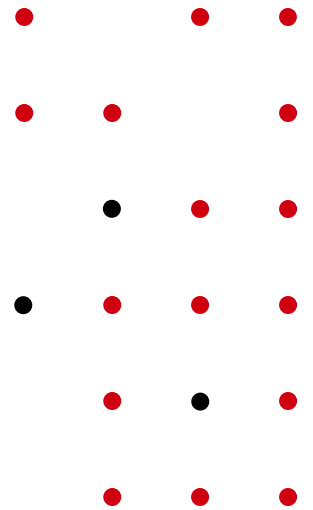


DATA-FILE

Better Data Driven Business Decisions: What You Need to Know

Table of Contents



03	Introduction
06	Data Driven Decision Essentials
12	Data Management
16	Artificial Intelligence
19	Data Literacy
23	Data Driven Culture
26	Conclusion

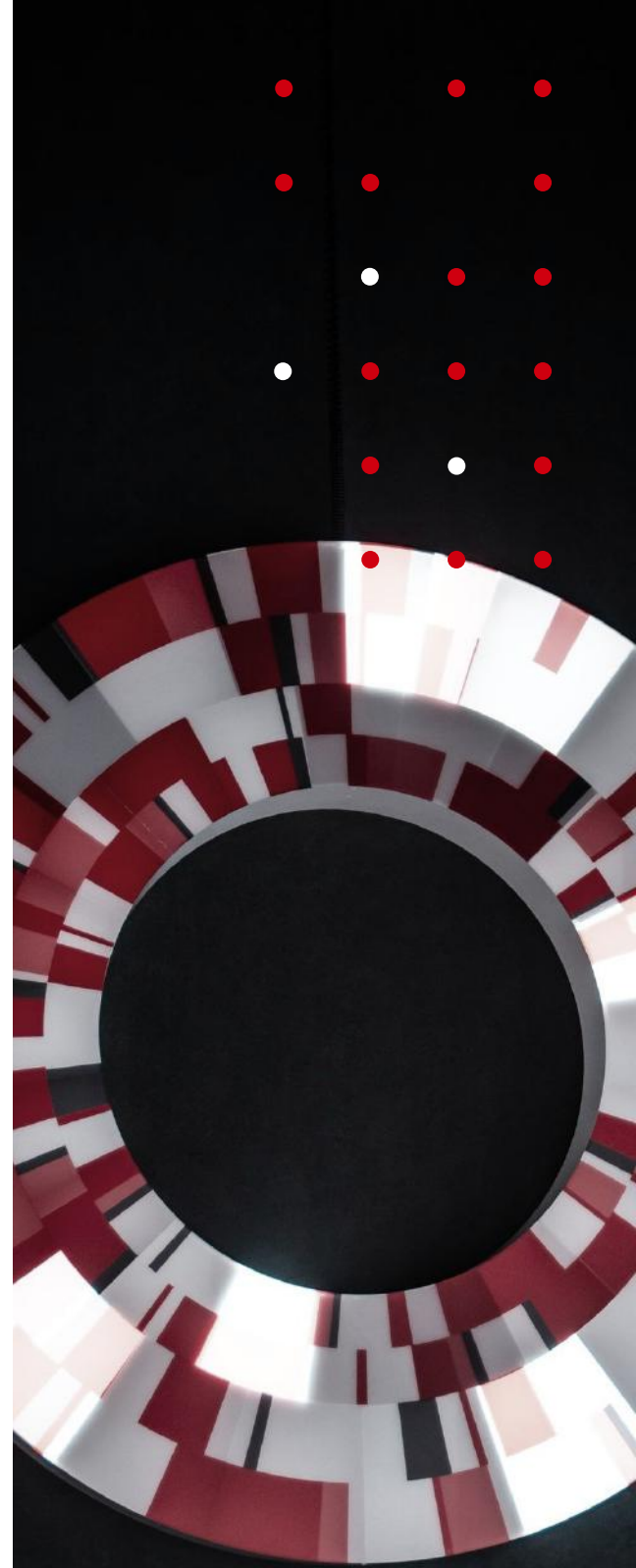
Introduction

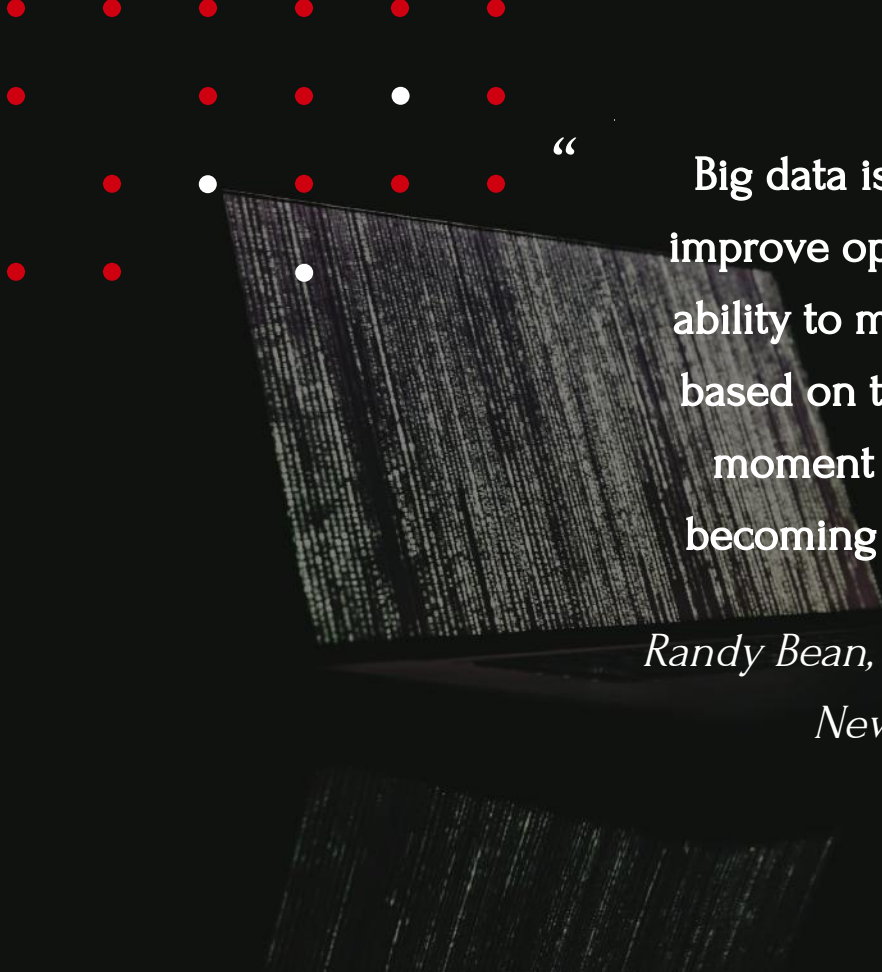
The recent explosion of available data has created an ever-increasing need for more effective methods to help us make sense of it.

According to Gartner research, 30% of organizations will harness the collective intelligence of their analytics communities—outperforming competitors that rely solely on centralized analytics or self-service, by 2023.¹

Data-driven decision-making (DDDM) is the process of collecting data based on targeted performance goals and using that data to gather actionable insights.

Data and analytics are now involved in all aspects of our businesses, communities, and personal lives.





“ Big data is already being used to improve operational efficiency. The ability to make informed decisions based on the very latest up-to-the-moment information is rapidly becoming the mainstream norm. ² ”

*Randy Bean, CEO of consultancy firm
NewVantage Partners*

Today the role of data and how it is used to make decisions is an essential part of an organization’s business model and digital capabilities.

Yet less than a third (29%) of respondents to Gartner’s Annual Chief Data Officer Survey indicated that they are successfully meeting the objective of “ROI from data and analytics investments.” ³

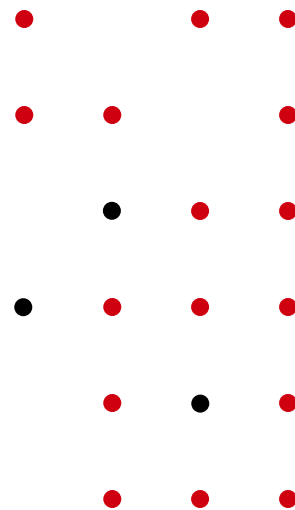
