



4 Ways to Unlock Transformative Business Outcomes from Analytics Investments

A global survey on the impacts of people, data, and analytics automation on ROI

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Executive Summary

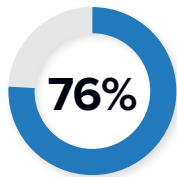
Data is changing the world and the world is changing the data; 73% of organizations indicate analytics spend will outpace other software investments. But is everyone's spending resulting in the same ROI? To answer this question, IDC conducted a global study of 1,500 leaders on behalf of Alteryx. IDC developed a framework to identify the organizational behaviors that capture high return on analytics investments.

IDC found that organizations that achieve more ROI from their analytics investment do the following:

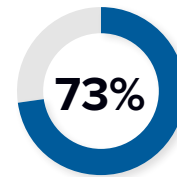
- ✓ **Unify everything** across the entire analytics life cycle
- ✓ **Solve for use cases everywhere** with every type and source of data
- ✓ Ensure analytics are **available to everyone**
- ✓ Make analytics **easy to access**

Data Is Changing and the World Is Changing with It

Over the next 12–18 months:



of survey respondents **see the business landscape changing faster** than in the past.



of organizations indicate **analytics spend will outpace other software investments.**

Meanwhile ...



The overwhelming majority of survey respondents say that **only about half** of business decisions in their organization are made based on analytics.



93% of survey respondents report that they are not fully using the analytics skills of their employees.



Only one out of five survey respondents report commensurate investment in workforce upskilling on analytics and data literacy.

n = 1,501, Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

KEY QUESTIONS:

- Does everyone's spending result in the same ROI?
- Are some organizations better than others in deriving value from data?
- Which organizations reap greater benefits of analytic automation and can mitigate the analytics talent shortage?

A Framework of Enterprise Analytics Proficiency

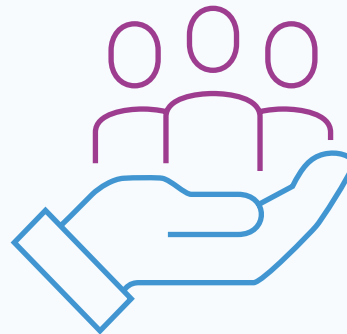
To help decision makers prioritize their analytics investments, IDC conducted a global study on behalf of Alteryx of 1,500 leaders in data analytics. We identified **four dimensions of analytics proficiency** as well as the **benefits of analytics investments across these key metrics** in the past 12–18 months.

Financial Metrics



Revenue, profitability, costs

Customer Metrics



Acquisition, retention, experience

Employee Metrics



Retention, productivity, experience

[For research demographics see slide 19.](#)

A Framework of Enterprise Analytics Proficiency

(continued)

Our research revealed the behaviors of organizations that achieved high ROI and the significant roadblocks to reaping greater benefits. Below is the framework we developed for defining analytics proficiency.

FOUR DIMENSIONS OF ENTERPRISE ANALYTICS PROFICIENCY:



Comprehensiveness of analytics across all data sources and types

- ▶ Extent of data types and breadth of data sources used for analytics
- ▶ Easy, well-governed access to diagnostic, predictive data and analytics capabilities



Flexibility across deployment scenarios and departments

- ▶ Extent to which analytics is used throughout the different business domains and included in decision making
- ▶ Extent of AI/ML and automation usage



Ubiquity of analytics and insights for every skill level

- ▶ Extent to which knowledge workers have access to and use analytics software (beyond spreadsheets)
- ▶ Data and analytics literacy
- ▶ Ease of collaboration among data and knowledge workers



