The Global Interconnection Index (GXI) 2023

Measuring the Growth of the Global Digital Economy

Volume 6

Industry Research

The GXI forecasts how organizations are using interconnection bandwidth and distributed infrastructure to shape and scale the global digital economy. It is presented by industry and geography and supported by global deployment data.

Interconnection Profiles

Digital deployments across every region and major metropolitan area were analyzed to understand average interconnection profiles, including both local and multinational deployments across geographies. The research sample was stratified across industries and organization size segments, providing a comprehensive breakdown of colocation subscribers and their interconnections, which were validated against digital infrastructure benchmarks.

Market Conditions

Market research assessed local and regional market conditions, including macro economic trends, market demographics and industry concentrations, to determine their impact on bandwidth provisioning.

A primary research study was also conducted, analyzing the growth of interconnection investments by organizations across the carrier-neutral data center market. Average interconnections per organization were applied to global counts of colocation participants to identify the current volume of interconnections worldwide. This allowed for the development of a set of indicators and market condition filters to assist in producing tailored predictions.

Predictive Models

Predictive models combined these components to build an interconnection bandwidth growth forecast by region and market segment. Key demand drivers of digital business that force the distribution and interconnection of IT components within the proximity of users were analyzed.

Each variable was weighted to factor in its impact in driving digital business transformation. The provisioned bandwidth, as measured in gigabits per second, was estimated for interconnections used by organizations in this study.

*This report contains forward-looking statements that involve known and unknown risks and uncertainties that may cause actual events or results to differ materially from the estimates or the results expressed in such forward-looking statements.

*Deployment data includes an analysis of >500 organizations that deployed ≥5,000 deployments worldwide between Q42015 and Q12022. 44% of the studied organizations are from the Americas, with a mix of local and multinational deployments across the region. (42% AMER, 36% EMEA, 22% Asia-Pac).

*Used technology market intelligence data sources including Synergy Research Group, IDC and Gartner.

*The methodology accounts for both physical and virtual interconnections, including those participants whose infrastructure may fall outside of a carrier-neutral facility but still access the fabric of a carrier-neutral facility via SDN. Average interconnections per organizations were applied to global counts of colocation participants to identify the current volume of interconnections, validated against digital infrastructure growth benchmarks.
Global Forecast: Industry

The digital economy continues to accelerate globally past economic and supply chain disruption. Global interconnection bandwidth is forecast to grow at a 40% five-year CAGR reaching 27,762 Tbps, which is equivalent to 110 zettabytes of data exchanged annually.

Service Providers

Regional forecast
Service Providers are forecast to consume 57% of interconnection bandwidth (15,897 Tbps). Network Providers consume the most bandwidth, and Hyperscale Providers are the fastest growing.

Digital infrastructure
Service Providers show the greatest distribution of their digital infrastructure and the largest percent of edge locations. While the majority of cabinets are in core locations, the edge infrastructure is growing 50% faster.

Telecommunications /ISP
Cloud & IT Services
Hyperscale Providers
Content & Digital Media

Global Mix

43%
57%

Enterprises

Regional forecast
While Enterprise industries are forecast to consume 43% of interconnection bandwidth, they are once again outpacing Service Providers. Returning to pre-pandemic growth rates, Enterprises are showing the greatest acceleration in growth in 2024 and 2025.

Digital infrastructure
The focus Enterprises have had on solving network access and cloud adjacency is evident in the fact that 60% of leaders’ locations are in the core. As Enterprises re-think their business, the edge has now become the focus, with infrastructure growing over 2x faster than the core.

Telecommunications /ISP
Banking & Insurance
Securities & Trading
Manufacturing
Energy & Utility
Retail Trade
Wholesale Trade
Healthcare & Life Sciences
Consumer Services
Business & Prof. Services
Industrial Services
Public Sector

49% CAGR
45% CAGR
45% CAGR
53% CAGR
53% CAGR
55% CAGR
45% CAGR
45% CAGR
45% CAGR
51% CAGR

Leaders are growing edge 1.5x faster than the digital core.

Leaders are growing edge 2.3x faster than the digital core.

Average # of Metro
6
4
10

Average # of DI Cabinets
140
50
190

Annual DI Growth Rate

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*Digital Infrastructure
The large footprint of the Network, Cloud and Financial Services ecosystems continues to drive the majority of interconnection bandwidth, with 86% of bandwidth distributed across core locations. LATAM is showing the fastest growing core and edge locations.

**AMER Forecast: Distribution**

**Core**
- Interconnection forecast: New York has 35% of the forecasted interconnection bandwidth, with most destinations being business and ecosystem partners. Conversely, in D.C., Cloud & IT and Hyperscale Providers make up 33% of the forecasted bandwidth, with most destinations being Network Providers.
- AMER Core Growth: Hyperscale Providers continue to show growth across all edge locations. Los Angeles is the largest edge metro in AMER, with Mexico City the fastest growing.

**Edge**
- Regional forecast: Hyperscale Providers continue to show growth across all edge locations. Los Angeles is the fastest growing core metro with a 46% 5-yr. CAGR, followed by Silicon Valley and Dallas. In all three of these metros, Enterprise adoption has increased to over 20% of the forecasted interconnection bandwidth.

**AMER Core Edge Mix**
- Vertical Mix Forecast in 2025:
  - New York
  - Washington, D.C.
  - Silicon Valley
  - Chicago
  - Dallas
  - São Paulo
  - Los Angeles
  - Toronto
  - Atlanta
  - Miami
  - Mexico City
  - Seattle
  - Houston
  - Montreal

**% Interconnection Mix – 2022 Benchmark**
- 86%

**Leading metros**
- Sao Paulo is the fastest growing core metro with a 46% 5-yr. CAGR, followed by Silicon Valley and Dallas. In all three of these metros, Enterprise adoption has increased to over 20% of the forecasted interconnection bandwidth.

**Leading metros**
- Los Angeles is the fastest growing edge location. Los Angeles continues to be an edge network hub, while Toronto and Mexico City are mature Financial Service hubs, and both locations show nearly 20% of bandwidth being driven by B2B partner access.