

# Cost Optimization and Risk Reduction Approaches for Data and Analytics Leaders: A Gartner Trend Insight Report

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Initiatives: [Data and Analytics Leaders](#); [Coronavirus \(COVID-19\) Resource Center](#)

Jarring economic disruption and uncertainty makes the road ahead difficult to anticipate. In response, data and analytics leaders must optimize costs and reduce risk but are unsure on how to do this. This special report explains how to account for uncertainty while maximizing value delivery.

## Overview

### Opportunities and Challenges

- The long-term effects of COVID-19 are unpredictable. Recovery and renewal will require accounting for uncertainty while maximizing value delivery.
- Data and analytics (D&A) leaders report heightened demand for data and insights as executives grapple with new operational challenges and strategic choices, yet many will adjust priorities rather than increase spending.
- Enterprises crave new data and insights for renewal and recovery, but economic, societal and enterprise risks abound.

### What You Need to Know

- D&A leaders, such as chief data officers (CDOs), must update their D&A strategies, renew their priorities and create scenarios to account for relentless uncertainty.
- Cost and value optimization is different from creating arbitrary reductions based on a target like “all departments reduce costs by 10%.” Make intentional reductions (or even increase spending) to balance cost and value by focusing resources on the most valuable opportunities.
- Sound risk management supported by D&A will prevent key initiatives from going sideways, delaying value delivery and reducing the value of data essential for decision making.

## Strategic Planning Assumptions

- By 2022, 90% of corporate strategies will explicitly mention information as a critical enterprise asset and analytics as an essential competency.
- By 2023, organizations that have made data and analytics a core part of their business and operating models will outperform their industries on most financial metrics.

## Insight From the Experts

### The Only Thing That Is Certain Is Uncertainty



[Mike Rollings, Distinguished VP Analyst](#)

The COVID-19 pandemic continues to exert a catastrophic toll on individuals and turn global economies upside down. However, not all enterprises have been subjected to negative economic effects due to the pandemic's effects on work and social practices. Some have seen increased demand, including providers of essential services, work-from-home technologies and consumer commodities. What lies ahead is anyone's guess; there are too many variables to consider and little historical guidance to employ.

Globally, D&A leaders have been responding to the call for data and insights. The majority of enterprises have seen heightened demand for data and analytics, and a rise in its perceived importance. This will likely persist as we proceed into recovery and renewal. Consequently, we will be asked to continually refocus our energies on the most valuable endeavors, optimize enterprise costs and reduce risk as we prepare for a new normal. This research aims to help you do all three.

