Data Gravity Index DGx™

interxion
A DIGITAL REALTY COMPANY

DIGITAL REALTY®

INSIGHTS BRIEF

5 Macro Trends Amplifying Data Gravity

# THE EXPLOSION IN ENTERPRISE DATA GROWTH

A recent study conducted by IDG reveals that data volumes are growing at an average of 63% per month.[1] It's estimated that by 2025, over 463 exabytes of data will be created every day.[2]

This continuous cycle amplifies the attraction of data and applications through an emerging megatrend known as Data Gravity. As more applications create more data, and more data needs to be exchanged with more applications, the gravitational effect of that data is increasing in volume, velocity and scale. The Data Gravity Index™ identified five macro trends amplifying Data Gravity's impact on enterprises and service providers.

5 Macro Trends Amplifying Data Gravity

1. **Enterprise Data Stewardship**
2. **Mergers and Acquisitions**
3. **Digitally-Enabled Interactions**
4. **Data Localization**
5. **The Cyber-Physical**

The implications of these trends generate significant risks to traditional IT infrastructures.

63%
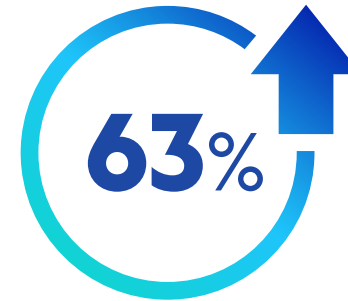
Data volumes are growing at an average of **63% PER MONTH**

Current backhaul architectures need to be inverted to a data-centric architecture that is deployed at points of presence in neutral, multi-tenant datacenters to integrate private and public data sources. Addressing Data Gravity requires a connected community approach between enterprises, connectivity, cloud and content providers.

In this Insights Brief, we'll explain more about the macro trends that are amplifying Data Gravity.

Macro Trend #1
Enterprise Data Stewardship

When it comes to data stewardship, 80% of data worldwide will reside in enterprises by 2025.[1] In the first quarter of 2020 alone, Gartner saw a 90.2% increase in year-over-year enterprise petabytes (PB) delivered. Through 2022, Gartner forecasts enterprises PB requirements will grow at greater than 35% per year.[2]

THE ENTERPRISE IS FAST BECOMING THE WORLD'S DATA STEWARD.

80%
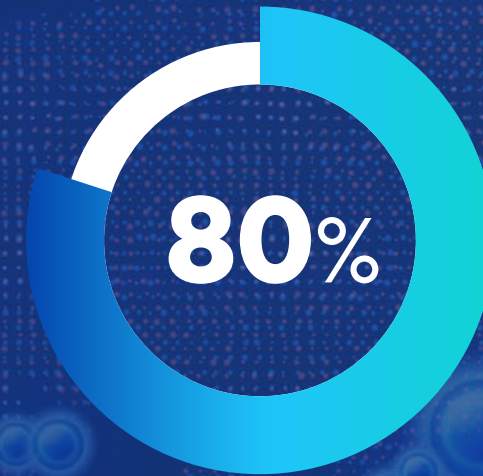
Enterprises will store **80% OF DATA WORLDWIDE BY 2025.**

1. IDC #US44413318, Data Age 2025, The Digitization of the World From Edge to Core, November 2018
2. Gartner, Market Impact: New Surges in Enterprise and Cloud Data Demand, ID G00727551

M&A volumes are expected to return to pre-COVID levels in 2021.[1]

Macro Trend #2
Mergers and Acquisitions

While the enterprise is becoming the world's data steward, merger-and-acquisition (M&A) activities are increasing the number of data sources participating in data exchanges. As Data Gravity creates barriers to accessing data intelligence, fully processing, aggregating and analyzing data becomes a critical challenge. According to the McKinsey Global Institute, only 8% of companies use advanced analytics to unlock the value of data resulting from M&A.[2]

1. Goldman Sachs, BRIEFINGS Newsletter June 16, 2020
2. Ali Korotana, et al., "M&A success, powered by advanced analytics," McKinsey Global Institute, August 1, 2019

Macro Trend #3
Digital-Enabled Interactions

Digital-enabled interactions is another macro trend that has global implications because of the focus on increased volume of enterprise data on a worldwide scale. This data explosion is expected to accelerate as digitally-enabled interactions increase the digitization of enterprise workflows. As businesses deal with the new digital workplace and customers preferring digitally-enabled sales, the adoption of digital technologies for Internet of Things, Artificial Intelligence and social mobile analytics has rapidly increased. These trends increase the amount of data being transmitted and stored. As a result, digitally-enabled interactions rank 2x greater importance vs. physical interactions.[1]

69% of boards of directors have responded to COVID-19 with digital business acceleration.[2]

1. McKinsey, B2B Decision Maker Pulse Survey, April 2020
2. Gartner, The 2021 CIO Agenda: Seize This Opportunity for Digital Business Acceleration, ID: G00734780

Macro Trend #4
Data Localization

In response to growing data localization requirements, nearly 9 out of 10 enterprise IT leaders indicate they will have policies in place to maintain local copies of customer and transaction data by 2022.[1] This multiplies the locations of enterprise data aggregation, thus compounding the Data Gravity effect on local data repositories.

