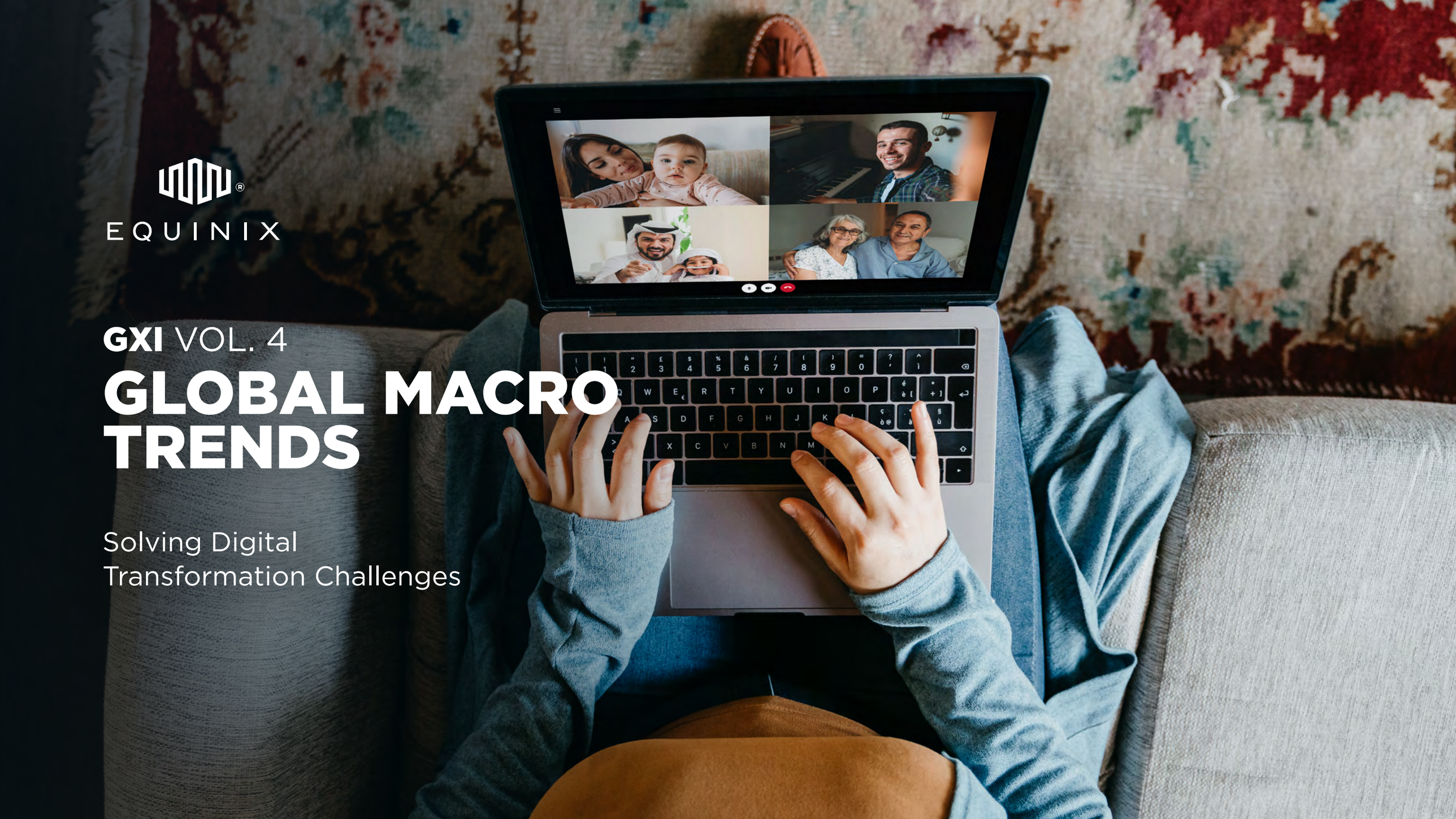

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GXI VOL. 4

GLOBAL MACRO TRENDS

Solving Digital Transformation Challenges

Foreword

The Global Interconnection Index (GXI) is an annual market study published by Equinix that tracks shifts in the digital economy and their impacts on digital business. It reveals these shifts by measuring and forecasting growth in interconnection bandwidth—the total capacity provisioned to privately and directly exchange traffic with a diverse set of partners and providers at distributed IT exchange points. The GXI provides key insights into ways that leaders are using digital infrastructure to fuel growth, where it's happening and how you can use interconnection—direct and private traffic exchange between businesses—to be prepared for whatever is next.

The GXI comprises three separate documents and a digital infographic:

How Leaders Create Strategic Advantage

See where your organization stands against digital leaders—including infrastructure deployment data from 400+ companies, the digital initiatives leaders are prioritizing and how to achieve a digital-ready state with a series of transformational steps.

Download

Global Macro Trends

Learn why digital leaders with the right infrastructure are best positioned to respond to today's major macro trends—and take a deep dive into those trends. Explore the transformational challenges of each trend and how resolving them can provide substantial business benefits.

