

Data to the Masses! An Exploration of Networks and Transformation

Global Interconnection Index

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The Global Interconnection Index (GXI) Established **Interconnection Bandwidth as a Unit of Measure** for Digital Business Integration



Volume 1 released in August 2017

Volume 2 released in September 2018

ANNUAL GLOBAL BASELINE

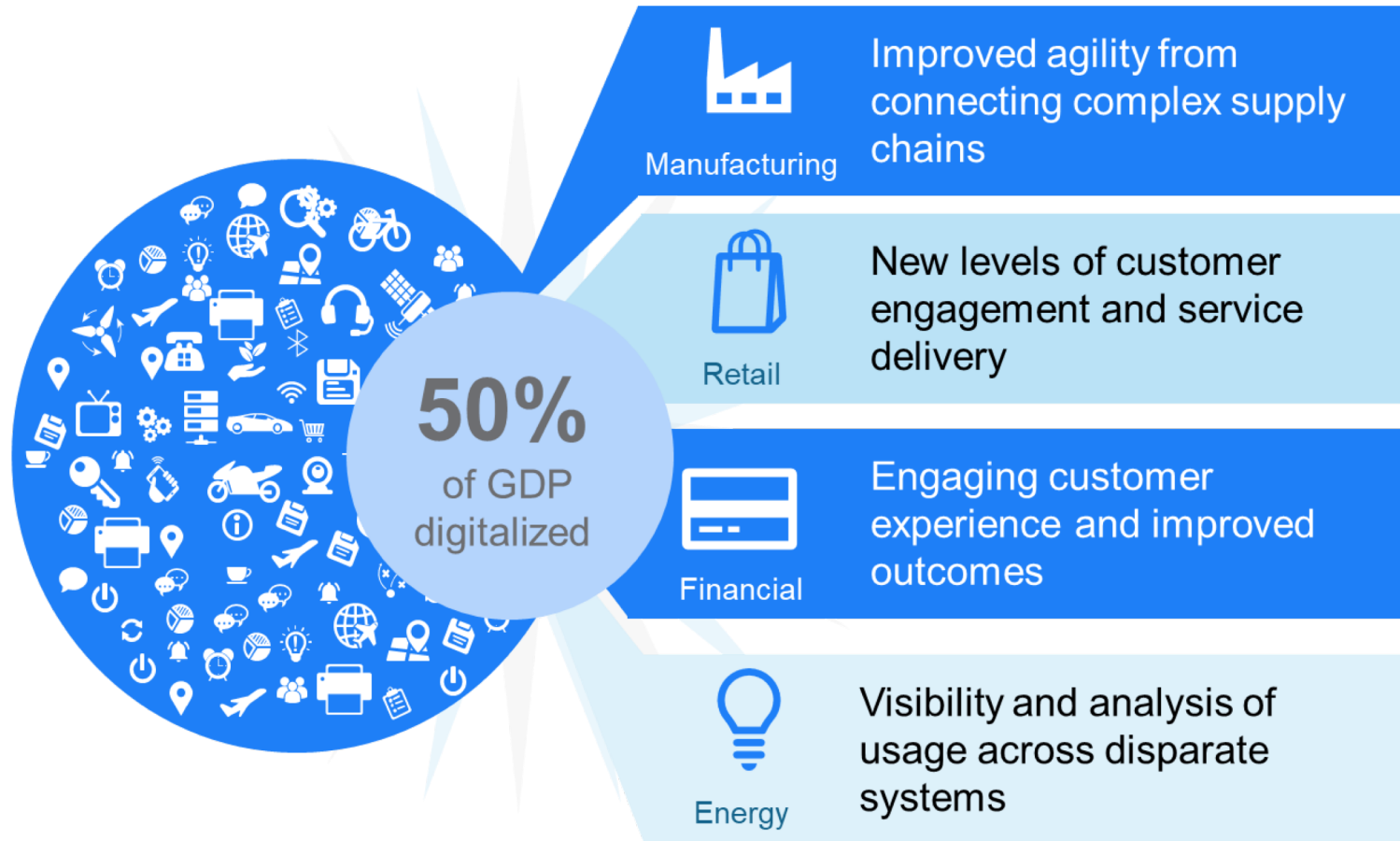
Track, measure and forecast the growth in Interconnection to support digital business

INTERCONNECTION BANDWIDTH

Total capacity provisioned to privately and directly exchange traffic between counterparties at distributed IT exchange points inside carrier-neutral colocation data centers.

