

A Data-Driven Enterprise

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Data Access for Enterprises in 2022

Today's business relies on data analytics more than ever to remain ahead of the competition. To have a cutting edge, data analytics for informed business decisions and workflow automation at all levels of the organization is critical to achieve overall success. Due to the challenges over the last two years, organizations must respond to greater demand for data access and a shift to supporting AI/ML in a complex, hybrid multi-cloud environment. Organizations need to become nimble in providing fast, reliable access to data anytime, anywhere, throughout their increasingly complex, integrated enterprise. Research proves that demands on customer experience, the ever-growing challenge of staying ahead of risk and market swings, and employee engagement are the driving factors for these shifts.

As a result, the ability of organizations to adopt data analytics in critical functions directly impacts organization maturity. In concert, with the focus in analytics seen for the past years, customer experience is essential and is a term that has exploded recently. Having a business strategy center on customer experience has become much more than just a trend. However, companies struggle to realize the true benefit of having a customer-focused strategy

without having a robust data analytics strategy in place. This strategy begins at multiple areas of the organization. A strong culture and strategy that are driven from the organization's leadership, all the way to a highly functional technology infrastructure layer with fully integrated workflow automation processes, make it possible to realize business impact throughout the organization—ultimately driving customer experience to see gains in revenue growth and customer retention.

Many factors are important when defining a mature organization. EMA's research shows that the size and age of an organization add significant levels of complexity, with an average of 4-6 data pipelines and as many as 12 separate data pipelines, creating a complex data landscape that includes many applications and systems, and the integration layer that connects them. This complexity can create additional challenges for these enterprise-class organizations on their journey to be data-driven. Inversely, emerging startups can create a robust data strategy without the complexity and, in many cases, may be further along in maturity in the data-driven journey.

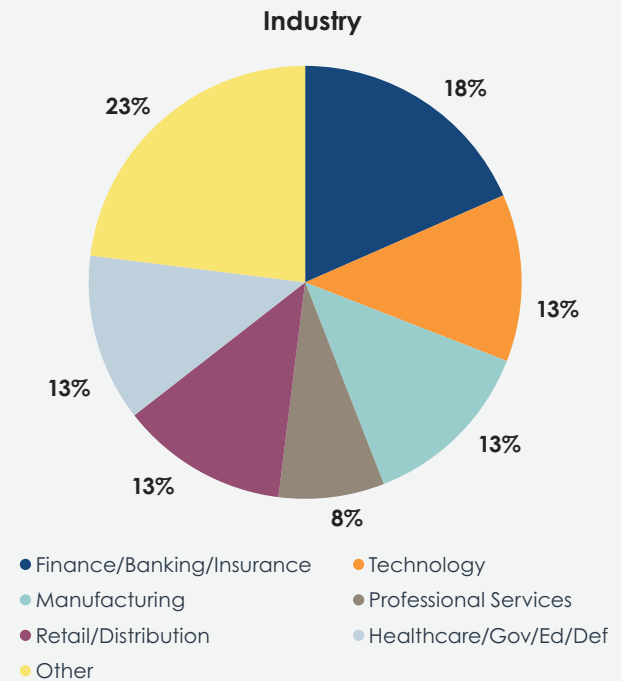
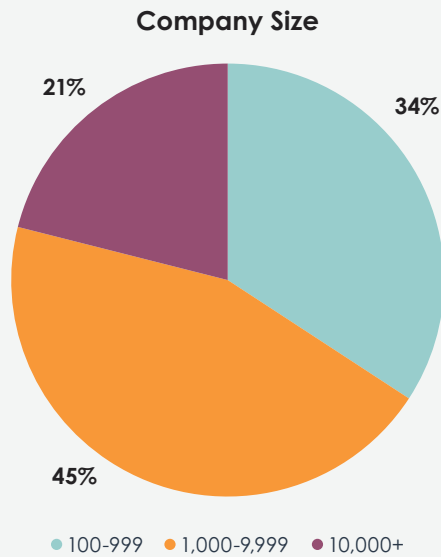


About the Study – Demographics

The focus of this research, conducted in partnership with BMC and Nastel Technologies, was to understand the DNA behind a mature organization that has embraced a data-driven strategy with analytics incorporated into the decision-making process throughout the entire enterprise. This study was conducted in the United States, United Kingdom, France, and Germany. The study collected results from 152 participants across multiple industries and job functions to capture a comprehensive landscape of data analytics maturity.

- Total Qualified: 152
- Company Size: 100+
- Location: 49.3% U.S.

50.7% Europe (UK, Germany, and France)





Executive Summary

The research delivered several fascinating key findings detailed throughout the report. Some of these key findings are:

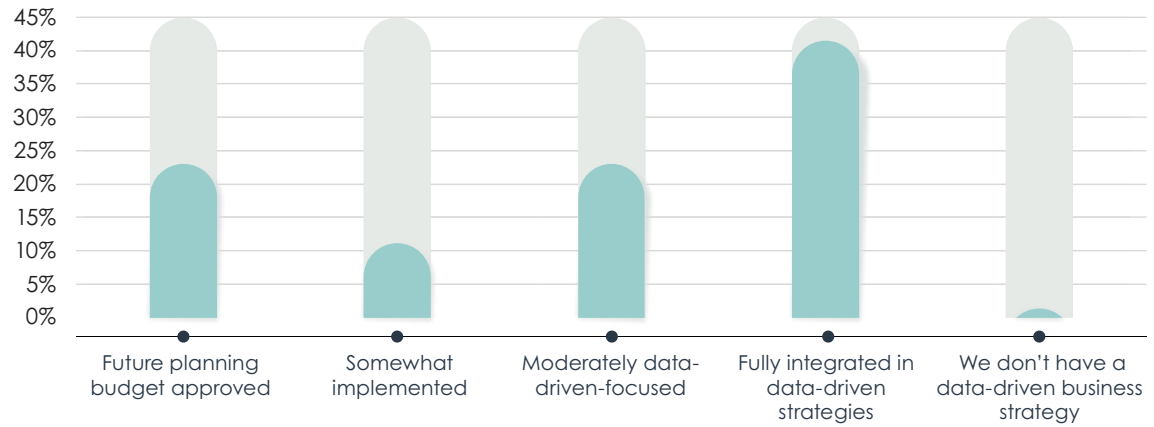
- Perception of maturity and culture is high; however, perception of organization's strategy to be data-driven is not as strong
- Resources and leadership are key factors preventing an organization's maturity from being data-driven
- Biggest impact to not being data-driven: decisions are inconsistent and slow to happen
- Security is currently the top reason for being data-driven
- Improved efficiency is the highest benefit of being data-driven
- Executives believe their organizations are more mature when it comes to being data-driven
- Technology roles focus on reducing errors, monitoring, and detection, while execs focus on efficiency, accountability, IoT, and automation
- Technology roles and executives differ in their overall satisfaction of data analytics tools – executives are significantly more satisfied
- Execs will select data analytics tools based on ease of management, while IT groups are focused on improved IT services
- North America has a greater focus on being data-driven and companies are more mature than those in European countries
- Management across all industries is now making it a priority to fix gaps in data needs, and most aim to do it within six months
- Data is more available in North American organizations
- Organizations are more satisfied with data analytics tools in North America
- Scalability and customer experience are the main reasons for European companies selecting data analytics tools, while security and ease of use are the top reasons in North America



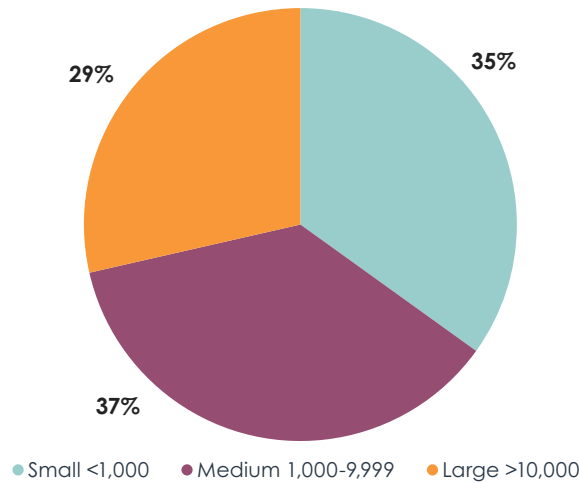
Makeup of a Mature Data-Driven Enterprise

To understand the DNA of a data-driven organization, EMA asked survey respondents about their perception of the organization's strategy for data analytics, culture, and data availability. Key findings from the research show that only 41% of organizations believe they have a well-defined data-driven strategy. From the graphics, it is evident that company size does not play a significant role in having a strong strategy around data analytics, with medium-sized companies only being slightly more likely to have a robust strategy in place. The second graph shows that finance, banking, and insurance, followed by retail and distributions, are more mature when it comes to having a data-driven strategy, followed by industries including healthcare, government, education, and defense.

