EQUINIX

Leaders Guide to Digital Infrastructure

Steps to accelerate your digital transformation

Table of contents

To jump to a section, click an option below.

EQUINIX

Introduction

In today's rapidly growing digital economy, you may find your business struggling to stay relevant—especially if you are still bound by physical limitations and legacy dependencies.

Over the past few years, an enormous shift in global demand for digital services and digitized versions of services has prompted many forward-thinking organizations to accelerate their transformation to digital business models, as demonstrated in the findings of the Global Interconnection Index (GXI), an annual report published by Equinix.

This digital-first strategy adopted by market leaders has rewarded them with a huge advantage over competitors who have been slower to react. In fact, the World Economic Forum estimates that ~70% of new value created in the next 10 years will be based on digitally enabled business models.[1] As disruption impacts virtually every industry in the global economy, this shift in value is fueling market opportunity.

To capture this opportunity, organizations are participating in growing marketplaces at software speed, generating more revenue and value—all built on digital-first strategies.

Yet, while 90% of the companies surveyed by the World Economic Forum acknowledge that digital disruption is impacting their industry, only 39%—an astonishingly low percentage—are actively responding by redesigning their infrastructure. These organizations will reap a healthy financial return on their investment. Those who fail to react will be left behind.

[1] "Shaping the Future of Digital Economy and New Value Creation," World Economic Forum, 2020.

EQUINIX

CHAPTER 1

Put digital first to grow and expand

Becoming agile for a shifting economy

Companies today have been experiencing a huge shift in demand for more digital services and quicker digitization of business models. Business leaders have realized their digital infrastructure is their business infrastructure. As such, they've been transforming business models with technology in order to participate and be competitive in the digital economy.

Instead of spending time and resources creating services themselves, digital leaders gain value and speed to market for their organizations by subscribing to services that are already built. They leverage a rich ecosystem of providers and invest where it makes sense for a composable infrastructure. This provides the agility required to pivot as needed while tapping into hyperspecialized capabilities that complement their business and allow them to focus on their own innovation.

In short, they can do more faster, reduce costs and save time by concentrating resources on those areas that provide greater competitive advantage. They also subscribe to services with providers who have proven solutions for everything, from managing data to handling logistics to finding talent worldwide. But to achieve all this, they must have a strong foundation at the heart of their digital infrastructure.

By 2026, 40% of total revenue for G2000 organizations will be generated by digital products, services, and experiences.

IDC FutureScape: Worldwide Digital Business Strategies 2023 Predictions, IDC[1]

[1] "IDC FutureScape: Worldwide Digital Business Strategies 2023 Predictions," Doc #CA49743822, October 2022.

EQUINIX

Building a strong foundation

As the world's digital infrastructure company®, Equinix brings together a global ecosystem of more than 10,000 customers on six continents, including providers of network services, storage and compute as well as cloud native and cross-industry enterprises. Over 80% of the Forbes Top 100 Digital Companies have leveraged Platform Equinix® to implement and capitalize on their digital-first strategies. They understand the importance of having this extensive ecosystem of providers and business partners at their disposal to leverage market opportunities around the globe as they compete and scale.

For 25 years, Equinix has been at the center of it all, enabling organizations to develop and grow their digital infrastructure to become digital service providers. During this time, we have been collecting information and offering customers best practices. As the world transforms into a globally interconnected service fabric with Equinix in the middle, we openly share our unique perspective and data to help companies understand what's happening and how quickly it's unfolding.

Companies use Platform Equinix to build an infrastructure that grows their digital services, both helping them scale into new markets and providing access to ecosystems of business partners to enable new revenue models. This requires developing digital services closest to the greatest cloud and network densities (meaning located near specific ecosystem concentrations) and localizing delivery of experiences and services where business happens. This document lays out the common strategies and practices that leaders implemented to build their competitive advantage. Use this as a guide to create the right digital infrastructure to power the models, experiences and innovations that are essential for your organization to compete in this new world.

25
Years

10,000+
Customers

6
Continents

80%+
of Forbes Digital 100

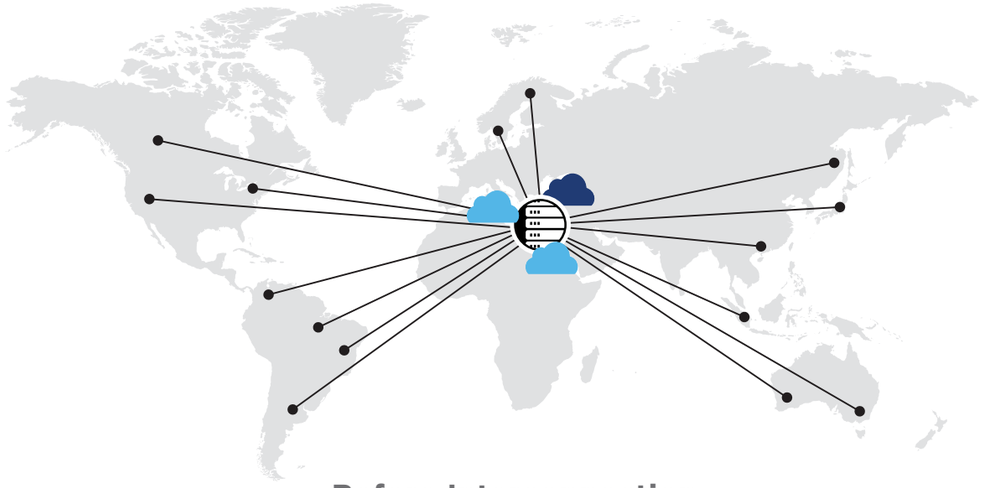
EQUINIX

Unlocking edge-to-cloud business opportunity

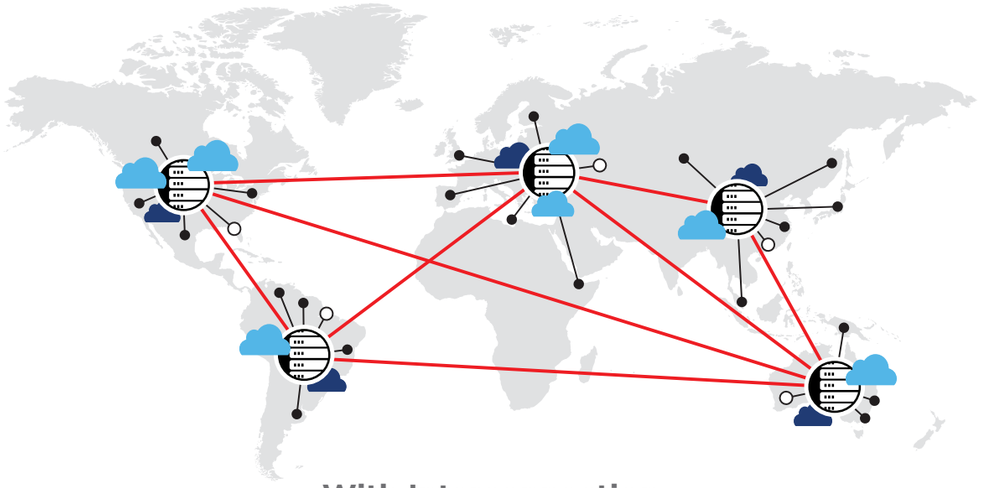
Forward-thinking businesses have been designing their digital infrastructure around points of interconnection (the direct private exchange of data with each other) for years. This is a consistent pattern that we call Interconnection Oriented Architecture® (IOA®), and it is key to business growth.

With IOA, organizational functions that were formerly locked in a central location are distributed across highly interconnected locations. This brings applications, data, clouds and people closer in addition to scaling low-latency data exchange and service delivery, thereby unlocking business opportunities.

Application architectures have adapted to IOA as well. What was once the three-tier model of web, application and database has become endpoint, edge and cloud. This updated model solves for today's edge-to-cloud reality. This means that application developers now need to understand the business implications of multicloud, multi-partner and multi-location requirements. Distance is the biggest impediment to application and business performance, which results in a focus on containers and portability to distribute processing and data instead of working with the monolithic stack or a centralized single cloud approach.



Before Interconnection
Siloed and centralized



With Interconnection
Distributed and interconnected

Interconnection benefits[2]

By studying deployment trends across all regions and industries, we see what Equinix customers do. With a digital infrastructure built on IOA and leveraging Platform Equinix, leaders are taking these actions to solve for challenges and meet their digital transformation goals: interconnecting the digital core, integrating with digital ecosystems, and interacting at the digital edge.

Through these actions, they position themselves to digitally access ecosystems, services, partners and customers anywhere they want to do business.

As leaders transform on Platform Equinix, they leverage interconnection to scale and remove distance. By doing this, digital leaders improve their competitive advantage and realize outstanding results.

6x
Increase in addressable market revenue through access to new markets

60%
Reduction in network costs due to distributed points of presence, increased negotiation leverage with a larger pool of providers and greater efficiencies in buying bandwidth

30%
Minimum reduced latency

60%
Faster infosecurity and IT audits

[2] Insights based on Equinix deployment benchmark and platform adoption analytics. Find more information on benchmark methodology in the GXI.

