

COHESITY

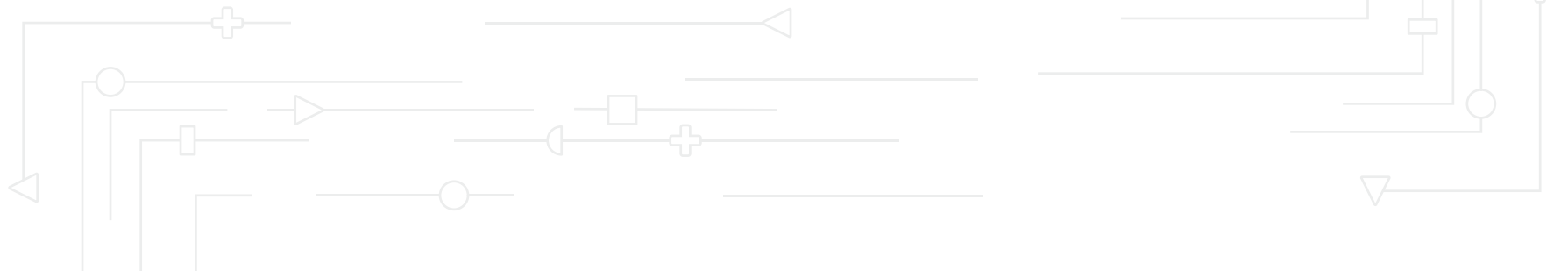
MASS DATA FRAGMENTATION IN THE CLOUD

A GLOBAL MARKET STUDY



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INTRODUCTION

This market study is the second in a series examining the issue of mass data fragmentation — the proliferation of data across different locations, infrastructure silos and management systems that has become a growing impediment to IT effectiveness.

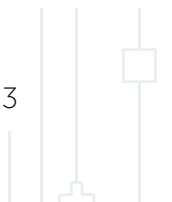
The first report explored the scope of the mass data fragmentation problem and uncovered major issues ranging from budget overruns and compliance risks, to falling team morale, and service levels. This second report focuses on a particular aspect of this problem that we think deserves special attention: the public cloud.

While there's no doubt that public cloud services offer many valuable benefits and are now a fixture of the IT landscape, our report reveals that the rush to migrate to the cloud has created an expectation gap between senior management (who often instigated the push to migrate) and the IT teams' ability to deliver the anticipated benefits.

In addition to their on-premises complexity, IT teams now have to deal with a new collection of data silos being created in multiple clouds with almost no visibility or governance of the data's content or location. Not only is this causing predictable operational issues in terms of budget, time and resources, it also represents a potentially serious business risk in an era of tougher regulatory standards such as GDPR and security threats such as ransomware.

On a more positive note, respondents to our survey strongly confirmed there is potentially a big upside for both IT and the business if a solution to mass data fragmentation in the public cloud could be found.

By shining a light on this issue, we hope you will be motivated to examine your own cloud adoption journey, and determine whether you have solutions in place that ensure you can reap the benefits of the public cloud without incurring the risks that await the unprepared.



KEY FINDINGS

PUBLIC CLOUD HASN'T DELIVERED ALL ITS EXPECTED BENEFITS

91%

of respondents believe the cloud would simplify operations, increase agility, reduce costs and provide greater insights, but many of those hopes haven't come to fruition

A MAJOR CAUSE IS MASS DATA FRAGMENTATION IN THE CLOUD

91%

of those organizations that believe the promise of the public cloud hasn't been fully delivered, 91 percent specify mass data fragmentation as the cause

THE CONSEQUENCES ARE SERIOUS FOR BUSINESS, NOT JUST IT

67%

of respondents believe their organization's inability to take full advantage of the data in public cloud environments has a negative impact on the business

IT IS STRUGGLING TO MEET SENIOR MANAGEMENT EXPECTATIONS

88%

of respondents say their IT teams were given a mandate to move to the public cloud by senior management, but less than 4 in 10 report that they are able to execute it flawlessly

CURRENT IT RESOURCING LEVELS AREN'T ENOUGH

19^{WEEKS}

is the average amount of time per year IT teams spend managing data and apps infrastructure across public cloud environments.

