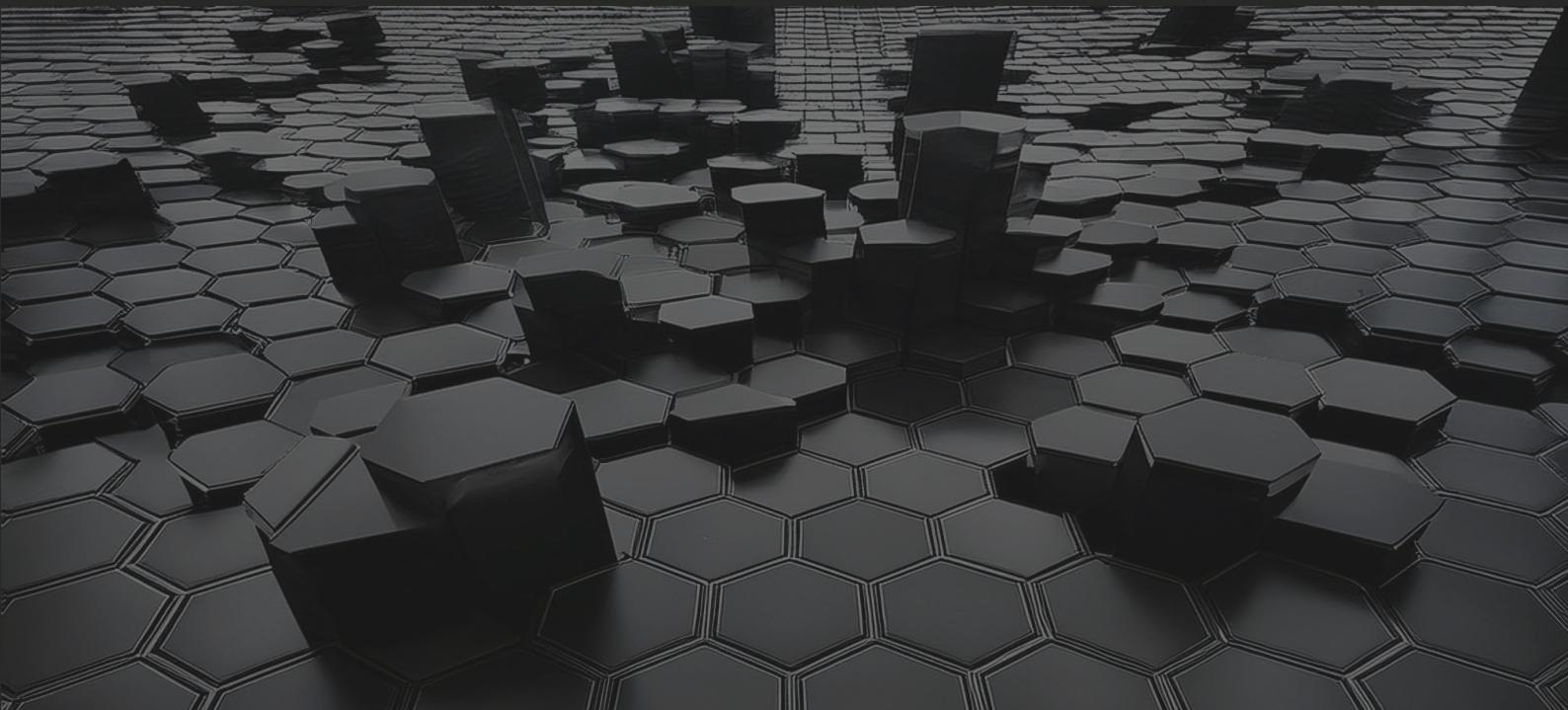


VOICE OF THE CDO



IN PARTNERSHIP WITH
 databricks

ANNUAL REPORT
2024



Insights and guidance from
leading CDOs on building the
AI-driven future.



GUILD THINK TANK

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Hosted by:  DATA
LEADERS



Richard Pope

Co-Founder and CEO,
Data Leaders



Pascal Clément

Co-Founder and Executive Chairman,
Data Leaders

FOREWORD

Data Leaders

When we established Data Leaders in 2020, it was with the conviction that the Chief Data Officer held a unique position in shaping the future, not just of how we do business, but of the world we live in. Given the complex history of data and analytics, we understood that the journey would be tough, as it is for any pioneer, and one that could not be successfully undertaken alone.

We made it our mission to accompany and support CDOs by building a community of data leaders open to collaborate and catalyse change. The Guild CDO think tank embodies that mission, convening a select group of leading global CDOs once a year to explore their role in orchestrating an AI-enabled future.

Guild 2024 was our most enriching think tank yet; contributors shared a myriad of breakthroughs in driving AI-enabled business transformation, and their readiness and enthusiasm to navigate an uncharted future were highly motivating.

This year also stood out thanks to our strategic partnership with Databricks. This collaboration, which was requested by contributors, not only brought insights into highly pertinent technical challenges facing CDOs today, but also unique perspectives on the strategic approaches necessary to leverage these innovations.

Voice of the CDO 2024 reflects the learnings and debates shared during the two edifying days spent at Penha Longa in Lisbon this June. Our goal is that it serves not only as a practical guide to fellow CDOs but also as a wake-up call to organisations that still underestimate the extent to which AI will change the world around them. As you will read, the augmented organisation is emerging under the leadership of the CDO. The time to act is now.

In partnership with:  **databricks**



Robin Sutara

Field Chief Data Strategy Officer
Databricks



Dael Williamson

Field Chief Technology Officer
Databricks.

FOREWORD

Databricks



We are thrilled to be part of the Data Leaders Guild 2024. Our experience at the CDO think tank in Lisbon was truly invaluable, as we joined an impressive cohort of Chief Data Officers in an environment that was uniquely open and collaborative. This setting fostered genuine peer-to-peer learning as well as deep and meaningful connections.

The *Voice of the CDO 2024* report encapsulates the essence of the Guild experience. It delivers real-life perspectives and practical advice on the foundational elements driving CDO success: leadership, strategic integration of AI, and fostering a data-engaged culture. These insights are drawn from inspirational professionals who have and continue to forge new frontiers in data leadership.

Furthermore, the report explores the unfolding implications of AI on the future of business, the role of the CDO, and society at large. It serves as a crucial resource for CDOs,

providing clear guidance on the key areas that will help to shape their future success.

We sincerely hope the insights shared within these pages spark new thinking and leave you feeling re-energised as you continue leading your organisation into its next transformative phase.

List of CONTRIBUTORS

Abbi Agana
Chief Transformation Officer, Macmillan Cancer Support

Agne Sanders
Director, Head of Data Privacy at Barclays Investment,
Barclays

Alexander Haidinger
Former Chief Data Officer, Financial Services

Andrew Day
Operating CEO, ai.io

Bert Verdonck
CEO, Luxembourg National Data Service

Bruno Reis
Head of Big Data & Advanced Analytics, El Corte Inglés

Catherine Taylor
Senior Director Enterprise Data & Analytics, Elsevier

Chris Gullick
Chief Data & AI Officer, Ofgem

Cornelia Schaurecker
CEO, Innotech AI Consulting

Dael Williamson
Field Chief Technology Officer, Databricks

Didier Mamma
Vice President Advanced Analytics, AI Innovation,
Sustainability, Circularity & In-Store, Decathlon

Eleanor Winton
Expert Innovation, Future Trends and Disruption,
Foresightfully

Enrique Méndez
Chief Data Officer, Edrington

Elizabeth Osta
Chief Data Officer, Former Heineken International

Esther Munyi
Chief Data and Analytics Officer, Sasfin

Geert-Jan Verdonk
Executive Data Steward | Data Governance Lead,
Vanderlande

George Papadatos
Global Head Data Strategy and Data Assets, Syngenta

Gérard Guinamand
Strategic Advisor, Data Leaders

Hakan Duman
Head of Data Science & Engineering, Cariad Volkswagen
Group

Joëlle van der Bijl
Chief Data & Analytics Officer, FrieslandCampina

Karl O'Hanlon
Chief Data and Analytics Officer, Veolia

Klaus Straub
Co-Founder and CEO, xelerate.tech

Nirali Patel
Group VP Data, Liberty Global

Nuno Assis
Director Global Data, Governance and Analytics, Miele X

Paola Cagliani
EU Chief Data & Analytics Officer, Admiral Group Plc

Pascal Clément
Co-Founder and Executive Chairman, Data Leaders

Patricia Carvalho - Group Head of Data and Analytics,
Solvay

Philip Dick
Director, Data & Analytics Transformation, Coca-Cola
Europacific Partners Plc

Robert Kent
Founder, AI Group Advisory

Robin Sutara
Field Chief Transformation Officer, Databricks

Rowland Agidee
Chief Data & Analytics Officer, University Hospital Derby
and Burton

Samir Patel
Head of Data, BAE Systems plc

Sarah Hillman
Director Technology for CRM & Data, The Travel
Corporation

Susan Dorward
Global Head of Data Engineering, Specsavers

Timothy Chapman
Global Head of Data Management, Stellantis

Toby Balfre
VP Field Engineering EMEA, Databricks

Volker Buscher
Chief Data Officer, Data Leaders

Zakarias Gunyits - Chief Data Officer, MVM



INTRODUCTION

While Lincoln's quote may have felt true in the 1860s, Chief Data Officers working in 2024 could be forgiven for feeling as if the future were arriving one hour or even a minute at a time. The pace of change is relentless, and there is no sign of it slowing.

