



| | | |
|-----|-------|-------------|
| AIU | 1,822 | 12,349,000 |
| EJK | 3,680 | 238,681,000 |
| HPL | 1,062 | 85,678,000 |
| KEE | 485 | 8,369,000 |
| NAH | 8,569 | 189,301,000 |
| QOP | 6,602 | 102,698,000 |
| TIK | 890 | 24,697,000 |
| WIG | 6,280 | 81,002,000 |
| AHD | 2,400 | 15,000,000 |

| | | | | | | |
|--------|--------|-------|--------|--------|--------|--------|
| AIU | HJI | WWE | PLD | EEF | GRY | OPY |
| 1,822 | 20,369 | 890 | 6,350 | 10,985 | 665 | 6,800 |
| (-35) | (+580) | (-20) | (-200) | (-380) | (-15) | (-115) |
| MBC | LJH | MJB | PON | NFR | WGH | SWJ |
| 3,605 | 9,542 | 2,609 | 7,654 | 6,522 | 1,632 | 3,652 |
| (+210) | (-128) | (+35) | (+169) | (+122) | (-54) | (+182) |
| YBV | QMN | MMJ | IIT | KLM | CCX | EMH |
| 3,204 | 5,211 | 7,100 | 7,150 | 782 | 1,901 | 3,280 |
| (-33) | (+156) | (-60) | (-150) | (+74) | (+101) | (-120) |
| MBB | WFF | HJM | QLC | LSD | SDH | GHS |
| 3,320 | 712 | 134 | 2,022 | 631 | 637 | 12,630 |
| (-120) | (+12) | (+5) | (-11) | (+40) | (-7) | (+330) |

Cloud Business Intelligence and Analytics

An IDC InfoBrief, *Sponsored by Tableau and AWS* | **April 2020**

By Chandana Gopal and Dan Vesset, IDC



CEOs put new priority on analytics and data

Don't get bogged down in the jargon:

- ✓ Machine learning
- ✓ Business analytics
- ✓ Data intelligence
- ✓ Data lakes
- ✓ Data warehouses
- ✓ Data visualization

These technologies and processes exist to...

...enable better decision making

...drive action

When 100 CEOs were asked by IDC in a 2019 study about their strategic areas of investment for the next five years,

80% IDENTIFIED USING DATA IN ADVANCED DECISION MODELS FOR INTELLIGENT OPERATIONS

Data should drive all decision making

HOW IMPORTANT IS DATA TO AN ORGANIZATION?
ACCORDING TO IDC'S 2020 BI SURVEY



70% of respondents say they want to be more data driven.



Only 27% say they are completely data-driven.

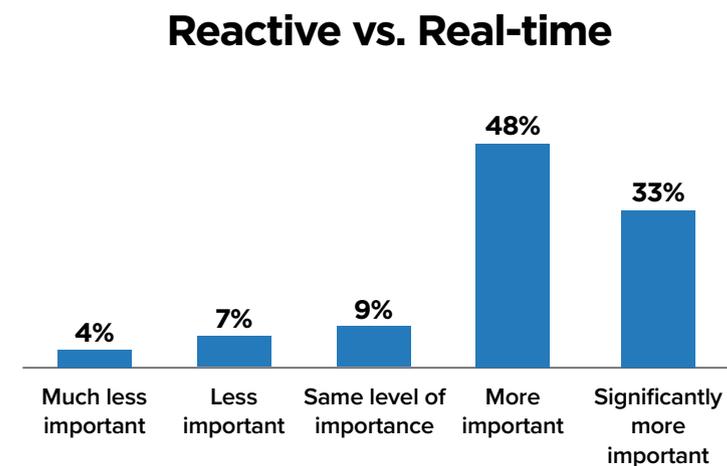
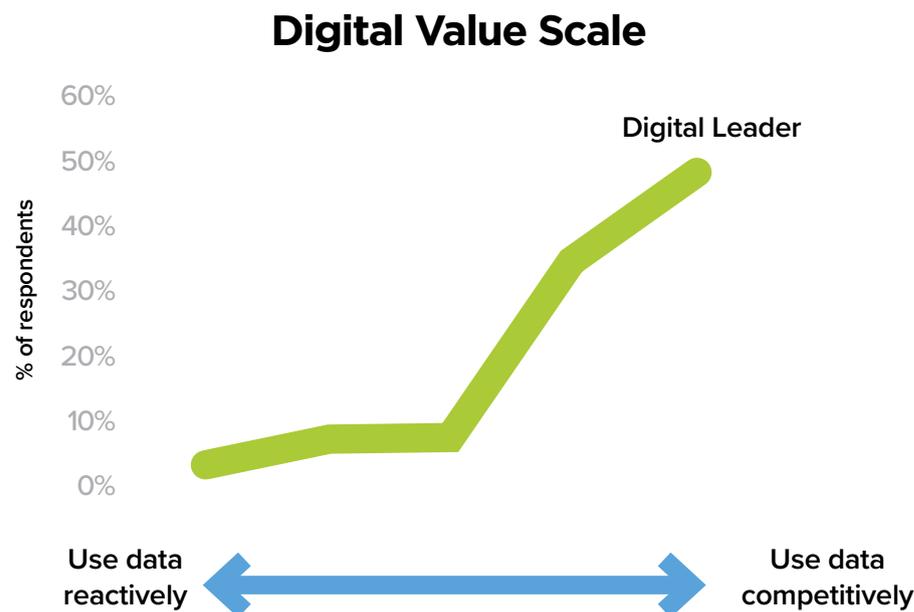
Frontline employees and managers lag executives in being able to use data in their decision making.

