



Transforming retail IT

NOKIA



IT solutions for retailers

With Nokia cloud, networking and communications infrastructure, you can:

- Transform the in-store experience by introducing new technologies
- Provide a seamless experience across all devices
- Build multi-layer security that defeats hackers, minimizes human errors, and automates security policies
- Modernize and consolidate data centers and connect stores without massive infrastructure changes
- Make best-in-breed technology decisions regardless of vendor
- Maintain control of the network with a policy-based approach

Transform your infrastructure

Nokia cloud, networking and communications solutions can provide you with an efficient, cost-effective infrastructure that adapts to the fast-moving retail environment. We provide the technologies that run some of the world's most demanding networks.

Unleash your network for a better customer experience

The retail industry is rapidly changing, placing pressure on retailers to change with it. To be successful in the low-growth, crowded retail space, retailers need to transform their stores for the future, design a truly omnichannel experience, and harness big data for better decision making and marketing.

The future of retailing

The retail environment has shifted dramatically in recent years, and it continues to change as customers demand more from each channel they have access to. Retailers must ensure they adapt just as quickly, meaning the future of retailing will look quite a bit different than it does today.

Physical stores remain critical, but they must adapt to new technologies and capabilities. Rather than just a physical place to purchase products, stores are becoming customer experience centers to excite shoppers and drive sales. They will complement the rise of digital commerce with ship-from-store and click-and-collect services and will play a different role than they do today.

Beyond the store, capabilities such as digital commerce and mobile applications will be fully integrated into the retailer's other platforms. These channels will be designed to provide the consistent,

unified experience that customers expect. With communications functions embedded directly into mobile or web-based applications, retailers can provide customer service anytime, anywhere, and on any device from a centralized location.

Finally, big data will play an even bigger role than it does today. Once it is harnessed and analyzed by retailers, big data can lead to individualized offers and messaging to keep customers coming back. Based on this data, retailers will be able to provide incentives that are not available anywhere else. And aggregate data can be analyzed to identify new trends or profitable business areas.

The future of retailing is exciting, but it will place new demands and challenges on retailers' IT infrastructure. How can retailers implement these changes?

Bring the power of the cloud to your stores.

Start with the cloud

This level of digital transformation can only be successful with the scalability, flexibility and agility the cloud provides. And by implementing a software-defined networking (SDN) approach using Nuage Networks Virtualized Services Platform (VSP), you can get the most out of any private or hybrid cloud environment. Nuage Networks VSP gives you the ability to securely unify multiple clouds while optimizing IT resources through a policy-driven approach regardless of the size, platform or hardware.

Your network can become as dynamic and consumable as the compute infrastructure and scale up to meet the demands of thousands of tenants. And with open platform capabilities and robust interfaces, you can integrate existing infrastructure at your own pace without undergoing a full forklift replacement.

Choose best-in-breed technologies and tear down silos

Our solutions are vendor- and network-agnostic so that you can choose the infrastructure that best suits your retail IT needs. Many retailers have stores that have undergone various levels of renovations or have been acquired through mergers or acquisitions, leaving them with different technologies to manage and maintain. This can be a big concern for retailers who want to transform, because the cost of completing a full technology overhaul can seem prohibitive. But with open solutions from Nokia, you transform at your own pace without worrying about the existing hardware.

Focus on your business: Our open, cloud-based communications and collaboration solution, Rapport™, integrates all communications and collaboration functions within a single framework. You can embed communications directly into web- or mobile-based applications with customized user experiences to promote your brand. Cap legacy silos and take advantage of the newest technology, all while keeping costs under control.

Bring the power of the cloud to your stores: a software-defined wide area network (SD-WAN) approach lets you connect stores to the data center quickly, securely, and easily with full visibility, management and control. Based on an overlay model that uses any IP network, Nuage Networks Virtualized Network Services (VNS) gives you maximum flexibility to mix and match available networks and use any available access technologies, without the need for expensive, cumbersome and proprietary hardware.



Boston Retail Partners' 2014 report stated:

“Retailers can no longer afford to operate from within silos, and must transform their organization, business processes and technology if they want to align with their customers.”

Boston Retail Partners. 2014. “Achieve Unified Commerce with the Right Technology.”

Connect your clouds with the right network

Retailers have many options when deploying the cloud, including private, virtual private, or hybrid cloud models. But you should also pay attention to the networking technology used to connect to them. For example, a private cloud has different data center interconnect requirements to a hybrid cloud.

Networking solutions from Nokia give you the control, security and performance you need for the cloud era and make it easy to manage large volumes of customer and transaction data on a private or hybrid cloud. Connections to data centers and the cloud must be agile, scalable, flexible and secure. They must adapt to changing bandwidth need and meet reliability requirements.

Backbone networks have traditionally supported applications such as business continuity and disaster recovery. And while those are still important for retailers dealing with large volumes of critical information, the move to the cloud has created new possibilities to better align the network with your business needs.

Agility. Security. Performance.

Empower your enterprise to seize the cloud opportunity by evolving your network and communications infrastructure into a strategic asset with solutions from Nokia. We give you the agility, security and performance needed to respond to emerging business opportunities and changing customer needs. We combine our knowledge and expertise with leading IP and optical solutions, innovative communications frameworks and the dynamic Nuage Networks SDN platform to meet retailers' most demanding requirements.



How we can help

Whatever you're
looking to achieve
with your network,
communications
or cloud, we have
a solution.

[http://networks.
nokia.com/retail](http://networks.nokia.com/retail)

Make the most of the private cloud

Our Nuage Networks VSP delivers SDN for private cloud capabilities including centralized, policy-driven networking, simplified configuration, and automation to ensure compliance and enable optimal use of your IT resources. With support for cloud platforms such as OpenStack®, CloudStack® and for all major hypervisors, the VSP lays the foundation for an open, dynamically controlled data center network.

Connect thousands of stores to the network

Leveraging SD-WAN technologies, our Nuage Networks VNS unleashes the power of the cloud, letting you choose the technologies that best suit your needs—regardless of vendor—and seamlessly connect remote stores with your data center without a separate management approach or expensive proprietary hardware.

Open up communications with your customers

Rapport, our open, private cloud-based communications and collaborations framework, allows you to quickly adapt your user experience with new web-based services and mobile applications while capping your costly telecom network silos.

Connect your clouds

Our Cloud Data Center Interconnect solutions deliver the agility, flexibility and capacity you need for faster service turn-up and assured business continuity, while improving asset utilization and lowering costs. You can enjoy scalable, secure, high-performing, multi-site data center connectivity for the cloud era, giving customers and employees anywhere, anytime, any device access to business-critical data.

Build an optimized private WAN

Our private WAN solutions provide more flexible and agile approaches to enterprise networking that support your cloud strategy. We offer high-performance backbone and flexible access solutions that integrate easily with existing managed WAN services. Our solutions provide scalability, security and control for your private cloud and enable you to implement virtual private and hybrid clouds to reduce costs and increase agility.



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About Nokia

Nokia is a global leader in the technologies that connect people and things. Powered by the innovation of Bell Labs and Nokia Technologies, the company is at the forefront of creating and licensing the technologies that are increasingly at the heart of our connected lives.

With state-of-the-art software, hardware and services for any type of network, Nokia is uniquely positioned to help communication service providers, governments, and large enterprises deliver on the promise of 5G, the Cloud and the Internet of Things. <http://nokia.com>

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