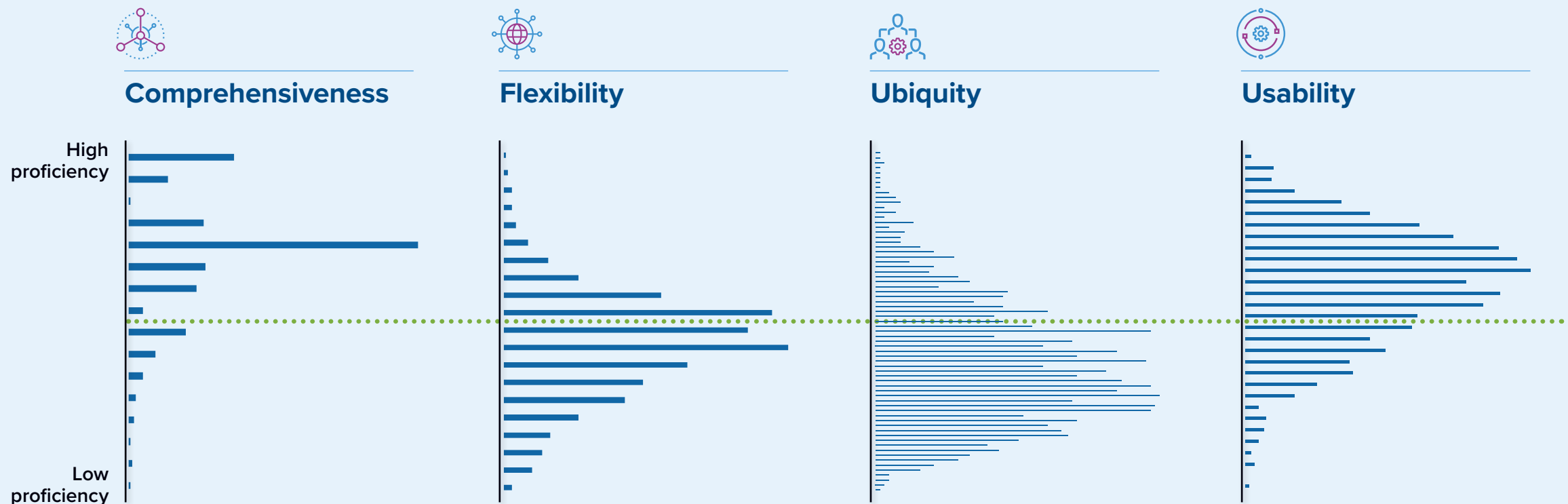
Usability of the analytics software

- ▶ Streamlined analytics stack that requires fewer tools to manage and master
- ▶ Extent of automation infused into technology to abstract the complexity of manual effort

[For research demographics see slide 19.](#)

Investment Across the Four Dimensions Is Unbalanced

Among the four dimensions of analytics proficiency, the **Ubiquity dimension is most heavily skewed towards low proficiency.** In order to maximize ROI, ensure everyone in the organization has **access to the data and analytics technology they need.**



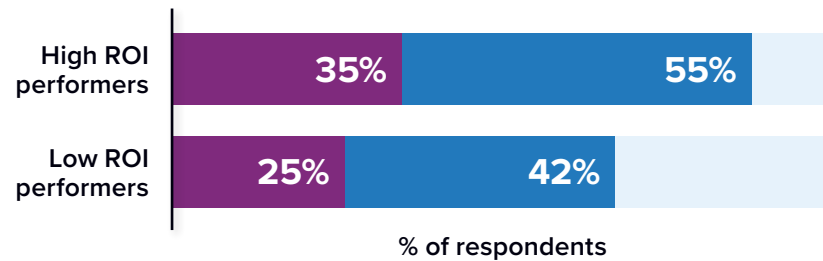
Comprehensiveness of analytics across all data sources and types

IMPACT: Organizations that use more DATA SOURCES and DATA TYPES generate higher ROI from their analytics investments.

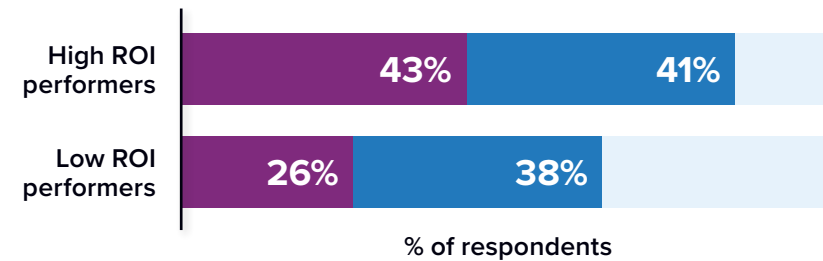


ACTION: Unlock the value in DATA SOURCES and DATA TYPES you're not currently leveraging but are already available to you.

Among those with improved **customer metrics** (high ROI performers), **90% are good or great at utilizing all DATA SOURCES**, compared to only 67% among those without positive ROI.



Among those with improved **customer metrics** (high ROI performers), **84% are good or great at utilizing all DATA TYPES**, compared to only 64% among those without positive ROI.



63% of organizations report they are not using the full breadth of data types available.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

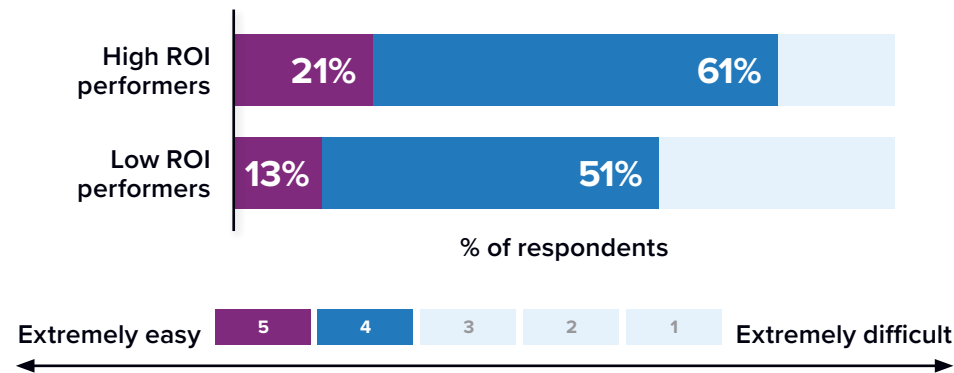
Comprehensiveness of analytics across all data sources and types (continued)

IMPACT: Easy access to data and insights enabled by clearly defined and implemented governance structure positively impacts ROI.