GXI Trend #1: Accelerating growth in the impact of Digital Business

By 2021, at least 50% of global GDP will be digitalized, with growth in every industry driven by digitally-enhanced offerings, operations and relationships¹



IMPLICATIONS

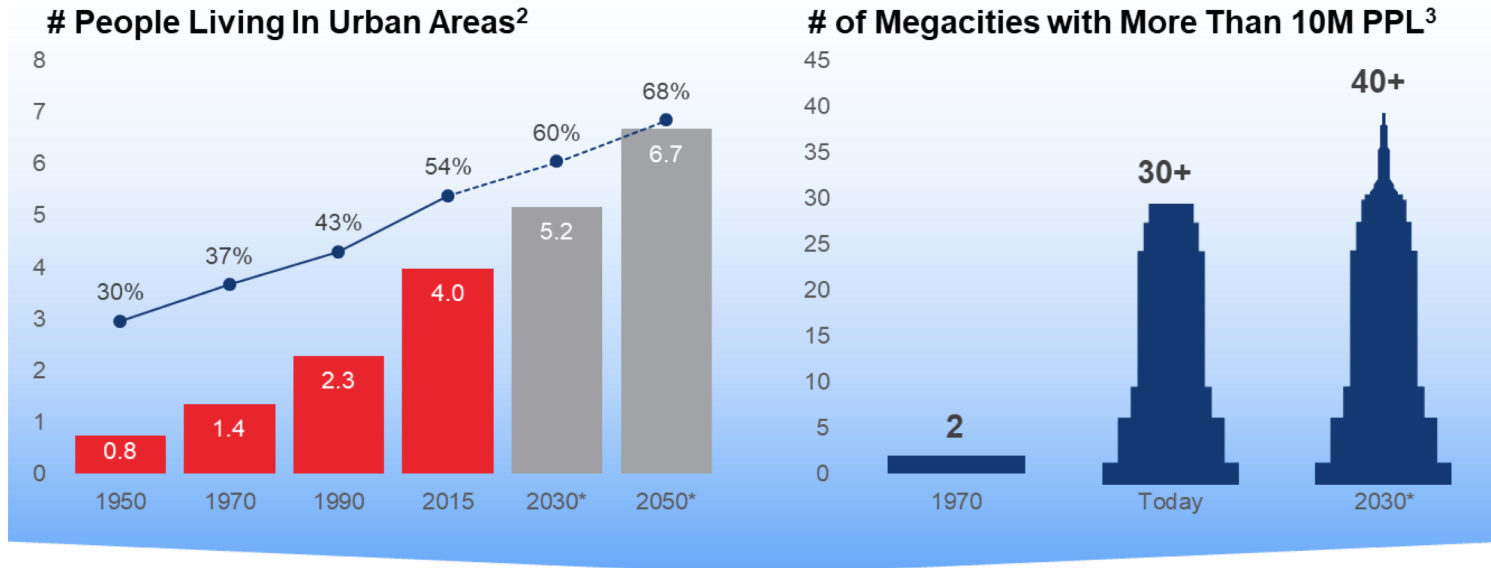
Digital business forces the need to support real-time interactions to capture value

NEED

Real-time interactions require the Interconnection of people, things, locations, clouds and data

GXI Trend #2: Rapid Urbanization

Every year, 65 million people are added to the world's urban population, the equivalent of adding seven cities the size of Chicago, creating as many as 50 urban metro hubs by 2030¹



