

How 200 Analytics and Cloud Leaders Connect People, Processes, Data and Technology









Contents

Click below to navigate

Executive
Summary

4

Methodology, Key Findings and Contributors

The State of
Data-Driven Business
Transformation

11

Key Challenges Facing Data and Analytics Leaders

Three Elements of
Successful Data-Driven
Transformation

18

Self-Service Analytics is the Future

How Cloud
Modernization Powers
Advanced Analytics

23

From Cloud Migration to Modernization

Death of the Monolithic Data Platform

30

Now is the Time to Transform





Executive Summary

nterprises across the world are at an inflection point. As speed and resilience continue to be critical, analytics and cloud leaders are building data-driven businesses.

Some executives have moved their vision for a data-driven enterprise from the experimentation phase to scale successfully, with the help of the cloud. But for most, there's still a long way to go. Just 21% of the 200 data, analytics and cloud leaders we surveyed say their enterprises use data-driven decisions to realize business value "all the time".

This research identifies three common factors that distinguish the most datadriven enterprises from those at the start of their transformation journeys:

- Collaboration between business and technology leaders, plus support for transformation from company executives.
- A culture in which data, analytics and cloud strategies are aligned with business objectives.
- A trusted foundation of data that data literate employees can use to uncover valuable business insights.

However, our findings also show that most data, analytics and cloud executives are still struggling to put these things in place.

A full 88% of respondents say their enterprises will have invested in cloudnative platforms by the end of 2022. But challenges around securing budget, maintaining vendor-agnostic cloud architectures, and securing executive support for cloud initiatives are preventing many from implementing their ideal data architectures in the cloud.

Crucially, this research highlights that data and analytics best practices are changing. We're seeing the rise of a new hub-and-spoke model that combines elements of data strategy centralization with decentralized infrastructure and crossfunctional data teams. This also calls for a cultural shift, as business and technology leaders must work together to boost data literacy throughout the enterprise.

In this report, we delve deeper into our findings and their implications for what it means to be a data-driven business. We outline how leading enterprises integrate people, processes, data and technology to deliver defined business outcomes.





Methodology

his survey of 200 data and analytics leaders from the US (50%), Germany (15%) and the UK (35%) was conducted in February 2022.

Respondents were selected from companies with annual revenues of at least \$1 billion USD in sectors including banking and financial services, insurance, healthcare and life sciences, technology, consumer packaged goods, media and entertainment, industrial manufacturing and retail.

Their role levels range from C-level to Directors, VPs or Heads of Department, and all have influence over their organizations' data, analytics and cloud strategies.

Respondents were asked 15 questions about their enterprises' data strategy maturity and cloud journeys, as well as how they're working to instill data-driven practices throughout their organizations.

Key findings

100%

of respondents say an inability to make decisions using data has had a negative impact on their business

Only 9%

say their cloud migrations are complete, despite the need to focus on cloud modernization

Just 8%

have data and advanced analytics fully embedded into company processes and modernized in the cloud

Source: Corinium Intelligence, 2022

87%

say their enterprises' master data management programs do not provide a complete view of all the data types they need to provide timely insights

78%

find galvanizing executive support for data-driven innovation and business transformation challenging

x2

The most data-driven enterprises are roughly twice as likely as the least data-driven ones to provide analytics capabilities to business units 'as a service'





Contributors



Zachery Anderson PhD Chief Data and Analytics Officer, NatWest



Deepak Jose Global Senior Director and Head of Analytics Products, Mars Wrigley



Vladimir Bacvanski PhD Distinguished Architect (Senior Director), PayPal



Aleksandar Lazarevic PhD Former VP of Advanced Analytics and Data Engineering, Stanley Black & Decker



Sanjeevan Bala Group Chief Data and Al Officer, ITV



Dan Power MD, Data Governance, State Street Global Markets



Glenn Hofmann PhD Chief Analytics Officer, New York Life



Arvinder Singh CEO, Enquero (a Genpact company)



Vikrant Karnik Global Cloud Services Lead, Genpact



Morgan Templar VP, Information Management, Highmark Health



Chun Schiros PhD SVP, Head of Enterprise Data Science Group, Regions Bank



Amaresh Tripathy Global Analytics Leader, Genpact



Sandeep Singh **Business Data Services** Practice Lead, Genpact



Ian Wallis Deputy Director, People Analytics and Insight, HMRC



The State of Data-Driven Transformation

KEY FINDING

While enterprises have accelerated their data-driven transformations over the past 24 months, just 21% use data-driven decisions to realize business value 'all the time'

n the post-pandemic era, business is more digital, more intelligent and more data-driven.

Corinium and Genpact wanted to find out if the pandemic-era demand for data-driven innovation has translated into lasting business transformations.

So, we surveyed 200 data, analytics and cloud leaders from the US, UK and Germany.

Of the executives we surveyed, 97% say they use data-driven decisions to realize business value at least "some of the time". Meanwhile, 60% say they now base business decisions on data at least "most of the time".

These findings contrast starkly with those of Corinium's 2019 Four Data and Analytics Trends to Watch survey, in which 40% of respondents said their companies had never used data to justify business decisions.

"COVID-19 has been a real catalyst for the maturation of data and analytics," says Zachery Anderson PhD, Chief Data and Analytics Officer at retail bank NatWest. "[It] forced a lot of



executives and senior people to, all of a sudden, look at the data."

Chun Schiros PhD, SVP, Head of Enterprise Data Science Group at Regions Bank, agrees that the pandemic has accelerated enterprise digital transformations.

"A lot of seemingly impossible tasks or simply impossible transformations have now become the primary ways of doing business," she says.

