



EQUINIX

PHARMACEUTICAL DIGITAL EDGE PLAYBOOK

Enabling pharmaceutical companies
to thrive in a shifting landscape

ABOUT THIS PLAYBOOK

PURPOSE

This playbook outlines how pharmaceutical companies can transform their businesses to meet the demand for tailored offerings that enable positive patient outcomes. Pharmaceutical companies will learn how distributed interconnection on a global platform allows them to optimize operations, rapidly test new markets, and achieve a strategic global presence in direct proximity to patients, clinicians and partners.

CHALLENGE

Regulatory demand for positive and predictable patient outcomes and competitive pressure from low-cost sources are disrupting the pharmaceutical industry. The need to interact directly with patients, health ecosystems and supply chain partners and adapt to emerging payer and regulatory policies is forcing pharmaceutical companies to embrace agile communication and collaboration models. Traditional IT infrastructures prevent pharmaceutical companies from rapidly innovating targeted drug therapies at lower cost.

NEED








Pharmaceutical companies that wish to remain viable must meet patient and regulatory demand for outcome-based offerings. To achieve this objective, however, these companies must re-architect their IT infrastructures on a globally distributed interconnection platform. This allows them to integrate digital technologies, enable dynamic partner collaboration and standardize processes. The result is a digital-ready state that allows pharmaceutical companies to quickly and efficiently deliver products and services, nimbly adjust to changing regulations, and incorporate patient feedback for better outcomes.

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EXECUTIVE SUMMARY

Pharmaceutical companies need digital-ready architectures to meet patient demands for outcome-based medicine

TRENDS AND INSIGHTS		CONSTRAINTS AND CAPABILITIES		PLAYBOOK		
TRENDS	INSIGHTS	CONSTRAINTS	CAPABILITIES	STRATEGY	ROADMAP	PLATFORM
						
A shift in revenues to outcome-based medicine is forcing leaders to adopt a distributed architecture that meets the demand for interaction, collaboration and improved outcomes.	Interconnection Bandwidth growth is compounding, creating an opportunity for pharmaceutical companies to integrate ecosystem, cloud and analytic capabilities for greater patient insights, faster time to market and reduced costs.	Traditional pharmaceutical development and delivery processes are based on centralized infrastructures that inhibit innovation and time to market and prevent the incorporation of patient feedback.	A distributed interconnection platform streamlines operations, incorporates digital engagement processes and supports outcome-based medicine by integrating partners, ecosystems and data.	Business exchange points distributed in proximity to users at the digital edge allow pharmaceutical companies to deliver cost-effective, targeted medications; standardize governance; and enable timely insights for patients, clinicians and providers.	Transform digital business with a step-by-step approach to interconnecting pharmaceutical companies, partners, patients, health ecosystems and digital services using Interconnection Oriented Architecture (IOA®) best practices.	Achieving these digital transformation goals requires a platform that can support three critical elements provided by Platform Equinix®.

MARKET TRENDS

Revenue performance is constrained by shifting price controls...



PwC, 2017 Pharmaceuticals and Life Sciences Trends

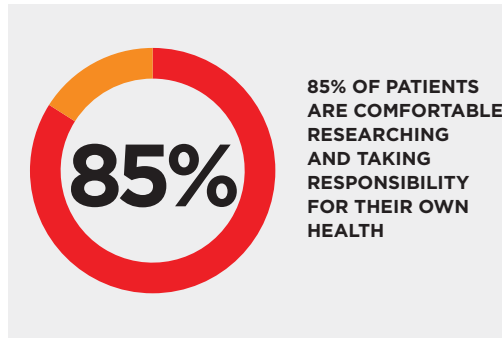
Implications

- Pharmaceutical industry revenue is declining amid generic drug pricing pressure, increased regulations, greater patient choice and payer-controlled pricing.
- Pharmaceutical companies must improve R&D agility to compete and uncover new revenue opportunities.

