Enhance your webinar experience

Ask a Question

Download Attachments

Watch Again

Gartner.

The Gartner 2025 Leadership Vision for Data & Analytics
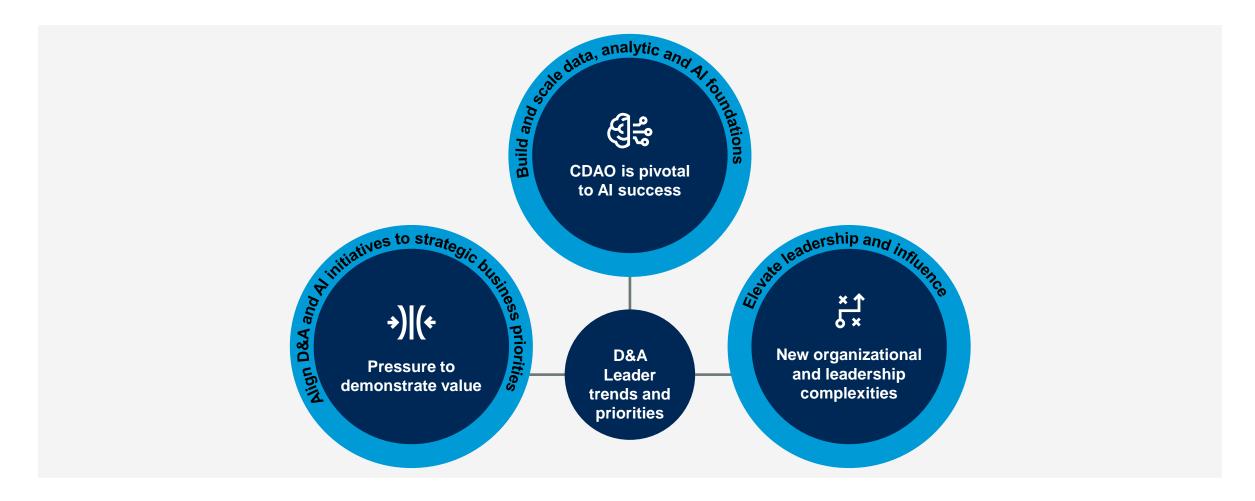
Rita Sallam

Distinguished VP Analyst

in

Gartner®

Top Trends and Priorities for Data and Analytics Leaders in 2025: How To Create Business Value In The Age of AI

Build and scale data, analytic and AI foundations

CDAO is pivotal to AI success

Align D&A and AI initiatives to strategic business priorities

Pressure to demonstrate value

D&A Leader trends and priorities

Elevate leadership and influence

New organizational and leadership complexities

Gartner

Key Issues

01 What are the **major trends** affecting Data and Analytics Leaders?

02 What are the major **challenges and top priorities f**or Data and Analytics Leaders?
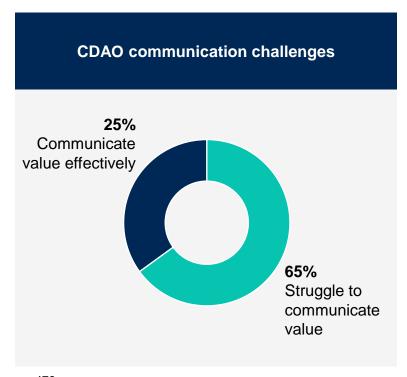
03 What **actions** should Data and Analytics Leaders take now to be successful?

Gartner.
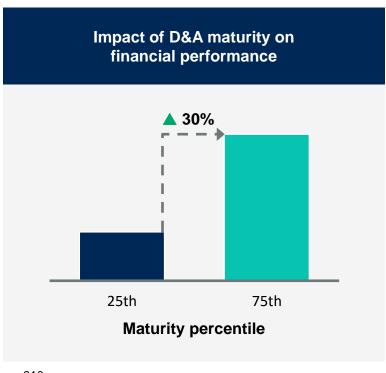
Pressure to Demonstrate Value Has Never Been More Acute

A critical gap remains

CDAO communication challenges

25%
Communicate value effectively

65%
Struggle to communicate value

n = 476
Source: 2024 Gartner CDAO Agenda Survey

CFO satisfaction with digital investments

33%
Met expectations

67%
Fell short

n = 102
Source: 2022 Gartner CFO Digital Strategies Survey

Impact of D&A maturity on financial performance

▲ **30%**

25th   75th

Maturity percentile

n = 310
Source: Invest in D&A Maturity to Accelerate Financial Performance,
A Journey Guide to Realizing Value from Data, Analytics and AI

Gartner.

Data and Analytics Leaders Are Pivotal to AI Success

AI-ready data and governance impact on AI outcomes

30% of generative AI projects will be abandoned after proof of concept due to poor data quality, inadequate risk controls, escalating cost or unclear business value by 2025.

60% of organizations will fail to realize the anticipated value of their AI use cases by 2027 due to incohesive ethical governance frameworks.