EQUINIX

Creating ongoing competitive advantage

Having access to the richest, most dense ecosystems in the most strategic locations around the world provides Equinix customers with limitless choice. When paired with interconnection, this robust access offers the flexibility to continuously change. This allows customers to scale with composable business and infrastructure capabilities from hyperspecialized partners—all within a short distance of where business happens. While this was traditionally a competitive advantage for service providers, it is now what digital leaders across all industries have gained on Platform Equinix—and what fast followers need.

Service providers

Service providers largely invented the practices around core, ecosystem and edge to benefit from enhanced go-to-market capabilities, allowing them to expand into new markets and launch new digital services via a software-defined network (SDN) infrastructure.

With faster delivery, they gain more revenue opportunities in less time. In addition, getting easy access to other networks and customers through robust ecosystems results in a reduced cost of service delivery. In turn, their customers benefit from both simple connectivity to hybrid and multicloud environments as well as the ability to gain the most value from the maturity and scale of services provided.

SaaS and cloud native companies

SaaS and cloud native businesses are coming to understand the pressures of a centralized approach. These organizations distribute mature workloads into cloud adjacent markets or move functions closer to the edge to reduce processing costs (cost of revenue) and round-trip delays.

Partnering with Equinix enables them to expand into more cloud regions and edge locations, so they can increase their ability to scale and benefit from greater choice while controlling costs. With Platform Equinix's digital services and a cloud-like delivery model, SaaS and cloud native businesses manage their distributed infrastructure in the same way as the cloud.

Enterprises

Many enterprise business leaders are rethinking their IT environment. Over the last few years, industries that may have delayed digital transformation have found that they need to rapidly change to keep up with new demands. Businesses feel that they are either not moving fast enough or that their infrastructure investments aren't yielding the anticipated returns.

Equinix has partnered with thousands of enterprises across all industries (including transportation, healthcare, government, education and manufacturing), with each one forced to pivot quickly and at scale. Equinix helps enterprises get to their end goal faster by drawing from decades of experience and best practices.

Real-world examples

Service provider

When launching a new global data transfer network, a leading storage provider relied on Platform Equinix to launch its service. While adding compute capacity can eventually result in diminishing returns, removing distance is game changing. On Equinix, this provider saw a 60% increase in application performance for customers.

UCaaS provider

A leading cloud-delivered Unified Communications as a Service (UCaaS) provider had been using Platform Equinix to optimize traffic since 2015, connecting remote conferencing participants worldwide. In the wake of a massive distribution shift to remote work, Equinix enabled it to scale quickly by dynamically distributing key processing functions, elastically adjusting bandwidth and providing access to local partners, which helped it keep up with the unprecedented demand.

Enterprise

A large transportation company created a digital infrastructure on Platform Equinix, obtaining secure, low-latency access between its Helsinki data center and the AWS and Azure clouds in Amsterdam and London. As a result, the organization reduced its equipment and connection costs by 60%, improved cloud application performance and increased resiliency. These achievements dramatically reduced the risk of outages and app interruptions and delivered a drastic improvement in user experience.

Equinix and i3D.net put Ubisoft in the pole position for gaming

Expected to be worth $46.7 billion by 2025, the gaming industry is ultracompetitive—and winning in this industry hinges entirely on the user experience.[3] As games became more complex and immersive with higher resolution, Ubisoft sought to adapt by doubling capacity and dramatically improving responsiveness. With the help of i3D.net and Equinix, Ubisoft now delivers across 21 major metro locations in 14 countries. The company is optimizing low-latency connectivity and proximity to gamers for a world-class gaming experience and competitive advantage.[4]

[3] "As Online Gaming Demand Doubles, Equinix and i3D.net Accelerate Underlying Digital Infrastructure with Ubisoft," Equinix, Nov. 24, 2021.

[4] "Equinix and i3D.net with Ubisoft Accelerate Global Online Gaming Growth," Equinix, Sept. 29, 2021.

CHAPTER 2

Discover the keystone of a digital-first strategy

The patterns digital leaders follow for success

Digital leaders are moving 4.5x faster than traditional businesses.[1] Why? Because these leaders have the strength and agility to turn market shifts into competitive advantage. They can scale up or down as needed, integrate with service providers and SaaS partners, and deliver new business services to match customer demand—anytime and anywhere. They accomplished this with the mindset that business and technology are indistinguishable, with the result being business-as-code. These leaders moved away from physical transactions that required people, documents and manual steps, and they moved toward more digital or digitized services. By observing trends in how leaders gained their competitive edge with Equinix, we have found these three fundamental patterns to success for a digital platform.

Interconnecting the digital core

Distribute core infrastructure into carrier-neutral colocation facilities worldwide with a large network, cloud and IT presence.

Integrating with digital ecosystems

Identify new marketplaces, leverage SaaS and integrate industry-specific services from thousands of partners.

Interacting at the digital edge

Tap into platform and partner capabilities to offer secure digital experiences and gain real-time intelligence in proximity to where business happens.

[1] Equinix market analytics.

Digital core, digital ecosystems and digital edge

Our analysis of thousands of organizations across all industries, including a benchmark study of over 500 digital leaders, has revealed a common set of patterns for how these leaders are leveraging digital infrastructure and building composable business models to solve business problems.[2] IOA is based on this ongoing analysis, which we share in the GXI. It shows not only how leaders are deploying and distributing hubs, but also who they are interconnecting with for digital exchange. Over time, the steps they are taking to complete their digital infrastructure and transformation have become clear.

Data in the GXI reveals how the most successful leaders—regardless of industry—have been able to build a distributed core for the digital business, integrate the highest value ecosystems and interact at the digital edge. By leveraging the unique capabilities and partners available on Platform Equinix, they are building a digital-first IOA.

[2] Find more information on Equinix benchmarks and analytics in the GXI.

EQUINIX

Supporting digital business with a dynamic architecture

Leaders across all industries have leveraged these three fundamental components of a digital platform to implement their version of IOA with Equinix—built from the ground up for the scale, flexibility and speed a digital business requires.

Platform Equinix brings together an ever-growing variety of service providers, cloud native businesses and enterprises to form the world's largest digital ecosystems, thus creating a network center that is unmatched. By leveraging network effects, businesses can fuel growth and innovation as they take advantage of the innumerable choices and new marketplaces directly where business happens. Businesses want to be on the platform because they can quickly tap into whatever they need, their partners and customers are already there, and they can position themselves to reap opportunities as those present themselves.

Without the right platform, companies encounter frustrating limitations and infrastructure fragmentation, regardless of whether they're in traditional data centers, the cloud or both. Traditional infrastructure can't keep up with today's distributed requirements, and while cloud-only deployments offer modernized operations, horizontally scaling in centralized locations is not cost-effective for many workloads. When costs grow without revenue growing proportionally, the strategy becomes unsustainable. This is why hybrid multicloud is the most common infrastructure choice for edge-to-cloud solutions across all industries.

Supporting digital business requires a software-defined digital infrastructure (one that can be deployed through software), leveraging tools and partners already on the platform to develop a tailored, composable infrastructure stack. These tools reshape the basic ingredients of the infrastructure—network, interconnection, compute and storage—into a dynamic architecture. It can be provisioned in a cloud-like model on demand, optimized and placed in direct proximity to where your business requires it. With this process, organizations don't need to invest in long-term debt and put capital at risk when—as many learned from recent major economic and social upheavals—circumstances can so easily change.

What digital leaders are doing

Although organizational journeys vary, digital leaders have all solved for these requirements through a series of common actions, and then they continually adjust as needed. It's no longer about a long-term plan to build the next legacy infrastructure to a fixed TCO model. It's now about investing in technology and managing cost of revenue (COR) in strategic sprints.

Traditional enterprises

Traditional enterprises are trying to both innovate and shift to the digital economy as well as clean up their traditional infrastructure. Leaders across industries such as manufacturing, insurance and retail have transitioned from traditional data centers to distributing their core infrastructure in locations that can support the hybrid model they require. Once they build this foundation, they optimize access to partners and bring infrastructure closer to their customers. They are moving from centralized long-term IT debt to distributed subscription flexibility in proximity to the user.

Technology and service partners

Technology providers, professional services and system integrators are also adapting to new economics and marketplaces. As asset sales into traditional data centers decline and providers see few benefits from cloud growth, leaders are transforming where and how they offer services to meet new business demands. This means shifting from products to as a Service models with flexible consumption or from invoice purchases to recurring subscriptions—all of which need to be delivered in digital marketplaces.

Service providers require a platform that facilitates access to the thousands of participants they must reach. By using the same digital infrastructure building blocks to transition to subscription service delivery, providers can scale and capture new value from adjacent markets around the world. This turns a declining market into a much larger—and rapidly growing—opportunity. The number of tech manufacturing companies that have recently announced as a Service or flexible consumption models clearly exemplifies this opportunity.

