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A GLOBAL SURVEY OF ANALYTICS LEADERS

2023 State of Cloud Analytics Report

Insights and recommendations for navigating a new era of decision-making

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Executive Summary

Business leaders have a tough job these days: Managing a challenging economy, geopolitical pressures, intense expectations for social and environmental responsibility, global competition, talent shortages, and more — all while delivering world-class customer and employee experiences. Leaders are being called upon to make confident, data-driven decisions faster.

The irony is that businesses are generating more data than ever while still struggling to use it strategically to compete and grow.

But there is hope. It's clear that more data isn't the answer; instead, the answer lies in giving more people the ability to make better use of the data. Cloud adoption has made data more available and scalable than ever — and cloud analytics is the technology that is turning that data into valuable business outcomes.

To help business and analytics leaders prepare for 2023 and beyond, Alteryx set out to understand why and how organizations are investing in cloud-based analytics and the results associated with those investments.

Our findings were startling: 89% of respondents agreed that their cloud analytics investments have contributed to profitability, and 81% of organizations surveyed expect cloud analytics to have a positive impact on managing economic uncertainty (potential recession, inflation, etc.).

89% of respondents agreed that their cloud analytics investments have contributed to profitability.

Pressures around digital transformation and the challenges of big data are driving more organizations to adopt cloud-based analytics. In fact, by 2025, nearly 70% of enterprises plan to put most of their analytics solutions in the cloud. Some respondents reported challenges around adopting cloud analytics — but the reported benefits are clear, as is the path forward. We believe in letting the data speak for itself.

Top 10 Key Findings

1. Cloud analytics is prevalent and growing, largely driven by big data challenges and the need for digital transformation.
2. IT typically takes the lead on cloud analytics strategies, with two-thirds of buying decisions involving the C-Suite or board.
3. The top benefits of cloud analytics include greater efficiency and faster decision-making.
4. 89% of respondents agreed cloud analytics contributed to profitability.
5. 81% of organizations expect cloud analytics to have a positive impact on managing economic uncertainty.
6. While cloud analytics adoption is increasing, organizations expect to maintain some level of on-premises analytics.
7. 98% of respondents said their organization would benefit from more users having access to data analytics tools.
8. The cloud innately supports real-time collaboration and access to analytics regardless of work environment (remote, hybrid, or in-office).
9. End users prefer a single cloud analytics solution with end-to-end capabilities.
10. To maximize their investments, IT and data leaders should seek cloud analytics solutions that are easy to use and fast to deploy.

Cloud Analytics Drives Profitability and Helps Navigate Economic Uncertainty

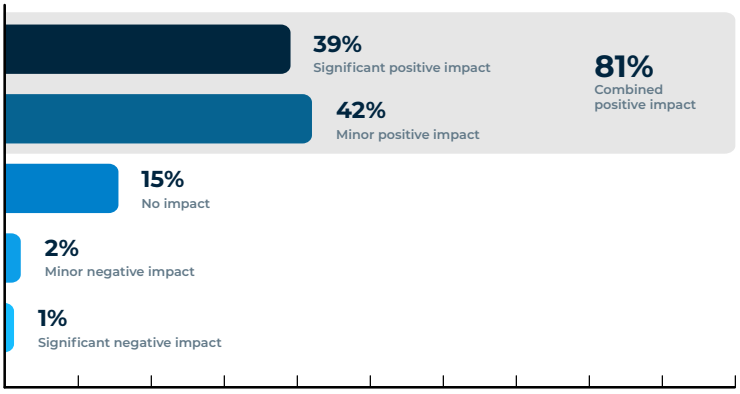
Overcoming economic uncertainty (potential recession, inflation, etc.) requires the ability to see around corners and make informed decisions based on the latest data. According to a global IDC survey, 73% of organizations report analytics investments will outpace all other software investments in 2023.[1] Decision makers have no better tool, but speed and costs are key factors when choosing the right solution.

As financial health and survival eclipses organizations' priorities for 2023, many of the benefits of cloud analytics directly aid those imperatives, including improved operational efficiency (64%), increased scalability (55%), and reduced costs (49%). (See Figure 2.)

Cloud analytics is also helping organizations empower their employees with the capabilities needed for a post-pandemic world. This includes faster decision-making (58%), improved collaboration (42%), and greater productivity (41%). In almost every area, actual benefits exceeded expectations.

