

# Delivering Better Business Outcomes with DataOps Orchestration

**RESEARCH BY:** 



Stewart Bond
Vice President
Data Integration and Data Intelligence Software, IDC



Mary Johnston Turner Research Vice President Future of Digital Infrastructure, IDC

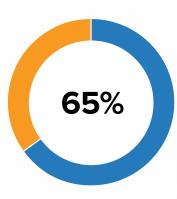


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In Uncertain Times, Data-Driven Decision Making Is Critical



of enterprise decision makers globally believe pressure from supply chain, inflation, labor shortages, and COVID-19 variants will continue through much of 2022, **restraining the pace of economic recovery** in global activity into 2023.

n=828, Source: IDC's Future Enterprise Resiliency & Spending Survey, Wave 3, April 2022; data weighted by country GDP (500+ employees)

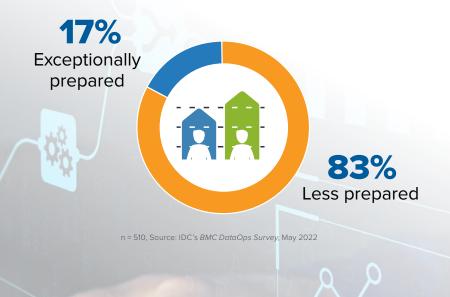
Data-driven decision
making is the
process of making
organizational
decisions based on
actual data, rather
than intuition or
observation.



A low majority (56%) of organizations make decisions primarily based on data.

### Most Organizations Are Unprepared to Use Data to Navigate Current Disruptions

Level of organizations' data-driven decision making and data analytics capabilities readiness to respond to unexpected events over the last two years.



### Incomplete data access creates decision-making gaps

**58**%



Percentage of data available to support data analytics and decision making (mean percentage)

Distributed, diverse, and dynamic data environments make analytics challenging.

- Most organizations are ingesting and integrating three to four different types of data, and some up to nine.
- Most organizations are integrating data that's coming from (or going to) three to five different data organization technologies, and some up to nine.
- Organizations are ingesting and integrating data from tens to hundreds of sources.

### Workflow Orchestration Improves Quality of Data, Decisions, and Business Outcomes

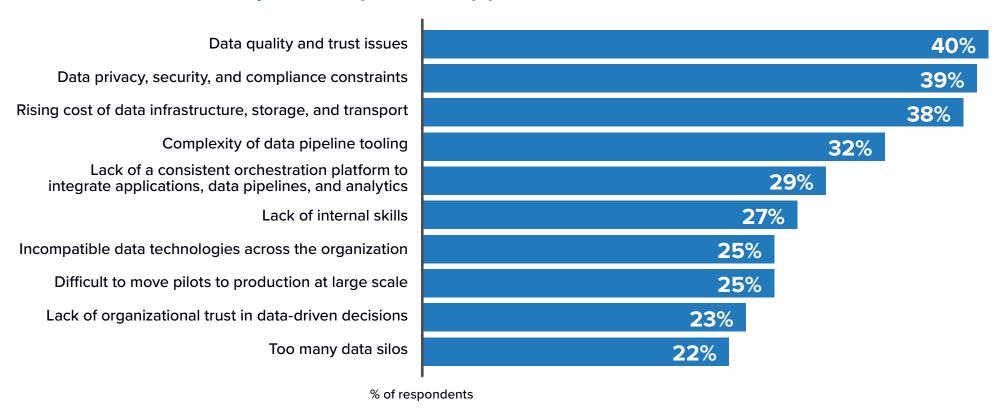
DataOps orchestration automates complex workflows for data ingestion, transformation, integration, and delivery to support data-driven applications and analytics.



**Using a consistent orchestration platform across applications,** analytics, and data pipelines speeds end-to-end business process execution and improves time to completion.

# Quality, Trust, and Security Are the Top Challenges to Business Value from DataOps Investments

Q: What are the top challenges related to achieving maximum business value from your DataOps and data pipeline orchestration initiatives?





### DataOps Can Be Complex, and Skills Are Often Lacking

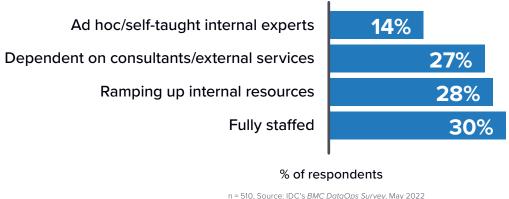
### Obstacles to DataOps and Data Pipeline Orchestration

Q: What are the most critical organizational challenges your organization faces when attempting to operationalize large-scale production use of DataOps and data pipeline orchestration to enable business decision-making applications and analytics?