Every year, this unprecedented rate of change forms the backdrop to Guild. This year, under the theme of "CDOs Orchestrating the Future: Connect to Enable", the think tank more closely examined the drivers and implications of data-propelled transformation on both business and society at large and what it means for the role of the CDO.

“The best thing  about the future is that it comes one day at a time,”

Abraham Lincoln.

Specifically, it explored:

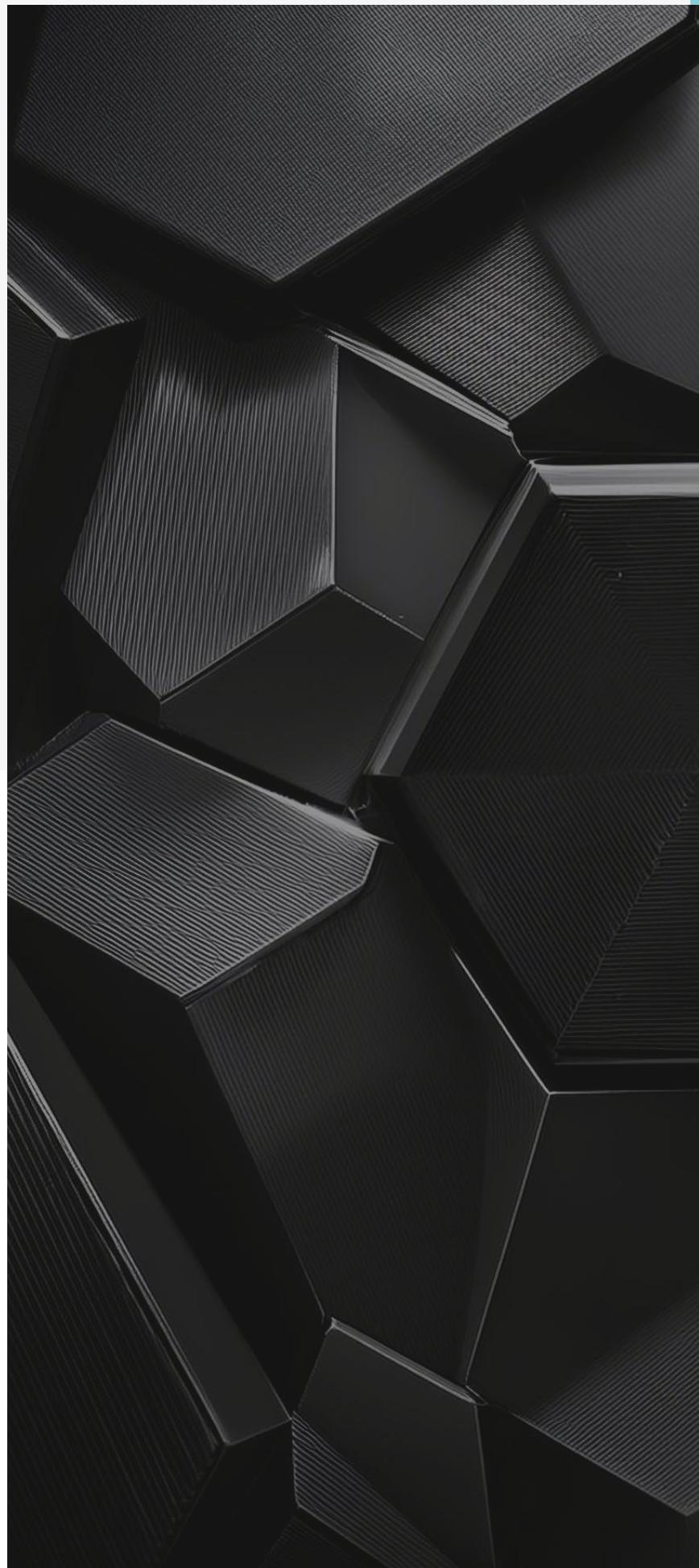
- The role of data and AI as both a driver of and remedy to uncertainty in the near future,
- The rapidly diverging nature of the CDO role and the breakthroughs in leadership unlocking AI-driven transformation,
- The complexities of strategically scaling AI and the hidden intelligence with the potential to accelerate operational efficiencies,
- The strategies making inroads to successfully build a data-engaged culture.

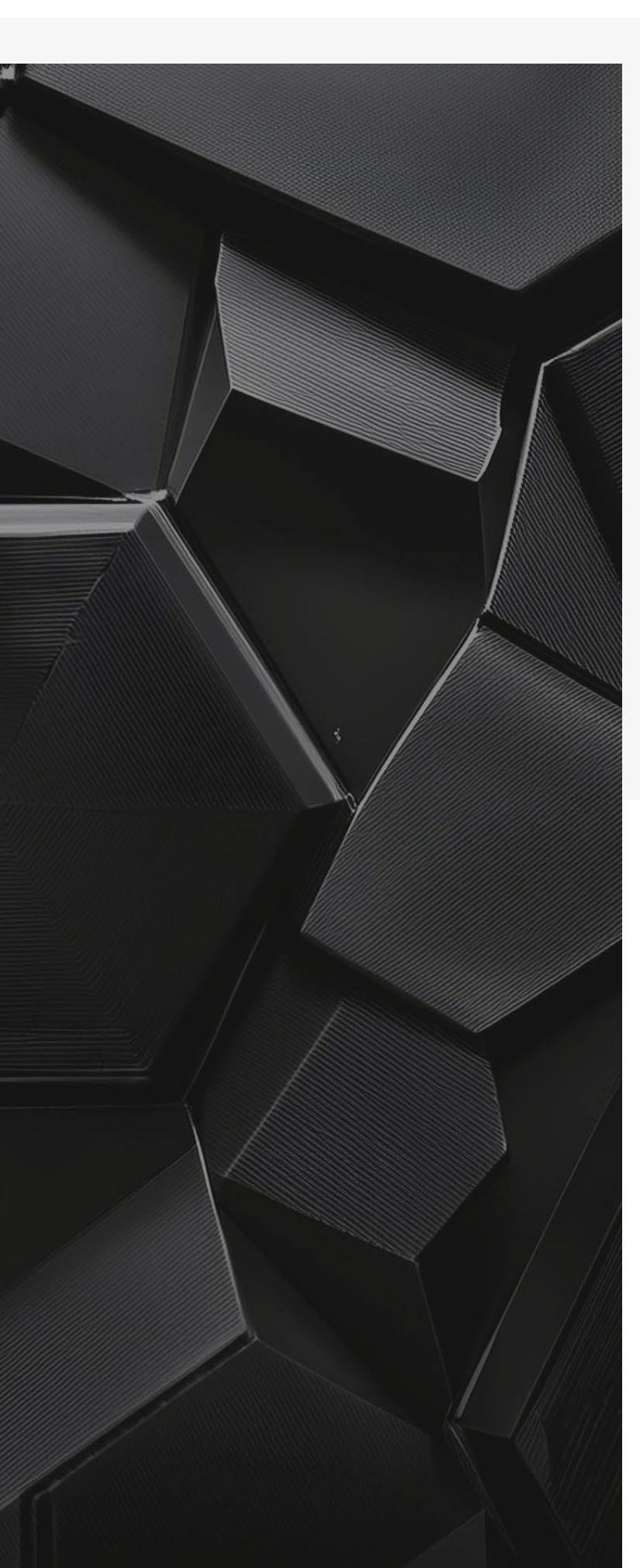
As we delve into these themes, this report captures the essence of our discussions, offering practical advice and real-world examples intended to empower CDOs as they navigate the new and emerging complexities of their evolving roles, drive transformation, and forge a resilient and agile organisational culture.



EVOLVING CDO LEADERSHIP

CHAPTER 01





CHAPTER 01

EVOLVING CDO LEADERSHIP

“I think the CDO role has evolved so quickly over time. You don’t see roles like the CEO or the CFO changing as fast as you see the CDO role changing. And I think that’s because of the pace of innovation and technology. But it’s also that the pace that organisations are trying to transform is significantly higher than it’s ever been in the past.”

Robin Sutara
Field Chief Data Strategy Officer, Databricks.

The evolving nature of the CDO role has been a constant point of debate among Guild contributors and Data Leaders members. At Guild 2024, the discussion was more animated than ever. The inseverable link between data, process and people has meant that the CDO's reach has always had to go far beyond data management, consequently making it one of the hardest roles in the organisation to define. Today, this is truer than ever as AI at scale sees them both broadening and deepening their impact on their organisations.

In this section, we explore the landscape in which CDOs are operating, looking at a fast-unravelling future that is being shaped by data and AI at large, the developing threats and opportunities, and the emergence of a spectrum of CDO roles. We also delve into the leadership strategies and skills propelling CDOs to evolve from data leaders to business transformers.

The Role of the CDO in Navigating an Uncertain Future

“For the most part, organisations only see the probable future. If you’re lucky, they’ve got a strategy which is about their preferred future. Where we want to get to is their ability to see plausible alternative futures. And data plays a huge part in that.”

Eleanor Winton,
Foresight and Innovation Expert, Foresightfully.

What does the future hold? It's the key question all organisations look to answer. Eleanor Winton explored how well that question can be answered in today's rapidly changing world, asking the think tank:

“What will we be living with and without by 2030?”

It's no surprise that the answers were dominated by predictions of a continued digitalisation of the physical world: say “goodbye” to cash, shop assistants, and computer interfaces and “hello” to AI assistants, AI healthcare, and AI-to-AI business.

