

#### **AI-READY DATA AND ANALYTICS:**

## Priorities and Challenges of Data and Analytics in the Midst of Al Momentum



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### Table of Contents



#### CLICK BELOW TO NAVIGATE TO EACH SECTION IN THIS DOCUMENT.

.3
4
.5
6
.7
.8
.9
10
11

Analytics and Data Leadership	12
Embedding Analytics into Enterprise Applications	13
Integrated AI Capabilities in Data Management and Analytics Solutions	14
GenAl to Improve Data Quality, Mastering, and Protection	15
Organizations Are Investing In Agentic AI	16
Success Factors for Agentic Al	17
Data and Analytics Focus Is Key for Discipline and Innovation Post-Al Scramble	18
Appendix: Supplemental Data	19
About the IDC Analysts	20

### Al Momentum Amid an Al Scramble

Investments are being made, but few solutions have made it into production.



of Al investments are being allocated to GenAl and agentic Al, with the remainder going towards predictive and interpretive Al.

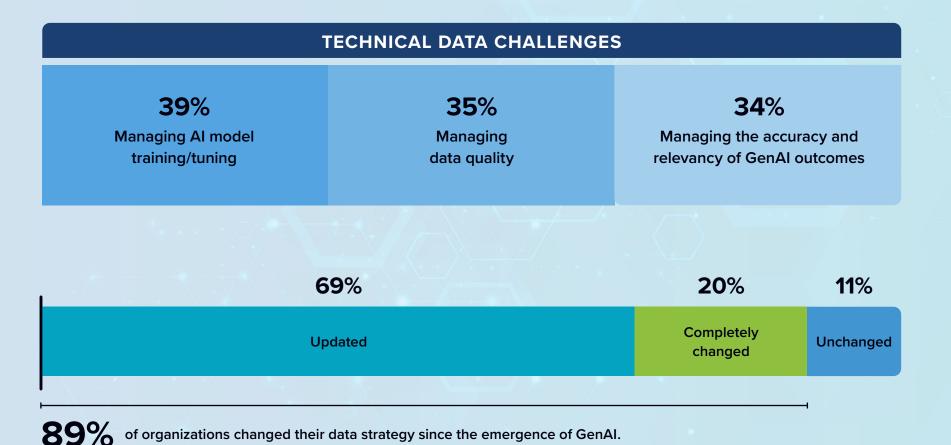
But only 26% of organizations have GenAl solutions in production.

Artificial intelligence will contribute \$19.9 trillion to the global economy through 2030 and drive 3.5% of global GDP in 2030.

Source: IDC's The Global Impact of Artificial Intelligence on the Economy and Jobs: Al will Steer 3.5% of GDP in 2030. #US51057924



## Technical Data Challenges Are Getting in the Way of Al Success



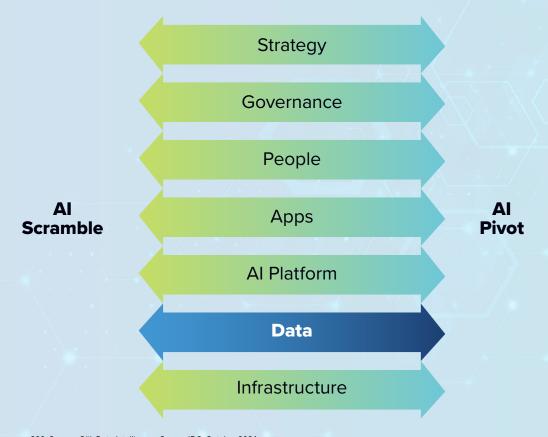
To expand and accelerate use of AI, organizations need to take a more structured and organized approach to AI projects, and investments in the organization and technology to enable business operations fueled by AI technology.

Source: IDC's The Global Impact of Artificial Intelligence on the Economy and Jobs: Al will Stee 3.5% of GDP in 2030. #US51057924



## Pivoting Out of the Al Scramble

Data transformation is a foundational dimension of the AI adoption model organizations can use.