“Most discussions of decision making assume that only senior executives make decisions or that only senior executives’ decisions matter. This is a dangerous mistake.” —Peter Drucker

Everyone needs support from business intelligence and analytics



Importance of real-time data in the digital economy



Q: How important is moving from using data to analyze past performance to more real-time advanced decision making?

Enterprises are realizing the importance of using data proactively and strategically, rather than the old BI paradigm of looking at historical performance to drive future outcomes.

Today's high volume, high velocity data creates demand for pervasive BI and analytics that is a challenge for legacy technology and processes

Worldwide Data Creation by Location and Real-Time Data, 2014–2023

In Zettabytes (1 ZB = 1,000,000 PB)



An IDC survey* about data integration and integrity found that:

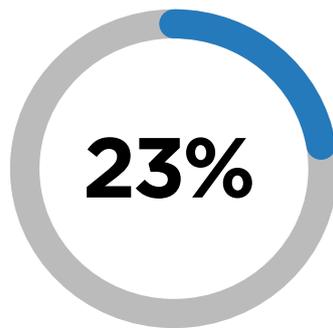
- **55% of respondents work with four or more data types.**
- **26 new data sources or targets are requested per month on average.**
- **94% of enterprises have a hybrid cloud environment—making data management even more complex.**

Given the complexity of data environments, enterprises require a BI and analytics platform that is:

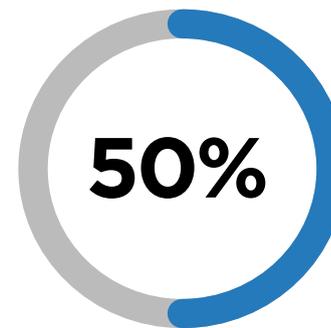
- ✓ Always available
- ✓ Globally scalable
- ✓ Secure and trusted

BI and analytics move to the cloud to address these challenges

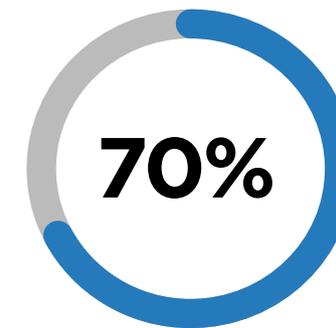
As a result of ongoing challenges, more enterprises are moving BI and analytics technology to the cloud.



23% of global spend on BI and analytics software was for cloud deployments in the first half of 2019.



50% of the BI and analytics software market will be deployed in the cloud by 2023.



70% of enterprises have deployed some BI and analytics software on one of the cloud platforms.

Analytics spending on the cloud is growing **8X FASTER** than other deployment types.

The cloud delivers more than scalability

Cost savings and scalability are top reasons for choosing cloud services. Through moving to the cloud, IDC projects that organizations will:



Run their cloud environments at 25% of their on-premises IT infrastructure costs



Reduce the time to deploy additional compute by 91%

Enterprises also cite enhanced agility and redeployment of IT staff to more strategic business initiatives as major factors for moving to cloud. Additionally:

- ✓ Business disruptions are minimized by 87% when leveraging public cloud services
- ✓ IT infrastructure team efficiency is improved by 70%
- ✓ Application developer productivity is enhanced by 31%

Agility and readiness for the future

IT leaders want platforms that provide the ability to respond to their business colleagues' needs within days or weeks – not months.