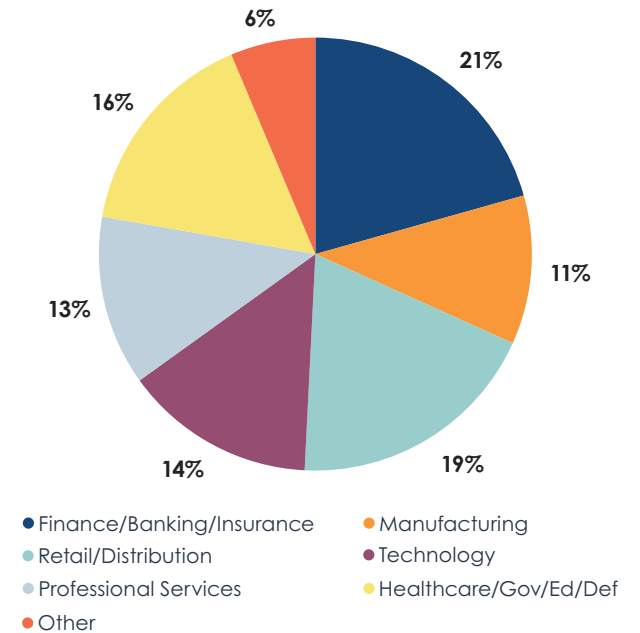
Which of the following best describes your organization's data-driven business strategy?



Fully Integrated Strategy Based on Company Size

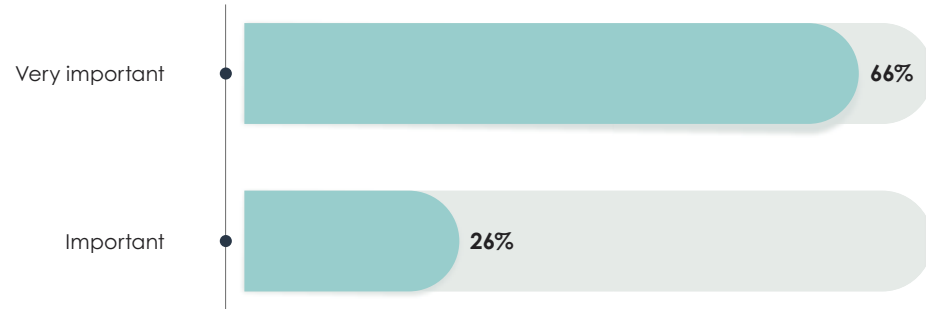


Fully Integrated Strategy Based on Industry



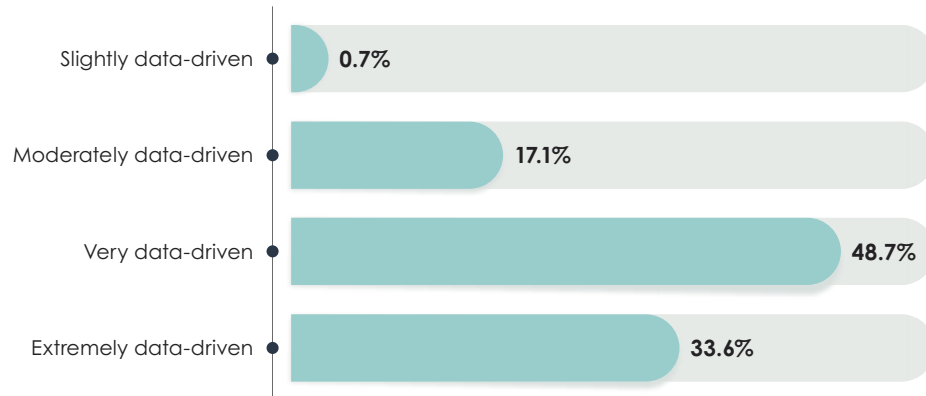
It should not come as a surprise that most respondents (more than 92%) indicated that it is either important or very important to be data-driven as an organization.

How important do you feel it is to be a data-driven organization?