While it may seem relatively easy to envisage a more digitalised future just six years from now, Winton explains why, in reality, the future is becoming less predictable.

• Geopolitical Risk

Firstly, citing the [World Economic Forum's Uncertainty Index](#) shows that both global policy uncertainty and geopolitical risk are well above the long-term average measured since 1997.

• Digitalisation of the Physical World

Secondly, industries are transforming at an unprecedented pace, driven by advancements in AI and big data. This shift is creating new business models and disrupting

traditional ones, compelling organisations to adapt swiftly or risk obsolescence. One of the impacts is the increasing pressure companies feel to harness technology quickly, even though the implications of their deployment may not be fully understood.

• Climate Change

Thirdly, organisations are beginning to experience disruptions linked to climate change and, for the most part, are navigating these challenges with little substantiated guidance.

• Unforeseen Events

Fourthly, hard-to-anticipate events such as pandemics and major IT outages are having increasingly global impacts on business.

The Future is VUCA

These factors combine to create an external environment characterised by volatility, uncertainty, complexity, and ambiguity (VUCA). This VUCA world presents unique challenges for organisations that are in danger of being caught off guard and vulnerable to a greater range of possible impacts that uncertainty presents.

According to Winton, both the danger and the opportunity lie in how organisations respond.

“Uncertainty is about the range of potential outcomes that a driver of change can generate. And that's something we need to get better at understanding,”

says Winton. She goes on to explain why this is so complex to achieve:

“When we think things are really hard to understand, we try to apply what we've used successfully before to different problems. This leads to the structures and systems we rely on becoming increasingly brittle, and leaders becoming increasingly anxious because the connection between the decisions they're making and the consequences is increasingly non-linear.”

The Imperative for Resilient and Agile Organisations



The antidote to uncertainty is resilience, says Winton, a message strongly echoed by Klaus Straub, CEO and Co-Founder of xelerate.tech and former CIO of BMW.

"The world has changed dramatically in the last five years. Resilience will drive us for the next ten to 20 years, for sure."

Both believe CDOs have a critical role in realising this imperative for organisations.

Straub underscores that the key responsibility of CDOs must be to deliver data and AI solutions at speed:

"The need for resilience drives the need for digital transformation to be done at speed. It needs to be agile transformation."

Meanwhile, Winton urges CDOs to become horizon scanners, taking responsibility for bringing data-driven insights to the table, helping to articulate the range of uncertainties and fostering discussions that lead to more robust strategic planning.

"What are the critical uncertainties for this organisation? What are the things about which we know the least and need to know the most? And that feels to me like a fantastic role for the CDO in driving that conversation."

For example, IATA demonstrated the value of dataenabled foresight when in July 2020, they were able to [provide the travel industry with a long-term forecast for the recovery of global passenger traffic](#), stating that it would not fully recover before 2024.

Both also press CDOs to challenge norms and structures that hinder an organisation's ability to adapt and lead the charge to disrupt from within the organisation.

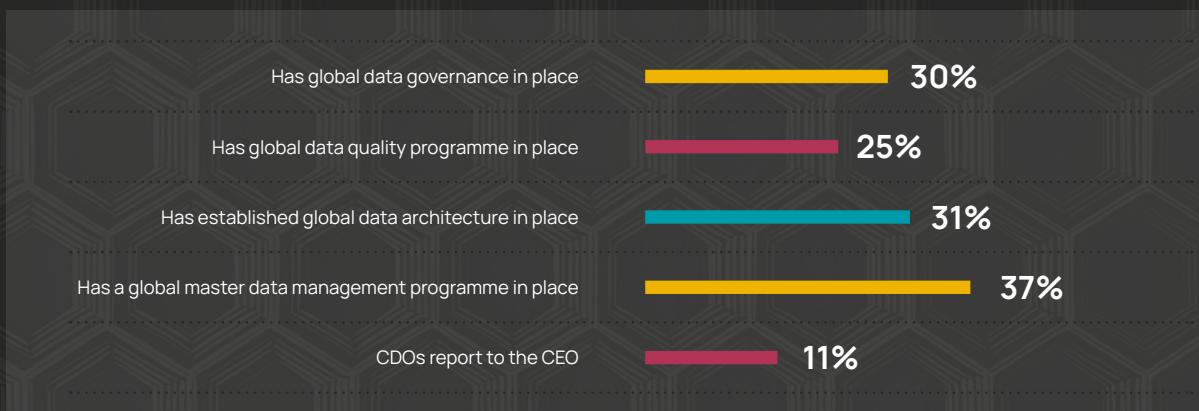
"It will require personal resilience to push that through in the organisations you're working with. But it's really, really important,"

stresses Winton. Patricia Carvalho, Group Head of Data and Analytics at Solvay, adds that it will also require humility:

"One person can only be humble enough to acknowledge that we know very little. What's important is to be able to understand what we do not know."

The CDO Spectrum

Discussing how well-prepared organisations and CDOs are to face this evolving landscape, it's clear that there is a significant disparity in maturity and readiness required to take the step up to transform an organisation into a more resilient and agile entity.



Feedback from Guild contributors highlights that many CDOs are still predominantly focused on data fundamentals and pursuing a strategy of data services. This strategy is based on the delivery of actionable insights through democratised data, dashboards and self-service tools to users, strongly supported by data literacy efforts.

Source: Data Leaders benchmarking data, July 2024

Company Data Strategies

Source: Data Leaders



On the other hand, feedback also shows that many CDOs are beginning to execute a transformation strategy. In this early era of AI-enablement, they are feeling their way into the organisation, unearthing pockets of value that can be delivered with data and AI solutions, and, increasingly, stepping back to see where solutions can be more broadly applied to generate significant value. Their contributions are making a noticeable bottom-line impact, and their presence in the boardroom is becoming a more regular sight.

In between these bookends are the CDOs who find themselves caught between wanting to seize opportunities to transform parts of the business and fighting for support and resources to accelerate data fundamentals.

“CDOs struggle to be recognised by their peers. They are not seen as business decision-makers or enablers but more as data processing managers, integration managers or heads of data governance. However, it has been proven that when CDOs are given the proper recognition, the right support and mandates, they're able to fully drive business growth and innovation in the business.”

Esther Munyi
Chief Data Officer, Sasfin.

The Evolution of the CDO Role

As companies mature, so too does the role of the CDO, calling on them to deploy not just technical expertise but deeper business acumen and different leadership skills that match the needs of their organisation.

"In my observations, there are still some very traditional CDOs that have grown up in the technical, architecture and engineering space. Oftentimes, their experience, expertise, strengths, and skill sets were what the organisation needed at that point in time. As an organisation becomes more mature, CDOs have to start to think about the evolution of their role - maybe they move on to another organisation that's really looking for their technical expertise, and the organisation brings in the next level of CDO to bring things like operational efficiency and organisational structure, and tying people, process and platform together."

Robin Sutara
Databricks.

Volker Buscher, Chief Data Officer at Data Leaders, supports Sutara's observation:

"The right role will depend on both the individual's aspirations and the needs of the business. Regardless of their responsibilities, the CDO must take ownership of their role, whatever it entails. Simultaneously, the business must work hard to determine what it needs from the CDO."

As we will explore, the ability to own the role and the narrative is one of the standout traits of CDOs who have successfully transitioned from a "traditional" to a "transformative" CDO.

Are we still all "Chief Data Officers"?

Given this evolution, a lively debate arose about the title of the Chief Data Officer. Does it still fit, considering the spectrum of role definitions and responsibilities, and more importantly, does it sufficiently communicate the influence and authority of the role?

What's the right title?

It was felt that "Chief Data Officer" may fit the description of a leader focused on data foundations. However, once the remit and impact of the role broaden, what are some alternatives?

"Once you get the data foundations correct, that's when you move into analytics. So, there's a process of rebranding to Chief Data and Analytics Officer. Data remains because it is seen as the foundation."

Rowland Agidee
Chief Data & Analytics Officer at NHS University Hospitals of Derby and Burton.

Pascal Clément, Executive Chairman at Data Leaders, commented on the irony that, historically, the focus on analytics preceded the emphasis on data management. He noted,

"If we look at the history, it actually started with analytics before companies realised that data management was absolutely key. Now, that data is being better managed and analytics is much more powerful, we're reverting back."

Some also felt it's increasingly important to clarify where ownership of artificial intelligence lies.

Chris Gullick, Chief Data and AI Officer at Ofgem shared:

"My predecessor was the Chief Data Officer, and I'm the Chief Data and Artificial Intelligence Officer. Does that mean we are an organisation ready to scale AI? No, but the job title signals the ambition of what we want to do with data."

Other Guild contributors argued that the title should depict the impact of the role.

Andrew Day, Operating CEO at ai.io, stated:

"I think we should be the Chief Data Outcomes Officer because nobody in the business apart from us really cares about the data. They only care about how the data can be used to drive outcomes for customers, shareholders, and top and bottom-line growth. I think the deployment at scale comes from being able to demonstrate that your work is going to deliver value to the business. That's the way people get behind you and support you."

What's in a Name?

Proposed Alternative Titles to CDO

- Chief Data and Digital Transformation Officer
- Chief Data Outcomes Officer
- Chief Profitability Officer
- Chief Disruption Officer

Where do the boundaries of the CDO's responsibilities lie?

