



EQUINIX

# NETWORK SERVICE PROVIDERS

## DIGITAL EDGE PLAYBOOK

Transforming network service  
provider delivery for digital business



## ABOUT THIS PLAYBOOK

### PURPOSE

This playbook outlines how leading network service providers are evolving their network platforms to enable digital business at the metro edge using colocation and interconnection. This enables their customers to provide a growth opportunity in services.

### CHALLENGE

Consumer and enterprise expectations of service are rising, as they demand a better digital network experience. Application needs are shifting, requiring more bandwidth, lower latency and ubiquitous availability. The pace of these challenges is accelerating, potentially leaving some providers behind.

### NEED








Network service providers need to upgrade their infrastructure, transform service delivery and enable new digital services. They need to evolve their network platforms to enable digital business and new services closest to the users, at the metro edge.

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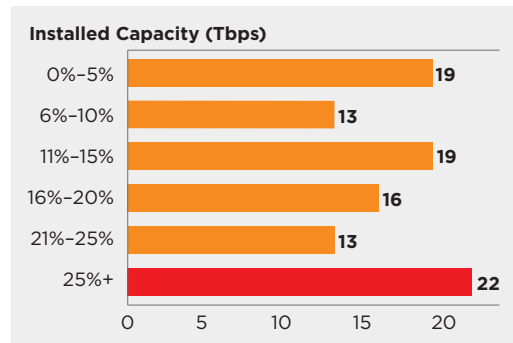
# EXECUTIVE SUMMARY

Network service provider professionals are facing strong revenue and competitive pressures that require new strategies and architectures

TRENDS AND INSIGHTS		CONSTRAINTS AND CAPABILITIES		PLAYBOOK		
TRENDS	INSIGHTS	CONSTRAINTS	CAPABILITIES	STRATEGY	ROADMAP	PLATFORM
						
Digital business is reshaping NSP sources of growth and forcing changes to the NSP platform.	Interconnection Bandwidth use is rapidly growing as NSPs' preferred approach to scale for digital business at the edge.	NSP platforms are architected around their core network, creating constraints that must be addressed for digital business.	To solve, NSPs are implementing new capabilities, including dynamic provisioning, distributing network controls and moving functions closer to the digital edge.	The Digital Edge (DE) Playbook provides NSPs a differentiated strategy to accelerate this transformation.	Leverage the IOA roadmap customized for NSPs to implement the DE Playbook.	To achieve these benefits, your architecture and platform require three critical elements, provided by Platform Equinix®.

## MARKET TRENDS

Digital is reshaping NSP sources of growth...



EY, Global Telecoms Playbook

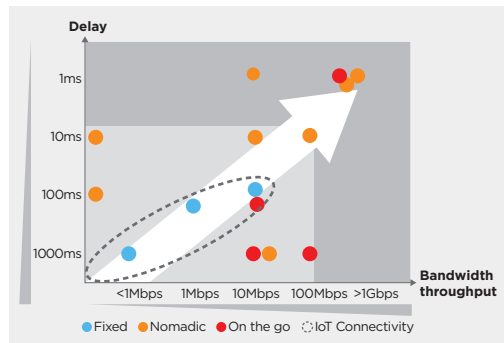
### Implications

- Digital services are creating growth opportunities for network service providers and supporting ecosystem partners.
- Consumer and enterprise expectations of service are rising, as they demand a better digital network experience.

### Summary

Digital business is reshaping NSP sources of growth and forcing changes to the NSP platform. Demand for digital services is rising. This is creating the need to support new application networking models. At the same time, technology innovation is transforming the role the network plays and how services are delivered to support digital business.

...while changing application networking needs...

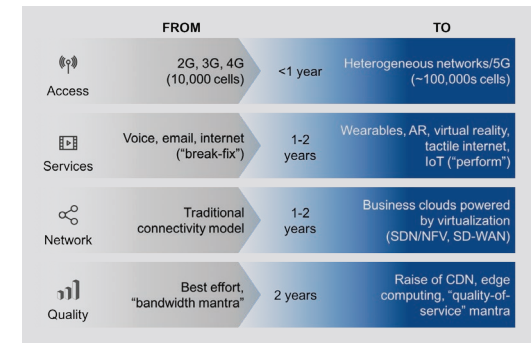


GSMA, Intelligence—Understanding 5G

### Implications

- Digital is creating new commerce and collaboration models that require increased bandwidth and lower latency with tiered quality of experiences.
- Network service providers and supporting ecosystem partners will need to upgrade infrastructure, backhaul and rewire topology to accommodate digital app needs.