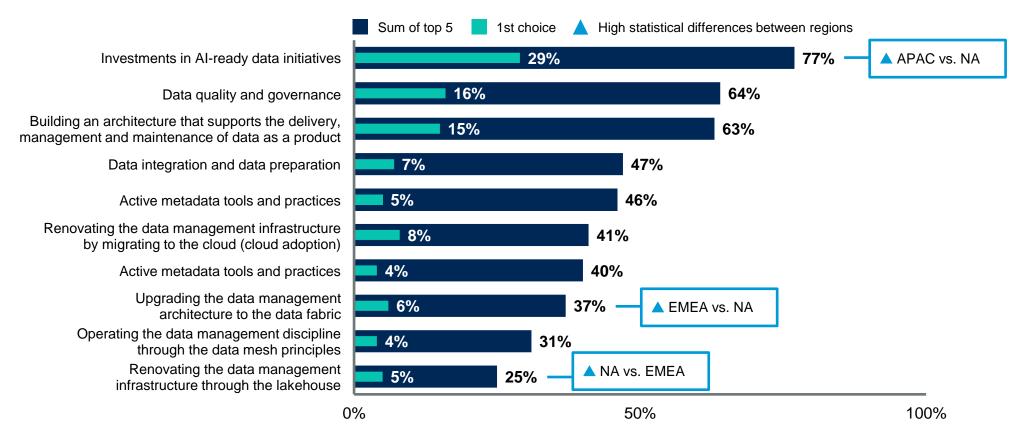**20% improvement in business outcomes** by having data ready for AI-driven business outcomes.

84% of surveyed CIOs and technology leaders are planning to increase their AI investments.

Source: 2025 Gartner CIO and Technology Executive Survey

Gartner®

Data and Analytics Leaders Are Pivotal to AI Success

Top five investment trends in the next two or three years

Legend: ■ Sum of top 5 ■ 1st choice ▲ High statistical differences between regions

Investment trend	1st choice	Sum of top 5	Region comparison
Investments in AI-ready data initiatives	29%	77%	▲ APAC vs. NA
Data quality and governance	16%	64%	
Building an architecture that supports the delivery, management and maintenance of data as a product	15%	63%	
Data integration and data preparation	7%	47%	
Active metadata tools and practices	5%	46%	
Renovating the data management infrastructure by migrating to the cloud (cloud adoption)	8%	41%	
Active metadata tools and practices	4%	40%	
Upgrading the data management architecture to the data fabric	6%	37%	▲ EMEA vs. NA
Operating the data management discipline through the data mesh principles	4%	31%	
Renovating the data management infrastructure through the lakehouse	5%	25%	▲ NA vs. EMEA

0% — 50% — 100%

n = 247; All respondents excluding not sure
Q: What do you think are the top five investment trends for data management leaders in the next two to three years?
Source: 2024 The Evolution of Data Management survey,
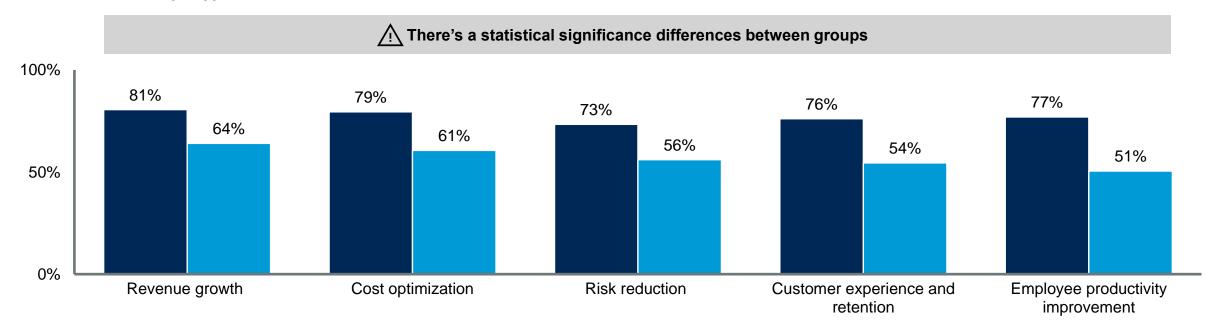CDAO Agenda 2024: Become a Driver of Business Value

Gartner

Having Data Ready for AI Drives Greater Business Outcomes by 20%

Impact of AI on business outcomes by data readiness for organization's AI initiatives
Top two box (7 = extremely impactful, 6 = mostly impactful)

■ Data ready for AI (8-19)   ■ Data not ready for AI (0-7)
   n = 151-155   n = 99-101

⚠ **There's a statistical significance differences between groups**

	Revenue growth	Cost optimization	Risk reduction	Customer experience and retention	Employee productivity improvement
Data ready for AI	81%	79%	73%	76%	77%
Data not ready for AI	64%	61%	56%	54%	51%

n = varies, main sample who has deployed AI
Q: How impactful has AI been to each of the following business outcomes for your organization?
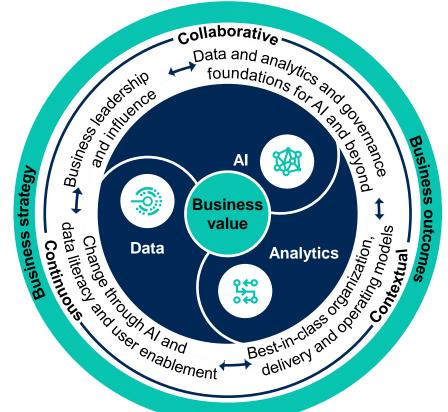Q: How ready is your organization's data for your AI initiatives?
Source: 2023 Gartner AI in the Enterprise Survey

Gartner

Data and Analytics Leaders Must Navigate and Harness New Organizational and Leadership Complexities

The D&A leadership mandate

Data and analytics as a business capability is pivotal to AI success but requires elevated collaboration and influence across both business and IT teams

Harness the AI-Fueled Collision Between Data, Analytics and Software Engineering

Gartner.