As part of the discussion about titles, CDOs debated where the edges of their responsibilities lie. As we will explore more in Chapter Two, AI's effectiveness relies on scale, leading to a possible exponential growth in the reach of the CDO. But where should it extend to?

• Digital vs. Business Transformation

Agidee was keen to stress the need for CDOs to align digital transformation with business transformation...

"We tend to do a lot of technology-led digital transformation without aligning the digital tools with the transformation of the business and the new ways of working. This has led to a misconception between digital transformation and how the business is able to fully optimise the processes. So, it's a really pertinent point for me in terms of thinking of the alignment between business transformation and digital transformation."

• Use Case Ownership: Business Owners or the CDO?

Samir Patel, Head of Data at BAE Systems, pointed out that, just as CDOs are not data owners, neither are they use case owners.

"In the same way as a CDO does not own all the data - the data owners are in the business - we will not own the use cases. To put it another way, is the CDO responsible for making sure the car doesn't crash or for making sure the regulatory reports are correct, or the manufacturing? No, there's a chief manufacturer officer and a chief engineer who have to be accountable for making sure those things happen."

In this context, the importance of clear objectives and the need for effective partnerships were also clearly underlined:

Patricia Carvalho, Solvay, shared:

"We talk a lot about transformation, and that means making sure that we are clear on what I'm doing in the organisation and what everybody else needs to do. I need the business to help me. I'm not in this alone - I never will be - and if I am, then I'm doing something wrong."

Cornelia Schaurecker, CEO at Innotech AI Consulting, Former Global AI and Big Data Leader at Vodafone Group and Founder of Volkswagen Group Data Lab, stated:

"You can't do everything, focus is key. For instance, when I was in charge of Big Data & AI for the Vodafone Group, I had a clear responsibility for big data and AI, as well as helping to drive the Data Governance agenda from the Global Group Commercial side, together with IT, privacy/cyber and legal. You need all stakeholders to successfully drive this together."

Esther Munyi, Sasfin, advocated:

"Shouldn't the conversation focus on how we evolve the organization and develop other

roles to fill the gaps, rather than trying to fill them ourselves?"

- **Disruption**

The think tank touched upon whether CDOs should be responsible for implementing potentially disruptive transformation. Klaus Straub, xelerate.tech, is strongly in favour, believing that introducing new business models should be their priority number one:

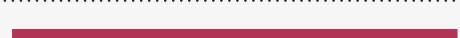
"Not bringing in these new business models can sometimes be the death of a company. You have the opportunity to streamline the organisation, build up the revenue or bring down the cost, which can be critical."

Elizabeth Osta, Strategic Advisor at Data Leaders and former CDO at Heineken, echoes his view but adds that it implies a huge cultural change and transformation that must be managed with the rest of the business.

"The CDO needs to work with the rest of the organisation to redesign processes, create the change canvas. Whilst there can be many quick wins, large transformations require a longer time frame."

When asked, only a third of Guild contributors said they were in a position to execute new business models, with nearly half firmly believing that it is outside of their current remit.

Do you have the mandate and legitimacy for enabling newer business models?

Yes  **36%**

No  **45%**

I don't know  **18%**

The lack of consensus over responsibilities further illustrates the quickly diverging nature of the CDO role.

Strategies for Leading Organisations towards Transformation

"If at the company level, the CEO is writing into the company strategy the role of data in delivering business outcomes, you're in a completely different world."

Toby Balfre
VP Field Engineering at Databricks.

The critical challenge most CDOs have faced during their tenures has been bridging the gap between business and data. This year, Guild contributors presented a wealth of examples of how they have overcome common obstacles to build the credibility and trust required to bring change through data and AI. This is how they do it:

1. Be 100% Focused on Delivering Strategic Value

Be laser-focused on finding pockets of value directly linked to corporate or commercial strategy.

Elizabeth Osta underpins the importance of aligning investment in data foundations to strategic programmes.

"We aligned building data foundations with the investment in the top global programmes. Alongside the Transformation Office, we assessed the foundational requirements for each programme and ensured programme budget was set aside."

Paola Cagliana, EU Chief Data Officer at Admiral Group Plc demonstrates the power of clarity and delivery of value in budget negotiations.

"When my CFO told me he did not have the money we needed to invest in data foundations, I said: "Okay, let's do it this way: with the budget and resources I have, I'll do a first use case, and if I can generate value, we will divide it. We did the first use case and we generated

four million which gave me two to start the data foundation. Then we did the second, the third and the fourth use case: value generation."

2. Get Under the Skin of Stakeholder Needs

Time taken to deeply understand your users' problems is time well invested. The term coined for this was "data therapy."

"One of the key learnings was to really understand your audience: "What exactly is your problem?" It's slow, but you can really figure out how you can solve these problems and link the feedback to your change story. That's why I love data therapy."

Joëlle van der Bijl
Chief Data & Analytics Officer at FrieslandCampina.

"There's nothing that buys trust quicker than them knowing that you know what matters to them. So do whatever you need to get not just the pain points, but the aspiration too."

Abbi Agana
Chief Transformation Officer at Macmillan Cancer Support

3. Manage Change Sensitively

Move at a rate your company culture can absorb.

"We are a unit with a digital background used to working at a fast speed, while we were working for a classical engineering company used to operating at a totally different velocity. This means that while we were here changing the world, we lost our colleagues along the way. We had to look at how to reduce our velocity to an optimal level."

Nuno Assis
Director Global Data, Governance & Analytics at Miele X

4. Co-CREATE But With Clear Accountability.

To create a lasting culture, the journey must be undertaken together. However, you must ensure that business stakeholders understand their responsibilities and are held accountable for their role in successfully delivering initiatives.

"My team follows a very explicit service development approach; we don't release any service without having it co-created with a business partner. So that's built-in by design from the start. You don't release anything unless you've properly designed, documented and validated it with the first client."

Samir Patel, BAE Systems.

"We need to be really honest and give feedback back to the business. For example, "if you're going to change this, this is the impact, and this is where you need to play a role." It needs to be a two-way street."

Joëlle van de Bijl, FrieslandCampina.

5. Deliver First and Deliver Fast

Build the momentum that creates the conditions for agile and resilient organisations. The two key strategies for doing this are 1) fulfilling the promise to deliver and 2) delivering at speed.

Speed. Speed. Speed. It's not about making some PowerPoint slides and coming back two years later having thought about it. We discovered the best is, after two weeks, after one sprint, you deliver something, and you get direct feedback as to whether it fits or not." Klaus Straub.

"If you ever read your job description, you could probably delete the four pages and just write down, "Do great things faster and deliver."

Joëlle van de Bijl, FrieslandCampina.

6. Be Bold

Don't be afraid to ruffle some feathers.

According to Didier Mamma, Vice President of Advanced Analytics, AI Innovation, Sustainability, Circularity, & In-Store at Decathlon, friction is essential to drive change:

"Agreement is not always the thing that gets us there. We need positive friction. Without friction, there is no transformation."

7. Own Your Narrative

Transformative CDOs lead proactively by owning their narrative. This means, in the face of resistance, they are clear about what they want to achieve and why.

"I think what is very important is to understand the responsibility we have in leading towards our managers or towards the board. Too often, we are too reactive, and we need to really start leading. And in order to lead, we need to be very clear what are the core principles on which we base our work on, what are the most important areas we need to do, and to cover and to deliver on."

Nuno Assis at Miele X.





CASE STUDY

Joëlle van der Bijl: Journey into Transformation

Joëlle van der Bijl was Director of Insights and Analytics at FrieslandCampina when she was approached to consider stepping into the Chief Data Analytics Officer (CDAO) role after her manager transitioned to the CIO position. Already working with her team to deliver high-value use cases alongside peers from architecture, engineering, transformation, and service & operations, Joëlle carefully evaluated the opportunity before accepting this new challenge.

Choosing to Lead

"When the opportunity arose, I recognised the significant responsibility that came with the role of driving true business transformation, particularly with the growing hype around AI. I wanted to ensure I was the best person to take on this challenge," says Joëlle. "At that time, we were about to embark on a company-wide reorganisation, and my decision came down to two key questions: first, could I envision myself designing and leading a comprehensive restructure of the data and analytics organisation? Second, did I see in myself the transformative leadership qualities I admired in my boss?"

She took time to assess her strengths.

"By this point, I had 13 years of experience at FrieslandCampina, predominantly in financial management and financial systems, which exposed me to a range of strategic business challenges. A common denominator in my projects was simplifying and automating decision-making processes. Additionally, the past six years in Data & Analytics, where I led data-centric transformations, provided invaluable insights and connections across various departments. This experience, combined with my network, gave me the confidence to see how we could transform the way we work. That's what motivated me to say 'yes' to becoming Chief Data & Analytics Officer."

Building the Pathways to Transformation

Since taking on the role, Joëlle has focused on establishing the right conditions for transformation, including key initiatives in reorganising the data & analytics function and embedding data-driven approaches across the business.

Delivering the Reorganisation

One of Joëlle's primary goals was ensuring that the right team and resources were in place to support FrieslandCampina's data-driven transformation. As part of this vision, alongside the global Data & Analytics hub in the Netherlands, a new Technology Excellence Centre (TEC) was opened which built upon a small team located in Dutch Lady's vibrant office in Kuala Lumpur. This new hub strategically places FrieslandCampina's data & analytics team closer to the consumers of data in Asia, where the company has a strong presence. Over the past year, they've successfully recruited a highly skilled team at the TEC to support their global operations.

