

# منتدى الدوحة للبيانات

من أجل الابتكار في التنمية المستدامة

23-22 أكتوبر 2024

## DOHA DATA FORUM

FOR INNOVATION IN SUSTAINABLE DEVELOPMENT

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# Top Trends in Data and Analytics 2024

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ثروة وطن  
FAMILY IS THE TREASURE OF A NATION  
العميلة القومية للأسرة - قطر 2024  
International Year of the Family - Qatar 2024



المجلس الوطني للتخطيط  
National Planning Council  
دولة قطر - State of Qatar





# Playing It Safe Doesn't Mean Ignoring the Trends; Doing Anything Can Be Better Than Doing Nothing





# Problems You Are Facing (or Will Be ...)



## Strategic

Lack of data-driven innovation

Reduced D&A agility



## Financial

Misallocation of resources

Higher TCO for D&A projects

Underused investments



## Technology

Proliferation of stealth D&A

Multiple points of failure



## Organizational

Loss of influence for D&A team

Incorrect use of data for decision making

Non-data-driven approaches to decision making



## People

Employee burnout

Difficulty sourcing talent

# The Top Trends in D&A

From **good enough**



to **bet the business**

From **chaotic**



to **managed complexity**

From **a single source of truth**



to **a deluge of distrust**

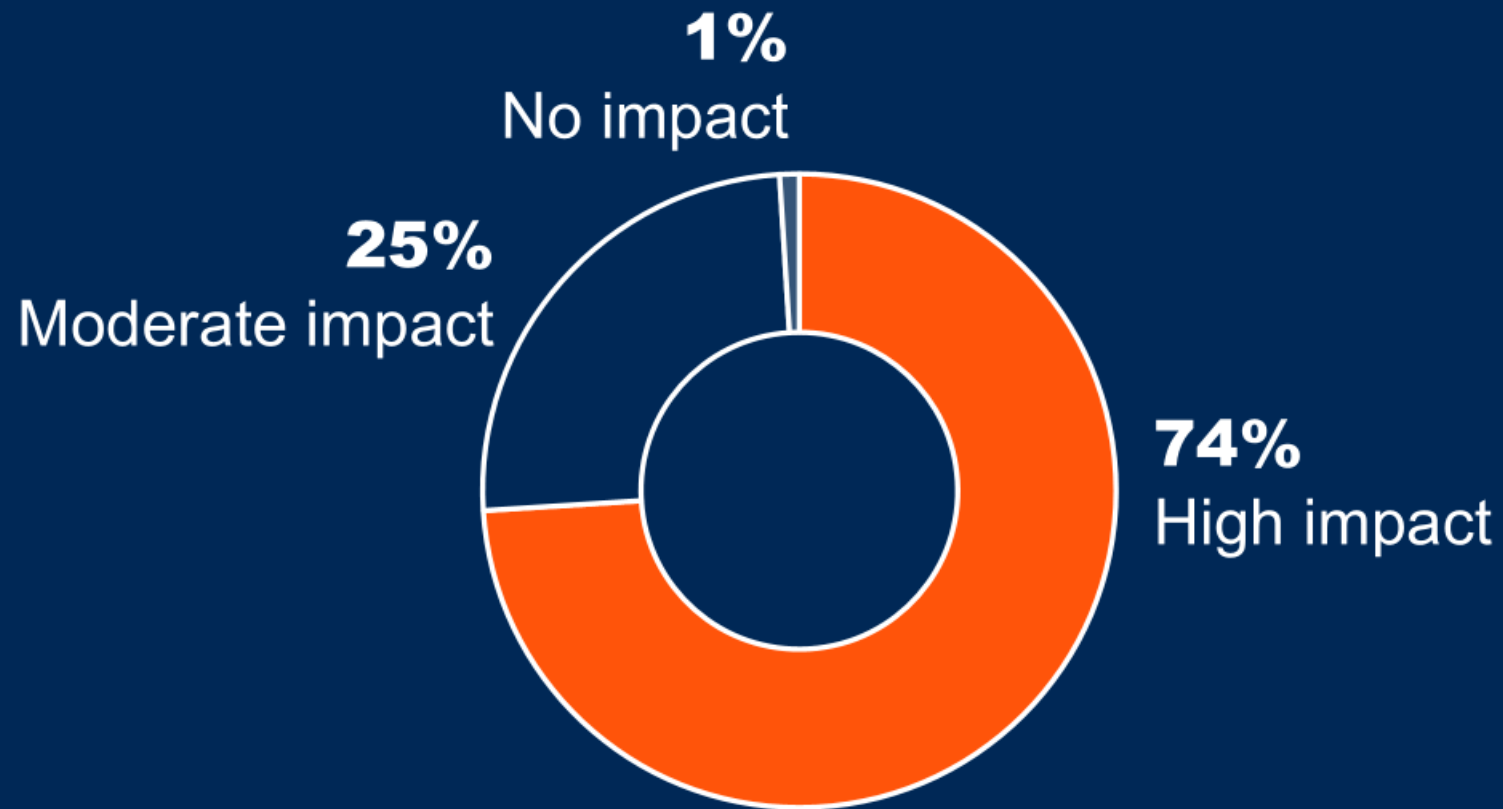
From **overloaded**



to **empowered**