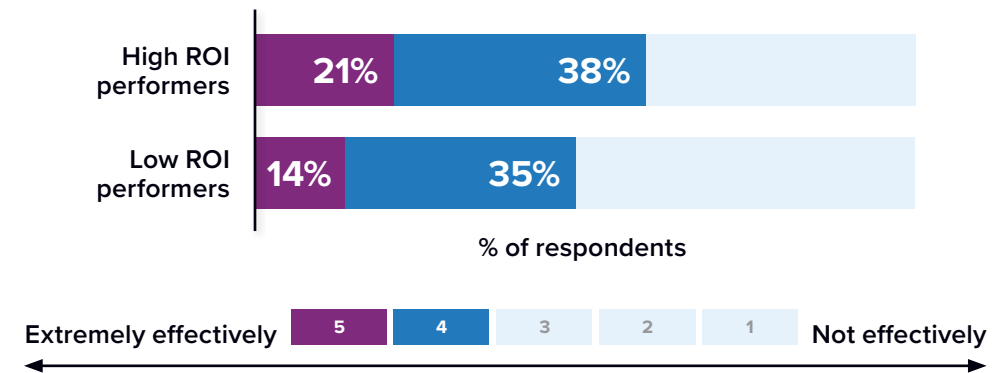


ACTION: Clearly define data governance policies and articulate them to everyone to enable frictionless access to data and insights.

Among those with improved **financial metrics** (high ROI performers), **82% say it is very or extremely easy for data workers to access data**, compared to only 64% among those without positive ROI.



Among those with improved **financial metrics** (high ROI performers), **59% have very or extremely effectively defined data access policies**, compared to only 49% among those without positive ROI.



For 82% of organizations, data access policies are **only moderately effective or worse**.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

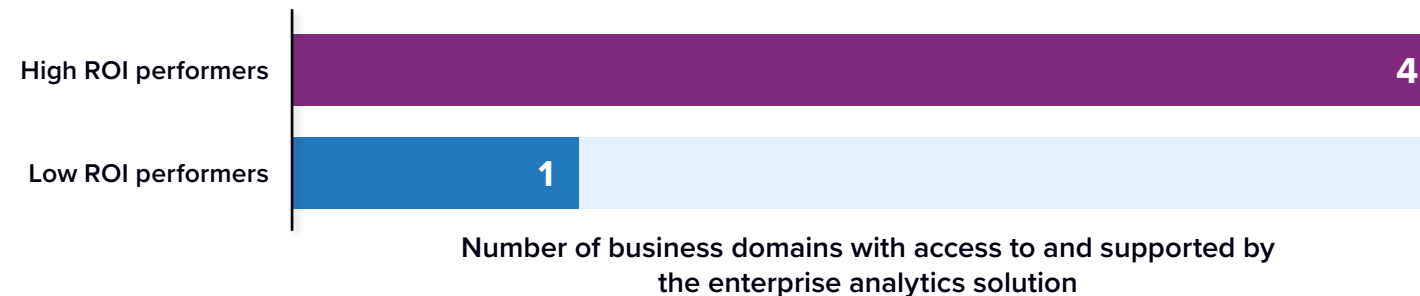
Flexibility across deployment scenarios and departments

IMPACT: Supporting more business domains with analytics and providing cross-functional analytics correlates with higher ROI.



ACTION: Shift from departmental to enterprise analytics by exposing the analytics solution to more departments.

Those with improvements across **all business metrics** (high ROI performers) **have analytics solutions (other than spreadsheets) that support on average 4 business domains**, compared to only 1 business domain supported at organizations without positive ROI.



Enterprise analytics solutions have been deployed in **less than half** of the departments who need such a solution.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

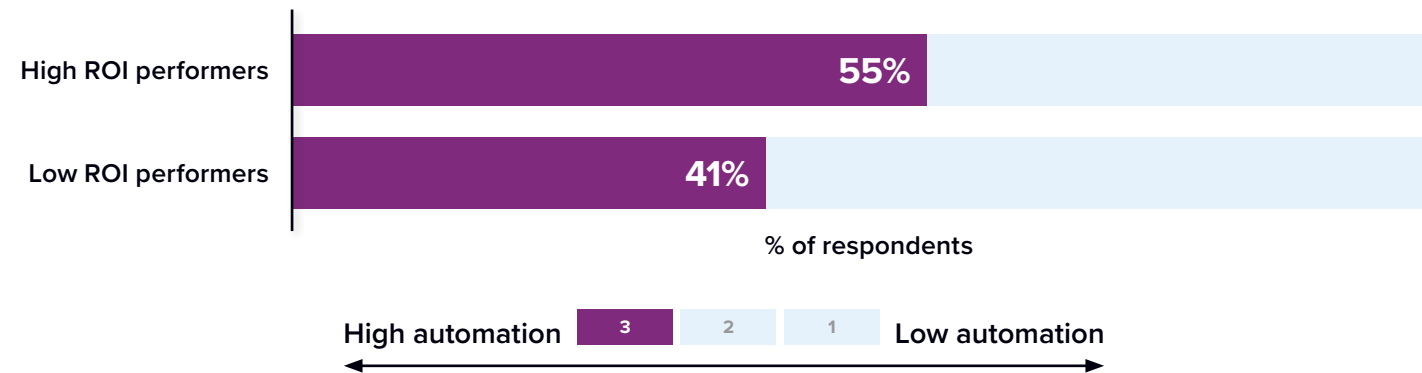
Flexibility across deployment scenarios and departments (continued)