...and transforming capability requirements of the network



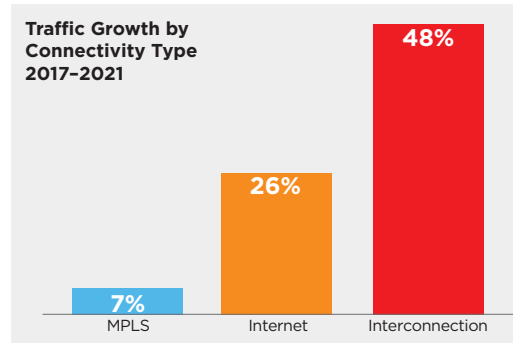
Accenture, CommsDay Summit: Accenture's David Ellis

### Implications

- Technology innovations are transforming the role of the network and how services are delivered end-to-end.
- Network service providers and supporting ecosystem partners need to create heterogeneous, end-to-end network models to interconnect people, locations, clouds, data and things with digital services both locally and globally.

# INTERCONNECTION INSIGHTS

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



Equinix, The Global Interconnection Index Volume 2

## Opportunity

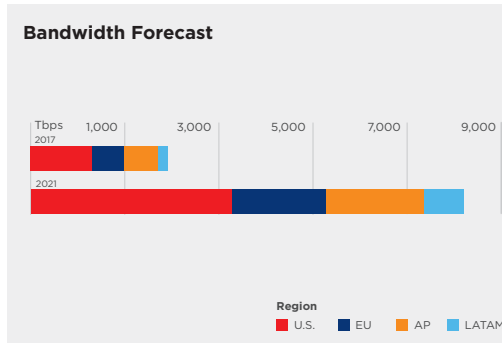
Network service providers and their supporting ecosystem partners can capitalize on increasing demand for interconnection, or the direct and private traffic exchange between key business partners, to integrate digital services.

## Summary

Interconnection Bandwidth use is rapidly growing as NSPs' preferred approach to scale for digital business at the edge. Interconnection Bandwidth is outpacing internet and MPLS traffic growth. Interconnection creates monetization opportunities for NSPs, as enterprises interconnect with NSPs to rewire their topology to scale for digital business.

\*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 inside carrier-neutral colocation data centers.

...with compounding growth year-over-year across all regions and industries...

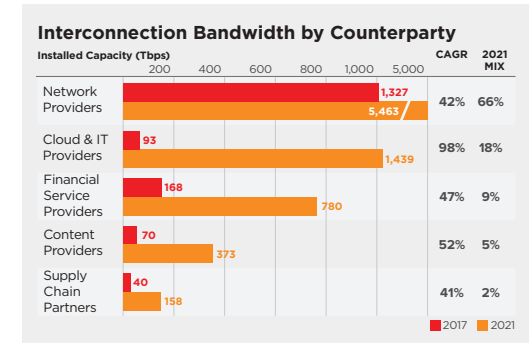


Equinix, The Global Interconnection Index Volume 2

## Opportunity

Network service providers and their supporting ecosystem partners can strategically plan coverage and target markets to take advantage of increasing demand for interconnection of digital services across markets.

...and key interconnection use cases requiring strategic control points are driving digital business.