Cloud platforms must not only tick off the core requirements of scalability, availability, performance, and manageability, they also must provide future capabilities for:

- ✓ Cloud data warehousing
- ✓ Cloud streaming data processing
- ✓ Cloud artificial intelligence (AI) or machine learning (ML)



Analytics



Data Lake



Databases



Data Streams



AI/ML

“As an IT leader, I can be proactive in transforming our enterprise’s data management architecture and solutions into an agile, scalable, and extensible platform.” —CIO of a major Telco

Value from cloud BI and analytics

The combination of modern BI and analytics solutions and modern cloud platforms

Functionality: Cloud allows frequent updates to the BI and analytics software so features like ML-based task automation and activity recommendations are available to all users.

Accessibility: Analytics can be accessed from anywhere by anyone authorized to do so.

Scalability and performance: Users can scale compute and storage as needed.

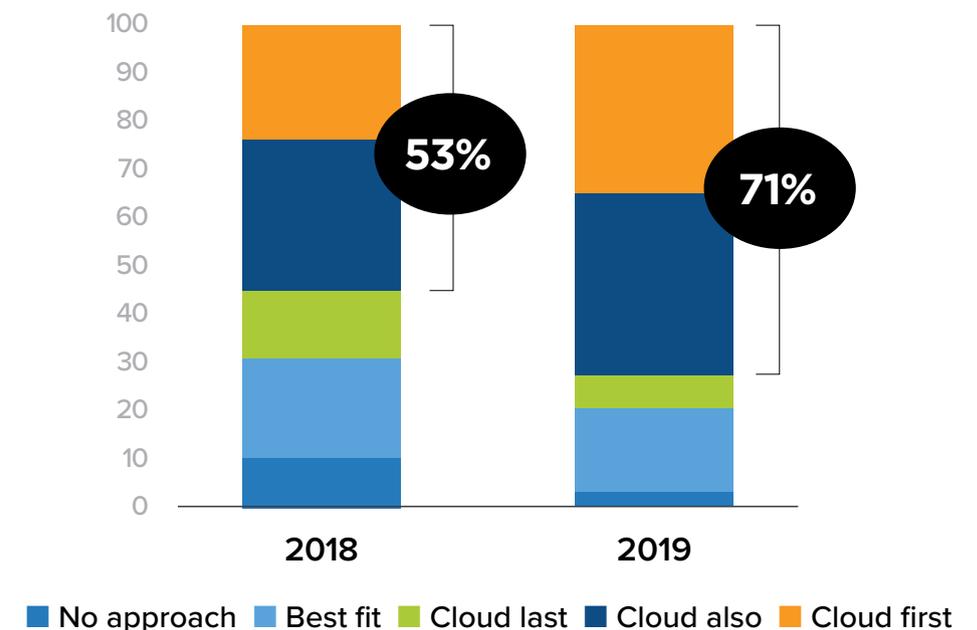
Manageability: The cloud provider handles software, hardware, and infrastructure.

Security and reliability: Providers ensure availability and security across local jurisdictions.

Improved usage analysis: A cloud platform enables administrators to understand user behavior, and AI can suggest improvements based on usage.

Complementary services: Customers can tap into other services including digital assistance and image, text, and video analytics.

