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In this InfoBrief

In this worldwide IDC study of 1,291 organizations, we investigate the state of the Chief Data Officer (CDO), including their challenges, priorities, and KPIs.

Chief Data Officers Are Now Seen as Business Leaders

While the role of the CDO traditionally was focused on compliance and data governance, it has now expanded into empowering broad and consistent use of data to improve business outcomes.



of top KPIs are business-oriented:

Operational efficiency
Data privacy and protection
Productivity and capacity
Innovation and revenue
Customer satisfaction and success





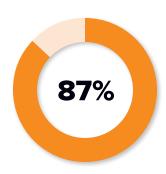
of top stakeholders are businesspeople:

Chief Executive Officer
Chief Information Officer
Chief Operations Officer
Chief Financial Officer
Head of Digital Transformation



Leading the Business with Data

The digital economy is at a tipping point where information flows are the primary driver of global economic output.



of CXOs state that becoming a more intelligent enterprise is their top priority by 2025.



of global GDP will be driven by digitally transformed enterprises by 2023.

For an organization to be successful, it must be data-driven and have a strong data culture. This means an organization requires people, process, and technology that can manage data from capture to consumption.

Source: The CXO View of the Future Enterprise in the Digital Economy Fielded January–February 2020, IDC, U.S. only | n = 152 Source: IDC FutureScape: Worldwide IT Industry 2020 Predictions, IDC #US45599219, October 2019

The Digital Economy Requires a New Generation of Data Workers and Leaders

Generation Data reflects a growing number of people in roles who work with data daily to complete tasks, make decisions, and affect business outcomes.

Modern Gen-D leaders...



Success Requires Four Archetypes of Data Leadership

This IDC study discovered four types of data-driven leadership based on measures across two dimensions of Orientation and Emphasis.

Governance Gurus

Emphasis on risk

Priorities: Advise, monitor, and govern enterprise data

Concerns: Data privacy, security, protection, errors

Means: Building frameworks, policies, and reporting systems to monitor

and respond to issues

Orient

Digital Innovators

Emphasis on innovation at scale

Priorities: Enterprise DX innovation, cost reduction, revenue generation

Concerns: Automation, culture, learning, knowledge management

Means: Creative use of operating levers such as data, analytics, IT, and organizational change to create business value

Protect ◀



Operational Optimizers

Emphasis on operations

Priorities: Enable data usability, availability, and efficiency

Concerns: Inefficiency, costs, inconsistency

Means: Building/deploying infrastructures, tools, technologies, processes,

and systems to support data operations

IT/Business Unit-Oriented

Analytics Champions

Emphasis on revenue, productivity, efficiency

Priorities: Analytics and reporting on products, customers, operations, and markets

Concerns: Transparency, data quality, accuracy, predictiveness, business alignment

Means: Developing/deploying analytic models on top of enterprise platforms to support/automate decision making in BUs

Successful Data Leadership Requires Agility to Address Multiple and Shifting Roles

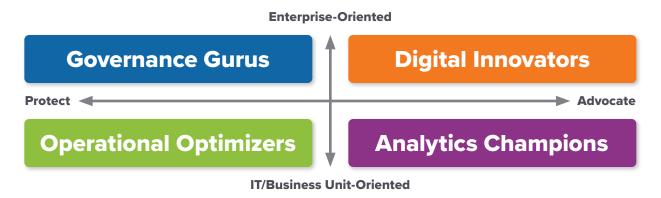
Data leaders must remain flexible, and shift between archetypes to address multiple priorities and shifting demands.



At some organizations, a single data leader must seamlessly shift between multiple roles for success.