THERE'S A SIGNIFICANT UPSIDE IF THE PROBLEM CAN BE SOLVED

88%

agree that solving mass data fragmentation would help their organization realize the original promise of the cloud, including more effective analysis, reduced compliance risk and improved customer experience

91%

of respondents believed the cloud would simplify operations, increase agility, reduce costs and provide greater insights. However, many of those hopes haven't come to fruition

THE PUBLIC CLOUD HASN'T DELIVERED ALL ITS EXPECTED BENEFITS

Respondents had high hopes their organization would be able to dramatically simplify their operations (95%), provide agility (91%), save money (92%) and provide more insights into their data (91%).

THE PROMISE OF THE PUBLIC CLOUD:

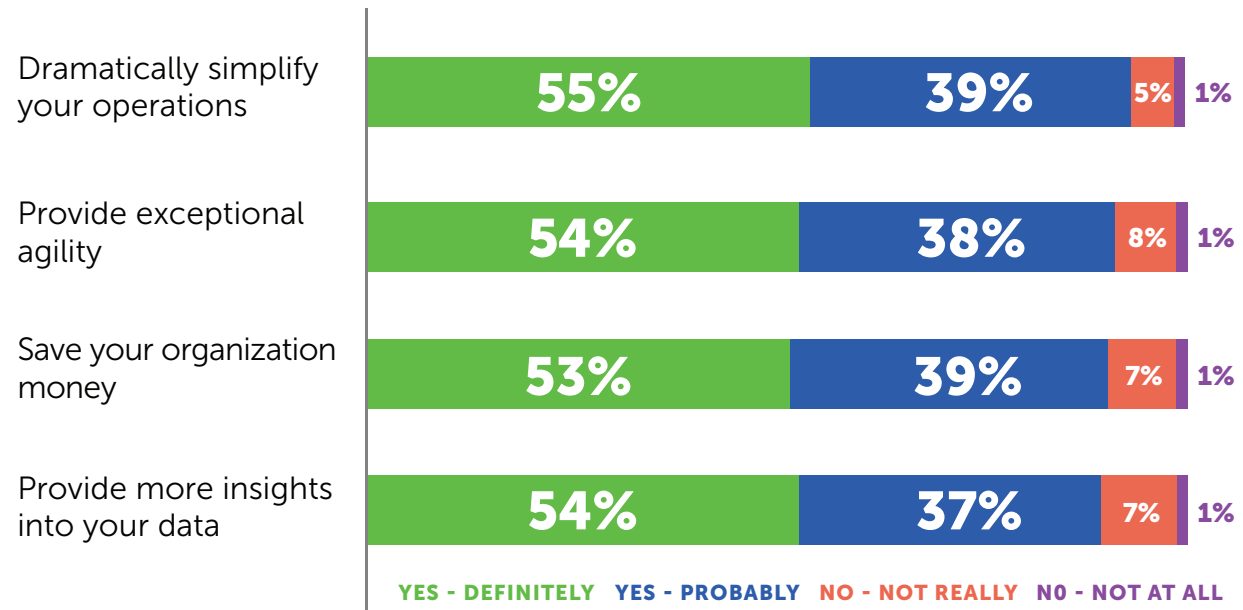


Figure 1: Asked to all respondents (900)

However, this promise has not necessarily been realized. Only around a third (32%) of respondents' organizations have achieved all of the public cloud benefits they expected they would, which leaves the remaining two thirds only achieving some (58%) or a few (10%) of the expected benefits.

