



EQUINIX

# HEALTHCARE

## DIGITAL EDGE PLAYBOOK

Enabling healthcare organizations to thrive in a shifting landscape



## ABOUT THIS PLAYBOOK

### PURPOSE

This playbook offers healthcare organizations a strategy for successfully delivering outcome-based care while improving regulatory compliance and increasing revenue and profit. It outlines how a globally distributed interconnection platform can enhance collaboration, data sharing and data analysis, allowing healthcare organizations to deliver personalized patient experiences, reduce business risk and leverage healthcare ecosystems to meet emerging healthcare demands and identify partner opportunities.

### CHALLENGE

The demand for patient-centric care amid evolving regulations is disrupting the healthcare industry. Requirements for real-time, secure communications and data exchange with patients, partners, health ecosystems, and network and cloud providers is forcing healthcare companies to invest in new digital value chains and care delivery models. Traditional IT infrastructures cannot integrate the digital services, vast data sources and real-time analytics needed to deliver an omnichannel user experience or provide insights that improve patient outcomes and reduce costs.

### NEED








To remain viable and relevant, and to meet regulatory dictates for holistic, outcome-based care, healthcare organizations must re-architect their IT infrastructures for emerging digital technologies. A globally distributed interconnection platform allows providers to securely integrate digital services, enable dynamic partner collaboration, and leverage data for holistic and personalized care. The result is better patient experiences and improved outcomes.

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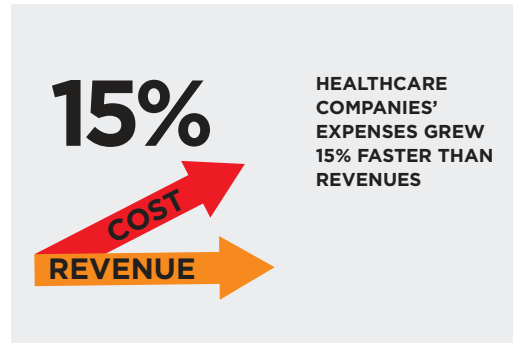
# EXECUTIVE SUMMARY

Rising costs, changing regulations and increasing demand for personalized care is forcing the adoption of new digital IT architectures

TRENDS AND INSIGHTS		CONSTRAINTS AND CAPABILITIES		PLAYBOOK		
TRENDS	INSIGHTS	CONSTRAINTS	CAPABILITIES	STRATEGY	ROADMAP	PLATFORM
						
<p>Changing regulations and patient expectations are forcing healthcare leaders to adopt a distributed architecture that can deliver holistic, outcome-based patient care.</p>	<p>Compounding Interconnection Bandwidth growth gives healthcare companies a unique opportunity to integrate ecosystem, cloud and analytic capabilities for better patient insights, experiences and outcomes.</p>	<p>Traditional healthcare delivery processes based on centralized infrastructure can't adjust to changing patient and regulatory requirements.</p>	<p>A distributed interconnection platform streamlines digital engagement processes, enabling the integration of partners, ecosystems and patient data for better patient experiences and outcomes.</p>	<p>Distributed business exchange points in proximity to participants allow healthcare organizations to deliver tailored offerings, standardize governance and gain timely insights to patients, partners and employees.</p>	<p>The business transformation roadmap offers a step-by-step, best-practice approach to interconnecting participants within a healthcare ecosystem.</p>	<p>Achieving digital transformation requires a global platform that can support three critical elements provided by Platform Equinix®.</p>

## MARKET TRENDS

Regulatory pressures are forcing a shift to outcome-based healthcare...



PWC, Top Health Industry Issues of 2018

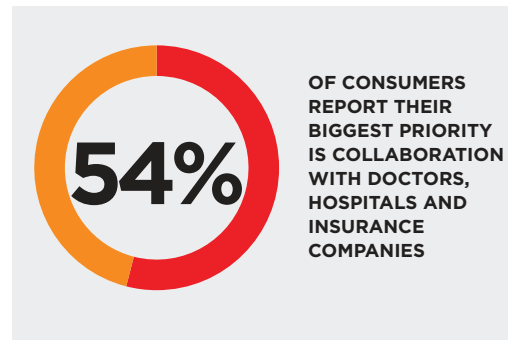
### Implications

- Healthcare companies struggle to improve patient experience and outcomes amid changing regulations and shrinking margins.
- Mergers and acquisitions are on the rise as organizations unite for cost-effective and accessible healthcare, accelerating the integration of digital and traditional services.