IMPACT: More expansive use of artificial intelligence/machine learning or other advanced analytics to automate decisions positively impacts ROI.



ACTION: Select and deploy technology that incorporates AI, ML, and automation in the various steps of the analytics life cycle.

Among those with improved **financial metrics** (high ROI performers), **55% expect to have a high degree of business decision automation** within the next 5 years, compared to only 41% among those without positive ROI.



The majority of responders report less than 30% of decisions are **informed by AI/ML**.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

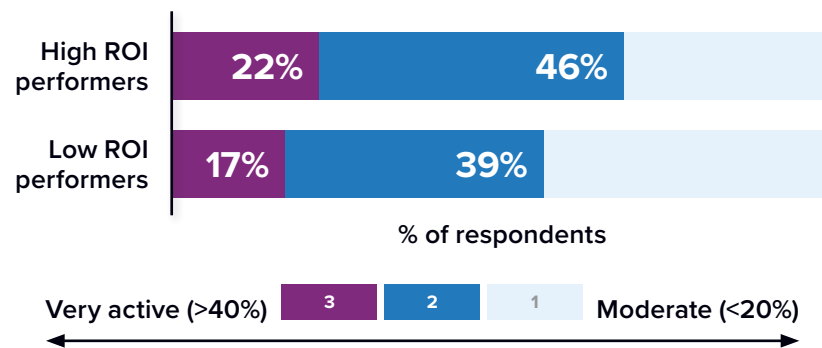
Ubiquity of analytics and insights for every skill level

IMPACT: Organizations with a higher percentage of active analytics users among knowledge workers enjoy higher returns from their analytics investments.

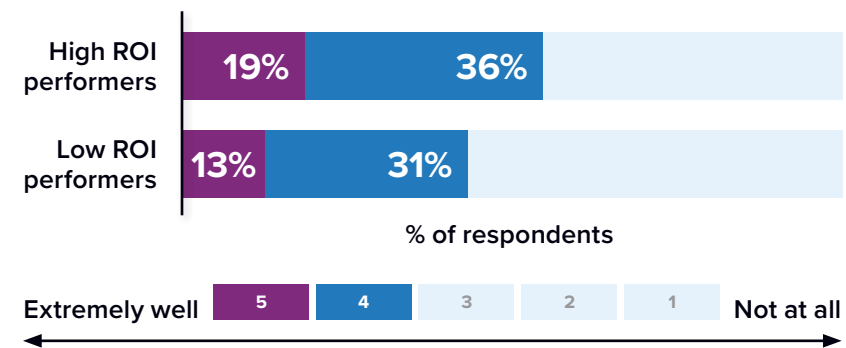


ACTION: Expose analytics to the widest possible user base and ensure everyone's data and analytics skills are fully utilized.

Among those with improved **financial metrics** (high ROI performers), **68% say that at least a quarter of their knowledge workers are active users of analytics software** (other than spreadsheets), compared to only 56% among those without positive ROI.



Among those with improved **financial metrics** (high ROI performers), **55% say their users understand data outside their immediate group very or extremely well**, compared to only 44% among those without positive ROI.



9 out of 10 respondents say that less than half of their knowledge workers are active users of analytics software (other than spreadsheets).

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

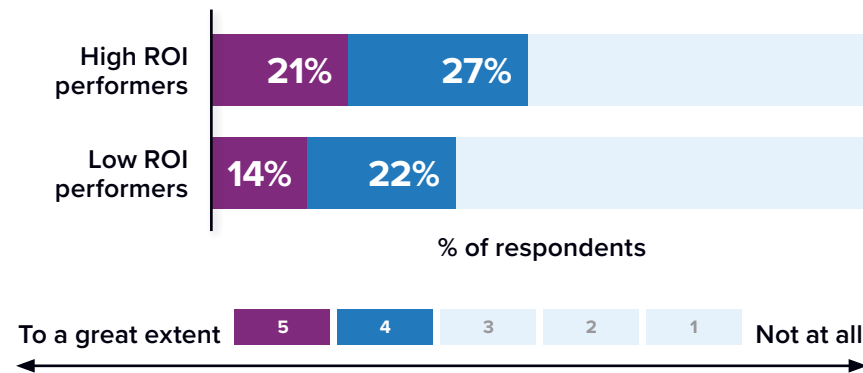
Ubiquity of analytics and insights for every skill level (continued)

IMPACT: Organizations with higher levels of data literacy and greater collaboration among data and analytics workers enjoy higher ROI.