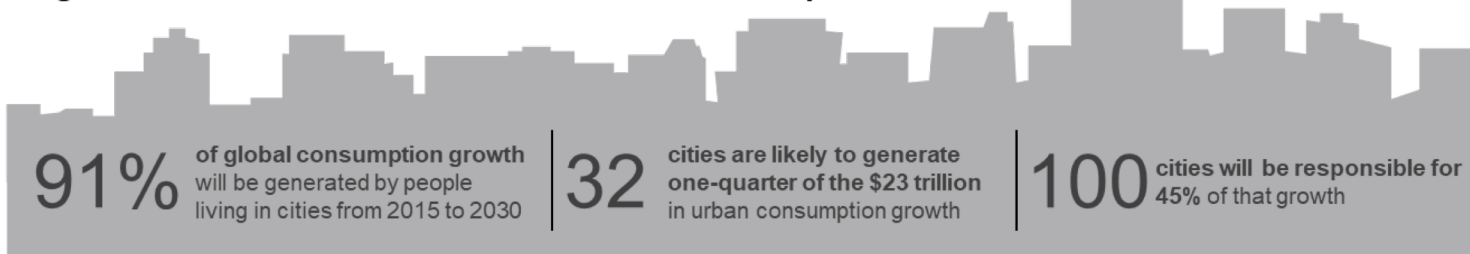
IMPLICATIONS

Urbanization is transforming global demographics and demand origins, creating a proximity need for digital services

NEED

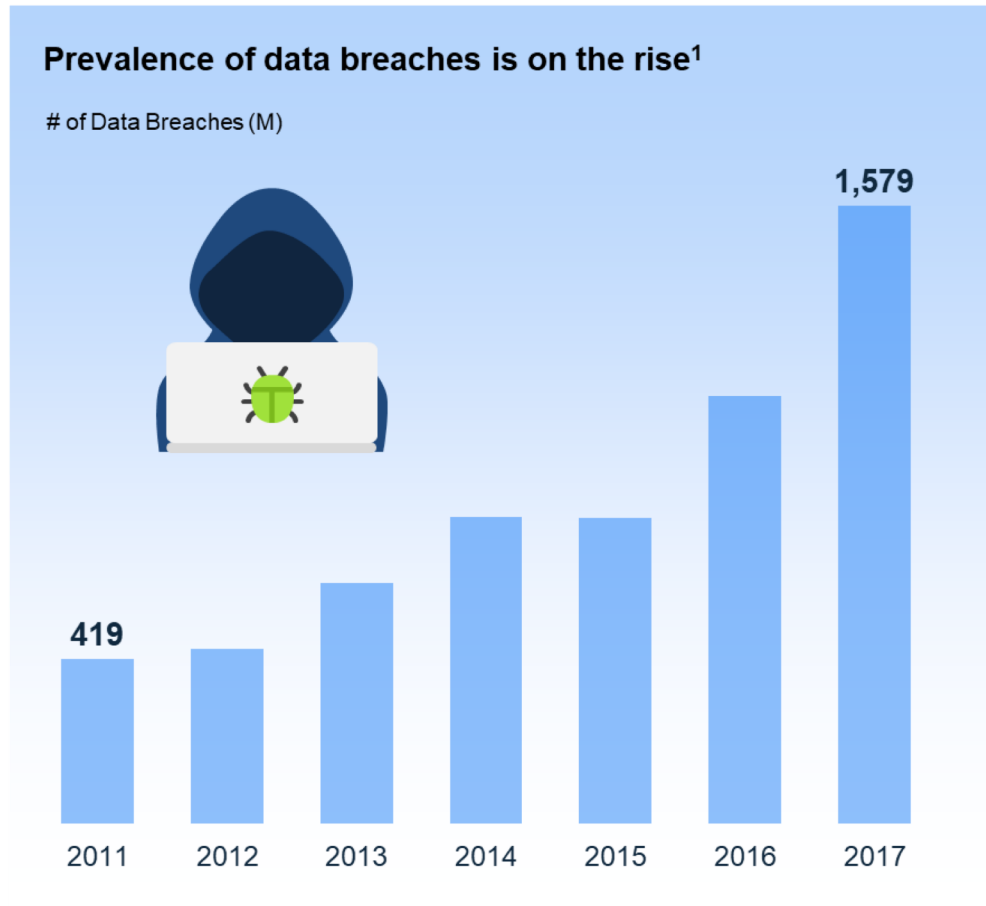
Supporting urban density requires the Interconnection of applications, data, content, and networking in locations where there is a concentration of users