Key Issues

01 What are the **major trends** affecting Data and Analytics Leaders?

02 What are the major **challenges and top priorities** for Data and Analytics Leaders?

03 What **actions** should Data and Analytics Leaders take now to be successful?

Gartner.

Several Challenges Inhibit Value Realization
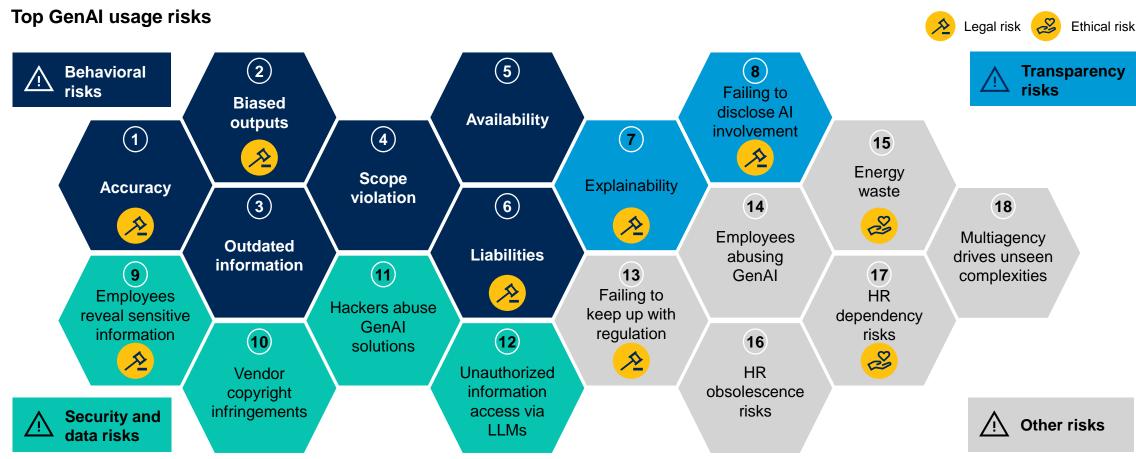
CDAOs face tough and unprecedented challenges

Strategic	Financial	Technology	Organizational	People
Alignment to stakeholder priorities	Misallocation of resources	Evolving to support AI ambition	Loss of influence for D&A team	Employee burnout
Reduced D&A agility	Higher TCO for D&A projects	Proliferation of stealth D&A, AI	Incorrect use of data for decision making	Difficulty sourcing/ upskilling talent
Lack of data-driven innovation	Underused investments	Multiple points of failure	Non-data-driven approaches to decision making	

How CDAOs Choose a Data and Analytics Funding Model

Gartner.

Increase in AI/GenAI Usage Introduces New Risks That CDAOs Must Manage and Mitigate

Top GenAI usage risks

A Journey Guide to Managing AI Governance, Trust, Risk and Security

Gartner

Build the Data, Analytics and AI Foundations for AI Success

Data and governance foundations for AI success

89% of respondents say **D&A governance is essential** for enabling business and technology innovation.
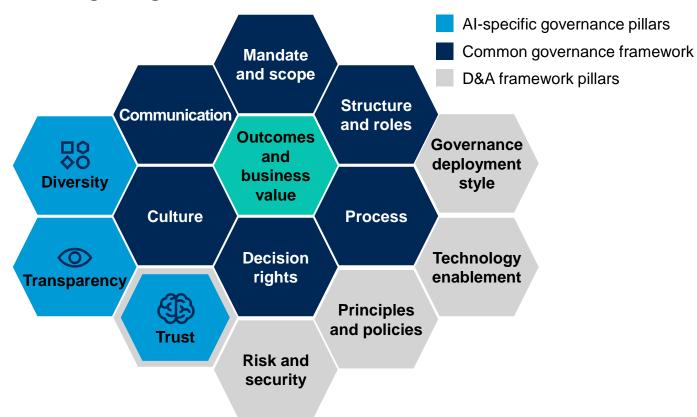
Source: 2024 Gartner CDAO Agenda Survey

39% of respondents expressed **lack of data as a top three barrier** to success with AI.