Summary

Pharmaceutical companies must embrace digital transformation to defend against pressures from generic drug companies and payers, shifting regulations and demand for outcome- and value-based care. Empowered consumers are demanding greater engagement, which technology-based competitors are able to address instantly and proactively. To compete, pharmaceutical companies need a dynamic IT infrastructure that can rapidly integrate new technologies and securely interconnect partners, clouds and patients for mutual benefit.

...while demand rises for better patient outcomes and value-based pricing...

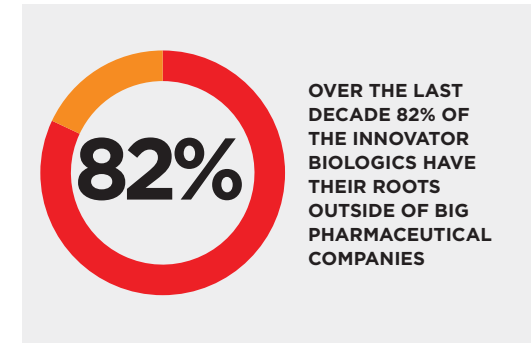


McKinsey, The Road to Digital Success in Pharma

Implications

- Outcome-driven awareness is forcing pharmaceutical companies to build real-time data exchanges for better insights.
- Traditional centralized infrastructure cannot provide instant feedback and proactive analysis that technology-based competitors use to gain market share.

...requiring a distributed architecture that interconnects a collaborative ecosystem.



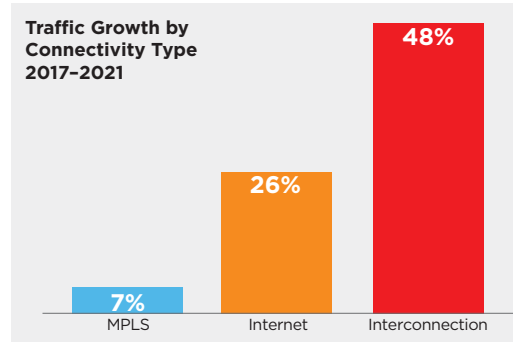
Accenture, The Future of Pharmaceutical Innovation

Implications

- New entrants force pharmaceutical companies to accelerate product time to market via collaboration, rather than building from scratch.
- Pharmaceutical companies must distribute IT infrastructure to effectively collect and analyze patient data and interconnect partners, data exchanges and health ecosystems.

INTERCONNECTION INSIGHTS

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



Equinix, The Global Interconnection Index Volume 2

Opportunity

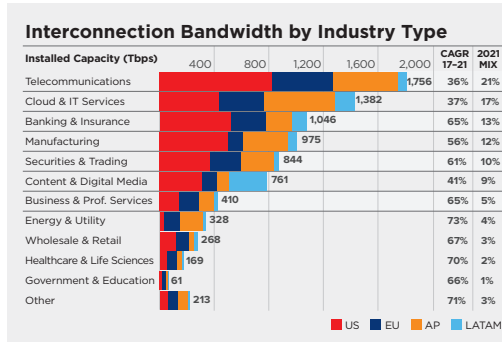
Interconnection, or the ability to privately exchange data between key business partners, is required to scale digital business. Pharmaceutical companies are leveraging this trend by establishing distributed, private business exchange points near partners, ecosystems and patients.

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 healthcare and life sciences industry creates an opportunity for pharmaceutical leaders to build exchange points near patients, partners and ecosystems on a distributed interconnection platform for greater patient insights, faster time to market, reduced costs and efficient delivery of outcome-based medicine.

*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 70% compounding growth in healthcare and life sciences...