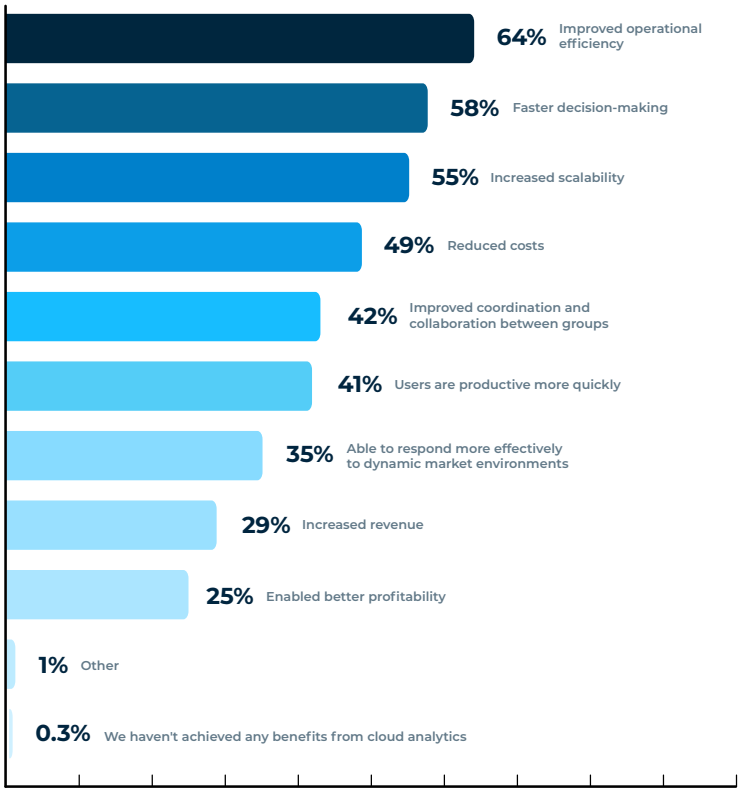
As organizations run more efficiently and help their employees accomplish more with the help of cloud analytics, they are realizing a significant and overarching benefit: the ability to overcome an uncertain future. More than four in five respondents agreed cloud analytics will help them navigate the unknowns in 2023 and beyond (Figure 1).

Figure 1. **Cloud analytics is broadly (81%) expected to have a positive impact on economic uncertainty**



Q: In your opinion, what will be the role of cloud analytics in managing economic uncertainty (potential recession, inflation, etc.)? Choose the one answer that most closely applies.

Figure 2. **The many benefits of cloud analytics**



Q: What benefits has your organization gained [expect to gain] from investments in cloud analytics? Choose all that apply.

The Cloud Enables True Data Democratization

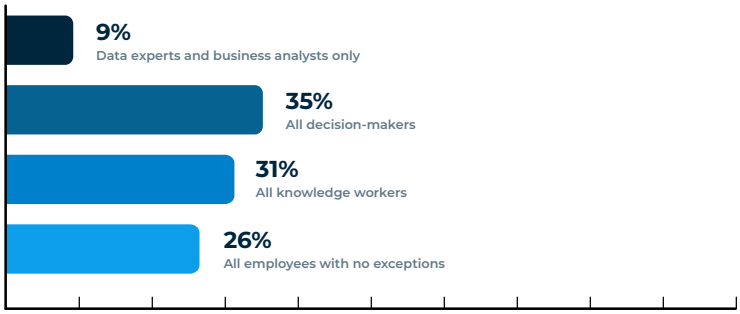
While the biggest net benefit of cloud analytics may be its ability to help organizations overcome uncertainty, collaboration is a common thread throughout the results of this survey that is both innate to the cloud and table stakes for the future of work.

With the rise of intuitive user experiences and low-code, no-code solutions, the barrier to entry for cloud analytics solutions has never been lower. However, while accessibility is higher than ever, respondents are not satisfied with who currently has access to their organizations' analytics solutions.

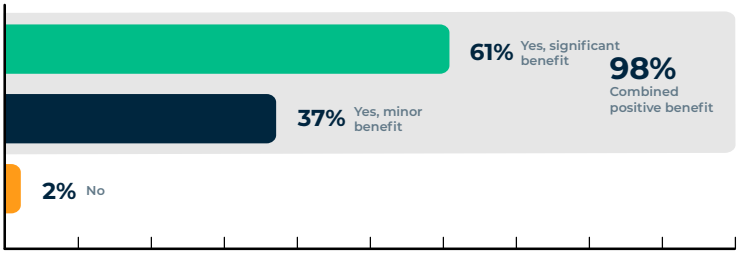
According to our survey, the most common analytics end users today are:

- Data scientists, data architects, data engineers, and other data experts (59%)
- Technical or data executives or managers (58%)
- Line-of-business executives and managers (58%)

Figure 3. **The ideal state for access to analytics solutions**



Q: In your ideal world, which employees should have access to analytics solutions? Choose the one answer that most closely applies.