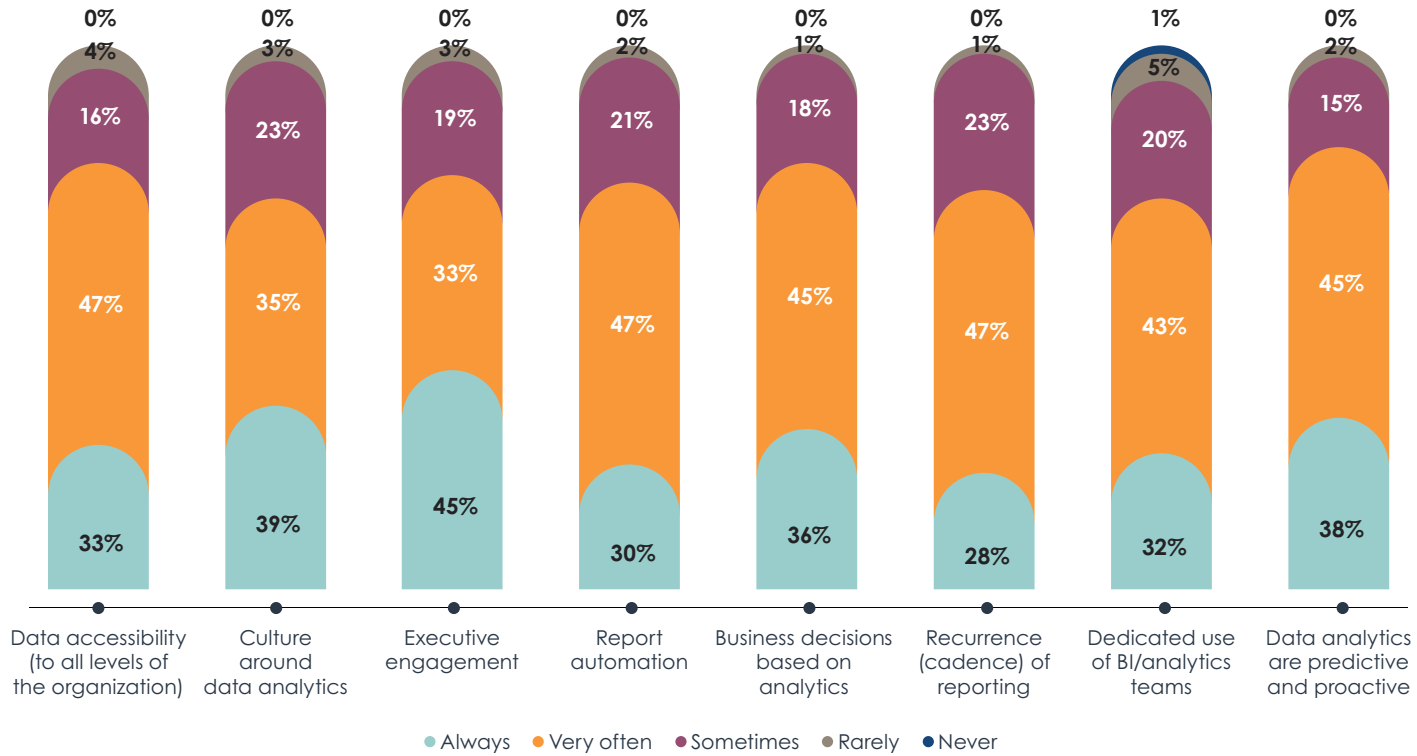


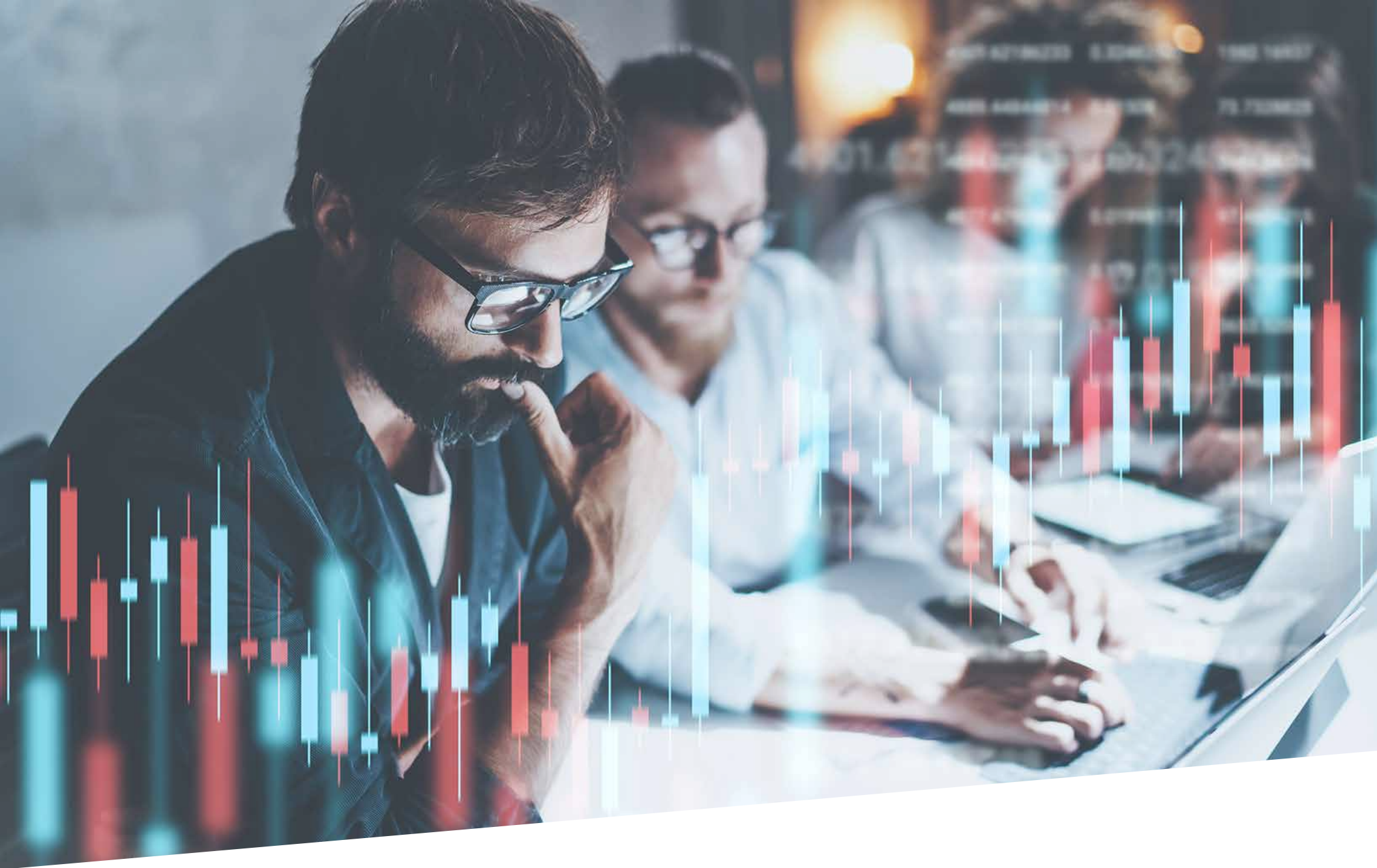
The research found that more than 82% of participants in the study believed their organization's culture was either very or extremely data-driven. In contrast, however, 74% of those respondents' perception of their organization's culture is very mature. One of the more interesting findings of the research showed that organizations find their ability to be predictive and proactive in data analytics to be one of most mature areas of the company.

How is your organization's culture when it comes to being a data-driven enterprise?



Indicate your organization's maturity in data-driven execution.
 For the following areas, rate your organization's level of adoption.

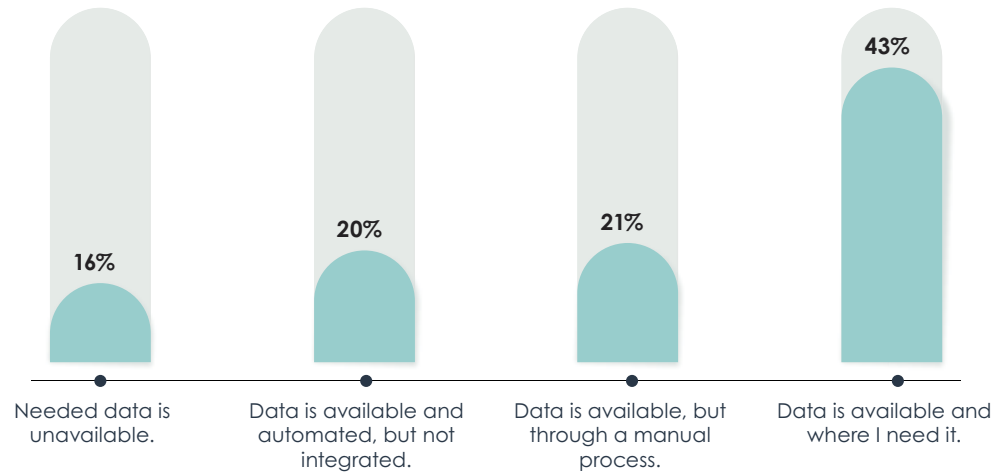




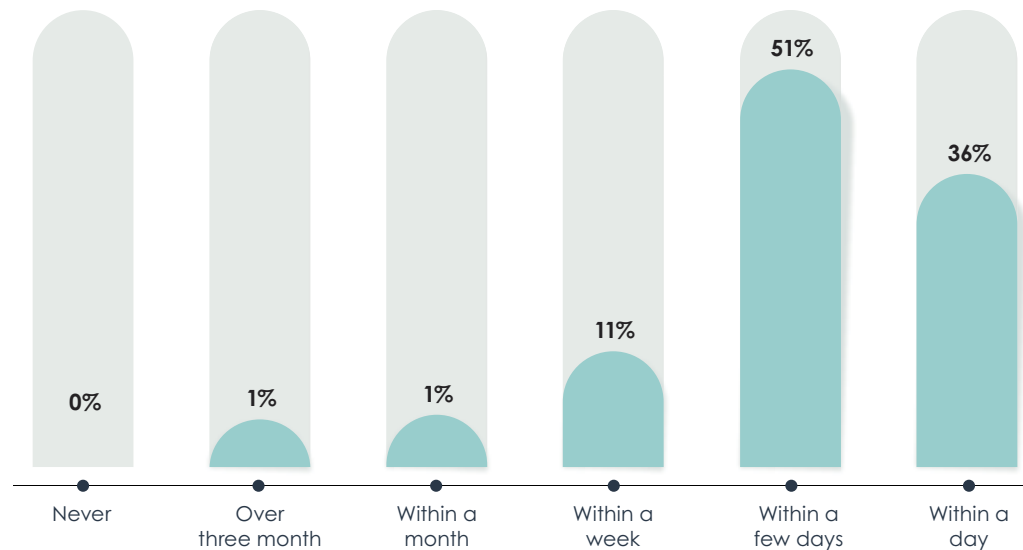
Data Availability

A strong hallmark of a mature data-driven enterprise is the availability of valuable data for making key business decisions. Data availability in terms of reliable and timely access is critical to all functions of the organization. When asked about data availability and how accessible the data is for making key decisions, only 43% responded that data is available where they needed it. Additionally, when asked how quickly internal teams fulfill data requests, respondents said only 36% of requests are completed in a day or less.

Thinking about your experience in having all the data you need, please indicate a percentage for each data availability description.