Today, data is no longer used just to improve processes. For many, it's become an integral part of every initiative, from bolstering supply chain resiliency to supporting diversity, equity and inclusion (DEI) initiatives. But while progress has been made, there's still a long way to go.

21%

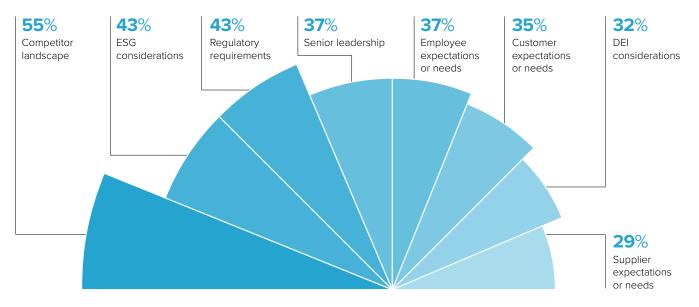
of respondents say their companies use data-driven decisions to realize business value "all the time"





Enterprises are Under Pressure to Transform

What is driving demand for data-driven business transformation in your organization?



Source: Corinium Intelligence, 2022

What's Driving Demand for Data and Analytics

Pressure from competitors is the most frequently cited driver for data-driven business transformation among the executives we surveyed. A full 55% say this is driving demand for transformation in their enterprises.

"The pandemic accelerated the need for data-driven decisionmaking," notes Deepak Jose, Global Senior Director and Head of Analytics Products at confectionary company Mars Wrigley. "We have quadrupled the number of workstreams in analytics since the beginning of the pandemic."

Meanwhile, 43% say regulatory requirements are a key transformation driver and 43% say the same about environmental, social and governance (ESG) considerations. This finding

speaks to the <u>growing roles</u> environmental sustainability and DEI considerations are playing in steering business strategy at large.

"Data or not, this shift is happening and is becoming a driver of competitive advantage," says Amaresh Tripathy, Global Analytics Leader at professional services firm Genpact. "What's really interesting from a data analytics perspective is that there isn't an established set of metrics for ESG. There's work to be done globally to develop a standardized measurement framework for these things."

"ESG will become a business domain in its own right, much like we have seen with the appointment of DEI officers," he predicts. "This is an area where you will have a lot more data flowing in from third-parties, such as government agencies. That has implications on how you think about data architecture"

"A lot of seemingly impossible tasks or simply impossible transformations have now become the primary ways of doing business"

Chun Schiros PhD

SVP, Head of Enterprise Data Science Group, Regions Bank





Driving Cultural Change is a Top Priority

To support different business units, data, analytics and cloud leaders are realizing they must oversee a cultural shift where their technology strategies empower employees to make datadriven decisions. In fact, 42% of the executives we surveyed are allocating budget to establishing this kind of data-driven business culture in their enterprises this year, making this the most common investment focus among respondents.

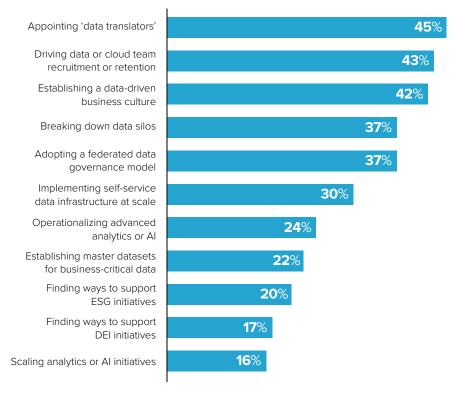
"The thing we're focusing a lot on is culture," reports Sanjeevan Bala, Group Chief Data and Al Officer at British television network ITV. "If we don't empower colleagues at ITV, [digital transformation] is never going to really stick. So, how do we ensure that, whatever we do, it's more than just the technology and data, and it's actually about the cultural change that needs to happen?"

Similarly, 45% have budget allocated for appointing 'data translators' to act as a bridge between data teams and the rest of the business.

In many organizations, small teams with specialized training are responsible for data and analytics initiatives. As a result, most departments rely on a limited group

Executives are Investing in Driving Cultural Change

Which of the following will your enterprise be allocating budget to in 2022?



Source: Corinium Intelligence, 2022

of individuals to handle their data needs. In the digital age, however, this model is unsustainable.

Business leaders realize that all employees must have the cloudbased tools – and the data literacy – to unlock data's power. As such, data teams must evolve from technologyfocused functions to strategic, business-focused ones.

"We're living in an information literacy era and people need to be comfortable using information in their daily tasks," says lan Wallis, Deputy Director, People Analytics and Insight for the UK's HM Revenue and Customs (HMRC) department. "That's a philosophy we're trying to embed."

"Whether we like it or not, enterprises need to have an incentivization mechanism for data sharing," argues Arvinder Singh, CEO at technology solutions provider Enquero, a Genpact company. "A data culture is percolated once you can collect data, make it open and accessible with cloud and create communities around it."

"A data culture is percolated once you can collect data, make it open and accessible with cloud and create communities around it"

Arvinder Singh

CEO, Enquero (a Genpact company)





Focus Areas for Data and Analytics Leaders

Driving product development (49%) and improving customer service (47%) are the top functional areas data, analytics and cloud leaders will prioritize when making investment decisions in the coming 24 months. Delivering analytics capabilities for ecommerce is also a key priority for 44% of respondents.

These findings speak to how important it is for these leaders to provide insights that can be used to accelerate customer experience (CX) initiatives.

"Customers expect you to know who they are, what they're doing and what they need before they even ask," Dr Schiros says. "Without understanding the customers via data, you really can't form or execute those strategies to improve customer experience."

