CARDINALITY.IO Al Data Integration Analysis More data means more potential business insights, but it also means more complexity. As the shift from onpremises to cloud-based solutions continues, organizations are struggling with the complexity of integrating the wide variety of data sources and formats needed for analytics. With a self-service data analytics & Al (Artificial Intelligence) platform in place, executives can easily process business and application data efficiently. Pulse and Cardinality surveyed 100 technology executives to understand what they are looking for in a data analytics & Al solution and what challenges they are facing when adopting a solution. Data collection: September 1 - October 15, 2021 Respondents: 100 technology executives Business visibility and data integration from a data analytics & Al platform is important—but many find data integration difficult to implement Executives look for business visibility (80%), performance optimization (71%), and automation (54%) as the primary benefits from a data analytics & Al offering. What are the primary benefits you seek from a data analytics & Al offering? **37**% **37**% 80% **71**% **54**% Business visibility Performance Automation Customer Anomaly optimization (dashboards and intimacy detection (fraud, service reports) assurance, etc.) 3% Other



20% Tools to build data pipelines 40%

Despite data integration being the most important capability, it isn't easy. Executives' top pain

points around data integration are building and maintaining connectors to ingest data from a

variety of sources (71%) and combining multiple data integration tools and techniques into a unified

8%

4%

3%

1%

Scalability

Anomaly detection

Edge analytics

Visualization and reporting

23%

Advanced features such

as machine learning

Data integration

integration approach (69%).

To gain competitive advantage

[215\*]

\* Ranking score

Customer satisfaction

and churn prevention

Operational efficiency

Customer 360-degree

Fraud prevention

analytics in the cloud

cloud and back.

100%

Cost concerns

with cloud

subscriptions

organization.

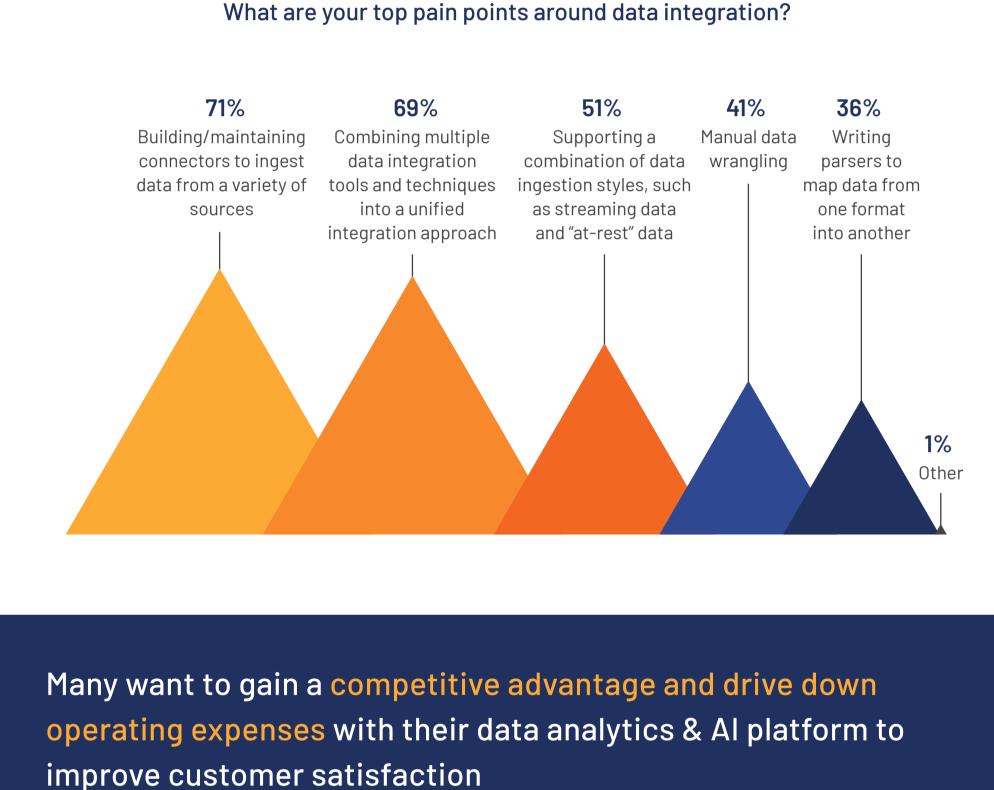
Performance

management

view

1%

Other



Executives agree that the top 3 drivers for adopting data analytics & Al are to gain a competitive

What are your organization's top 3

drivers for adopting data analytics & AI?

To grow the

customer base

[80]

4 To retain existing

5 To personalize the

7 To exploit 5G [N/A]

customer experience [74]

6 To position our organization for success in the new world

65%

56%

51%

50%

36%

customers [77]

of IoT [19]

advantage, drive down operating expenses, and grow the customer base.