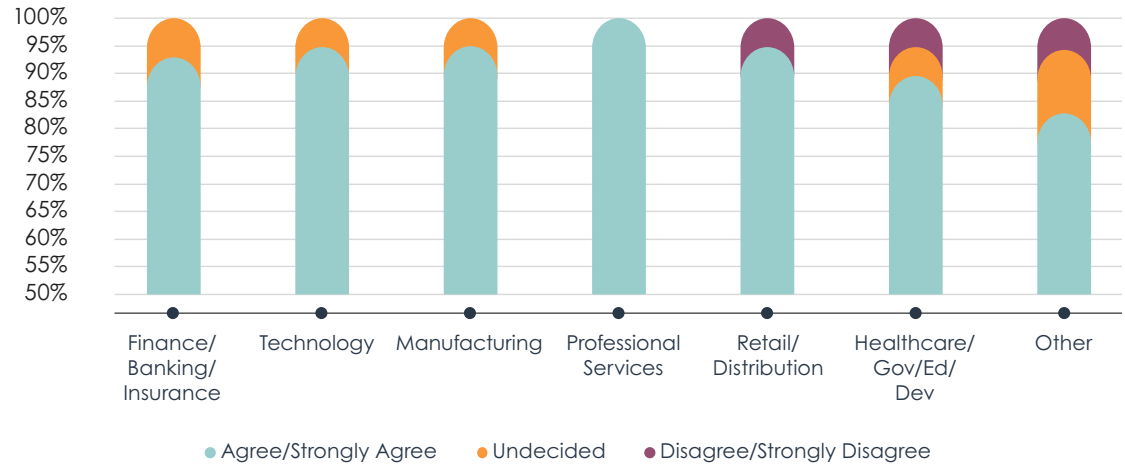


When data availability requests are made, how quickly do internal teams respond?

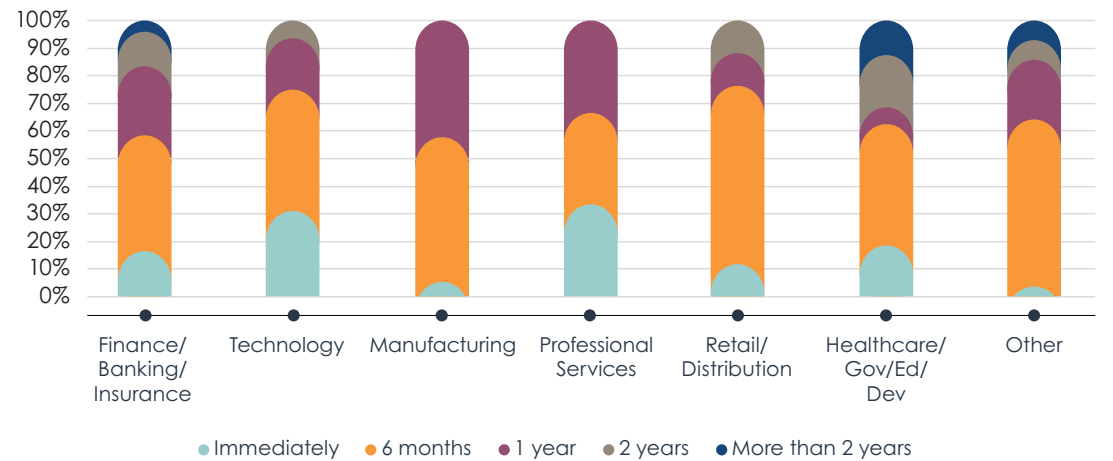


Organizational leadership must prioritize a strategy around data availability and resolve gaps as they are identified. Interestingly, in the graphic shown, management in professional services and manufacturing industries are more likely to place an emphasis to resolved gaps in data availability within the organization.

Management is making it a priority to fix gaps in data needs



Time before data availability gaps are resolved

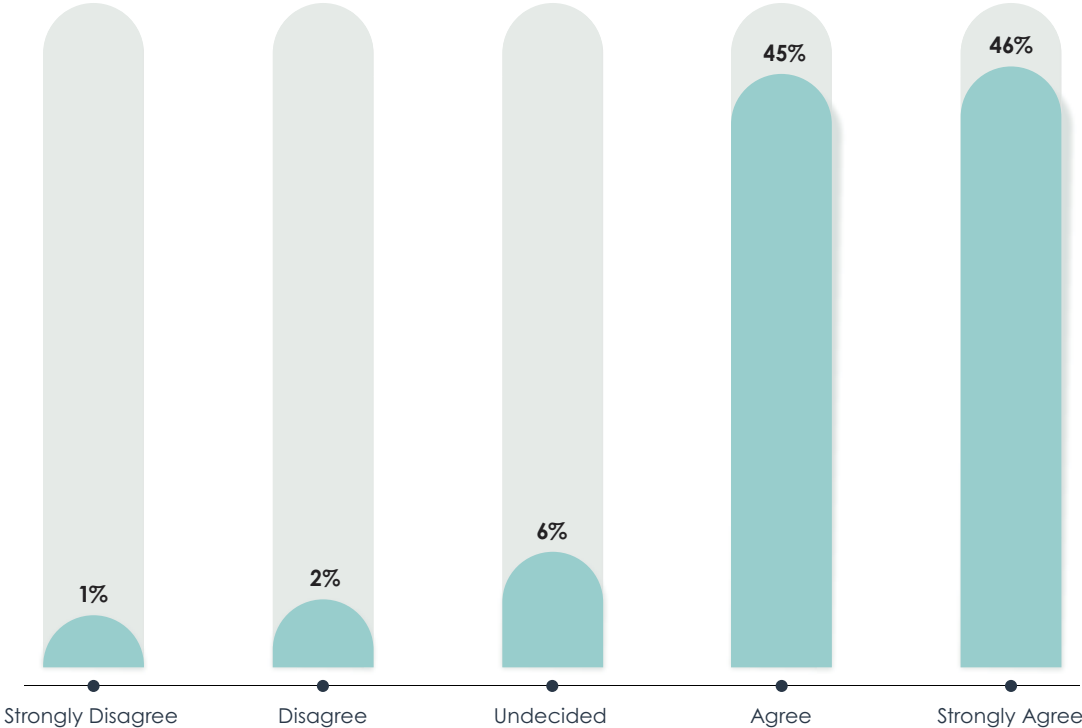




Priorities of a Data-Driven Organization

Understand that maturity in being a data-driven enterprise with a strong strategy focused on data analytics to drive key business decisions is a journey that takes time. Fortunately, organizations are committed to this journey and resolving gaps within their organization. When asked if leadership is making it a priority to resolve gaps in data availability, overwhelming at 91%, respondents believe this is a priority within their organization.

Our management is making it a priority to fix gaps in data needs





A Look at Industry

The research in this study evaluated how industry impacts an organization’s data-driven journey. The results show consistent results in certain organizations with a higher maturity in a data-driven culture, decisions based on analytics, and the availability of data to make key business decisions. In nearly all aspects, retail/distribution and professional services rank the highest in every category, followed by finance and banking, technology, and manufacturing.

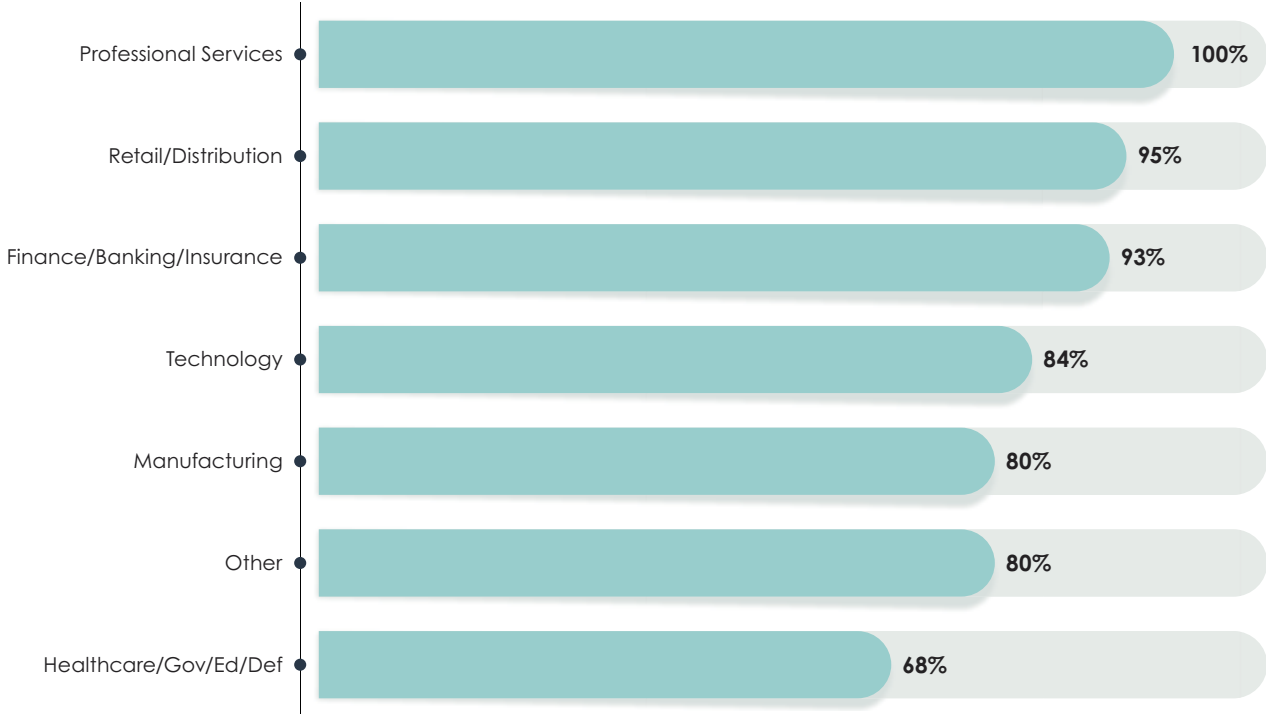
How is your organization’s culture when it comes to being a data-driven enterprise? Extremely and Very Responses



How often does data inform business decisions for each level of the organization?