# Trend: From “Good Enough” to “Bet the Business”

Senior leader perceptions of impact of GenAI in the next three years



n = 61; technology and business leaders, excluding “not sure”

Q: What degree of short-term and long-term impact do you believe generative AI (e.g., ChatGPT) will have on your industry?

Source: 2023 Gartner Business Outcomes of Technology by Use Case Survey

# If You Cannot Prove Your Value ...



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## Betting the Business: Step Up or Step Aside

# 1

## Prove your value to the organization

### What you should do:

- Use the enterprise value equation to create a clear link between D&A capabilities and business value.
- Optimize resource allocation decisions with a consistent approach to scoring investment opportunities.
- Include relevant intangibles, such as sustainability or DEI goals.





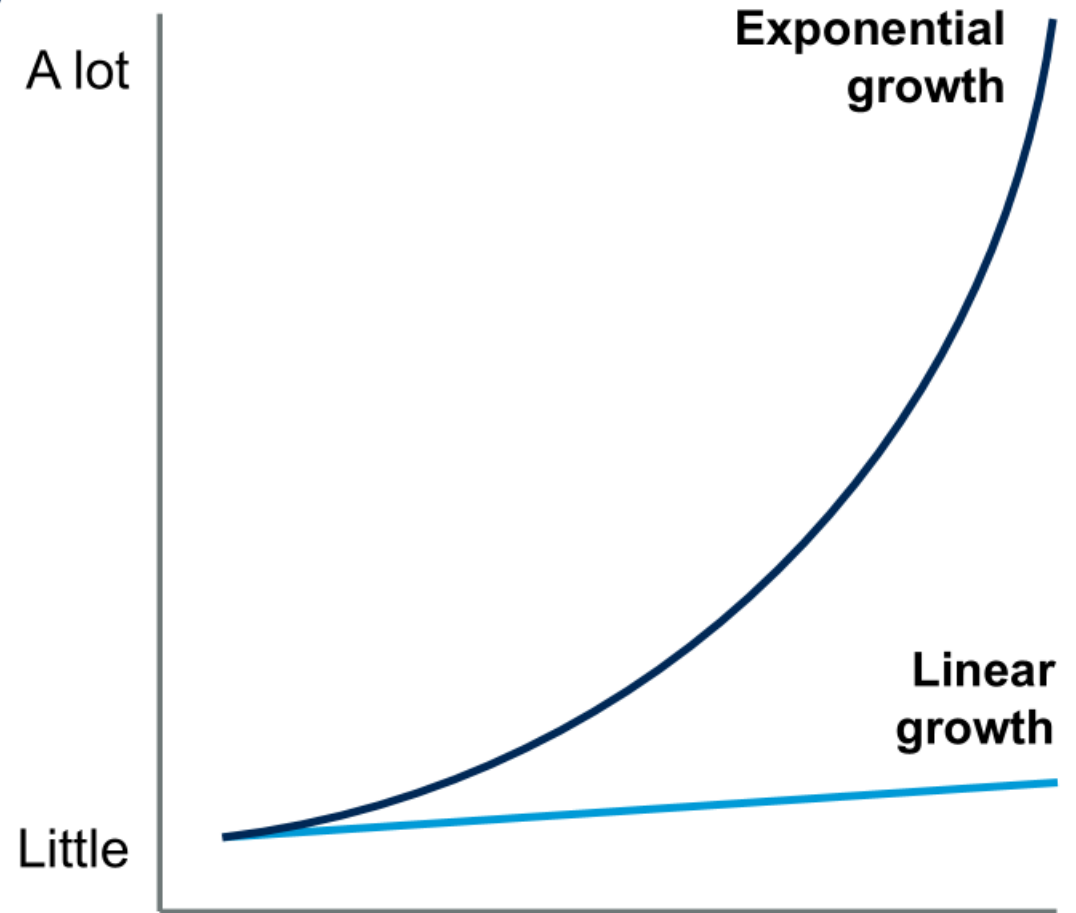
## Betting the Business: Step Up or Step Aside

# 2

## Use FinOps to flatten the cost curve

### What you should do:

- Establish a formal, centralized FinOps practice to set and enforce standards.
- Track and attribute costs by using resource tagging and targeted FinOps tools and practices.
- Conduct regular vendor price/performance reviews to assess the health of your environment.
- Seek out vendors offering augmented FinOps capabilities to progress your maturity and automation aspirations.