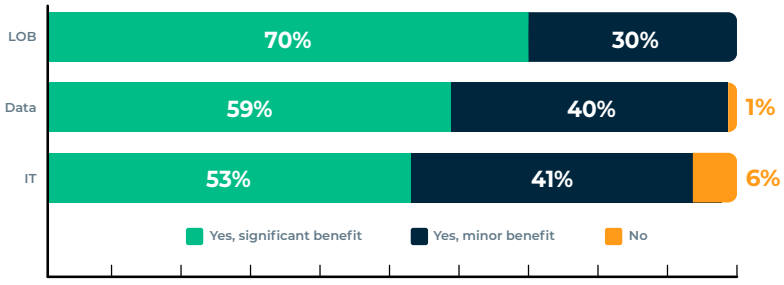


Q: In your opinion, would your organization benefit from more employees having access to analytics solutions?

In contrast, 91% of respondents agreed that analytics solutions should be made available to a much broader employee population (Figure 3). A staggering 98% of organizations believe their business would benefit from more employees having access to analytics solutions.

When we break responses down by role (Figure 4), line-of-business respondents were the most likely to say they would significantly benefit from more employees having access to data analytics (70%). This may be because LOB roles know both the business and the data intimately and crave autonomy over their ability to discover insights that shape their day-to-day work. Assisting these workers in gathering better insights through well-governed solutions will only help organizations make better decisions.

Figure 4. **Line-of-business respondents expect significant benefits from broad analytics access**



Q: In your opinion, would your organization benefit from more employees having access to analytics solutions?

Cloud analytics is growing quickly and will continue to co-exist with on-premises analytics

87% of respondents to our global survey said their organizations already use cloud analytics in some capacity (Figure 5), ranging from "just getting started" to having a mature implementation.

But the ongoing shift to cloud won't be an all-or-nothing transition.

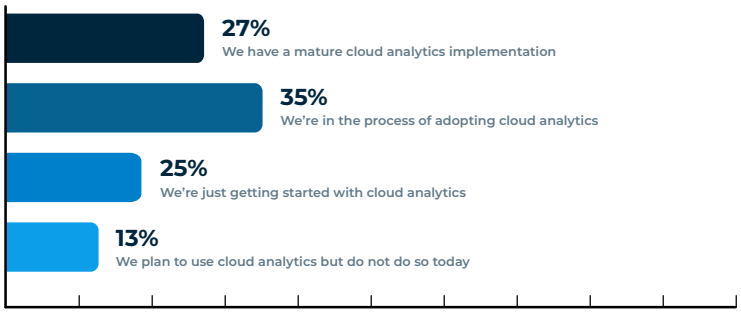
Only 45% of decision-makers reported having more than half of their analytics solutions hosted in the cloud today, with 96% currently having some form of on-prem analytics (Figure 6). By 2025, 73% of these organizations expect to have over half of their analytics hosted in the cloud, but 85% expect to maintain some level of on-premises analytics.

The most common reason cited for maintaining an on-premises presence was to retain existing support for legacy applications (70%). As is the challenge with many digital transformation initiatives, organizations already have processes, support, and procedures in place for their on-prem technologies. Abandoning the existing infrastructure that took great effort and cost to implement is not always cheap or easy.

For this reason, organizations may want to prioritize cloud analytics solutions offered by the same vendor who provides their on-prem solutions. This will ensure smoother adoption and easier transitions between cloud and on-prem workflows.

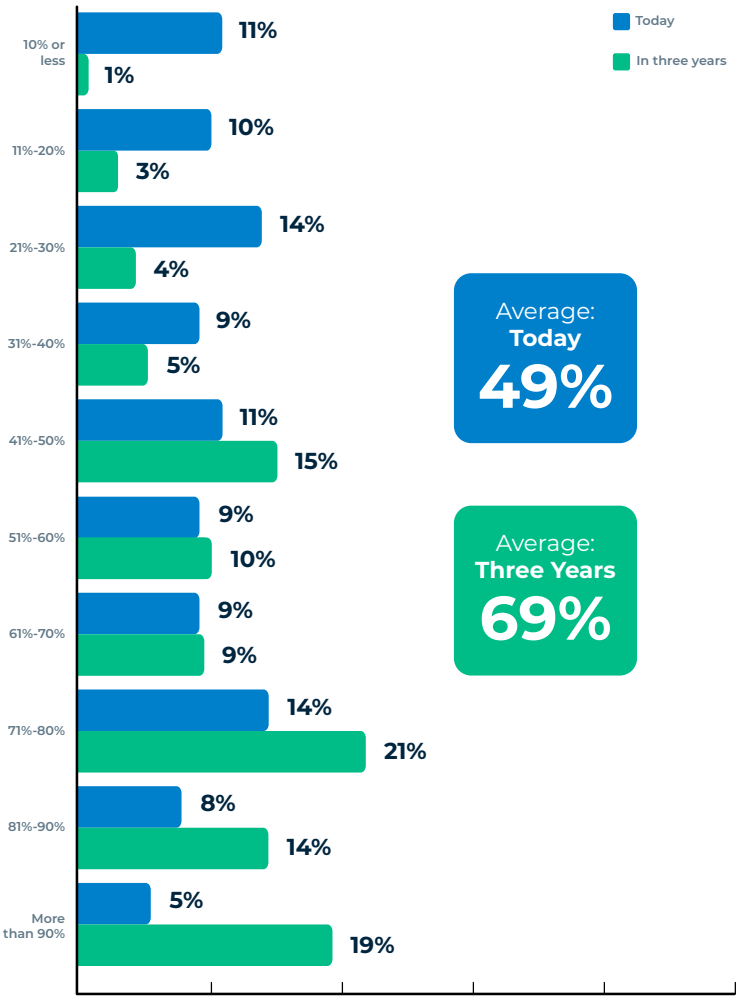
Nevertheless, the cloud's growth is undeniable. By 2025, 69% of all respondents' analytics is expected to be cloud-based (up 20% from today). Two main factors are driving rapid cloud analytics adoption: technology advancements and changing business dynamics.