Download

Forecast and Data: Insights for the New Digital Economy

Compare interconnection growth rates and where they are predicted to compound across regions, metros and industries—as well as how businesses have had to adapt and transform with the advent of COVID-19.

Download

The Global Interconnection Index

Get a digital overview of the GXI story.

Equinix.com/gxi-report/

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INTRODUCTION

Macro Trends Are Prioritizing the Need for Interconnection

The Global Interconnection Index (GXI) shows how the convergence of key global trends and COVID-19 are creating unforeseen pressures on an organization's ability to digitally transform.

The collective influence of these trends, along with external forces like COVID-19, are creating significant challenges to efficiency, scalability and security. These challenges can only be met by creating a digital foundation that is fundamental to transformation—one that leverages digital interconnection on a secure, agile global business platform. The following pages dive into the key challenges of these trends, requirements for their resolution and the value derived from that solution.

Macro Trends

1. Digital Business
2. Urbanization
3. Cybersecurity
4. Data Volumes and Compliance
5. Business Ecosystems

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MACRO TREND 1

Digital Business

Growth Is Driving the Need for Network Optimization

70% of new value created over the next decade will be based on digitally enabled business models[1]

Challenge

As organizations transform their traditional lines of business, they are being asked to reduce costs and become more efficient while accelerating the development of new insights.

Need

Transform the network architecture while distributing digital infrastructure in strategic locations to support local interconnection between user services, data, clouds and ecosystem partners. This drives a need for network optimization and scaling across regions.

Business Results

60% reduction in transport costs, 30% reduction in latency and 10x increase in interconnection bandwidth.[2]

1. "Shaping the Future of Digital Economy and New Value Creation," World Economic Forum, 2020.
2. "Total Economic Impact™ Study," Forrester, Commissioned by Equinix, April 2019.

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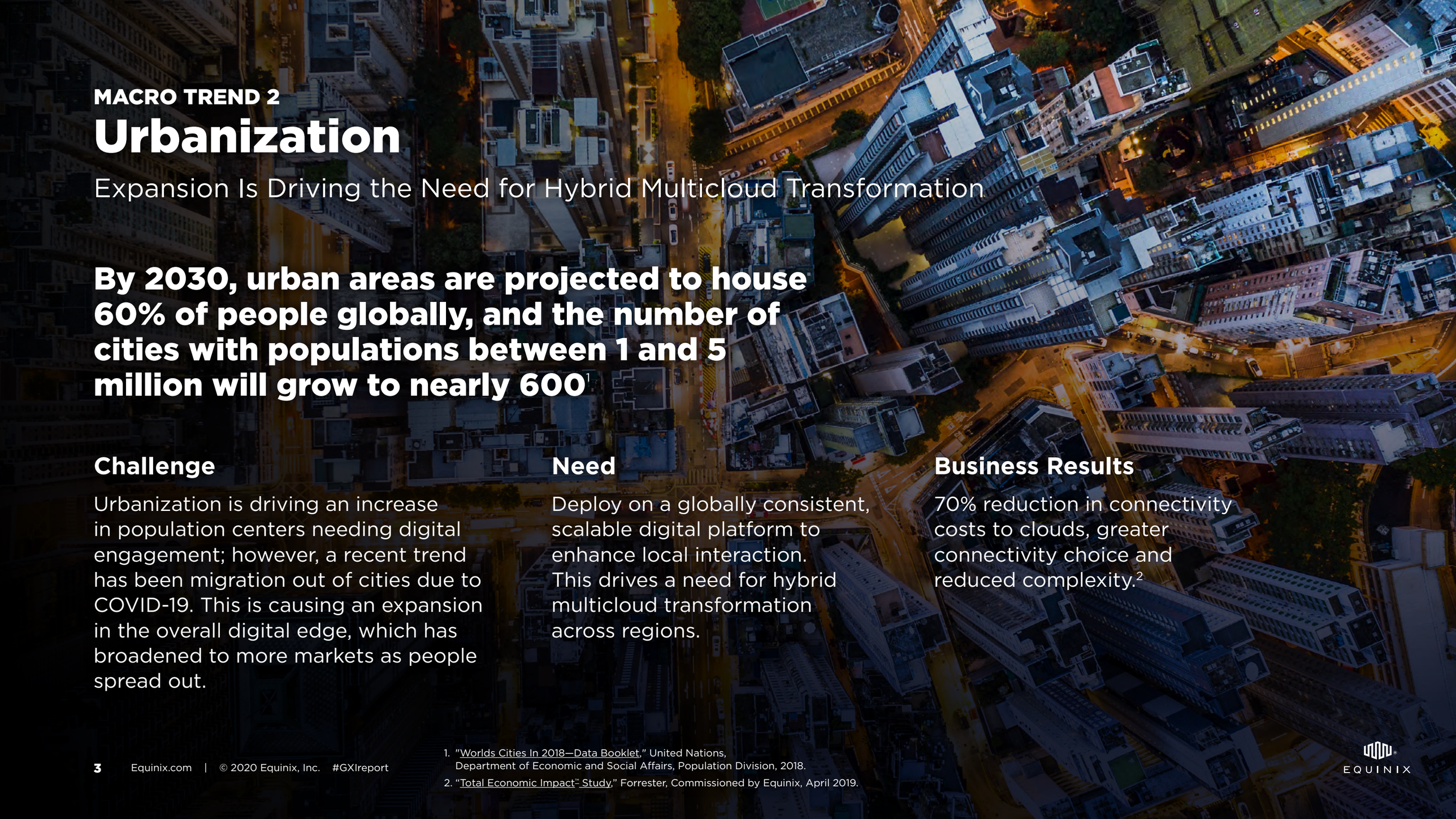