Digital providers

Digital providers are fighting to support the rapid growth in demand, which is fueled by enterprises' struggles to build their own services. In order to quickly scale their capacity, providers have taken a different approach, as they started with a distributed infrastructure that stretched across multiple regions. To differentiate their capabilities, they bring infrastructure to strategic points at the edge for economies of aggregation, close to the densest population centers. Streaming media, gaming, SaaS and Technology as a Service providers are all using Platform Equinix to build their digital presence.

Network providers

Network providers have leveraged Platform Equinix for decades. But as bandwidth requirements scale and margins shrink, they must drive new forms of innovation to support their business. With the growth of AI and Machine learning, 5G, IoT, and hundreds of other new use cases, rigid technology stacks no longer work. Integrating hyperspecialized ecosystem partners into flexible solutions delivered at the metro edge is the new model for success. Leading network providers are using the same digital infrastructure components to deliver new services in entirely new ways—and to much larger markets than they had access to before.

The components of digital infrastructure

These are the keystone patterns leaders follow to solve limitations and unlock digital growth.

Digital Edge

User Experience
Combine local compute with on-demand capabilities at strategic edge locations, bringing digital infrastructure closer to population and business centers and optimizing user experience.

Smart Edge
Bring HPC infrastructure to the edge and aggregate data across devices, users and partners for AI-driven analysis without core backhauling. Combine platform capabilities with technology partners.

Secure Edge
Extend the security perimeter by deploying secure hubs across distributed edge locations, bringing services closer to users, customers and business locations.

Digital Ecosystems

Commercial Services
Automate workflows and scale service delivery by subscribing on demand to the highest density of partners in strategic locations.

Data Marketplaces
Provision digital services near high-value data marketplaces to access new data sources, reduce risk, lower transfer fees and leverage economies of scale.

SaaS Integration
Deploy local infrastructure on demand while integrating innovative SaaS tools to streamline workflows and develop new offerings.

Digital Core

Dedicated Cloud
Combine dedicated compute and multicloud access. Colocate and integrate with hybrid infrastructure and iPaaS for workload-optimized, hyperconverged infrastructure (HCI).

Cloud Adjacent Data
Subscribe to on-demand storage across distributed infrastructure, with interconnection for high-volume data flows.

Network Modernization
Establish hubs in locations maximizing efficient traffic flows—closest to the highest densities of partners and providers.

While each organization's goals, needs and pain points are unique, the digital transformation steps outlined in Chapters 3–5 prove to be the common denominator between all leaders.

EQUINIX

CHAPTER 3

Interconnect the digital core

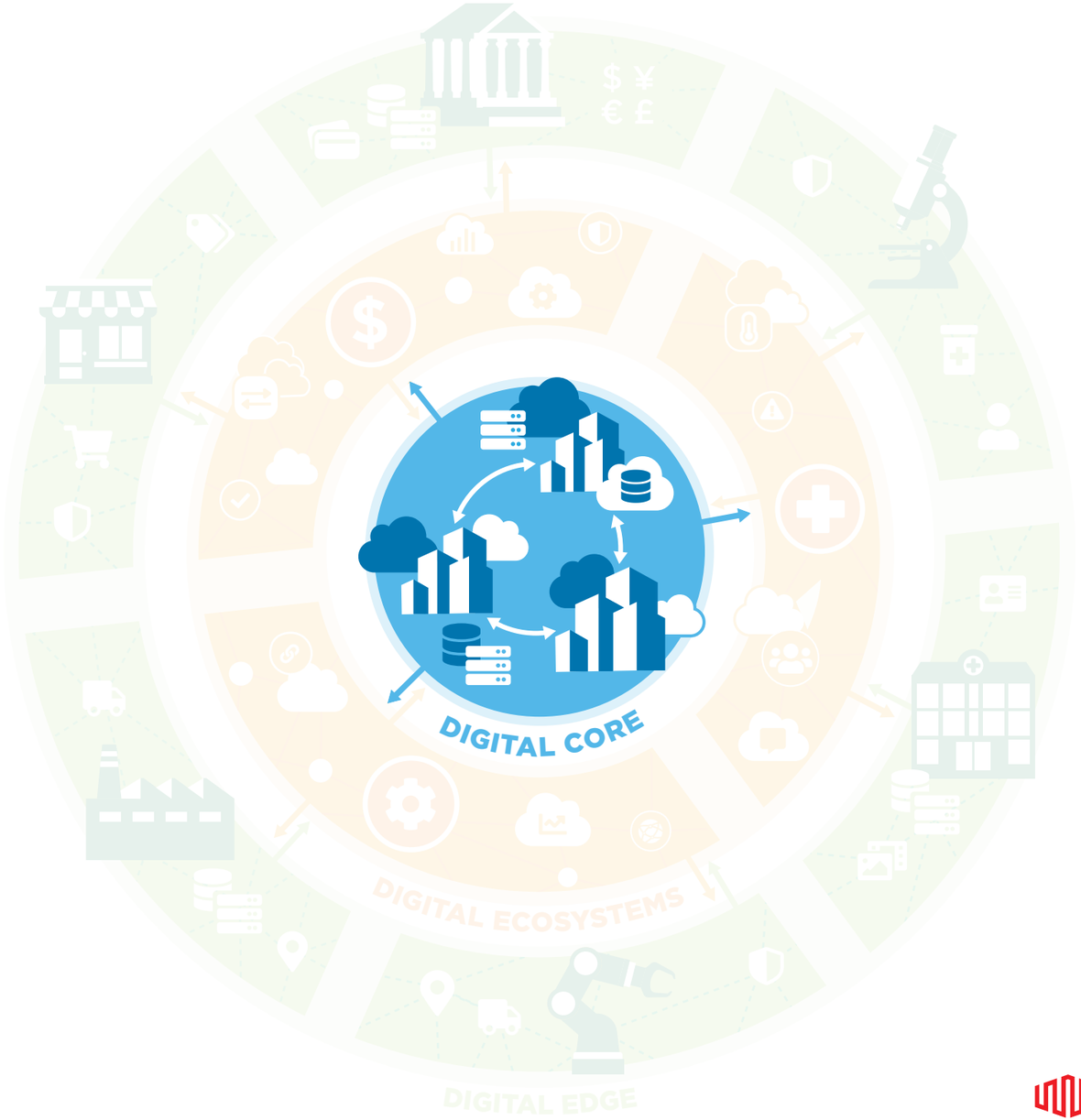
EQUINIX

Interconnect the digital core

Digital leaders started their transformation knowing that they needed to do two things: They needed to establish a digital presence, and they needed to identify how they would use this presence to produce scalable digital services wherever needed.

This digital presence spans multiple distributed aggregation points in locations with the largest volume of networks, cloud and IT services. By interconnecting these locations into a digital core, leaders use economies of aggregation to streamline connectivity, optimize multicloud access, efficiently connect regions and broker the most cost-effective options in each location.

This process has enabled businesses to save or avoid hundreds of millions of dollars in network transport costs each year. (In many cases, they've seen an ROI in 6–12 months.[1]) This helped them unlock trapped capital to reinvest in software-oriented solutions and technology-driven business models as well as leverage subscription-based services to manage growth.



[1] The Equinix Research Group, 2023. This group is comprised of our Data Science, Market Analysis and Digital Strategy teams within Equinix.

EQUINIX

Benchmark data for the digital core

Our benchmark data in the GXI shows how quickly these businesses transformed.[2] In the last two years alone, digital leaders grew their distributed core digital infrastructure 4x faster than traditional businesses, showing a 40% compounded global annual growth.

Service providers

Service providers average eight core locations with 380 multicloud adjacent equivalent cabinets and 670 interconnections total.

SaaS companies

Half of the top 25 SaaS companies average eight locations with 600+ cabinets and 260+ interconnections total.

