



EQUINIX

AUTOMOTIVE

DIGITAL EDGE PLAYBOOK

Integrating digital for greater agility, lower cost and seamless technology adoption



ABOUT THIS PLAYBOOK

PURPOSE

This playbook outlines how automotive industry leaders can deliver digital and connected car capabilities through greater collaboration with supply chain partners, business ecosystems and customers. By establishing a presence at the digital edge, automotive businesses can securely leverage data from ecosystem participants and seamlessly access network, cloud and IT providers. The result is the ability to personalize the customer experience, minimize business risk, and scale through ecosystems to emerge as a digital automotive industry leader.

CHALLENGE

Customer expectations for innovative digital and connected car capabilities are forcing automotive manufacturers to transform IT and business operations for agility, real-time customer engagement, partner-based collaboration and scalable service delivery. Traditional, centralized IT infrastructures are rigid, costly and unable to integrate the promising new digital capabilities available through third-party supply chain partners and business ecosystems.

NEED








To integrate new digital technologies, enable dynamic partner collaboration and reduce business risk, automotive companies must re-architect their IT infrastructures on a globally distributed interconnection platform. Direct, secure interconnection to partners, ecosystems and customers enables automotive companies to deliver premium connected car experiences at the digital edge. Follow the strategy in this playbook to enable private data exchange and achieve greater innovation, revenue and profitability.

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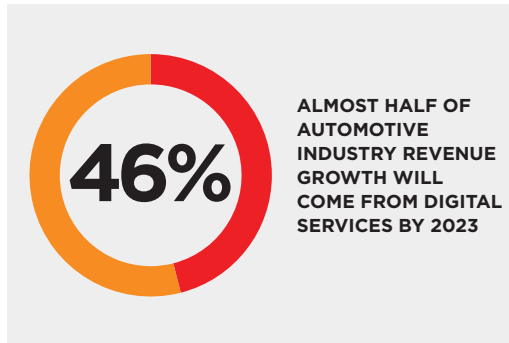
EXECUTIVE SUMMARY

Automotive companies need digital-ready architectures to deliver high-value digital and connected customer experiences

TRENDS AND INSIGHTS		CONSTRAINTS AND CAPABILITIES		PLAYBOOK		
TRENDS	INSIGHTS	CONSTRAINTS	CAPABILITIES	STRATEGY	ROADMAP	PLATFORM
						
<p>New technologies and customer requirements are forcing automotive leaders to adopt a distributed architecture to meet the demand for digital and connected car capabilities.</p>	<p>Interconnection Bandwidth growth is compounding, creating an opportunity for automotive companies to integrate ecosystem, cloud, device and analytic capabilities for high-value, connected experiences to customers.</p>	<p>Traditional automotive processes based on centralized infrastructure are impeding customer engagement, supply chain agility, collaboration, innovation and service delivery.</p>	<p>A distributed interconnection platform streamlines digital engagement processes so that partners, ecosystems, cars and customer data can be integrated for premium digital experiences.</p>	<p>Automotive companies are distributing business exchange points in proximity to users and vehicles for seamless, personalized services, standardized governance and timely insights to ecosystem participants.</p>	<p>The transformation roadmap offers a step-by-step approach to achieving digital business using best practices from an Interconnection Oriented Architecture® (IOA®) to interconnect partners, ecosystems, customers and cars.</p>	<p>Achieving digital transformation requires a platform that can support three critical elements provided by Platform Equinix®.</p>

MARKET TRENDS

Digital and connected services are driving new industry revenue growth...



McKinsey, Disruptive Trends that Will Transform the Auto Industry

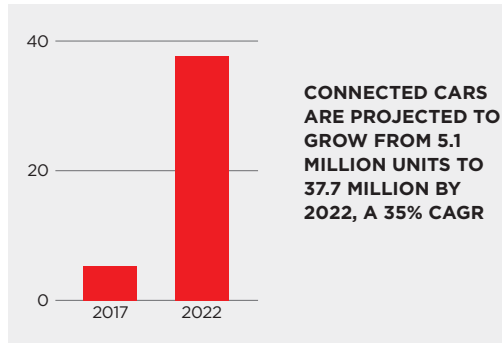
Implications

- The rapid adoption of customization, telematics, media and connected services (IoT) is forcing the reinvention of revenue and service models.
- Cloud and SaaS solutions must be incorporated to deliver a premium digital experience, compete with new entrants and increase revenues/profits.

