BI ON BIG DATA ADOPTION SURVEY REPORT

2018

INTRODUCTION

Organizations have invested heavily in their Big Data deployments over the last decade. To understand how they are using their BI on Big Data infrastructure to derive business value, an online survey was designed through which data was collected from a diverse set of respondents.

The primary objective of the survey was to:-

· Determine the extent to which organizations have succeeded in deriving value from their Big Data and BI on Big Data deployments

· Understand the challenges they face while using BI on Big Data

· Identify the key requirements for BI on Big Data

In this survey, respondents from 300 US enterprises spanning across industries answered questions about Big Data and BI initiatives in their organization. The survey respondents included C-Level Executives, EVPs, VPs, Directors, Data Architects, BI Analysts, Data Scientists, IT Managers and business executives from leading Fortune companies.

They were asked in-depth questions about their:-

· Existing Big Data deployments: Purpose, utilization, and return on investments

· BI on Big Data: Needs, expectations and challenges

· Changes expected in future

This report describes the key findings from this survey that will provide insights on how organizations have adopted BI on Big Data. It will help readers get an idea about the industry trends so that they can assess their deployments, plan their decisions, and prioritize their efforts. It will also help solution providers build solutions that can address the current challenges faced by the users.

EXECUTIVE SUMMARY

BI on Big Data is a fundamental business requirement

70% of the respondents say that Business Intelligence is the most important use case for Big Data deployments.

Long way to go to get substantial ROI on Big Data initiatives

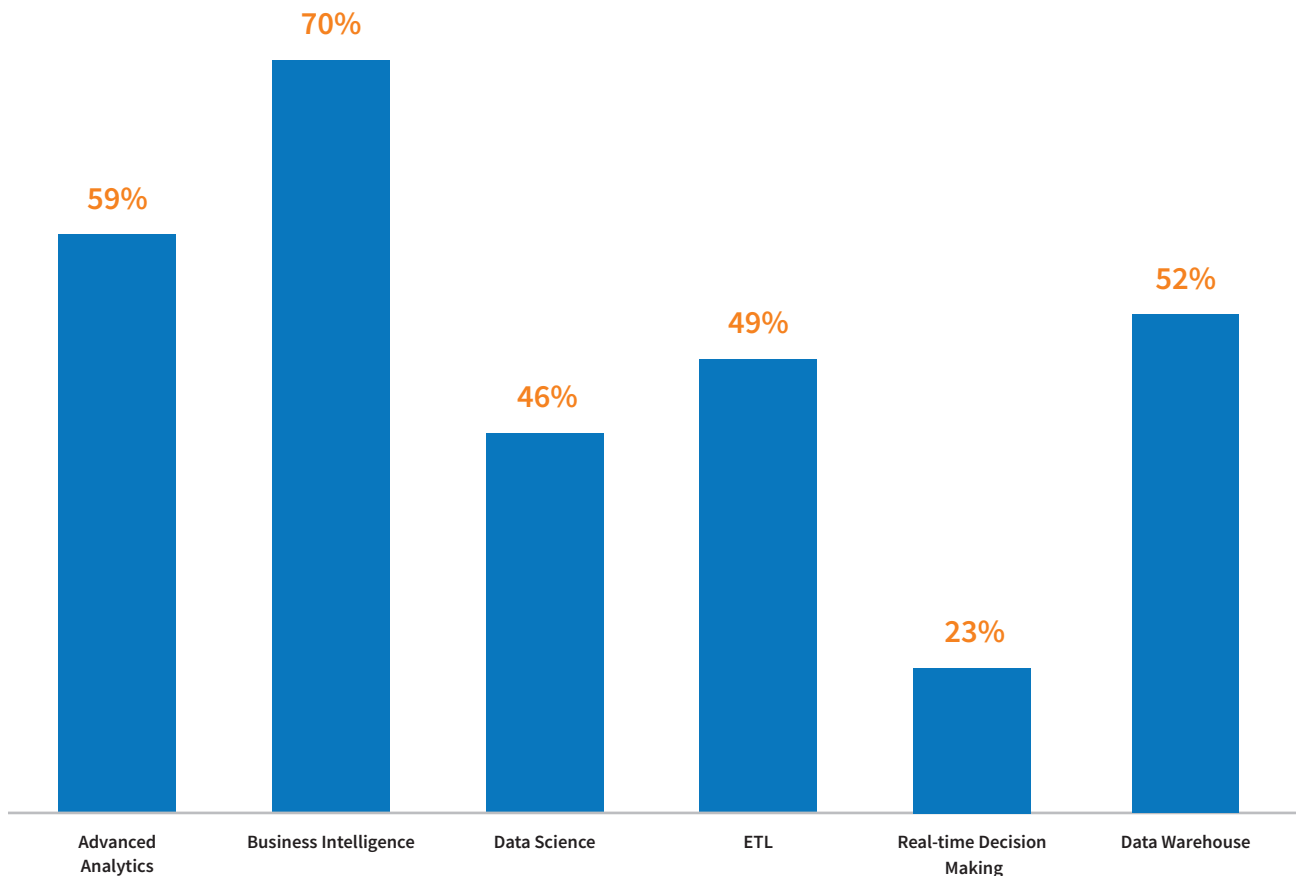Only **29%** are deriving value from their Big Data investments.