"Customers expect you to know who they are, what they're doing and what they need before they even ask"

Chun Schiros PhD

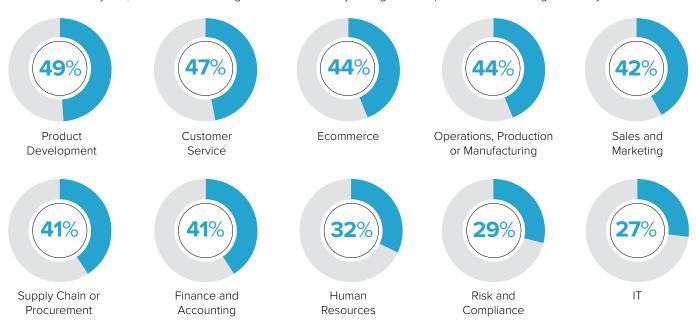
SVP, Head of Enterprise Data Science Group, Regions Bank

After a long period of disruption, many enterprises are also proactively using datadriven insights to future-proof their businesses. With 51% of respondents saying their companies have lost revenue because of their inability to make data-driven decisions, the stakes have never been higher.

"We still have significant challenges in supply chain and operations in general," reports Aleksandar Lazarevic PhD, former VP of Advanced Analytics and Data Engineering at tools manufacturer Stanley Black & Decker. "There is often irregular demand coming from our customers, and that's something we need to monitor really closely to optimize the overall operations."

Data Leaders are Supporting a Range of Business Areas

Over the next two years, which of the following functional areas will your organization prioritize when making data analytics investments?





Key Takeaways

Speed is a differentiator

Faced with a tough competitor landscape, data, analytics and cloud leaders are aware of the urgent need to transform their organizations at speed. They are moving their data, analytics and cloud strategies from experimentation to scale. Other executives may wish to follow their example.

Business and technology strategies are merging

Historically, enterprises have focused their efforts on a few high-value use cases for data and analytics. But many are expanding their strategies to drive enterprisewide transformations from ESG to CX initiatives. In short, data and analytics is no longer just an IT concern.

Culture is king

To deliver results, executives must invest in programs that integrate data-driven insights with their companies' business processes. This calls for a cultural shift to focus on data, analytics and cloud strategy, enhanced data literacy and close relationships between business and technology leaders.





DATA POINTS AT A GLANCE

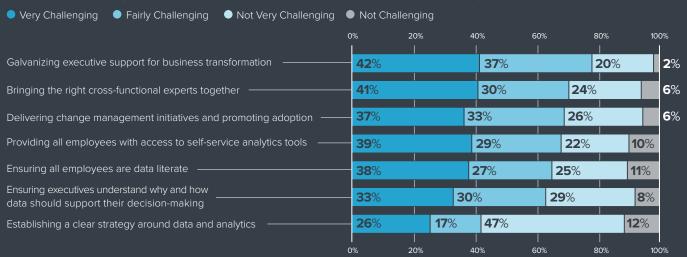
Key Challenges Facing Data and Analytics Leaders

KEY FINDING

Today, few enterprises are truly data-driven. Our research has identified seven hurdles executives must overcome to transform their organizations

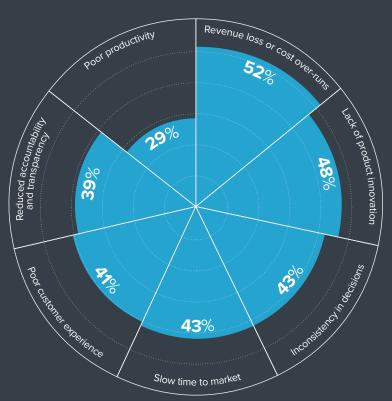
Many Hurdles Stand in the Way of Change

Please rate the following hurdles on the road to establishing data-driven business cultures as they apply to your enterprise



Enterprises are Missing Opportunities as a Result

Which of the following potential consequences of the inability to make consistent, data-driven decisions have impacted your organization?





Three Elements of Successful Data-Driven Transformation

KEY FINDING

Successful analytics programs start with executive support, well-aligned cloud and analytics strategies and a foundation of trusted data to inform business-critical decisions

hen developing this research, we wanted to identify the essential ingredients for analytics success. What do leading enterprise analytics strategies have in common? And what are the challenges that may hold others back?

To that end, we asked our 200 survey respondents to describe the maturity of their cloud-based analytics capabilities. In this way, we divided our sample group into four segments:

8%

Analytics innovators

say their enterprises have embedded data and advanced analytics fully into company processes.

41%

Advanced adopters

say they have made analytics insights available to 'early adopters' in their companies via self-service tools and have started scaling AI systems across their enterprises.

39%

Partial adopters

say they are developing analytics solutions on a 'use case' basis and are starting to automate processes with Al.

Data beginners

work at enterprises which have yet to put their core data governance framework in place and depend on analytics infrastructure that is largely siloed and on-premises.

12%









This analysis suggests that most enterprises are reaching the end of the experimentation phase of their business transformations and setting their sights on driving organization-wide change.

While it's encouraging to see so many analytics adopters, making the move to scale as an analytics innovator has proven an unattainable goal for almost all enterprise data leaders, so far.

Making these comparisons also enabled us to identify three common features that the most successful enterprise data and analytics strategies have in common.



Executive support



Cloud-enabled data infrastructure



Single sources of truth for critical datasets







ဂိုနာ် Executive Support

Executives are responsible for allocating budget and resources to data, analytics and cloud initiatives. But their support also sets the tone for how willing employees across the enterprise are to adopt them.

So, it's notable that just 6% of our analytics innovators say its "very challenging" to secure executives' support for data and analytics initiatives in their organizations.

Meanwhile, 29% of our data beginners and 49% of our partial adopters say it's tough to get buy-in for these projects.