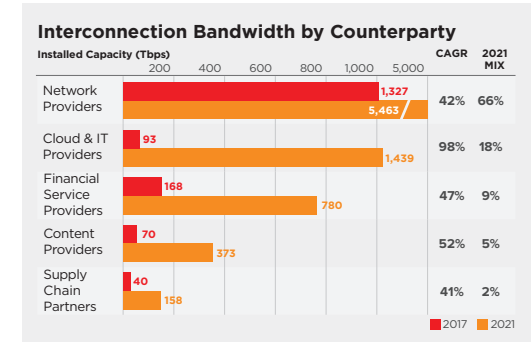


Equinix, The Global Interconnection Index Volume 2

Opportunity

Interconnection in globally distributed colocation facilities enables pharmaceutical companies to integrate crucial digital technologies into IT infrastructures, allowing them to gain patient insight, protect patient data and transform the way they develop and market drugs.

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



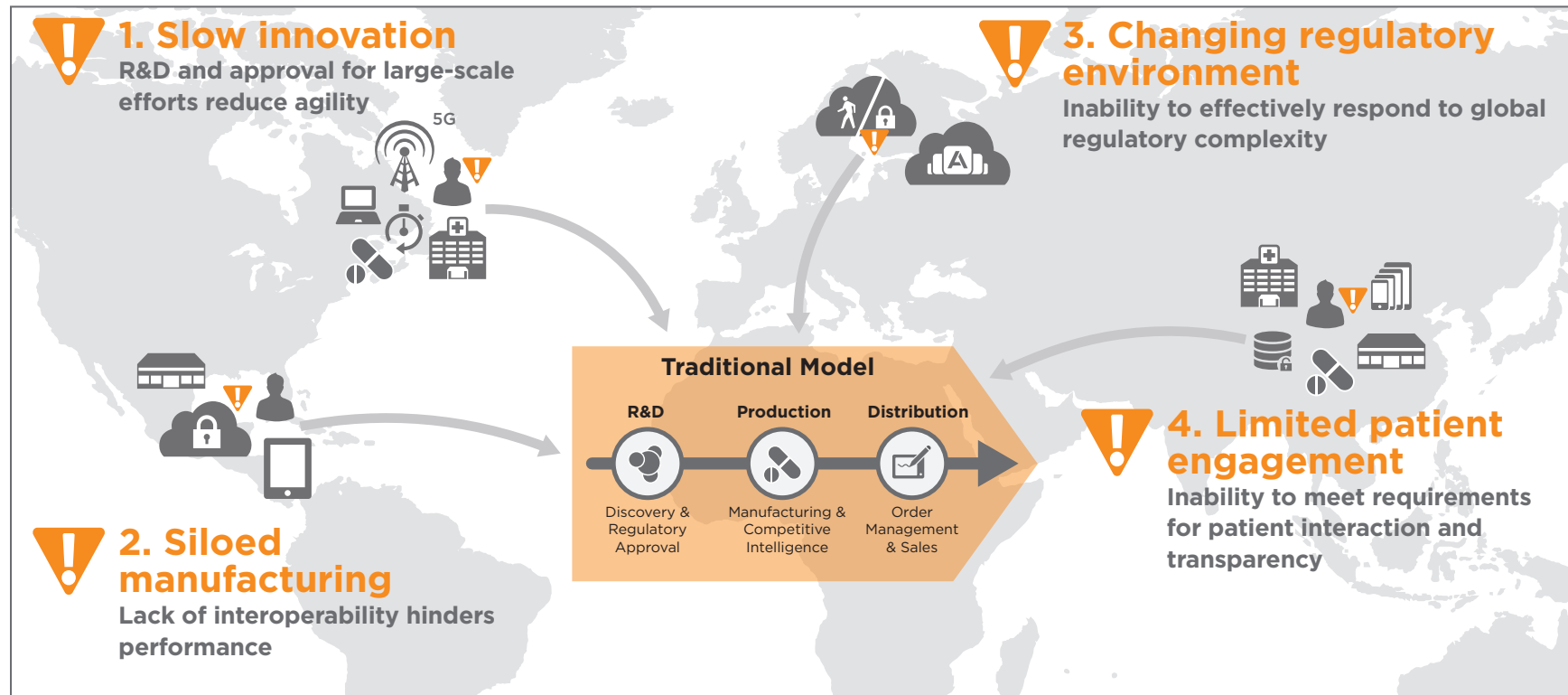
Equinix, The Global Interconnection Index Volume 2

Opportunity

Enterprises are on track to interconnect to cloud and IT providers at a 160% CAGR between 2017-2021. Pharmaceutical companies can leverage this interconnection gravity to accelerate the delivery of intelligent patient services that improve outcomes.