### Summary

Healthcare organizations are embracing digital transformation in response to changing regulations, shrinking margins and patient demand for greater control of provider interactions, which technology-savvy new entrants are poised to address. Dynamic IT infrastructures that can quickly and simply integrate new technologies and access a healthcare ecosystem of partners, clouds and patients for mutual benefit will allow providers to deliver targeted, compliant and cost-effective healthcare.

...while patients demand greater control over decisions throughout the continuum of care...

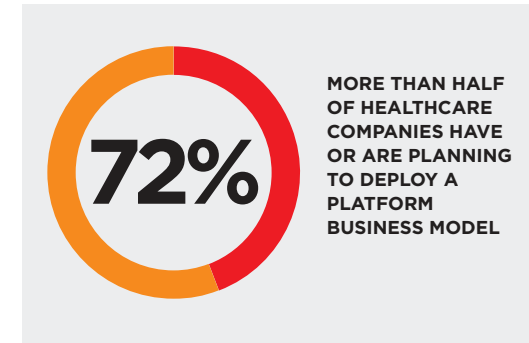


PWC, Top Health Industry Issues of 2018

### Implications

- Providers must deliver a spectrum of patient care, requiring seamless access to data and real-time analytics.
- Healthcare organizations unable to deliver insights across a web of people, technologies and ecosystems are vulnerable to tech-savvy entrants who can.

...requiring a new digital architecture that interconnects healthcare ecosystem participants.



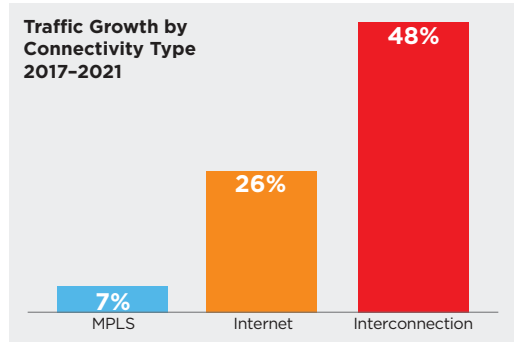
IBM, Incumbents Strike Back—2018

### Implications

- Digital healthcare tools are proliferating, along with multi-sourced data, requiring greater interconnection among disparate systems.
- Healthcare providers must re-architect IT to access the apps, BI, data, analytics, security and clouds for smart healthcare and create a platform on which to grow revenues and profits.

# INTERCONNECTION INSIGHTS

Interconnection Bandwidth\* is projected to outpace growth of internet traffic...



Equinix, The Global Interconnection Index Volume 2

## Opportunity

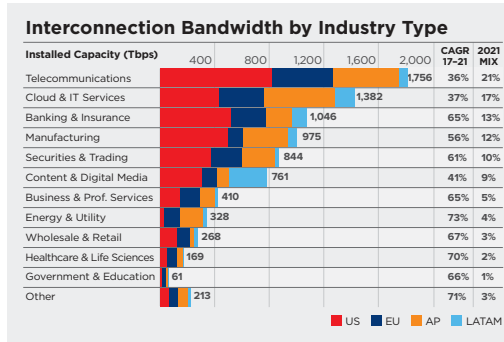
Interconnection, or the ability to privately exchange data between key business partners, is required to scale digital business. Healthcare companies are leveraging this trend by establishing distributed, private traffic exchange and control points near partners, ecosystems and patients.

## Summary

Global Interconnection Bandwidth is expected to grow at 2x the rate of internet traffic as organizations shift to interconnection as the standard for direct, secure business exchange. Compounding Interconnection Bandwidth growth in the healthcare and life sciences industries creates an opportunity for healthcare leaders to build exchange points on a distributed platform proximate to patients, partners and ecosystems. The result is greater patient insights, better user experience and effective, outcome-based patient care.

\* Interconnection Bandwidth is the total capacity provisioned to privately and directly exchange traffic with a diverse set of counterparties and providers at distributed IT exchange points.

...with healthcare and life sciences seeing 70% year-over-year growth in Interconnection Bandwidth...