Across all survey respondents, 78% say they find getting executive support for data-driven innovation and business transformation challenging. Increasing data literacy

"You have to bring data science education to your executives"

Glenn Hofmann PhD

Chief Analytics Officer, New York Life

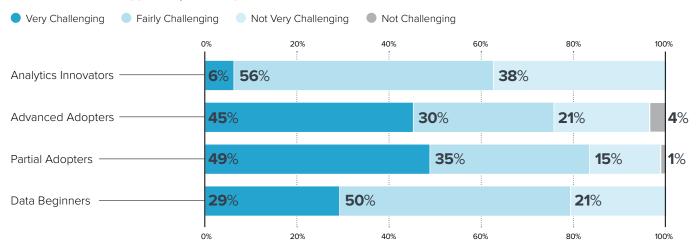
among company executives to ensure they understand the value these investments can offer may help get these executives on-side.

"You have to bring data science education to your executives," says Glenn Hofmann PhD, Chief Analytics Officer at insurance company New York Life. "We've trained over 150 company leaders, highlighting, at a broad level, New York Life's approach to data science.

"Through these workshops, our executives have had the opportunity to further their understanding of the power of data science and how our work has benefited many areas of our business over the last several years."

Data-Skeptical Executives Hold Business Transformations Back

Please rate the challenge of securing executive support for establishing a data-driven business culture as it applies to your enterprise









Cloud-Enabled Data Infrastructure

Cloud maturity is the second factor that separates analytics innovators from data beginners. Analytics innovators, who have embedded data and analytics into company processes, also tend to be further through their cloud migration journeys than less datadriven enterprises.

"The cloud is definitely an enabler," remarks Chun Schiros PhD, SVP, Head of Enterprise Data Science Group at banking company Regions Bank. "With cloud migrations, compute capability increases, which opens doors to a lot of applications."

In fact, our analytics innovators are five times more likely than the data beginners to have completed their cloud migrations. What's more, 75% of them say they are more than halfway through their migration plans.

This enables them to focus less on migration and more on modernization.

"The speed of innovation is one of the most significant benefits of moving to the cloud," says Vladimir Bacvanski PhD, Distinguished Architect (Senior Director) at PayPal. "With the various service offerings in the cloud, there are a variety of technologies that are available to companies to use immediately."

One reason for this correlation between cloud and analytics maturity is that cloud technologies make it easier for enterprises to experiment with and deploy analytics at scale to drive value for their business lines. The cloud also enables enterprises to join up siloed data stores from across their business units and to empower data literate employees to generate data-driven insights using self-service tools.

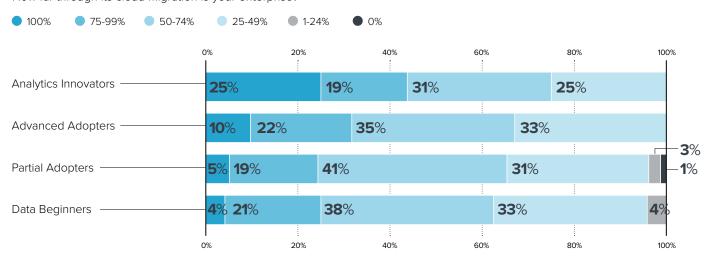
"With cloud migrations, compute capability increases, which opens doors to a lot of applications"

Chun Schiros PhD

SVP, Head of Enterprise Data Science Group, Regions Bank

Cloud Migration Underpins Analytics Success

How far through its cloud migration is your enterprise?









Single Sources of Truth for Critical Datasets

The third marker of an analytically mature enterprise is a well-governed foundation of trusted data. This is vital for generating reliable and accurate data-driven insights and making sure that company stakeholders trust what the data is showing.

It's increasingly common for the authoritative sources for different data types to be distributed across the enterprise, rather than drawn from a single central location. This shift has led to the creation of catalogs of single sources of truth.

In fact, our research shows that respondents who say their enterprises have established more complete master data management (MDM) programs have a clear advantage over those that haven't. Almost all survey respondents who identify as analytics innovators say their

enterprises have an MDM program. What's more, they're roughly twice as likely as data beginners to say their MDM programs provide a source of truth for most critical data types.

"We have been working on eliminating all the other data sources for the things that are covered by that MDM hub," reports Dan Power, MD, Data Governance for financial services giant State Street's Global Markets division.

"We're trying to make things as consistent as possible, pulling data out of the multiple master data management systems," adds Morgan Templar, VP, Information Management at non-profit healthcare company Highmark Health.

Of course, best practices for establishing single sources of truth for business-critical data have evolved significantly over the "We're really trying to make things as consistent as possible, pulling data out of the multiple master data management systems"

Morgan Templar

VP, Information Management, Highmark Health

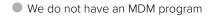
past five years. Importantly, these programs are expanding to include transactional and other data types.

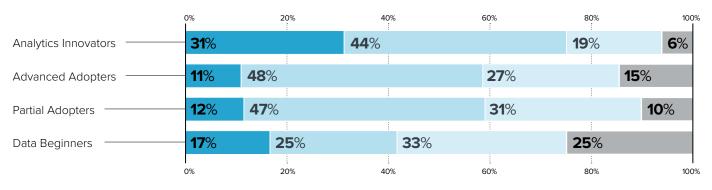
Our findings suggest that the more comprehensive a company's cloudbased data management program is, the more likely it is to drive business results across the enterprise.

Digital Transformations Depend on Trusted Data Sources

To what extent does master data management help you create a single source of accurate data for generating insights at speed?