Summary

Leading automotive companies are embracing digital transformation to deliver innovative digital and connected car services and drive revenue growth. Consumers increasingly prefer premium digital experiences beyond what traditional IT capabilities can deliver. To meet these goals, automotive companies need new, dynamic IT infrastructures that can quickly and simply integrate new technologies and leverage the global interconnection of supply chains, ecosystems, cars and customers for mutual benefit.

...while consumers demand innovative digital and connected features...



MarketsandMarkets, Connected Car Market Worth 37.7 Million Units by 2022

Implications

- Traditional IT infrastructures can't support new digital capabilities from third-party suppliers and business ecosystems.
- Integrating digital and connected car capabilities and data sources at the digital edge is required to meet new regulatory, partner and customer requirements.

...which require re-architecting IT for real-time supply chain and ecosystem interactions.



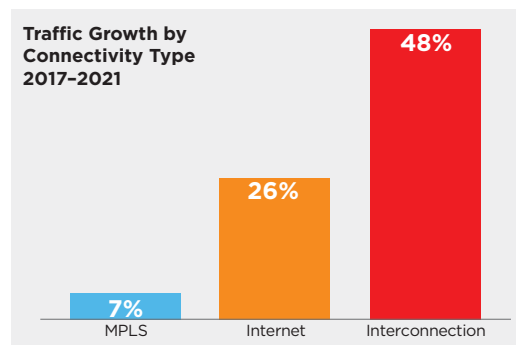
IBM, Automotive 2025: Industry Without Borders

Implications

- Integrating IoT, cloud and other digital capabilities on a distributed IT architecture at the digital edge ensures direct and secure information exchange.
- Collaboration with compatible business ecosystems requires re-architecting IT for real-time interactions with partners and customers at the digital edge.

INTERCONNECTION INSIGHTS

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



Equinix, The Global Interconnection Index Volume 2

Opportunity

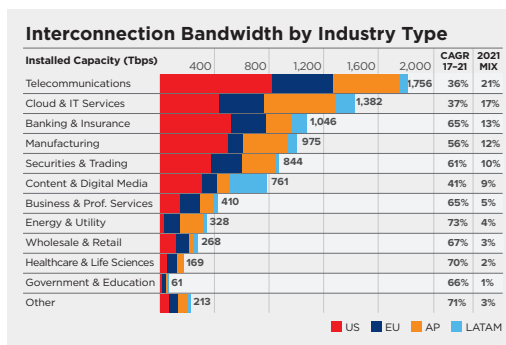
Interconnection, or the ability to privately exchange data between key business partners, is required to scale digital business. Automotive companies are leveraging this trend by establishing distributed, private traffic exchange and control points near supply chains, ecosystems and customers.

Summary

Global Interconnection Bandwidth is expected to grow at 2x the rate of internet traffic as enterprises shift to interconnection as the standard for direct, secure business exchange. Compounding growth in Interconnection Bandwidth for the automotive industry creates an opportunity for automotive leaders to build exchange points near customers, cars, partners and ecosystems. The result is the ability to deliver innovative digital and connected car capabilities for premium customer experiences on a distributed interconnection platform.

* 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 manufacturing (including automotive) expected to grow 56% year-over-year...

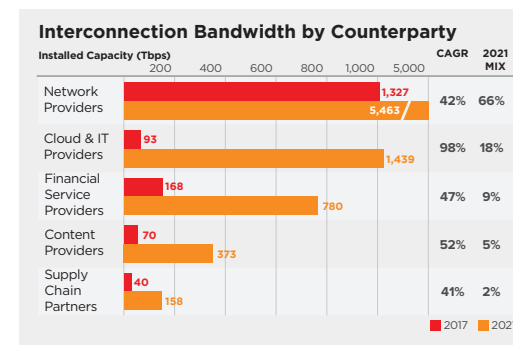


Equinix, The Global Interconnection Index Volume 2

Opportunity

Interconnection in globally distributed colocation facilities enables automotive companies to quickly serve a variety of customer needs with premium digital experiences, while accelerating the integration of crucial digital technologies into IT infrastructures.

...and enterprises expected to connect to cloud and IT providers at a 98% CAGR.