#### Sources of Expertise for DataOps and Data Pipeline Orchestration

Q: In terms of people and skills, which statement best describes your organization's current approach to sourcing DataOps and data pipeline orchestration expertise?



n = 510, Source: IDC's BMC DataOps Survey, May 2022

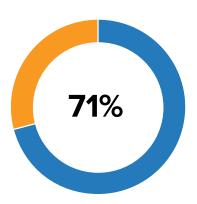


### Only 10% of Organizations Qualify as DataOps Orchestration Leaders

DataOps orchestration leaders are exceptionally prepared to make data-driven decisions in uncertain times.

- Demonstrated business outcome improvements
- Data-driven decision making quality and resiliency
- Integration and analytics across multiple data sources and diverse data formats
- Commitment to comprehensive, organization-wide data pipeline orchestration
- Holistic, end-to-end architecture to standardize use of distributed, diverse, and dynamic data
- Invested in a unified, full-stack orchestration platform

### Levels of Data-Driven Decision-Making Preparedness

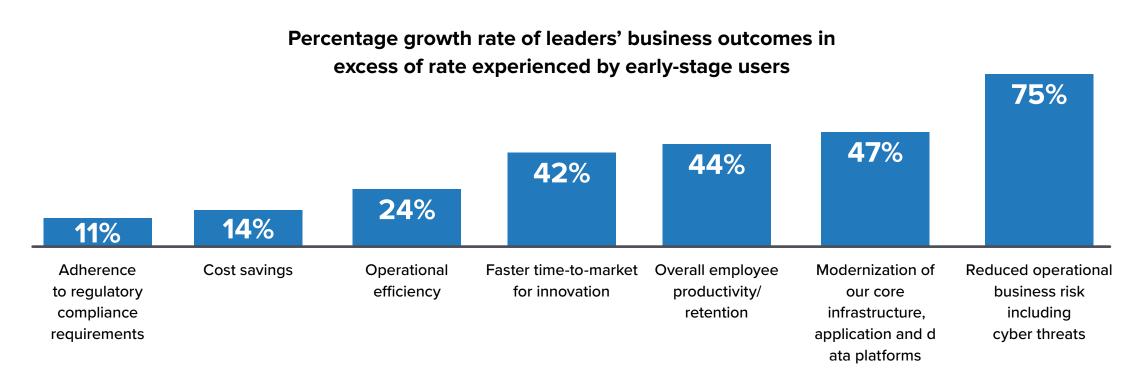


Agree with the statement: "During the past two years our organization's data-driven decision making and data analytics capabilities were exceptionally prepared to respond to unexpected events."



### DataOps Leaders Have More Success in Business Outcome Improvements

DataOps orchestration leaders see 25% higher rates of business outcome improvements on average when compared to early-stage adopters. Some areas see significantly higher levels of improvement.

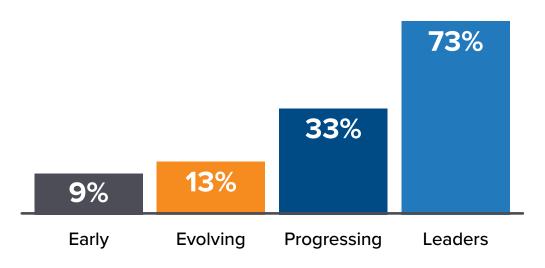




### The Importance of a Full-Stack Orchestration Architecture

#### Leaders Build on a Consistent Full-Stack Orchestration Architecture

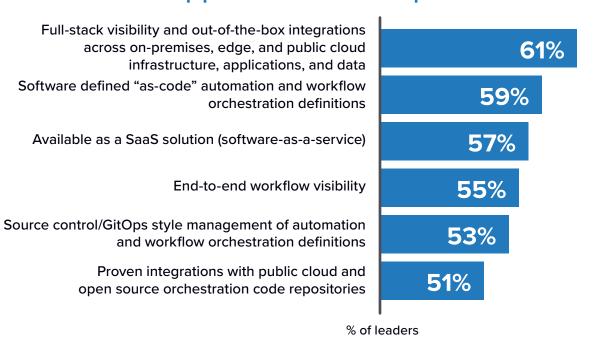
Q: Do you have a complete architectural layer (data control plane, fabric, mesh) that sits over an end-to-end set of data activities (e.g., integration, access, governance, and protection) to manage and control the holistic behavior of people and processes?