CURRENT-STATE CONSTRAINTS

Pharmaceutical companies contend with lack of agility and limited data insights

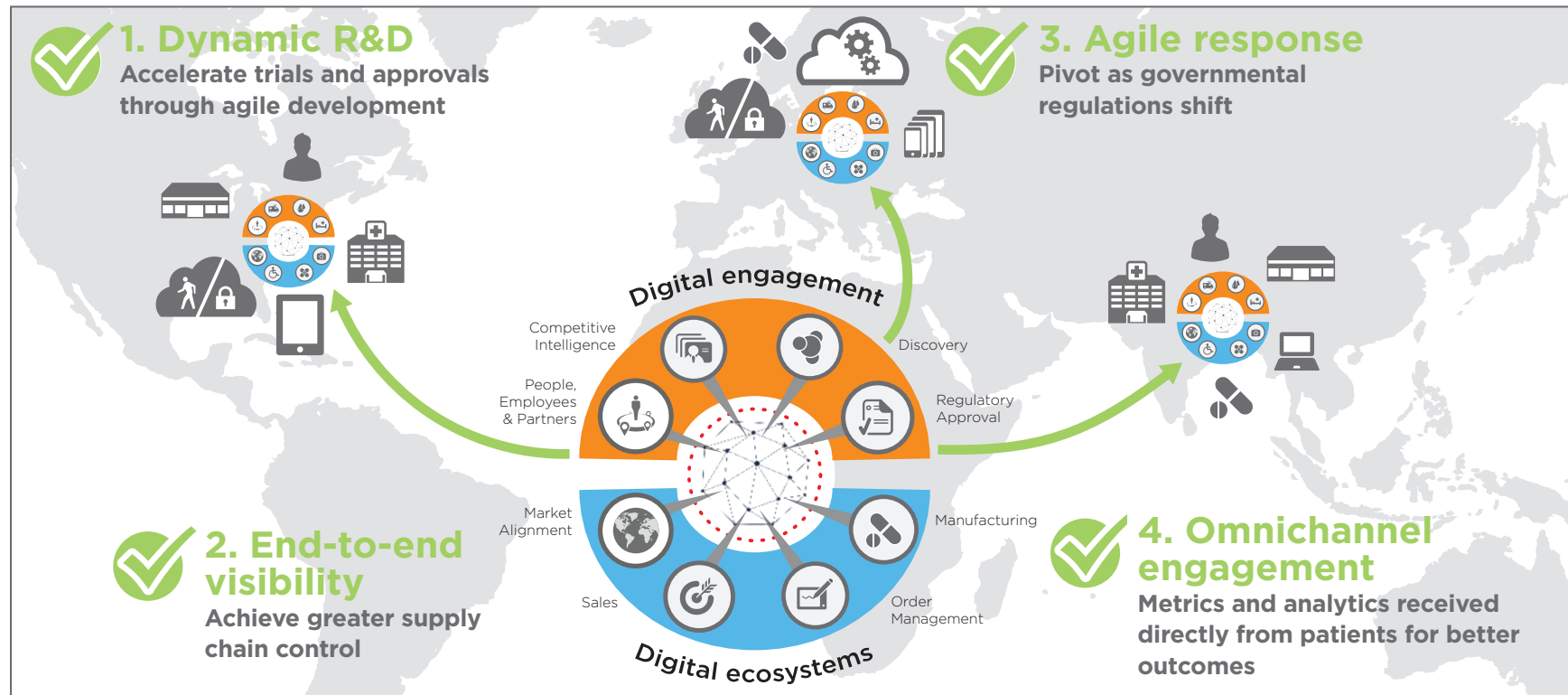


Summary

Pharmaceutical companies with traditional IT architectures are unable to innovate or deliver targeted patient offerings. Inefficient supply chain processes, changing payer pricing policies and fluctuating government regulations increase operational cost and risk. Finally, the inability to directly engage patients and partners keeps pharmaceutical companies from delivering outcome-based medicine.

FUTURE-STATE CAPABILITIES

Optimized IT infrastructure
increases agility and improves
patient outcomes



Summary

A globally distributed, interconnected IT infrastructure enables dynamic, collaborative R&D and faster product delivery. This approach enables companies to gain visibility