Figure 5. **87% of organizations are already using cloud analytics in some capacity**



Q: How would you describe your organization's use of cloud analytics? Choose the one answer that most closely applies.

Figure 6. **Only 45% of respondents have more than half of their analytics in the cloud today**



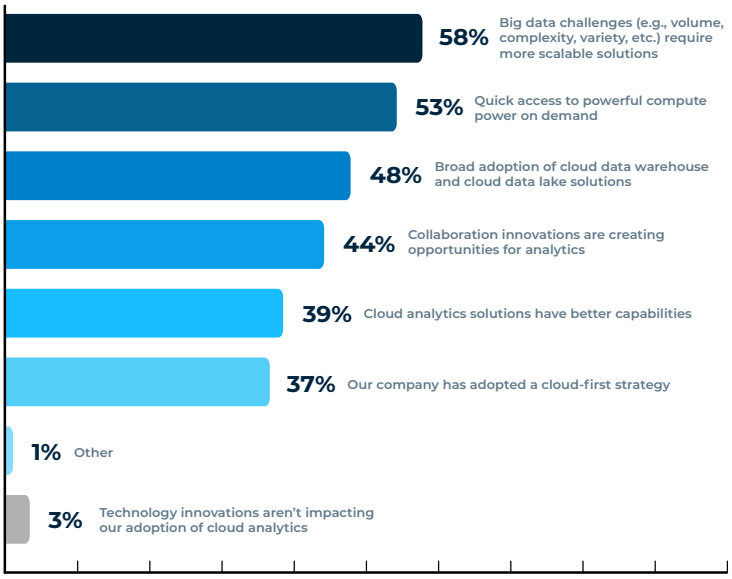
Q: Think across all analytics solutions at your organization. Approximately what percentage of those are "cloud analytics?" Now think about how your organization's use of analytics solutions is changing. What is your best guess for what percentage of your organization's analytics solutions will be cloud analytics in 2025?

Business and Technological Drivers for Cloud Analytics

Growing data volume demands scalable solutions

Big data challenges (58%) topped the list of technological drivers, followed by the benefits of the cloud's compute power on demand (53%), widespread adoption of cloud data warehouse and cloud data lake solutions (48%), and greater analytics collaboration (44%). (See Figure 7.)

Figure 7. **97% cited technology innovations as the main driver for adopting cloud analytics**



Q: What innovations in the technology landscape are driving your organization's adoption of cloud analytics? Choose all that apply.

Data's growth is pervasive, if not cliche, with the average analytics or data science process processing 40M rows of data.[2] With so much data, organizations are looking for alternatives to their on-prem data analytics solutions and data centers. This is a practical change in infrastructure, as on-prem data centers can cost millions to set up and maintain.[3] The cloud's additional computing power lets organizations run analytic processes in a fraction of the time of spreadsheet-based analytics.