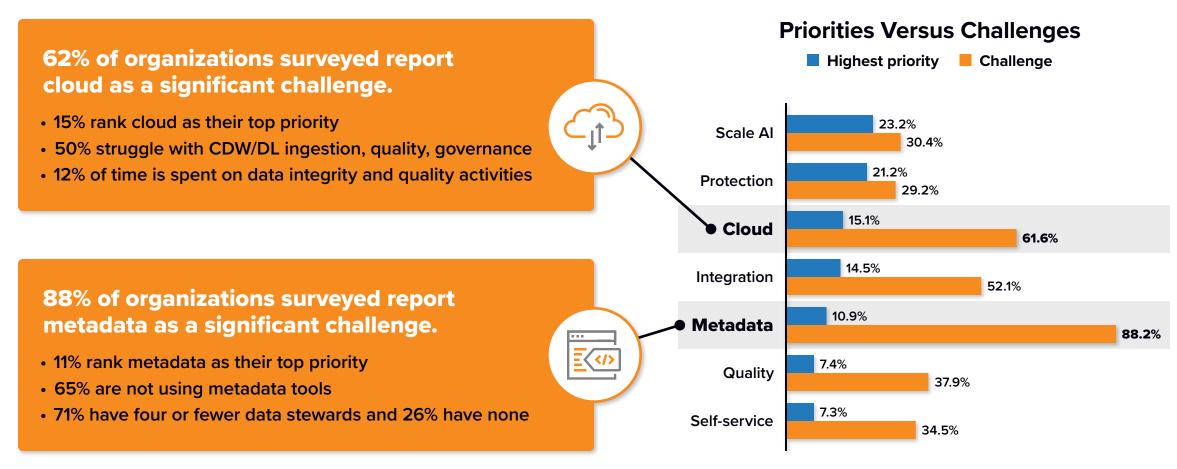


At others, a team of data leaders, each having a specialized role under a unified data strategy, is a model for success.



Broad Responsibilities Create Misalignment

The two largest discrepancies observed were with cloud and metadata.



Further Misalignment Observed in Data Privacy and Protection

65% of organizations surveyed report data privacy and protection as the top KPI, yet...



40%
do not track
data risk metrics.



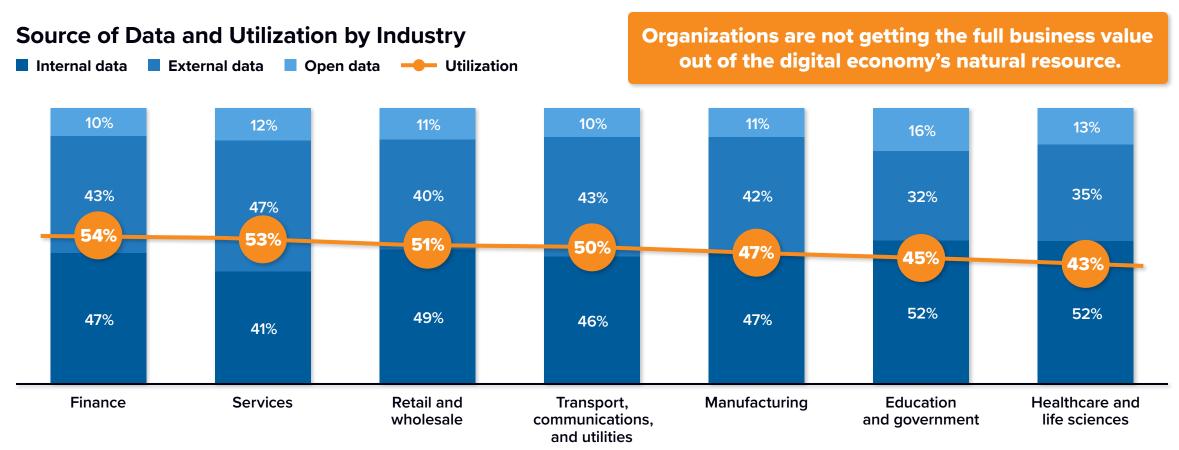
53% are not using privacy and protection tools.



80%
have four or fewer
people in data privacy
management roles.