- Our MDM program comprehensively addresses all relevant data types
- Our MDM program addresses most critical data types but omits some key types of data
- Our MDM program does not offer a comprehensive view of all types of data









Key Takeaways

Build strong relationships with business stakeholders

It comes up time and again – executive support is a predictor of data, analytics and cloud strategy success. Data leaders should partner with business leaders across the enterprise when developing their strategies, participating in steering committees actively and showcasing success stories to build support for their plans.

Connect your cloud strategy to your data strategy

Cloud technology is a vital enabler for breaking down enterprise data silos and providing employees with access to consistent, accurate and timely insights. Implementing the right cloud infrastructure to allow employees to self-serve analytics insights and arming them with the data literacy needed to use these tools should be a priority for all enterprises.

Align MDM processes with business outcomes

Enterprises need single sources of truth for all business-critical datasets to augment decision-making processes with data consistently and reliably. When developing scorecards to help employees manage the quality of these datasets, as with cloud, do so with business outcomes in mind.





DATA POINTS AT A GLANCE

Self-Service Analytics is the Future

KEA EINDING

The most data-driven enterprises use cloud-based self-service capabilities to democratize access to data and embed analytics fully into company processes

Few Enterprises are Truly Data-Driven

How often does your company make data-driven decisions to realize business value?

● All the time ● Most of the time ● Some of the time ● Rarely

21%	40%	37%	4 %

Industry Leaders are Providing Analytics 'as a Service'

Which of the following best describes the way your enterprise uses cloud-based data analytics capabilities to meet its needs?

	Analytics Innovators	Advanced Adopters	Partial Adopters	Data Beginners
Fully 'as a Service' Analytics is fully democratized and employees use data products and analytical tools protectively	13%	0 %	3 %	0%
Partially 'as a Service' An operating model based on staff consuming data products and analytics capabilities 'as a service'	19%	18%	14%	17%
Fully On-Demand A trusted enterprise-wide foundation for analytics and have efficient processes to provide reports or analyses on-demand	38%	50%	42%	21%
Partially On-Demand Investing in data governance and self-service tooling. But lack agreed 'sources of truth' for data and access to on-demand analytics is limited	31%	32%	40%	54%
Fully Siloed Data silos and inadequate tooling or processes mean employees do not typically have access to reliable, timely insights	0 %	0 %	• 1 %	8%







he great enterprise cloud migration is in full flight. But for most, the journey is far from over. All but one of the 200 executives we surveyed say their enterprises have begun their transition to the cloud. But just 9% say they've migrated all the data and systems they plan to move into the cloud.

For most, the priority now is modernizing their data ecosystems with cloud-native platforms and services. Indeed, 53% of our survey respondents say their companies have already invested in these technologies and a further 36% say theirs plan to in 2022.

"Our board actually approved a complete rebuilding of the platform," says Morgan Templar, VP, Information Management at Highmark Health. "So, for the next three years, we're going to be rebuilding our platform in the cloud."

On-premises and hybrid cloud are still the most prevalent data architectures in business today. However, many respondents hope to store all their companies' data in the cloud one day. A full 94% of respondents say the 'ideal future state' for their data architecture is 100% cloud-based.

"The ideal cloud architecture for any enterprise really depends on what its priorities are," explains Vikrant Karnik, Global Cloud Services Lead at Genpact. "If your motivation is more around managing costs, that might mean designing a vendorneutral ecosystem that can take advantage of cost arbitrages between the different cloud providers.

"But if your focus is on capturing market share by being more agile than your competitors, speed becomes important. Then, you want to design for ease of change, ease of testing out new features, and those architectures tend to be more cloud-native and tied to specific providers."

9%

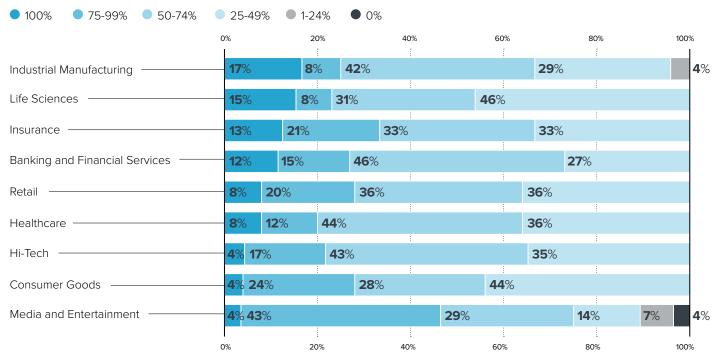
The proportion of respondents whose companies have finished their cloud migration journeys





Enterprises in All Sectors are Moving to the Cloud





Source: Corinium Intelligence, 2022

Top Enterprise Cloud Strategy Challenges

Across all sectors, the top cloud strategy challenges our survey respondents are contending with include securing the necessary budget (47%), maintaining a vendor-agnostic cloud architecture (40%) and securing support for cloud migration (33%).

"The first [thing] that we have to really get comfortable with across the team is hosting the data warehouse in the cloud," says Chun Schiros PhD, SVP, Head of Enterprise Data Science Group at Regions Bank. "We need governance and policies and standardized processes, such that we know our downstream users understand how we can safely deploy and develop data products, services and models in the cloud."

Meanwhile, 32% cite keeping the needs of each business function in mind as one of their top three challenges and 31% say defining the ideal architecture for their enterprises is among the top three challenges they're facing.

Overcoming these obstacles is essential if enterprises are to modernize their analytics ecosystems in the cloud in ways that benefit their businesses most. But data and analytics leaders must develop a deep understanding of both cloud technologies and their businesses' needs to do so successfully.

"Technology is changing all the time," says Karnik. "Historically, all the processes that were built to support data systems were built to handle batch processing on a daily basis. Now, people want to do it in real-time, so the processes have to change completely."