Delivering Business Value

Joëlle's approach to integrating data into business strategy has been centred on clear, measurable outcomes. One key target is delivering €30 million in business value within the first year, a commitment she views as essential for building credibility and demonstrating the tangible benefits of the company's data and AI initiatives.

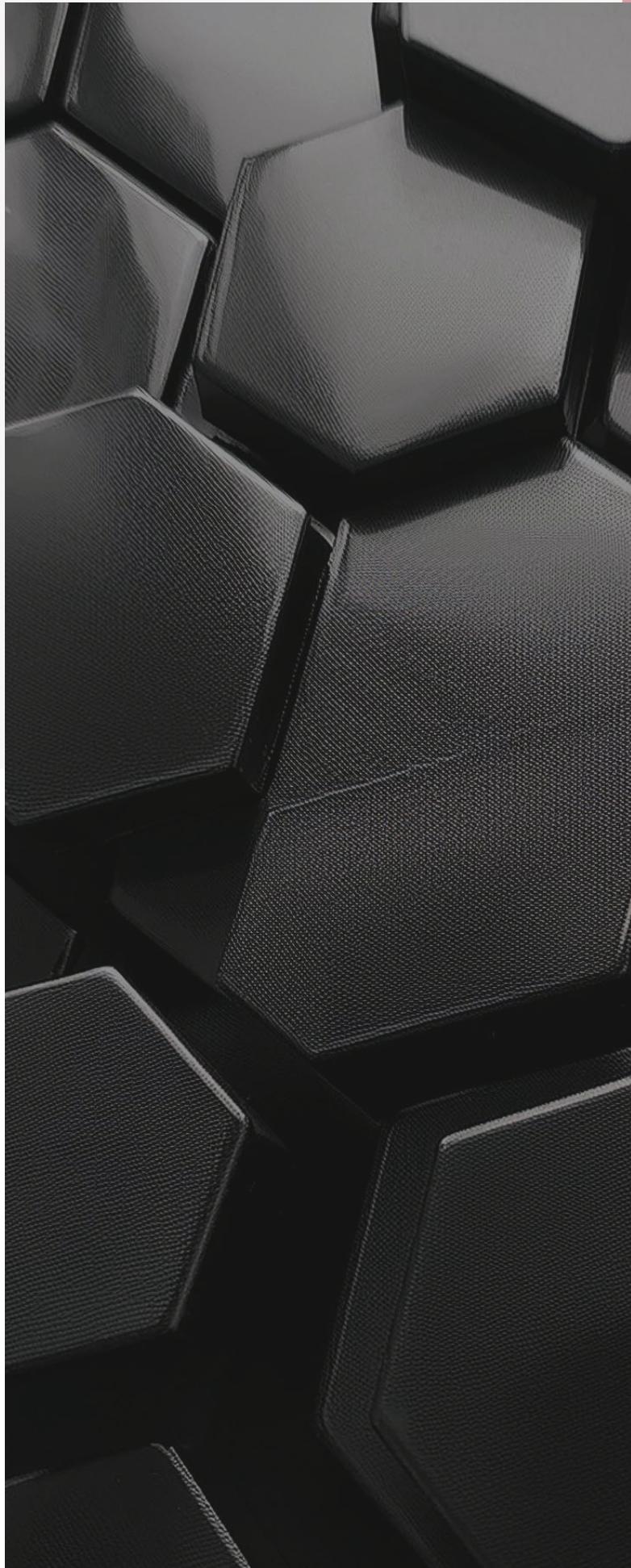
Building Effective Partnerships

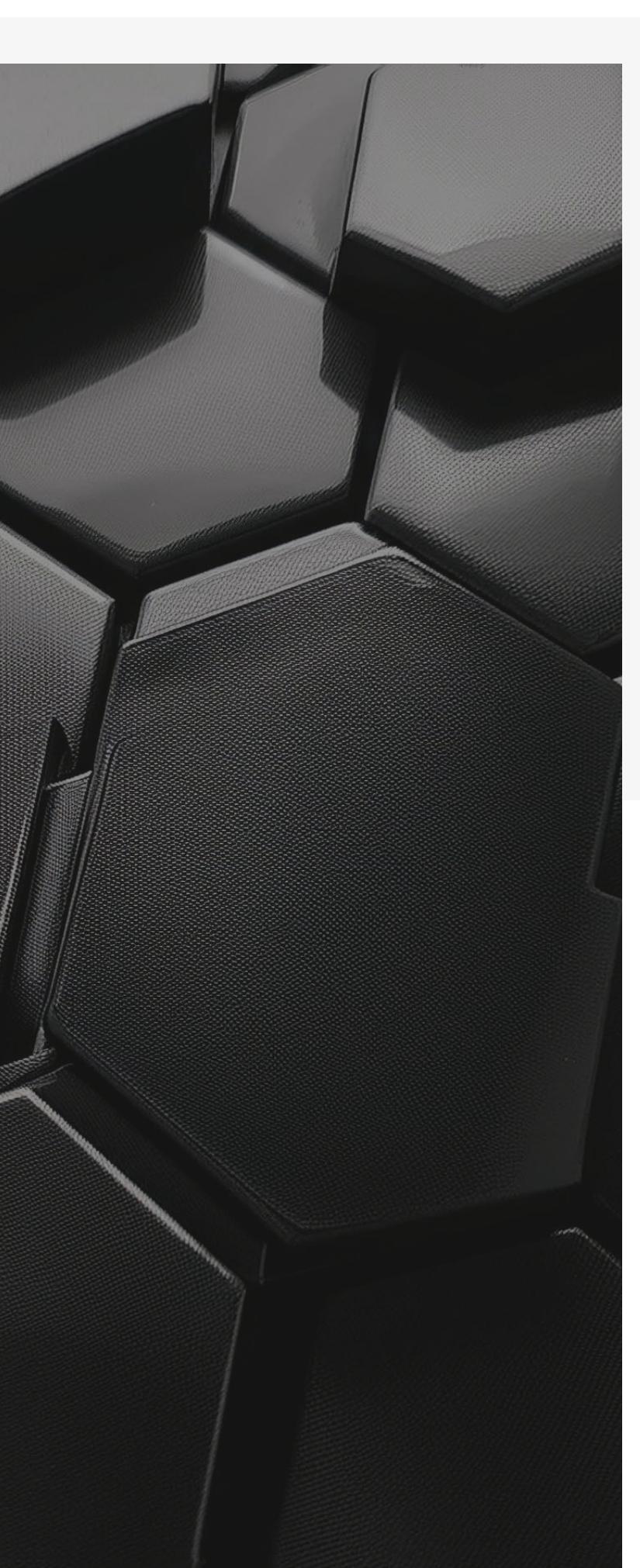
For Joëlle, true transformation relies on forming strong partnerships where all stakeholders are treated as equals. "I like to compare it to a modern kitchen: we've built something incredible with state-of-the-art appliances and technology, but what we really need now are the chefs—people who know the recipes, techniques, and understand the guests. Only when these worlds come together can we truly reimagine how we work and create opportunities that really make a difference, rather than simply automating what we've always done."

She emphasises that transformation hinges on deeply understanding business problems: "You have to see each other as partners, not as separate entities. As data leaders, we need to immerse ourselves in the business issues, ask questions to clarify needs, listen carefully, and adapt. I truly believe that's where success lies."

FROM AI TSUNAMI TO AUGMENTED ORGANISATION

CHAPTER 02





CHAPTER 02

FROM AI TSUNAMI TO AUGMENTED ORGANISATION

"I believe that taking a more measured approach is needed when deploying GenAI."

Dael Williamson, Field Chief Technology Officer at Databricks.

At Guild 2024, AI, and [generative AI](#) in particular, changed from being a talking point on the agenda to centre stage with CDOs comparing their experiences in managing the hype and the practical challenges of moving from proof-of-concept to scalable solutions.

In this section, we examine the current state of generative AI adoption, and explore the practical realities CDOs face in deploying and scaling AI technologies. We also uncover the critical success factors for scaling and delve into the latest research, uncovering the challenges of scaling LLMs and potential solutions that could significantly accelerate operational efficiencies.

When we convened Guild in 2023, generative AI was making a splash, but the implications of its arrival were still not clear. Pascal Clément referred to it as an impending “AI Tsunami”, warning that it would both accelerate data literacy and increase pressure on CDOs to deliver magical AI solutions regardless of whether their data foundations were ready.

His predictions were correct.

On one hand, the hype has caught the attention of Boards concerned they’re about to be left behind in the race. Many CDOs are turning this to their advantage to get increased support for data fundamentals:

“People are coming to us and asking how we can exploit generative AI. And for me, this is a huge opportunity to turn the spotlight back on to the data management and data governance that we need to have in place to unlock the power of generative AI,”

Catherine Taylor
Senior Director of Enterprise Data & Analytics at Elsevier.

On the other hand, CDOs face a myriad of challenges that are making it increasingly complex to effectively deliver and scale generative AI solutions. During Guild, they cited:

- **Unrealistic expectations of deliverable impact**
- **Sourcing valid use cases**
- **The threat of resources being redistributed if expectations are not met**
- **Increased competition for talent**
- **Navigation of new regulations**
- **Resistance to change and fear of job losses**
- **Shareholders requesting transparency on AI strategy**

“It’s tempting to want to use generative AI tools to automate everything. But, when you get into the use cases, you often find there’s a very different underlying root cause that doesn’t need an AI fix.”