Percentage with complete architectural layer, segmented by DataOps maturity

### Most Important Full-Stack Orchestration Capabilities Identified by Leaders

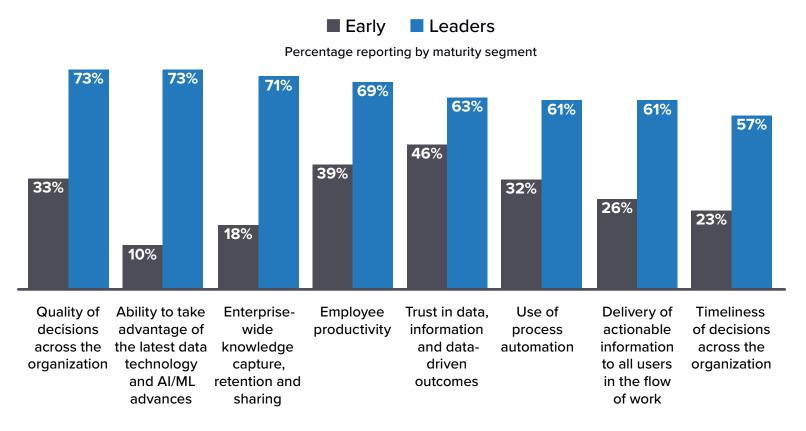
Q: What are the most important capabilities required from a consistent orchestration platform deployed to support the full spectrum of applications, analytics, and data pipeline orchestration requirements?





## Decision Quality, Trust, and Timeliness Improve with DataOps Maturity

Comparison of Early-Stage Adopters and Leaders in Improvements from DataOps and Data Pipeline Orchestration



Leaders see significant improvements from investments in DataOps and data pipeline orchestration when compared to early-stage DataOps users. Leaders experience higher:

- Decision quality
- Artificial intelligence/machine learning adoption
- Enterprisewide knowledge sharing
- Data trust
- Actionable information
- Timeliness



### DataOps Orchestration Leaders Realize Higher Levels of DataOps Functional Effectiveness

Q: How well does your organization's current approach to DataOps and data pipeline orchestration address these functional requirements?

■ Leaders
■ Early

Functional effectiveness rating by DataOps maturity stage

Scale: 0 = Not well at all, 5 = Extremely well

End-to-end interfaces to enable creation, monitoring and assurance of delivery of files across big data, cloud and other platforms and services Single unified view of all orchestrated workflows, including file transfers, applications and data sources

Auditing for compliance and governance

Operationalization of data pipelines for business outcomes

Code-based integration of DataOps workflows with DevOps toolchains

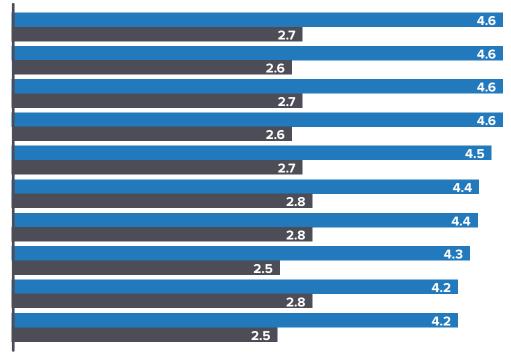
Workflow observability and optimization using intelligent predictive analytics and reports

Logs and output capture and management

Scaling from tens to millions of jobs with zero downtime

Real-time data ingestion and correlation in context of business outcomes and workflows

Consistent integration, automation and orchestration of workflows on-premises and in public and private clouds





### Make an Orchestration Plan for Your Data-Driven Business Needs

- Consistent orchestration across applications, analytics, and data pipelines improves business decision making, compliance, and innovation.
- Leaders recognize the value of full-stack integration, workflow automation, and end-to-end visibility of:
  - Multiple data sources
  - Varied data formats and tools
  - Hybrid cloud and datacenters
  - DevOps and legacy applications
- Companies should identify the gaps in their data-driven decision-making capabilities and design a plan to improve data access, quality, timeliness, and trust.

#### Orchestration Platforms Drive Better Business Outcomes

Q: In what ways would you expect the use of a consistent orchestration platform across applications, analytics, and data pipelines to most impact the business' ability to gain value from data?