How available is data when you need it?

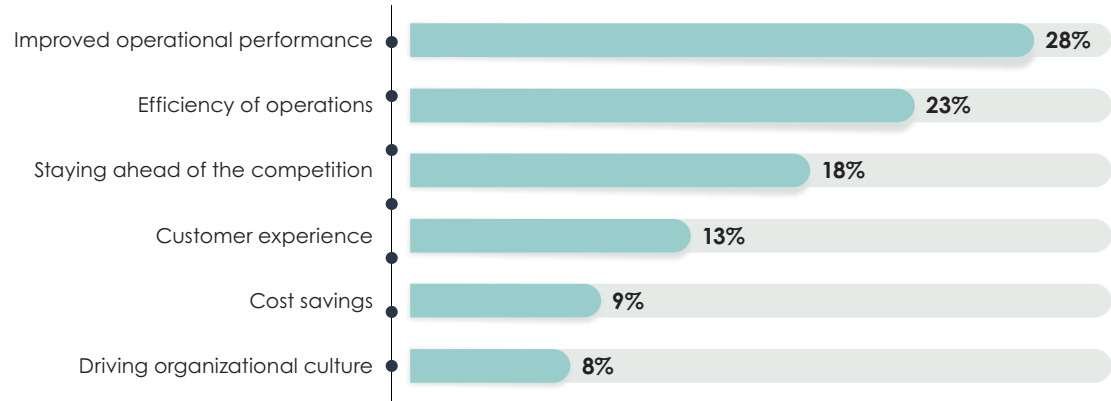




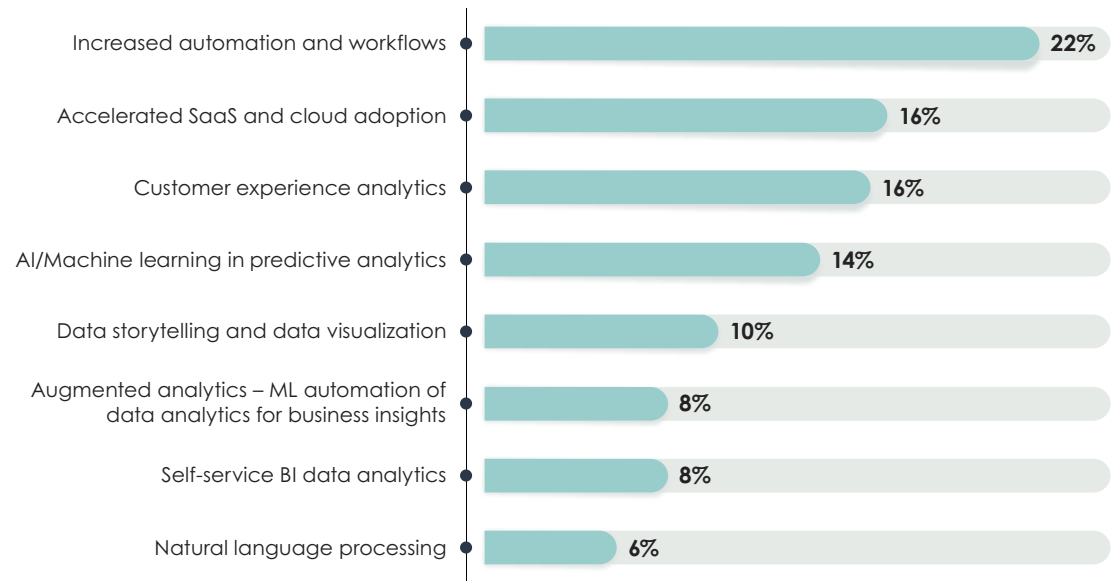
Trends in Use Case

The reason companies are on a journey of being data-driven are countless. However, across industries, there are use cases that stand out as driving maturity in an organization more than others. Efficiency and improved operational performance are expectedly key drivers. Increased workflow and process automation are requirements for a strong platform in any organization striving to reach maturity in being data-driven. Automation and workflows were so important that they scored the highest in use cases to be implemented in the following year.

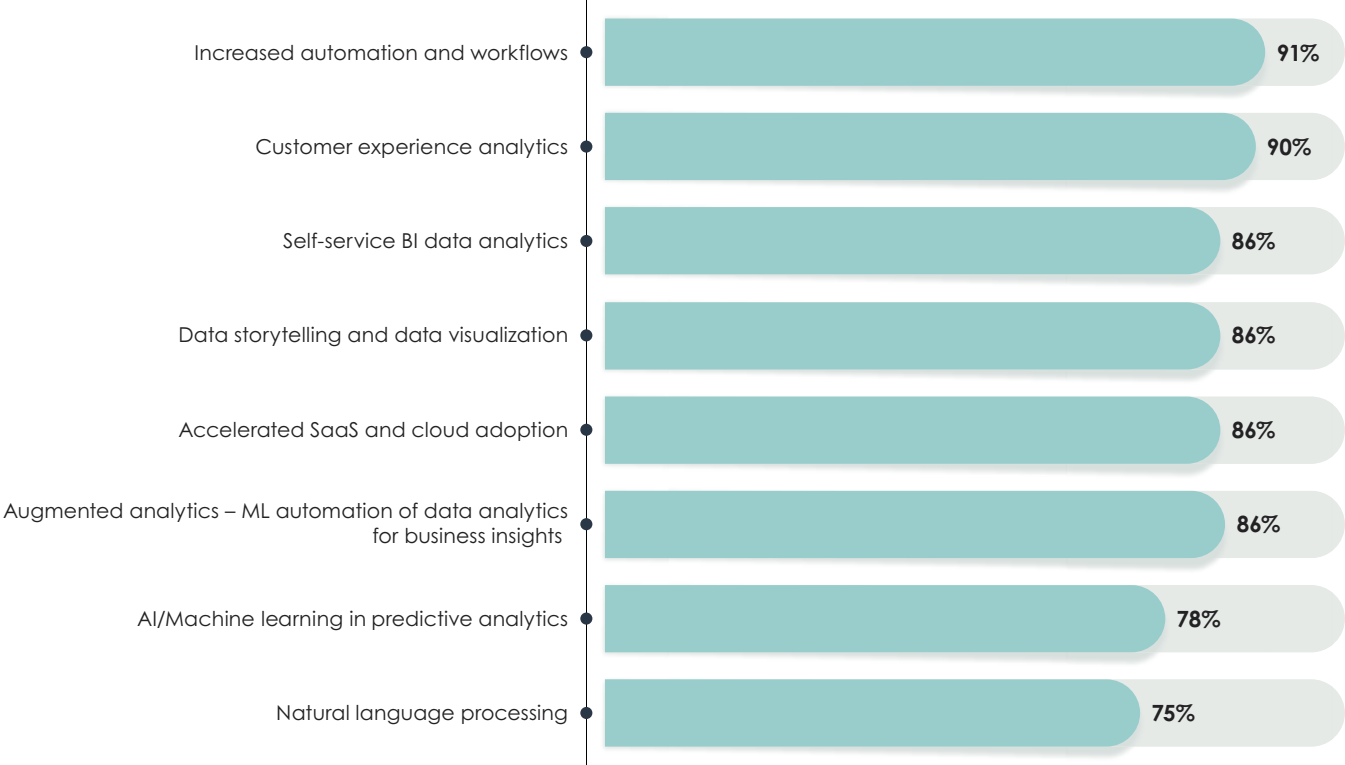
What was the primary driver for becoming an organization with a data-driven execution strategy?