Best regards,

Mike Rollings

## Executive Overview

### Definition

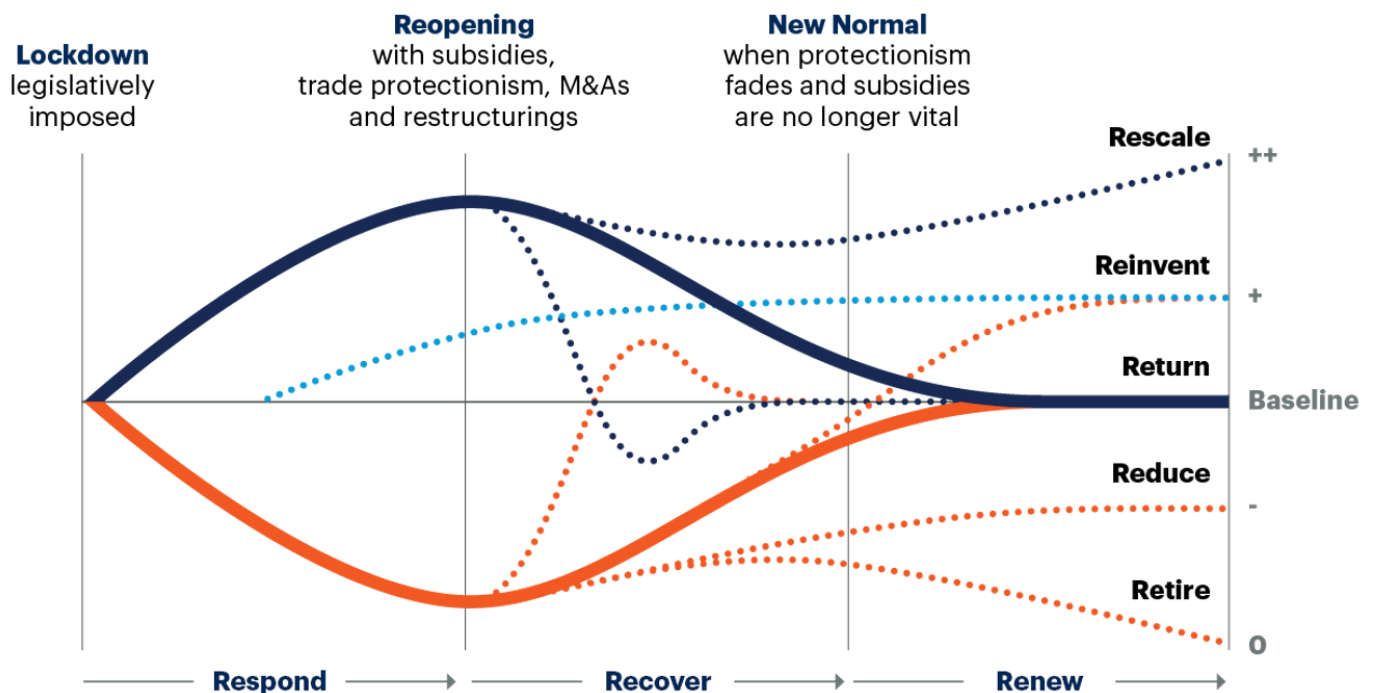
**Cost optimization and risk reduction are essential skills for COVID-19 recovery and renewal. The wrong moves can result in cuts that impede an organization's ability to maintain liquidity, retain key talent, keep innovating and prepare for recovery. Cost optimization entails lowering costs at the functional and enterprise levels, along with ensuring the ability to balance spending aligned with business renewal plans.**

The COVID-19 pandemic has touched every part of the globe, with countrywide or regional lockdowns of all nonessential businesses having had profound economic effects, both positive and negative. Some enterprises (for example, in the retail and travel sectors) have incurred drastic business reductions, even forcing some to cease operation. On the other hand, others have seen dramatic increases in demand that may or may not continue. The asymmetrical effects are not only common at the macro level, but also apparent within enterprises, where one business unit thrives while another barely survives. These asymmetrical effects will not end with our response to the initial shock. The tables can easily be turned on our enterprises during recovery and renewal as some markets reopen, others close and the disruptive effects continue to emerge, subside and reemerge elsewhere. One thing is for certain: it is impossible to accurately predict the way forward. Uncertainty will be a constant.

D&A leaders have a central role in all three phases of postpandemic planning, providing critical data and insights for decision making as we traverse the many possible paths ahead (see Figure 1 and [“The Postpandemic Planning Framework”](#)). The first response entailed engaging the executive team to address critical information needs, triage current priorities, adjust operations and account for a remote workforce. Some D&A leaders identified and retrained analytical models that became obsolete overnight, and many were forced to review security, governance and remote access policies to provide business-critical information. They were also required to address unforeseen issues at the intersection of health, safety, privacy and ethics, such as tracking contact for essential workers, and assembling the best of existing policies and practices to address new concerns.

Figure 1. Postpandemic Planning Framework

## Postpandemic Planning Framework



Source: Gartner

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The next wave of recovery requires D&A leaders to develop strategies for the many possible ways forward while optimizing costs and reducing risk to ease the road to renewal. For example, one business unit, product or service may have experienced a rapid decline in demand and end up following the Reduce path to account for the reduced demand. Another part of the enterprise may have seen huge surges in volume during the pandemic that may subsequently fall to pre-COVID-19 levels (the dark blue Return path), or it may dip below normal demand in recovery with an eventual return to normal demand (the dotted dark blue Return path). The many paths to renewal are as shown in Figure 1, and data is central to understanding where you are, anticipating where you will be and determining actions commensurate with your context.