THE PROMISE OF THE PUBLIC CLOUD:

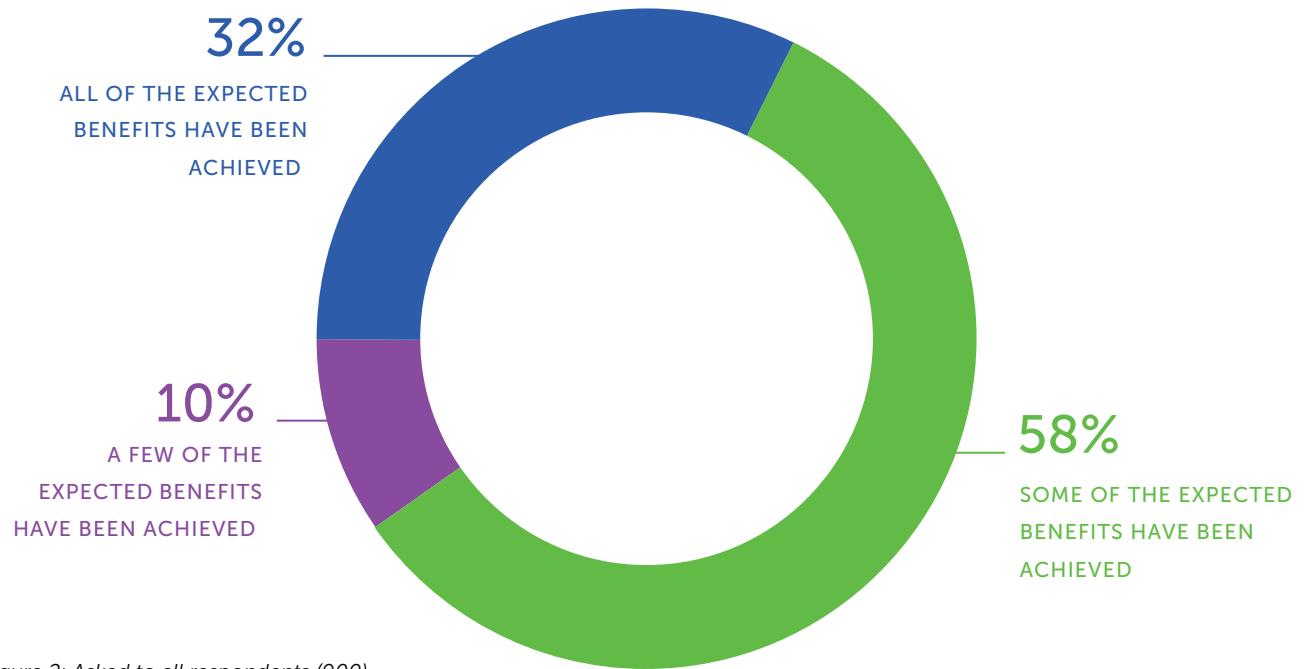
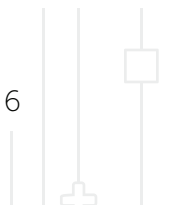


Figure 2: Asked to all respondents (900)



91%

Of those that believe the promise of public cloud hadn't been fully delivered, 91% believe it is because their data is greatly fragmented in and across public clouds and could become nearly impossible to manage long term

A MAJOR CAUSE IS MASS DATA FRAGMENTATION IN THE CLOUD

Data fragmentation isn't just confined to the legacy data center. IT teams now have to deal with a *new* collection of data silos being created in multiple clouds for offsite backups, long term archives, second tier storage, test and development systems and analytics pools, with almost no visibility or governance of the data's content or location.

To make things even more complicated, it is common practice to make and store *more* copies of the same data in cloud environments - on average three copies of the same data according to our respondents.