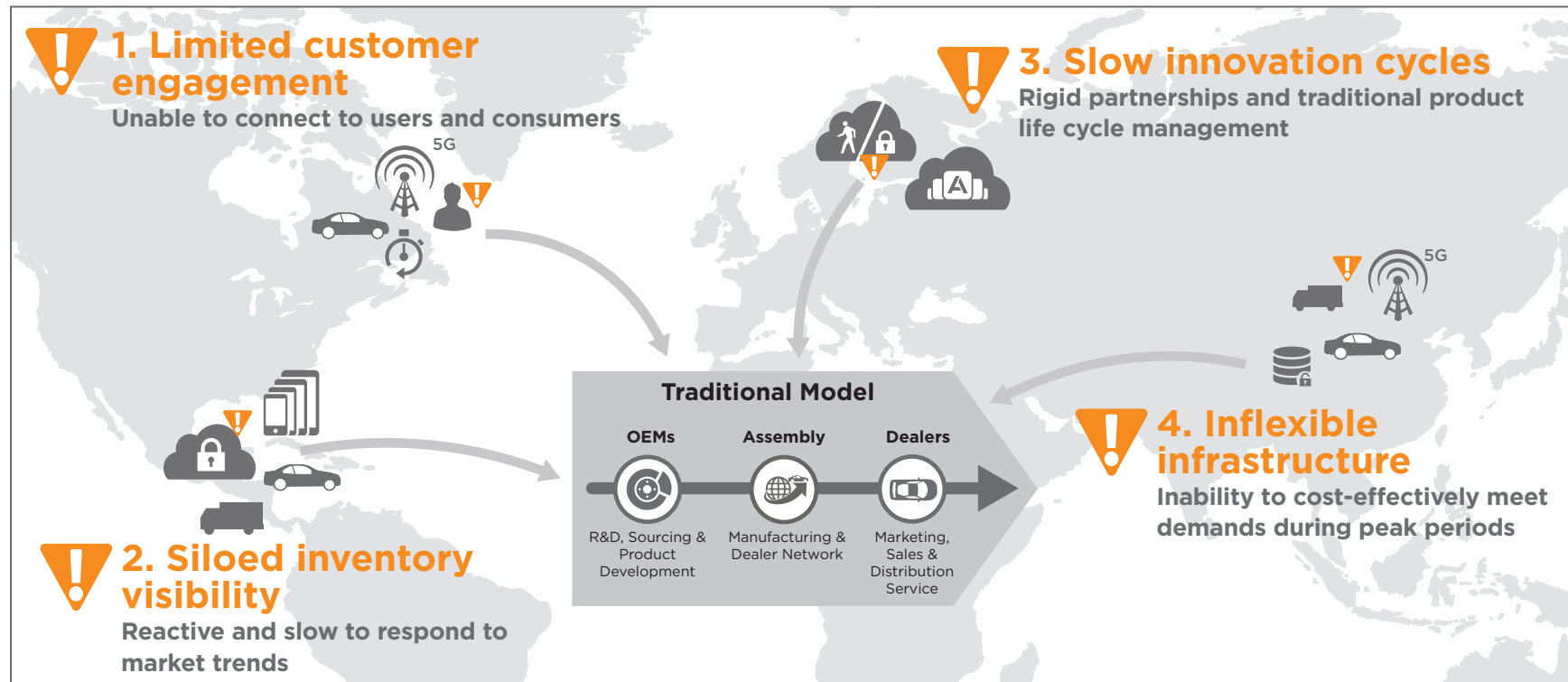
Equinix, The Global Interconnection Index Volume 2

Opportunity

Interconnection to cloud and IT providers for enterprises is growing by 98% annually. Automotive companies can leverage interconnections to these service providers to speed the delivery of new digital and connected services to customers.

CURRENT-STATE CONSTRAINTS

Traditional infrastructure is rigid and inflexible, limiting customer engagement and restricting innovation