"So, the biggest problem is not the tech, in my mind," he says. "The biggest problem is changing the culture."

"The biggest problem is not the tech, in my mind. The biggest problem is changing the culture"

Vikrant Karnik

Global Cloud Services Lead, Genpact







Technology and Business Leaders Have Different Priorities

Consulting with business stakeholders to ensure strategy alignment isn't the only challenge for data, analytics and cloud leaders. They must also partner closely with IT leaders to execute those strategies. But our research shows that these groups have different priorities.

According to Genpact's **2021 CIO study**, the top-three cloud priorities for IT executives are migrating data centers to the cloud, optimizing and modernizing their existing public cloud footprint, and building a development, operations, security and governance infrastructure in the cloud.

Meanwhile, our 2022 survey suggests that data, analytics and cloud leaders are more focused on developing SaaS-based application stacks, building data lakes and "That's what we're focusing our efforts around: building fit-for-purpose datasets that align to the needs of our analytics group"

Morgan Templar

VP, Information Management, Highmark Health

systems of insight in the cloud and re-platforming existing applications in the cloud.

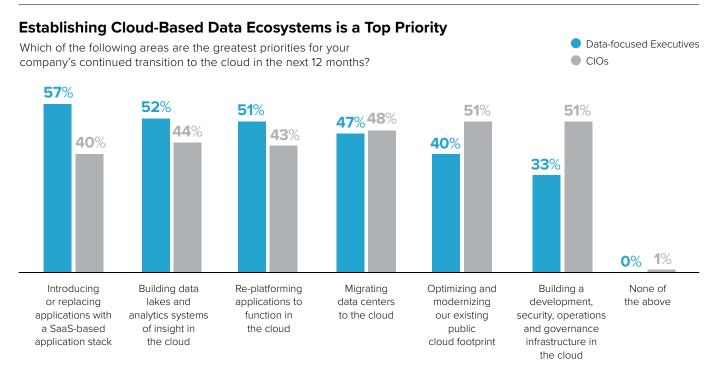
"We're transitioning as many of our vendor relationships to 'software as a service' as we can, so that we're not hosting those on our own onprem systems," reports Templar. "A big benefit of that is cost. The second one is the improved availability of data for analytics."

She continues: "That's what we're focusing our efforts around: building fit-for-purpose datasets that align to

the needs of our analytics group."

Clearly, there's a need for close collaboration between business and technology teams as their companies make their transitions to cloud-based operating models.

"Business, data and IT are realizing they can't live without each other," Karnik concludes. "Historically, there's been tension between giving people access to and the ability to act on data, versus keeping it secure. But that mindset holds data-driven business transformations back."







Key Takeaways

Cloud is a team sport

IT or cloud-focused executives are generally responsible for designing and implementing their enterprises' cloud strategies. But they must partner closely with data, analytics and business leaders to ensure the ecosystems they build provide the right data-driven insights across the enterprise. In other words, they must build a collaborative cloud culture.

Connect technology strategies to business outcomes

Securing budget for cloud migration and modernization projects often means showing how they'll drive business outcomes. So, design a cloud ecosystem that helps your employees make data-driven decisions that fuel agility, resilience and innovation. This is something everyone can get behind.

Build 'transition states' into your cloud strategy

Executives may want to move their entire IT architectures to the cloud. But these transformations take time and must be worked toward incrementally. Cloud leaders must balance the future-proofing of their businesses with the protection of data-driven operations throughout their companies' cloud journeys.





DATA POINTS AT A GLANCE

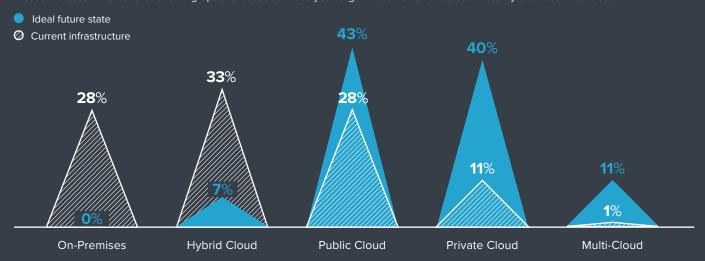
From Cloud Migration to Modernization

KFY FINDING

Two thirds of the enterprises we surveyed are at least halfway through their cloud migrations, with 94% transitioning toward a completely cloud-based infrastructure

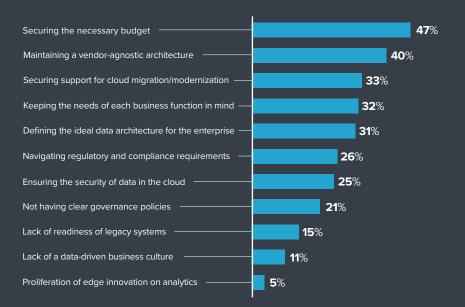
Cloud Environments are the Future

Please indicate which of the following options best describes your organization's current cloud maturity and ideal future state?



Cloud-Focused Execs Must Overcome Many Challenges

Which of the following are the biggest challenges to building analytics ecosystems in the cloud for your enterprise? (Select up to three)



Most Enterprises Have a Way Left to Go

How far through its cloud migration is your enterprise?









Death of the Monolithic Data Platform

KEY FINDING

Centralized data stores and monolithic data platforms are no longer the dominant operating model for enterprise analytics. A new approach for business data services is gaining ground

single, enterprise-wide data lake was once seen as the ideal model for business data architecture. But in recent years, this approach has come under criticism. With technologies such as data catalogs and virtualization making it possible to connect multiple data sources seamlessly, new approaches are coming to the fore.