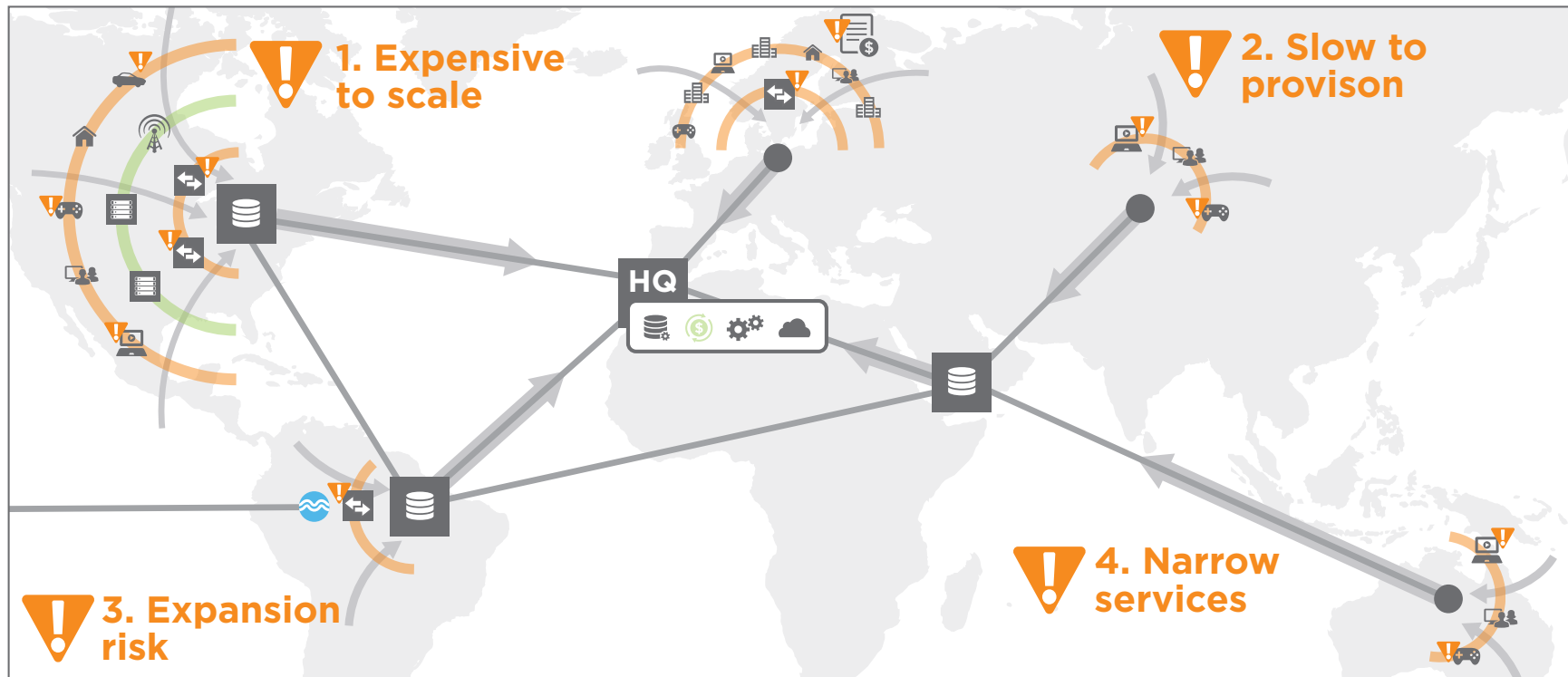
Equinix, The Global Interconnection Index Volume 2

## Opportunity

Network service providers and their supporting ecosystem partners can target growth scenarios based on use cases to build and monetize network capabilities around increasing demand for interconnection of digital services.