87%
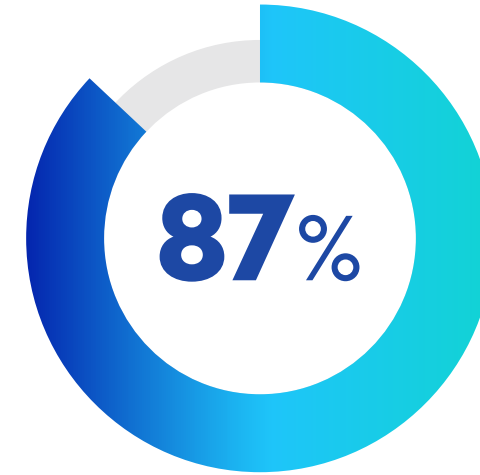
By 2022, 87% of IT Leaders will maintain local copies of customer and transaction data for compliance.

1. "Infrastructure Imperative – IT Leader Survey," 451 Research, November 2019

Macro Trend #5
Cyber-Physical

Digital transformation that moves more data to users, devices, applications, and various areas of the network significantly increases cyber and physical risks. The wall between cyber and physical security no longer exists. Bad actors recognize the opportunities Data Gravity offers and are honing their attacks on new points of presence, such as IoT devices and operational technology (OT).

THE INTEGRATION OF PHYSICAL AND DIGITAL SECURITY SYSTEMS IMPROVE CYBERSECURITY.

70%

By 2023, 70% of security products will integrate IT-OT-IOT systems.[1] This increases the types and volumes of data creation and exchange.

1. Gartner, Emerging Technology Analysis- Cyber-Physical Security. ID: G00726994

Overcoming the Intensity of Data Gravity

The amount of data being created today is almost hard to comprehend, and it's driven by the growth in users and points of presence. In less than two years, more than half of enterprise data will be created outside of the datacenter or cloud.[1]

Current backhaul architecture does not support the exchange of data across multiple internal/external platforms. It also doesn't maintain local data copies for data compliance or run simultaneous multi-data set analytics in a performant manner at global points of presence.

By implementing a data-centric architecture in multi-tenant data centers, enterprises will address Data Gravity barriers by putting data at the center of the architecture, inverting traffic flow, and bringing clouds and users to privately hosted enterprise data. Additionally, they will reduce risks through a secure data exchange and lower costs through a reduction in bandwidth and duplicated infrastructure.

Data Gravity requires a connected community approach between enterprises, connectivity, cloud and content providers. This approach integrates core, cloud and edge at centers of data exchange. This implements a secure, data-centric hybrid IT architecture at Global Enterprise points of business presence that is deployed in multi-tenant datacenters.

Data Gravity Index DGx™

Organizations seeking to understand how they can overcome the challenges of Data Gravity should visit **Digital Reality's Data Gravity Insights Hub (www.digitalrealty.com/data-gravity-index)** and access resources like the **Data Gravity Index DGx™ Report.**

What is Data Gravity?

Data Gravity, or the propensity for bodies of data to draw an expanding swath of applications and services into closer proximity, has been identified as a key megatrend impacting enterprises and service providers over the next decade, according to recently published research.

Data Gravity may affect an enterprise's ability to innovate, secure customer experiences, and even deliver financial results on a global scale.

What is the Data Gravity Index™?

The Data Gravity Index™ measures the creation, aggregation and private exchange of enterprise data and examines its impact on the Forbes Global 2000. Learn more about the Data Gravity Index by accessing the full report.

The Data Gravity Index methodology is based on the analysis of thousands of attributes of Global 2000 enterprise companies' presences in each metro, along with variables for each metro, including GDP, population, number of employees, technographics, IT spend, average bandwidth and latency, as well as flows of data. Digital Realty conducted research between August 2019 and August 2020 and drew upon more than a dozen third-party data sources, ranging from the World Economic Forum and United Nations to global consulting and market research firms.

About Digital Realty

Digital Realty supports the world's leading enterprises and service providers by delivering the full spectrum of data center, colocation and interconnection solutions. PlatformDIGITAL®, the company's global data center platform, provides customers a trusted foundation and proven Pervasive Datacenter Architecture PDx™ solution methodology for scaling digital business and efficiently managing data gravity challenges. Digital Realty's global data center footprint gives customers access to the connected communities that matter to them with 280+ facilities in 45+ metros across 20+ countries on 6 continents. To learn more about Digital Realty, please visit digitalrealty.com or follow us on LinkedIn and Twitter.

interxion™ | **DIGITAL REALTY®**
A DIGITAL REALTY COMPANY