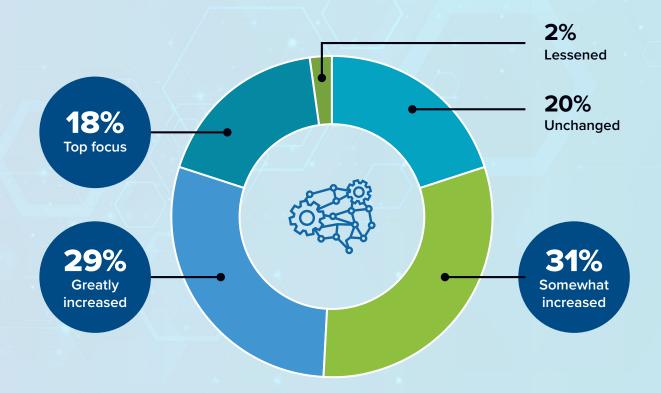


### **IDC ENTERPRISE INTELLIGENCE MODEL BUSINESS ACTIVITY PLANE** Feedback and investment Actioning, decisioning, optimization, publication, communication **DATA SYNTHESIS PLANE** Actioning, decisioning, optimization, publication, communication DATA CONTROL PLANE Data intelligence, engineering, governance **DATA PLANE** Distributed, diverse, dynamic, dark

# An Increased Focus on Data and Analytics Will Help Organizations Pivot

78% of organizations

on data since the emergence of GenAl.



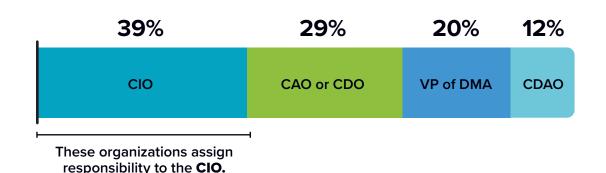
of organizations indicated that adopting Al platforms that are tailored and integrated into specific data and analytics systems will drive more meaningful business outcomes.

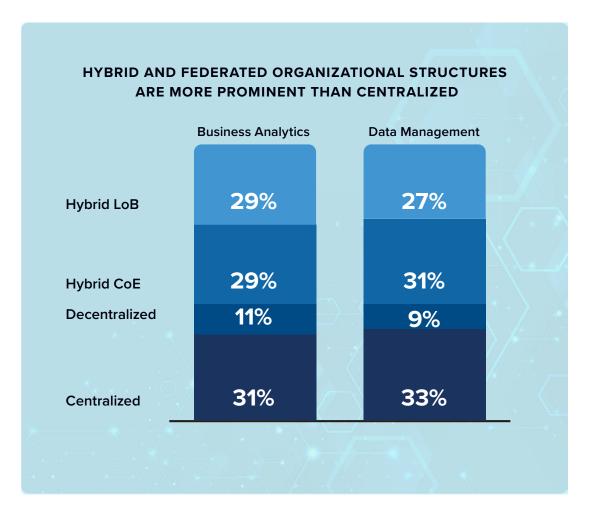
## Organizations Are Transforming to Meet the Demands of Al-Ready Data and Analytics



#### 3 in 5

organizations consolidate data management and data analytics responsibilities **under one person.** 

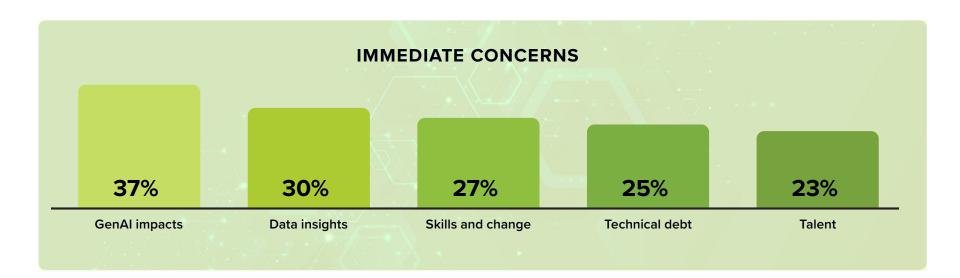






# Change Management Is a Priority for Data Leadership as Al Impacts People and Technology

Collaboration constraints, managing expectations of what AI can deliver, and skills development are the biggest challenges facing data leadership. Impact of GenAI on people are immediate concerns of data and analytics organizations.



n = 209; Source: *Qlik Data Intelligence Survey,* IDC, October 2024

InfoBrief, sponsored by Qlik
February 2025 | IDC #US53153325

IT respondents are primarily concerned with **technical debt.** 

Line-of-business respondents are primarily concerned about skills and training.

## Data Architectures and Technologies Are Being Updated

#### Less than half

of all respondents
are extremely
confident with
their current data
architecture and
technology stack.
Even fewer
business
respondents have
this same level
of confidence.