Source: 2023 Gartner AI in the Enterprise Survey
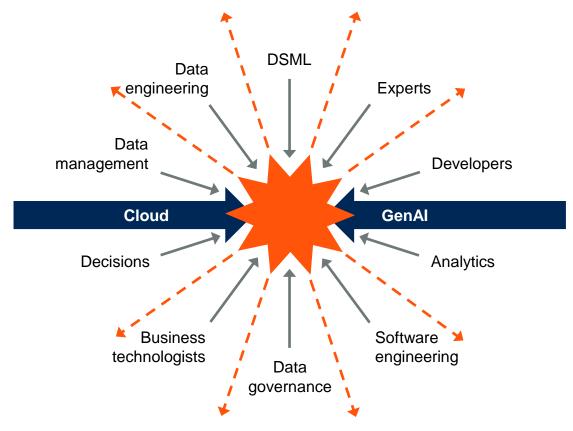
A Journey Guide to Managing AI Governance, Trust, Risk and Security
A Journey Guide to Successful Data and Analytics Governance

Extending D&A governance to AI

Legend:
- AI-specific governance pillars
- Common governance framework
- D&A framework pillars

Pillars shown: Mandate and scope, Communication, Structure and roles, Diversity, Outcomes and business value, Governance deployment style, Culture, Process, Transparency, Decision rights, Technology enablement, Trust, Principles and policies, Risk and security

Gartner®

Break Down Silos and Collaborate Across Business and IT Teams to Deliver Value

Collaboration is needed across IT and the business for AI access

Data engineering

DSML

Experts

Data management

Developers

Cloud

GenAI

Decisions

Analytics

Business technologists

Software engineering

Data governance

87% of respondents reported that CDAO collaborations with a business-oriented CxO contributed the most to enterprisewide business value

Harness the AI-Fueled Collision Between Data, Analytics and Software Engineering
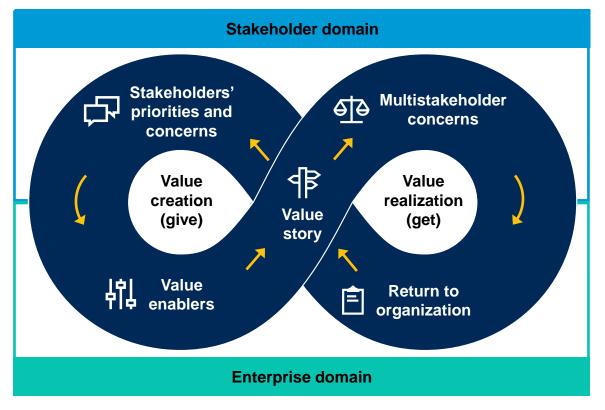How CDAOs Can Expand Executive Stakeholder Relationships

Gartner

Key Issues

01 What are the **major trends** affecting Data and Analytics Leaders?

02 What are the major **challenges and top priorities** for Data and Analytics Leaders?

03 What **actions** should Data and Analytics Leaders take now to be successful?

Gartner
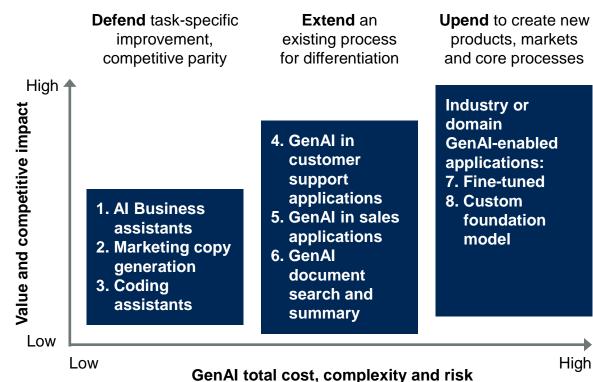
Create Value by Aligning D&A and AI Initiatives to Strategic Business Priorities

The Gartner enterprise value equation

Stakeholder domain

Stakeholders' priorities and concerns

Value creation (give)

Value story

Multistakeholder concerns

Value realization (get)

Value enablers

Return to organization

Enterprise domain

Ignition Guide to Articulate Data, Analytics & AI Enterprise Value to Executives
Ignition Guide: How to Align D&A Business Value With Outcome-Driven Metrics

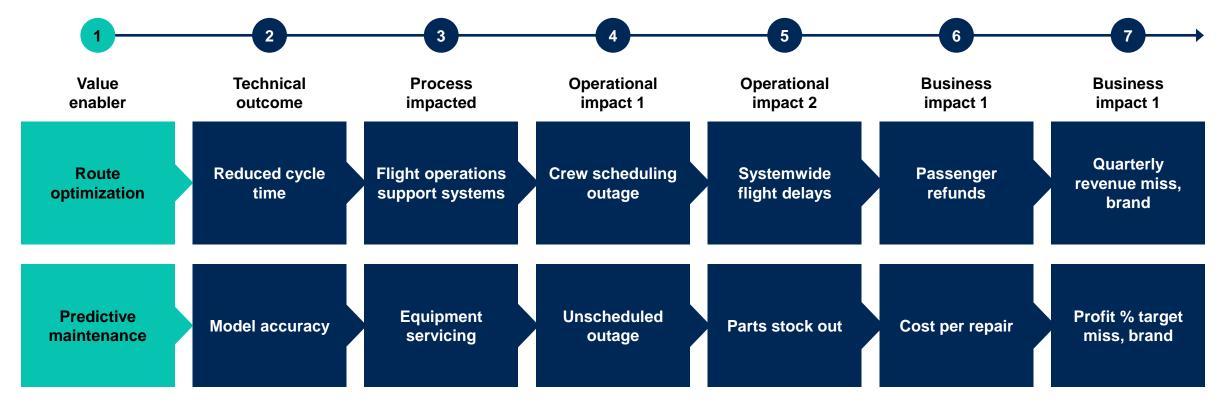**Generative AI use-case categories**
Illustrative