Misalignment Creates Underutilization

70% of organizations have articulated the need to be more data-driven. Yet, of the total data available to an organization, only 50% is being utilized.¹

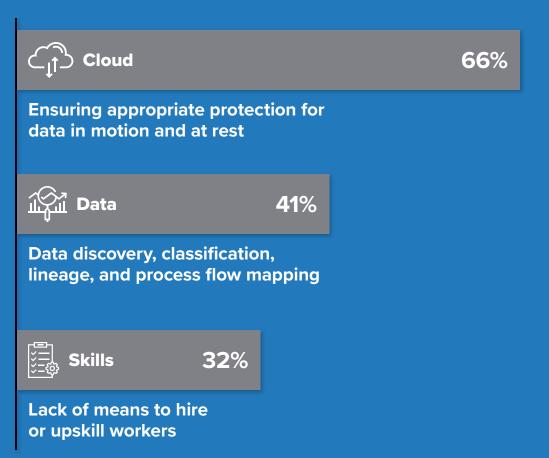


1. Source: Business Intelligence End User Survey, IDC, February 2020



Governance Gurus

Significant Challenges

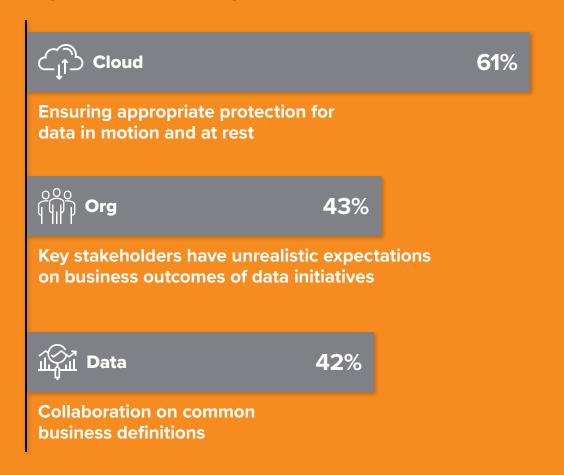


Opportunities

- Implement data protection capabilities such as encryption, masking, and privacy management
 - 49% report not using these technologies
- Implement metadata management, data catalog, and lineage capabilities
 - 60% report not using these technologies
- Look for technology that uses AI/ML to automate data governance and management activities, such as classification and mapping of policies to data elements

Digital Innovators

Significant Challenges

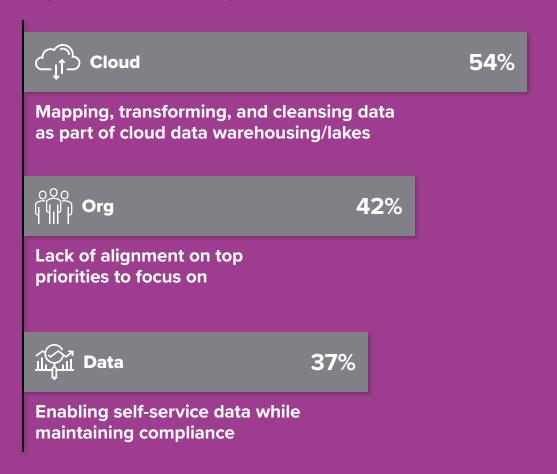


Opportunities

- Implement data protection capabilities such as encryption, masking, and privacy management
 - 46% report not using these technologies
- Implement lineage and process flow capabilities to map data to operational processes, analytical activities, and business outcomes
 - 63% report not using these technologies
- Implement business glossary and cataloging capabilities
 - 63% report not using these technologies

Analytics Champions

Significant Challenges



Opportunities

Implement data profiling, quality, preparation, and enrichment capabilities

54% report not using these technologies

Implement lineage, process flow, and governance capabilities to map data to operational processes, analytical activities, and business outcomes

65% report not using these technologies

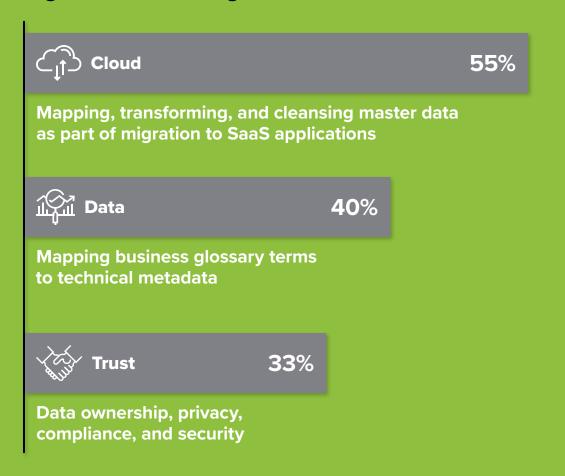
Implement cataloging, governance, and privacy capabilities