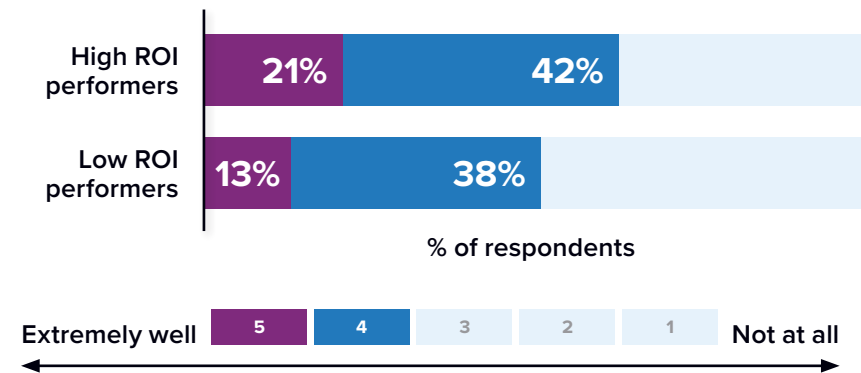


ACTION: Invest in programs and training that increase data literacy and remove barriers to collaboration.

Among those with improved **financial metrics** (high ROI performers), **48% are good or great at utilizing analytics skills of their workforce**, compared to only 36% among those without positive ROI.



Among those with improved **financial metrics** (high ROI performers), **63% say that data and analytics workers collaborate well or extremely well**, compared to only 51% among those without positive ROI.



93% of survey respondents report that they are **not** fully using the analytics skills of their employees.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

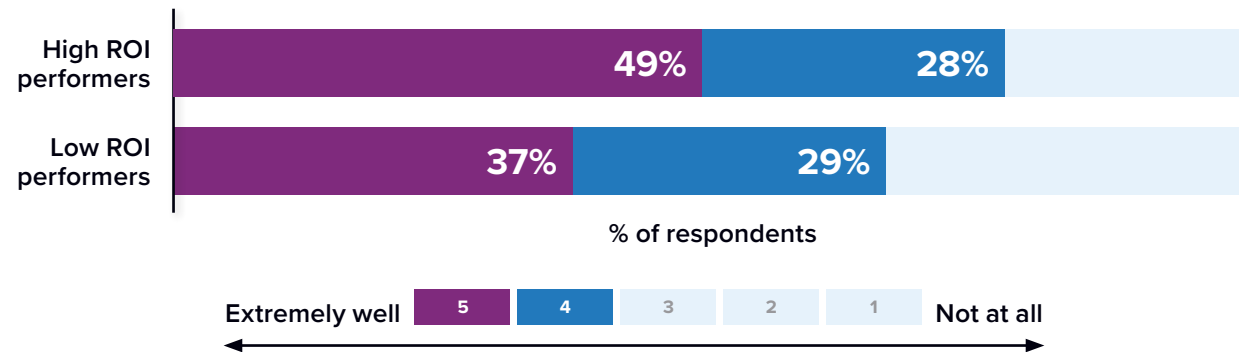
Usability of the analytics software

IMPACT: Organizations with end-to-end integration across the steps of the analytics process experience better ROI.



ACTION: Ensure work by data and analytics professionals is viewed as a process and supported by integrated technology.

Among those with improved **financial metrics** (high ROI performers), **77% say that all 5 steps of the analytics process are very or extremely well integrated into a single platform**, compared to only 66% among those without positive ROI.



The five steps of the analytics process:

- 1 Data access and integration
- 2 Data preparation and enrichment
- 3 Data analysis with descriptive statistics
- 4 Data analysis using advanced analytics (e.g., ML)
- 5 Distribution of results of analysis

In a majority of organizations (56%), the five analytics steps are **not** yet integrated into a single platform, requiring users to become proficient in several tools.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

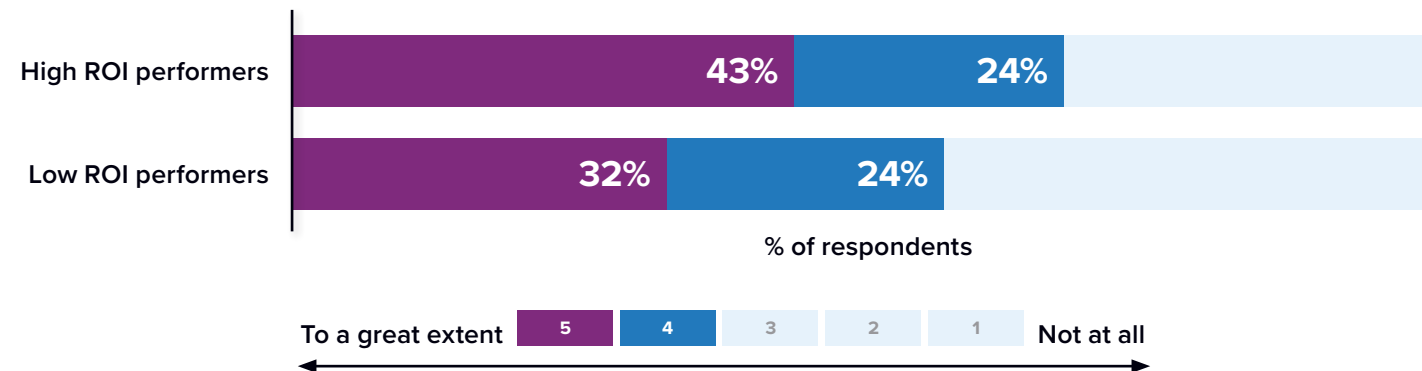
Usability of the analytics software (continued)