## CURRENT-STATE CONSTRAINTS

Digital is reshaping  
NSP sources of  
growth



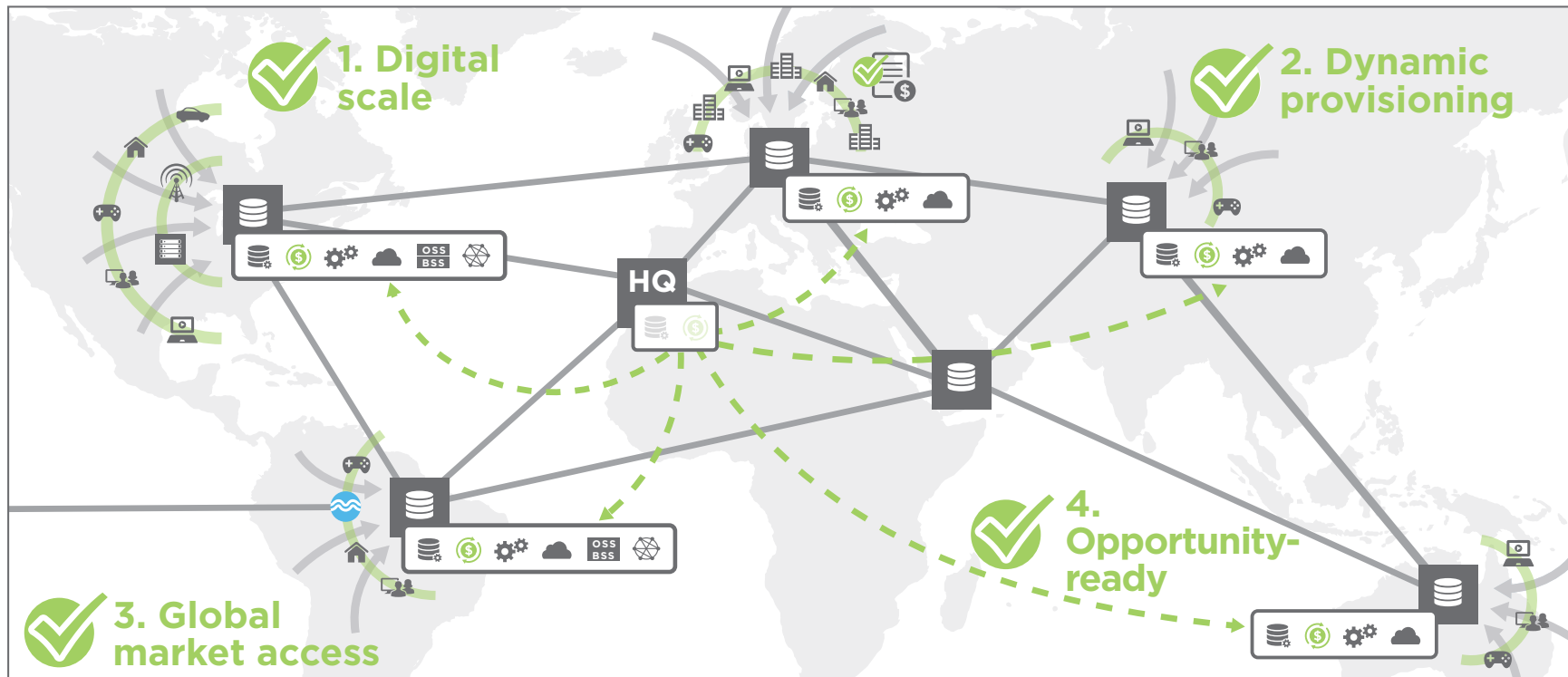
### Summary

NSP platforms are architected around the core network, creating constraints that must be addressed for digital business. The first comes from the expense and risk of owning and maintaining all aspects of the infrastructure. With the combination of time, process and contract-intensive activities slowing things down, it becomes clear why market expansion and new business development is limited. Key changes are needed to architect around these underlying problems.