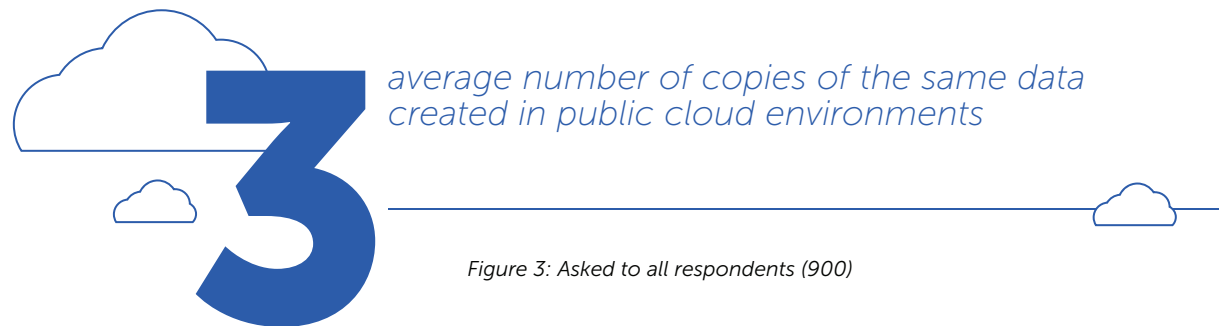


Figure 3: Asked to all respondents (900)

And, just as with the data center, IT teams are using multiple separate vendor solutions or point products to manage their public cloud-based secondary storage and data, adding further administrative overhead and complexity to an already burdened staff.



Figure 4: Asked to all respondents (900)

67%

of respondents agree that their organization's inability to fully take advantage of the public cloud has a negative impact on the business.

THE CONSEQUENCES ARE SERIOUS FOR BUSINESS, NOT JUST IT

Business is increasingly reliant on IT for competitive advantage and innovation, not just operational support, and data is the lifeblood asset that feeds every important decision and insight. Not being able to take full advantage of cloud-based data therefore is a major concern for the whole business, not just IT administrators. Respondents who agree that their organization's inability to take full advantage of data in the public cloud has a negative impact on the business also stated their ability to drive new revenue could be affected by 13.4% on average.

IMPACTING ABILITY TO DRIVE NEW REVENUE

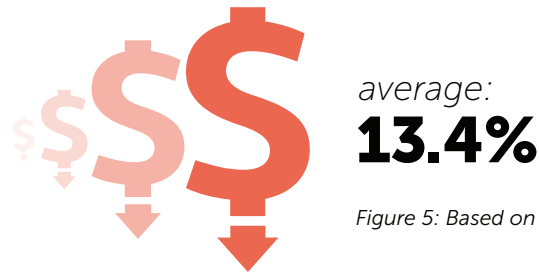


Figure 5: Based on 607 respondents

In addition, of this subset, over a third (36%) reported that they worry about security breaches. A similar portion (34%) worry that if their organization cannot reap the full advantages of the public cloud expected by management, IT will be blamed, which could result in budget cuts or job losses in this department.

THE BIGGEST IMPACT TO THE ORGANIZATION

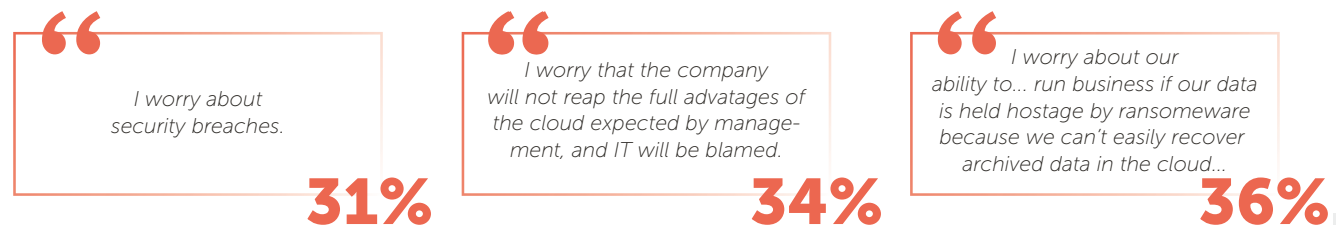


Figure 6: Based on 607 respondents.

88%

of respondents say their IT teams have been given a mandate to move to the public cloud by senior management, but nearly half are struggling to make the benefits a reality

IT IS STRUGGLING TO MEET SENIOR MANAGEMENT EXPECTATIONS

While public clouds undoubtedly offer significant business benefits, there is a temptation for top management to pressure teams to migrate data to the cloud before understanding challenges that IT has to deal with as a result of that migration.