Understanding the data-driven decision-making process will help you identify solutions to common challenges and highlight valuable opportunities to make better data-driven business decisions.

This paper discusses the essentials of DDDM and four core components that dominate the current discussion about how companies can make better decisions:

- > Data Management
- > Artificial Intelligence
- > Data Literacy
- > Data Driven Culture



Data Driven Decision Making Essentials

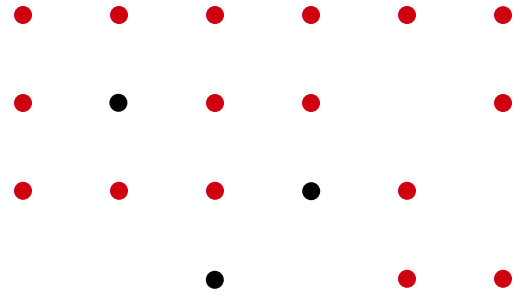


36%

of senior executives from large corporations highlight “advanced analytics/better decisions” as their top priority ⁴

Data-driven decision-making (DDDM) is an essential process for every professional to understand—even more so for those in data-oriented leadership roles.

Effective data-driven processes help businesses make strategically-guided decisions, set measurable goals, improve company operations, and maximize profits.



All modern businesses use data-supported elements in some capacity to inform the way they operate.

There are 4 essential steps for implementing an effective Data-Driven Decision-Making process:

1 Identify business objectives: The most common problems associated with this step center around data quality.

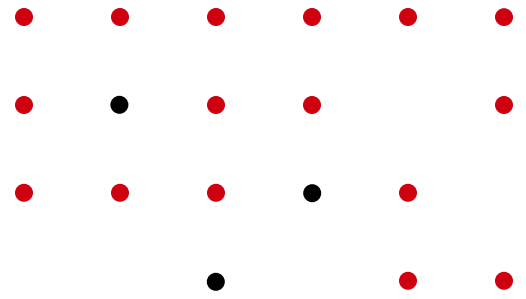
Without clearly defined business objectives, data collection will be unfocused and unreliable.

Data quality is critical to this process since it heavily influences each following step.



82%

of respondents cite confusing data governance policies as a primary challenge ⁵



2 Collect & organize data: Once you've identified the goals you're working towards, you can identify targeted data sources and start collecting data.