and control of their supply chains, adapt to regulatory changes and incorporate patient feedback. The result is the ability to deliver better medical outcomes to patients.

STRATEGY

Architecting for digital business requires an interconnection-first approach

Summary

Pharmaceutical companies can manage pricing and competitive pressures and deliver outcome-based medicine by incorporating digital capabilities. By standardizing on a single platform, they can increase engagement, optimize operations and leverage data-driven insights through interconnected ecosystems.

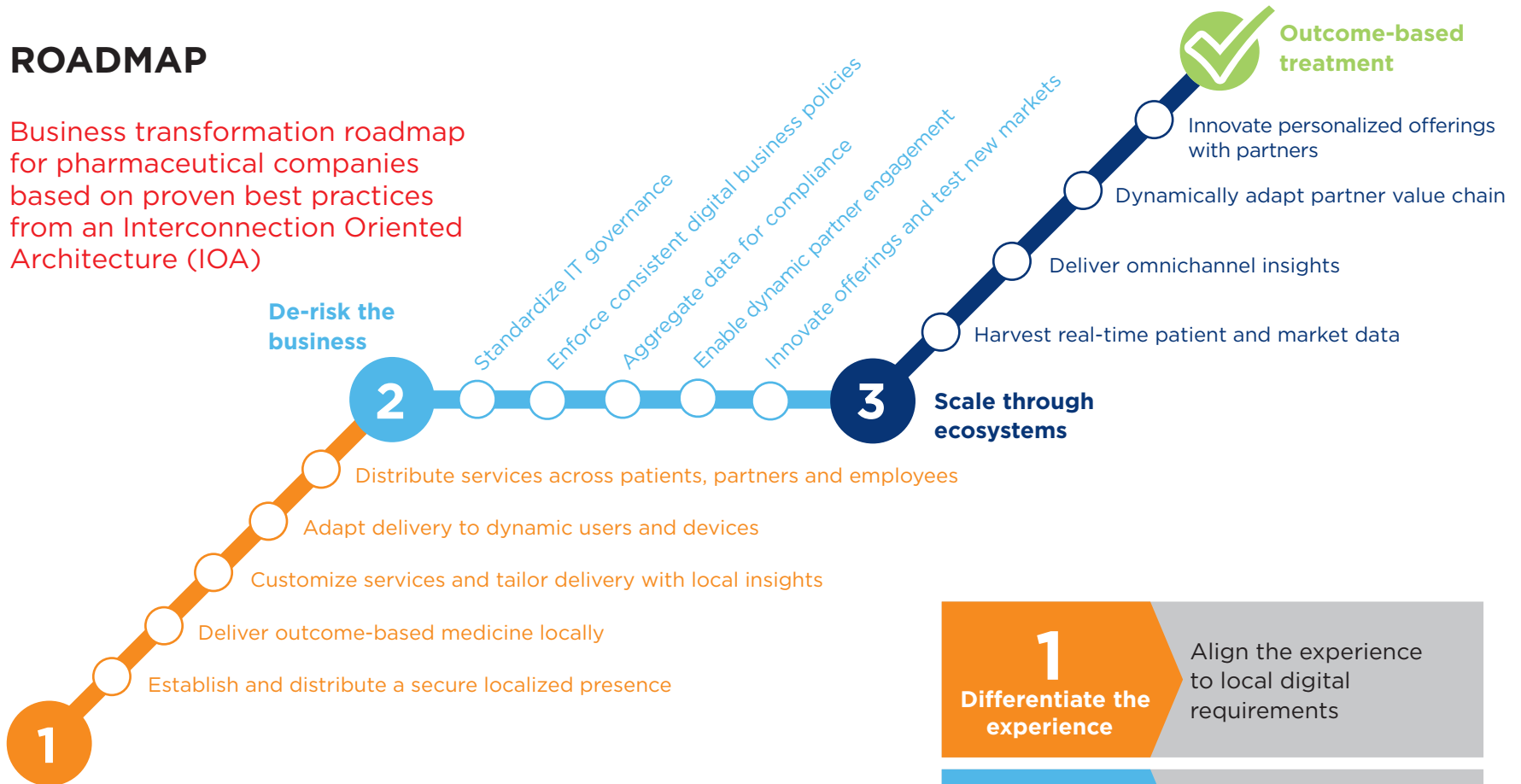
Network, cloud, SaaS and content service providers enable new platform capabilities and information exchanges by deploying solutions for pharmaceutical companies that support highly scalable, self-service business models.