Enterprises

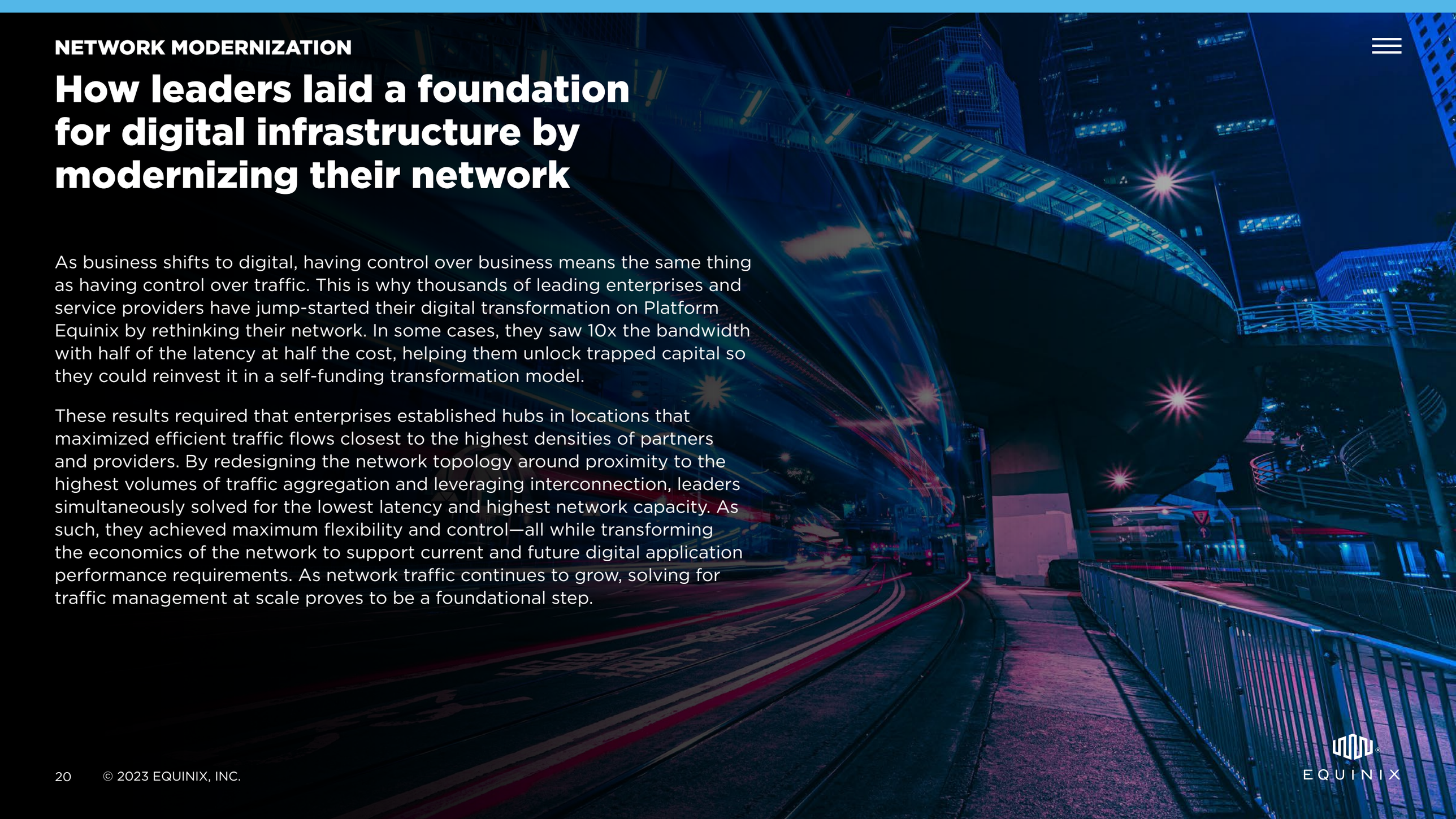
Enterprises average six core locations with 130 multicloud adjacent equivalent cabinets and 150 interconnections total.

To solve the challenges of interconnecting a digital core, these leaders focused on three areas: network modernization, cloud adjacent data and dedicated cloud.

[2] Find more information on Equinix benchmarks and analytics in the GXI. Data sourced from GXI 2023.

EQUINIX

How leaders laid a foundation for digital infrastructure by modernizing their network



As business shifts to digital, having control over business means the same thing as having control over traffic. This is why thousands of leading enterprises and service providers have jump-started their digital transformation on Platform Equinix by rethinking their network. In some cases, they saw 10x the bandwidth with half of the latency at half the cost, helping them unlock trapped capital so they could reinvest it in a self-funding transformation model.

These results required that enterprises established hubs in locations that maximized efficient traffic flows closest to the highest densities of partners and providers. By redesigning the network topology around proximity to the highest volumes of traffic aggregation and leveraging interconnection, leaders simultaneously solved for the lowest latency and highest network capacity. As such, they achieved maximum flexibility and control—all while transforming the economics of the network to support current and future digital application performance requirements. As network traffic continues to grow, solving for traffic management at scale proves to be a foundational step.

Why and how to modernize a network

The benefits of a modernized network[3]

45% average latency reduction and 60% transport cost reduction

A modernized network allowed leaders to meet performance and responsiveness requirements in the most efficient way—which is how providers do it.

Over 5x improved market access

These leading organizations were able to both access and offer services as well as deliver business in more locations than ever before.

ROI achievement in 6–12 months

Using a self-funding model, businesses reinvested trapped capital and funded their next transformation step.

Leaders took these five steps to achieve a modernized network:

1

Establish a point of digital presence in the locations with the highest traffic.

2

Locally interconnect cloud infrastructure and traditional infrastructure.

3

Segment traffic flows for corporate, commercial and third-party services.

4

Distribute hubs across core locations to rewire the global backbone and service fabric.

5

Extend the service fabric and internet perimeter into strategic edge locations.

[3] The Equinix Research Group, 2023.

How leaders transformed their data strategy

The foundational IOA topology of network modernization is augmented with an edge-to-cloud data strategy. Leaders start with what data goes into or stays in the cloud, what will be cloud adjacent but accessed by multiple clouds, and what will use other cloud-agnostic data and storage services from the technology ecosystem.

Performance in data processing (cost per IOP) and data transfer windows are becoming critically important for business operations and revenue generation. The goal is to retain end-to-end control over data while minimizing data transport costs and cloud egress fees. To achieve this, leaders subscribe to on-demand storage infrastructure across distributed points—behind zero-trust network security—with private interconnection configured for high data transport. That means they can move more data with the same bandwidth.

When performance matters, hardware-specialized storage and database services can provide far higher IOPs for far less cost per IOP. With low-latency proximity, there is no need to either duplicate data across multiple clouds and SaaS services or transport data over the WAN or internet.

This level of multicloud data control enforces a common, transparent access model across processes and partners that simplifies data compliance and governance.

Why and how to go cloud adjacent

The benefits of cloud adjacent data[4]

10x faster backup and data transfer

Leaders accelerated data transfer through direct fabric connectivity and optimized networking.

3–4x lower costs to move data in and out of clouds

These organizations gained cloud adjacent workload protection and mobility to any cloud—without the penalty of unforeseen costs.

20x data processing at 1/2 the price per transaction

As businesses optimized infrastructure for high-performance workloads, they improved efficiency.

Leaders took these five steps to solve for data management in a hybrid model:

1

Implement cloud adjacent storage capacity.

2

Apply cloud-agnostic data governance, sovereignty and policy controls.

3

Plan data protection, encryption, replication (erasure coding) and digital rights management.

4

Optimize data locality (that is, where to collect, aggregate and access data) for efficiency.

5

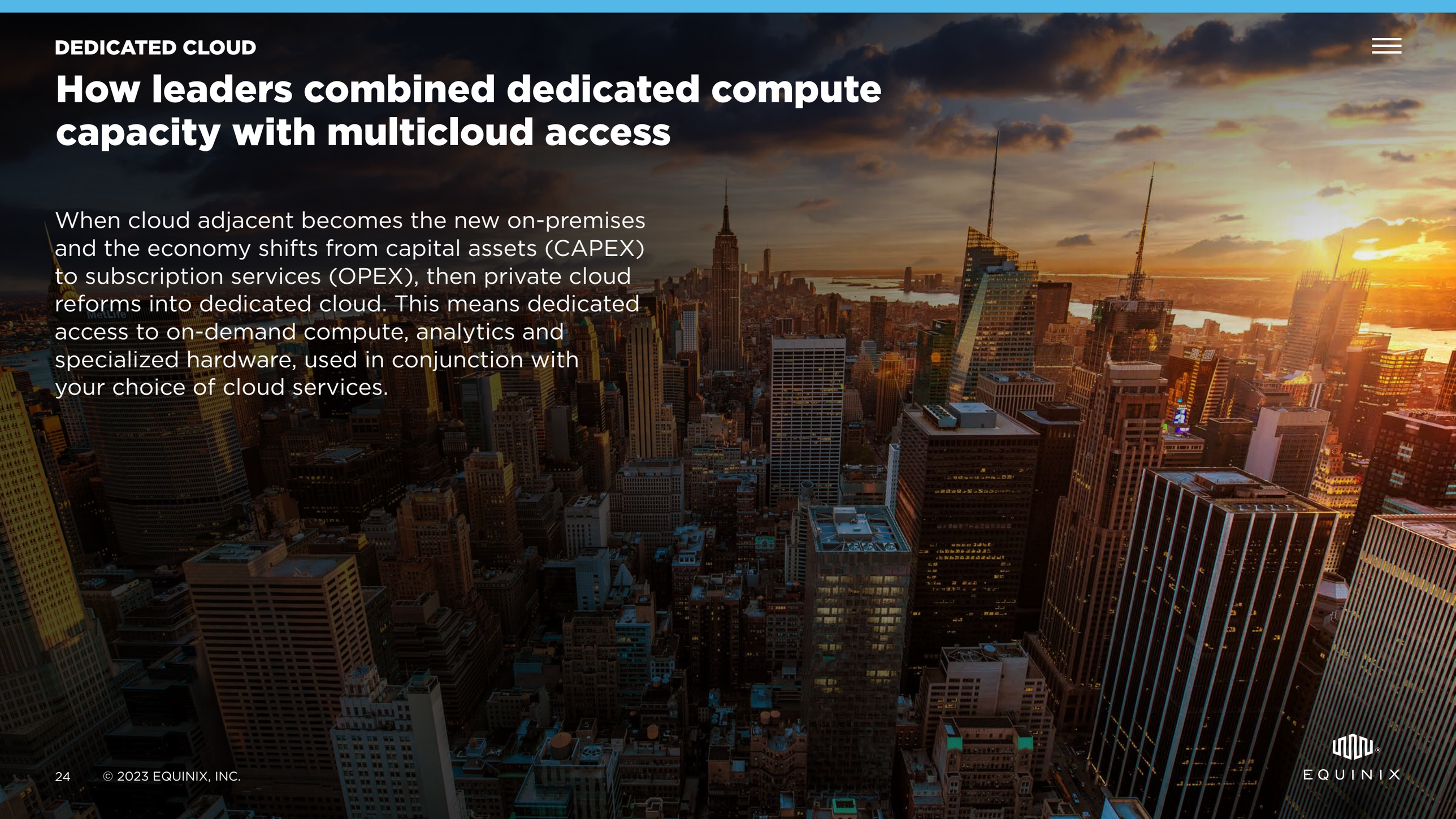
Leverage hyperspecialized services such as AI/ML, HPC and HCI for performance.

