief Data Officer, and this year it was 83.2%. At the same time, we asked whether the role was successful and established. Up until last year it was only 35.5%, so roughly one in three said yes. This year it jumped up pretty significantly, to 51%. We attributed that jump to all of the awareness that generative AI created, but that still means that roughly 50% said that the role wasn't well established.

We also asked where the CDO role reports. In 2023 it broke out like this:
- 5.9% report to the President or CEO
- 19.6% report to the Chief Operating Office
- 25.2% report to the CIO
- 2.8% report to the CFO
- 11.2% report to the Chief Digital Officer
- 25.3% report to God Knows Who

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And then to your last point about the primary focus of the function, previously up to 54% said it was offense, or growth and innovation. But this year that rose to 62.3%. That leaves 37.7% of CDOs on defense, focusing on regulatory and efficiency.

DLC: It would be great to hear some comments about those statistics, because who you report to and what the lines of reporting are speaks volumes to the organization about the importance of the CDO role and also potentially hampers a true understanding of the role if they're in the wrong part of the organization.

Christy O'Gaughan: In my current role at GE HealthCare, I report into the CIO. Before coming here, I spent 15 years at the same pharma company, where I reported into Global Product Strategy on the business side. Part of the reason I made the switch is because I had most data strategy, analytics, and all of that under me. I didn't have some of the traditional IT functions like data engineering or architecture. I was really frustrated because IT and I were not aligned on how to deliver value for the business. After seeking advice from a mentor on how to better align with my IT partners, it was brought to my attention there was a role open at their company (GE HealthCare) within the IT function. The mentor was in a role at another company within the IT function. She told me that it sounded like I was doing the things that I could do, but that it didn't seem like the CIO was held accountable by the CEO to be aligned. Even though we had best-in-class analytics it was frustrating to not be able to transform insights the way the company needed. I then made the switch into a CDO role within IT so that I could better understand the perspective of IT.

GE HealthCare's vision to create a world where healthcare has no limits resonated with me – and I see how my role can impact the way we can deliver value to our people, patients, and customers. It's more having the right strategy for what your company's trying to achieve and being able to drive the data and analytics strategy to achieve those business outcomes. Can you drive that strategy from where you're reporting in that specific company?

Linda Avery: I think you're asking an excellent question there, because this is a very invasive role. And it's a role where there's a lot of transformations happening, in many ways that include IT. IT has to come along. You can't get anything out the door that is scaled and has real impact if it's not through IT. But even more than that, it's really about people and process. And typically, there can be a lot of resistance to change. So I think from my vantage point, what is key is that you're positioned where it is clear that you have the support of the senior leaders and they're vocal about it, and that you also have the proximity to business leadership. I don't think there's one answer here, but I do think that there's certain things that need to be true in order to succeed.

Dr. Andy Moore: The answer depends on the state we're in. Currently I report to the CIO because there's a high technology element as we build a data cloud and bring in modern data tools. It also makes sense for me to sit alongside the CISO from a security aspect, and alongside the head of architecture and the head of operations, so that we're able to bring in those new tools together. I think as the business matures and we have a more stable platform, then it's perfectly foreseeable that the role could move to another reporting structure. Where we are now is getting people out of Excel and into modern data tools with connected data sources. When we achieve a level of stability, I could see the role evolving into a more strategic one and a different area of the business.

Heidi Lanford: I've had the experience of reporting to the CIO, the COO and the CEO in different companies. And I would say the remit of what we were trying to do with data and analytics aligned with the role I was reporting into. One key element to this role is that it can be disruptive, as it is about leading a transformation in many cases. CDOs are being brought in because the organization sees data and AI as a critical strategic asset and wants to improve upon how that asset has been cultivated in the past. They've hopefully committed to some form of change, and realize the focus should be much more dedicated. That's why this role is important. That said, others in the C-Suite need to be supporting that change, be willing to disrupt and transform things and provide air cover for the CDO/CDAO role. Aligning with whomever is the sponsor for transformation at the organization is key for the CDAO, as well as ensuring the transformation is shared across the C-Suite.