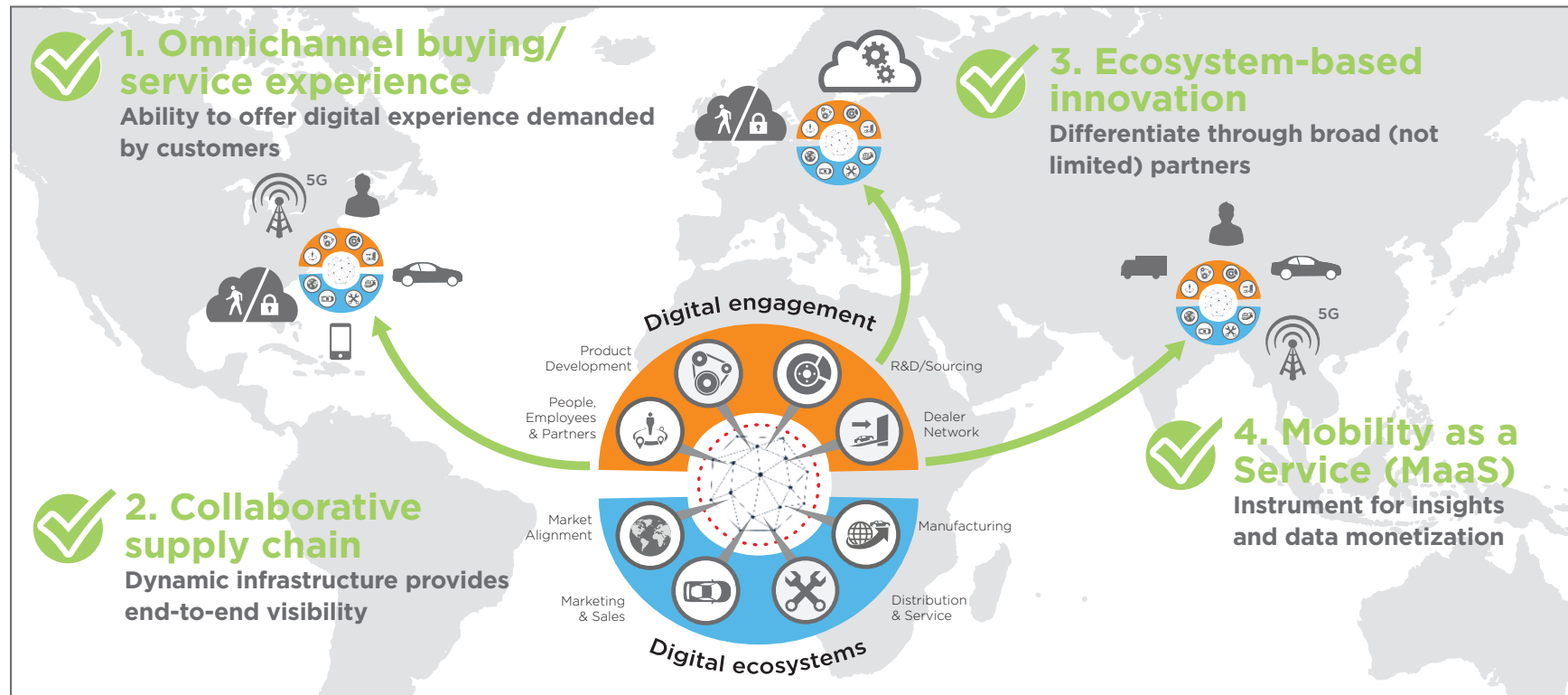


Summary

Traditional operations and infrastructures prevent automakers from connecting with consumers, partners and dealers. As a result, automotive companies lack needed insight into customer, supply chain and distribution demands, hindering revenue growth. In addition, developing resonant new products via an agile product life cycle becomes almost impossible, preventing automakers from delivering innovative connected cars to market in a timely fashion.

FUTURE-STATE CAPABILITIES

An optimized IT infrastructure enables customer and partner engagement, data integration and innovation



Summary

An integrated digital platform enables automakers to deliver an omnichannel experience to consumers, collaborate with supply chain partners, gain visibility across the manufacturing life cycle and optimize operations. Access to a diverse ecosystem of partners and MaaS providers catalyzes innovation and enables customer insight and data monetization opportunities.

STRATEGY

Architecting for digital business requires an interconnection-first approach

Summary

Automotive companies that re-architect their infrastructures on a global interconnection platform can harness revolutionary new technologies to differentiate the customer experience, reduce business risk, and enable scale via ecosystem partners and data.