[4] The Equinix Research Group, 2023.

DEDICATED CLOUD

How leaders combined dedicated compute capacity with multicloud access

When cloud adjacent becomes the new on-premises and the economy shifts from capital assets (CAPEX) to subscription services (OPEX), then private cloud reforms into dedicated cloud. This means dedicated access to on-demand compute, analytics and specialized hardware, used in conjunction with your choice of cloud services.



Why and how to evolve to dedicated cloud

The benefits of dedicated cloud[5]

30–40% operational savings

Businesses reduced costs by eliminating cloud connectivity overhead and shifting fixed CAPEX to flexible OPEX models.

80% performance improvement

Purpose-built, workload-optimized HCI provided significant performance advantages over generic virtualized infrastructure—at a reduced cost.

5–10x reduced deployment time

Leaders achieved faster deployment through automated digital infrastructure provisioning.

Leaders took these five steps to solve for dedicated cloud:

1

Avoid future IT debt by colocating on-demand dedicated compute.

2

Integrate that compute with hybrid infrastructure and iPaaS.

3

Run cloud-agnostic application performance and availability management.

4

Orchestrate resources with a DevOps toolchain integration.

5

Scale hybrid workloads across multiple cloud domains.

[5] The Equinix Research Group, 2023.

Get the help you need to interconnect your digital core

Our customers have quickly established their digital presence by leveraging Platform Equinix to solve private and public solutions across multiple cloud regions, gaining global access to 3,000+ cloud and IT service providers, 2,000+ network providers, and the top tech partners and system integrators.

Case study

Two years into a single cloud migration strategy, a leading financial service provider was struggling to meet the rate of financial transactions, maximize application performance and control infrastructure costs. The company provisioned virtual networking services on the Equinix platform to rapidly establish a presence in the core locations it needed, deployed a cloud adjacent database, optimized infrastructure and implemented a use case–based network to improve backups between sites.

As a result, it reduced network and cloud access costs by millions of dollars, increased transactions to a single database by 50x, lowered the cost per IOP by 50% and used jumbo frames to reduce backup windows by 5x. Then, having solved its core performance issues, it subscribed to additional compute and storage solutions from Dell directly through Platform Equinix to process customer insights.

Discover our partners

Platform Equinix offers digital services that you can both provision directly on the platform and subscribe to via our technology partners like Cisco, Dell, HP and Nvidia. Our ecosystem of managed service providers, system integrators and channel partners are also ready to help you accelerate your journey.

Visit the directory.

Try the platform now

Test-drive some of our virtual services today.

Learn how you can improve app performance with Equinix Metal®.

Transform your network and reduce complexity with Network Edge. Try it now.

Enable cloud networking with Equinix Fabric®.

EQUINIX

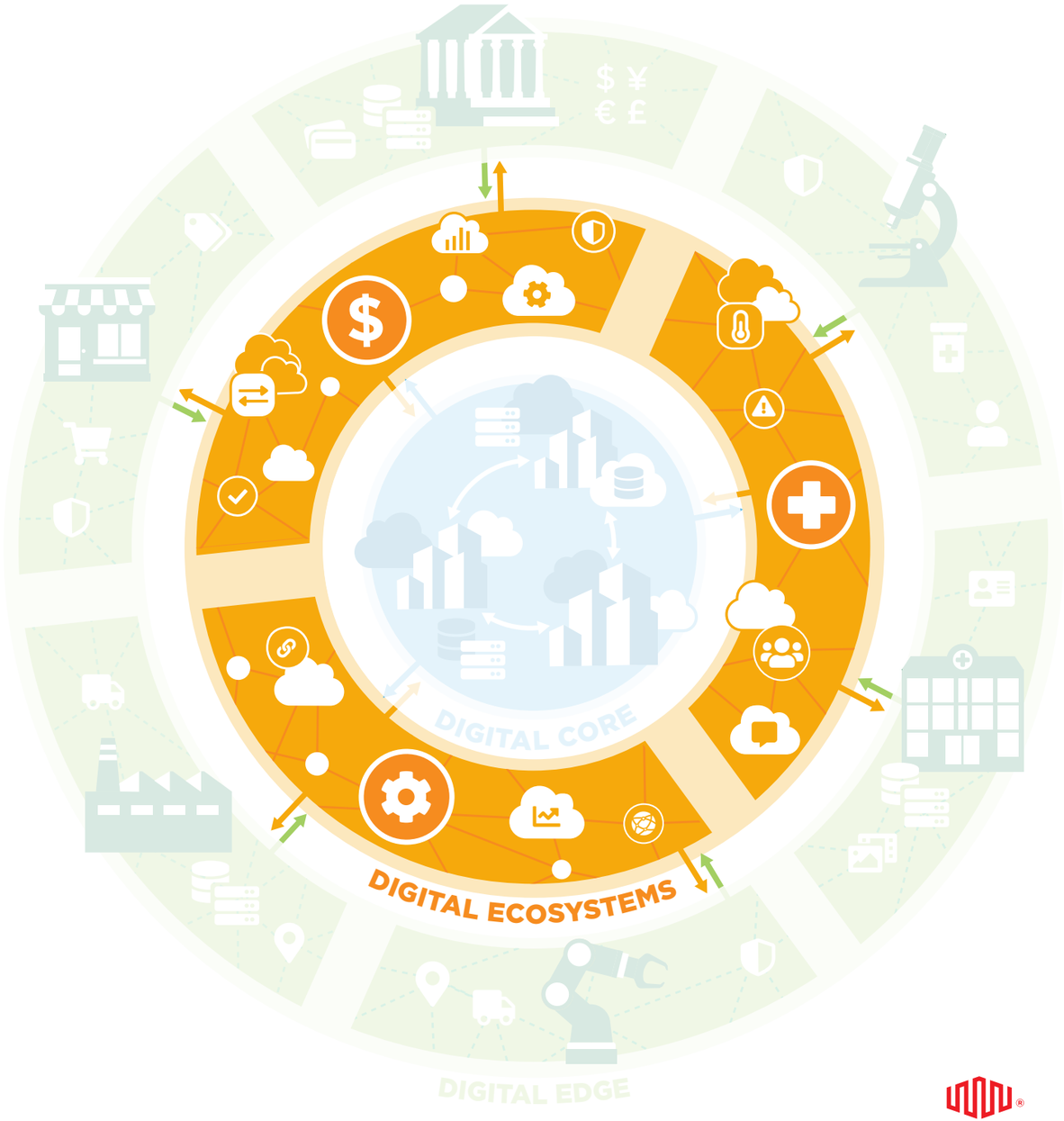
CHAPTER 4

Integrate with digital ecosystems

Integrate with digital ecosystems

Analyzing deployments from thousands of Equinix customers revealed a common pattern among the leaders who grew their digital services the fastest: After building an agile digital infrastructure with a strong digital core, they shifted their focus to integrating and delivering new digital services. Leveraging the digital core as their foundation, they were able to tap into the largest business ecosystems, which in turn enabled them to drive innovation and outpace the competition.

By combining direct digital ecosystem access with the power of their adjacent digital infrastructure, these leaders have been able to rapidly generate new value. This crucial combination gave them a gateway to new SaaS offerings, removed the risk that comes with having only a single vendor in the supply chain, transformed business partners into digital value chains and allowed them to monetize new offerings.



Benchmark data for digital ecosystems

Our benchmark data in the GXI shows that over the past two years, leaders introduced offerings 4.5x faster, accessed new markets in a fraction of the time spent by traditional businesses and scaled delivery with demand.[1] The GXI data also reveals the importance of ecosystem partnerships.

Service providers

Service providers interconnected with 100+ discrete partners, on average.