Data Analytics Trends in Order of Importance

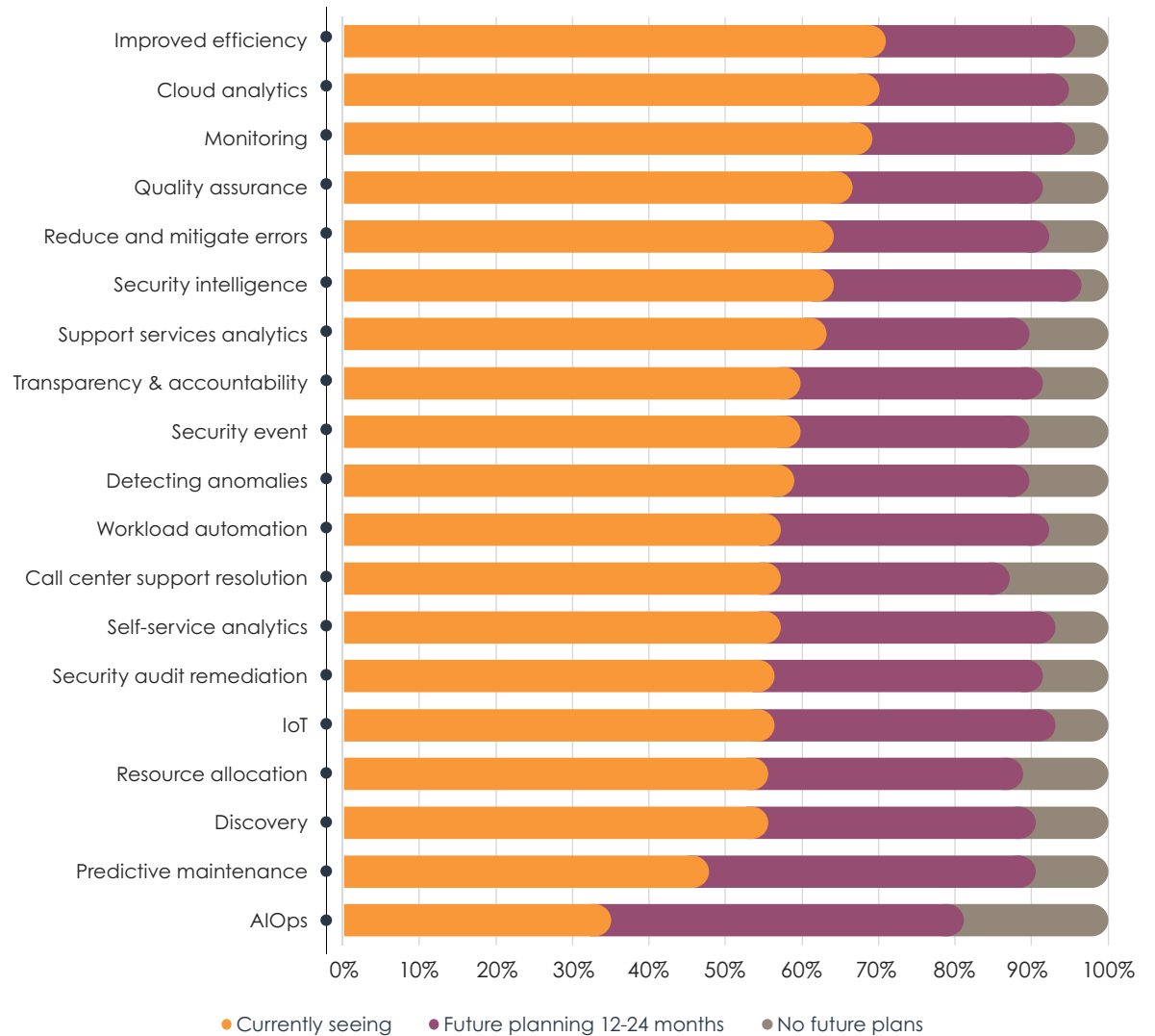


Technology Trends in Data Analytics Planning to Implement in the Following Year

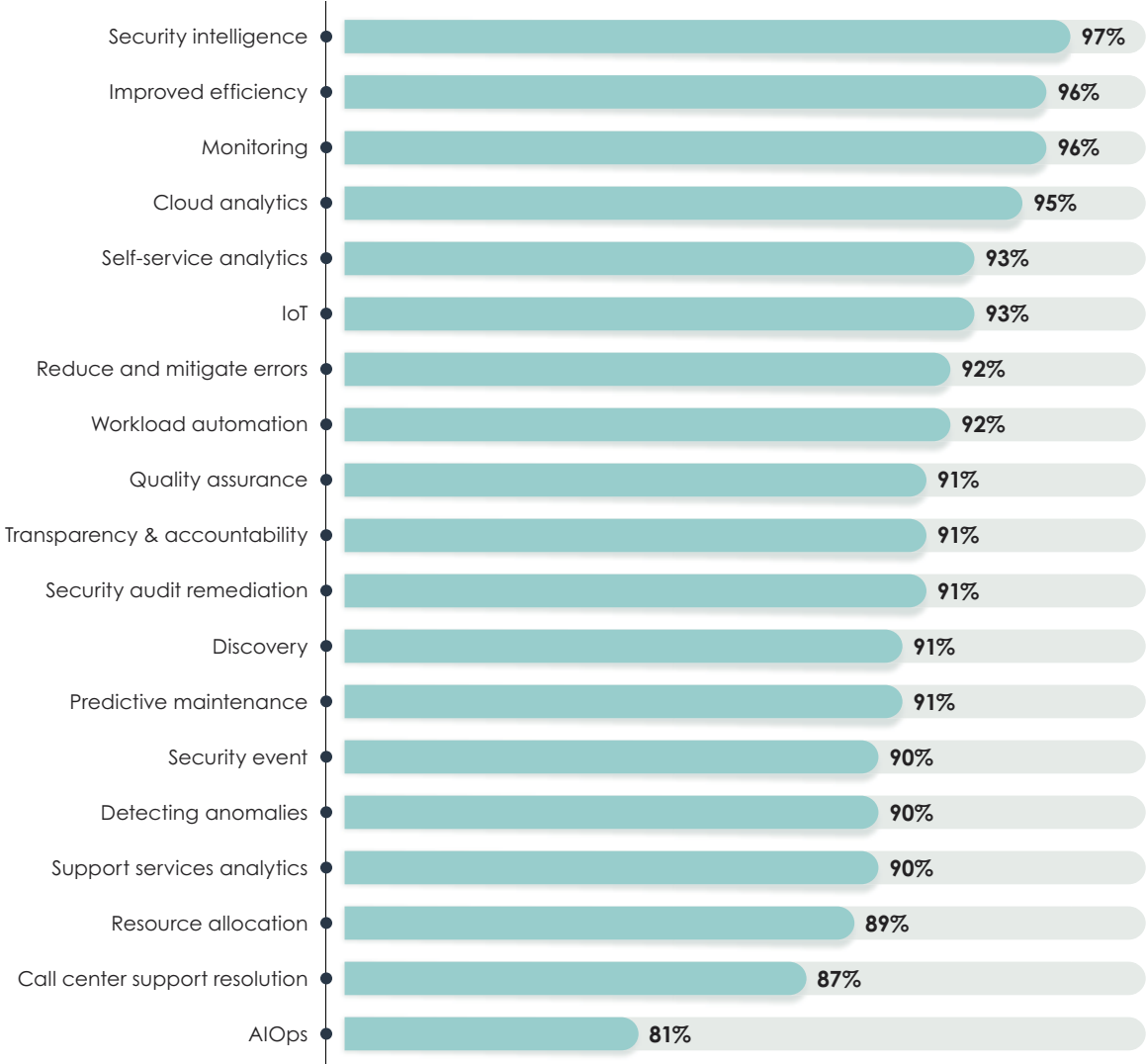


Specifically, technology departments were surveyed about data analytics use cases they are seeing in their organizations and where they are seeing the greatest benefit. When looking at the current picture, improved efficiency, cloud analytics, and monitoring top the list. However, there is a shift coming in the next year, with an increased focus in security intelligence as the top area of concern.

Which of the following IT operations management activities benefit most from a data-driven business strategy?



