

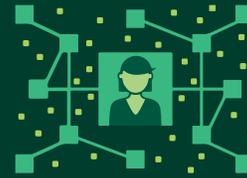
Data Gravity Is Critical To The Modern Business

As the backbone of an insights-driven business, data allows organizations to best understand and serve their customers, deliver top-notch employee experiences, and drive efficient internal processes. And while no business is short on data — in fact, many organizations claim they have *too much* — many struggle with the technical complexities of preparing and using that data to produce timely insights. This is where the concept of data gravity — that is, the ability of bodies of data to attract applications, services, and other data — can be helpful. By implementing a data gravity strategy, organizations can minimize data movement, limiting latency, reducing risk, and driving important benefits.

KEY FINDINGS

Forrester's study yielded the following key findings:

- › **A complex environment requires a data gravity strategy.** As organizations look to improve data-driven decisioning and make data more accessible across the enterprise, they must modernize, simplify, and automate their data management processes. However, hybrid cloud environments and the deployment of analytic workloads in specialized environments, rather than on the operational platforms where the data originates, introduce layers of complexity and the need to continuously copy and move data. Embracing a data gravity strategy could alleviate some of this unwanted complexity and cut down on performance, security, governance, and quality issues.
- › **Firms waste precious time and energy preparing data for analytics.** Most decision-makers admit that the time and effort it currently takes to prepare their data for analytical work is more than ideal. This is because data volume is enormous, processes are overly manual, and integration is challenging. The work involved to overcome these issues and continually copy, transfer, and integrate data slows processing, increases latency, and forces teams to waste time problem-solving instead of gaining traction on more innovative and strategic projects.
- › **Data gravity overdelivers on technical and business benefits.** The ability to leverage data in real time is a huge boon for insights-driven businesses. Using data where it originates not only cuts down on the technical issues created when data must be shuffled from one place to the next, but it also leads to downstream benefits for the business. Firms that have already implemented a data gravity strategy tend to see greater improvements to employee productivity, revenue growth, and competitive differentiation than expected.



Summary of results from the IBM-commissioned Thought Leadership Study, “Leverage Data Where It Originates To Drive Substantial Business Benefits.”

METHODOLOGY

In this study, Forrester conducted an online survey in the US, Germany, Brazil, Mexico, the UK, China, Japan, Australia, and Canada to evaluate the market's awareness of data gravity.

To achieve these objectives, Forrester conducted an online survey with 300 data and analytics decision-makers at global enterprises across industries.

[Click here to read the full results of the study.](#)

Consider Data Gravity To Drive Better, Faster Insights

The modern, insights-driven business requires real-time access to trusted data. But today, enterprise data is distributed across multiple data centers and data repositories, in the cloud, and at the edges. This widespread distribution of data coupled with exponentially expanding data volume makes centralizing data for aggregation and integration impractical.

As a result, analytics and AI workloads end up deployed in a variety of environments that often necessitate migration, copying, and integration of data. Unfortunately, these tasks often have manual components that take time and effort and introduce the opportunity for risk, latency, and quality issues (see Figure 1).

Over two-thirds of respondents in our study expend more time and energy accessing and connecting data sources than they would prefer. All this extra work also slows down the delivery of insights and decisioning. Nearly half of survey respondents admit that getting insights where and when they are needed is a big challenge, and another 46% struggle with managing network performance and latency.

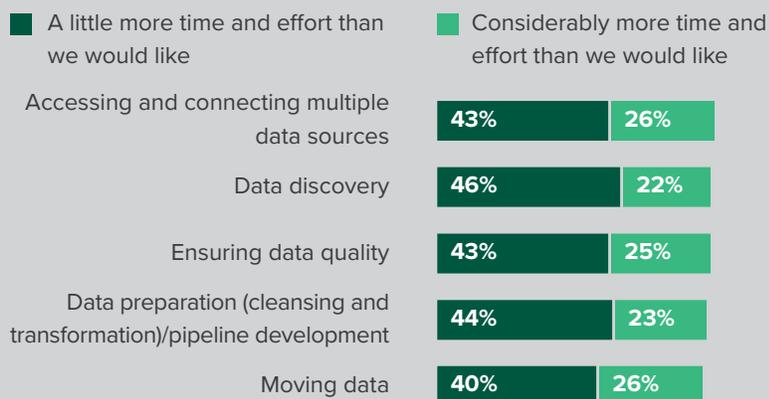
Fortunately, firms can alleviate many of these challenges. The concept of data gravity maintains that the larger the amount of data, the more applications, services, and other data will be attracted to it. Therefore, considering where an application lives can be incredibly important to the ultimate success of that workload. Yet only one-fifth of respondents consider data gravity when deciding where to deploy analytics and AI workloads. And even fewer decision-makers (12%) report having fully embraced a data gravity strategy.



Enable a data gravity strategy by processing data at the source, primarily to support real-time, trusted, and consistent data across applications and insights.

Figure 1

“Think about all the time and effort being spent readying your data for analytics/AI. Which of the following best describes how you feel about each of the following tasks?”



Base: 300 global data and analytics enterprise decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, July 2020

Top technical challenges when analyzing data:

1. Integrating data from multiple sources
2. Large data volume
3. Time it takes to assemble data
4. Too many data formats to integrate effectively

Data Gravity Leads To Technical, Customer, And Business Benefits

When data and analytics teams are forced to waste time solving problems or performing tedious operational tasks, strategic work and innovation get pushed aside. By considering data gravity, firms can not only avoid these issues, but also realize transformational benefits. Respondents report that data gravity can:

- **Help overcome key data struggles.** Organizations that have embraced this strategy experience improved data management and analytic efficiency, better performance, data quality and governance, and increased data security. These firms also see decreased infrastructure complexity, cost, and latency.
- **Deliver better experiences, reduce risk, and drive growth.** More than 40% of decision-makers report their firms experienced improved customer experience, customer acquisition, and retention, as well as increased revenue growth, from their data gravity strategies, all of which were key goals of their analytics initiatives. Businesses also benefited from reduced operational risk, improved decision-making, and increased innovation due to greater agility. And all this change allows firms to pull ahead of the pack: About one-third of respondents have gained an advantage over their competitors from their data gravity strategies.

But perhaps one of the most important findings of this research is that data gravity overdelivers. Respondents in our study who had already embraced these strategies saw greater benefits than they expected (see Figure 2). This means that education is critical: Firms must understand that embracing a strategy that accounts for data gravity is not only going to solve for technical issues, but also produce business benefits that will help them thrive.

Figure 2

Data Gravity Overdelivers: Firms See More Benefits Than They Expected



Base: 164 global data and analytics decision-makers who have implemented data gravity strategy, 136 global data and analytics decision-makers who have not implemented data gravity strategy
 Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, July 2020

To read the full results of this study, please refer to the Thought Leadership Paper commissioned by IBM, "Leverage Data Where It Originates To Drive Substantial Business Benefits."

Project Director:
 Rachel Linthwaite,
 Senior Market Impact Consultant

Contributing Research:
 Forrester's Enterprise
 Architecture research group

ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit forrester.com/consulting.

© 2020, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to forrester.com. [E-48550]