Susan Dorward
Global Head of Data Engineering at Specsavers.

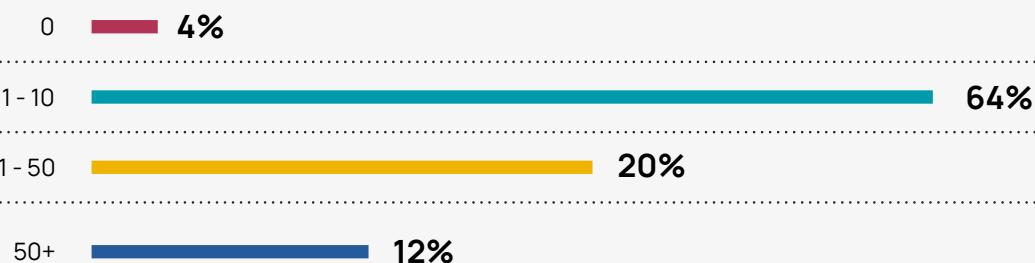
This is without considering the practical impediments to strategic generative AI deployment, which CDOs state include a lack of data availability, data quality, and explainability, rising hardware costs, and a lack of trust in models.



Who is responsible for Generative AI?

The complexity has led some CDOs to question whether they're even ready to take on the responsibility for generative AI.

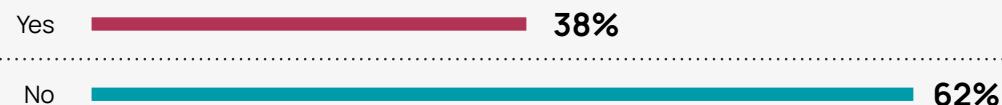
How many GenAI POCs do you have in development



Do you have GenAI use cases deployed and scaled across the business?



Are you responsible for GenAI in your organisation?



At Guild, GenAI ownership fell into three schools of thought:

1. Clearly, with the CDO

The most popular opinion held by Guild contributors is that it must sit squarely with the Chief Data Officer. There are a variety of justifications including:

A) It is a natural extension of the role: Many organisations already operate a hub-and-spoke model, with the central data office supporting local data teams embedded in business units. This model lends itself well to the integration of AI from a technical, governance, and commercial perspective.

B) Data resources need to be consolidated: In an increasingly fierce competition for

resources and talent, it's important that the CDO has control over the budget.

C) AI Ethics and Governance: The EU AI Act entered into force (1 August 2024), requiring the development of AI systems to comply with the new rules. While governance should not be the sole responsibility of the CDO, the data organisation needs to put in place robust compliance and ethical frameworks.

D) AI success depends on creating a data-driven culture: CDOs are already at the forefront of preparing organisations to leverage data and AI through tailored training and education. AI must be fully understood to be taught.

E) AI must align strategically to create transformation: AI use cases must be orchestrated at a global level in order to assess and prioritise strategically critical use cases.

2. Not with the CDO... yet

Some CDOs feel that assuming the responsibility for generative AI integration could overshadow the importance of core data management and overburden them before the organisation is ready to advance.

3. Do not know

It also came to light that some CDOs are undecided: the decision may be taken out of their hands and made by the C-suite. The consensus, however, is that Generative AI should, and in fact must be brought into CDO's role, whether the organisation is ready for it today or not.



Building the Augmented Organisation

Key Success Factors for Scaling AI

Despite the challenges, CDOs are using strategies to successfully deploy and scale generative AI solutions, particularly in the areas of customer service, retail, marketing and communication, alongside general-purpose AI.

Cornelia Schaurecker, CEO at Innotech AI Consulting, Former Global AI and Big Data Leader at Vodafone Group and Founder of Volkswagen Group Data Lab, attributes her success in building and scaling AI to a nine-step AI building-block framework that brings clarity to the AI strategy and use case portfolio, coupled with a commitment to deliver at speed and scale, even if it means making tough decisions.

To be able to successfully deliver on each of the AI delivery building blocks, she endorses a set of key success factors. To mention only a few:

1. For your AI Policy, Bring All Appropriate Stakeholders Together

Build Steering Committees

"You can't do everything, because then, you're not focused on delivering your use cases. We built up a SteerCo with powerful stakeholders which met regularly on a group, global and local levels. When my team and I elaborated our Global AI policy, we created a team of some 45 appropriate people from all across the company, including the legal experts, the tech experts, the cyber experts, the external affairs, as well as our big data, AI and ethics experts."

2. Focus

Be ruthless with your use case selection, focusing on value, size, scalability and do-ability.

"When building the global and local Data and AI Use case portfolio, we really focused on a couple of global use cases. Really focus your resources and your team because there will be lots of issues when it comes to scaling."

3. Start With Business Buy-in First

Do not waste resources on use cases that do not have the buy-in of the business.

"If you don't have the business buy-in, you won't get the right data, and you won't get their support for the human change management."

4. Automate to Accelerate Use Case Delivery

Invest in automation to reduce the time-to-delivery.

"We worked a lot with strategic tech partners to automate the way data science solutions were built and IT impediments like cyber checks were fulfilled. Automation makes things more frictionless, and it meant we could dramatically reduce the time to build use cases."

5. Get your Tech Stack in Order.

Without good technology, you won't get good talent.

"In my 12 years of experience building data science and AI teams, I have never known the battle for talent to be as fierce as it is now. Scaling is all about having the right people and tech capabilities. If you don't have the underlying tech, you simply cannot scale."

6. Build the Right Delivery Model

Focus your resources.

"The right delivery model is key, so a big part of my work is focused on helping companies build the right ecosystem to execute a MAKE/BUY and PARTNER delivery model. I'm a fan of the saying, "if you are doing what everyone can do, you're not doing what only you can do." Our approach in the telco and car industry was to have the data at hand, have talented data scientists and the right business people, and then do what only we could do. The rest should be done with the best possible partners." is industry common best practice that can be bought."



Augmenting Organisational Efficiency: Bridging the Intelligence Gap

"If we were to take the lens of looking at an organisation as if it was a living system, it would be eaten by something very quickly, just because of how inefficient it is."

Dael Williamson

Field Chief Technology Officer at Databricks.

While organisations are enthusiastic about the potential of generative AI to realise substantial operational efficiencies, when it comes to scaling these technologies, CDO teams are encountering significant obstacles.

"90% of use cases we see are stuck in proof of concept,"

says Dael Williamson, Field CTO at Databricks.

"We're seeing people going, "We've done this first experiment, but we actually don't feel comfortable getting adoption." And these are the reasons they're giving us..."

1. Cost

The first is straightforward cost which is already hitting hard for some and is expected to increase in the future:

Andrew Day, ai.io.

"Cost is the biggest obstacle to scaling largely because our workloads are using computer vision, which is hellishly expensive to run in the cloud. Now, with GenAI, the costs are going up massively, and as a startup, we need to find a way to manage that and the growth."

2. Explainability

The second is the immaturity of LLMs, the lack of understanding of how they work and their hallucination effects.

"We have a lot of work to do before we actually understand how these things work inside. We have always worked with deterministic computers where the inputs and outputs are repeatable. These are probabilistic models. They're fundamentally different computers,"

says Williamson.

3. Optionality and portability

Thirdly, organisations often face limitations by being tied to specific cloud providers or proprietary AI models. This lack of flexibility can hinder their ability to adapt and innovate.

4. Lack of control

CDOs are also realising that, ultimately, they have little control over the models, outcomes and intellectual property, all of which they want to protect. Their concern is that by giving away too much data in the rush to compete in the AI race, they may be giving away a lot more IP and company intelligence:

"You're seeing a lot of people going, "I can't build AI capabilities, so I'm just going to do a deal, provide my data and wait for the returns."

He goes on to explain,

"What's really fascinating is that we're observing this intelligence gap that exists in multiple areas of how we conduct business. But what we're also starting to see play out is that there is value there lying in specific pockets like email, business processes encoded in SAP and business logic embedded in code."

These pockets of value are the impetus for Project Genie, a Databricks research programme looking at how natural language could be used to embed this kind of "data intelligence" into business decisions and processes to drive efficiencies.

"If you look at emails from executives, they are one-liner questions and responses which look very much like prompts. In Project Genie, we're training the model to derive semantics from emails via a weighted prompt library,"

Williamson explains.

"What we're seeing emerge is a new way of working in which an actor has the skills, prompts and questions to understand context and semantics, which are now encoded, and apply them to the insights derived through information and knowledge."

