

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.⁷



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.⁸

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.⁹

⁷This 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 implied or expressed in such forward-looking statements.

⁸Deployment data includes an analysis of >500 organizations that deployed >5,000 implementations worldwide between Q12016 and Q12022. 44% of the studied organizations are F500/G2000, with a mix of local and multinational deployments across the regions (42% AMER, 36% EMEA, 22% Asia-Pacific).

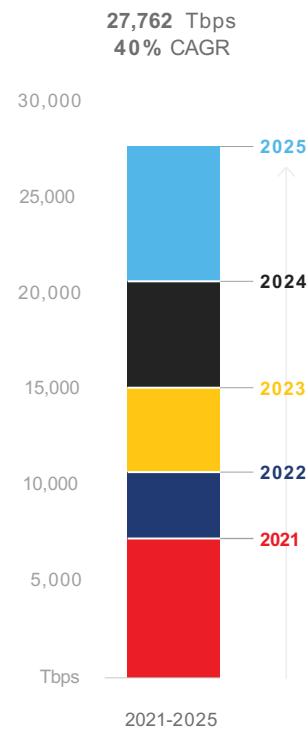
⁹Used technology market intelligence from data sources including Synergy Research Group, IDC and Gartner.

⁹The methodology accounts for both physical and virtual interconnections, including those participants whose infrastructure may sit outside of a carrier-neutral facility but still accesses 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.

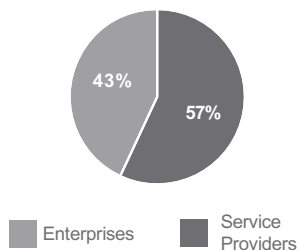
Global Forecast: Industry

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.

Global Growth



Global Mix



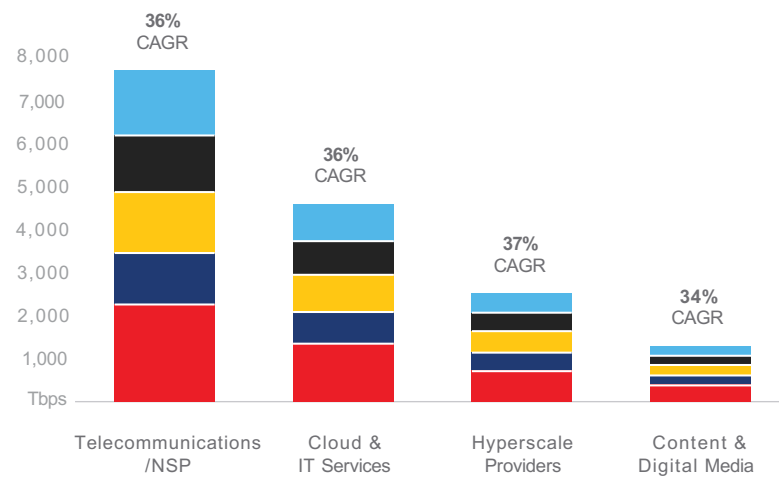
Service Providers

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.



	Core	Edge	Total
Average # of Metros	8	9	17
Average # of DI* Cabinets	405	225	630
Annual DI Growth Rate	Leaders are growing edge 1.5x faster than the digital core		