Randy Bean: I'd like to add one thing and just make a note that it can vary quite a bit from industry to industry as well. I had a panel a couple of years ago that Linda was on, and there was also Diana Schildhouse from Colgate-Palmolive, which is basically consumer packaged goods. So the nature of their business was that it was very important that she reported to the CEO and she had commented that I'd asked the question about what percentage of time was spent on offensive and defensive activities. And the bankers all said, well, we're up to 30% offense and we're trying to get to 35%. And she said it's 100% offense in her role. And if you look at the Googles and the METAs and so forth, they don't even have Chief Data Officers because it's already so embedded within the culture across the organization.

Linda Avery: I think what that denotes is that there's an understanding of what AI and data can do. And so we've been talking about air cover, which is really important, but there's another dimension here which is understanding. And what I have seen is unfortunately a reluctance to really engage on this topic. I think a lot of senior business leaders are afraid of AI. Now, generative AI certainly has opened some doors because it's accessible, you can play with it, et cetera. However, it is incredibly important, I believe, for business leaders to gain that understanding. And to gain that understanding, you need to have access. And again, I'm not going to be prescriptive as to where somebody needs to sit, but I do think that ready access to senior business leadership is critical and you want them to have an understanding that's strong enough that they can actually ideate it in this space. And that is what you certainly see with the Googles of the world. That's maturity.

That's the key point about stepping up into the CDO role. It's a leadership role, it's less of a technical role.

— Dr. Andy Moore
Chief Data Officer, Bentley Motors

There are lots of technical people who want a CDO job, but some of them didn't develop their strategic skills. You need to know how to develop a strategy that will deliver tangible business value, then inspire people around that strategy.

– Christy O'Gaughan
Chief Data Officer, GE Healthcare

What Does the CDO Need To Thrive?

DLC: In your case, Linda, did you have that air cover figure to support you?

Linda Avery: It's interesting. I was the inaugural Chief Data Officer twice, once at Verizon and once at the Federal Reserve Bank of New York. At Verizon I arrived as a team of one. I wouldn't necessarily consider that I had a lot of cover because I don't think that there was a lot of understanding. A lot of what I had to do was educate. There had been attempts, I called them fireworks, that were pet projects happening in the business. And it was a very interesting situation because the thing about fireworks is they flash and everybody around the table goes, "Ooh" and "Ah," and then that's it. So a lot of the journey was really around how do you move from this type of experimentation or what I had called Artisanal AI years ago when I was at the Fed, to industrializing it. I had funding, I guess that's a form of cover, but it was really kind of out in the open to be honest.

Heidi Lanford: Who did you report to in those roles, Linda?

Linda Avery: Interestingly enough, I reported to the Chief Technology Officer, but that was really much more focused on network because network was the technology. I was a peer of the CIO and then ultimately my organization got moved into the CIO's organization. And that was culturally very difficult for my data scientists in that it is a very different kind of mindset, data scientist versus application developer, let's say.

Heidi Lanford: That's interesting because I feel that if the CDO/CDAO is reporting into the CIO, that is not the right place for them to report into. I believe in strong partnerships with that organization, but there is an inherent stigma of back office operations – a lot of order taking – and to do any of that experimentation or offensive revenue-enhancing data monetization is a very different mindset.

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> ## If we think about how ubiquitous data has become in everybody's job and how everyone needs to be data literate, why not consider the CIO reporting to the CDO?
>
> – Heidi Lanford
>
> Former Chief Data Officer, Fitch Group; former Enterprise Head of Data & Analytics, Red Hat

Dr. Andy Moore: The only thing I would add to that is in my case, the CIO got brought in with a remit to transform the technology we use across the business. So that wider transformation scope has given me a degree of flight cover. I've been at Bentley for a number of years and already have a network across the business from previous roles. So that cross-business network and then being part of a transformation lets me move at the pace of change as well as a wider transformation.

Randy Bean: My sympathies and my inclination align with Heidi 100%. I constantly tell organizations that data leaders should align with and report to the businesses. I had Christina Clark from GE, who was Chief Data Officer at the time, on a CDO panel a few years back and when I asked where the role should report, all the other panelists said the business side. But she said, "Not at GE. All the innovation, all the transformation is driven from the technology side." So it really depends upon the industry you're in.

Heidi Lanford: If we think about how ubiquitous data has become in everybody's job and how everyone needs to be data literate, why not consider the CIO reporting to the CDO? Because technology is a way of disseminating and delivering information and data, but data could be thought of as this umbrella over all of those things.

Linda Avery: I think Heidi has the thought of the day here.