Lack of expertise is biggest challenge for BI on Big Data

52% find lack of skills a key challenge for implementing BI on Big Data

Performance is still a major issue

Less than **40%** were satisfied with the performance of their Big Data infrastructure.

Cloud: On the three year agenda

More than half of the respondents are expected to fully move their Big Data infrastructure to the cloud over the next **3 years**.

BI on Big Data is a fundamental business requirement

70%

70% of the respondents say that Business Intelligence is the most important use case for Big Data deployments.

Workloads supported by Big Data Infrastructure

- Advanced Analytics: 59%
- Business Intelligence: 70%
- Data Science: 46%
- ETL: 49%
- Real-time Decision Making: 23%
- Data Warehouse: 52%

For most organizations, business intelligence is the key workload supported by their Big Data infrastructure. The results of the survey reveal that more than two-third of the organizations use Big Data for business intelligence. Besides this, more than half of the respondents cite advanced analytics and data warehouse offload as important use cases for Big Data deployments.

# CHANGES IN DATA LANDSCAPE DRIVE BIG DATA DEPLOYMENTS

54%

54% organizations deployed Big Data infrastructure to incorporate new data sources.

50%

Half of the organizations deployed their big data infrastructure to meet scale-out needs.

Key Reasons for Adopting Big Data Infrastructure

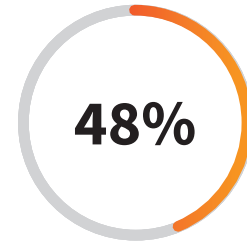|			
45%	50%	29%	54%
Cost saving	Scale-out needs	Revenue generation	New applications or data sources
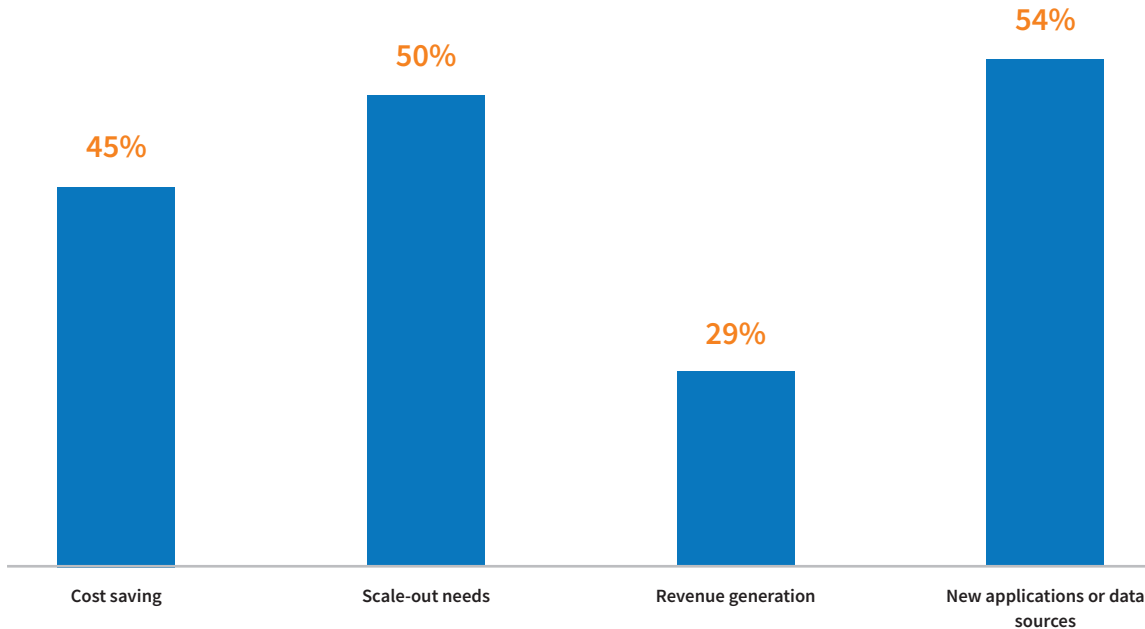
The survey results show that increase in data volume and availability of new data sources were the top two drivers for moving to a big data infrastructure. Cost saving was a close third and continues to be an important motivation for deployment.