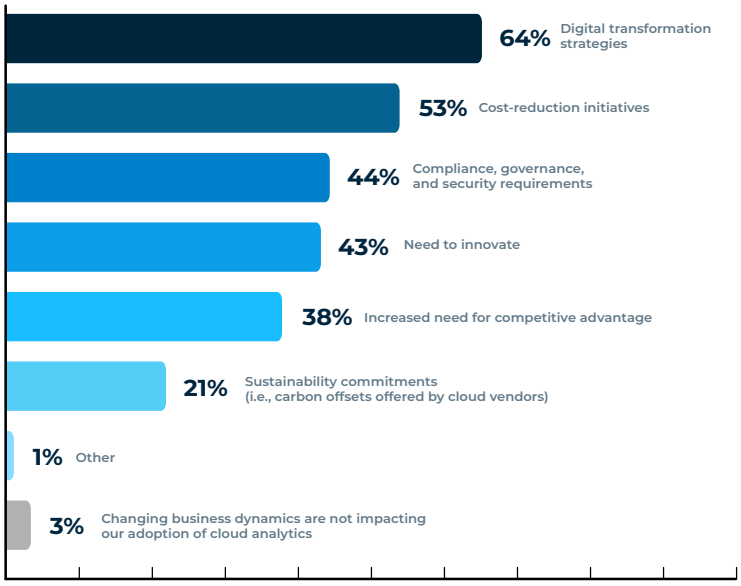
Another innate benefit of the cloud is greater connectivity and collaboration. As Gartner notes, "Analytics silos in the organization weaken data-driven collaboration. Different departments and lines of business (LOBs) hardly collaborate to share and reuse analytics assets in an iterative and agile way."[4] Because of the cloud's accessibility, users can collaborate on the same analytics or data science project in real time and from anywhere, whether they work remotely, hybrid, or in-office. This helps enable much faster decision-making.

Digital transformation and cost reduction lead business drivers

The pandemic amplified the need for and pace of digital transformation, of which data analytics is a foundational part. As Figure 8 shows, 64% of respondents cited pressure to digitally transform as their biggest motivation for adopting cloud-based analytics, followed by cost reduction (53%) and compliance, governance, and security (44%).

Security and governance have been sticky issues surrounding cloud migration and adoption for years, whether due to internal compliance requirements or skepticism about vendors' cybersecurity capabilities. But this sentiment has shifted as organizations seek out cloud providers specifically for their robust security options.

Figure 8. **Digital transformation and cost reduction top list of business dynamics driving cloud analytics use**



Q: What changing business dynamics are influencing your organization's adoption of cloud analytics? Choose all that apply.

Governance is also a key concern. Without the cloud, data is pulled from on-premises data centers and stored on desktop devices. Once there, it can be nearly impossible to track how it's used or shared. However, with cloud-based data storage and analytics, users can access data through an encrypted connection without ever storing it on their devices. Cloud analytics solutions can also make it much easier to implement usage rules on data and track any changes.

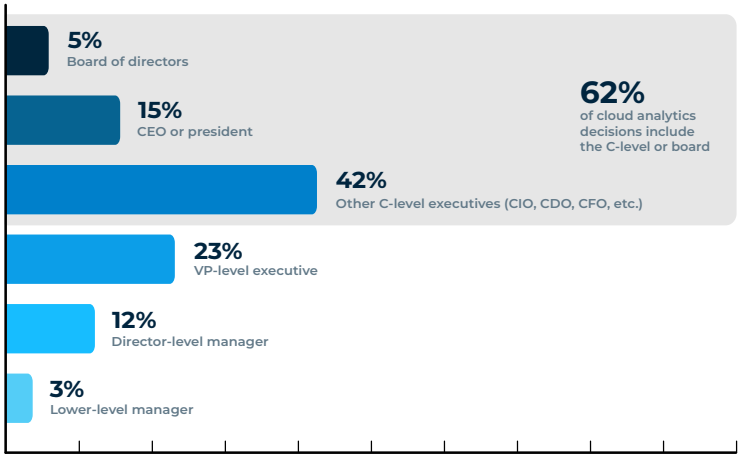
Cloud Adoption: Four Steps to Securing Investment

The benefits of cloud adoption are clear, so how can you positively influence your organization's decision to invest in cloud analytics? We recommend four steps: 1) identify key stakeholders in the buying process, 2) communicate the benefits, 3) address any reservations, and 4) meet your end users' needs.