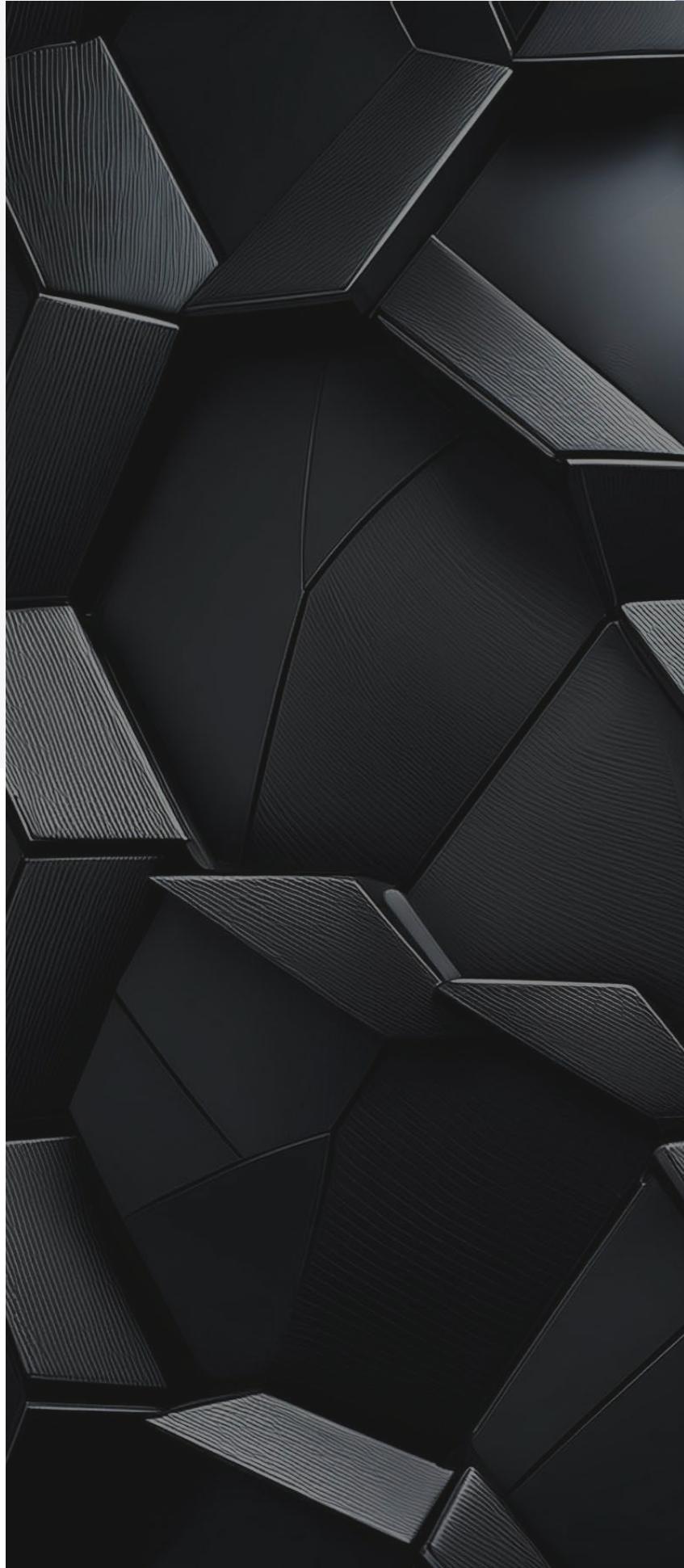
The early results arising from creating this data intelligence layer show decreased time spent in meetings, more empowered decision-making and a switch from tasks relating to internal company intelligence to a greater focus on understanding the external environment.

"It's early days in for the project, but already, the value it's demonstrating to change how you work and be really efficient is truly fascinating. It's why we encourage companies to be wise about what they do with all their data."

Project Genie is just one example of how generative AI's application is evolving fast. In their [2024 Hype Cycle](#), Gartner also predicts that generative AI will soon replace traditional BI. What's clear is that AI's evolution will require organisations to continuously adapt their data strategies to its emerging capabilities. It's also clear that companies must pick the right leadership to navigate this path. While Gartner sees its traditional audience, the CIO, taking responsibility for AI technology decisions and CDOs returning to focus squarely on data management, Guild 2024 clearly showcases how far CDOs have come in building the [business relationships and acumen that will underpin AI's successful integration](#). Whoever takes the helm, the collaboration between CDO and CIO must be seamless to succeed.

FOSTERING A DATA-ENGAGED ORGANISATION

CHAPTER 03





CHAPTER 03

FOSTERING A DATA-ENGAGED ORGANISATION

“I firmly believe that data and technology mean nothing in an organisation without engaged people and the right culture.”

George Papadatos
Global Head Data Strategy and Data Assets at Syngenta

Building data-engaged organisations remains one of the most challenging and complex items on the CDO agenda. Guild 2024 showcased significant breakthroughs data leaders are achieving, both thanks to and despite the generative AI hype.

In this section, we explore the CDOs' evolving strategies to foster a data-engaged culture within their organisations. From aligning data initiatives with strategic goals to breaking down silos and leveraging generative AI, we delve into the various approaches and success stories that highlight the growing importance of creating a data-centric mindset across all levels of the enterprise.

Changing Culture

People have a tendency to go back to what they know, and this is a challenge that is deep in the roots of culture. So, the question was, how can we change culture without changing culture?"

Nuno Assis, Miele X.

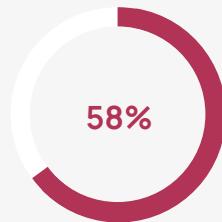
CDOs have long cited culture as the biggest impediment to successfully integrating data and analytics into working practices and, critically, organisational strategy.

Data Leaders' peer discussions and benchmarking data have shown the scale of the impact, as well as the resources and time required to nurture adoption and create an openness to data-backed decision-making.

It has been particularly challenging to balance the rapid pace of technological change with the slow pace of change. However, Guild 2024 brought to light many key learnings and success stories, demonstrating that CDOs have been honing their skills and strategy to build more data-engaged cultures.



of data teams say decision making is not backed up by data.



of data teams say there is not a good level of data literacy among their Executive Committees.

Source: Data Leaders benchmarking data July 2024

No one wants to talk about data

Private sector CDOs have learned by trial and error that the way to a senior executive's heart is through their P&L, not through explanation:

Elizabeth Osta:

"Measuring financial value from deployment of AI use cases is a good and solid starting point. You need to be quite bold and want to create value with AI that, over time, is the same size of a small business unit. You need to have targets for year 1, 2 and 3 and most importantly alignment with Finance on the measurement and the business for deployment. However, there needs to be an evolution in the measurement of value towards impact – AI impact needs to reflect not only financial value but also impact on society, climate, employee satisfaction."

Paola Cagliani backs up Osta's approach:

"I start aligning data initiatives with the organisation's strategic goal and objectives by finding critical metrics in the company's strategic plan and showing how data foundations can successfully improve them."

For public sector organisations, their leaders want to know how they generate increased social value:

"If you look at the broader use of data for policymaking, there's a lot that can still be improved, and even services to citizens can still be further improved,"

says Bert Verdonck, CEO at Luxembourg National Data Services.

Abbi Agana agrees:

"There is an aspiration to address health inequalities i.e. to provide good quality healthcare for marginalised people. There is a standard data set complied by the ONS every two years called the Indices of Deprivation which identifies where the most marginalised communities are and what their challenges are. By designing a strategy for the organisation that seeks to address all these data domains, there's a real opportunity to bring that data together, enrich it and to use it to drive and design initiatives that together, as one, improve health outcomes."

Breaking Down Silos

Breaking down silos is fundamental to bringing the organisation together to be able to leverage AI and data.

Agana emphasises the importance of collaboration and transparency, as well as subtle guidance, in breaking down these silos to drive significant value.

"Data is my Trojan horse in transformation. It helps you to get the measure of an organisation very quickly to assess the starting point. It is also a powerful tool to galvanise the C-suite around their single mission and help them realise the power of connected data to fuel their strategic vision."

Her approach includes building multidisciplinary squads united around a single business problem.

"You start with the sponsors in the room. You don't have preconceptions as a data team, working hand-in-hand with the organisation, co-creating from the very beginning. Even if you had a hypothesis to begin with you have to allow the business to come along on the journey and understand and own the outcomes.

Another key tactic is to acquire a deep understanding of the organisational issues and goals: "I'm at team meetings to understand the organisational challenges and then translating them into data-driven solutions. I'm not selling data - I'm selling solutions to problems. Invariably, those solutions are in the data, but they don't know that initially."

In addition to tactics in the field, CDOs are having greater success in getting the buy-in and investment for consolidated, targeted data literacy programmes.



CASE STUDY

Syngenta's Digital Growth Academy

For Syngenta, a digital transformation strategy is key to addressing the complex challenges of modern agriculture. Recognising a gap in digital literacy and upskilling among its R&D staff, George Papadatos, Global Head of Data Strategy and Data Assets at Syngenta, saw it as a critical opportunity to foster a data-driven culture and empower employees with the necessary skills and mindset to support the transformation.

The digital transformation strategy rests upon two pillars: seamlessly connect data and empowered people: *"For the first time, we defined what kind of behaviours and attributes we want from data culture. And that's curious, open, data-centric, and empowered."*

Their strategy to empower their employees has been through the establishment of a Digital Growth Academy. At Guild, he told us the story of how he and his team secured the required support and investment, the content strategy, and the impressive outcomes achieved to date.

Journey to the Digital Growth Academy

1. Gaining Leadership Buy-In: Finding the “Why.”

The vision for the academy was ambitious: it needed to be expansive, credible and impactful. To secure support and funding, the leadership team were asked to articulate their desired outcomes from the academy.

"First of all, better management of data, better generation of data, better decision making by better use of the data. Of course, innovation and the ability to interpret data better and share data across functions. And then, of course, there's the third part, which is the value for the employee, to create something that will boost professional development and career growth, but also make people feel a part of a bigger, vibrant unity."

2. Leveraging Peer Best Practices and Partnerships

As a Data Leaders member, Syngenta had access to best practice examples of peer data literacy programmes. They found one that particularly resonated with their goal and asked Data Leaders to make an introduction. This led to Syngenta finding the right partners to build the academy.