## FUTURE-STATE CAPABILITIES

Capture new revenue by  
expanding your cloud and  
internet edge



### Summary

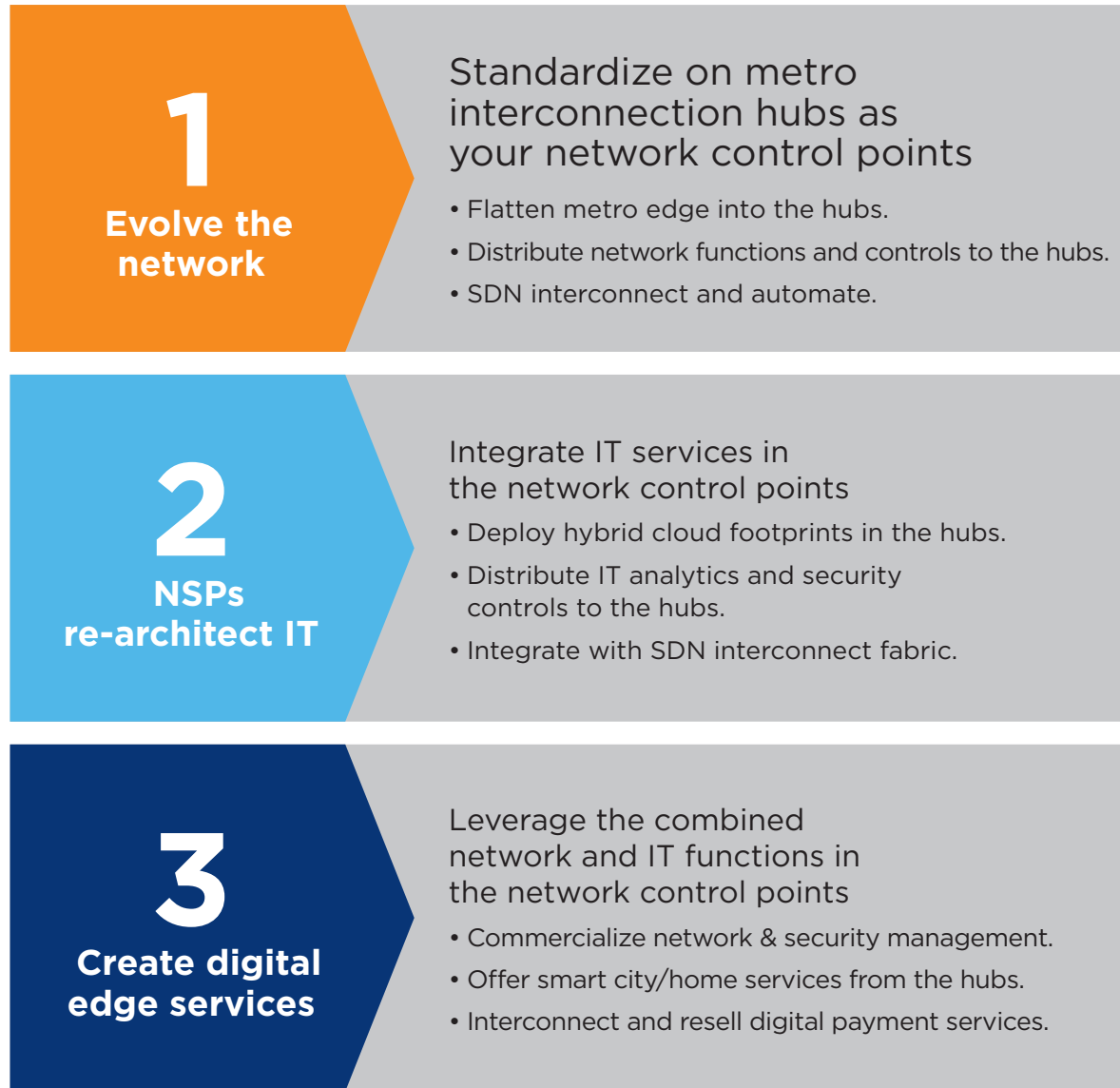
Interconnection Bandwidth use is anticipated to rapidly grow as NSPs' preferred approach to scale for digital business at the edge. By focusing on metro-based network control points—which are highly interconnected—scale can be achieved more seamlessly with pay-as-you-go models. Existing SDN capabilities can be adopted and integrated. New markets can be initially accessed remotely, and together, they enable a modern IT platform to launch new digital edge services.

# STRATEGY

When solving for digital, think interconnection first

## Summary

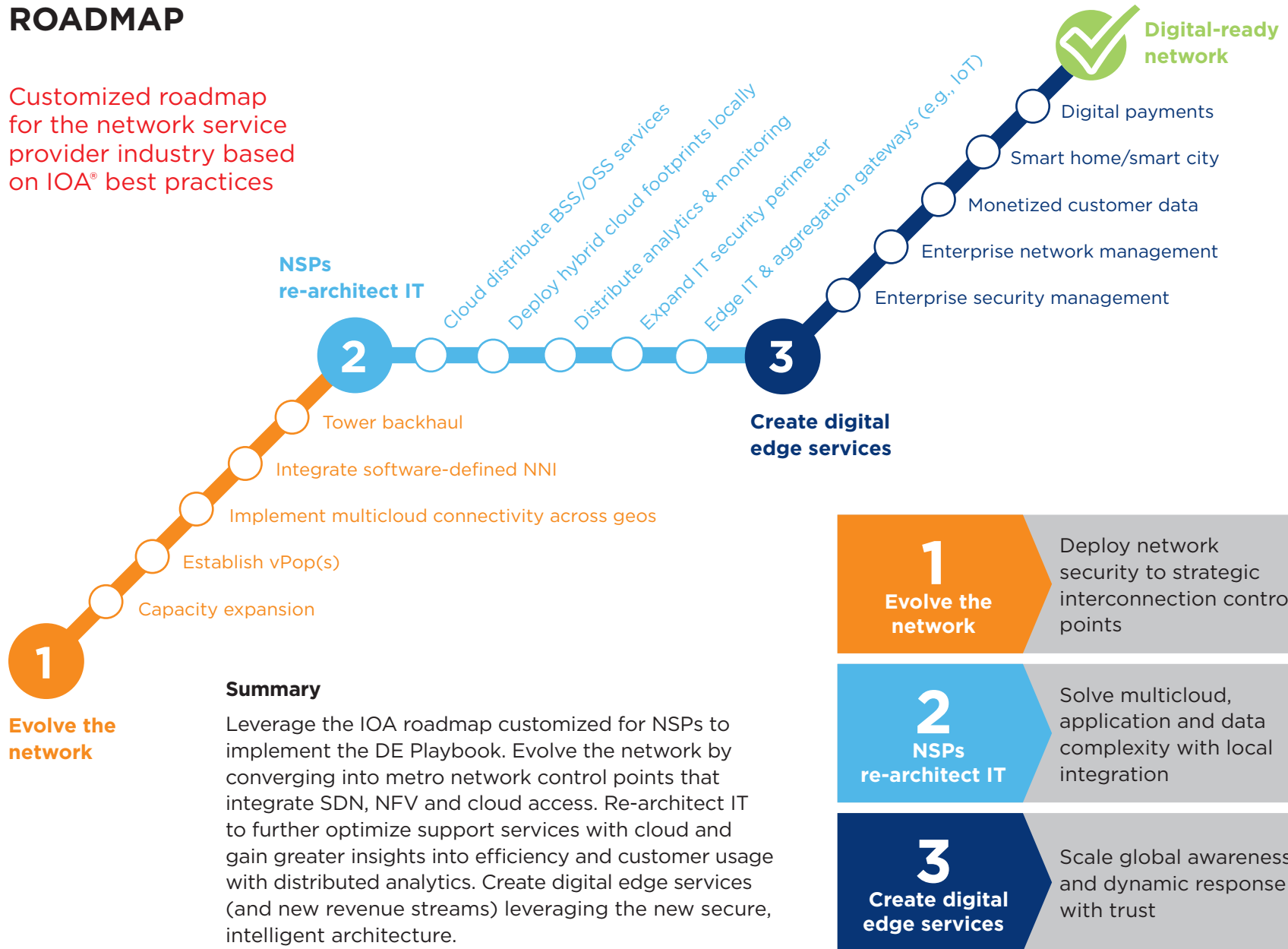
Take an interconnection-first approach to build your updated products and solutions. Enable new metro edge services to build cloud and internet edge platform-based solutions. Evolve the network by converging into the new metro network control points that integrate SDN, NFV and cloud access. Re-architect internal IT to provide services required to support the dynamic nature of these refreshed offerings.