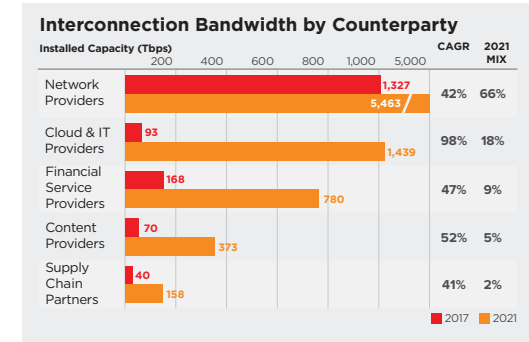


Equinix, The Global Interconnection Index Volume 2

## Opportunity

Direct and secure interconnection in distributed colocation facilities enables healthcare organizations to integrate digital technologies with existing IT systems. Strategic interconnection between providers, data, networks and clouds allows companies to securely leverage data at the digital edge.

...as the rate enterprises connect to cloud and IT providers increases at a 98% CAGR.



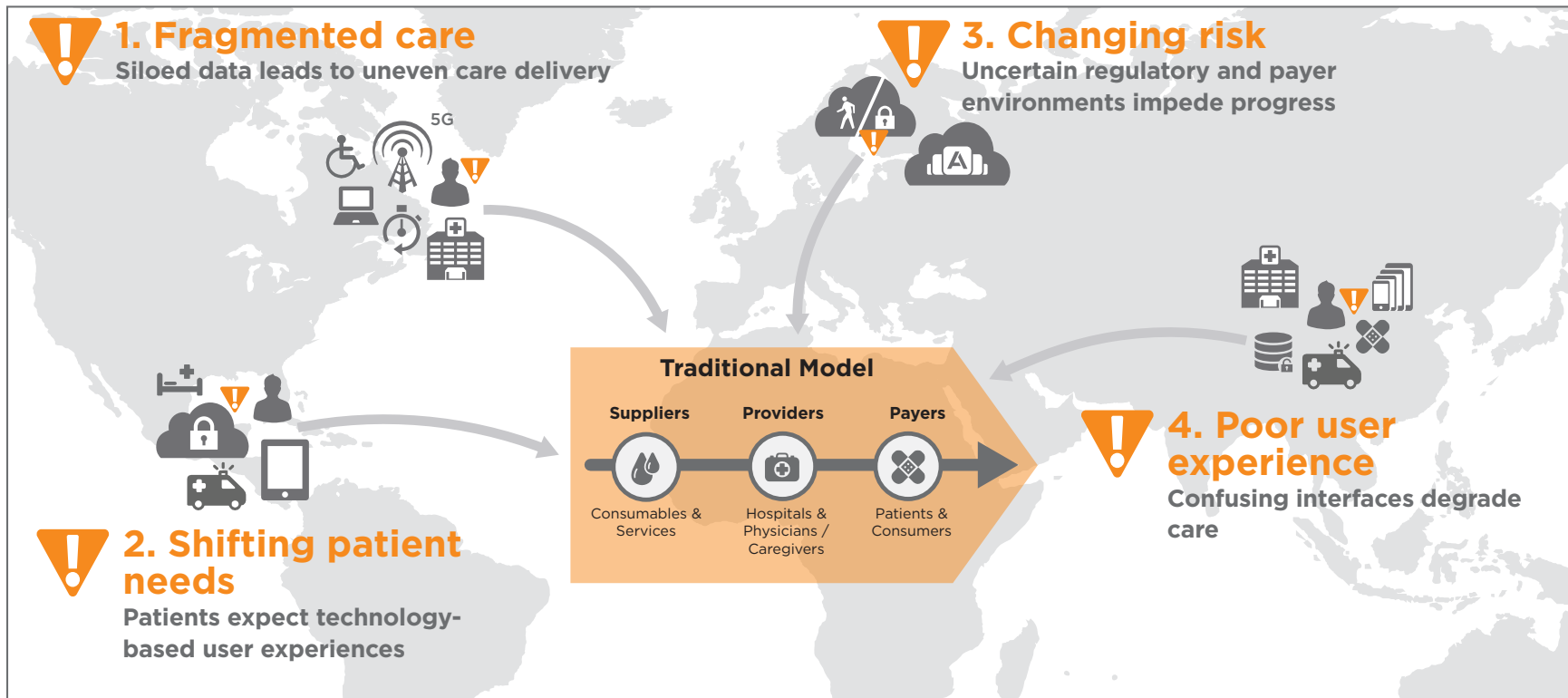
Equinix, The Global Interconnection Index Volume 2

## Opportunity

Interconnection to cloud and IT providers for enterprises is expected to grow by 98% between 2017-2021. Healthcare companies can leverage interconnections to these service providers to speed the delivery of high-performance, value-added solutions and services to patients.