Leveling Up to a Leadership Role

DLC: Based on your own experiences, what are some of the dynamics that a new CDO may face as they try to secure that seat around the table with other C-suite executives?

Linda Avery: I think one thing that they might expect is that they're going to have to design the operating model with each part of the organization that they're interfacing with. At the end of the day, you have to stand up a winning operating model where you've got thorough delineation of responsibilities, governance, ways of working together, expectation management, and communication strategies. I think one other big aspect that surprises CDOs is how much communication is required. And so Andy, I think you're very lucky. You have the network, you have the credibility, but a lot of CDOs are coming into organizations new without that. And so when people aren't continuously hearing about good things, they tend to assume the worst, even if good things are getting done. So communication strategy and operating model have to be absolutely at the core of what the CDO needs to focus on.

Dr. Andy Moore: That's the key point about stepping up into the CDO role. It's a leadership role, it's less of a technical role. And I think I've talked to a lot of technical people that love being a data scientist, love what they do because they're hands on, they're into the data. That's not the CDO role. It can't be the CDO role. Certainly to get up to the C-Suite, to get from a very technical person, an individual contributor, to then sit toe-to-toe with the senior leadership across the business, that's definitely a significant change.

Heidi Lanford: One of the first people I hired as a CDO was someone to lead strategy and communications for me: helping me gather inputs from the business on what is most important to drive the organization forward, which informs what we should be working on, and to also develop how we report out on ROI and success. Eventually that function grew a little bit bigger into also spearheading our data literacy program. Definitely you need a budget for this role, a communications and strategy person(s) handling that for you as a Chief Data and Analytics Officer.

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Randy Bean: What I've seen in varying degrees over the past decade is great subject matter experts are elevated into the C-Suite, but it's a completely different game they have to play in terms of communications and having sharp elbows. People tend to get possessive of their territories. The need for data and AI and analytics leadership is only going to increase, but it's not going to be an easy role and it's going to be under the spotlight and the center of a lot of attention both for good and for bad as well.

Christy O'Gaughan: When you come into a new role, one of the first things you have to do is set up a strategy that aligns with the business strategy. There are lots of technical people who want a CDO job, but some of them didn't develop their strategic skills. You need to know how to develop a strategy that will deliver tangible business value, then inspire people around that strategy. To do a CDO job really well you need to understand how to transform the culture of a company toward data-driven decision making.

DLC: One interesting thing you've said, Randy, is that at this point it's almost a telltale sign of trouble when you hear a CDO say, 'We're building such great capabilities and we're doing such amazing things. So why doesn't anybody recognize it?' That says success is a function of communication as well as making the right alliances with the business leaders.

Linda Avery: I think it is communication, but I think it's also the shadow of the leadership, the business leadership. And that's why I think that the engagement at the senior levels and visible support is so important. Without that, people are not going to get in line. I mean, I think that there's always going to be some passive-aggressive behavior when change is underway, but when you take a new role that is not vetted in and you don't give it that support, it's unlikely to thrive.

Heidi Lanford: Actually, could we talk about that a little bit? Because we talked earlier about communications being important and having those relationships, and a common thread that I've seen with a lot of CDOs who have changed roles recently is there's an incredible pressure for them to solve all of those problems. They have to sell the fact that the company needs a data and AI strategy, that they need to upgrade the infrastructure in order to be competitive and relevant. And unless there are others in that C-Suite who feel that need and see it as incredibly important, this is a massive role for people to take on, which I think gets to the churn and tenure statistics for those in this position.

Randy Bean: I've really encouraged CDOs to speak the language of the business in terms of articulating how this improves customer acquisition, customer retention, customer satisfaction, revenue growth, improved profitability, and things of that kind as opposed to saying we built a data mesh and a data fabric. That's when the business leaders say, we have no idea what you're talking about. You seem to think you're smarter than we are using a language that we don't understand. So unless we can speak their language and satisfy what they're trying to do for the organization, we serve at their whim.

DLC: This raises a point we definitely wanted to get to. The CDO role is 22 years old, and yet the average tenure is still two and a half years. Does reporting structure play into that or is it more this added burden that you've got to make not one case, but several cases in order to thrive in this position?

Linda Avery: I think where you're positioned in the organization is a loud signal and an important signal. Organizations vary greatly, and both Christie and Andy, it sounds like you feel like the right signal is being given as being part of the CIO organization. In other industries that is not the right signal. I've certainly looked at this very carefully as I've considered roles. Where am I going to be positioned? It's not the only factor, but it's a key factor.