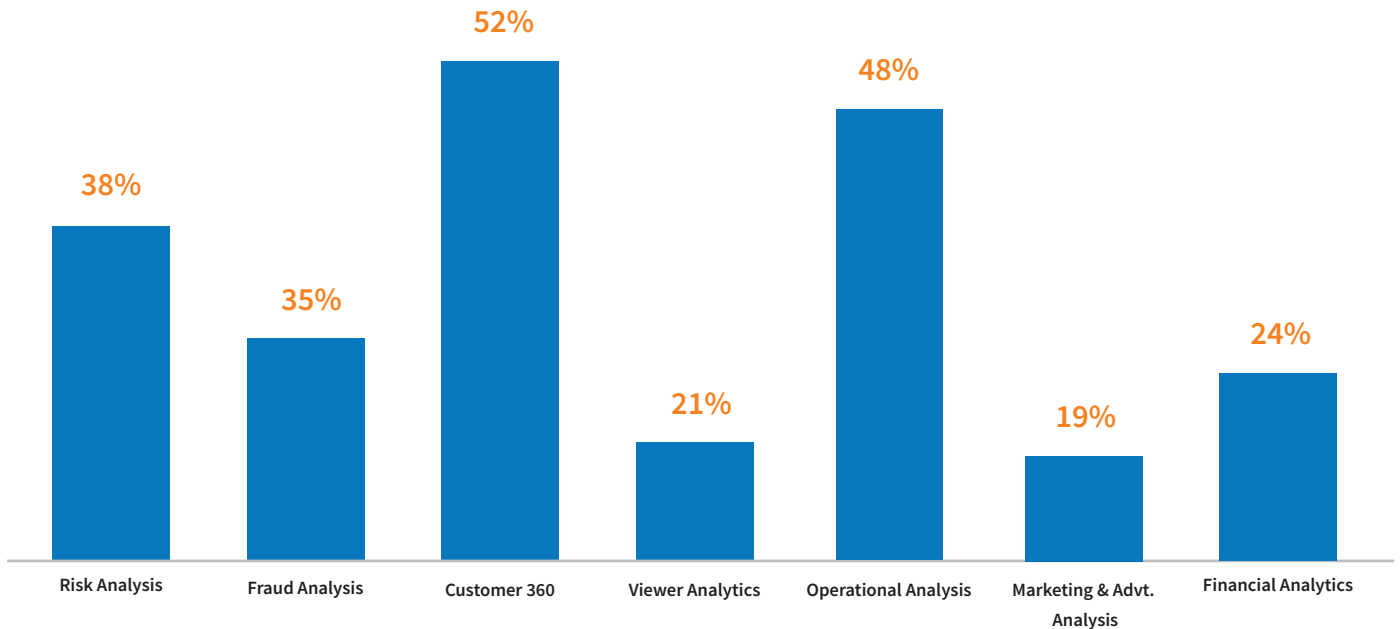# BI ON BIG DATA SERVES SEVERAL USE CASES ACROSS THE ENTERPRISE

52%

52% organizations use BI on Big Data for Customer 360.

48%

48% use it for Operational Analysis.