The most common problems associated with this phase can include challenges with storage, security, and availability.

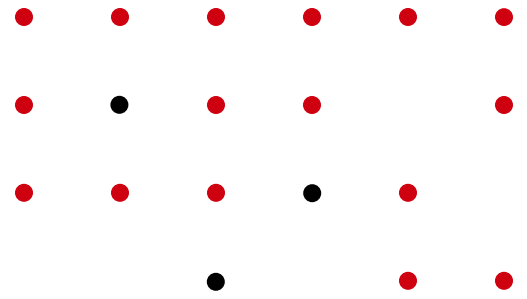
A well-crafted data governance policy will establish rules and regulations for all an organization's data-related procedures.

This policy informs what data is collected, how the data is stored, and who will have access to it.



33%

of leaders say it is “very important”
to have programs or partnerships in
place to make employees more
data-literate ⁶

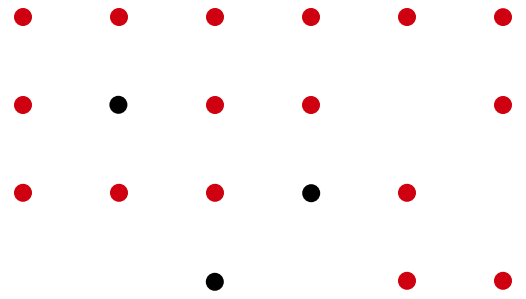


3 Data Analysis: Once the collected information is properly organized, you can begin your data-driven analysis. This process will allow you to extract actionable insights from your data.

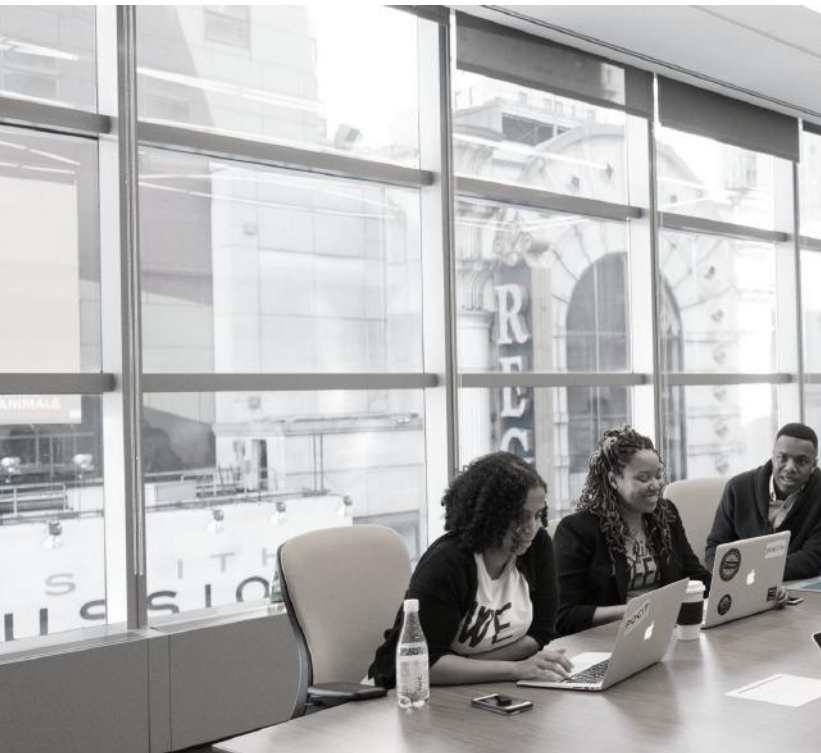
Common problems associated with this step in the decision-making process impact the ability of team members to glean useful insights from data and then communicate those insights to others.

Investments in data literacy skills and training have proved the most effective solution to improve the ability of team members to read, write and communicate the use-case applications and resulting value of the available data.





Organizations that operate with a shared purpose, policies, and processes to enable inter-enterprise data sharing will outperform those that don't by 2023, according to Gartner research. ⁷



4 Act on insights: The final step is to make decisions based on gathered insights.

The most common challenges associated with this phase of the DDDM process arise from personal and cultural resistance to data-driven decision-making.

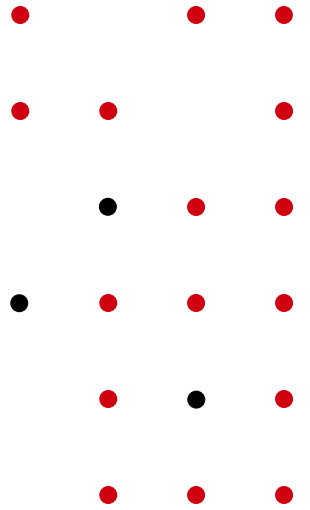
Developing a data-driven culture is the key to overcoming these challenges. This collective set of beliefs and behaviors, aligned through a shared value and practice of using reliable information to make better decisions, is a proven solution.



“ The quality of the decisions made by data-driven organizations is giving them a competitive edge, especially on digital initiatives. ⁸ ”

Patrick Long Principal Analyst

By understanding both the challenges and best practices for working with growing stockpiles of data, organizations are better equipped to empower their teams to cultivate the critical skills and community to make the most of ever-improving tools & technology.