ITOps Use Cases Across the Next 12-24 Months

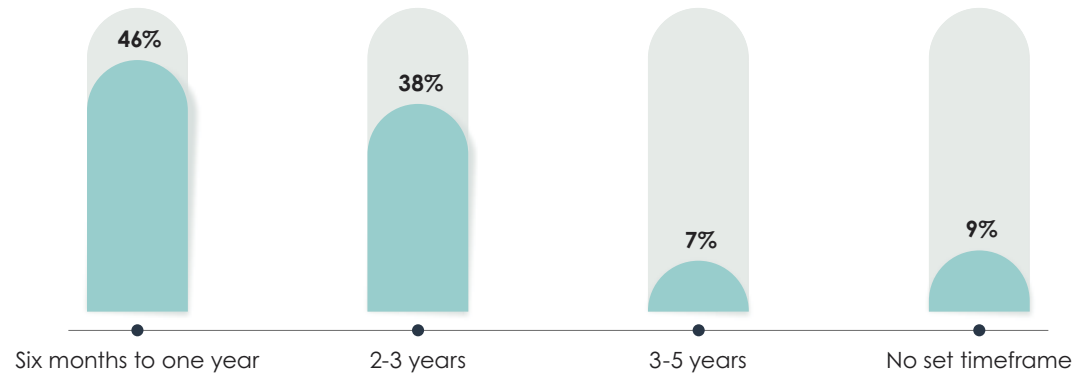




Trends in Technology Tools and Products

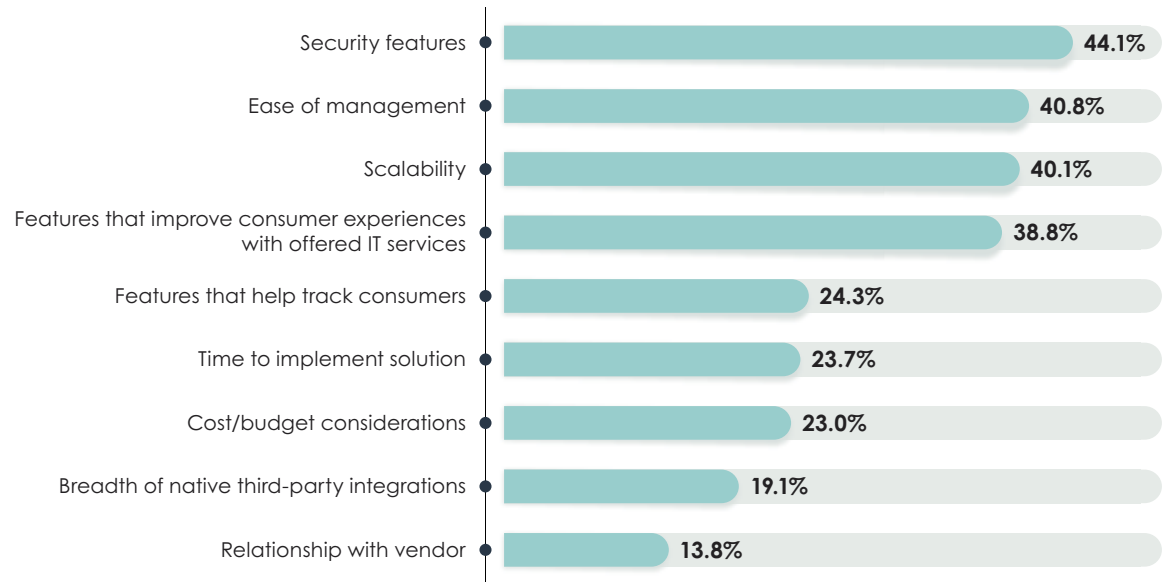
The development of analytics products and functionality has increased significantly over the past years. This demand has been perpetuated with the complexity of enterprises' multi-cloud, hybrid environments and the current COVID-19 pandemic. Organizations are requiring more enterprise-spanning insights out of their data analytics tools to remain competitive in a fierce market. EMA's data supports this, with 46% of the participants indicating they review their analytics tools every six months to a year.

With what frequency does your organization review your data-driven analytics tools?

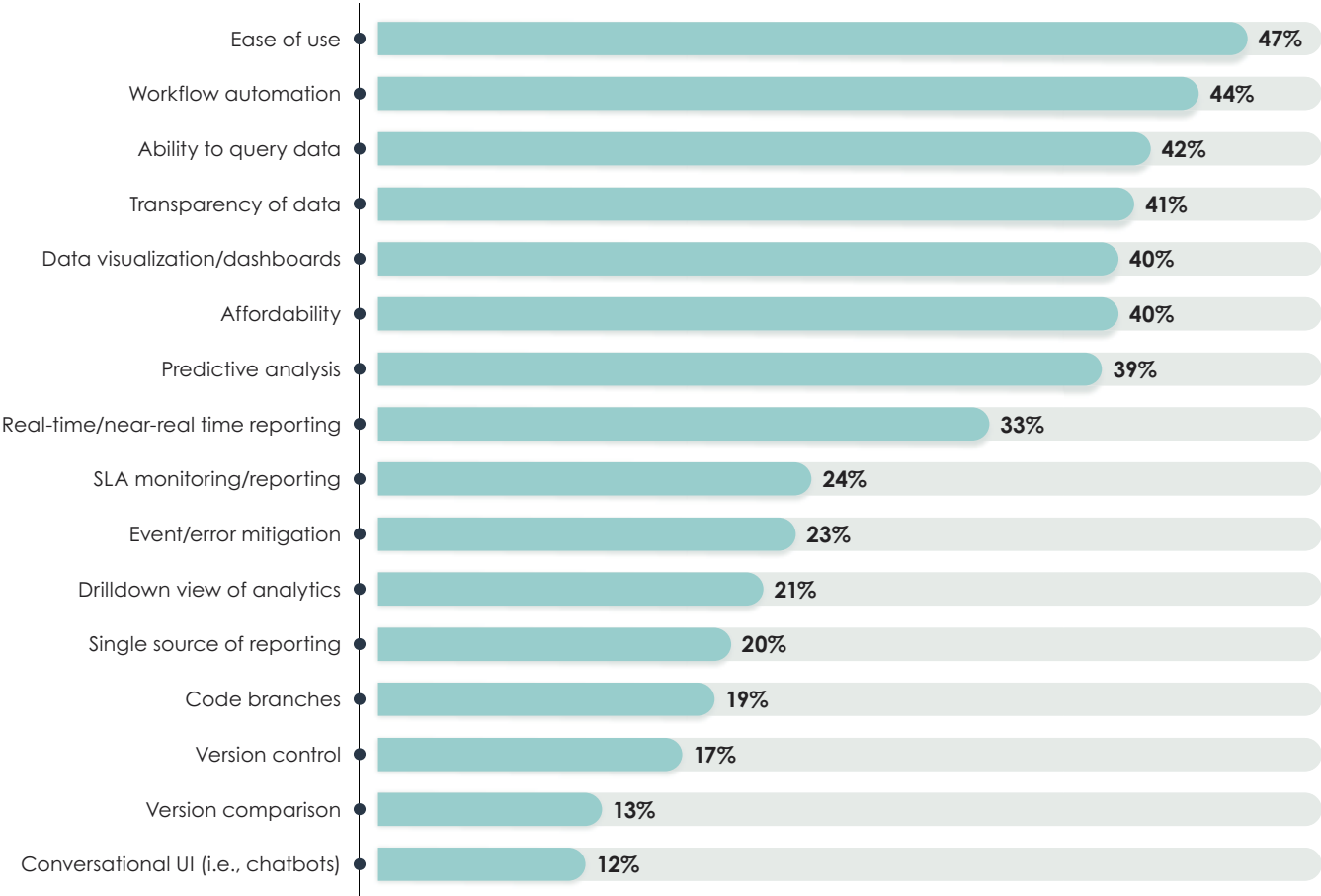


The risk and cybersecurity threat landscape continue to be top priorities of organizations and the research in this study confirms what EMA is seeing across the community. When asked what the primary reasons are for selecting data analytics products and what features are required to be successful in a data-driven toolset, security features top the list.

Which of the following indicate the PRIMARY reasons your organization selected the data analytics product(s) currently in use?



What is your organization looking for in an IT operations management data-driven toolset to be successful?