Cloud Migration Sentiment



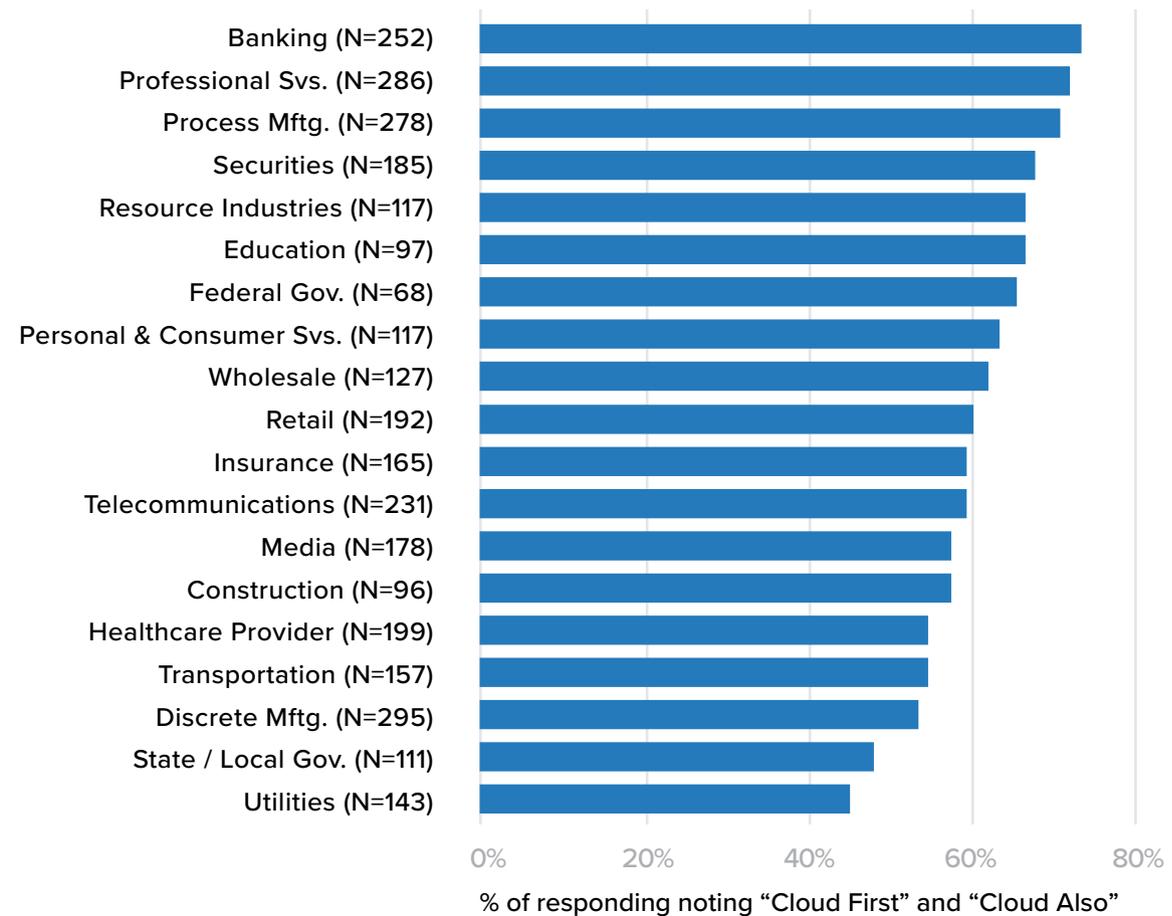
How would you describe your organization's general posture toward replacing existing on-premises IT functionality with cloud services?

BI and analytics projects are either cloud first or cloud across most industries

Cloud is becoming the foundational infrastructure for many organizations.

The average BI and analytics project budget is \$217K, about 20% higher than 2018.

Big Data Analytics in the cloud is a tougher sell for more regulated industries with significant data privacy concerns such as healthcare, state and local governments, and utilities. They are adopting Big Data Analytics at a slower pace.



What should enterprises consider for cloud analytics?

Choose a modern BI and analytics technology that provides:

- ✓ Easy self-service and AI/ML for data analysis and collaboration
- ✓ Pre-built as well as extensible connectivity to cloud and on-premises data sources
- ✓ Flexible deployment options and pricing models
- ✓ Tight integration with cloud PaaS or IaaS platform for speed to market and TCO

Choose a cloud platform that provides:

- ✓ Scalability across compute and storage requirements
- ✓ Portability of analytics software licenses so buyers can manage them on their own infrastructure
- ✓ Availability and security to ensure trusted round-the-clock access and service levels by all users
- ✓ Data management and AI/ML services that can be leveraged as BI and analytics needs and software requirements evolve

Analyst profiles



Chandana Gopal
Research Director, Business Analytics

Chandana Gopal is Research Director for IDC Business Analytics Solutions market research and advisory practice. Ms. Gopal's core research coverage includes demand and supply trends in business intelligence advanced and predictive analytics, and enterprise performance management markets.



Dan Vesset
Group Vice President, Analytics and Information Management

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, and visualization.

IDC Custom Solutions

IDC Corporate USA
 5 Speen Street
 Framingham, MA
 01701, USA
 T 508.872.8200
 F 508.935.4015
 Twitter @IDC
 idc-insights-community.com
 www.idc.com

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2020 IDC. Reproduction without written permission is completely forbidden.

Message from the sponsors

Modernize Your Analytics Platform with Tableau and AWS

Modern Cloud Analytics (MCA) combines the resources, technical expertise, and data knowledge of Tableau, Amazon Web Services (AWS), and respective partner networks to help you maximize the value of your data and analytics investments and your end-to-end analytics journey.

From strategy, to migration, to operations, this collaboration helps you securely deploy and scale your cloud analytics practice without compromising data integrity, governance, or security.

What do customers get?

By working with a consulting partner validated by Tableau and AWS, customers can expect:

- Faster time-to-value for Tableau deployments
- Validated migration processes to mitigate risk
- Customer programs to reduce cost

Learn about our MCA partners and how to get started at
<https://www.tableau.com/solutions/Modern-Cloud-Analytics>