Data management leaders' top objectives are focused on Al and the quality of data and analytics products for improved decision-making.



n = 209; Source: *Qlik Data Intelligence Survey,* IDC, October 2024

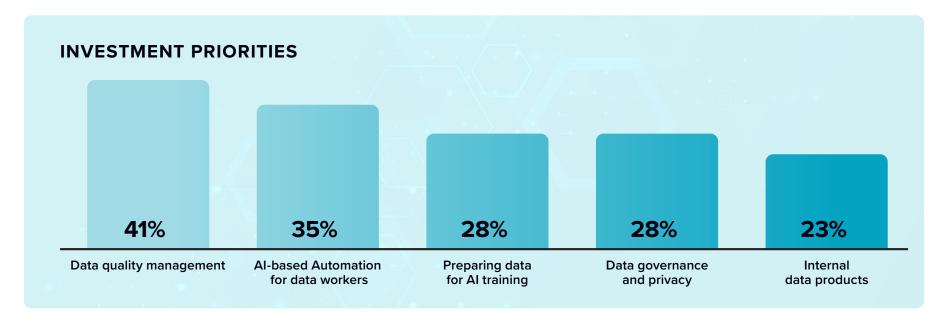


Data architectures and technologies are being updated to meet AI, data and analytics quality, and decisioning objectives.

9

## Leadership Prioritizes Investments in Data Quality Management and Al Automation for Data Workers

Investment priorities are focused on data quality, data worker productivity, and preparing data for Al tuning/training, leveraging data products for improved governance and privacy.



n = 209; Source: Qlik Data Intelligence Survey, IDC, October 2024



Line-of-business respondents are more invested in data products, governance, and privacy compared to the total population.

### Improvements from Data Productization

Data products are improving productivity, governance, data-driven business outcomes, and Al success.

#### ORGANIZATIONS WITH HIGH LEVELS OF PROFICIENCY IN DATA PRODUCTS



Can find and prepare data 6x faster



Have improved innovation metrics 9x more



Are 5x more likely to be a digital business



Have improved data governance



Are 7x more likely to have GenAl solutions in production



Have better utility of data in decision-making

Note: Compared to those with low, or no, use of data products  $\mid$  n = 848; Source: Office of the CDO Survey 2024, IDC, August 2024

#### **CURRENT STATE OF DATA PRODUCTIZATION**

#### **INVESTING SIGNIFICANTLY**

43%

We are investing significantly in identifying and creating data products and accountability within the organization.

#### CREATED AND DEPLOYED MANY DATA PRODUCTS

38%

We have created and deployed many data products with assigned ownership, enabling internal data sharing with associated.

#### DATA PRODUCTS

**17%** 

We have identified candidate data products and accountability and are doing some initial testing and focused proofs of concept (POCs).

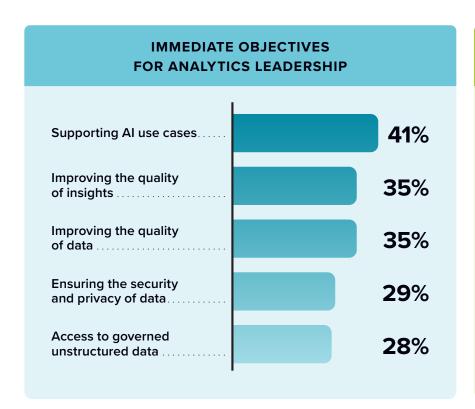
#### **NOT YET SIGNIFICANT**

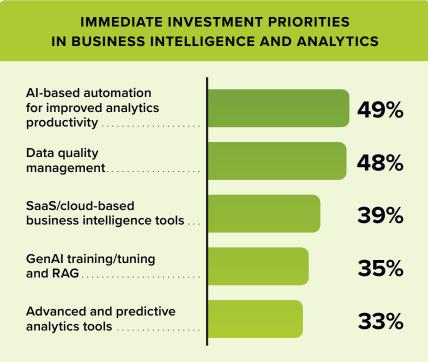
2%

We are not doing anything significant yet.