Defend task-specific improvement, competitive parity

Extend an existing process for differentiation

Upend to create new products, markets and core processes

Value and competitive impact — High / Low

GenAI total cost, complexity and risk — Low / High

1. AI Business assistants
2. Marketing copy generation
3. Coding assistants

4. GenAI in customer support applications
5. GenAI in sales applications
6. GenAI document search and summary

Industry or domain GenAI-enabled applications:
7. Fine-tuned
8. Custom foundation model

How to Calculate Business Value and Cost for Generative AI Use Cases

Gartner®

Apply Value Chain Mapping to Manage and Communicate the Business Outcomes of D&A and AI

Value chain mapping – illustrative examples

Value enabler	Technical outcome	Process impacted	Operational impact 1	Operational impact 2	Business impact 1	Business impact 1
Route optimization	Reduced cycle time	Flight operations support systems	Crew scheduling outage	Systemwide flight delays	Passenger refunds	Quarterly revenue miss, brand
Predictive maintenance	Model accuracy	Equipment servicing	Unscheduled outage	Parts stock out	Cost per repair	Profit % target miss, brand

How to Communicate Value in the Languages of Data and Analytics, Finance and Business Outcomes,
How CDAOs Can Succeed in Data and Analytics Funding Negotiations With the CFO

Gartner

Exploit GenAI When It Is Best for the Business Need

Align value, AI-ready data needs and governance to use cases and AI techniques

AI technique suitability ☐ Low (L) ☐ Medium (M) ■ High (H)
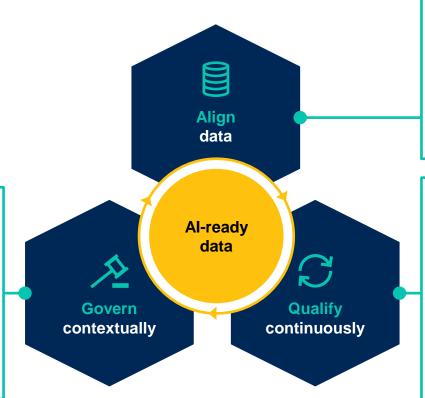
Use-case families	Common AI techniques					
	Generative models	Nongenerative machine learning	Optimization	Simulation	Rules/heuristics	Graphs
Prediction/forecasting	L	H	L	H	M	L
Planning	L	L	H	M	M	M
Decision intelligence	L	M	H	H	H	H
Autonomous systems	L	M	H	M	M	L
Segmentation/classification	M	H	L	L	H	H
Recommendation systems	M	H	M	L	M	H
Perception	M	H	L	L	L	L
Intelligent automation	M	H	L	L	H	M
Anomaly detection/monitoring	M	H	L	M	M	H
Content generation	H	L	L	H	L	L
Conversational user interfaces	H	H	L	L	M	H
Knowledge discovery	H	M	L	L	M	H

When Not to Use Generative AI

Gartner®

Build and Scale Data, Analytics and AI Foundations to Realize Value
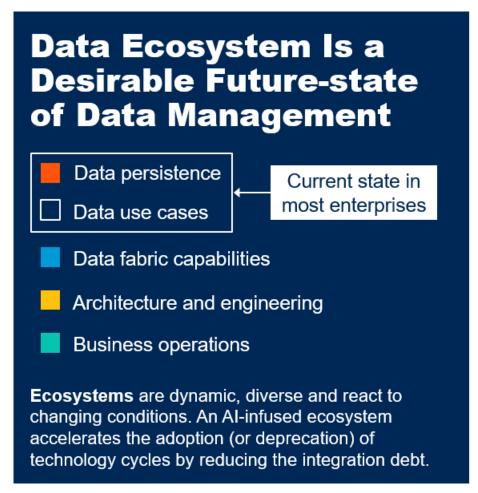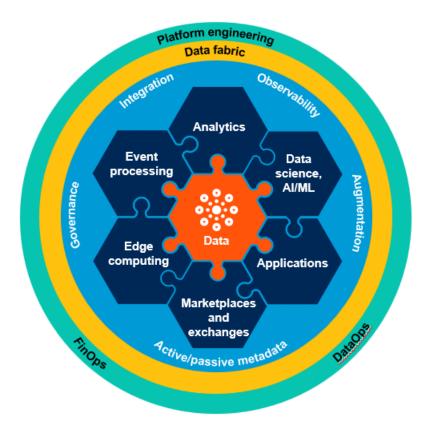
Making your data AI-ready

- Accessibility
- Structure
- Semantics
- Accuracy and quality
- Trust, fairness and diversity
- Annotation and labeling
- Lineage and graphs

Align data

- Consistency assessment
- Validation and verification
- Continuous regression testing and auditing
- Inference and derivation
- Observability metrics
- Annotation and labeling
- Monitoring and detection

Qualify continuously

AI-ready data

Govern contextually

- AI standards and governance
- Data sharing
- Regulatory and compliance
- Accountability and responsibility
- Documentation and transparency
- Complaints and feedbacks handling
- User training and certification