# CURRENT-STATE CONSTRAINTS

Healthcare organizations with traditional infrastructures struggle to meet regulatory and payer requirements for targeted, outcome-based care

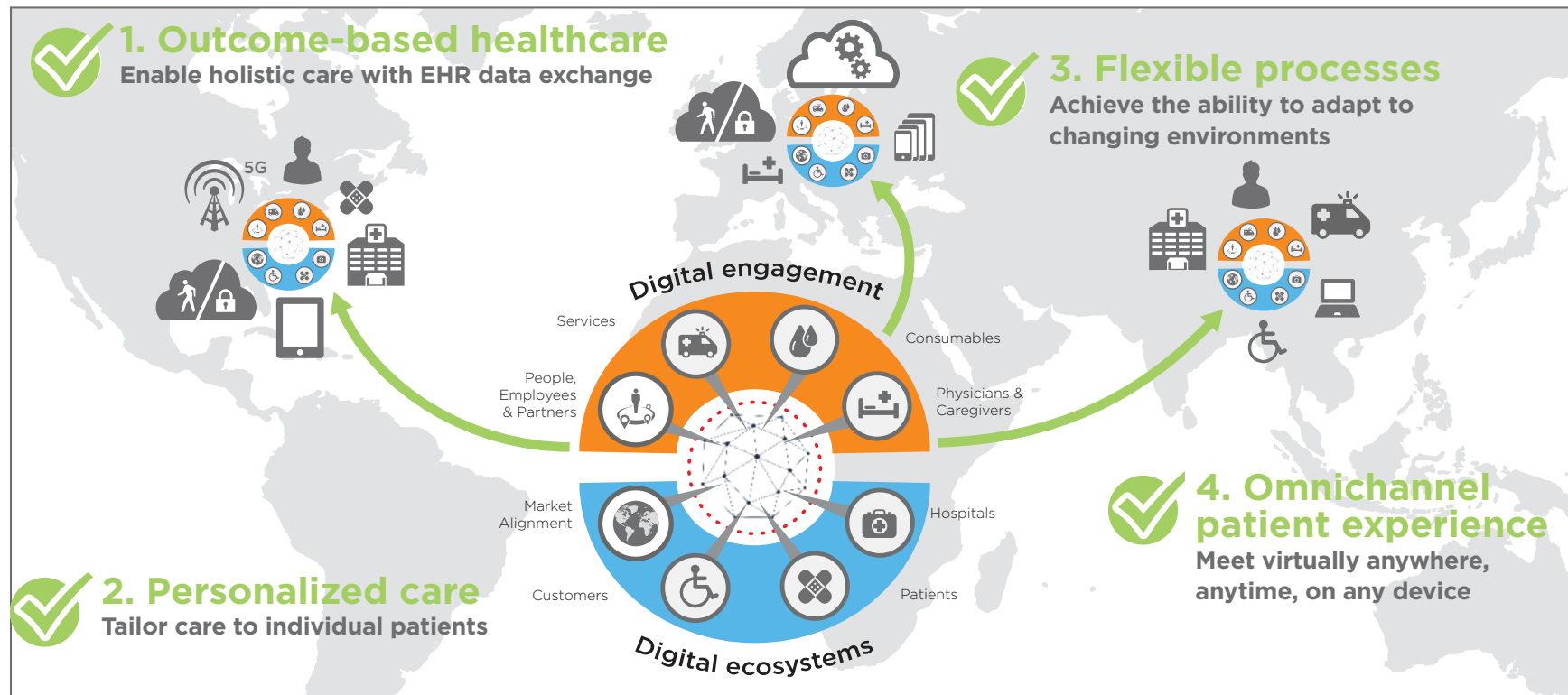


## Summary

Healthcare companies are limited by siloesd data that results in inconsistent care. Patient expectations and needs are increasingly shifting to technology-based experiences. Changing regulatory and payer requirements increase risk, while the inability to support omnichannel, real-time interactions between patients, doctors and medical records results in poor user experience. These factors can degrade patient experiences and outcomes.