BI on Big Data Use Cases

38%	35%	52%	21%	48%	19%	24%
Risk Analysis	Fraud Analysis	Customer 360	Viewer Analytics	Operational Analysis	Marketing & Advt. Analysis	Financial Analytics

BI on Big Data can support several functions in an organization, yet currently it is being used only for limited use cases. As per the survey findings, about half of the organizations use BI on Big Data for Operational Analysis and Customer 360. Around one-third use it for risk and fraud analysis.

LONG WAY TO GO TO GET SUBSTANTIAL ROI ON BIG DATA INITIATIVES

29%

Only **29%** are deriving substantial value from their Big Data Investments.

Value derived from BI on Big Data

BI is at the core of Business Process
4%

Deriving substantial value
25%

Too early to tell
59%

Minimal value
12%
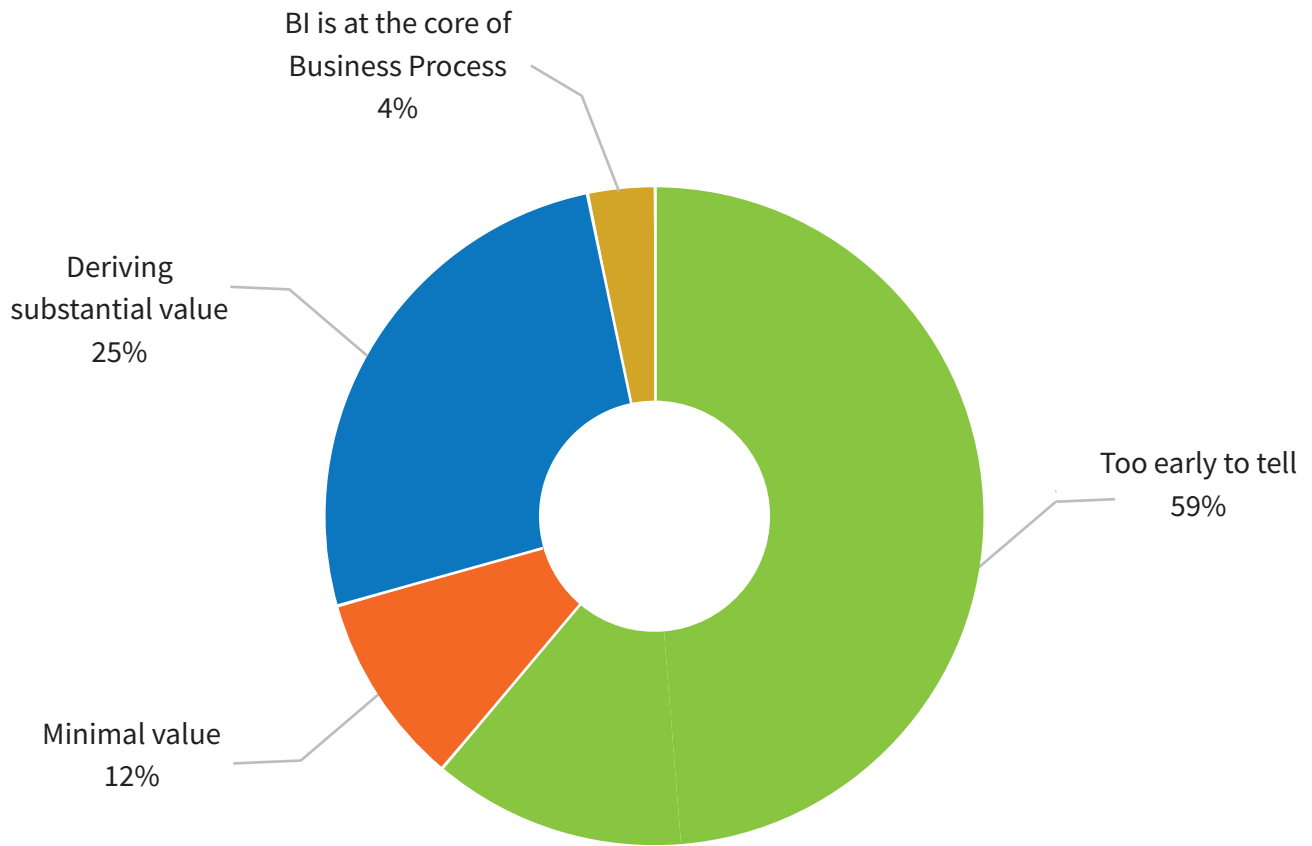
Despite the infrastructure in place, only one-fourth of the organizations are deriving substantial value from their BI on Big Data investments. Very few organizations have been able to bring BI to the core of their business processes. Most still are not getting value from their investments.