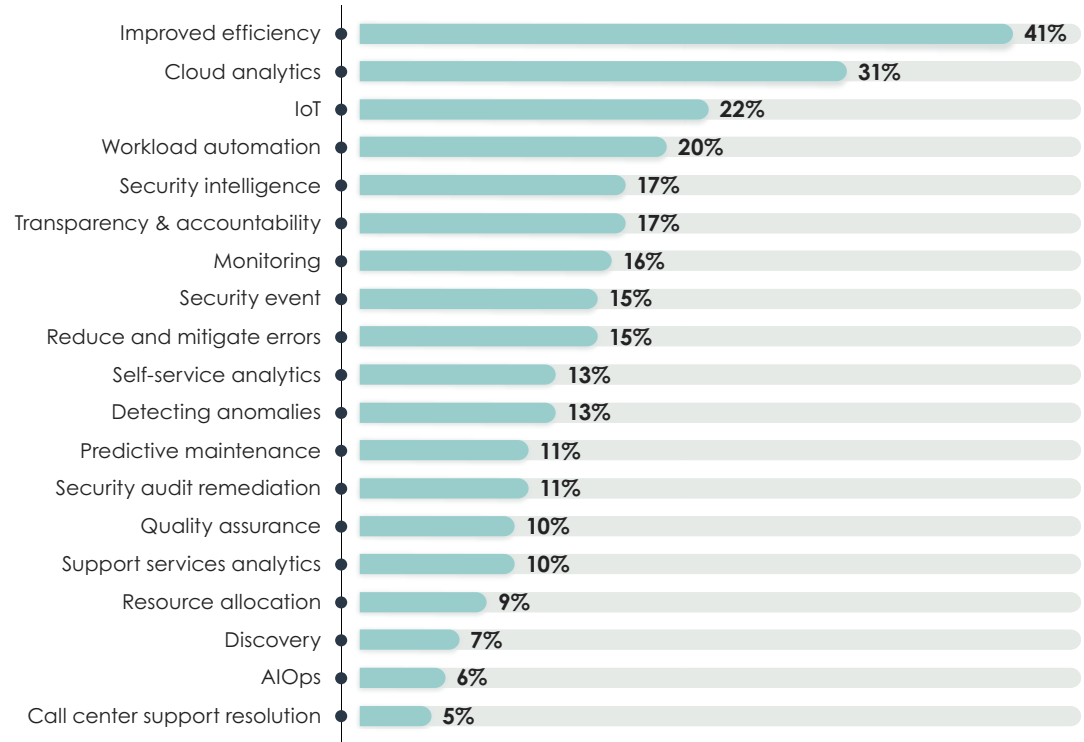




Benefits of Being Data-Driven

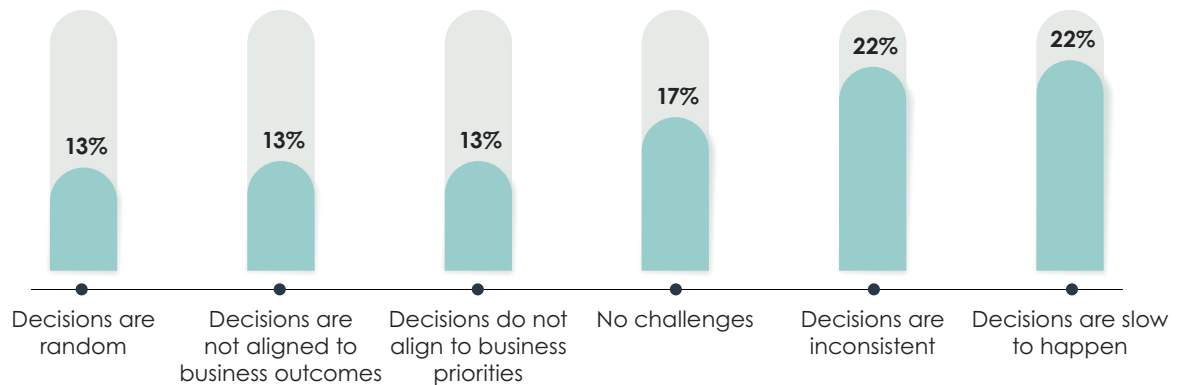
Undoubtedly, there are many benefits for an organization to be data-driven. An overwhelming 97% of survey respondents stated they agree or strongly agree that their organizations see a direct impact to business outcomes from being data-driven, from increased efficiency, productivity, customer experience, and cybersecurity posture. When IT organizations were asked what they are seeing as a direct impact of being data-driven, improved efficiency was the number-one benefit, followed by cloud analytics, IoT, and workload automation.

Benefit Most From Being Data-Driven



Adversely, there are several challenges an organization (especially a large enterprise) faces when they don't have a strategy focused on being data-driven. When asked what the greatest challenges are of not having a data-driven execution strategy, the top reasons are that decisions are slow to happen, and the second reason was that decisions are inconsistent.

Challenges of Not Having a Data-Driven Execution Strategy





Conclusion

The quest for data is a journey every business undertakes to gain valuable understanding into the customer experience, and for today's enterprises, that means data from all the systems, applications, and integration infrastructure supporting customers and transactions. Data analytics, when reliably available in a timely, easily consumable form, can be the crystal ball that will provide insights into customer perception and expectations. These insights provide the competitive edge businesses are seeking to develop new products and experiences ahead of their competitors. However, data analytics is so much more. Data has a long history of providing business awareness into performance metrics, event monitoring security events, employee engagement, and delivery to critical business goals and outcomes, to just name a few. Achieving this level of benefit from data is a journey, and for some businesses, this journey can take years.

It should come as no surprise that the top companies' maturity in being data-driven fundamentally rests on a strong strategy that incorporates culture that permeates throughout all levels of the organization. As with any strategy, a strategy focused on data-driven maturity needs to encompass culture, process,

technology, automation, and tools. This begins at the infrastructure layer of an organization, including workload and process automation, as well as the integration infrastructure layer to streamline efficiency and transparency of data. This research shows the importance of this first step in achieving organizational efficiency.

As the world continues to change at a rapid pace, organizations are forced to speed up their digital transformation initiatives to meet the ever-growing trend of having a strategy to quickly drive desired customer experiences in a digital world. Companies that already have a strong architecture, infrastructure, and integration layer ready for the digital transformation movement have weathered the global changes, while others are scrambling to catch up. EMA is seeing a shift as companies move to a complex, hybrid multi-cloud structure while having to still rely on some legacy systems. There will be a resurgence and focus on infrastructure teams, along with a greater need for data process automation and specialized infrastructure management and analytics tools to meet digital transformation outcomes.



Case Study – Control-M

Leading commercial truck manufacturer Navistar harnesses big data to improve driver efficiency and grow customer uptime

Business Challenge

Navistar, a leading manufacturer of commercial trucks, buses, defense vehicles, and engines, uses big data to generate new, value-added services that empower truck drivers and improve vehicle uptime. This starts with its OnCommand™ Connection remote diagnostics system, which captures data from over a dozen telematics providers to create 20 million data records per day. To aggregate, normalize, move, and process this data, big data teams spent significant time and resources moving data and running scripts manually. They needed a faster, more efficient way to get that job done.

Solution

Control-M automates and manages complex workflows and largescale data by speeding the consolidation of data from internal and external sources and moving it into Hadoop for analysis.

Business Impact

Control-M manages Navistar's day-to-day business operations, performing tasks such as database updates, data extractions, updates to price and parts masters, integration with distribution center and warehouse management systems, and financial reporting. With Control-M for Hadoop, the staff now manages job streams for big data projects using the same solution that supports its other critical business processes.

- Previously, two engineers worked full-time collecting and transforming OnCommand data. Currently, the task is done automatically and immediately.
- Control-M saves engineers 20% of their work time by automatically collecting and reporting on the results of cybersecurity vulnerability scans.
- Application developers are now actively engaged in job scheduling, freeing up schedulers' time for strategic activities.

“In the Connected Vehicle Age, our vision for big data is to add a new dimension of insight-driven service that enables customers to get the maximum value from our product,” says Todd Klessner, senior data operations specialist, batch operations, Navistar. “We’ve just begun to tap the power of Control-M to help us use big data to enhance remote diagnostics, improve vehicle quality, and protect critical resources from unauthorized access, among other initiatives.”





About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals, and IT vendors at www.enterprisemanagement.com. You can also follow EMA on [Twitter](#) or [LinkedIn](#).

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