C-SUITE EXPECTATIONS VS. REALITY

Yes, we were given a mandate, and we are executing it flawlessly in terms of deploying a strategy that uses the public cloud efficiently for the right workloads at the right cost

38%

Yes, we were given a mandate, but we are struggling to come up with a strategy that effectively utilizes the public cloud to the complete benefit of the organization

41%

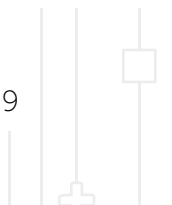
Yes, we were given a mandate, and are executing it just to satisfy leadership

9%

No, we haven't been given a mandate

12%

Figure 7: Asked to all respondents (900)



Of the respondents who received a mandate to move to the public cloud, 96% say that their IT teams have concerns about it. Nearly half (49%) are concerned about compliance risks. Costs are also a worry, with 44% reporting concerns that the cost of the public cloud is underestimated, and 42% are concerned with the large costs associated with moving data back on-premises from public cloud environments.

PUBLIC CLOUD MANDATE CONCERNS

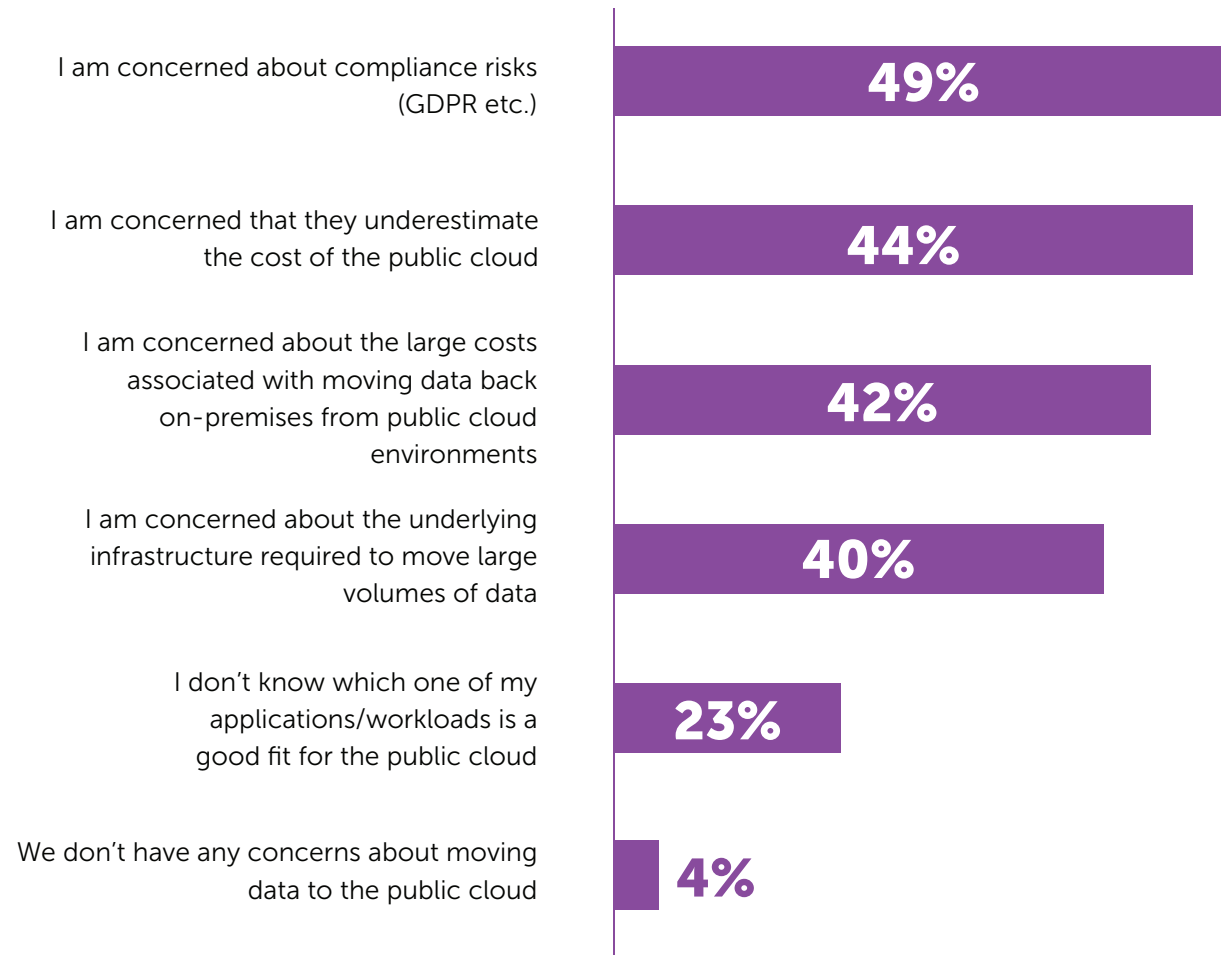
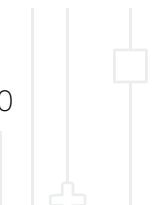