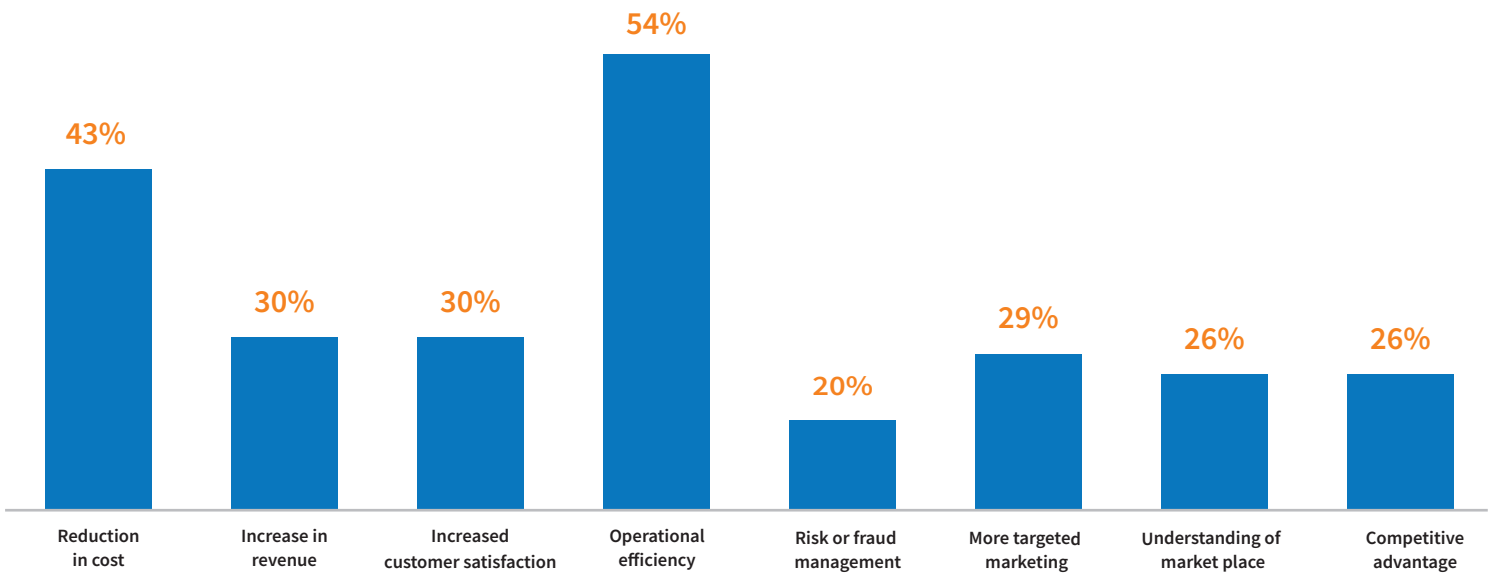# OPERATIONAL EFFICIENCY IS THE AREA OF BIGGEST RETURN FOR BI ON BIG DATA

54%

54% organizations achieved operational efficiency using BI on Big Data

43%
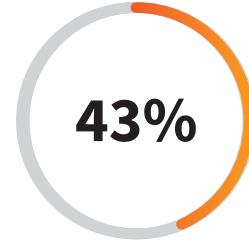
43% organizations were able to reduce costs with the help of BI on Big Data

Areas of biggest return from BI on Big Data

Reduction in cost	Increase in revenue	Increased customer satisfaction	Operational efficiency	Risk or fraud management	More targeted marketing	Understanding of market place	Competitive advantage
43%	30%	30%	54%	20%	29%	26%	26%