Step 1: Identify key stakeholders

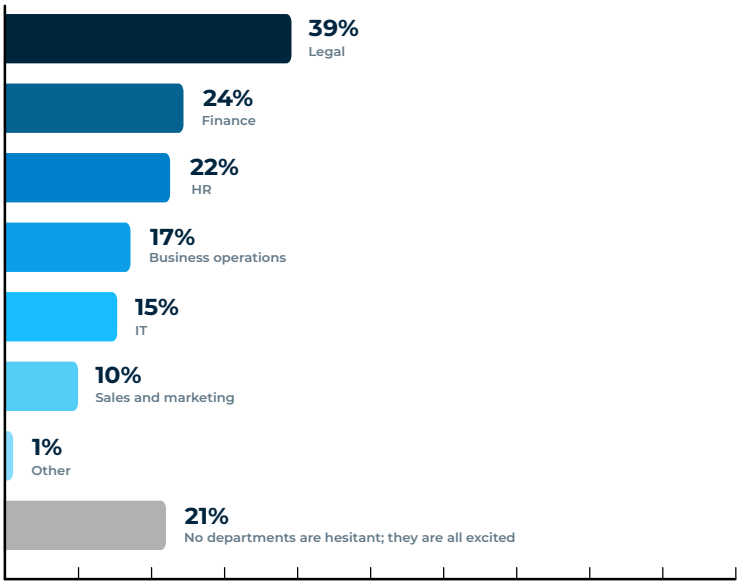
Respondents indicated that IT (62%) and data teams (24%) are most likely to lead cloud analytics initiatives. Working with them on goals and requirements may increase the success of building a comprehensive analytics strategy, but the ultimate decision is influenced at the top level. Almost two-thirds (62%) of buying decisions involve the C-Suite or board (Figure 9). Also noteworthy is that sales and marketing and IT are least likely to have reservations about adopting cloud analytics (Figure 10). **For these reasons, we suggest finding the IT, sales and marketing, and data leaders in your organization who are most likely to get behind cloud analytics and collaborating with them to sell the benefits to the C-Suite.**

Figure 9. **Almost two-thirds (62%) reported cloud analytics decisions include the C-Suite or board**



Q: What is the highest level in your organization that gets involved in decisions about cloud analytics (strategic direction, organizational responsibilities, technology investments, etc.)? Choose the one answer that most closely applies.

Figure 10. **Legal and finance are the most likely to have hesitancies**



Q: Which functional areas at your organization are the most HESITANT about adopting cloud analytics? Choose up to two of the following.

Step 2: Communicate the benefits

It's likely that many of your organization's concerns and priorities align with the technological and business changes driving cloud adoption. Or it may be that your IT team has already begun campaigning for cloud analytics adoption. In either case, it may be helpful to refresh yourself on the benefits of cloud analytics mentioned earlier in this report. These benefits include improved operational efficiency, employee productivity, profitability, collaboration, and the ability to navigate economic uncertainty.

Step 3: Tackle any objections head-on

We mentioned earlier that many respondents wanted more users to have access to analytics solutions. So what's stopping organizations from providing it?

The top five barriers respondents said were preventing more types of users from accessing analytics include:

1. Cost of additional licenses (58%)
2. Difficulty of training additional employees (55%)
3. Lack of organizational data literacy (52%)
4. The perception that analytics tools are difficult to use (39%)
5. Lack of interest (32%)

This suggests organizations should prioritize cloud analytics solutions that are easy to learn and use. Because cloud solutions are more accessible, scalable, and collaborative than their on-prem counterparts, they can help more employees discover meaningful insights that drive top- and bottom-line returns, offsetting licensing costs. Organizations may also consider implementing data literacy or analytics development programs to help empower more employees at scale.

The legal (39%) and finance (24%) functions are more likely to resist cloud analytics, although both are at relatively low percentages (Figure 10).

Legal is likely concerned with compliance and protecting sensitive information. To help alleviate any of these concerns, we suggest **seeking out credentialed cloud analytics vendors with vetted cybersecurity capabilities.**

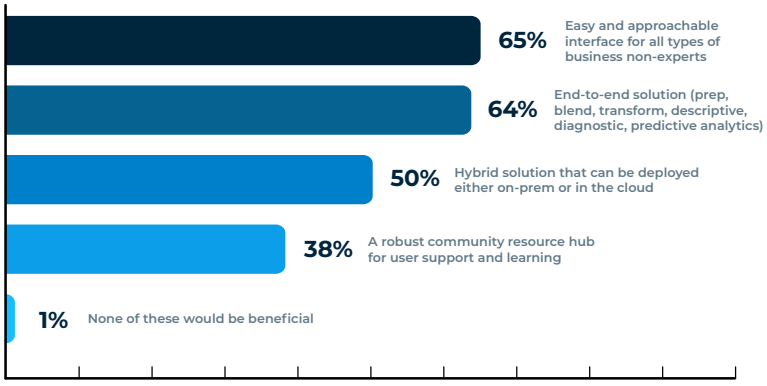
Finance is likely more concerned with high costs and wasted spending. According to a Flexera State of the Cloud report, respondents to their survey self-estimated that organizations waste 32% of their cloud budget.[5] Finance dreads buying expensive solutions only for them to sit on the shelf without delivering value.

To get finance on board, **look for cloud analytics solutions that are easy to use and deploy. This way, users can start adding value immediately.** This requires solutions that can easily integrate with your existing technologies and offer a large number of out-of-the-box connectors to many common business applications.