Enterprises and SaaS companies

Digital enterprises and cloud native SaaS companies directly interconnected with 30 partners, on average.

In addition, our analysis shows how these leaders solved the challenge of integrating digital ecosystems. They did it through the integration of SaaS, data marketplaces and commercial services.

[1] Find more information on Equinix benchmarks and analytics in the GXI. Data sourced from GXI 2023.

EQUINIX

How digital leaders integrated SaaS offerings to increase business value

Leading retail, healthcare, and content and digital media companies have leveraged the foundation they built on Platform Equinix to boost business value with SaaS integration. This foundation enabled them to efficiently scale access to SaaS applications and ecosystem providers, thereby lowering costs and accelerating their business.

They optimized SaaS workflows by deploying local digital infrastructure on demand; at the same time, they integrated the latest innovative tools from the widest range of SaaS providers available to streamline business functions and develop new offerings. By moving to an on-demand, subscription-based model, they shifted CAPEX to OPEX, unlocking trapped capital to allow for reinvestment into their digital growth.

Why and how to integrate SaaS

The benefits of SaaS integration[2]

4x faster introduction of new digital offerings

With a faster time to market, leaders laid the foundation for quicker growth and scalability.

30–60% reduction in process overhead

Leading companies increased business efficiencies, leveraging ecosystems for commoditized business functions.

Improved latency and risk reduction

As companies accessed SaaS applications locally across the service fabric, they improved latency, reduced risk and established a secure data exchange.

Leaders took these five steps to integrate SaaS:

1

Determine which SaaS and Technology as a Service offerings can be leveraged to simplify operations and accelerate business.

2

Expand the digital presence to ensure direct access to any SaaS providers that are not already adjacent to the digital core.

3

Model the as a Service application and workflow components for the required performance, throughput and growth.

4

Move workflow components that are not offered as a service in proximity to SaaS providers.

5

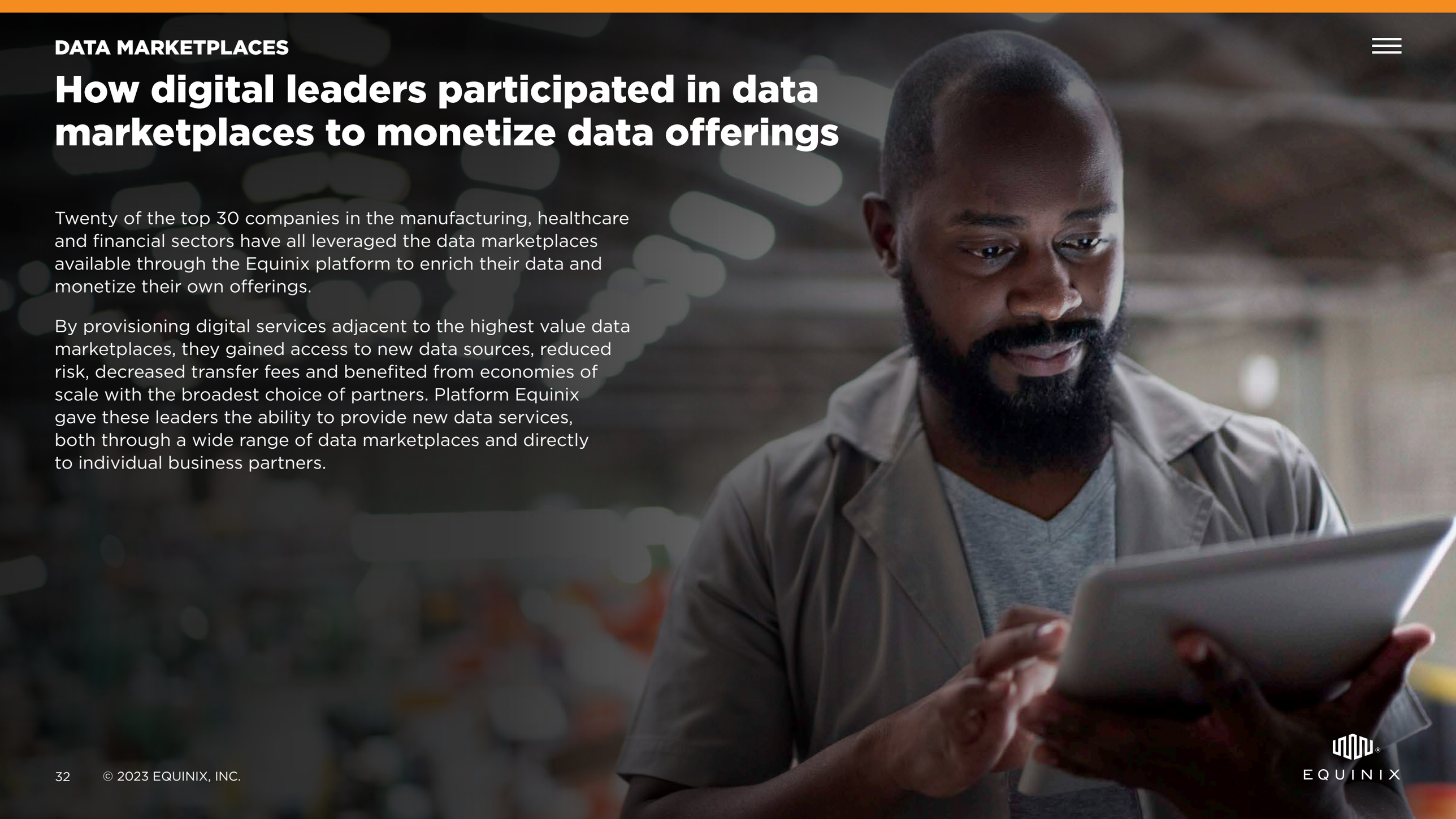
Apply identity and access controls, and synchronize integration templates across all regions for continuity and scale.

[2] The Equinix Research Group, 2023.

How digital leaders participated in data marketplaces to monetize data offerings

Twenty of the top 30 companies in the manufacturing, healthcare and financial sectors have all leveraged the data marketplaces available through the Equinix platform to enrich their data and monetize their own offerings.

By provisioning digital services adjacent to the highest value data marketplaces, they gained access to new data sources, reduced risk, decreased transfer fees and benefited from economies of scale with the broadest choice of partners. Platform Equinix gave these leaders the ability to provide new data services, both through a wide range of data marketplaces and directly to individual business partners.



Why and how to integrate data marketplaces

The benefits of data marketplace integration[3]

40–60% increased data quality

Digital leaders aggregated high-value, real-time data feeds for actionable insights through a robust data marketplace.

5x faster response to meet demands

Digital leaders gained the flexibility to adjust services based on their needs.

5–10x improved data monetization

With direct access to the densest populations of commercial technology and data marketplaces, organizations could deliver their own data services.

Leaders took these five steps to leverage data marketplaces:

1

Identify the data sources that the organization needs and/or uses, including where they are.

2

Establish a point of digital presence in proximity to those sources.

3

Determine interconnection needs to meet frequency, volume and application response requirements.

4

Manage growth by staging data and processing applications locally.

5

Expand services to subscribers for data monetization.

[3] The Equinix Research Group, 2023.

COMMERCIAL SERVICES

How leaders built new value chains leveraging commercial ecosystems

Leading digital providers automated business processes and scaled service delivery platforms by leveraging their access to technology and business communities of interest—like payments, logistics, connected vehicle, fintech, healthtech and other digital marketplaces—on Platform Equinix.

They ensured the lowest latency and highest performing digital services through API-driven collaboration, directly connecting with the highest density of commercial partners in strategic locations. Through an on-demand, subscription-based model, they shifted CAPEX to OPEX, unlocking trapped capital to invest into their digital growth.

Why and how to integrate commercial ecosystems

The benefits of commercial ecosystem integration[4]

20x increased data exchange

With low-latency, automated, API-driven collaboration, leaders easily scaled their digital collaboration.

2–5x faster access to new markets

With faster market access and a rich partner ecosystem, leaders were well-positioned to meet changing market requirements.

CAPEX to OPEX shift to leverage on-demand and subscription services

Companies improved efficiencies and unlocked trapped capital with a change to flexible models.

Leaders took these five steps to integrate commercial ecosystems:

1

Identify digital marketplaces, partners and communities that are strategic to the business.

2

Expand the digital presence in order to locally and directly participate in these ecosystems.

3

Locally connect either physically or virtually for the lowest risk and highest performance.

4

Automate flows, capacity provisioning and fault tolerance to scale with availability.

5

Incorporate other requirements like supply chains, logistics and rental networks as the business evolves.

[4] The Equinix Research Group, 2023.

Get the help you need to integrate with digital ecosystems

The leaders are accelerating the pace at which they launch new digital services. Across a variety of industries, we've seen the fastest moving organizations transform their IT cost centers into revenue-driving business infrastructures. But they're not doing it on their own. Moving at this pace requires a virtualized, agile infrastructure with access to the richest ecosystems. They achieved this speed with the on-demand capabilities, technology providers and delivery partners found on Platform Equinix.