Big Urban Centers are the future of Global Consumption⁴



GXI Trend #3: Cybersecurity

By 2021, the global cost of cyber security breaches will reach US\$6 trillion¹



It is a costly issue with high probability of recurrence²

\$3.86M
Average cost of a data breach

\$148
Average cost per lost or stolen record

28%
Likely occurrence of a breach over next two years

IMPLICATIONS

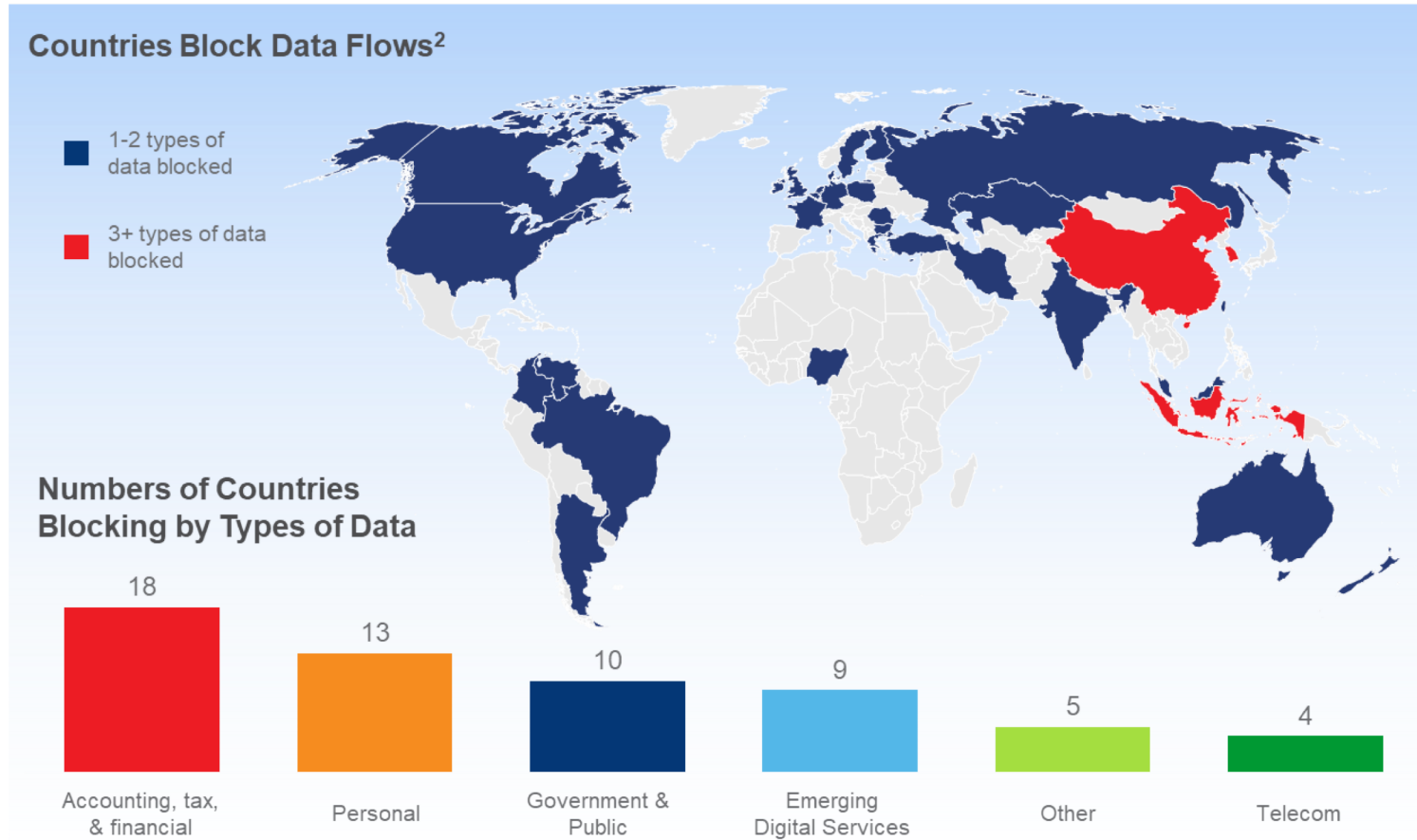
Digital business increases vulnerability points, especially when data is distributed across many different sources and consumers