Data Management

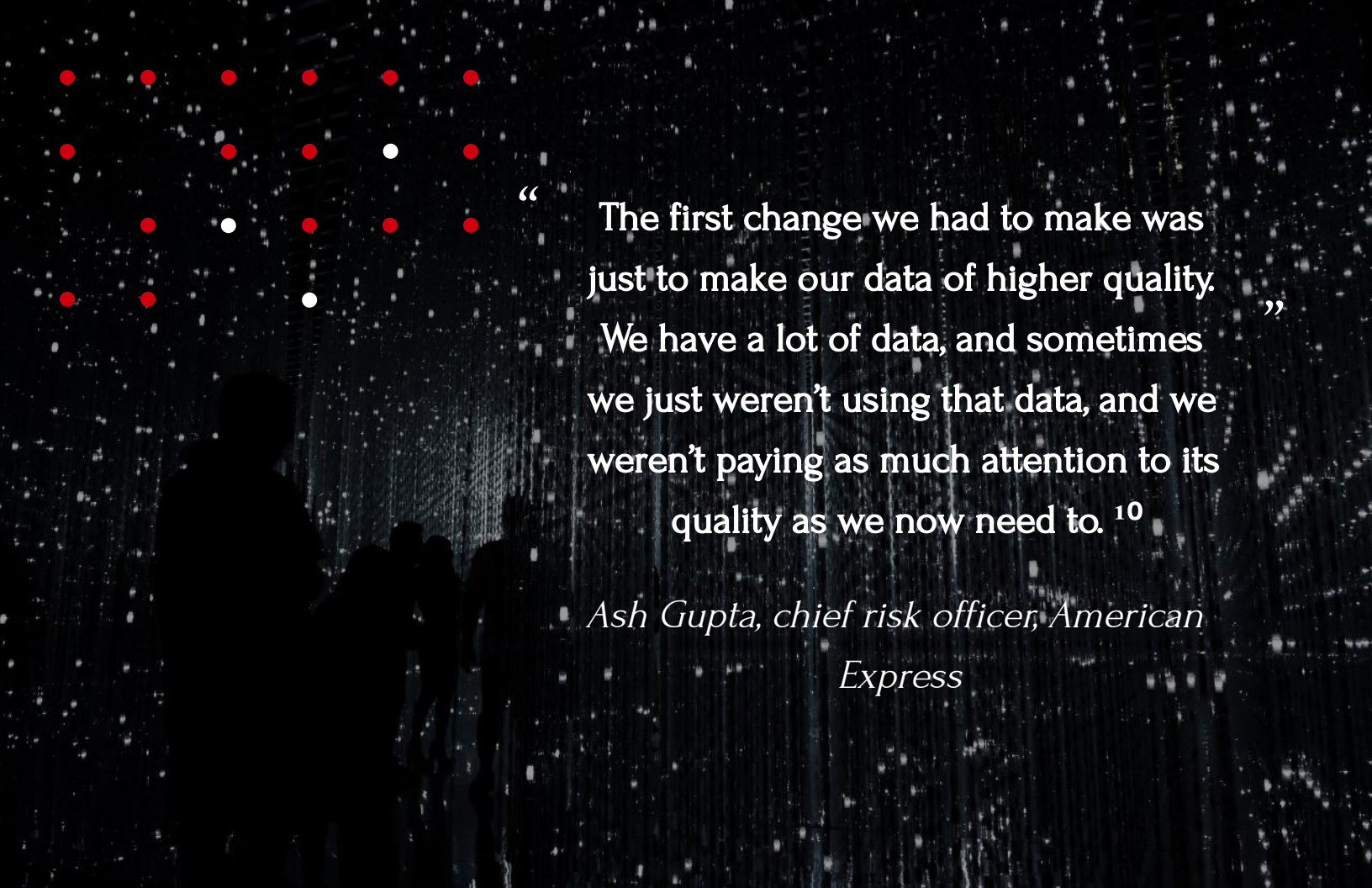
Data is the fuel that powers modern business—it helps you make better decisions and better understand your customers.

Data management is the practice of collecting, organizing, protecting, and storing an organization's data so it can be analyzed for business decisions.



78%

of decision-makers cite a lack of data cataloging as a top challenge⁹



“ The first change we had to make was just to make our data of higher quality. We have a lot of data, and sometimes we just weren’t using that data, and we weren’t paying as much attention to its quality as we now need to. ¹⁰ ”

Ash Gupta, chief risk officer, American Express

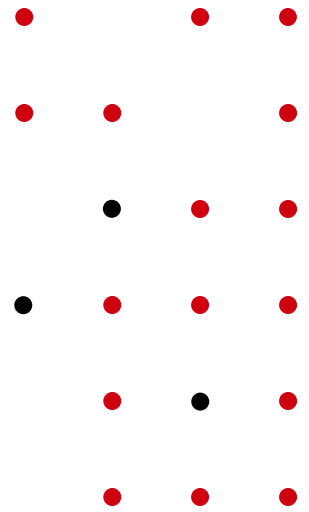
The quality and accuracy of data-driven decisions rely heavily on the quality of the data and its analysis. Concerns about privacy and security also make collecting and sharing data a significant challenge.