It will not be “business as usual.” D&A leaders should prepare for the recover phase to be just as demanding as the respond phase, if not more so. This will require focus to develop and adjust business strategies for the way forward, adjust costs without limiting opportunity and remove risk from the opportunities pursued to maximize value. Leaders should use this research to accomplish these objectives.

## Research Highlights

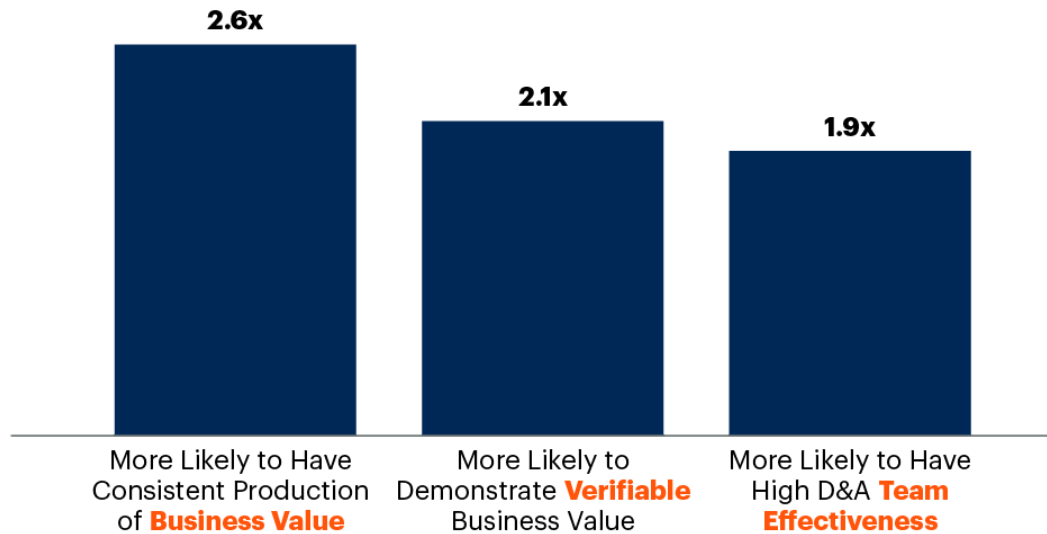
## Heightened Demand and Ongoing Uncertainty Mandate a Modern Strategy With Options and Priorities

Demand for D&A has increased as a result of the COVID-19 crisis. A recent poll of D&A professionals in a May 2020 Gartner webinar showed that 91% of respondents experienced an increase in demand for D&A. Respondents said they had experienced requests for new predictive models (13%), updates to existing predictive models (8%), internal and external data sharing (22%) and new reports and dashboards (48%) (see Note 2).

The demand for information is likely to be sustained, if not increase, as we proceed into recovery and renewal. Enterprises will need even more data and insights as they plan for multiple possible futures and deploy digital initiatives to monitor, support and influence postpandemic outcomes. We will need to resist the human urge to want to believe in a certain direction, and instead challenge and test our biases with data.

More than ever, this requires D&A leaders to change how they engage with their business peers to create business strategies, recovery scenarios and priorities that focus energy on the most important and valuable endeavors. Have a business conversation that connects business outcomes to your D&A initiatives. How you engage significantly increases the chances of business value production. The Fifth Annual CDO Survey shows that when a CDO is fully involved or has active advisory input to the executives in defining and agreeing business priorities, their odds of consistently producing business value increase by 2.6 times. It also increases the odds of demonstrating verifiable business value by 2.1 times (see Figure 2 and Note 3).