NEED

Managing cybersecurity risk requires distributing and interconnecting security controls at points of business presence to improve security posture locally and globally

GXI Trend #4: Data Compliance

More than 18 major countries globally block the transfer of data related to accounting, tax, and financial information¹



IMPLICATIONS

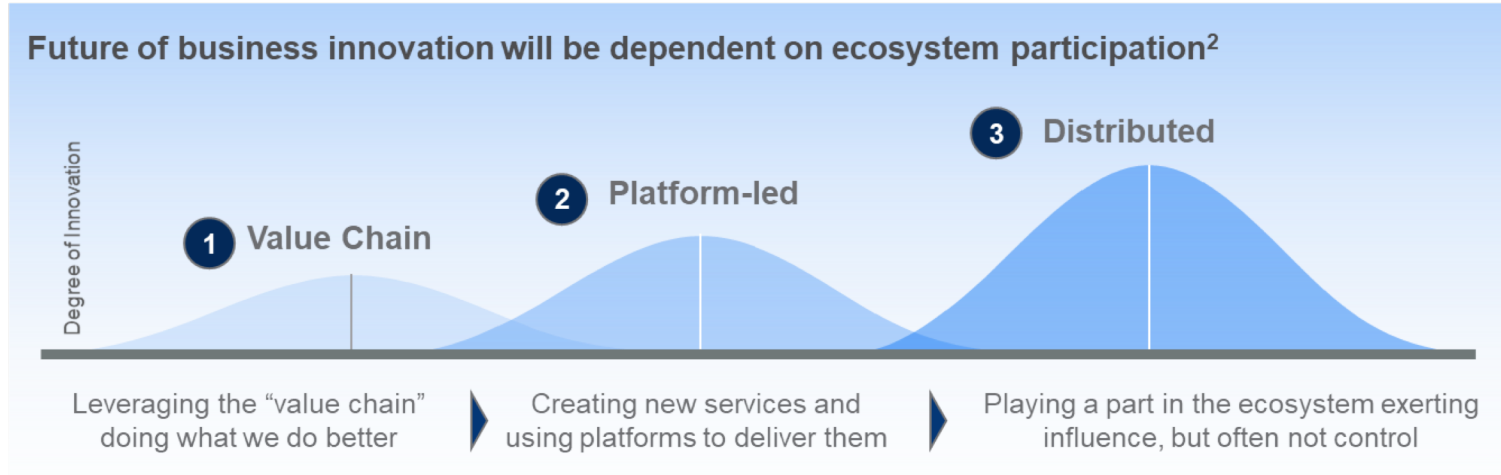
Compliance with data regulation requires the need to maintain data locally while being used globally

NEED

Addressing compliance requires the interconnection of data storage, analytics, and networking placed directly in business regions that require compliance

GXI Trend #5: Digital Evolution of Business Ecosystems

By 2021, organizations using a mix of intermediaries will more than double, and active engagement with industries outside their native industry will nearly triple¹

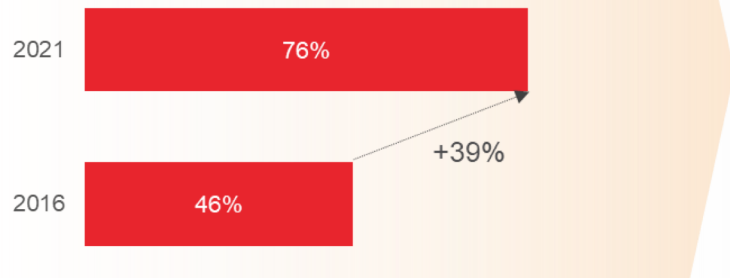


IMPLICATIONS

Digital trade flows are creating business and data processes involving an increasing mix of customers, partners, and employees