Without data cataloging, decision-makers struggle to understand what data they have, how the data is used, and who owns the data. This leads to other key challenges, such as poor data quality, difficulty understanding data, and a lack of data observability.

“ I think the best companies are treating data as a strategic asset that everyone has to manage well. When it comes to managing money, that’s not just the CFO’s problem. ¹¹

Anil Chakravarthy - CEO, Informatica

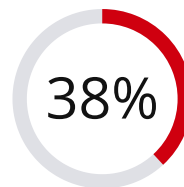
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51%

of respondents say data accuracy is an essential metric of success for their data-governance programs ⁸

Data accuracy, quality, and security are primary metrics for the success of any data governance program.



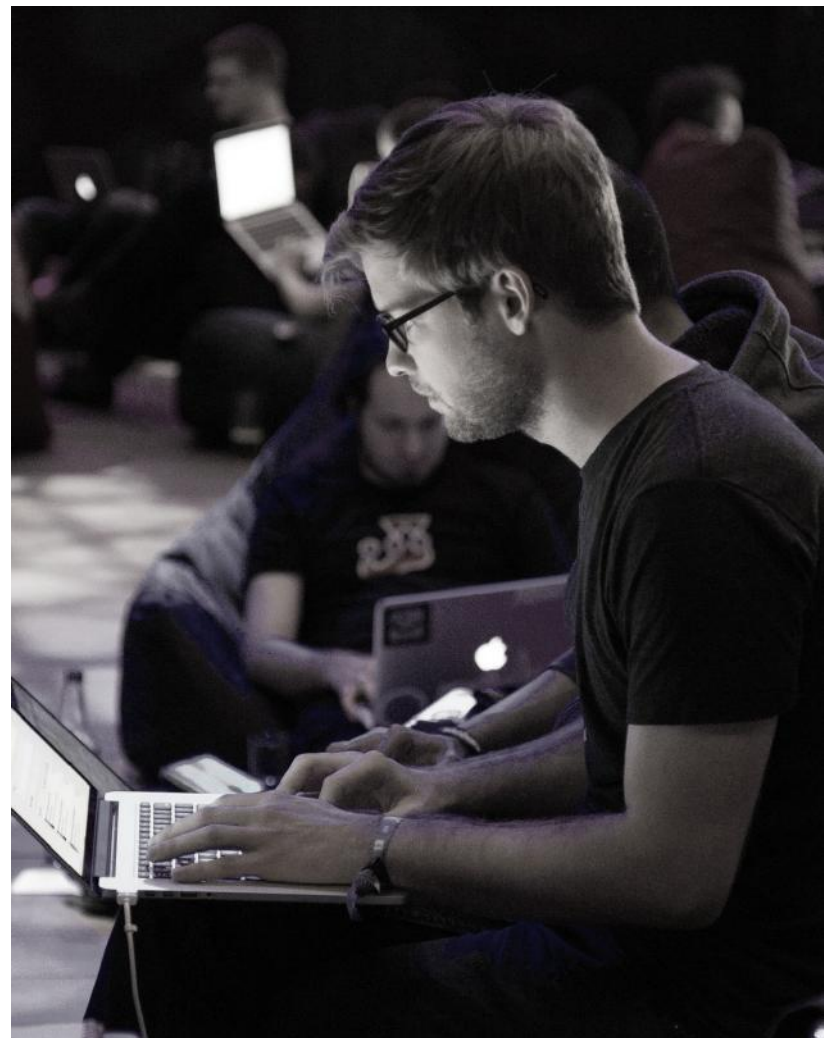
of survey respondents rank improving data quality as the most important benefit of data governance ¹²

“ Effective data governance makes data relevant, easy to find, and ready to use and derive business value from. ¹³ ”

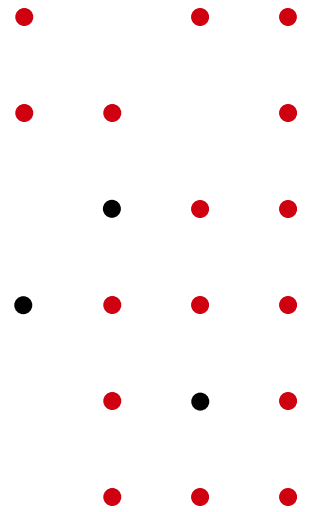
Salim Syed, VP & head of engineering

for Capital One Software

The solution to these challenges is a combination of strong data governance and integration of well-aligned data management software solutions. Today's leading data management software solutions ensure reliable, up-to-date data is always available to guide daily business decisions.



Artificial Intelligence

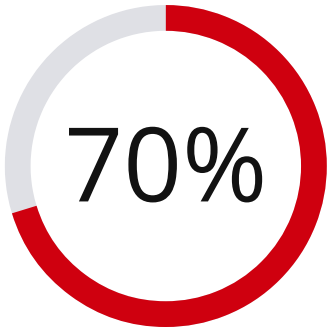


65%

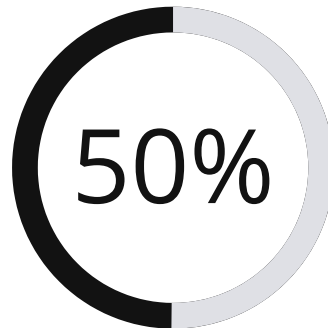
Artificial intelligence will be capable of reducing the costs of data quality and data management by up to 65% by 2023 ¹⁴

If data is the fuel that powers data-driven processes, then artificial intelligence (AI) is the engine that propels much of the innovation we see in today's business world.