The results of the survey reveal that BI on Big Data can provide great value to organizations and can yield results on several aspects across the organization. Operational efficiency, cost reduction, increase in customer satisfaction, and revenue generation have emerged as areas of biggest returns from BI on Big data.
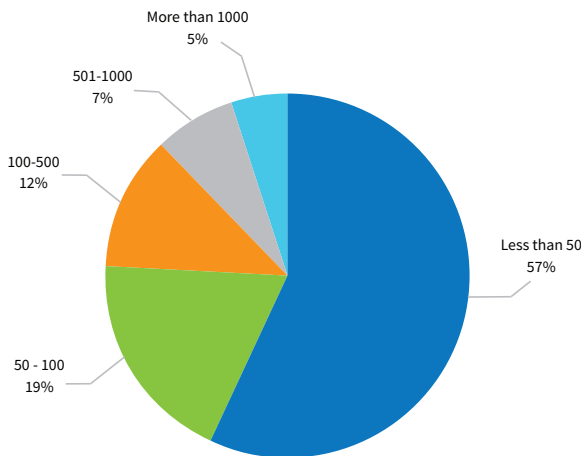
LACK OF EXPERTISE IS A MAJOR CHALLENGE FOR IMPLEMENTING BI ON BIG DATA

52%

Majority of the organizations find skill-set a challenge for implementing BI on Big Data.
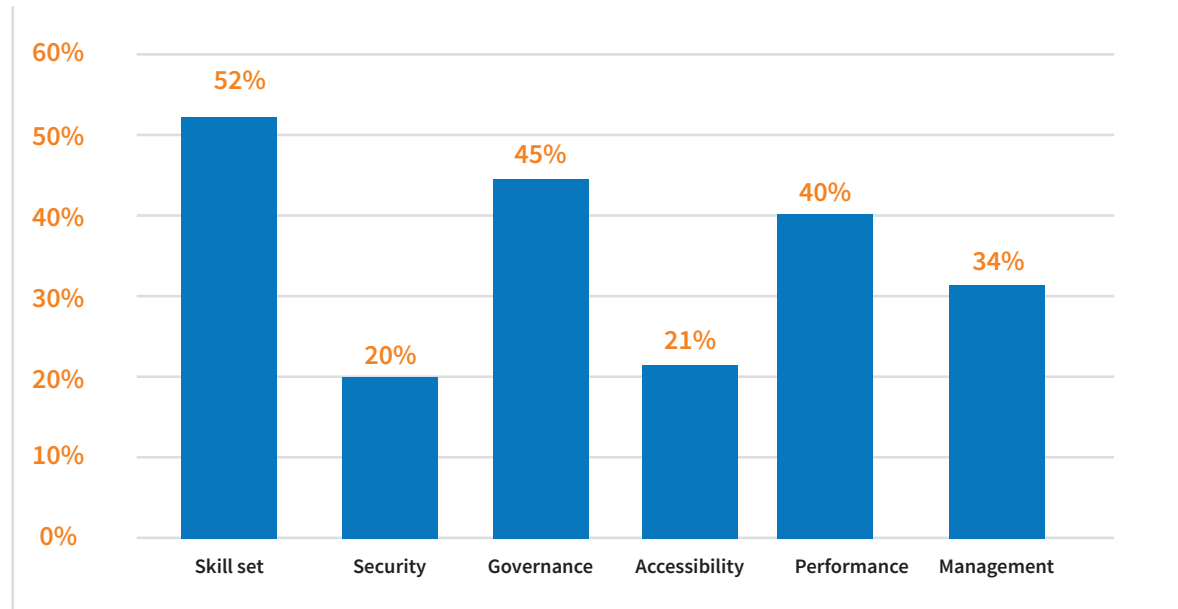

Challenges for implementing BI on Big Data

In **57%** organizations fewer than 50 employees use BI on Big Data in their daily work.

The survey shows that organizations are facing several challenges in implementing BI on Big Data. The respondents mention skill set as a key challenge faced by their organizations. Besides this, governance and performance are other major challenges faced for implementing BI on Big Data. Despite the infrastructure being in place, very few people and teams are using BI on Big Data for their daily work.