IMPACT: Organizations with greater automation of data preparation as well as advanced analytics and distribution of insight experience higher ROI.



ACTION: Incorporate automation throughout the steps of the analytics workflow to ensure that the technology augments and assists every user.

Among those with improved **financial metrics** (high ROI performers), **67% say that the data preparation process is automated to a good or great extent**, compared to only 56% among those without positive ROI.



In 6 out of 10 organizations, data preparation is **not** automated to a great extent.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

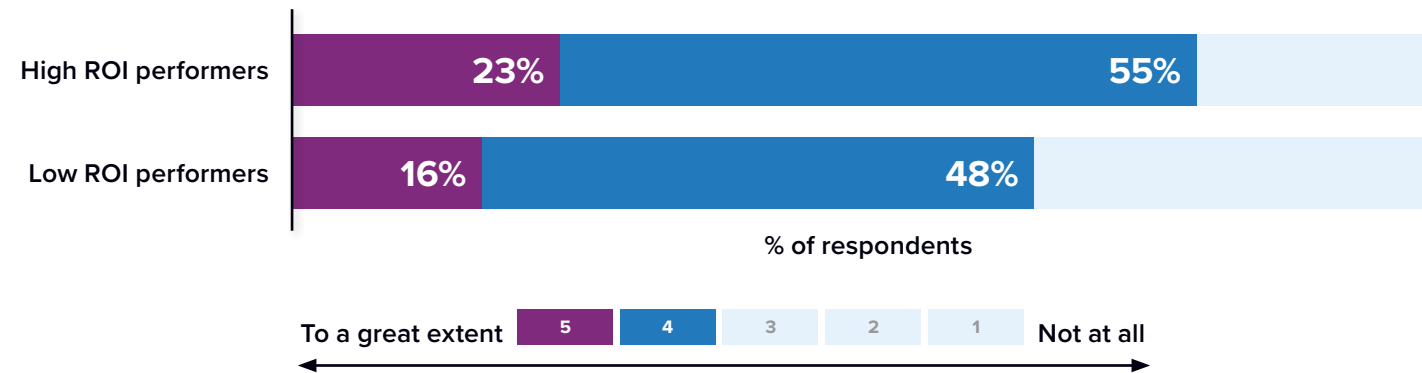
Ongoing Success with Analytics Automation Requires Constant Investment

IMPACT: Organizations that align their analytics investments with upskilling in data literacy enjoy higher ROI than organizations that are less aligned.



ACTION: Ongoing success with analytics automation requires constant investment across all four dimensions, leading to optimal utilization of technology and skills.

Among those with improvements across **all business metrics** (high ROI performers), **78% have good or great alignment between analytics investments and workforce upskilling on data literacy and analytics**, compared to only 64% among those without positive ROI.