Heidi Lanford: CMOs have relatively short tenures, too. They're two and a half to three and a half years as well if you look at the latest stats on that. If you think about the similarities between the CMO and the CDAO, CMOs are also somewhat disruptive. They're trying to change the brand, change how they engage with customers, and they've got pressure: increase revenue, increase ARR, reduce customer churn, increase cross-sell, upsell, all of these things. And they're being evaluated by the sales organization as to whether or not they contributed tangible ROI. It's hard to quantify. And I think as CDAOs too, the further we are from product creation, we are also evaluated on ROI. Did the data lake, these new data sources and AI models that you built actually lead to an increase in revenue or reduction in cost? CMOs can report to head of sales, or the CEO, or a division or regional president. I think it's something interesting for us to think about.

Christy O'Gaughan: And is the other side of the two and a half or three years that the number of opportunities has increased, so then CDOs are just jumping for the next thing? Are people moving towards something or are they leaving something?

Randy Bean: I think it's like a marriage where both partners have decided that maybe they're better off with another person. The Chief Data Officer is better off with another partner and the company's better off with another partner. So it often seems to be that it's time to mutually part ways.

Linda Avery: One of the factors is this notion of return on investment and attribution. I have yet to find the company that has figured out how to calculate what should be attributed to the CDAO organization in terms of value. And it's really tough because if you're not able to demonstrate value, your tenure is going to be short.

Randy Bean: When times are good, it's like spend, spend, spend, grow, grow, grow. When times get tough, it's like we only have X amount of dollars to spend. What do we absolutely need?

Dr. Andy Moore: The other interesting role that I've noticed is Chief Digital Officer. Chief Digital Officer was something that was introduced to big fanfare five, ten years ago. Everyone needed an app for everything. That was the flavor of the time. And again, they were expected to turn around the business and deliver value. And it became really hard because everyone wanted to own their own digital products. So the Chief Digital Officer tended to fall away because they weren't able to deliver that value. They were able to disrupt the status quo and deliver some sort of change program, but maybe not that long-term value. And that's where maybe a CDO or CDAO can play more of a stable role than just the pure transformation.
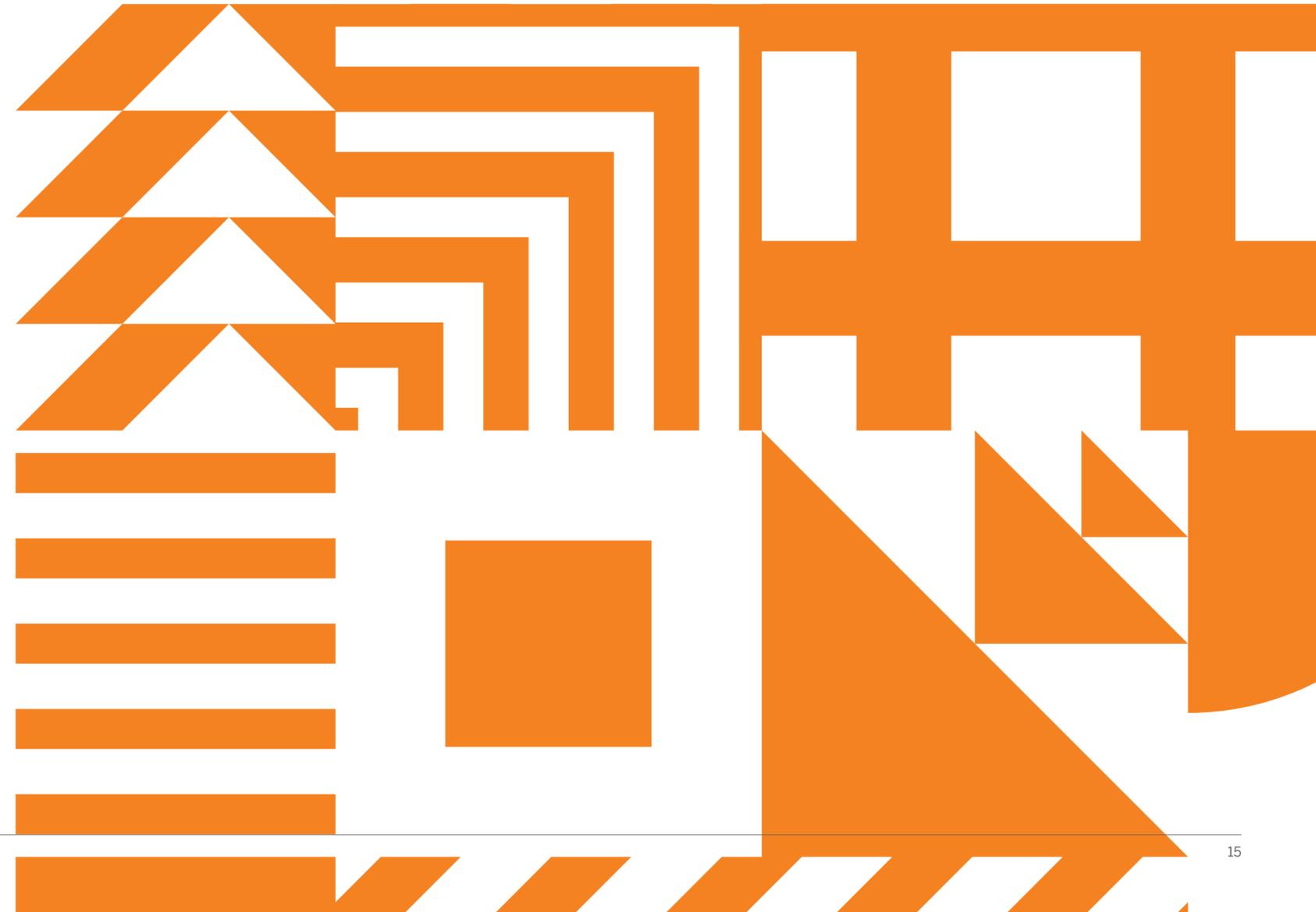
Do We Need a Chief AI Officer?