# FUTURE-STATE CAPABILITIES

An optimized IT infrastructure enables the delivery of efficient, compliant, outcome-based care



## Summary

A distributed, interconnected digital platform allows healthcare companies to seamlessly access electronic health records and deliver holistic, personalized care. By securely and privately interconnecting providers with patients, partners, health ecosystems and regulators, providers can adapt to changing environments, reduce risk and support real-time, omnichannel patient experiences.

# STRATEGY

Architecting for digital business requires an interconnection-first approach

## Summary

**Healthcare organizations** can improve patient experiences and reduce pricing and competitive pressures by embracing new digital capabilities. A distributed platform allows them to increase engagement, standardize processes and expand the value chain for superior outcomes.

**Network, cloud, SaaS, content and other service providers** enable new platform capabilities and information exchanges by deploying solutions for healthcare companies that support highly scalable, self-service business models.

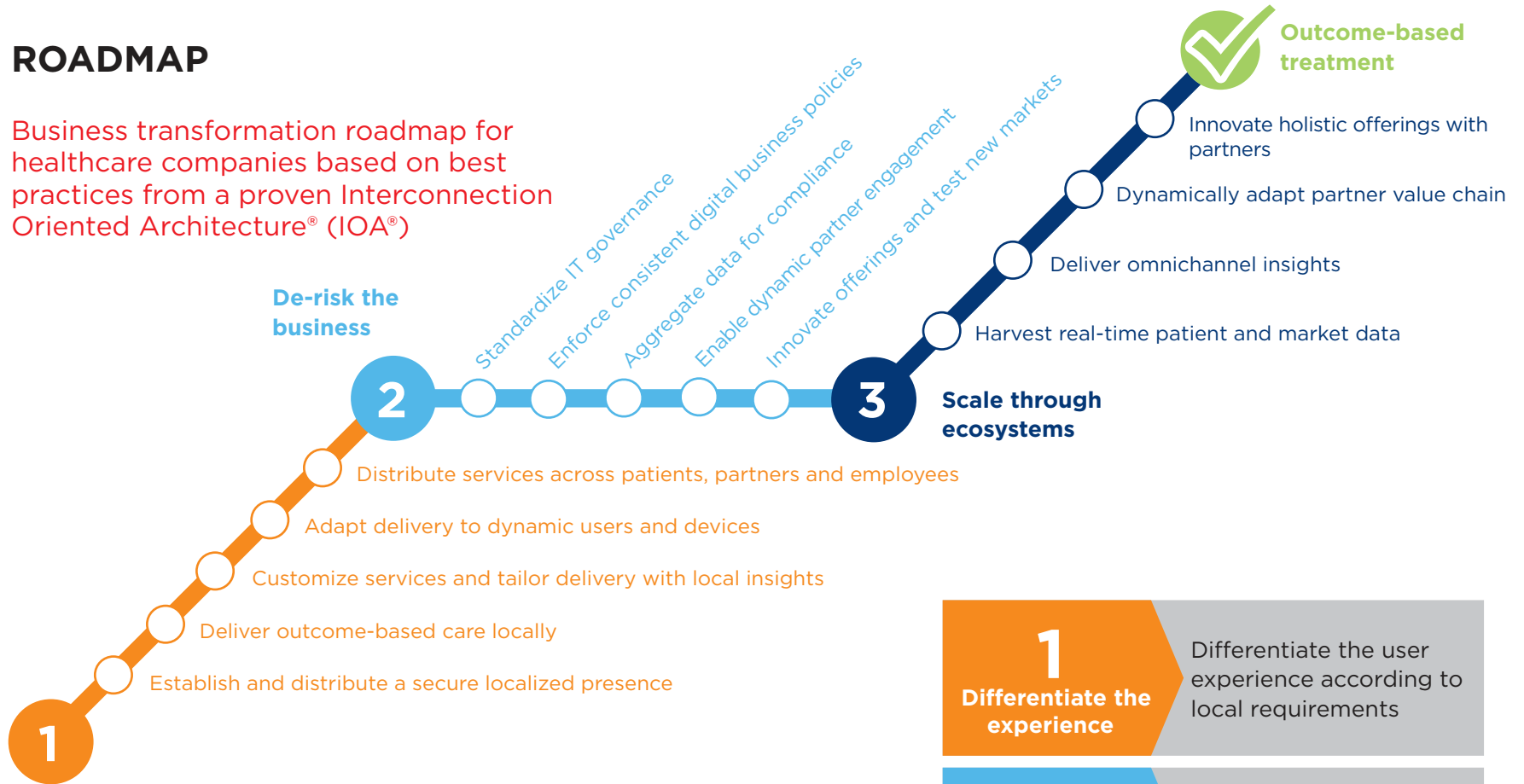
**Managed services providers** help healthcare companies transform their businesses by integrating third-party solutions that enable rapid delivery of holistic service offerings.