Step 4: Meet your users' requirements

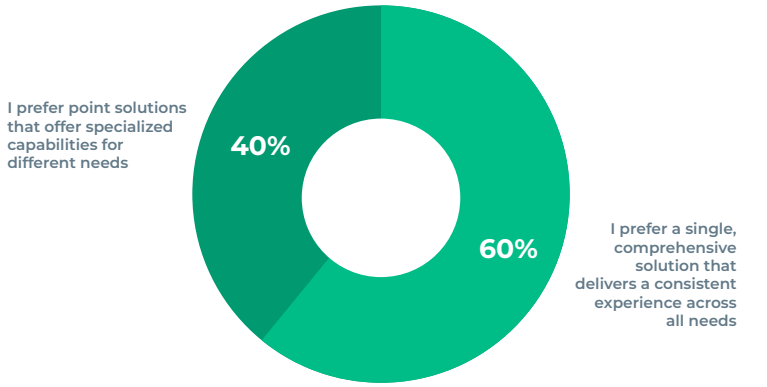
Finally, keep in mind what end users want most out of their cloud analytics solutions (Figure 11).

Figure 11. **Two-thirds (65%) prioritize ease of use**



Q: Which of the following are important to your organization's cloud analytics deployment? Choose all that apply.

Cloud analytics stakeholders lean away from point solutions



Q: What is your personal preference when you think of cloud analytics solutions? Choose the one answer that most closely applies.

Above all else, respondents said they valued an **easy and approachable interface** for all types of users (65%) and an **end-to-end solution** that covers every step of the analytics lifecycle, from prep and blend to predictive analytics (64%). Respondents also preferred a **single, comprehensive cloud analytics platform** (60%) rather than switching between specialized point solutions (40%).

There's a clear link between ease of use and the desire for a comprehensive solution. A single solution is easier to manage (fewer contracts, better economies of scale), and it also means end users only need to master one platform rather than becoming experts in multiple platforms with varying interfaces. This minimizes hand-offs between platforms which can be error-prone, expensive, and time-consuming.

Alteryx Analytics Cloud

Get ready for the enterprise of the future now

Everyone in the organization should be able to access and utilize data and analytics, regardless of their department, role, skillset, or location. The cloud plays a pivotal role in making this democratization possible.

Alteryx Analytics Cloud supports organizations across industries with unified analytics, including automated data preparation & analytics, approachable machine learning, and automated insights with data stories. End users can perform analytics according to their skill level with low-code, no-code tools for everything from simple calculations to building machine learning models.

Self-service for every role

Alteryx Analytics Cloud helps employees be more productive, make better decisions, and collaborate with a simple user experience that allows both experts and non-experts to create analytics solutions from the comfort of their browsers.

Automated AI-driven insights help surface hidden signals for users so they can focus on what matters most. Employees can also quickly upskill with the help of built-in recommendations, best practices, and templates shared by the Alteryx Community and its 370,000+ experts and everyday users.

A unified platform

Alteryx Analytics Cloud lets users easily share analytic workflows across cloud, desktop, and on-prem. Users can distribute AI-generated insights across the organization to answer questions not found in dashboards or reports.

The end-to-end analytic abilities of Alteryx include the ability to combine, prepare, and enrich disparate data sources, as well as access analytics, geospatial, and approachable machine learning to help users anticipate future demands and improve decision-making. Regardless of infrastructure, working location, or analytic need, Alteryx Analytics Cloud covers everything.

About Alteryx

Alteryx powers analytics for all by providing the leading Analytics Automation Platform. Alteryx delivers easy end-to-end automation of data engineering, analytics, reporting, machine learning, and data science processes, enabling enterprises everywhere to democratize data analytics across their organizations for a broad range of use cases. More than 8,000 customers globally rely on Alteryx to deliver high-impact business outcomes. To learn more, visit ***www.alteryx.com.***

About Dimensional Research

Dimensional Research® provides practical market research to help technology companies make smarter business decisions. Their research experts partner with you to deliver actionable information that reduces risk, increases customer satisfaction, and grows your business. Whether you need to understand complex behaviors or desire fresh insights of your buyers, their research services will enable you to gain a clear understanding of customer and market dynamics.

Enterprise-grade deployment and security

Alteryx Analytics Cloud is an enterprise-grade platform that natively integrates with your existing data and analytics architecture. This simplified deployment process helps you reduce set-up time and effort. You can connect to a wide range of data and applications across cloud and on-premises sources, as Alteryx is extensible to fit your needs and requirements with OpenAPI standards.

Alteryx Analytics Cloud also features best-in-class security and governance. Give your team peace of mind as Alteryx fully protects your data with leading security standards and certifications (SOC2, ISO).