# ROADMAP

Customized roadmap  
for the network service  
provider industry based  
on IOA® best practices



# 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.

## Global Coverage



Digital edge control point locations where you need them, close to...

Customers

Employees

Partners

Things

### Reach Everywhere

- Global, metro cities and markets.
- Geographical compliance and sovereignty.
- Business operations and offices.
- Fleet, plant and field.

## Interconnection and Ecosystems



Direct and dynamic private exchange of data across...

Networks

Clouds

Payments

Supply Chain

### Interconnect Everyone

- Access network and cloud providers.
- Participate in ecosystems exchange.
- Leverage commoditized services.
- Share and exchange data.
- Transact using digital commerce.

## Integration and Control



Integrate digital and physical services to control and optimize...

Security

Data

Applications

Business

### Integrate Everything

- Marketplace of control functions.
- Cloud and managed services.
- Private data and distribution repositories.
- Globally standard policies.
- Business continuity and control.
- Establish digital commerce and payments.

## GETTING STARTED

Playbook  
Companion  
Resources

**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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### The Platform Equinix Vision



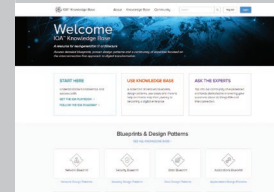
See how platform coverage,  
new dynamic SDN  
connectivity, and ecosystem  
access enable new capabilities.  
[eqix.it/PlatformEquinixVision](http://eqix.it/PlatformEquinixVision)

### Global Interconnection Index



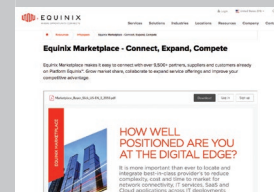
Learn how Interconnection  
Bandwidth growth is  
shaping next-generation  
opportunities for NSPs.  
[eqix.it/InterconnectionIndex](http://eqix.it/InterconnectionIndex)

### IOA<sup>®</sup> Playbook and Blueprints



Download proven network  
architecture blueprints  
and design patterns  
based on industry-leading  
implementations of IOA.  
[eqix.it/playbook](http://eqix.it/playbook)

### Equinix Marketplace



Promote network services  
to installed platform  
customers worldwide.  
[eqix.it/marketplacebrochure](http://eqix.it/marketplacebrochure)



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://equinix.com)

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