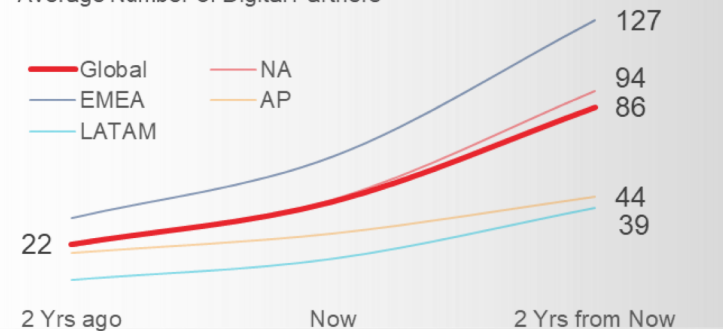
Increasing importance of participation

% of Indicating Success Dependent on Ecosystem Participation³



of digital partners are set to rise exponentially

Average Number of Digital Partners⁴



NEED

To scale, business ecosystems require digital ecosystems supported by technology infrastructure interconnecting the participants and supporting digital flows

GXI Vol. 2 Predicts Interconnection Bandwidth Will Outpace the Internet by Nearly 2x the Growth and 10x the Volume

Interconnection Bandwidth ...

IS EXPECTED TO GROW BY

48%¹

TO