About This Report

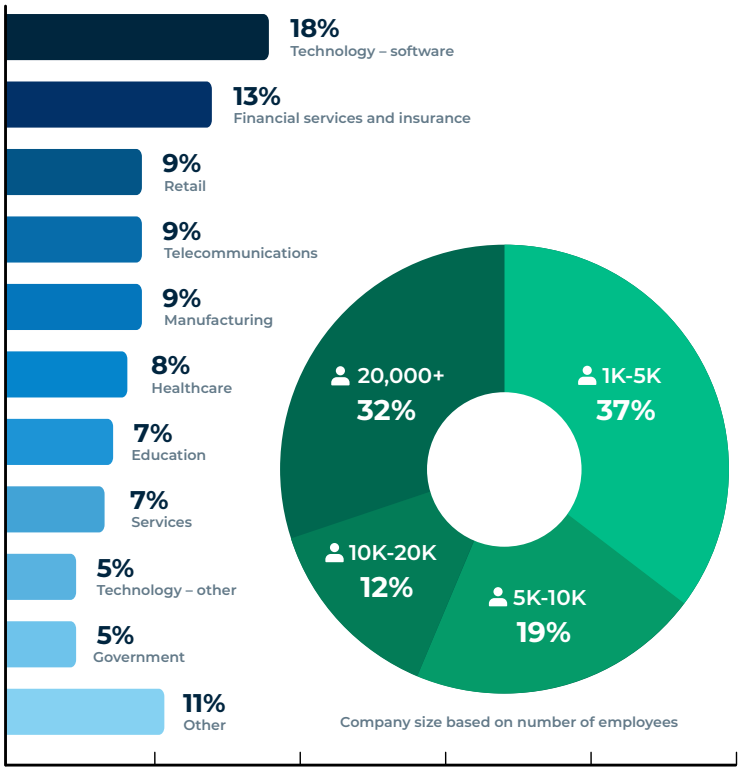
This report is based on a global survey conducted by Dimensional Research on behalf of Alteryx with the goal of capturing hard data around adoption plans for, experiences with, and benefits from cloud analytics. Unless otherwise stated, the data presented in this report is from this survey. A total of 309 qualified individuals completed the survey. All had technical and/or budgetary decision-making responsibility for cloud analytics solutions in an IT, data, or line-of-business role.

For this survey, "cloud analytics" refers to any general-purpose analytics, business intelligence, machine learning, or data science solution that includes the following features:

- Hosted by a software vendor
- Accessed by end users through a browser
- Uses multiple sources of data, which may be hosted on-prem or in the cloud or both

For this report, "cloud analytics" does not refer to reporting or dashboards that are part of a single solution (e.g., built-in reporting in Salesforce).

Figure 12. **Respondents by industry and company size**



Methodology

Independent sources of analytics stakeholders were invited to participate in an online survey. A variety of questions were asked on a range of topics, including current and future use of cloud analytics, business drivers, challenges, and more. Responses were captured between November 16 and November 28, 2022.

Respondents worked at companies with more than 1,000 employees that are currently using or planning to use cloud analytics. The breakdown of respondents by region is as follows: United States (69%); Europe (12%); Canada (7%); Asia (4%); Mexico, Central, or South America (3%); Australia or New Zealand (2%); Middle East (1%); Africa (1%).

Note on methodology

Participants were presented with slightly different questions related to benefits and challenges based on the maturity of their cloud analytics. "Mature" or "In-process" participants were given questions that referred to the actual outcomes of their projects, while "Getting started" and "Planning" participants were given the same questions framed in terms of their expectations. "Getting started" and "Planning" participants were given additional options to not answer questions if it was too soon in their process to have an opinion.

Notes

1. Vesset, Dan, and Ray Huo. "4 Ways to Unlock Transformative Business Outcomes from Analytics Investments." Alteryx.com. IDC, August 1, 2022. https://www.alteryx.com/resources/whitepaper/4-ways-to-unlock-transformative-business-outcomes-from-analytic-investments.
2. "State of Data Science and Analytics." Alteryx.com. IDC, April 1, 2019. https://www.alteryx.com/resources/report/idc-state-of-data-science-and-analytics.
3. Enix, Shannon. "Comparing (All The) Costs of Managed Hosting Vs. On-Prem DIY." Rackspace.com. Rackspace Technology, April 28, 2018. https://www.rackspace.com/blog/comparing-costs-managed-hosting-vs-in-house-diy.
4. Sun, Julian. "Adopt Cloud Analytics to Drive Innovation." Gartner.com. Gartner, June 2, 2020. https://www.gartner.com/en/documents/3985874.
5. "Flexera 2022 State of the Cloud Report." Flexera.com. Flexera. https://info.flexera.com/CM-REPORT-State-of-the-Cloud.