Case study

A leading manufacturer was trying to collect the necessary data to ensure product quality. It was only after the manufacturer tapped into the Equinix platform that it was able to access data feeds from its distributors and establish a data marketplace.

Leveraging subscription-based high-performance infrastructure to process insights, it turned its data analysis into a new AI digital service to help its distributor predict the failure rate, reduce downtime and proactively manage inventory. Instead of forcing the manufacturer to build this service on its own, Platform Equinix enabled the direct access to the technology providers and supply chain partners it needed to establish this service as a new revenue stream. As a result, our customer was able to turn its challenges into an opportunity and launch to the front of the market.

Discover our partners

Businesses no longer need to solve their transformation challenges in-house. Platform Equinix offers digital services from leading technology partners like Dell Apex, HPE GreenLake and many others that can help your organization optimize access to SaaS applications and scale compute and storage as you build your digital value chains. Our ecosystem of managed service providers, system integrators and channel partners can also help you accelerate your journey.

Visit the directory.

Try the platform now

Test-drive some of our virtual services today.

Learn how you can improve app performance with Equinix Metal.

Transform your network and reduce complexity with Network Edge. Try it now.

Enable cloud networking with Equinix Fabric.

CHAPTER 5

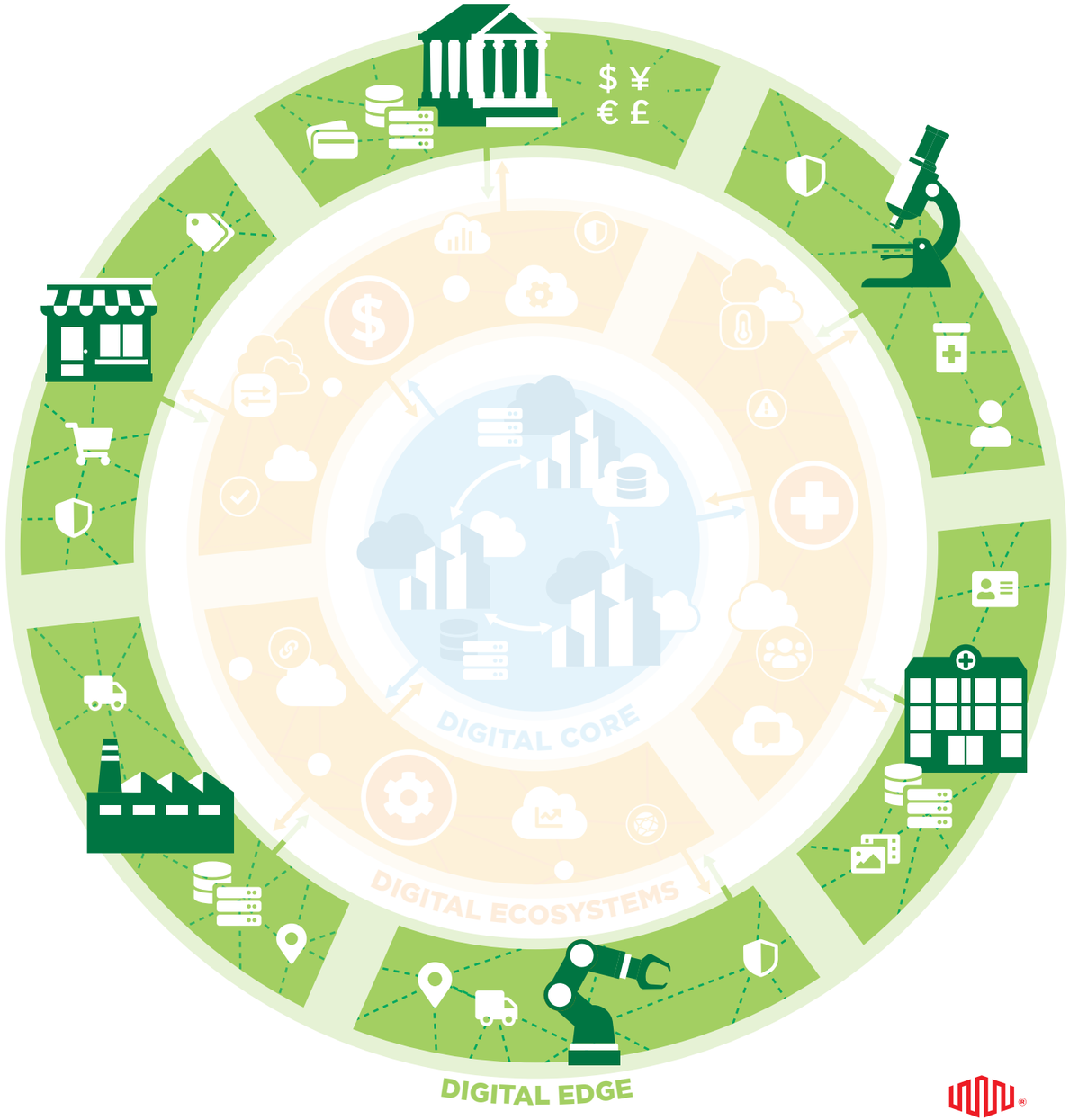
Interact at the digital edge

EQUINIX

Interact at the digital edge

Establishing a digital presence alone isn't enough to compete today. As traditional businesses transformed to become digital providers, we analyzed thousands of deployments and saw that after companies built their digital presence, they then faced the challenge of mastering digital delivery. The leaders solved this by bringing their digital infrastructure to the locations where they had the greatest digital engagement. Supporting dynamic mobile workforces, developing business-relevant insights and providing differentiated experiences required these leaders to bring their infrastructure to the digital edge.

By doing so, the leaders have captured significant opportunities. For instance, they can adapt to rapidly changing market conditions by establishing secure locations for edge digital infrastructure. They have also been able to scale edge processing, develop insights directly where they are required, and deliver needed performance and security to their users.



EQUINIX

Benchmark data for the digital edge

Our benchmark data from the GXI shows how quickly these leaders moved digital infrastructure to secure edge locations.[1] This data reveals that while the majority of digital infrastructure continues to support the digital core, 30% of digital infrastructure has shifted to the edge. This cross-industry trend has had momentum with both enterprises and service providers.

Service providers

Service providers interconnected with 100+ discrete partners at the edge, on average.

Enterprises

Enterprise leaders averaged four edge locations with 50 cabinets total.

SaaS companies

The top SaaS providers averaged four edge locations with 130+ cabinets and 55+ interconnections total.

Furthermore, our analysis shows how these leaders solved the challenge of interacting at the digital edge. They focused on the secure edge, smart edge and user experience.

[1] Find more information on Equinix benchmarks and analytics in the GXI. Data sourced from GXI 2023.

EQUINIX

How leaders extended their security perimeter by establishing a secure edge

Leaders across industries have all established secure locations at the edge, allowing them to bring digital services closer to where they're needed.

Leveraging Platform Equinix and a wide range of partner services, they have transformed last mile networking to access users, customers and places of business securely—and they've done it with reduced costs. This security didn't come at the expense of productivity, either. Using on-demand capabilities, they deployed secure hubs across distributed edge locations.

Why and how to create a secure edge

The benefits of building a secure edge[2]

5–10x+ edge performance improvement

Leaders saw an 80% reduction in traffic volume over the open internet.

Reduced risk through locally established security controls

A decreased threat surface through secure access helped companies improve control and visibility and simplified governance.

Secure edge deployment in hours instead of months

Leaders optimized last mile transport, improved flexibility and created scalable threat management.

Leaders took these five steps to create a secure edge:

1

Identify edge locations in proximity to remote offices, mobile workforces and digital consumers.

2

Determine traffic patterns and provision network services to secure edge access and segment traffic based on its trust profile.

3

Standardize, orchestrate and monitor edge access control policies.

4

Offload low-value traffic at the edge.

5

Extend the secure edge as needed (for example, for new or emerging markets).

[2] The Equinix Research Group, 2023.

How leaders built a smart edge to develop new insights through AI-driven analytics

Leading manufacturers and digital providers have optimized their ability to glean business insights by bringing HPC infrastructure directly to the edge, where data needs to be analyzed.

Leveraging a smart edge, they aggregated data across devices, users and partners, enabling AI-driven analysis without having to backhaul all their data to their core. By combining the power of Platform Equinix's capabilities with available technology partners, they could tailor their edge infrastructure, reduce costs, scale on demand and provide real-time intelligence to accelerate their business.

Why and how to build a smart edge

The benefits of building a smart edge[3]

60% reduction in average data transfer costs across ecosystem partners

Leaders brought compute to edge data to efficiently scale insight development and business collaboration.

20–30x increased data processing at the edge

This increase enabled low latency, automation and API-driven collaboration.

2–5x faster access to new markets

Businesses accelerated time to value, leveraging on-demand and subscription services while shifting from CAPEX to OPEX.

Leaders took these five steps to build a smart edge:

1

Identify the nearest edge locations to the business operations being digitized.