AI is employed in a broad range of data-focused jobs—from capture, storage, and preparation, to advanced analytics technologies.



of businesses will be using at least one type of AI technology by 2030



of all large companies will have a full range of AI tech embedded in their processes ¹⁵

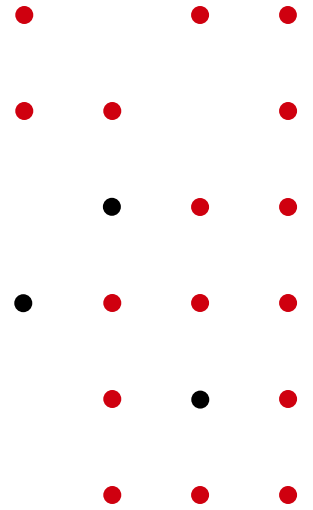
As the sheer volume of available information grows, the need for tools to help collect, analyze, and prepare data for human consumption becomes a necessity.

Artificial intelligence has emerged as a critical component of successful data-centric business operations.

However, even with all its varied applications that help businesses make informed and effective decisions, AI requires quality data and clear direction to produce quality results.



Decision-makers at organizations adopting AI now realize they must address data quality issues before they can fully realize their data-driven goals—especially in the era of automated decisions, AI, and continuous process optimization.

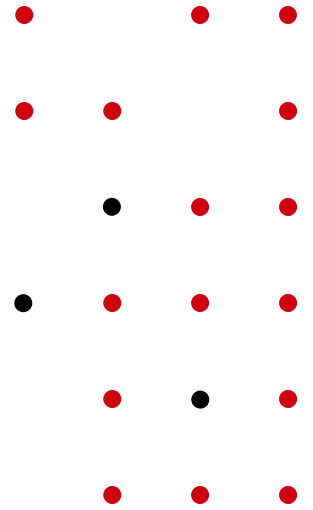


60%

of decision makers at companies adopting AI cite data quality as either challenging or very challenging—it's their top challenge when trying to deliver AI capabilities ¹⁶

The best approach to address persistent data quality issues requires data management policies and procedures that ensure quality standards for what data is collected and how it's stored, and who has access.

Data Literacy

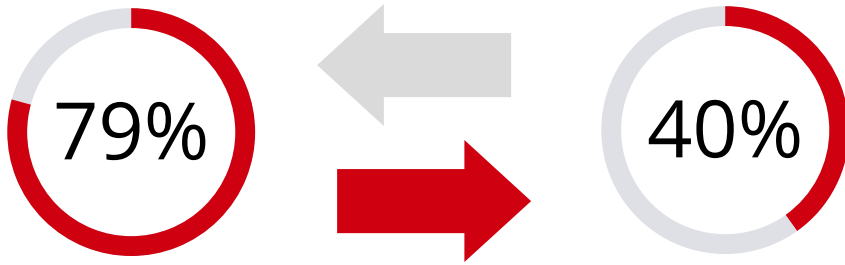


89%

of employees don't feel fully
confident in their data literacy
skills ¹⁷

By 2023, data literacy will become an explicit and necessary driver of business value, according to Gartner research. ¹⁸

Data literacy skills are a new core requirement for all employees in digital business and can be defined as the ability to read, write and communicate effectively using data.



Decision-makers

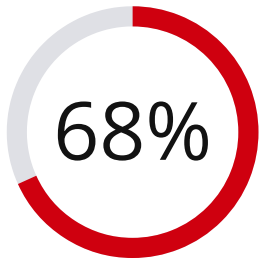
Employees

say their department is successfully equipping its workers with needed skills ¹⁹

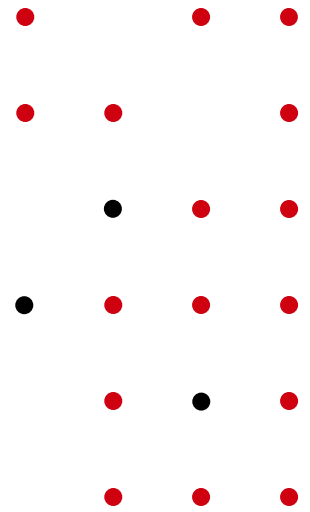
Unfortunately, organizations are struggling to maximize the full benefits from DDDM—due in large part to a low rate of data literacy among team members.

According to global research by Qlik from over 1,200 C-level executives and 6,000 employees, employees' use of data and its importance in decision-making has doubled in the last year. However, only 11% of employees feel fully confident in their data literacy skills. ²⁰

Along with research that notes low rates of literacy with data, there are signs that leaders underestimate the training gap in their organizations.



of respondents highlight data literacy/skills training within their data and analytics strategies as a top priority ²⁰

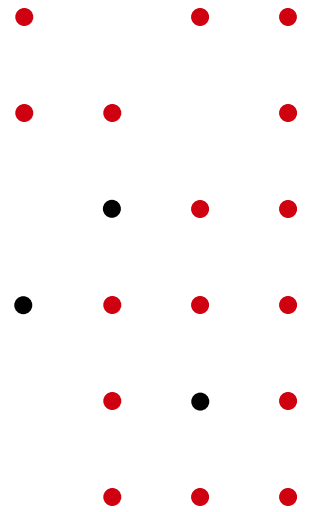


This disconnect has a damaging impact on the resources and backing from leadership necessary for literacy initiatives to deliver results.