### Analytics and Data Leadership



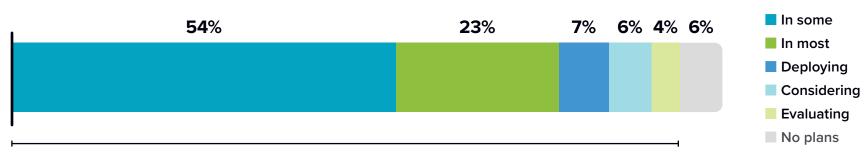


Using new data types and data sources makes quality and governance critical, and drives demand for integrated Bl/analytics and data platforms. Al-based automation is the only way to improve the productivity of analytics users working in modern data environments characterized as being highly distributed, diverse, dynamic, and dark.

Analytics leadership objectives and investments align with data leadership: focus on Al, quality, and improving access to unstructured content.



## Embedding Analytics into Enterprise Applications



of organizations have embedded or are in the process of embedding analytics into enterprise applications for pervasive insights, better data utilization, and enhanced user experiences.

For an accessible version of the data in this figure, see Appendix: Supplementa Data, figure from page 13.

#### **REASONS FOR EMBEDDING ANALYTICS INTO ENTERPRISE APPLICATIONS**

16%

Better data utilization by business users

49%

Enhanced user experience for business users

31%

Enables Bl/analytics team to focus on more analytics projects

4%

Real-time data access for business users

n = 209; Source: Qlik Data Intelligence Survey, IDC, October 2024



Line-of-business respondents were more interested in real-time access and reaching a broader set of users.

## Integrated AI Capabilities in Data Management and Analytics Solutions

**74**%

are seeking
Al systems that
require deeper
integration with
existing data
infrastructure
and workflows.

70%

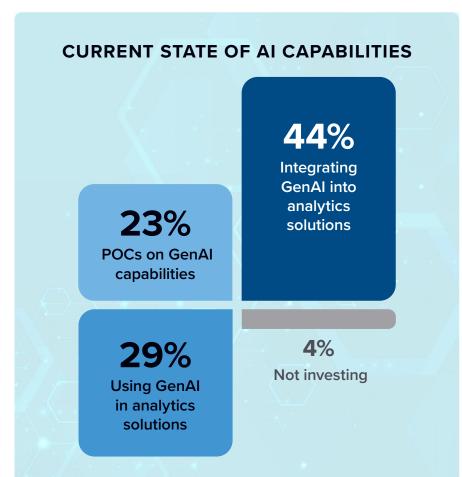
are seeking
Al platforms
that are more
tailored and
integrated
into their
specific data
and analytics
systems.

**73**%

are using/
integrating
GenAl
capabilities
into analytics
solutions,
with only
29%
indicating
already

using these

capabilities.



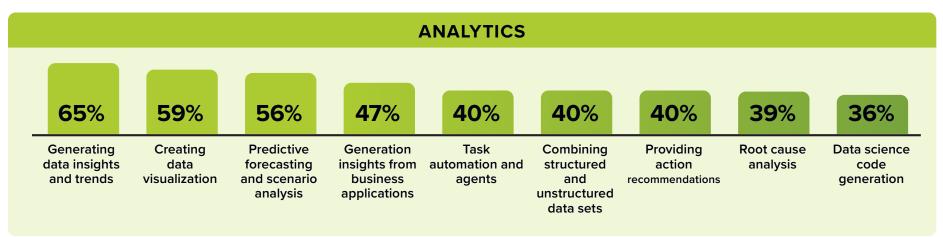
Most respondents are seeking integrated Al capabilities in data management and analytics solutions to drive long-term value and business outcomes.



## GenAl to Improve Data Quality, Mastering, and Protection

**Expectations of GenAl in ...** 





n = 209; Source: Qlik Data Intelligence Survey, IDC, October 2024



Organizations are



## Organizations Are Investing In Agentic Al

#### **IDC** defines Al Agents as:

"LLM-powered autonomous software entities that perceive their environment, make decisions, act upon them and interact with users or other systems in a manner like a human."

Source: IDC's Tech Buyers Introduction to Al Agents and Agentic Workflows, #US52518424, August 2024

This requires organizations to set up agentic workflows which refer to an iterative, interactive approach to Al development, where the Al agent is empowered to engage in a more dynamic and self-reflective process.

#### **CURRENT STATE OF AGENTIC AI**

80% of organizations are investing in agentic Al.

#### **ALREADY INTRODUCED**

**16%** 

We have already introduced several agentic AI enhanced applications/services abilities into production.

#### SIGNIFICANT INVESTMENTS

49%

We are investing significantly in agentic AI with an established spending plan.