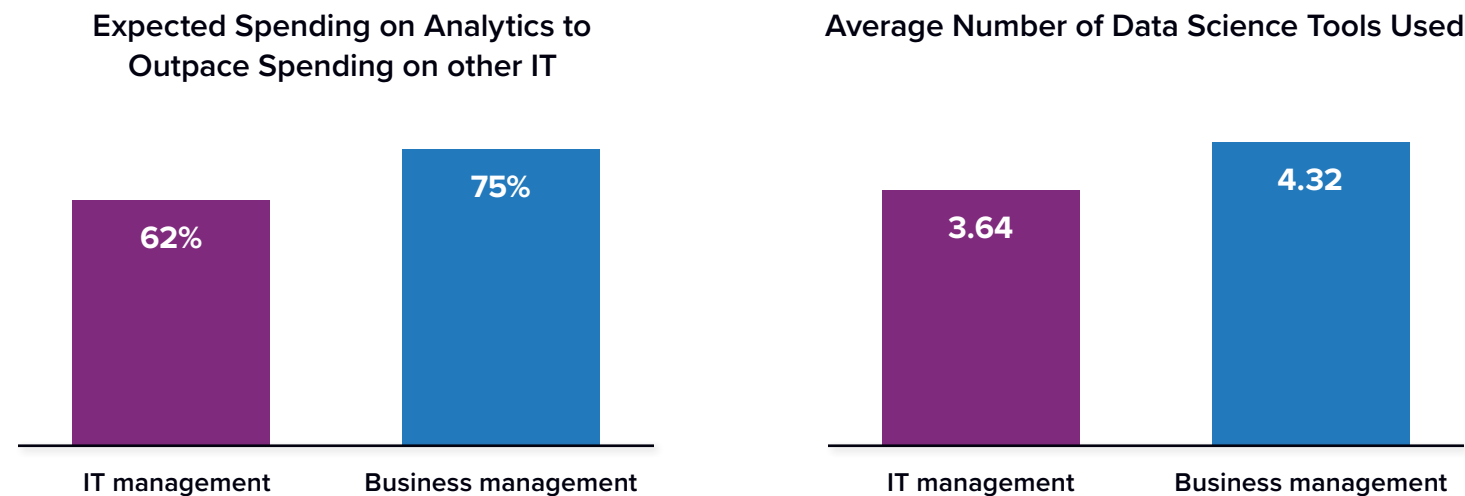


Focusing on each of the four dimensions in the framework leads to optimal utilization of technology and skills.

Note: Numbers may not add up to 100 due to rounding. n = 1,501. Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

IT and Business Management Are Not Aligned on Data and Analytics

SHADOW IT



Misalignment between IT managers and business managers increases the risk of current and future analytics technology being purchased by business without IT's knowledge.

Compared to their IT counterparts, business managers:

- ▶ Expect to spend more on analytics
- ▶ Use more tools than IT is aware of

Lack of a central governance structure for analytics technology selection, deployment, and support inhibits balanced investment across all four dimensions, and according to IDC research has the greatest negative impact on ensuring that analytics are democratized for everyone.

n = 1,501, Source: IDC's *Cloud Analytics*, commissioned by Alteryx, May 2022

Essential Guidance

Invest in the 4 analytics proficiencies to maximize business value derived from data and analytics.



Comprehensiveness

- ▶ **Unlock the value in data sources and data types** you're not currently leveraging but are already available to you.
- ▶ **Clearly define data governance policies** and articulate them to everyone to enable frictionless access to data and insights.
- ▶ **Ensure alignment on data and analytics initiatives** between IT and business to eliminate productivity inefficiencies.



Flexibility

- ▶ **Break down data and analytics silos** by emphasizing enterprise-wide analytics solutions.
- ▶ **Select and deploy technology** that incorporates AI, ML, and automation in the various steps of the analytics life cycle.
- ▶ **Support cross-functional use cases** by deploying modern cloud-based or hybrid AI-infused analytics technology.



Ubiquity

- ▶ **Expose analytics to the widest possible user base** and ensure everyone's data and analytics skills are fully utilized.
- ▶ **Develop a data culture** that appreciates and rewards everyone's analytics skills and data-driven or data-informed decision making.
- ▶ **Align spending on data and analytics technology** with upskilling on data literacy.
- ▶ **Remove barriers to collaboration.**

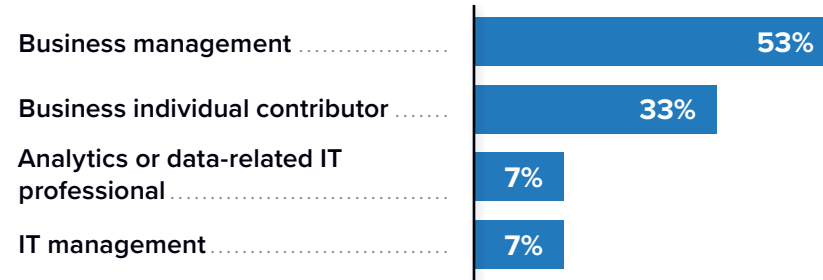


Usability

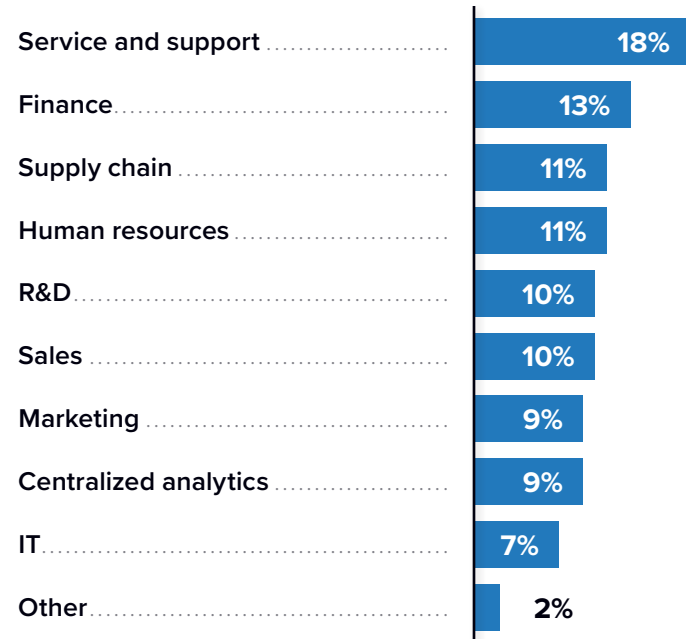
- ▶ **Ensure work by data and analytics professionals is viewed as a process** and supported by integrated technology.
- ▶ **Incorporate automation throughout the steps of the analytics workflow** to ensure the technology augments and assists every user.