PERFORMANCE IS STILL A MAJOR ISSUE

39%
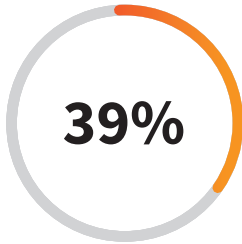
Only **39%** respondents are satisfied with the performance of their Big Data infrastructure.

Big Data environment in terms of Performance and Maintainability

Satisfied
39%

Too early to tell
49%

Not satisfied
12%

40%
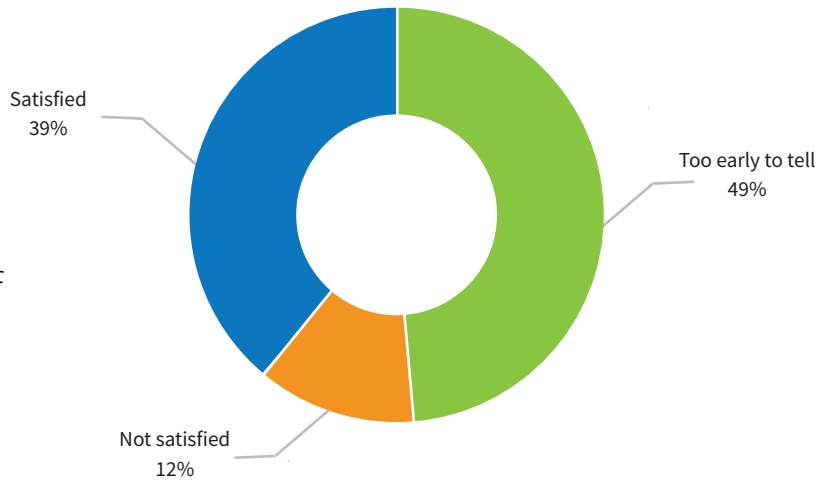
Only **40%** respondents say their BI infrastructure measures up in terms of response time for large amount of data and finest granularity.

BI infrastructure measures up in terms of response time

No
24%

Yes
40%

Don't know
36%
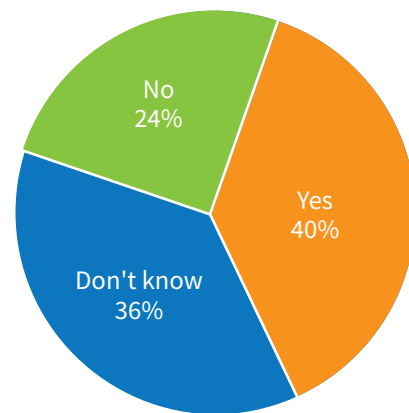
Performance is a huge challenge faced by many organizations. Almost half of the respondents feel it is too early to tell if their Big Data environment performs satisfactorily. For BI on Big Data, less than half of the respondents feel their BI tools measure up in terms of response time for large amounts of data and finest granularity.

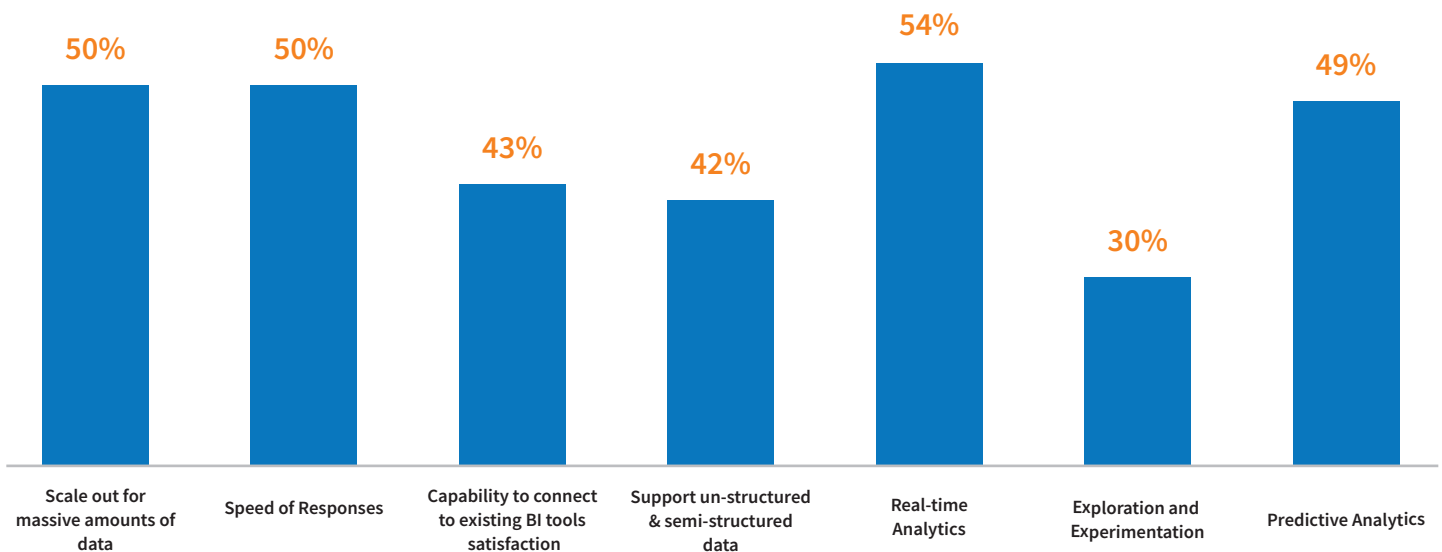# BI ON BIG DATA NEEDS TO DELIVER ON KEY REQUIREMENTS