DLC: Let's move to this last question around the Chief AI Officer. Randy shared an anecdote about a CDO who resigned their job, got on the elevator as an ex-CDO and walked off the elevator and said, 'Okay, now I'm a Chief Artificial Intelligence Officer.' Everyone's saying that 2024 is going to be the year when GenAI really gets practical and is expected to deliver value. So do we need a Chief AI Officer, and if so do you think it's more of a temporary organizational role?

Linda Avery: I think it's dependent on where it ends up being positioned. You can't have too many masters in this space. This is a beast, so how many heads do you want it to have? There has to be alignment in terms of data strategy and AI strategy and how that comes into being. You can't have AI just being this independent thing without the appropriate data architecture, data engineering, data governance. All that good stuff needs to be in place as well.

Randy Bean: Again, when the CDO role was established, at least among major banks after the financial services crisis, it was largely a defensive role to fix things so the problems didn't recur. A lot of the work that needs to be done from an AI perspective now is around the safeguards and the guardrails. And so it may be that the Chief Data Officer is pretty far down the road in terms of moving to offensive capabilities, and a Chief AI officer really needs to focus on defensive fundamentals from the outset.

Linda Avery: That would be an interesting way of defining the role, though when I've spoken to people who consider themselves Chief AI Officers, they do see themselves on the commercial, offensive side of the equation. But you're absolutely right, we have to mature rapidly in that space and somebody's got to take the helm of that.

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I have yet to find the company that has figured out how to calculate what should be attributed to the CDAO organization in terms of value. And it is really tough because if you are not able to demonstrate value, your tenure is going to be short.

– Linda Avery
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Dr. Andy Moore: And maybe it depends on how all-in the company's going on AI. Are they getting off-the-shelf LLMs and therefore it becomes less of a technical role, more a safeguarding, but also value delivery role? Or is the company working in building their own LLMs and therefore needs the more deep technical expertise to support it?

Heidi Lanford: Also, is AI being used to help run the business versus being used in products and monetization of products? If it's the latter and one had an opportunity to head up AI, the role could report into the Chief Product Officer. That would be a natural spot for it.

But before we close, have we actually answered the central question on the table here? Who should the CDAO report to?

Linda Avery: I think we have. I think the answer is, it depends.

Heidi Lanford: I agree. There is no silver bullet for the answer to this question.

DLC: That makes sense given all the rich context you've brought to the conversation. Thank you all.

Do you have opinions about who the CDO should report to – or who should report to them?

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