Figure 8: Based on 444 respondents.



19 WEEKS

is the average amount of time per year IT teams spend managing data and apps infrastructure across public cloud environments.

CURRENT IT RESOURCING LEVELS AREN'T ENOUGH

Today IT teams spend over a third of their day (36.6% on average) managing secondary data and apps infrastructure across all public cloud environments. This works out to be around 19 weeks a year, on average. Worse, respondents believe that the time needed to manage this data is going to increase to **6 months of the working year** - a serious impact on IT efficiency and an indication of the complexity involved in managing cloud-based data without the proper tools.



IT teams spend **19 weeks a year** managing data and apps infrastructure across public cloud environments.



IT teams would need to **expand by over a third** to glean maximum insights from all the data they store across public clouds.



IT budgets would need to **increase by nearly half**.

On average respondents report that in order for their organization to operate like a data-first organization, their IT team would need to expand by over a third (39.59%) and IT budgets would need to increase by nearly half (44.37%).



45%

of respondents say their IT teams are spending between 30-70% of their time managing data and apps in public cloud environments today

As an added caution, the cloud service providers should not be viewed as an extra source of assistance in this regard. Nearly 80% of respondents executive teams (wrongly) believe that it is the service provider's responsibility to protect any data stored in their clouds, when it is actually up to the data owners themselves.



PERCEPTION

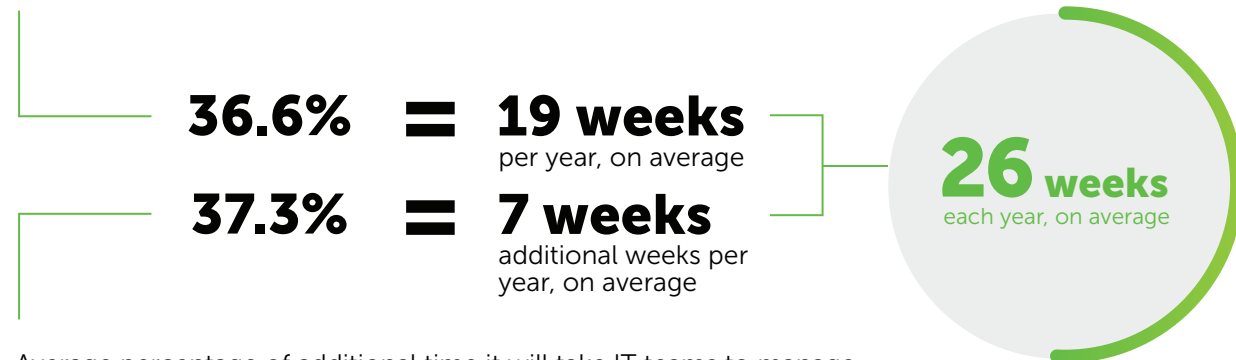
Nearly 80% of respondents stated their executive team believes the public cloud service provider is responsible for protecting any data stored in the public cloud.

REALITY

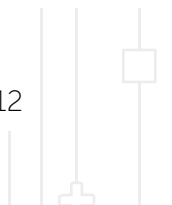
It's the organization's responsibility to protect its data and executives are confusing the availability of data with its recoverability.