#### **INITIAL TESTING**

31%

We are doing some initial testing of models and focused proofs of concept (PoC) but don't have a set spending plan.

#### **NOT YET SIGNIFICANT**

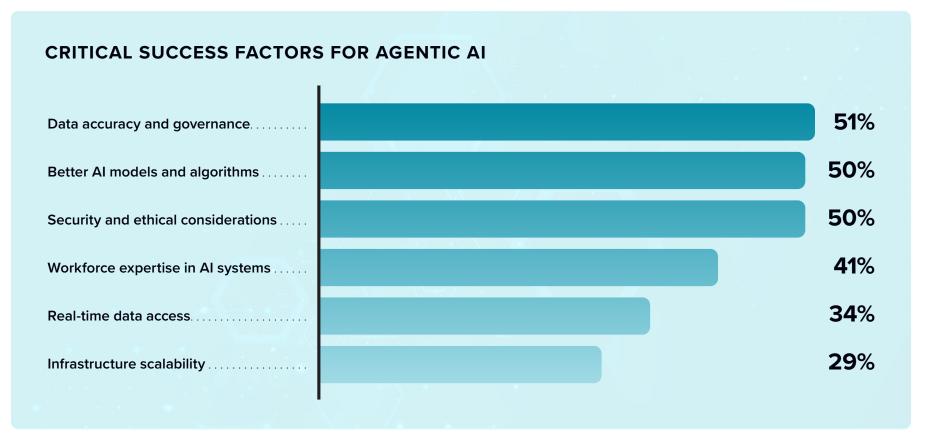
4%

We are not doing anything significant yet.



## Success Factors for Agentic Al

Only 12% organizations are extremely confident that current infrastructure is sufficient to support autonomous decision-making. Data accuracy, governance, models, and security are critical success factors.



Real-time data
access is critical for
agentic workflows,
but accuracy,
governance,
models, and security
problems need to be
resolved before real
time can be realized.



## Data and Analytics Focus Is Key for Discipline and Innovation Post-Al Scramble

The focus on data and analytics in pivoting out of the AI scramble requires discipline, accountability, and a culture of data-driven innovation.



**Data products are key to Al success.** Succeed by focusing on the business value of each product, accountability, and delivery to the product consumers — people and machines.



**Implement responsible AI** by establishing accountability and responsibility for setting clear ethical guidelines, ensuring transparency in AI decision-making, and prioritizing fairness and inclusivity.



**Orchestrate processes** that facilitate seamless integration, quality, and accessibility of data and analytics, aligning data governance, ensuring data integrity, and fostering collaboration between data engineers and analysts, driving more accurate predictions, optimized operations, and strategic innovation.



**Invest in data literacy and analytical training** to improve skills across the workforce, fostering a learning mindset prioritizing agility, transparency, and accountability in data governance to build a data culture.

"We have been successful assigning data governance roles, but formalizing data product ownership has been difficult."

Data Leader at a Manufacturing Organization

"Focus on practical applications within a defined scope to manage quality and trust issues, while maintaining a gap between sensitive internal information and publicly trained models."

Data Leader at a Financial Institution

"Emphasize upskilling and digital literacy, and use data products to democratize data access."

Data Leader at a Global Systems Integrator

## Appendix: Supplemental Data

The tables in this appendix provide accessible versions of the data for the complex figures in this document. Click "Return to original figure" below each table to get back to the original data figure.

#### FIGURE FROM PAGE 13

Embedded Analytics Into Enterprise Applications	Percentage
In some	54%
In most	23%
Deploying	7%
Considering	6%
Evaluating	4%
No plans	6%

n = 209; Source: Qlik Data Intelligence Survey, IDC, October 2024

Return to original figure



19

### About the IDC Analysts



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Megha Kumar is research vice president within IDC's worldwide AI, automation, data, and analytics organization and the global research lead for business analytics, enterprise intelligence, and decisioning solutions. Her research is focused on providing insights on business analytics, enterprise performance management, and decision intelligence technology trends, adoption, and vendor strategies. It includes best practices around enterprise intelligence and aspects of building a data-driven organization, such as data culture and personas.

More about Megha Kumar



Stewart Bond Vice President, Data Intelligence and Integration Software, IDC

Stewart Bond is vice president of IDC's Data Intelligence and Integration Software service. Mr. Bond'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 business. Having worked in the IT industry for over 30 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 and market insight give him a unique perspective valued by his customers and peers.

More about Stewart Bond

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