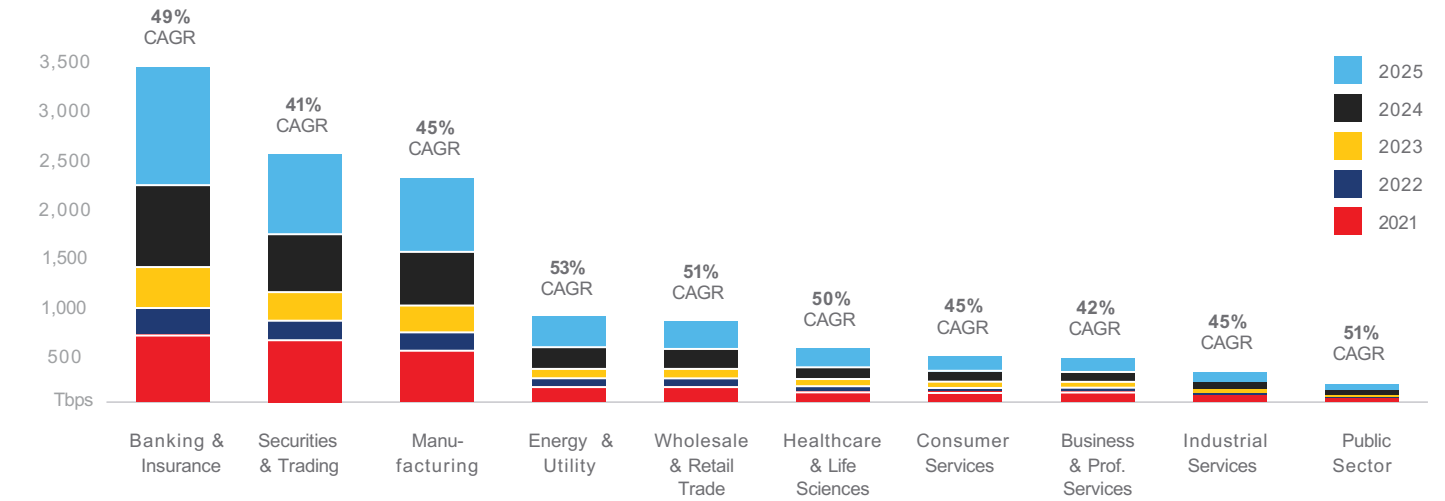
Enterprises

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.

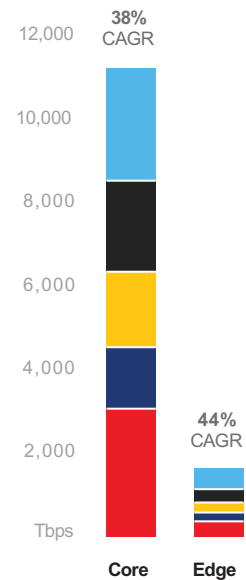


	Core	Edge	Total
Average # of Metros	6	4	10
Average # of DI Cabinets	140	50	190
Annual DI Growth Rate	Leaders are growing edge 2.3x faster than the digital core		

AMER Forecast: Distribution

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.

Interconnection Bandwidth



Core

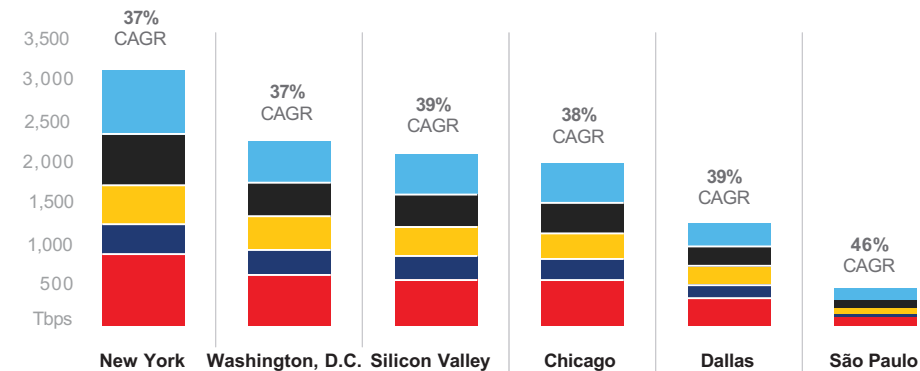
Interconnection forecast

New York has 35% of the forecasted interconnection bandwidth; most destinations are business and ecosystem partners. Conversely, in D.C., Cloud & IT and Hyperscale Providers make up 33% of the forecasted bandwidth; most destinations are Network Providers.

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.