66% report not using these technologies



Operational Optimizers

Significant Challenges



Opportunities

Implement master data management and data quality capabilities

55% report not using these technologies

✓ Look for cataloging and glossary capabilities that use AI/ML to automate classification and map glossary terms to data elements

71% report not using these technologies

Implement data privacy management capabilities

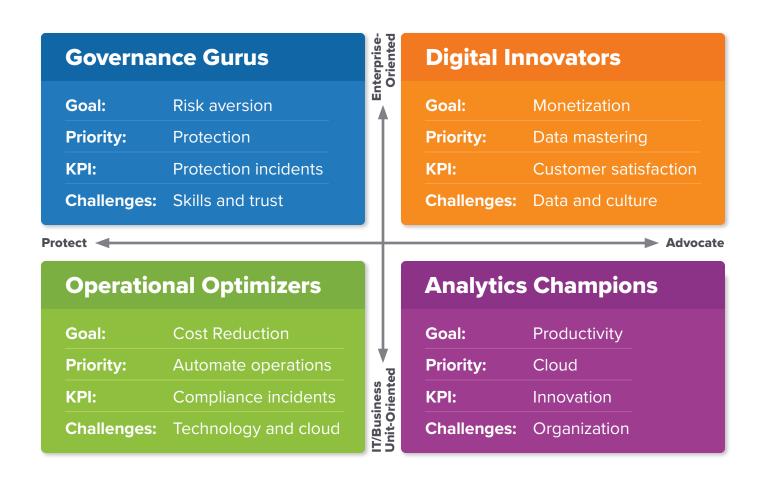
57% report not using these technologies

Means to Success: Assess, Adapt, Articulate

A data leader must assess the alignment of business goals and priorities with KPIs and challenges.

A data leader must adapt to ongoing changes in priorities and lead the team and the organization toward a data-driven future.

A data leader must articulate the value and the need for the four different types of data leadership.



Guidance to Successful Data Leadership



Goals

- Validate business goals and objectives with key stakeholders.
- Align goals and objectives with data initiatives.
- Socialize and lead Gen-D to execute on initiatives.



Key Performance Indicators

- ✓ Validate with stakeholders the KPIs you need to be measured on.
- Ensure KPIs align with the current and expected goals and priorities.
- Redefine critical success factors as needed.



Priorities

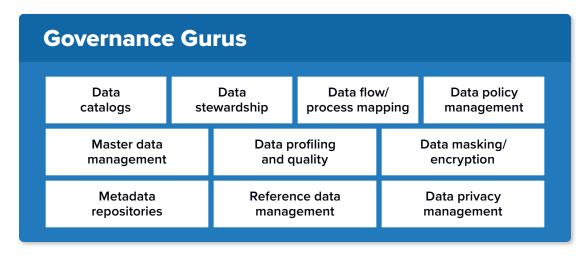
- Survey direct and indirect reports to identify where they are spending time.
- Evaluate how you are measured against data and IT priorities.
- Readjust priorities and/or recalibrate time for better alignment.



Emphasis

Use this IDC study as a guide to understand different data leadership types and adapt to the type of data leader you need to be as projects, programs, and priorities evolve.

Invest in the Right Tools for the Job



Digital Innovators			
	Data catalogs	Advanced and predictive analytics	Descriptive analytics
	Master data management	Data integration	Self-service data preparation
	Business glossary	Data-as-a-Service	Data profiling

Protect <	•
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Operational Optimizers

Metadata management	Data quality	Data replication	Data integration
Test data management	Data loss prevention	Data warehouses and lakes	Information life-cycle management
Data migration	Master data management	Data storage and orchestration	Data protection and security

IT/Business Unit-Oriented

Analytics Champions			
Data ingestion	Advanced and predictive analytics	Visualization and self-service analysis	
Data profiling and quality	Data warehouses and lakes	Data streaming	
Data catalogs and marketplace	Data anonymization	Self-service data preparation	

Advocate

Leading with Data to a Future of Enterprise Intelligence

The digital economy requires broad and consistent use of data by a more data-literate workforce.