# ROADMAP

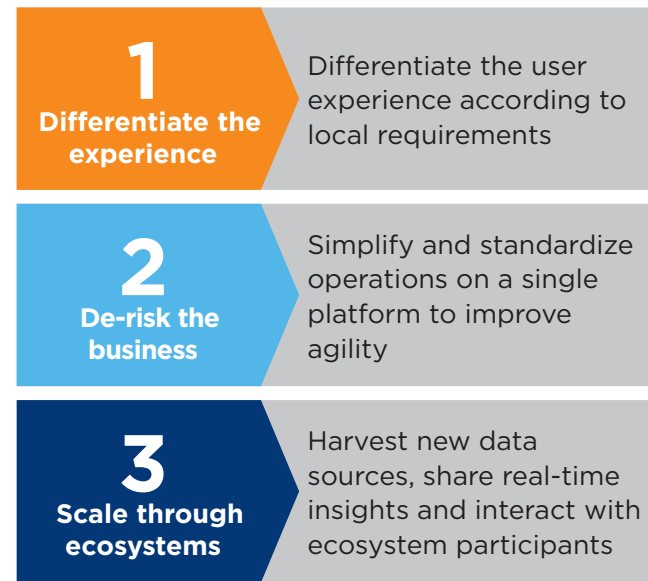
Business transformation roadmap for healthcare companies based on best practices from a proven Interconnection Oriented Architecture® (IOA®)