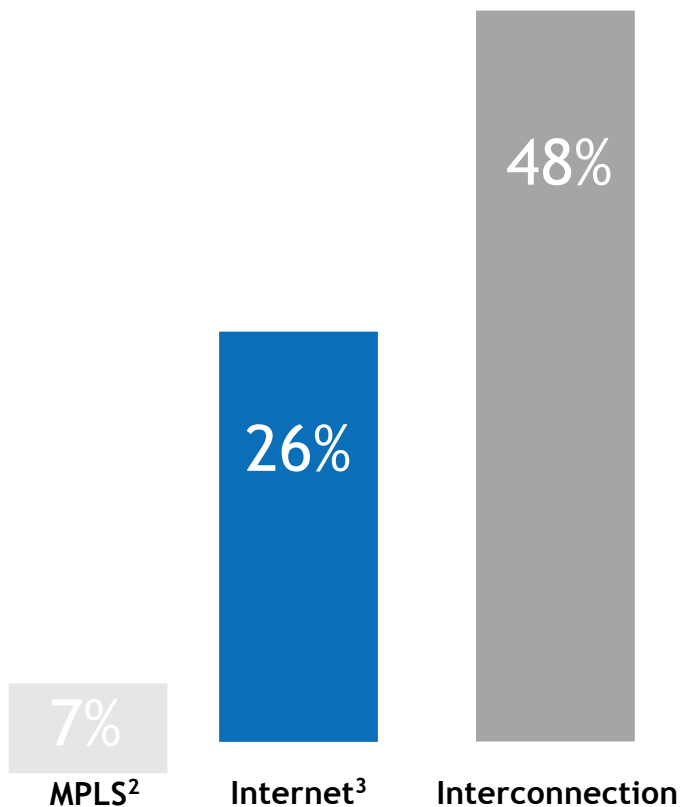
8,200Tbps

OR EQUIVALENT TO

33ZB

OF DATA EXCHANGED ANNUALLY

...Is Expected to Outpace the Growth of internet & MPLS Traffic



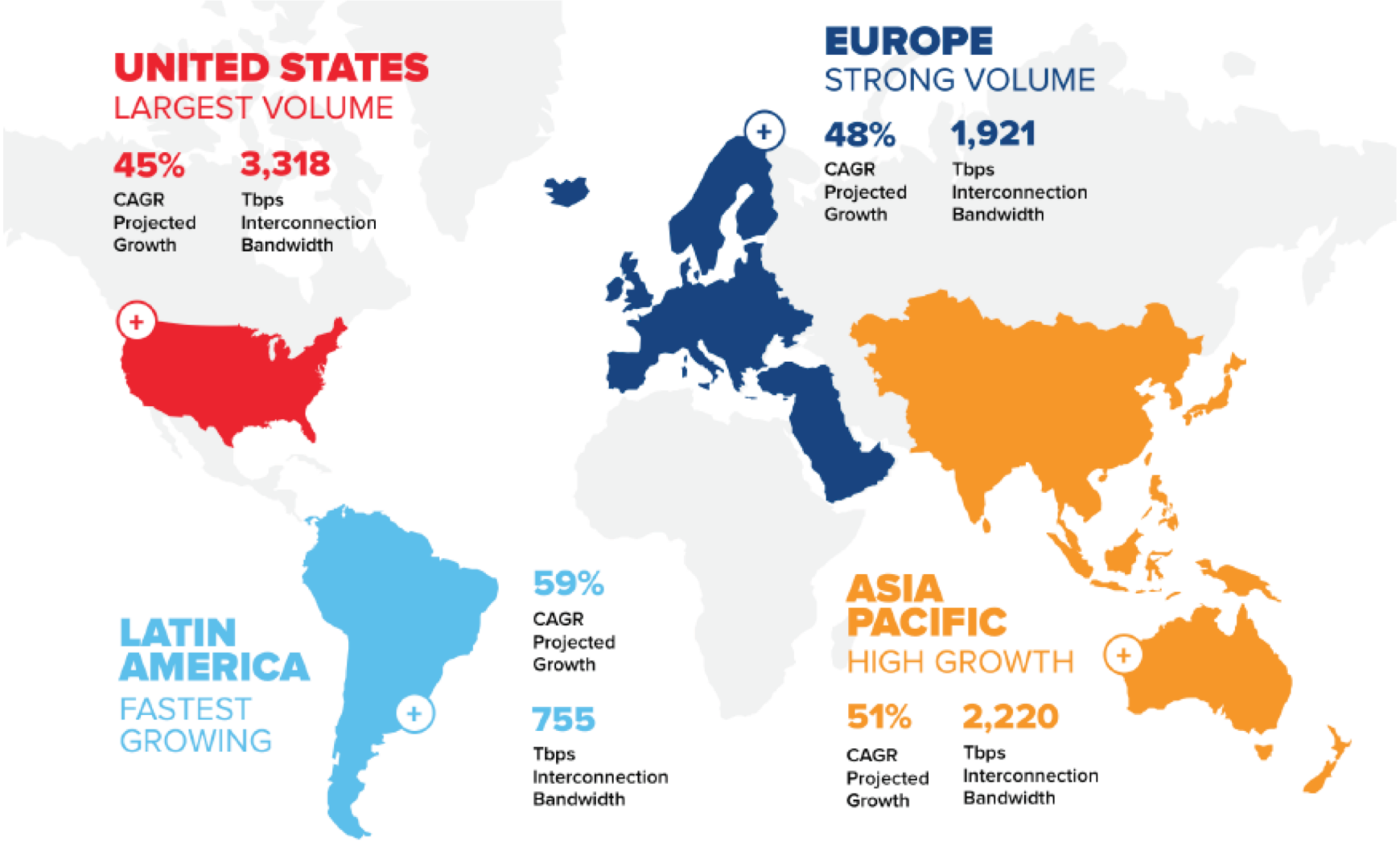
8,200 Tbps (33ZB/year) in one minute could concurrently process

3B	PAYPAL TRANSACTIONS
7.4M	UBER DRIVER STREAMS
82B	IoT DEVICE STREAMS
30.8B	EMAILS WITH ATTACHMENTS
1.5M	CORPORATE TRAINING VIDEOS
1.4B	UCC CALLS
1.4B	DOCUMENT UPLOADS
57.6M	PRE-PRODUCTION 4K VIDEO STREAMS

1. CAGR for 2017-2021
2. Research and Markets, Global Managed MPLS Market, June 2018
3. Cisco Visual Networking Index, 2017