54%

54% the organizations want their BI solution to deliver real-time analytics

50%

Half of the organizations expect their BI solution to be able to scale out for massive volumes of data and deliver on response times.

Areas of biggest return from BI on Big Data

Scale out for massive amounts of data	Speed of Responses	Capability to connect to existing BI tools satisfaction	Support un-structured & semi-structured data	Real-time Analytics	Exploration and Experimentation	Predictive Analytics
50%	50%	43%	42%	54%	30%	49%

The survey findings clearly indicate that to derive full value from BI on Big Data deployments, it is important to focus on overcoming the current challenges and meeting the user's expectations. Majority of organizations expect their BI solution to be able to scale out for large volumes of data and provide high-speed responses.

54%

More than half of the respondents are expected to fully move their Big Data infrastructure to cloud over the next 3 years.

Plan to move Big Data to Cloud in next 3 years

Yes
54%

No
46%
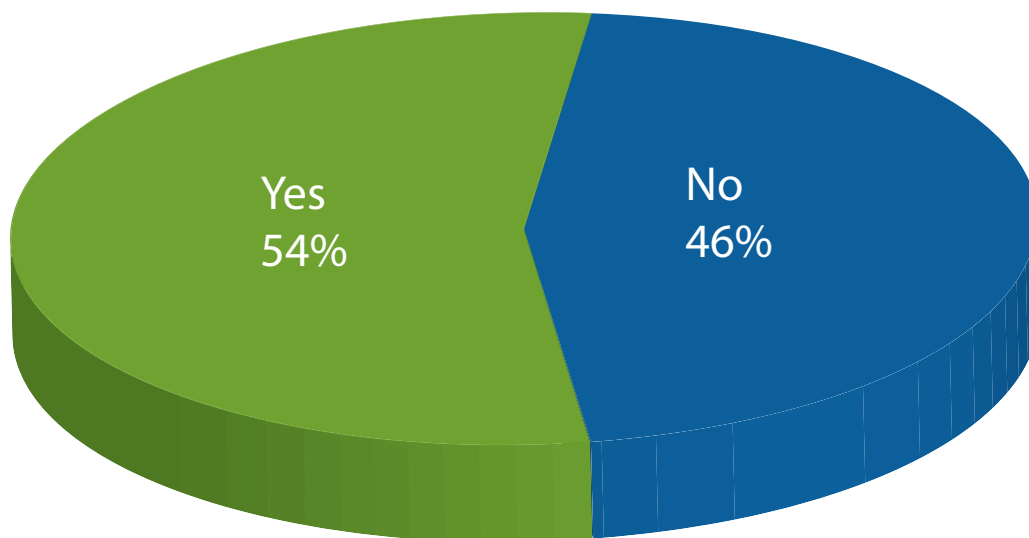
Looking ahead, cloud seems to be the future with majority of the enterprises planning to move their Big Data infrastructure to cloud in next 3 years.

kyvos

FOR MORE INFO:

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