2

Localize operations technology workloads into these edge locations, thereby reducing technology in the field.

3

Automate local provisioning of storage and compute capacity to meet data processing requirements.

4

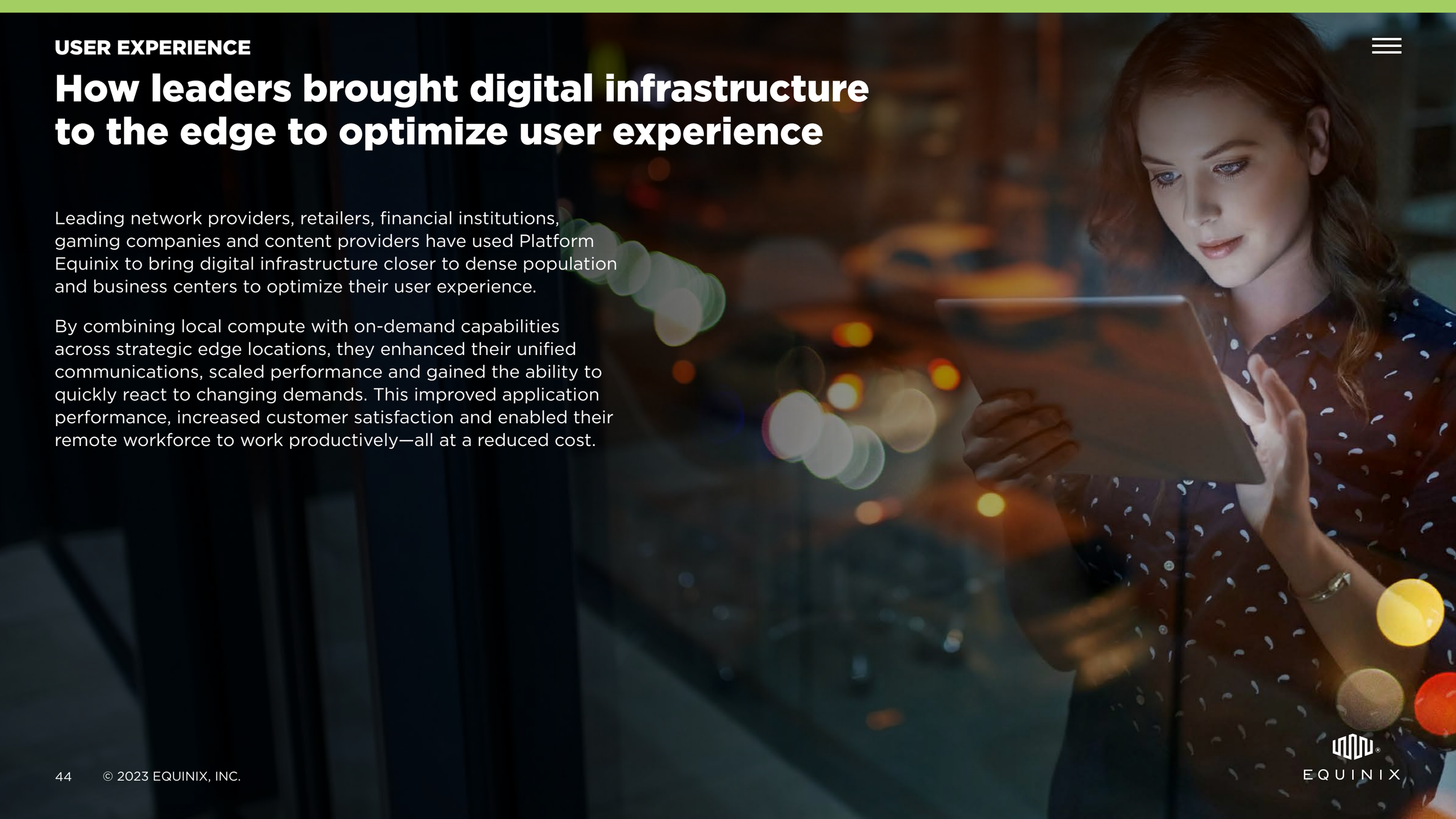
Balance analytics and specialization in edge locations instead of sending these workloads to the core.

5

Determine alternate routes to the core to support business resiliency.

[3] The Equinix Research Group, 2023.

How leaders brought digital infrastructure to the edge to optimize user experience



Leading network providers, retailers, financial institutions, gaming companies and content providers have used Platform Equinix to bring digital infrastructure closer to dense population and business centers to optimize their user experience.

By combining local compute with on-demand capabilities across strategic edge locations, they enhanced their unified communications, scaled performance and gained the ability to quickly react to changing demands. This improved application performance, increased customer satisfaction and enabled their remote workforce to work productively—all at a reduced cost.

Why and how to optimize user experience

The benefits of optimizing user experience[4]

5–10x improved customer response time

Taking advantage of their proximity to users and customers with local access, leaders leveraged their ability to perform data analysis in real time.

80%+ faster time to market

Businesses established scalable infrastructure for an unpredictable, growing workforce and other business demands.

Increased bandwidth at a reduced cost per user

Direct connectivity to the largest choice of network providers enabled leaders to select the providers closest to their users and devices.

Leaders took these five steps to optimize the user experience:

1

Identify which edge locations have a concentration of remote employees and customers.

2

Manage the last mile access leveraging SD-WAN and 5G.

3

Bring workloads that directly impact user experience closer to the edge.

4

Implement or leverage hyper-specialized solutions designed to optimize those experiences.

5

Instrument, monitor and measure user satisfaction.

[3] The Equinix Research Group, 2023.

Get the help you need to interact at your digital edge

The fastest digital infrastructure growth is at the edge. Leaders in industries like manufacturing, financial services, retail, and content and digital media have shifted digital infrastructure to the edge to securely enable their remote workforce, develop crucial insights and improve the customer experience. They adapted to rapidly changing demands and brought infrastructure to their users by leveraging access to the locations, partners and providers on the Equinix platform.

Case study

A Fortune 1000 manufacturer was having difficulties meeting the pressures that the global pandemic placed on its workforce and partnerships. Its edge architecture could not effectively scale for remote users or deliver the insights customers were demanding. That changed with Platform Equinix.

The manufacturer deployed virtual services from networking and security technology partners to distribute a secure edge presence. It used these locations to directly aggregate and process data from airlines, factories and operations fleets while delivering thousands of remote conference and VPN sessions to its users. The total solution increased bandwidth by 5x, provided $5 million in total savings and enabled the launch of a new digital service supporting intelligent operations at the edge.

Discover our partners

By leveraging solutions from partners like Check Point, Cisco and Fortinet directly through the platform, you can help your organization meet its edge goals. Platform Equinix offers digital services from leading technology partners who can help your organization establish a secure edge presence as well as bring compute and storage to where your users need it most. Our ecosystem of managed service providers, system integrators and channel partners can also help you accelerate your journey.

Visit the directory.

Try the platform now

Test-drive some of our virtual services today.

Learn how you can improve app performance with Equinix Metal.

Transform your network and reduce complexity with Network Edge. Try it now.

Enable cloud networking with Equinix Fabric.

EQUINIX

CHAPTER 6

Move forward with the power of Platform Equinix

Start your journey

Every organization is under pressure to adapt to disruption in this ever-changing digital world—and to not only survive, but thrive. As our analysis and examples in the last few chapters have shown, the organizations that succeeded have followed common patterns: They deployed digital infrastructure using a combination of core, ecosystem and edge, and they took specific steps that allowed them to identify opportunities for optimizing their infrastructure, saving costs and amplifying revenue.

But what brings it all together to transform digital infrastructure into competitive advantage and new business value? Deploying on a single platform: Platform Equinix. With the largest global ecosystem of partners and enterprises, Equinix can enable the innovations, experiences and optimized deployments to power your digital leadership.

This transformation is a journey, but you now have the guide that will lead you to success. With this information at hand, you can understand both what digital leaders have done to get ahead and how you can advance your own strategy to capture new market opportunities. It’s your chance to take the next step.

It’s time to invest in your digital infrastructure and get ahead in this new world

Provision virtual network services in minutes

See how you can modernize your network and deploy digital-ready infrastructure at the edge virtually with Network Edge.

LEARN MORE

Accelerate your strategy with partners

Discover the partners and providers that can propel your digital transformation strategy.

VISIT THE DIRECTORY

See how businesses like yours are solving these challenges

Explore our Digital Leader Series for insights on successful transformation strategies.

WATCH NOW

About Equinix

Equinix (Nasdaq: EQIX) is the world’s digital infrastructure company®. Digital leaders harness Equinix’s trusted platform to bring together and interconnect foundational infrastructure at software speed. Equinix enables organizations to access all the right places, partners and possibilities to scale with agility, speed the launch of digital services, deliver world-class experiences and multiply their value, while supporting their sustainability goals.

Questions?
Contact Us

Equinix.com/Contact-Us/Sales

EB_Leaders Guide to Digital Infrastructure_EN | 25116 - 20721 | v071823 | Q123

EQUINIX