Figure 2. CDO Engagement in Strategy Development

**CDO Engagement in Strategy Development**

n = 293 All Respondents

Q: Thinking about your company in general, how do you characterize your organization's overall performance relative to its competitors and peers on the following measures?

Source: 2019 Gartner CDO Survey

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Gartner provides additional research and tools to modernize your data and analytics strategy, create scenario plans, identify opportunities and evaluate potential investment priorities.

**Related Research**

When it comes to pandemic recovery, [“Don’t Make Predictions and Choices, Instead Create Options by Using Scenario Planning for Pandemic Recovery”](#). D&A leaders must expand their strategic toolkit with a well-known but counterintuitive methodology: scenario planning. This helps prepare for the unpredictable long term and improve their decision making for the short and medium term.

[“How to Craft a Modern, Actionable Data and Analytics Strategy That Delivers Business Outcomes”](#) describes how to create a modern D&A strategy and have it become a catalyst for digital strategy or transformation. Connecting D&A to the most important business outcomes is essential.

[“Toolkit: Creating a Modern Data and Analytics Strategy and Operating Model”](#) provides detailed guidance on how to create a strategy and operating model that conceives data-driven business opportunities and orchestrates enterprise action.

To help drive business value and innovation, [“Complete Your Data and Analytics Strategy With a Clear Value Proposition”](#) and ensure all stakeholders agree where D&A is a utility, a business enabler or a business driver.

D&A leaders have an imperative to exploit enterprise information assets for business value, especially during uncertain climates and business disruption. Use [“Achieving the Business Value of Data and Analytics”](#) to target opportunities and maximize business value contribution.

Gartner’s initial survey findings suggest that some sequences of D&A investment may be more productive than others. Use this research to [“Sequence Your Data and Analytics Investments to Maximize Business Value.”](#)

The [“Toolkit: How to Optimize Business Value From Data and Analytics Investments ... Finally”](#) provides the tools D&A leaders need to assess and prioritize investments that generate measurable business outcomes and align with strategic objectives.

[“Infographic: 6 Traps on the Road From Enterprise Data to Business Value”](#) discusses six traps that organizations fall into when they begin working to generate business value with their data. D&A leaders can avoid these traps by looking to examples profiled in the referenced case studies.

## D&A Leaders Promote Cost Optimization Within Their Team, Operating Model and Enterprise

The initial shockwave from the COVID-19 pandemic forced many enterprises to make difficult trade-offs in their cost structure. However, the blunt instruments used to arbitrarily cut costs in order to survive are not the same tools used to optimize spend for the longer term and protect resources for future growth.

D&A leaders provide critical information to those responsible for making cost optimization decisions, but they also have many tools at their disposal to optimize the cost of the D&A function and the enterprise operating model. D&A leaders can use Gartner’s resources to find immediate cost-saving opportunities, identify and accelerate cost-saving initiatives and find the balance point between spending efficiency and effectiveness.

### Related Research

D&A leaders are well-placed to assist their organizations during the COVID-19 pandemic by using the tools at their disposal to optimize costs and develop new revenue streams. [“Tool: Practical Cost Optimization Techniques for Data and Analytics Leaders Responding to COVID-19”](#) is a compendium of critical resources and guides to quickly ramp up a D&A cost optimization strategy.

Infonomics calculations help measure, manage and monetize the asset and liability valuations of information. D&A leaders can use [“Applied Infonomics: Calculations and Actions for Cost Optimization of Data and Analytics”](#) to calculate information costs, identify waste and mitigate business risks to identify opportunities for their cost optimization programs.

D&A leaders must focus on the discipline of cost optimization as they work to make data management essential to their organization’s digital future. Applying the cost optimization techniques in [“Cost](#)

[“Optimization Is Crucial for Modern Data Management Programs”](#) helps increase cost-efficiency and maximize business value of all five data management disciplines.