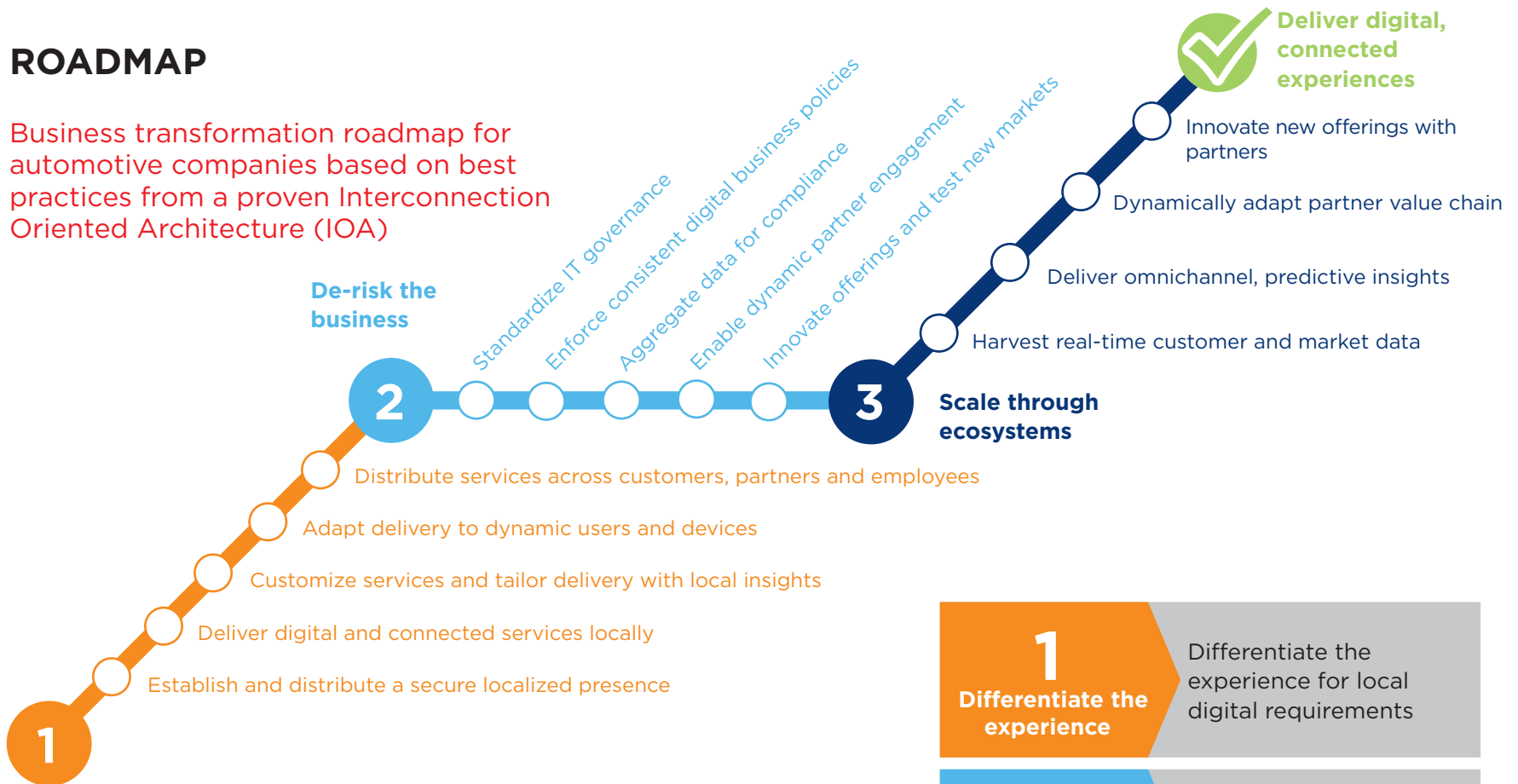
Network, SaaS, content and other service providers enable new platform capabilities and information exchanges by deploying services for automotive companies that support highly scalable, pay-as-you-go business models.

Hosting and managed service providers help automotive companies transform their businesses and integrate third-party solutions to enable rapid delivery of premium digital and connected services.



ROADMAP

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



Differentiate the experience

Summary

The business transformation roadmap offers automotive companies guidance for achieving a digital-ready model that supports innovative solutions tailored to customers' needs. Follow the three-step plan to differentiate the experience for ecosystem participants, reduce business risk, and enable the company to recognize and seize business opportunities through rich ecosystems. Adoption of these phases can result in rapid innovation and global delivery of high-value digital and connected car capabilities.



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.

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



Digital and physical services integrated 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.
- Digital commerce and payments.

GETTING STARTED

Playbook
Companion
Resources

The Platform Equinix Vision



See how automotive companies can leverage a global interconnection platform to scale innovative new services.
eqix.it/PlatformEquinixVision

Request a detailed briefing or strategy workshop with our experts.

Contact your Equinix account executive and learn more at equinix.com

Global Interconnection Index



Learn how growth in Interconnection Bandwidth is transforming opportunities for the automotive industry.
eqix.it/InterconnectionIndex

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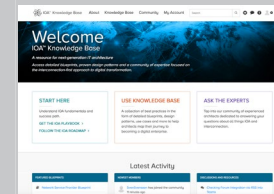
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IOA Playbook and Blueprints



Download proven network architecture blueprints and design patterns based on industry-leading implementations of IOA.
eqix.it/IOAKB

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Learn more at equinix.com

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