TIME SPENT MANAGING SECONDARY DATA APPS

Average percentage of the day that IT teams spend managing secondary data and apps infrastructure across all public cloud environments



Average percentage of additional time it will take IT teams to manage secondary data and apps infrastructure across all public cloud environments a year from now



88%

Nearly 9 in 10 agree that finding solutions that enable organizations to easily solve mass data fragmentation would help their organizations realize the promise of the public cloud.

THERE'S A SIGNIFICANT UPSIDE IF THE PROBLEM CAN BE SOLVED

The benefits that organizations could achieve include being able to more effectively deploy analytics/AI across multiple public clouds for better insights (50%), improved customer experience (47%) and maintaining or increasing brand reputation and trust by reducing the risk of compliance breaches (46%).

BENEFITS OF REMOVING DATA FRAGMENTATION IN THE CLOUD

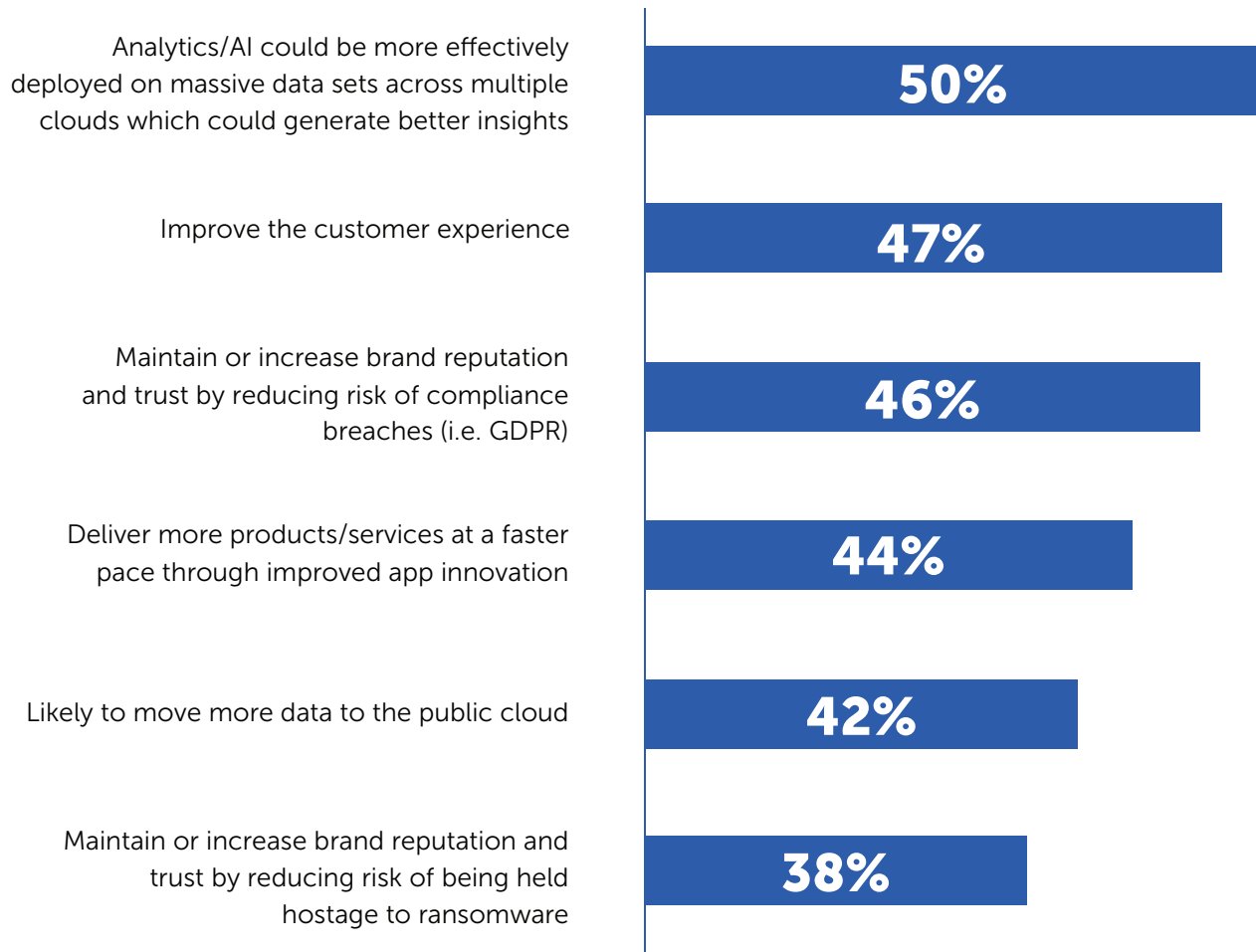


Figure 9: Asked to all respondents (900)

CONCLUSIONS

Our survey revealed a marked gap between expectations and reality when it comes to benefits of public cloud adoption. The cloud has received so much attention – and in many cases, rightfully so – as a touchstone to IT and business transformation that it has become a ‘must do’ initiative in the minds of senior management, but often without a full understanding of implications. However, over two-thirds of respondents reported that only some or a few of the expected benefits have been fully achieved. Over 90% of those who hadn’t experienced the expected benefits pointed to data fragmentation as a root cause of their difficulties.

The task of managing fragmented data within and across multiple public cloud environments has become so onerous that IT teams predict it will take up half their working year by 2020 – time that detracts from more valuable projects that could help drive the business. It’s also a shocking indictment of the legacy data management tools that customers have been using to date.

The consequences for organizations who don’t take more proactive steps to manage their cloud-based data could be severe – not just for IT but for the overall business. In the survey, concerns were raised about the increased risk of security and compliance breaches, downtime/unavailability of data, cost overruns, inferior customer experiences and low developer productivity, all of which are critical issues in the digital age.