## Betting the Business: Step Up or Step Aside

### 3

## Establish D&A franchises

### What you should do:

- Identify best practices in skills, processes and technology across the organization.
- Use those best practices as a template for others to leverage.
- Consider establishing some franchises as designated thought leaders in different aspects of D&A.



# Trend: From “Chaotic” to “Complex”

Struggled to find information or data needed to effectively perform my job

47%

Missed or failed to notice important updates because of the number of applications used and/or the volume of information produced on them

36%

Made the wrong decision due to lack of awareness

32%

0%

25%

50%

n = 4,734 to 4,802; all digital workers excluding not sure/not applicable

Q: Select how often you have encountered the following situations in your organization.

Note: The following percentages have been calculated by summing up responses for sometimes, frequently, usually and always.

Source: 2022 Gartner Digital Worker Survey



# If You Do Not Manage Complexity ...



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Reduced D&A agility



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## Embrace Complexity

# 4

## Balance your complexity

### What you should do:

- Avoid the temptation to try to fix problems by adding complexity.
- Simplify the governance process with policies, not rulebooks.
- Use design thinking principles to simplify your technology environment.
- Consider using D&A-enabled complexity as a source of competitive advantage.





## Embrace Complexity

# 5

## Understand your ecosystem

### What you should do:

- Invest in systems that capture contextual data.
- Create a digital twin of your products, processes, organization or environment.
- Invest in process mining tools to discover, monitor and improve business operations and processes.
- Use AI to build automated responses to complex phenomena.





## Augment with AI-enabled systems

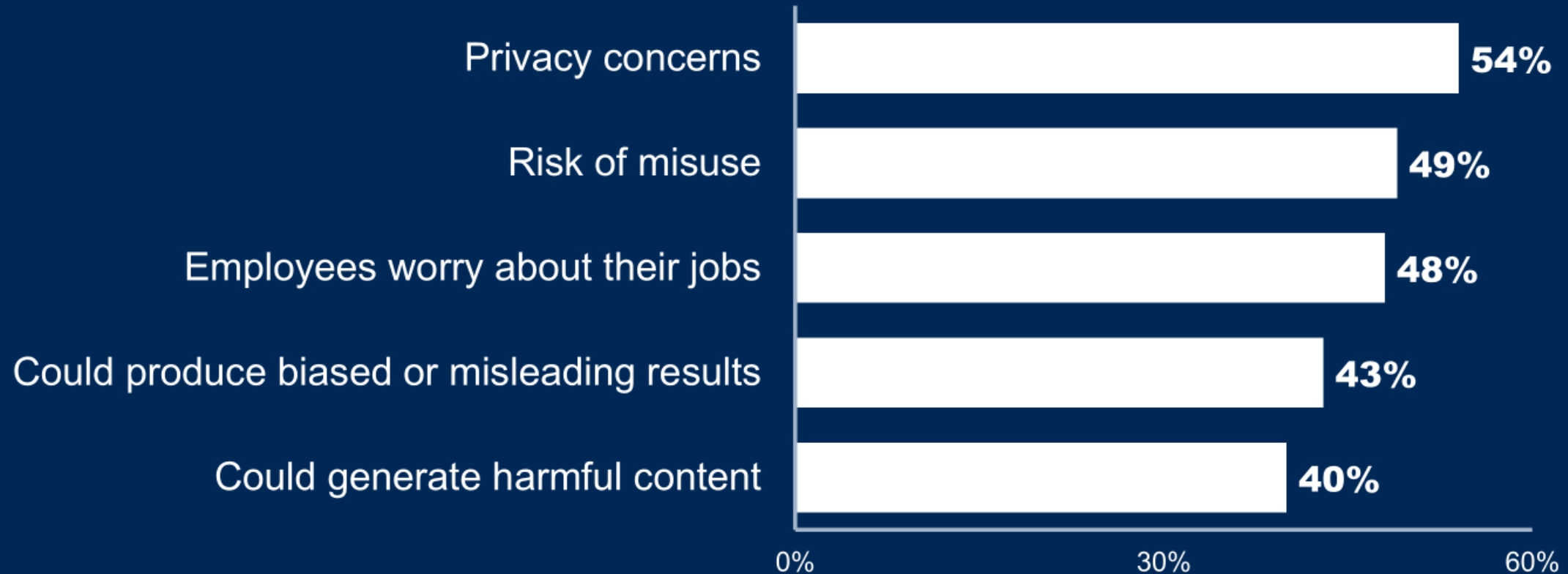
### What you should do:

- Invest in augmented data management tools, not only for established use cases such as data catalogs and migration but also to support advanced use cases like active metadata.
- Boost the efficiency of business analysts with augmented pattern discovery and communication capabilities.
- Embrace decision automation for more use cases with self-learning AI systems.
- Invest in augmented analytics capabilities such as NLP/NLG to reach emerging groups of users.