## Differentiate the experience

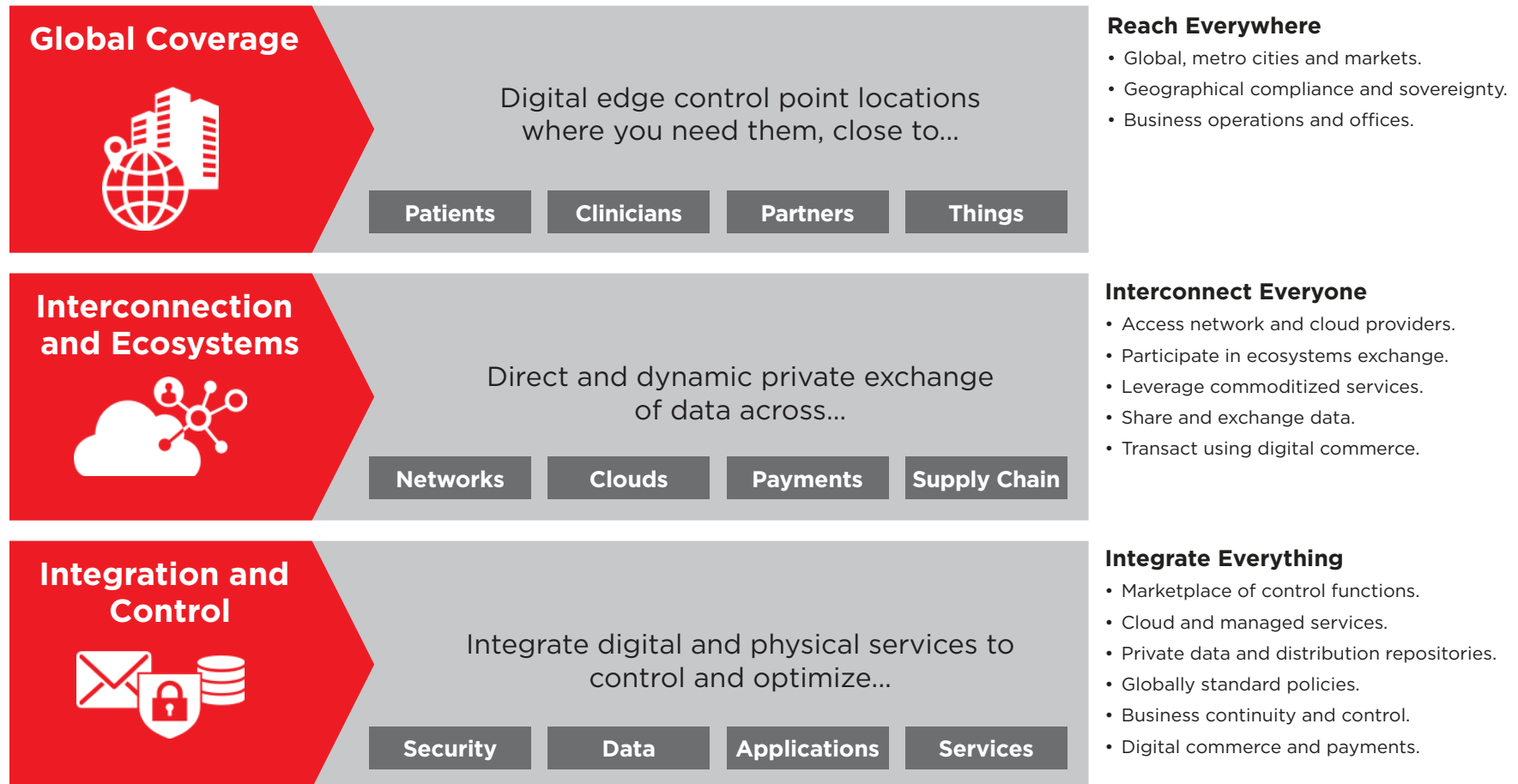
### Summary

The business transformation roadmap offers healthcare companies guidance for achieving a digital-ready model that enables outcome-based patient care and captures new revenue growth. Follow the three-step plan to differentiate the experience for patients, partners and employees, reduce business risk, and enable business opportunities through rich ecosystems. Adoption of these phases can result in rapid innovation and global delivery of outcome-based care.



# PLATFORM

To achieve the benefits of the strategy and the roadmap steps in this playbook, your architecture and platform require three critical elements: global location coverage, private interconnection with rich digital ecosystems and the capability to integrate, standardize and simplify control.



# GETTING STARTED

Playbook  
Companion  
Resources

<h2>The Platform Equinix Vision</h2>		<p>See how healthcare companies can leverage a global interconnection platform to scale innovative new services. <a href="http://eqix.it/PlatformEquinixVision">eqix.it/PlatformEquinixVision</a></p>
<h2>Global Interconnection Index</h2>		<p>Learn how growth in Interconnection Bandwidth is transforming opportunities for the healthcare industry. <a href="http://eqix.it/InterconnectionIndex">eqix.it/InterconnectionIndex</a></p>
<h2>IOA Playbook and Blueprints</h2>		<p>Download proven network architecture blueprints and design patterns based on industry-leading implementations of IOA. <a href="http://eqix.it/IOAKB">eqix.it/IOAKB</a></p>
<h2>Equinix Marketplace</h2>		<p>Discover an entire world of service providers or search for new partners, suppliers or customers on Equinix Marketplace. <a href="http://eqix.it/marketplacebrochure">eqix.it/marketplacebrochure</a></p>

**Request a detailed briefing or strategy workshop with our experts.**

Contact your Equinix account executive and learn more at [equinix.com](http://equinix.com)

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EQUINIX

Equinix, Inc. (Nasdaq: EQIX) connects the world's leading businesses to their customers, employees and partners inside the most-interconnected data centers. In 52 markets across five continents, Equinix is where companies come together to realize new opportunities and accelerate their business, IT and cloud strategies. In a digital economy where enterprise business models are increasingly interdependent, interconnection is essential to success. Equinix operates the only global interconnection platform, sparking new opportunities that are only possible when companies come together.

Learn more at [equinix.com](https://www.equinix.com)

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