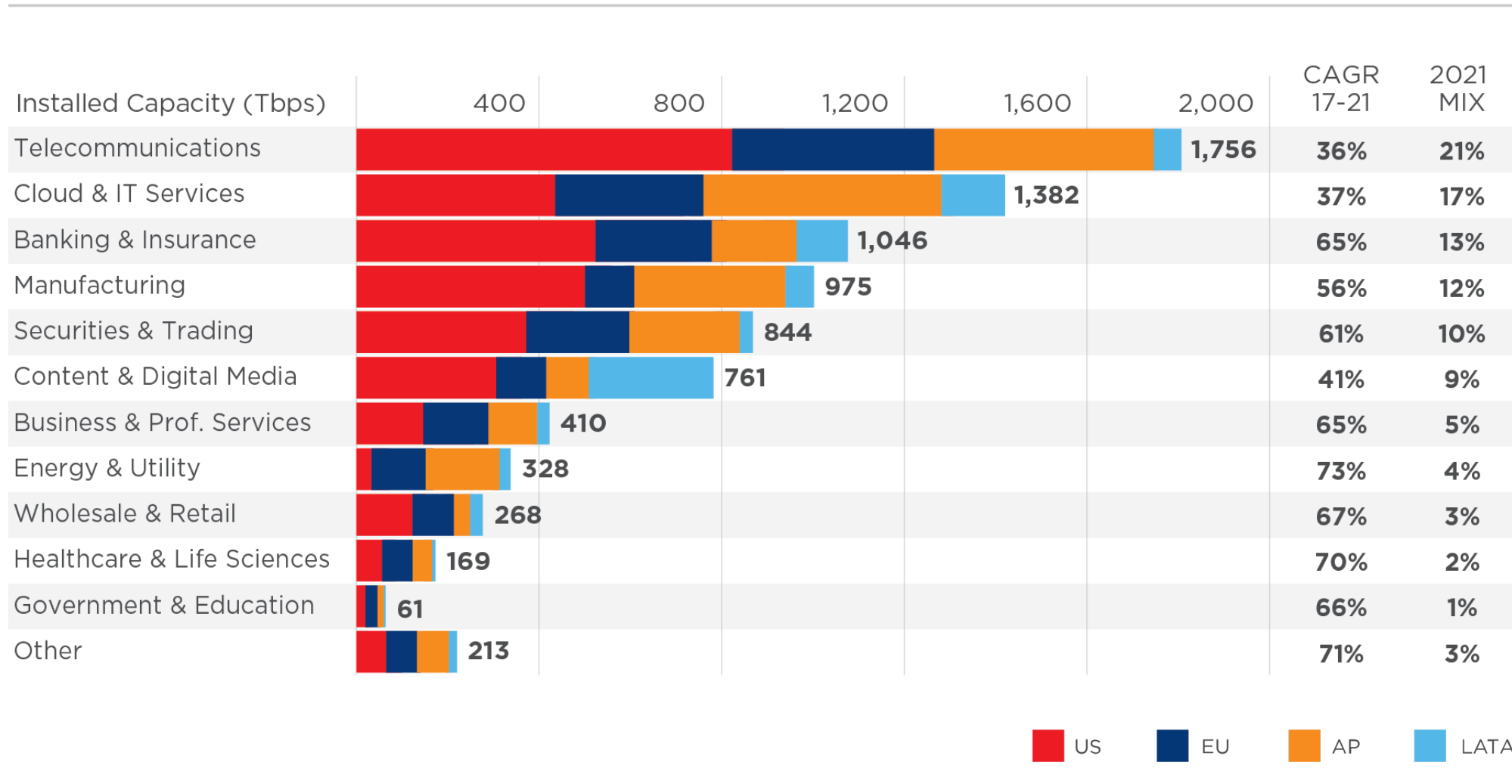
PAYPAL is a trademark of PayPal, Inc.
UBER is a trademark of Uber Technologies Inc.

2021 Forecast - Interconnection Bandwidth by Region



See the GXI for additional insights driving this geographic growth:
Equinix.com/Index2018#insights

2021 Forecast - Interconnection Bandwidth by Industry Segment



2021 Forecast - Interconnection Bandwidth by Ecosystem Destination