To drive down operating

expenses (OPEX)

[128]

management (56%), and operational efficiency (51%) are the use cases for data analytics & AI that matter most to their business. What are the use cases for data analytics & Al that matter most to your business?

In addition, executives find customer satisfaction and churn prevention (65%), performance

Preventive maintenance 17%, Internet of Things 11%, Social media analysis 10% A split between on-premises and cloud analytics is common and many require data to be transported easily between multiple sources The majority (70%) of executives say their organization separates the analytics they do between onpremises and cloud analytics depending on the data in question. How is your organization using cloud analytics today? 70% We separate the analytics we do between on-premises and cloud analytics depending on the data in question 22% **3**% We do all our analytics We perform in the cloud seamless analytics in a hybrid edge-core-**5**% cloud (aka edge to cloud) environment We're not doing any

Security intelligence 36%, Anomaly detection 36%, Price optimization 35%, Root cause analysis 27%, Investment planning 24%, Recommendation engines 18%, Data warehouse offload 17%,

In addition, over two-thirds (68%) of respondents say that different teams implementing their own

analytics projects is a key inhibitor to applying a unified data analytics & Al approach across their

20%

Concerns with

cloud vendor

lock-in

20%

Latency and the

need to perform

analytics closer to

the source

Of those who are not doing any analytics in the cloud, 100% say it is due to cost concerns with cloud

subscriptions and 80% say it is due to the inability to efficiently move data from on-premises to the

Why are you not doing analytics in the cloud? (n=5)

80%

Inability to efficiently

move data from on-

premises to cloud

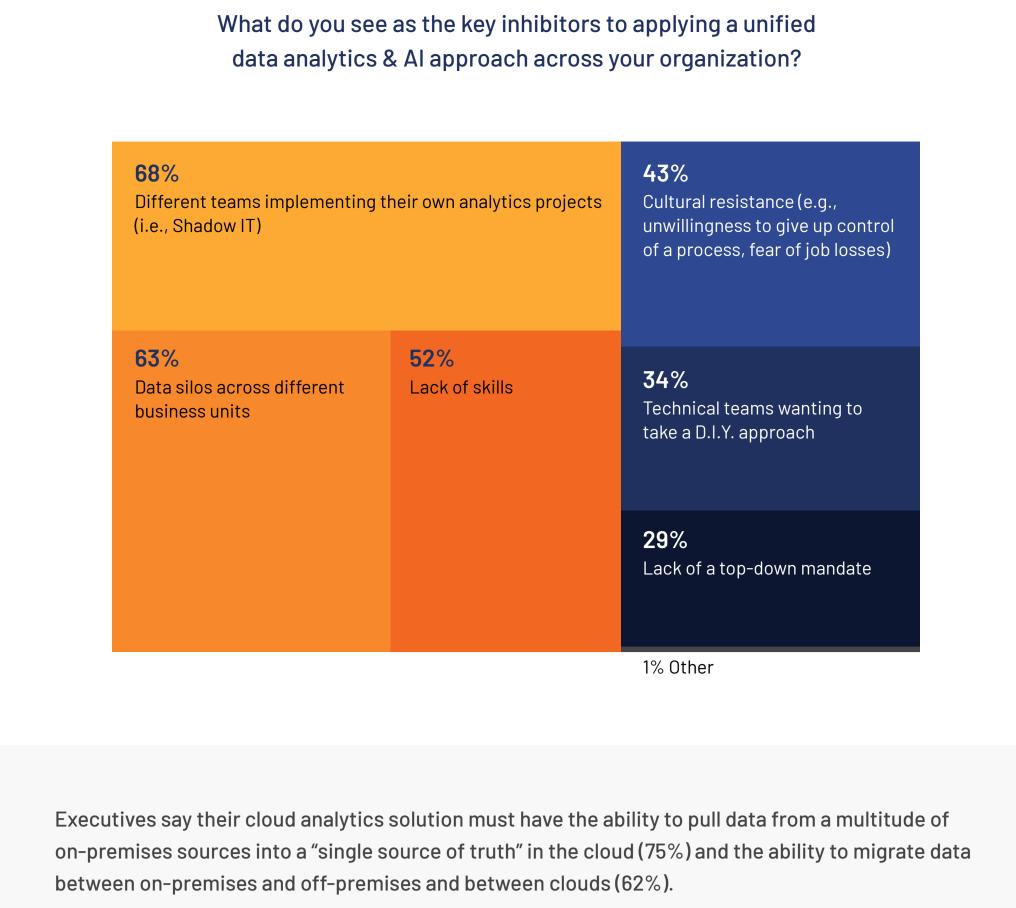
and back

20%

Privacy

regulations

(e.g., GDPR)



What are the must-have features of a cloud

analytics solution for your organization?