[“Toolkit: Intelligently Sourcing Internal D&A Talent When Budgets Are Tight”](#) presents the most common D&A roles based on our analysis of job posts in Gartner TalentNeuron. For each identified role, we provide the most frequent skills and the most adjacent roles to help D&A leaders discover data- or analytics-related roles and skills in various parts of their organizations.

[“Tool: 6 Ways Data and Analytics Leaders Can Serve Their Organizations in the COVID-19 Crisis”](#) showcases companies that use D&A to cut costs, optimize business processes, spend efficiently on talent, maximize the value generated from existing spending and accelerate new investments.

Cost optimization programs across IT and business units can be significantly enhanced by the use of analytics to compare options, support decisions and predict outcomes. [“Spend a Little to Save a Lot: Using Analytics to Support Cost Optimization of IT and the Business”](#) helps identify opportunities to deliver business value.

Learn how to identify, rank and prioritize the best combination of cost optimization opportunities with [“Use Gartner’s ROAR Model for Strategic Cost Optimization.”](#)

A proliferation of augmented capabilities within analytics, business intelligence, and data science and machine learning (DS/ML) products presents an opportunity for D&A leaders. [“Worlds Collide as Augmented Analytics Draws Analytics, BI and Data Science Together”](#) helps you anticipate big changes in products, investments and practices.

## Risk Reduction is an Essential Part of Maximizing Value

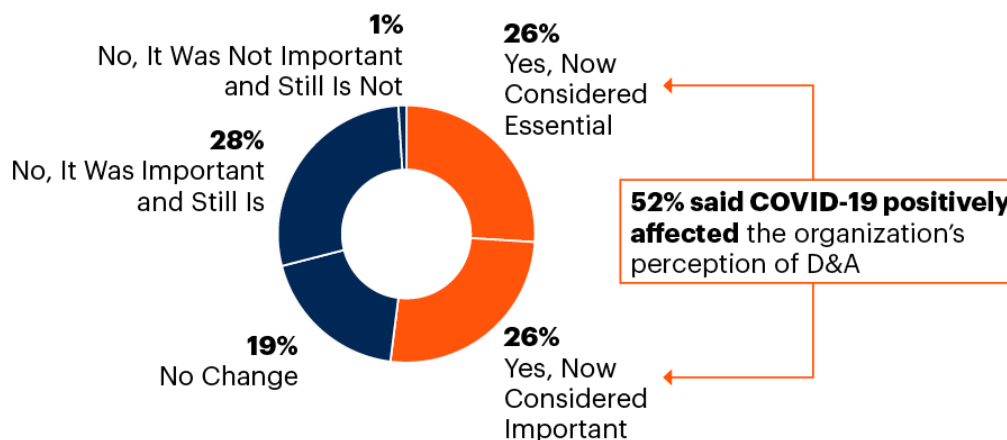
Fifty-two percent of D&A professionals polled in May have noticed a change in the perception of data and analytics since the onslaught of the COVID-19 crisis. Over a quarter (26%) say it is now considered essential, and the same proportion (26%) say it is now considered important (see Figure 3 and Note 2).



Figure 3. Perception of D&amp;A Affected Due to COVID-19

**Perception of D&A Affected Due to COVID-19**

Percentage of Respondents



n = 262

Q: Has the perception of D&amp;A been affected by COVID-19 crisis?

Source: May 2020 Gartner CDO Survey Webinar

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The increased importance of D&A will likely continue to result in further increases in D&A demand and the need to increase D&A capabilities. Cost optimization techniques help allocate and balance costs, but they do not help to ensure that future activities get implemented in the most judicious manner by avoiding unnecessary diversions. For this, risk management practices help D&A leaders to make the most of their investments without squandering precious resources. Leaders have several best practices to employ to keep common initiatives on track.

**Related Research**

The response phase of the reset driven by the COVID-19 pandemic has escalated the need for data and data-related capabilities to support remote working. [“10 Data Management and Governance Actions to Reset, Increase Impact and Enable Remote Work”](#) helps D&A leaders play a key role in enabling this adaptation by taking specific data management and governance actions.