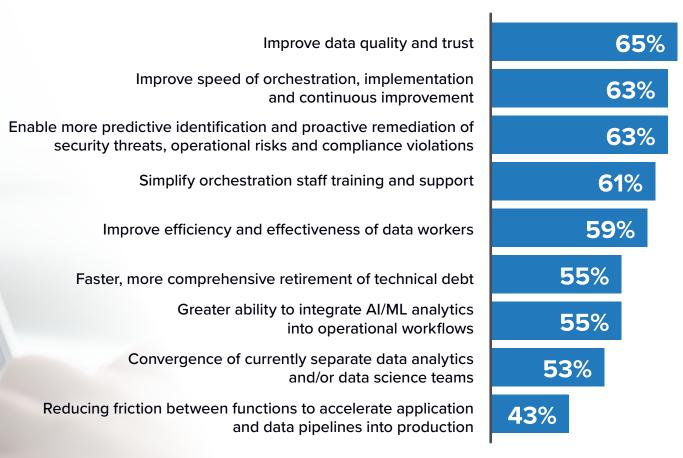




#### **Essential Guidance**

- Learn from the DataOps leaders' experiences with full-stack orchestration platforms.
- Consider how well your current orchestration approach delivers the following:
  - Data quality and trust
  - Predictive management of security threats
  - Continuous improvement
  - Staff training and support
  - Data worker efficiency

Most Important Overall Operational Benefits of Deploying a Consistent Orchestration Platform Across Applications, Analytics, and Data Pipelines (as identified by leaders)

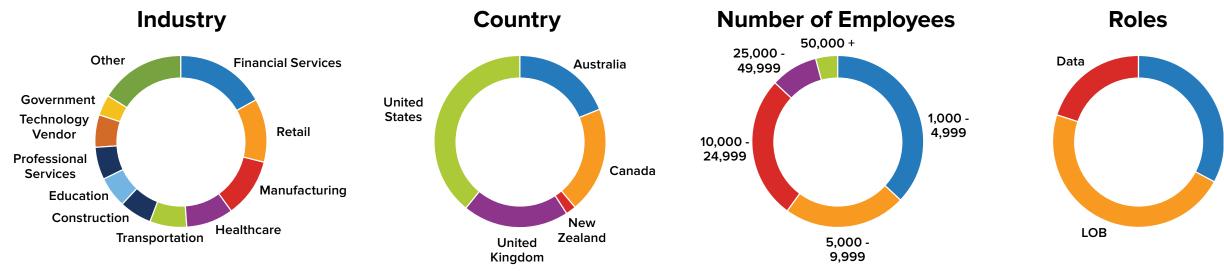


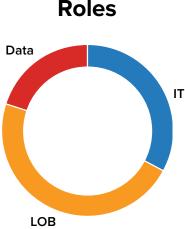
% of leaders



#### **Demographics**

IDC surveyed 510 DataOps decision makers in five countries in multiple industries. Respondents worked for companies of 1,000 to 50,000+ employees and in technology and line-of-business roles.





n = 510, Source: BMC DataOps Survey, IDC, May 2022

#### **About the Analysts**



**Stewart Bond**Vice President, Data Integration and Data Intelligence Software, IDC

Stewart Bond is vice president of IDC's Data Integration and Intelligence Software service. His core research coverage includes watching emerging trends that shape and change data movement, ingestion, transformation, mastering, cleansing, and consumption in the era of digital transformation. Having worked in the IT industry for over 25 years, from early experience in database and application development, through solution design and deployment, to strategic architectural consulting, Stewart has seen significant changes in the IT industry. His depth of experience coupled with market insight gives him a unique perspective, valued by his customers and peers. More about Stewart Bond



Mary Johnston Turner Research Vice President, Future of Digital Infrastructure, IDC

Mary Johnston Turner is research vice president of Future of Digital Infrastructure, part of IDC's Future Enterprise research team. She analyzes ubiquitous, autonomous cloud infrastructure solutions deployed across dedicated datacenter and shared public service environments. Her practice emphasizes the enterprise customer, using surveys and in-depth analysis of best practices related to how enterprises are changing the ways they source, secure, and optimize digital infrastructure solutions. Her research considers pay-as-you-go consumption-based subscriptions, cross-cloud control planes, collaborative enterprise infrastructure governance models, and better alignment of infrastructure investments with critical business outcomes and innovation priorities. More about Mary Johnston Turner

#### Message from the Sponsor

#### **BMC's Approach to DataOps**

At BMC, we know that the modern business landscape presents teams and leaders with a growing list of challenges and problems to solve. Learning to harness your data is critical to evolving and staying competitive in an ever-shifting, disruptive world. BMC has an extensive history of empowering companies to become a **data-driven business**. Our solutions are built to support the complex environments that span your entire ecosystem — from cloud to on-premises datacenters to edge and everywhere in between.

See BMC's Approach

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