**75**%

**62%** 

Virtualizing analytics

outputs and making

them available to

visualization tools,

via APIs to upstream

applications

[460]

21%

13%

9%

business

The ability to build

Expertise in my industry/

vendor show me the

Have an expert walk

of how to use the

sample data

me through the steps

platform (i.e., a live demo)

Try out a platform myself with

Try out a platform myself with production data

outputs they can produce from it

13%

**7**%

3%

solutions quickly

46%

**45**%

**38**%

Developing

analytics use

cases and queries

[500]

The ability to pull data from a

multitude of on-premises sources into a "single source of truth" in the cloud

The ability to migrate data between

on-premises and off-premises and

Avoiding the capital expense of

deploying large data stores and compute clusters on-premises

premises and in the cloud

The ability to use a single tool set on-

Automated provisioning of cloud

resources to optimize on cost and

provide expertise

in-house resources.

Managing the

complexities of

varying data formats

and sources

[664\*]

8 Maintenance and support [218]

\* Ranking score

23%

30%

analytics solution

45%

Work with a vendor to

perform a proof of

environment

concept that closely

simulates a full production

closely simulates a full production environment.

A vendor with leading market

as having leading technology

Expertise in data analytics & Al

share or that is recognized

between clouds

performance

Data orchestration

(transporting and

storing data close to

where it needs to be

processed)

[573]

6 Developing advanced use cases using machine learning [348]

Please rank the following tasks in order of what would be most important to the least important for a data analytics & Al vendor to offload from your in-house resources.

Data governance

(policies on who can

access data, where

it's stored, how long

it's retained, etc.)

[563]

7 Ensuring a seamless analytics environment from edge to core data center to public cloud [274]

Executives want their data analytics & Al vendor to offload

Executives rank management of varying data formats and sources, data orchestration, and data

governance as the top 3 most important tasks for a data analytics & Al vendor to offload from their

important tasks from their internal resources and to



For 30% of executives, expertise in data analytics & Al is the most essential trait of a data analytics

What is the most essential trait you

seek from a data analytics & Al vendor?

and Al vendor. 23% consider leading market share or recognition for leading technology most

important, while 21% are most concerned about their vendor's ability to build solutions quickly.

4% Openness and the flexibility to allow me to choose the components of an Willingness to build features I want into analytics solution their product roadmap

Proof of concept is preferred when assessing the value of an

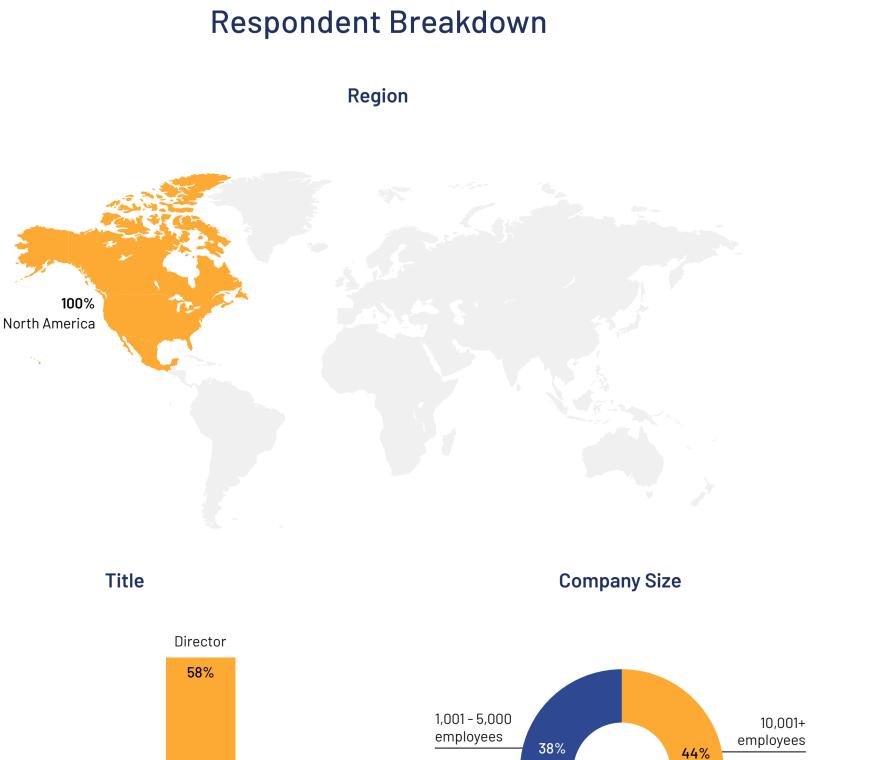
If executives have the opportunity to evaluate a data analytics & Al platform from a particular

vendor, almost half (45%) would prefer to work with a vendor to perform a proof of concept that

**32**% Provide production data or sample data to a vendor and let the

If you had the opportunity to evaluate a data analytics & Al platform

from a particular vendor, what would be your preferred approach?



5,001 - 10,000

employees

18%

Insights powered by PULSE

VΡ

24%

C-Suite

18%