The ability to understand and work with data is a skill set that empowers team members at all levels to gain insights and make better business decisions—even without programming experience or a specialized technical background.



According to a survey by Harvard Business Review, 87% of survey respondents say their organization will be more successful when frontline workers are empowered to make important decisions in the moment. ²¹



“ Data is powerful when it is in everyone’s hands. ²² ”

Kerry Small, Commercial and Operations Director at Vodafone Business

Leaders who want to prioritize data literacy need to invest in formal data literacy/training programs and communicate a clear connection between improved literacy and business success.

Successful DDDM programs will require dedicated training programs with clearly defined goals to measure success by.

Data Driven Culture

Few can argue the value DDDM has to offer. However, many companies struggle to shift the shared collection of values, expectations, and practices to a culture that prioritizes objective, data-driven decision-making.

NewVantage Partners recently reported that 98.6 percent of executives indicate that their organization aspires to a data-driven culture, while only 32.4 percent report having success.²³

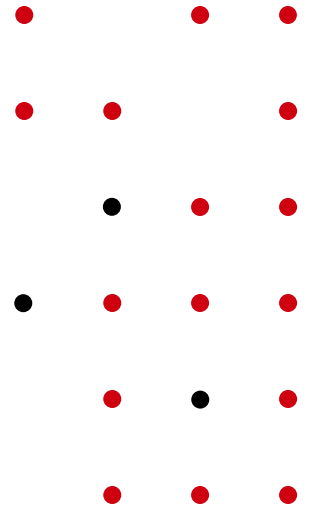
Data-driven culture requires leaders to chart a strategic shift in the way their entire organization uses data to inform decisions.



68%

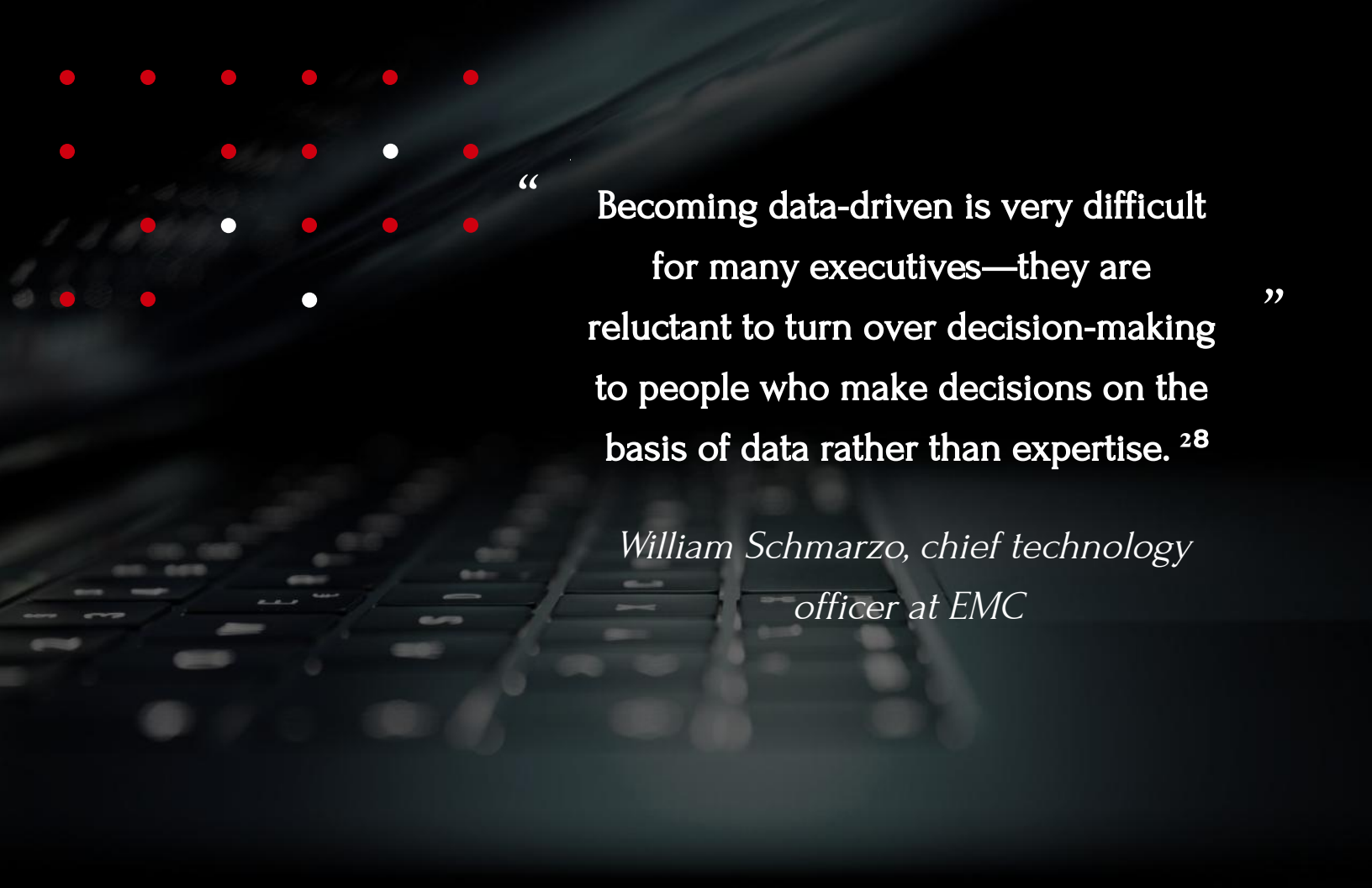
of executives report that their organization struggles to achieve a data-driven culture²⁴