Our research shows that the monolithic data platform is no longer the dominant operating model for enterprise data and analytics. For instance, many enterprises are opting for architectures such as the data mesh, a concept where data sources remain decentralized and managed by those closest to them. Demand for approaches like this will likely pick up as the need for 'analytics for every business unit' increases.

Of the 200 executives we surveyed, 36% say a fully centralized operating model that includes a central data store and a center of excellence to develop new analytics capabilities is still the best option for their enterprises.



However, another 36% say a hub-and-spoke model that combines elements of data governance centralization with a decentralized architecture and cross-functional data teams is the ideal scenario for their enterprises.

Our research shows that 'business data services' are being created as executives look for ways to meet growing demand for data-driven insights across their organizations. This is a comprehensive operating model that integrates processes, technology, and services to align data and business teams, empowering all employees to make informed decisions at speed.

"It's not about aggregating your data into a single, large cloud-elastic situation. It's about how seamlessly you can connect your data"

Arvinder Singh

CEO, Enquero, a Genpact company





Empowering Business Units to Innovate with Data

Of the executives we surveyed, 84% say their enterprises will have invested in a data mesh architecture by the end of 2022, with 43% reporting that theirs have already invested in one.

Data mesh architectures replace monolithic data stores with a distributed ecosystem of data platforms tailored to the needs of different stakeholder groups within an organization. The business data services model also applies this idea to ensure the analytics services provided to stakeholders across an enterprise are fit for purpose.

For example, there may be little overlap between the data a pharmaceutical company's R&D and marketing teams need to perform their roles. So, it makes sense to create bespoke data platforms tailored to each team's

"We need to be able to fully enable the business and the data mesh architecture allows us to do that very well"

Sanjeevan Bala

Group Chief Data and Al Officer, ITV

needs, with only the data that all teams use being stored centrally.

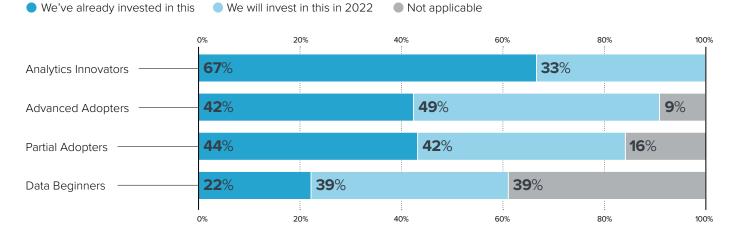
Switching to this model can address the inefficiencies that occur when centralized data teams are faced with demand for datadriven insights and new capabilities from business units throughout an enterprise.

"The data mesh concept enables you to do things in a much more 'value sliced' way," Zachery Anderson, NatWest's Chief Data and Analytics Officer, says. "So, you don't run a three-year program to create something that never gets used, which is what happened with a lot of people's data lake programs."

The end-goal of this architectural model is to help enterprises scale their analytics operations more efficiently, enabling faster innovation. But the high level of organizational data literacy it requires means it only becomes the optimum approach when an enterprise is ready to embrace this process fully.

Industry Leaders are Already Investing in Data Mesh

Does your enterprise plan to invest in a data mesh architecture over the next 12 months?









Agile and Standardized Data Governance

Interestingly, 28% of the executives we surveyed say they favor a fully decentralized operating model where the individual business units in their enterprises are responsible for their own data governance and analytics innovation.

Additionally, 37% of our survey respondents say their enterprises are investing in transitioning from a fully centralized model for data governance to a federated one. This involves embedding data owners into business units to develop an intimate knowledge of the datasets their teams use and remediate data quality issues more quickly than a centralized team could.

"The future of the single source of truth is federated," explains Sandeep Singh, Business Data Services Practice Lead at Genpact. "Our view is that a single source of truth will exist, but it will exist in multiple places." A key issue with decentralizing data governance fully is that this can result in a data ecosystem with multiple competing 'sources of truth' and inconsistent decision-making across the enterprise. In fact, this is why many enterprises opt to create centralized data teams in the first place.

For this reason, enterprises must combine federated responsibility with centralized policymaking. This is necessary to ensure that data owners embedded in business units all follow the same standardized governance policies and processes.

"At State Street, we have a federated approach, so business units (and the larger corporate functions) are responsible for data governance," says Dan Power, MD, Data Governance at State Street Global Markets. "But they also report to a centralized enterprise data governance and management group."

"We have a federated approach, so business units (and the larger corporate functions) are responsible for data governance"

Dan Power

MD, Data Governance, State Street Global Markets







Aligning Teams to Deliver Business Value

Under the business-data-services model, a relatively small central data team provides business units with access to data products and analytics capabilities via self-service tools.

For this model to work, the data and analytics experts embedded within each business unit must apply the tools their central team provides effectively and ensure everyone follows company data governance policies. At the same time, employees within each business unit need the necessary data literacy to generate, trust and act upon these insights.

Sanjeevan Bala, Group Chief Data and Al Officer at ITV, reports: "We're putting data scientists, data engineers, data analysts, all of those roles, actually into the business."

"What we've observed is, when the analysts are sitting with, let's

"When marketing is struggling, the data team should sit within marketing, so that they feel that pain"

Sanjeevan Bala

Group Chief Data and Al Officer, ITV

say, commercial or marketing, they almost need to 'go native'," Bala continues. "When marketing is struggling, the data team should sit within marketing, so that they feel that pain."

Our research shows that bringing the right cross-functional experts together to deliver modern data experiences is a key challenge for enterprise data leaders. Indeed, 71% of survey respondents say they find this at least 'fairly challenging', with 41% describing it as 'very challenging'.

But creating these crossfunctional teams is vital for ensuring that analytics initiatives harness the latest technologies to meet business needs.