Data migrations are complex, risky and expensive and often disrupted by unexpected changes. Use [“Make Data Migration Boring: 10 Steps to Ensure On-Time, High-Quality Delivery”](#) to avoid surprises, deliver on time and ensure quality by improving planning, proactively addressing data quality and relying on structured, technology-enabled execution.

Although new platforms for self-service analytics and data science offer many benefits, they add to an already siloed landscape. Gartner’s research titled [“3 Steps to Migrate to Your New Data and Analytics Platform”](#) aids the migration of legacy data warehouses onto a shared and consistent platform while rationalizing existing business intelligence solutions.

D&A leaders using cloud-based data management solutions are often surprised by cost overruns.

[“Overcome Economic Uncertainty Through Financial Governance of Your Cloud Data Management Environment”](#) to determine a predictable budget for cloud data management environments.

The scaling and operationalization of artificial intelligence and machine learning are often hindered by nontechnical hurdles. [“Organizational Best Practices for Successful AI and ML Initiatives”](#) aims to achieve better business outcomes through multidisciplinary collaboration, data literacy and innovation.

Effective governance is critical for successful data and analytics initiatives, but [“The State of Data and Analytics Governance Is Worse Than You Think.”](#) Unless D&A leaders identify and overcome barriers to effective governance, their credibility as partners with the business is at risk.

[“The Future of Cloud Data Management Is Multicloud”](#) helps D&A leaders prepare for a multicloud and intercloud world, where data management, governance and integration become more complex than ever before.

The concept of the logical data warehouse (LDW) is gaining market traction and acceptance, but D&A leaders still struggle with practical implementations. [“The Practical Logical Data Warehouse: A Strategic Plan for a Modern Data Management Solution for Analytics”](#) demonstrates a pragmatic approach to the LDW by leveraging the data management infrastructure model.

## Gartner Associates Supporting This Trend



[Mike Rollings, Distinguished VP Analyst](#)