AMER Core Growth



Edge

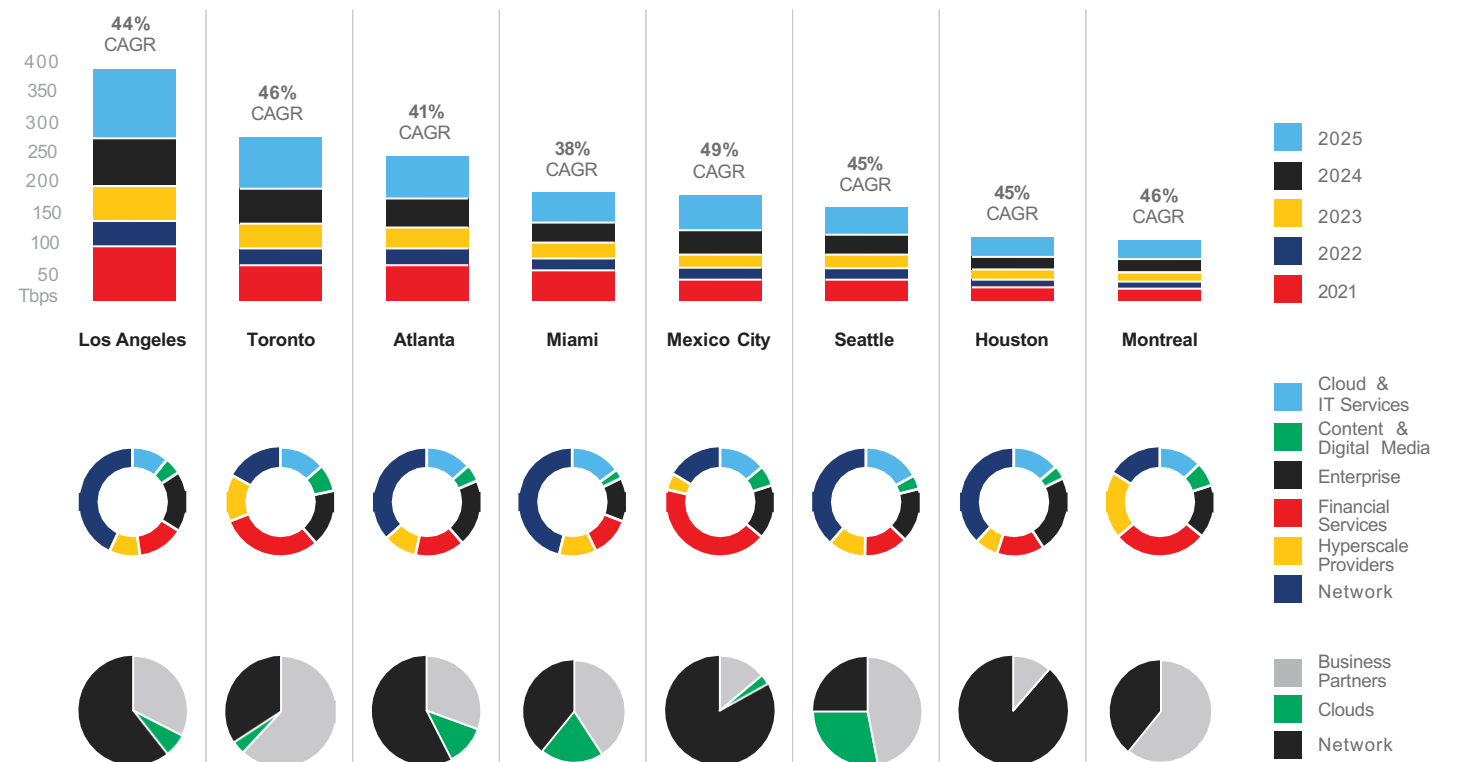
Regional forecast

Hyperscale Providers continue to show growth across all edge locations. 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.

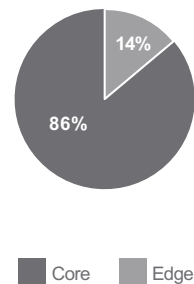
Leading metros

Los Angeles is the largest edge metro in AMER, with Mexico City the fastest growing.

AMER Edge Growth



AMER Core Edge Mix



Vertical Mix Forecast in 2025



% Interconnection Mix – 2022 Benchmark*