A Journey Guide to Delivering AI Success Through 'AI-Ready' Data

Gartner

Build and Scale Data, Analytics and AI Foundations to Realize Value
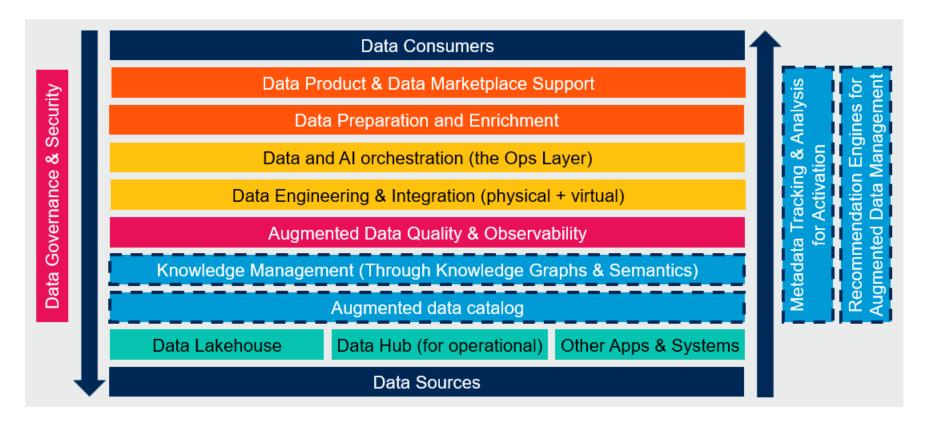
Making your data AI-ready Leveraging A Data Ecosystem

Build and Scale Data, Analytics and AI Foundations to Realize Value

The Data Fabric Is The Foundation of The Modern Data Ecosystem

Gartner.

Build AI Data Readiness

Journey guide to AI success with AI-ready data

Step 1: Get grounded and gain foresight	Step 2: Define value and gain executive buy-in	Step 3: Execute, implement and scale	Step 4: Govern and manage change
What is AI-ready data?	How can I present AI-ready data requirements to the boards?	How should I evolve my data management practice to support AI-ready data?	How do I plan GenAI's impact on current data management tools, practices and skills?
Why does AI-ready data matter now?	How do I build a business ease to secure funding, and what are my success metrics?	What technologies, platforms and architectures are needed to support AI-ready data?	How do I govern and scale AI-ready data and also mitigate risks?
How do I assess my data readiness for AI?		How can I extend our data management practice to support unstructured data and enrich LLMs through RAG support?	

A Journey Guide to Delivering AI Success Through 'AI-Ready' Data

Gartner.

Build and Scale Data, Analytics and AI Foundations to Realize Value

Process for launching and managing data products
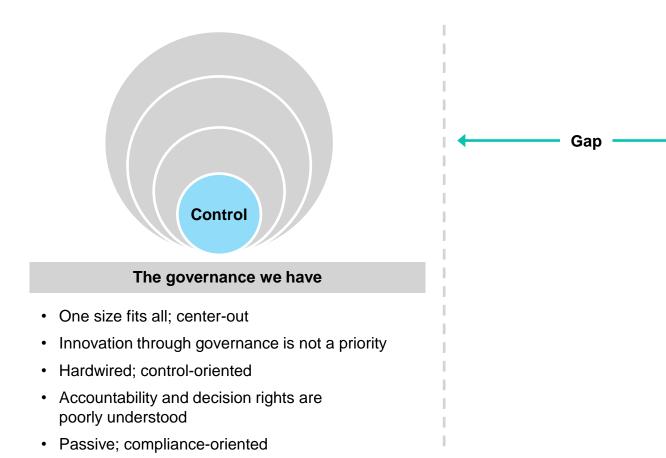
Day 1 Ignition	**Clarify objectives and roles**	**Create the vision**	**Build your strategy**	**Lay the groundwork**	**Iterate on development life cycle**	**Set the stage for future**	**Three months**
	Clarify objectives	Align product vision	Shortlist products	Create data contract	Establish product backlog	Prioritize products	
	Define the problem	Establish user personas	Plan change management	Assemble product team	Get product feedback	Upgrade data stack	
	Describe the roles and responsibilities	Understand user needs	Identify product owner	Ensure data accessibility	Push to production	Diversify funding	
	Understand principles	Develop value hypothesis	Onboard pilot user	Create product roadmap		Update operating model	
	Validate delivery model	Manage portfolio	Develop KPI measures	Verify data quality		Monitor Success	
			Specify requirements	Create prototype			
			Raise awareness				

Ignition Guide to Launching and Managing Data Products

Gartner.