Survey Demographics (Sample size = 1,501)

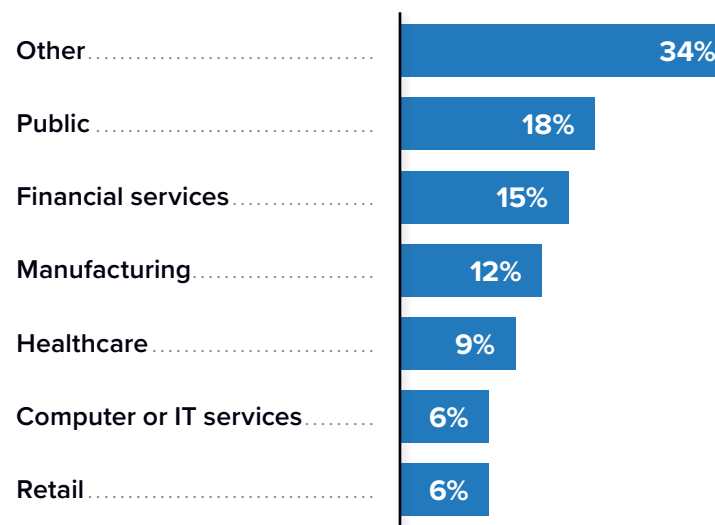
ROLE



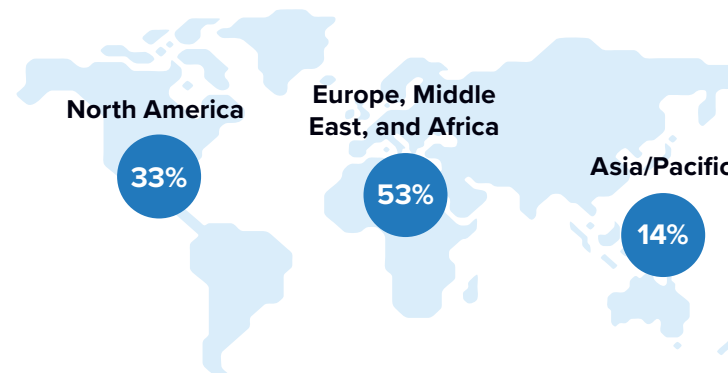
BUSINESS FUNCTION



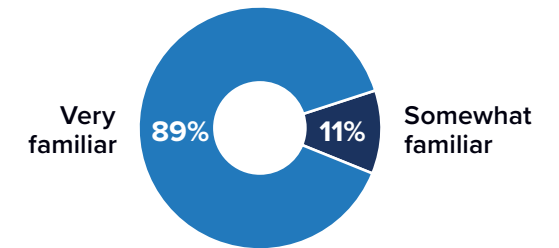
INDUSTRY



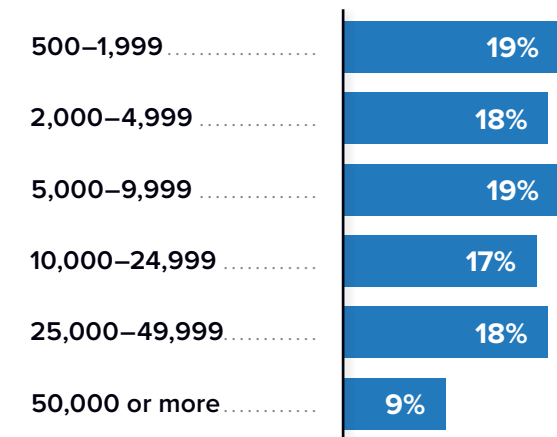
REGION



FAMILIARITY WITH ANALYTICS



NUMBER OF EMPLOYEES



About the Analysts



Dan Vesset

Group Vice President,
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Dan Vesset is group vice president of IDC's Analytics and Information Management market research and advisory practice where he leads a group of analysts covering all aspects of structured data and unstructured content processing, integration, management, governance, analysis, visualization, and monetization. Dan also leads IDC's global Big Data and Analytics research pillar.

[More about Dan Vesset](#)



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Raymond Huo is a senior research analyst in IDC's Business Analytics and Decisioning Software market research and advisory practice. His core research coverage is focused on business intelligence and analytics tools, advanced and predictive analytics, decision management, analytic data management and integration, enterprise performance management, and enterprise planning.

[More about Ray Huo](#)

Message from the Sponsor

Alteryx, the Analytics Automation company, is focused on delivering Analytics for All. Our core purpose is to empower everyone to generate transformational outcomes from data. Alteryx delivers an easy-to-use, unified platform with advanced capabilities that is scalable for the enterprise and is supported by a vibrant community of over 300K passionate users. Organizations of all sizes, all over the world, rely on Alteryx to deliver high-impact business outcomes and the rapid upskilling of their modern workforce.

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