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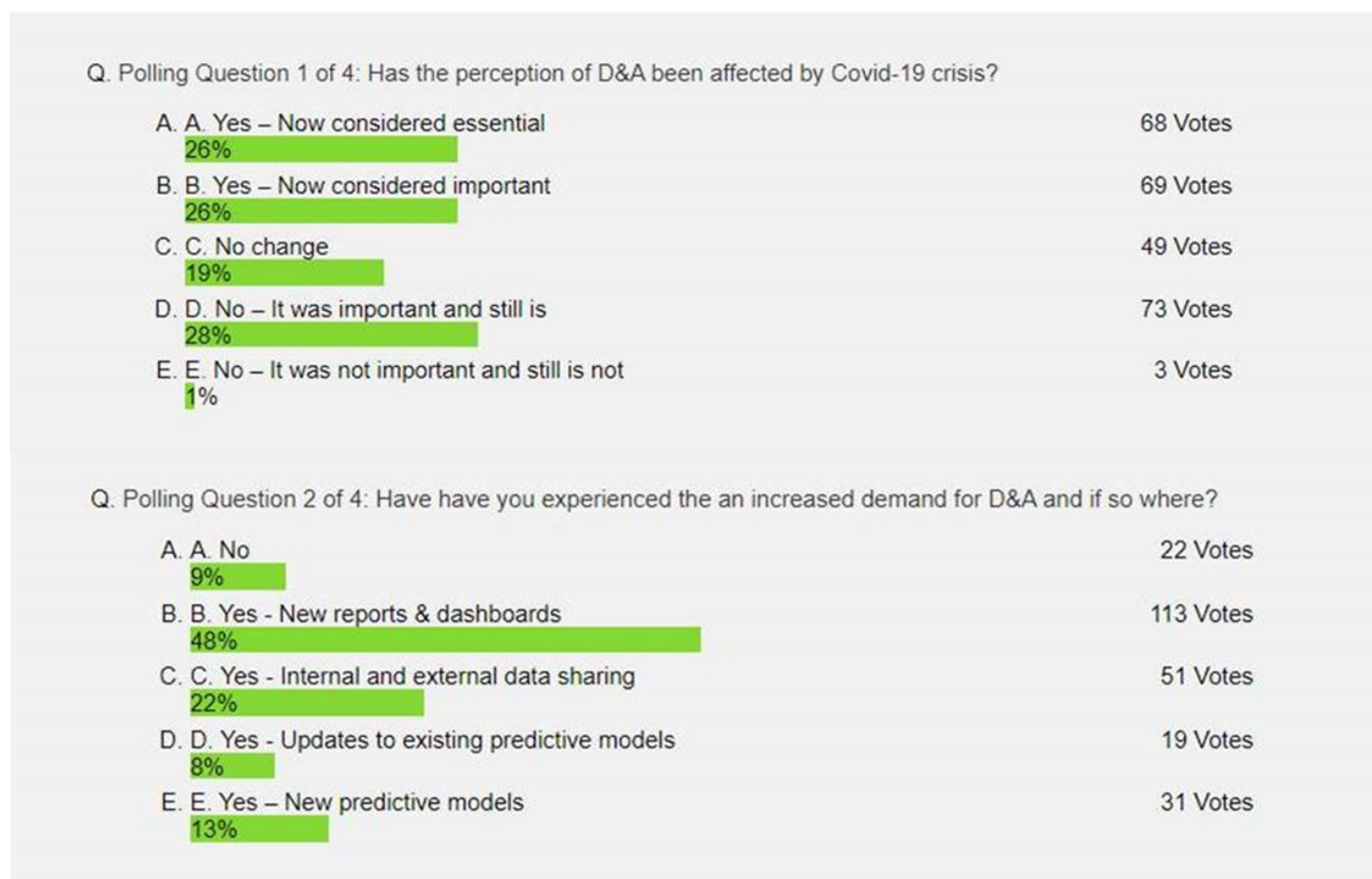
## Note 1: CDO Social Media Analysis

Gartner conducts social media analysis using third-party data tools to complement or supplement the other fact bases presented in this document. Due to its qualitative and organic nature, the results should not be used separately from the rest of this research. No conclusions should be drawn from this data alone as it may not be entirely representative of the market. The social media data referred to was gathered from 7 March 2018 through 7 March 2020 in all geographies (except China) and recognized languages. By default, the social media sources considered for analysis include Twitter, Facebook (publicly available information only), aggregator websites, blogs, news, mainstream media, forums and videos (comments only), unless and until specified.

## Note 2: Poll Shows Improved Perception of D&A

While conducting its 2019 CDO Survey, Gartner polled respondents on their experiences regarding the perception of and demand for D&A during the COVID-19 pandemic. Over half of respondents (52%) said they had experienced an improved perception of D&A, while 91% of respondents reported increased demand for D&A during the crisis (see Figure 4).

**Figure 4. Webinar Poll: Gartner Fifth Annual CDO Survey: Ways to Achieve Focus and Drive Impact**



Source: Gartner 2019 CDO Survey

## Note 3: Gartner's 2019 Chief Data Officer Survey

Gartner's 2019 Chief Data Officer Survey was conducted to explore the business impact of the CDO role and/or the Office of the CDO. The research was conducted online from September through November 2019 among 293 respondents from across the world. Respondents were required to have the title of CDO or CAO, or to have the responsibilities of an executive-level D&A leader in their organization (in the case of organizations without an official C-level D&A title).

The survey sample was gleaned from a variety of sources (including LinkedIn), with the greatest number coming from a Gartner-curated list of over 2,000 CDOs and other high-level D&A leaders. The study was developed collaboratively by Gartner D&A Analysts and the Primary Research Team. Note: The results of this study do not represent global findings or the market as a whole, but reflect the sentiment of the respondents and companies surveyed.

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