Build and Scale Data, Analytics and AI Foundations to Realize Value

The data and analytics governance we have is not what we need

Gap

The governance we have

- One size fits all; center-out
- Innovation through governance is not a priority
- Hardwired; control-oriented
- Accountability and decision rights are poorly understood
- Passive; compliance-oriented

The governance we need

- Multiple styles; sensitive to business context
- Encourages innovation at the center and the edge
- Flexible, dynamic strategy across ecosystem
- Decisions rights are fully understood and connected to value
- Active; sensitive to opportunity and risk

Maturing D&A Governance Is a Catalyst for Business Innovation and AI
2024 Strategic Roadmap for Data and Analytics Governance

Gartner.
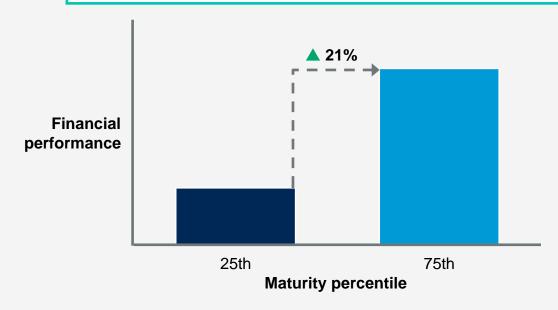
Establish the Connection Between AI-Ready Data, Governance and Business Value

Impact of "governance" on company financial performance[a]

> The benefit of moving from low to high maturity in D&A management practices, including data governance demonstrated a 21% improvement in organizational financial performance.

Financial performance

▲ **21%**

25th

75th

Maturity percentile

n = 310

Source: Gartner's IT Score for Data and Analytics
[a] This result holds for the overall sample. Financial performance is being measured by total revenue here
Data Governance and Management Investments Boost Financial Performance
Case Study: An AI Governance Framework for Managing Use Case Ethics

Gartner

Establish Scalable and Responsible Practices

Impact of GenAI on D&A governance personas

● Moderate to high impact ● Moderate impact ● Low impact

Personas	GenAI augmentation …	… via capabilities[a]
D&A governance board (Policy creating)	●	● Access management ● Active metadata ● Data catalog, business glossary, data dictionary ● Information policy representation ● Impact analysis ● Task management …
Domain stewards (Policy enforcement)	●	● Data catalog, business glossary, data dictionary ● Persona-based user interface ● Workflow management ● Lineage ● Impact analysis ● Data profiling ● Data classification …
Data management team (Policy execution)	●	● Data catalog, business glossary, data dictionary ● Persona-based user interface ● Workflow management ● Orchestration/automation ● Tag management

Same capabilities have different use cases for different personas, leading to different degree of impact of GenAI

Best Practices for the Responsible Use of Natural Language Technologies

Gartner

Link Trust to Value Realization

By 2027, AI governance will become a requirement of all sovereign AI laws and regulations worldwide.
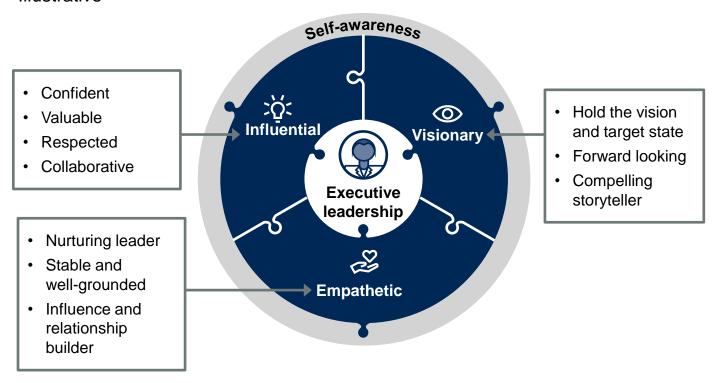
10 must-know legal concepts for CDAOs

Toolkit: Building Trust to Maximize Your AI ROI
Board Briefing: AI Regulatory Updates

Gartner.

Elevate Leadership and Influence

Successful executive leaders are visionary, empathetic and powerful
Illustrative

The journey from order-taker, to powerful partner

- Confident
- Valuable
- Respected
- Collaborative

Self-awareness

Influential

Visionary

Executive leadership

- Hold the vision and target state
- Forward looking
- Compelling storyteller

- Nurturing leader
- Stable and well-grounded
- Influence and relationship builder

Empathetic

Develop valued and trusting relationships and visibility across your organization

Build deep knowledge of the levers of success, and the problems facing your organization and the people in it

Identify and engage with a collaboration partner
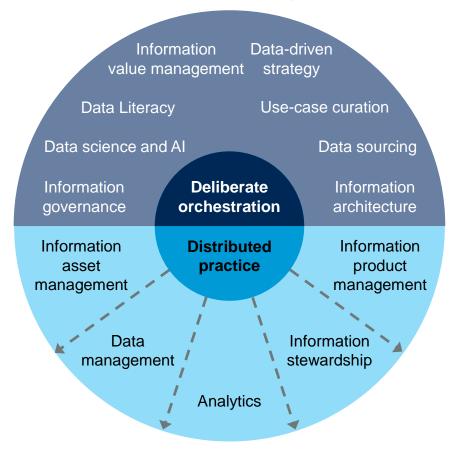
Build a fusion team to focus on one key challenge collaboratively, setting up a test-and-learn pilot

4 Steps for the CDAO to Build Powerful Business Partnerships
7 Hacks to Master the Power Politics of Data and Analytics Adoption

Gartner.