3. Designing An Expansive High-Quality Curriculum

Tailored to R&D and designed around personas, the curriculum caters to a range of learning needs and styles: data fundamentals certified by the Open Data Institute; tools and training, a Data Atlas of data systems and their owners, keynote video presentations on emerging technologies, and finally, culture which is addressed through a toolbox of content designed specifically to drive desired behaviours: Curious, Open, Data-Centric, Empowered (CODE).

"We worked within the ADKAR change management framework to make the content outcome-driven, awareness, and drive desire, knowledge, application, and reinforcement. That's how change works. You must go through all these steps."

Papadatos also underscores the importance of producing high-quality content.

"It was quite a big effort, but we wanted to show that we are serious about digital transformation and don't want to cut corners. So, if we're serious, we have to invest time and money to produce something of very high quality. And I think, in the longer term, it pays off."

4. Relentless Collaboration

They also recognised the criticality of broad collaboration to maximise adoption.

"From day one, we engaged with a lot of people. We started piloting, workshopping, and brainstorming with engagement squads, which consisted of digital leads and champions, experts and early adopters, continuous improvement leads, and change leads."

They also re-engaged with leaders to prepare them to support adoption.

"We spent a lot of time explaining what we wanted to do and what it would mean for their groups, for their teams, for their people. We even had custom-tailored upskilling sessions with them, going through concepts of machine learning and data management and showing them examples."

Results

Results

The outcomes of Syngenta's Digital Growth Academy highlight the success of their strategy.

1. High Adoption Rates

To date, the academy has engaged approximately 2,000 active learners and saw 1,600 completions of the Data Fundamentals course, despite it not being mandatory.

2. Cross-Functional Adoption

Other business units within Syngenta have adopted and repackaged the academy's content for their own use, indicating the programme's broad applicability and success.

3. Increased Employee Engagement

R&D groups have independently organised digital upskilling events, underlining the programme's close alignment with the organisational culture.

4. Shift in Data Perception

Enhanced recognition of data's importance, evidenced by requests from business units to appoint data governance leads and establish data asset owners.

5. Senior Leadership Support

There has also been strong endorsement and involvement from senior leaders, who have participated in tailored upskilling sessions and promoted the academy's initiatives.



CASE STUDY

BAE Systems' Ambitious Data-Engagement Programme

BAE Systems' approach to improving their level of data engagement follows a similar approach. They initially began their programme by focusing on catering to the training needs of specialists, including data owners and stewards, before identifying natural data enthusiasts. Here, the approach has been to equip them with content that supports them to advocate for and demonstrate the value of data and analytics to their peers.

This approach has enabled them to reach over 1,600 employees. However, the target is much more ambitious:

"Our target is everyone: 100,000 employees," says Samir Patel, going on to call it an "outrageously high target, but just challenging the business to reach it, I think we'll get close. If we get to 70%, I'll be delighted, but if we tell people we're aiming for that, the first thing they will do is try and make a case for why they're in the 30% that doesn't need to do it."

Like Papadatos, BAE Systems is now building a Digital Academy following many of the same core principles including avoiding gimmicks and top-down mandates. Patel also adds that healthy competition has been a great way to maintain engagement. Finally, he stresses the importance of focusing on real-life applications and upskilling the data team so, when working with business users, they are able to "talk to each other rather than past each other."



CONCLUSION

The insights shared by Guild contributors reveal that CDOs are arriving at a significant inflection point. In 2023, generative AI was creating ripples in organisations. In the elapsing twelve months, the floodgates have opened, and we're seeing CDOs managing the impact. However, they are not all in the same boat.

The key revelation has been the impact CDOs in more mature organisations are now generating by stealthily moving beyond proof-of-concept to successfully scaling AI technologies, both generative and general-purpose.

The transformation that has been largely theoretical in previous years is materialising, although not without its challenges. The technological challenges are universal, and CDOs will work together as a community to overcome them.

The true differentiation will come through the application of AI at scale. As explored in this report, this requires organisations to rely much more heavily on the business acumen and leadership qualities of their CDOs, who must be able to deeply understand today's business objectives and processes, reimagine their future and galvanise stakeholders in order to orchestrate its transformation. Critically, they must continue to support the efforts to build a data-engaged organisation as Paola Cagliani, EU Chief Data and Analytics Officer, Admiral Group, underlines:

"Training and organisation on AI is essential for maximising the value and the impact of artificial intelligence, fostering a culture of innovation and learning. Otherwise, the risk is that the organisation itself becomes the blocker, not the technology, ethics or compliance."

Given the complexities and unknowns of even the proximate future, companies will need to urgently recognise the strategic importance of the CDO role and trust their counsel. In organisations where data and analytics are still playing on the sidelines of business strategy, they must be integrated as soon as possible, starting with key strategic programmes.

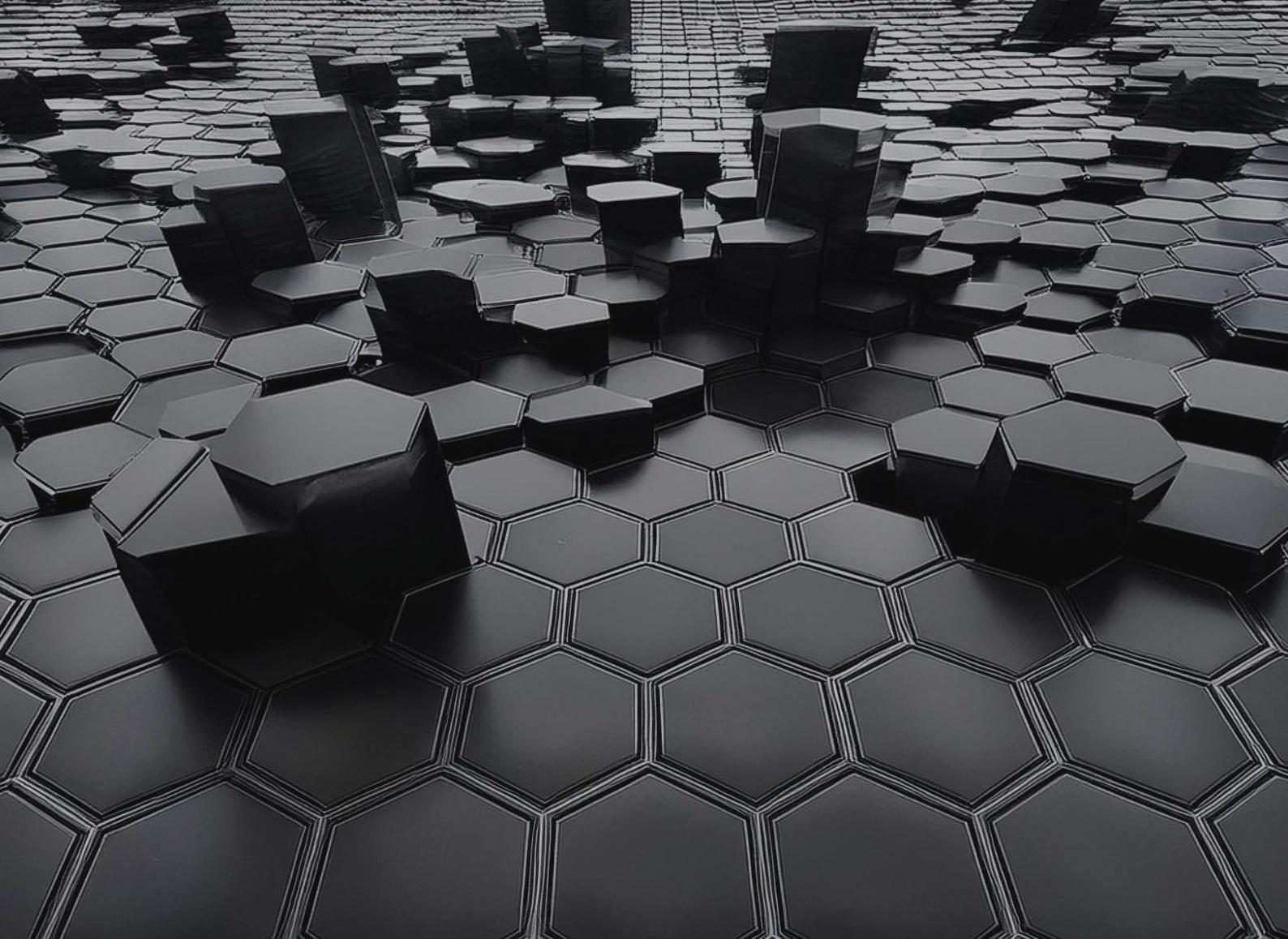
As we explored in Chapter One, data and AI are not just the drivers of a more unpredictable future but also a critical part of the solution. Already, a core group of Data Leaders' members are working together to tackle one of the key contributors to uncertainty: climate change, through the [Data-Enabled Sustainability Initiative](#).

It's a step in the direction that a growing number of data leaders believe the CDO is heading towards, even seeing them as the next generation of CEOs:

"I have a very strong conviction that the next evolution of the CDO is a person who pays attention to the business performance of the company, thinking not only about the gross margin or revenue, but also about people and the planet."

Didier Mamma, Decathlon.

Whatever the predictions, one certainty is that the CDO role will continue to evolve in line with its growing criticality as CEOs commit to making data and AI the core competency of the organisation. Whether that will be as CDO, CDAO, CDAIO, or a new title remains to be seen.



In partnership with:  **databricks**



VOICE OF THE CDO

ANNUAL REPORT
2024

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