# Trend: From a “Single Source of Truth” to a “Deluge of Distrust”

## Senior Leadership Top GenAI Concerns



n = 620; technology and business leaders, excluding not sure

Q: What are the main concerns about generative AI (e.g., ChatGPT) in your enterprise?

Source: 2023 Gartner Business Outcomes of Technology by Use Case Survey

# If You Do Not Establish Trust ...



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## Ensure explainability and auditability

### What you should do:

- Ensure data observability practices extend throughout the data to the action value chain.
- Use decision intelligence practices to track decision-making processes and decision outcomes.
- Ensure governance policies set clear expectations between performance and explainability.
- Invest in AI explainability skills, tools and processes.
- Invest in communication skills training for D&A team members to ensure effective collaboration with business partners.





## Be Trusted

# 8

## Ensure your data is AI-ready

### What you should do:

- Align diverse groups of stakeholders to ensure data is ethically governed.
- Secure your data by using technologies that allow you to license and use an LLM without disclosing your own data.
- To ensure fairness, ensure data is gathered from diverse sources.
- Enrich your data with rules and tags so it is ready for consumption by LLMs.
- Double-check data to ensure accuracy.



# Trend: From “Overloaded” to “Empowered”

	2017	2019	2023
Complex	1	1	1
Threatening	3	4	2
Fascinating	2	3	3
Impressive	4	2	4
Convenient	7	5	5
Efficient	8	9	6
Confusing	10	7	7
Exciting	6	8	8
Unnecessary	5	6	9
Effective	9	10	10

n = 3,600 employees worldwide; n = 4,264 employees worldwide; n = 3,621 employees worldwide

Source: 2021 Gartner Workforce Resilience Survey; 2021 Gartner Hybrid Workforce Survey; 2022 Gartner Candidate Experience Survey



# If You Do Not Empower Your People ...



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## Ensure your people are AI-ready

### What you should do:

- Invest in AI literacy programs to address:
  - Needs and policy.
  - Best practice AI techniques.
- For people in both business and technology, from C-level to operations.
- (Re)design processes and set role expectations for human and AI collaboration rather than AI substitution.



## Govern for user empowerment

### What you should do:

- Ensure end users are authorized to make decisions that are supported by analysis.
- Educate users in decision-making techniques and how to avoid decision-making errors.
- Ensure continued oversight to avoid self-serving analysis.
- Deploy tools for self-service data preparation on bring-your-own-data use cases.
- Ensure your data has a default accessibility status of “shared.”





## Protect personal innovation time

### What you should do:

- Dedicate specific time for employees to pursue side projects on high-impact topics.
- Align projects with business outcomes to ensure relevance and actionability.





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From **overloaded**



to **empowered**

# Immediate Actions to Respond to the Trends

## Think different

- 4 Balance your complexity
- 11 Protect innovation time

# Build Your Financial Acumen

## Think different

- 4 Balance your complexity
- 11 Protect innovation time

## Show them the money

- 1 Prove your value
- 2 Use FinOps

# Start the Transition of Authority

## Think different

- 4 Balance your complexity
- 11 Protect innovation time

## Show them the money

- 1 Prove your value
- 2 Use FinOps

## Let it go

- 3 Establish D&A franchises
- 10 Govern for empowerment



# Initiate Levels of Deeper Understanding

## Think different

- 4 Balance your complexity
- 11 Protect innovation time

## Show them the money

- 1 Prove your value
- 2 Use FinOps

## Let it go

- 3 Establish D&A franchises
- 10 Govern for empowerment

## Get a grip

- 5 Understand your ecosystem
- 6 Augment with AI-enabled systems
- 7 Ensure explainability and auditability
- 8 Make your data AI-ready
- 9 Make your people AI-ready

# Key Actions to Respond to the Trends

## **Think different**

- 4** Balance your complexity
- 11** Protect innovation time

## **Show them the money**

- 1** Prove your value
- 2** Use FinOps

## **Let it go**

- 3** Establish D&A franchises
- 10** Govern for empowerment

## **Get a grip**

- 5** Understand your ecosystem
- 6** Augment with AI-enabled systems
- 7** Ensure explainability and auditability
- 8** Make your data AI-ready
- 9** Make your people AI-ready