A data-literate workforce requires adaptive and agile data leadership to support:



Operational efficiency and cost optimization



Analytic insights and decision making



Business innovation and customer experience improvements



Risk management and ethical use of data

Data enablement is a differentiator:



Identify, catalog, transform, and master as much data as possible for higher data utilization.



Democratize the data to empower the right people at the right time for the right uses.

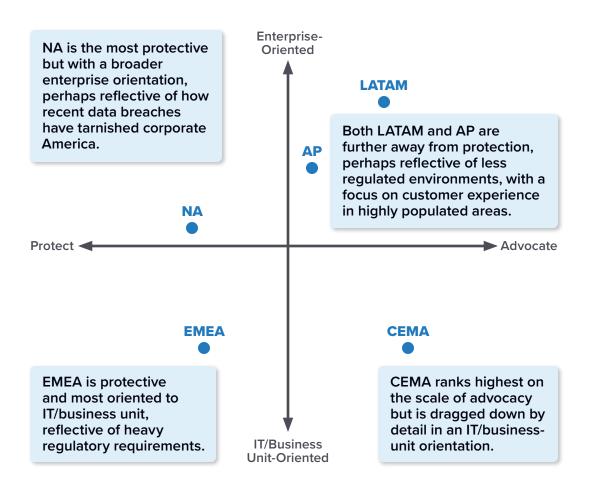


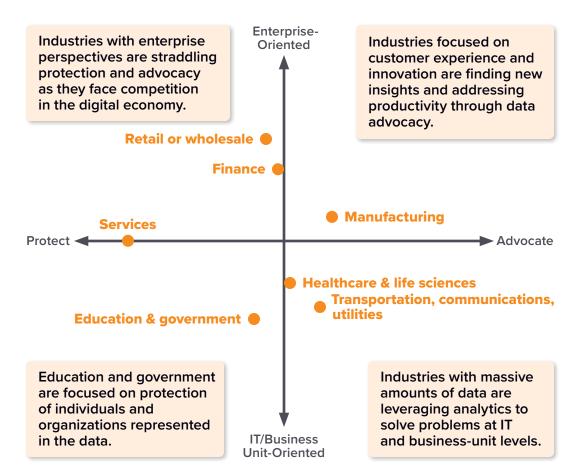
Automate data management processes to augment Gen-D worker skills and capabilities within your organization.



Invest in the right capabilities to address evolving priorities and challenges.

Regional Influences and Industry Drivers of Data Leaders Around the World





Regional and Industry Influences in **Country-Level Characteristics**



Business goal: Cost reduction

Objective: Lower manufacturing costs

Challenged by: **Technology** Data priority: Integration Data issue: Lineage



Business goal: Cost reduction

Lower procurement costs

Challenged by: **Technology**

Data priority: Cloud data lakes/warehouses

Classification

Enterprise-Oriented



Business goal: Cost reduction

Objective: Lower manufacturing costs

Challenged by: Cloud

Data priority: Modernization

Business glossary mapping to technical mapping Data issue:



Business goal: Cost reduction

Objective: Lower manufacturing costs

Modernization Data priority:

Business glossary mapping to technical mapping

Protect ◀





Business goal: Cost reduction

Lower customer service costs Challenged by: Organization and skills Data priority: Metadata management

Business glossary mapping to technical mapping



Business goal: Cost reduction

Lower procurement costs Challenged by: Culture and skills

Data priority: Self-service Data issue: Lineage



Business goal: Cost reduction

Objective: Lower manufacturing costs

Challenged by: Culture Data priority: Al in IT operations

Scaling preparation and quality

IT/Business **Unit-Oriented**



Business goal: **Customer experience**

Increase customer acquisition Challenged by: Cloud

Data priority: Al in business

Collaborating on business definitions



Business goal: Risk aversion

Improve cybersecurity Challenged by: **Ecosystem**

Data priority: Al in IT operations Scaling preparation and quality



Lower manufacturing costs

Challenged by: **Technology** Data priority: AI in IT operations Classification



Appendix: Research Hypothesis and Method

Hypothesis:

The complexity of data flows, coupled with different data capabilities of organizations have made the responsibilities of an organization's data leader more than one person's role.