But there is a way out of the dilemma: a more modern data management solution that consolidates inefficient silos, minimizes copies, and reduces compliance risk by providing visibility into the data. Almost nine in ten respondents were optimistic that the promise of the public cloud could be realized with a solution that could solve their mass data fragmentation issues.



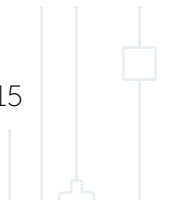
METHODOLOGY

Cohesity commissioned independent market research company Vanson Bourne to conduct a quantitative research study into mass data fragmentation, the impact it is having on organizations and the benefits which can be achieved by solving it.

The research was carried out in early 2019. Nine hundred senior IT decision makers were interviewed, from the US (250), the UK (250), France (100), Germany (100), Australia (100) and Japan (100).

Respondents were from organizations with 1,000 employees or more, from a variety of private or public sectors with a focus on financial services, healthcare, life sciences, media and entertainment, technology and the public sector.

On average, the global annual revenue of respondents' organizations is \$8.72 billion. Interviews were conducted online using a rigorous multi-level screening process to ensure that only suitable candidates were given the opportunity to participate.



ABOUT COHESITY

Cohesity ushers in a new era in data management that solves a critical challenge facing businesses today: mass data fragmentation. The vast majority of enterprise data – backups, archives, file shares, object stores, and data used for test/dev and analytics – sits in fragmented infrastructure silos that makes it hard to protect, expensive to manage, and difficult to analyze. Cohesity consolidates silos onto one web-scale platform, spanning on-premises, cloud, and the edge, and uniquely empowers organizations to run apps on that platform – making it easier than ever to back up and extract insights from data. Cohesity is a 2019 CNBC Disruptor and was named a Technology Pioneer by the World Economic Forum. Visit our website and blog, follow us on Twitter and LinkedIn and like us on Facebook.

ABOUT VANSON BOURNE

Vanson Bourne is an independent specialist in market research for the technology sector. Their reputation for robust and credible research-based analysis, is founded upon rigorous research principles and their ability to seek the opinions of senior decision makers across technical and business functions, in all business sectors and all major markets. For more information, visit www.vansonbourne.com