A recent IDC study also noted that organizations have invested trillions of dollars to modernize their business, but 70 percent of these initiatives fail because they prioritized technology investments without building a data culture to support it. ²⁵



Building a data-empowered community strengthens the network of users within your organization who use data to share and collaborate.

Research continues to cite “Culture challenges to accept change” as one of the most significant roadblocks to the success of data-centric decision-making initiatives. ²⁷



“ Becoming data-driven is very difficult for many executives—they are reluctant to turn over decision-making to people who make decisions on the basis of data rather than expertise. ²⁸ ”

William Schmarzo, chief technology officer at EMC

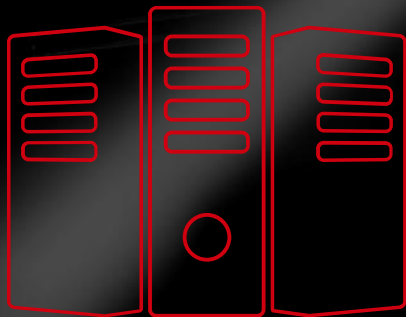
Murli Buluswar, chief science officer, AIG notes, "The biggest challenge of making the evolution from a knowing culture to a learning culture—from a culture that largely depends on heuristics in decision making to a culture that is much more objective and data driven and embraces the power of data and technology is really not the cost. Initially, it largely ends up being imagination and inertia." ²⁹

A clear focus and dedicated organizational change management are a must to achieve measurable data-driven business outcomes. Successful leaders are keen to highlight improved business outcomes and share collective victories to help ensure team members understand the value of improved data-driven culture.

Conclusion

Current research highlights the fact that the value of a data-driven process relies heavily on the quality of the data, as well as the accuracy of the analysis, and interpretation.

Those organizations that fail to address the skill, and the will needed to reap the rewards from a DDDM process, are positioned to lag behind competitors.



Building effective data-enabled operations require a structured investment in terms of time and resources. However, the return on this investment can be exponential—provided data policy, tools, and talent are aligned with strategic business goals.

Organizations well-positioned to leverage the oncoming torrent of information are predicted to outperform their peers by increasingly significant margins.

Endnotes

- 1 "[5 Key Actions for IT Leaders for Effective Decision Making in Midsize Enterprises](#)," - Gartner
- 2 "[The Advantages of Data-driven Decision-making](#)," Harvard Business School
- 3 "[Drive Business Outcomes by Measuring the Value of Data Literacy](#)," - Gartner
- 4 "[5 Essentials for Implementing Data-Driven Decision-Making](#)," Ohio University
- 5 "[Data Management Poses Major Challenges And Issues For Companies: New Study](#)," - Forbes Magazine
- 6 "[The Economist: Fostering a data-driven culture](#)," - The Economist Intelligence Unit
- 7 "[5 Key Actions for IT Leaders for Effective Decision Making in Midsize Enterprises](#)," - Gartner
- 8 "[5 Key Actions for IT Leaders for Effective Decision Making in Midsize Enterprises](#)" - Gartner
- 9 "[New data management models are essential to operate in the cloud](#)," - Forrester
- 10 "[How companies are using big data and analytics](#)," - McKinsey & Company
- 11 "[Managing data as an asset: An interview with the CEO of Informatica](#)," - McKinsey & Company
- 12 "[Data quality: the foundation of effective data governance](#)," - The Economist
- 13 "[Data Management Poses Major Challenges And Issues For Companies: New Study](#)," - Forbes Magazine
- 14 "[5 Key Actions for IT Leaders for Effective Decision Making in Midsize Enterprises](#)," - Gartner
- 15 "[AI decision making: the future of business intelligence](#)," - McKinsey & Company
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- 17 "[AI And Automation 2019 Predictions From Forrester](#)," - Forbes Magazine
- 18 "[Data Literacy: The Upskilling Evolution](#)," - Qlik
- 19 "[5 Key Actions for IT Leaders for Effective Decision Making in Midsize Enterprises](#)," - Gartner
- 20 "[Building Data Literacy](#)," - Forrester
- 21 "[Data Literacy: The Upskilling Evolution](#)," - Qlik
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- 24 "[THE NEW DECISION MAKERS Equipping Frontline Workers for Success](#)," - The Harvard Business Review
- 25 "[Data and AI Leadership Executive Survey 2022](#)," - NewVantage Partners
- 26 "[Data and AI Leadership Executive Survey 2022](#)," - NewVantage Partners
- 27 "[Business Value of Building Apps on the Salesforce Lightning Platform](#)," - IDC
- 28 "[The Economist: Fostering a data-driven culture](#)," - The Economist
- 29 "[How companies are using big data and analytics](#)," - McKinsey & Company