Hosting and managed services providers can help pharmaceutical companies transform their businesses by integrating third-party solutions that enable rapid delivery of personalized service offerings.



ROADMAP

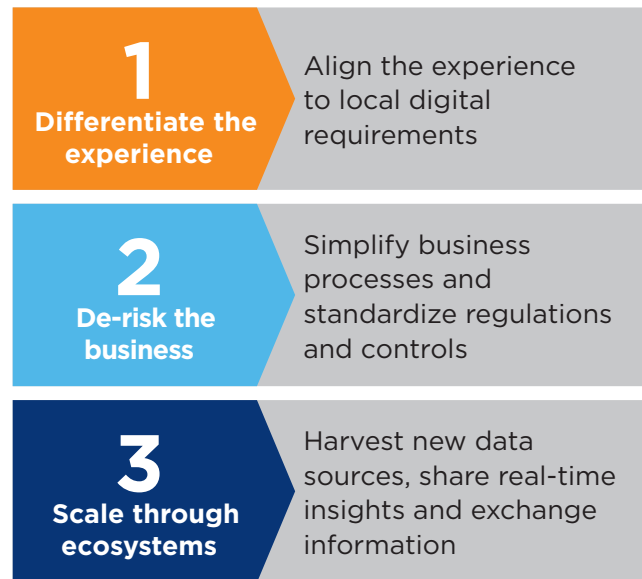
Business transformation roadmap for pharmaceutical companies based on proven best practices from an Interconnection Oriented Architecture (IOA)



Differentiate the experience

Summary

The business transformation roadmap guides pharmaceutical companies on their journey to a digital-ready infrastructure able to deliver outcome-based medicine and capture new revenue growth. Follow the three-step plan to differentiate the experience for 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 product innovation, new business models and the global delivery of outcome-based offerings.



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



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.
- 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

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The Platform Equinix Vision



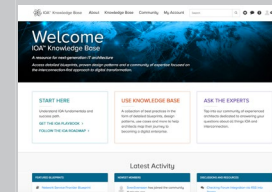
See how pharmaceutical companies can leverage a global interconnection platform to scale innovative new services.
eqix.it/PlatformEquinixVision

Global Interconnection Index



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

IOA Playbook and Blueprints



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

Equinix Marketplace



Discover an entire world of service providers or search for new partners, suppliers or customers on Equinix Marketplace.
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

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