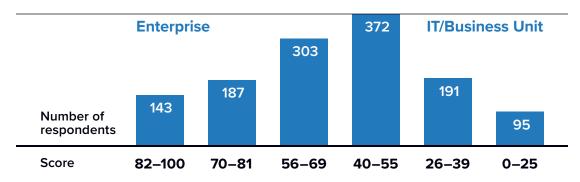
Methodology:

By surveying 1,291 organizations worldwide, IDC identified natural clusters of data leaders in terms of their organization's data capabilities and intersection with how each leader is measured and stated mandates.

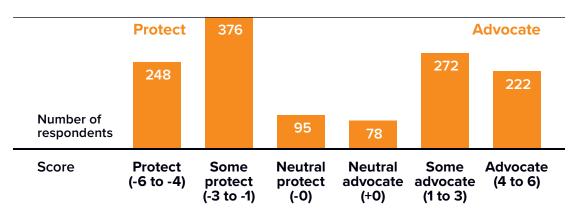
The distribution of survey respondents shows natural clusters in two dimensions:

- Data capabilities and scope orientation: IT/Business Unit to Enterprise
- Individual data leader KPI measurements and mandate: Protect to Advocate

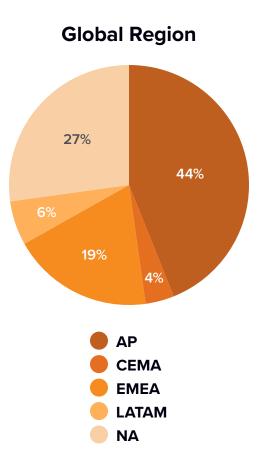
Enterprise-IT/Business Unit Score

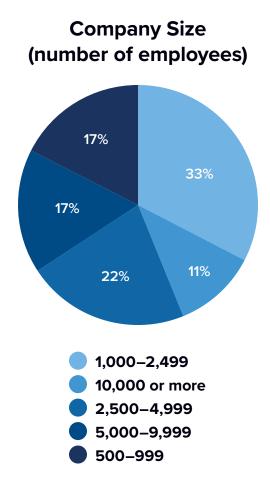


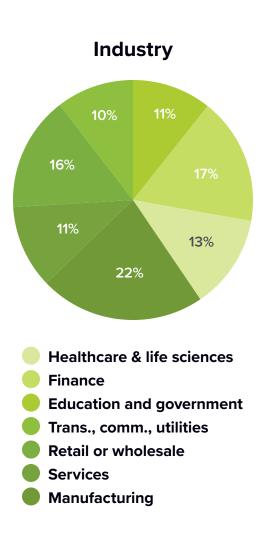
Protect-Advocate Score



Appendix: Demographics







About the Analyst



Stewart BondResearch Director, Data Integration and Data Intelligence Software, IDC

Stewart's core research coverage includes watching emerging trends that are shaping and changing data movement, ingestion, transformation, mastering, cleansing, and consumption in the era of digital transformation. Having worked in the IT industry for over 25 years, from early experience in database and application development through solution design and deployment to strategic architectural consulting, Stewart has worked through some significant changes in the IT industry. His depth of field experience coupled with market insight gives him a unique perspective, valued by his customers and peers.

More about Stewart Bond



Message from the Sponsor

Informatica: Exclusive Partner for State of the CDO Survey

Creating and executing a data strategy that is mapped to business goals, process, and outcomes is one of the most important activities you as Chief Data Officer can do to improve business performance. What should you look for in your data management solution partner?

Consider the following:

- Informatica is the only vendor with market leading capabilities in all data management capabilities, which reduce risk.
- Informatica is the first vendor to integrate capabilities into a comprehensive platform that increases return on investment.
- Informatica offers modular capabilities that enable fast deployment to accelerate time to value.
- Informatica was the first vendor automating and scaling data management activities using AI to lower cost of ownership.

See why Informatica is the global leader in enterprise cloud data management.

and

See what we've learned from more than 25 years of experience working with data.





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