MACRO TREND 2

Urbanization

Expansion Is Driving the Need for Hybrid Multicloud Transformation

By 2030, urban areas are projected to house 60% of people globally, and the number of cities with populations between 1 and 5 million will grow to nearly 600[1]

Challenge

Urbanization is driving an increase in population centers needing digital engagement; however, a recent trend has been migration out of cities due to COVID-19. This is causing an expansion in the overall digital edge, which has broadened to more markets as people spread out.

Need

Deploy on a globally consistent, scalable digital platform to enhance local interaction. This drives a need for hybrid multicloud transformation across regions.

Business Results

70% reduction in connectivity costs to clouds, greater connectivity choice and reduced complexity.[2]

1. "Worlds Cities In 2018—Data Booklet," United Nations, Department of Economic and Social Affairs, Population Division, 2018.
2. "Total Economic Impact™ Study," Forrester, Commissioned by Equinix, April 2019.

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MACRO TREND 3

Cybersecurity

Threats Are Driving the Need for Global Distributed Security

DDoS attacks have grown more than 270% year over year while 30% of companies are being challenged by thousands of insecure devices connecting daily without IT oversight[1]

Challenge

As COVID-19 transforms business and increases digital demands, organizations have found centralized, HQ-based security models cannot adapt to new threats at the rate and scale required, forcing a need for distributed models.

Need

Develop best practices to distribute security controls and infrastructure at digital exchanges. Establish consistent governance across users, resources and data exchanges. This drives a need for global distributed security via interconnection.

Business Results

Policy governance, reduction in audit costs and increased capacity across distributed presence.

1. "DDoS Attacks Jump 542% from Q4 2019 to Q1 2020," DarkReading, June 30, 2020.

MACRO TREND 4

Data Volumes and Compliance

Growing Complexity Is Driving the Need for Distributed Data

While data is growing at a compound rate, less than 3% of that data currently created is being analyzed for enterprise intelligence[1]

Challenge

Demand for local data analysis and data exchange to support digital workflows is outpacing organizations' ability to classify, secure, transport and process data across regions.

Need

Meet requirements for edge computing, cloud analytics and exchange across data marketplaces as well as AI/ML (machine learning) ecosystems with a data model based on interconnection. This drives a need for distributed data for compliance and new strategic value.

Business Results

Reduction in data transport, localized processing and IOPS (input/output operations per second) costs for cloud adjacent solutions, with increased data insights.

1. "Revelations in the 2020 Global DataSphere," IDC, Doc # US45906920, July 2020.

MACRO TREND 5

Business Ecosystems

Connectivity Is Driving the Need for Application Exchange

By 2025, 80% of digital leaders will see the positive impact of connecting to multiple ecosystems, including improving their value to end customers[1]

Challenge

Maintaining end customer value and relevance with inflexible ecosystem models and inefficient connectivity greatly limits growth, innovation and the generation of new value.

Need

Access an agile digital infrastructure platform providing the highest density of secure connections and the richest global ecosystems. This drives a need for application exchange in digital ecosystems to support real-time engagement.

Business Results

On-demand, low-latency connectivity to enhance digital engagement and dynamically drive new value.

1. "IDC FutureScape Webcast: Worldwide Digital Transformation 2020 Predictions," IDC, Doc # US46287720, May 2020.

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The Five Stages Digital Leaders Follow to Create a Competitive Advantage

As macro trends converge, companies can leverage interconnection to address their needs and solve IT challenges.

Network Optimization

Network Hub

Transform WAN architecture by removing the distance through an initial hub deployment. Expand capabilities to the edge and optimize last-mile connectivity.

Hybrid Multicloud

Network and Cloud Hub

Connect to multiple clouds in strategic locations with high concentrations of cloud and network providers and establish a second hub for business continuity. Scale capability across regions.

Distributed Security

Network, Cloud and Security Hub

Distribute secure infrastructure and edge services to support DDoS/WAF, CASB, SASE and other capabilities across hubs. Secure digital interaction locally.

Distributed Data

Network, Cloud, Security and Data Hub

Deploy edge computing to support AI and machine learning solutions for local analytics of large pools of data. Establish cloud adjacent data infrastructure to leverage cloud analytics and ecosystem exchange.

Application Exchange

Network, Cloud, Security, Data and Exchange Hub

Build out digital infrastructure at strategic exchange points for real-time participation in data marketplaces, industry exchanges and B2B real-time processing.

Position Your Business for Whatever Is Next

Looking to create a competitive advantage?
Here's how to get there.

Learn More

[451 Research - Strategies for Next-Gen Architecture]

Next Steps

[GXI Vol. 4 Forecast and Data]