These stakeholder groups must work closely to align the enterprise's data strategy with its business strategy. Once this is done, there is an opportunity for data leaders to move away from principle-based data governance and instead tailor data quality assurance processes to the outcomes the business wants to achieve.







Three Pillars of Business-Data-Services

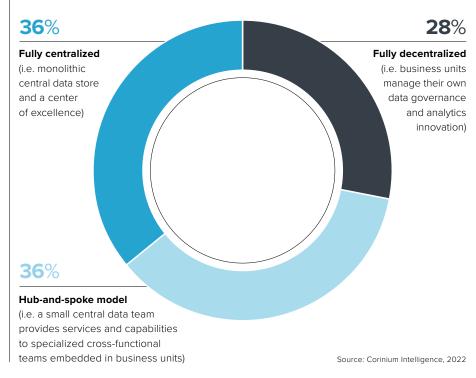
The pillars of the business-dataservices model are:

- Distributed data architectures
- Hub-and-spoke data management practices
- Data governance by value

With more enterprises planning to adopt these practices in the coming months, it's fair to say that perceptions around data and analytics best practices are shifting. A more distributed approach is replacing monolithic data stores and centralized governance teams.

Many Enterprises are Adopting a Hub-and-Spoke Model

Which of the following best describes the ideal operating model for data analytics within your organization?







Key Takeaways

Adopt a business-dataservices approach

A centralized operating model may still make sense for less mature enterprises that lack the data foundations required to succeed with the business-data-services model. But all enterprises will need to make this transition eventually to support business agility and resiliency with analytics at scale.

Enterprise data architectures are evolving

Monolithic data platforms are not an efficient way to serve the needs of disparate business units across an enterprise. As demand for data grows, technology leaders should adopt a business-data-services approach to unify people, processes, data and technology.

Provide data as a product and analytics as a service

Data leaders must partner with business stakeholders to synchronize data from different functions and technologies. This will empower them to develop data-driven solutions that meet pressing business needs, without compromising the security and integrity of their data.



Now is the Time to Transform

ecoming data-driven is vital to provide company stakeholders with the speed and resilience they need to compete in the post-pandemic business environment.

For these reasons, technology leaders are moving their enterprises' data and analytics strategies from the experimentation phase to scale, with help from the latest cloud services and tools.

Our research also shows that executive support, cloud-enabled data infrastructure and agreed sources of truth for data are three essential foundations for success. Executives whose enterprises are early on in their analytics journeys should ensure these pillars are taken into consideration when developing their strategies.

But there's also a cultural aspect to scaling analytics to drive enterprise-wide change, and this is shifting data and analytics from technology-focused disciplines to strategic and business-focused ones. Cultivating data-driven business cultures – with a focus on data literacy – is a key investment priority for data, analytics and cloud leaders in 2022.

At the same time, best practices for data and analytics are evolving for enterprises moving into the 'scale' phase of their journeys. Many of these organizations are replacing centralized data processes and storage with a hub-and-spoke model built on decentralized data architecture and a business-data-services approach.

This model integrates business processes, technology and services. Through assembling cross-functional teams dedicated to solving specific business problems, enterprises can deliver data-driven solutions that align data governance processes with business outcomes and priorities.

A similar shift is happening with cloud technology, as leaders look to complete their migration journeys and instead focus on modernization opportunities to build truly data-driven enterprises. This connection of people, processes, data and technology is what will help enterprises thrive long into the future.

About Genpact

Genpact is a global professional services firm that makes business transformation real. Led by its purpose – the relentless pursuit of a world that works better for people – the firm drives digital-led innovation and digitally-enabled intelligent operations for its clients.

Guided by its experience reinventing and running thousands of processes for hundreds of clients, many of them Global Fortune 500 companies, Genpact drives real-world transformation at scale.

Its 100,000 employees think with design, dream in digital and solve problems with data and analytics, combining its expertise in end-to-end operations with its Al-based platform, Genpact Cora. From New York to New Delhi, and more than

30 countries in between, Genpact connects every dot, reimagines every process and reinvents the ways companies work.

Genpact knows that reimagining each step from start to finish creates better business outcomes. Whatever it is, the company's team will be there with you – accelerating digital transformation to create bold, lasting results.

For out more here: Genpact.com

in LinkedIn

₩ Twitter

Facebook



Get Essential Data and Analytics Insights Direct to Your Inbox

As anyone who has attended our global conferences or events will know, our 300,000-strong network of data and analytics leaders boasts many of the most forward-thinking minds in the business world.

On our new content hub,

Business of Data, brings those same essential insights direct to your inbox in a weekly newsletter packed with exclusive research, video podcasts, indepth articles, interviews and reports.

Discover how other senior data and analytics leaders are tackling the challenges they're facing today and are accelerating their organizations' digital transformations.

For a limited time, subscribing to **Business of Data** is free. So, make sure to do so today for complimentary access to exclusive insights you just can't find anywhere else.

SUBSCRIBE NOW





Partner with *Business of Data* by Corinium

We'll develop in-depth benchmarking research, special reports and editorial content to establish your brand as an industry thought leader.

FIND OUT MORE HERE







Discover Corinium Intelligence

Corinium is a specialist market intelligence and events company, with the world's largest business community of more than 300,000 data, analytics, customer experience and digital transformation leaders.

Through insights, practical tools, expert guidance and industry connections, we help executives drive efficiencies and innovation.

Find out more: www.coriniumintelligence.com

Connect with Corinium

- Join us at our events
- Visit our blog
- Read our white papers
- in Follow us on LinkedIn
- f Like us on Facebook
- Find us on Spotify
- ► Find us on YouTube
- (1) Find us on iTunes