Build the Right Competencies and Organization for Success

Data and analytics competencies for a data-driven organization
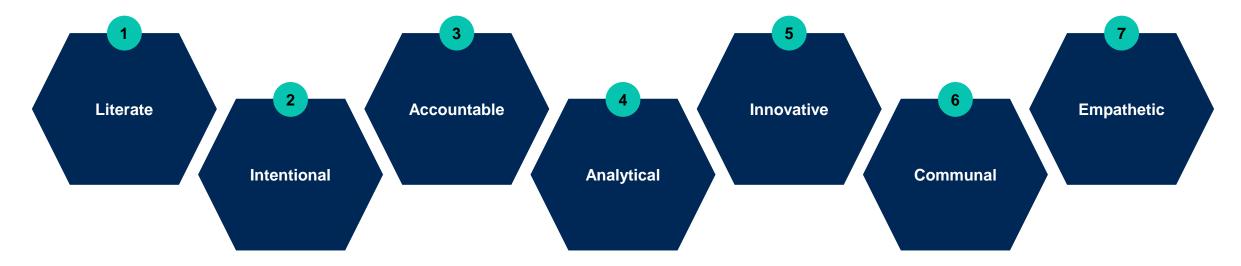

Gartner predicts

By 2027, more than half of CDAOs will secure funding for data literacy and AI literacy programs, fueled by enterprise failure to realize expected value from generative AI.

Accelerate Digital Business Aspirations by Becoming a Data-Driven Enterprise
Address Both Data Literacy and Culture for Effective D&A Programs

Gartner

Foster Key Cultural Characteristics for Successful AI and Data-Driven Transformation
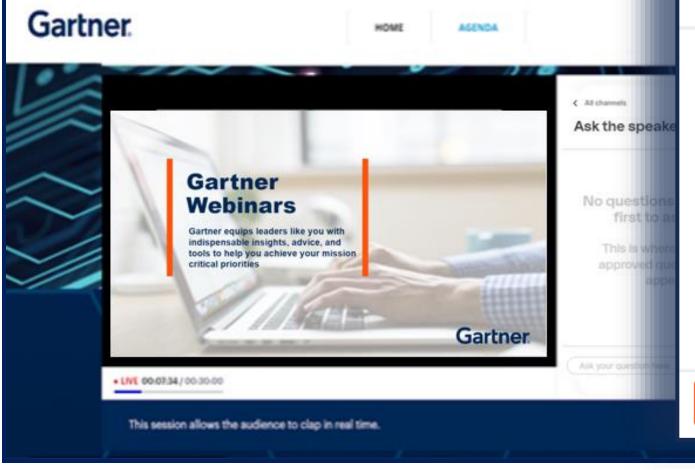
The Gartner Decision Intelligence Framework

[Quick Answer: How to Create a Data-Driven Enterprise](#)

Gartner®

Ask the speaker

Gartner

Gartner Data & Analytics Summit

3 – 5 March 2025 | Orlando, FL

28 – 29 April 2025 | São Paulo, Brazil

12 – 14 May 2025 | London, U.K.

20 – 22 May 2025 | Tokyo, Japan

2 – 3 June 2025 | Mumbai, India

17 – 18 June 2025 | Sydney, Australia

Gartner Data & Analytics Summit offers content for every member of your data and analytics team — from technical- to senior-level strategy. Join data and analytics leaders to gain the skills to build and execute a world-class strategy.

Learn more:
gartner.com/conferences/data

Register with code **GARTNERWEB** for a discount on the standard price.

At this year's conference, you'll learn to:

Implement **strategies and innovations backed by data and analytics** to navigate disruption.

Harness the **growing power of AI** effectively and responsibly for decision augmentation, process optimization and even autonomous operations.

Scale your purpose beyond organizational silos, across value chains and ecosystems to foster societal perseverance.

Gartner

6 Proven Steps To Become a Better Leader

Explore six proven strategies from 560+ of your peers.

→ Download eBook

Gartner.

Gartner for IT on social media

Want to stay in-the-know? Connect with us on LinkedIn and Twitter to receive the latest Gartner IT insights and updates across research, events and more. It's all curated specifically for IT leaders and decision-makers.
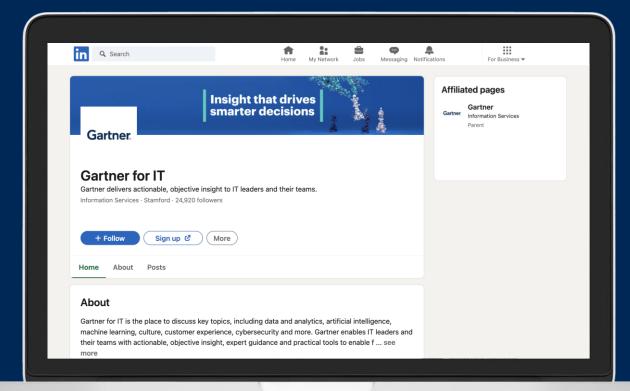
Follow us on

Looking for insights delivered to your inbox?
Subscribe to our

Gartner

Become a Client

Clients receive 24/7 access to proven management and technology research, expert advice, benchmarks, diagnostics and more.

Fill out the form to connect with a representative and learn more.

Learn More

Or give us a call: +441784614280 | +1 855 637 0291
8 a.m. – 7 p.m. ET
8 a.m. – 5 p.m. GMT
Monday through Friday

Gartner.

Get more Gartner insights

Download the research slides

View upcoming and on-demand Gartner webinars at gartner.com/webinars

Rate this session

Gartner.

Rate this session