

The Cisco Intelligent Retail Network: Maximizing Sales with Mission-Critical Mobility

In today's retail industry, maximizing interactions with customers has become the focus of a new series of strategic and tactical initiatives. Based on a variety of technologies, stores are seeking to reduce nonselling time and increase and enhance the customer experience. At the same time, retailers want to become increasingly cost-effective. As they reach the limits of existing legacy systems, stores are looking for less complex IT architectures that are easy to migrate, manage, and maintain.

Retailers face a number of challenges in creating an infrastructure that will meet their business needs, both now and into the future. Stores need to be able to:

- Improve customer satisfaction by enhancing the shopping experience
- Boost productivity by connecting people, places, and information
- Securely and reliably protect brand images and assets
- Increase visibility through timely access to information
- Increase revenues by improving decision making through utilization and delivery of data

The Mission-Critical Mobility solutions from Cisco Systems® provide the flexibility and security required by retailers to more effectively serve their customers, as well as reduce operating costs and increase efficiency. They also ensure the interoperability of multivendor devices and provide a wide range of support for different applications and data types (such as voice, video, Radio Frequency Identification [RFID], and more), based on a tightly integrated network that ensures consistent delivery of services and security to mobile environments.

Cisco® standards-based wireless solutions provide retailers with dependable, high-quality networking that is both manageable and completely secure, allowing retailers to accomplish present and future business objectives at the point of sale (POS), for in-store operations and throughout the supply chain.

Providing the Foundation for an Integrated Infrastructure

These Cisco solutions enable stores to completely integrate wired and wireless networks to maximize management capabilities across the entire network for greater efficiency and lowered operating costs. Stores benefit from better protection of assets, taking advantage of secure applications across the wired and wireless infrastructure with consistent rules and policies. Administrators also more effectively manage the entire distributed network, thanks to better management of valuable bandwidth and prioritization of critical applications such as POS, voice, authorizations, and content delivery.

Complete Security for the Retail Environment

Built upon this robust foundation, Cisco security is integrated end to end throughout the network, offering retailers the most protected networks available today, from headquarters to store sites. Cisco recognizes that the most mission-critical wireless network issue for retailers is ensuring complete security of sensitive corporate, partner, and customer information. Today's increasingly well-publicized security breaches do not reflect well on the organizations in which they take place, and could have a negative impact upon your brand.

The Cisco Intelligent Retail Network

By proactively planning defense strategies, complying with data-protection legislation, and ensuring a safe physical environment through IP wireless surveillance, you can help ensure your store network is protected against attacks before they happen. The Cisco Self-Defending Network comes complete with a full suite of industry-leading firewall services, partial and systemwide encryption options, interference and rogue access point detection tools, intrusion detection systems (IDSs), network management systems, and client security. This comprehensive suite of tools helps protect your data and systems from hackers, viruses and worms, and denial of service attacks.

Interoperability to Work with Multivendor Devices

Retail networks must also be able to interoperate flexibly with a wide range of multivendor devices. Today's retail environments support the requirements of an increasing number of wireless form factors to enable new productivity and customer experience-enhancing applications. Innovations in mobile checkout, RFID picking and labeling, smart shelving, and electronic shelf labeling; as well as dedicated PDAs and retail devices that provide access to knowledge management applications, goods receiving, inventory management, price audit, and merchandising continue to increase the capabilities of the wireless infrastructure. Cisco works in collaboration with every major device manufacturer, allowing retailers to interoperate with almost any available retail device, while the Cisco Compatibility Extension program allows retail device providers to take full advantage of all the most sophisticated capabilities of the network.

At the same time, retailers need to be able to support more than just their own applications. WiFi networks are increasingly being repurposed as customer "hot spots" and partner or vendor devices that require access to their own networks. A better customer experience is created through new initiatives such as streaming rich media information to customers through wireless video monitors or kiosks, which can be wirelessly reconfigured around the store to accommodate each new display or promotion. Awareness capabilities, such as RFID tags and Personal Shoppers, are being used to track customer preferences and maximize selling time.

Complete interoperability is also vital in supporting emerging inventory management and store operations technologies. Smart shelves automatically track product counts and alert store and vendor systems to restocking needs. Location-based services (LBSs) and Wi-Fi RFID enable distribution centers and warehouses to track assets more efficiently. Sales processing is also maximized with Cisco support for wireless self-checkout stands and pay-by-touch programs. Wireless terminals can be rapidly reconfigured to speed sales processing during peak periods and events, and wireless networks can even be used to support IP surveillance for store security.

Supporting Applications and Data Types into the Future

Retailers seeking to upgrade their networks must plan not only for today, but for tomorrow. You can help ensure your network's flexibility by ensuring that it supports the data types your business will need for years to come. Retailers are increasingly implementing more applications that take advantage of mobility and RFID, voice, and digital media to effectively support business needs. Cisco provides robust support for these data types and applications to help protect your business investment, allowing you to expand and develop as needed to store and distribution center associates.

The fastest-growing area of retailer deployment today is implementation of voice-over-IP (VoIP) over the network. These converged infrastructures integrate voice, data, and multimedia traffic onto a single network, allowing retailers to achieve significant cost-savings and significantly reduce network complexity. Cisco is the world leader in VoIP technologies, providing the highest quality of service, a flexible set of call center and directory services, and advanced services and management. The Cisco integrated infrastructure also allows you to extend voice to wireless devices, increasing productivity and improving customer service.

Choosing the Right Network for Your Retail Environment

For today's retailer, wireless LANs are being transformed from a convenience to a business-critical technology. Cisco is responding to this fundamental industry change with a commitment to the WLAN as a standard business technology. In a Cisco network, the wireless LAN is a natural extension of the wired infrastructure.

A History of Wireless Leadership

Cisco has led the wireless industry since its inception, based on its unwavering dedication to open standards and interoperability, as demonstrated by its membership on the Institute of Electrical & Electronics Engineers (IEEE) standards committee and WiFi Alliance. The company has been a driving force behind the standards for 802.11 and its various permutations, including 11.E, quality of service (QoS), EPC Global, and the ISO RFID standards. The Cisco Technology Developer program and the Cisco Compatibility Extension program also help to ensure wireless systems performance optimization in multivendor installations (including radio interoperability, roaming, power management, and security). Based on a detailed roadmap for future development, Cisco continues to work on enhancing its enterprise-class WLAN security solutions, delivering products that enable faster WLAN deployment, maximize asset tracking capabilities, and drive critical industry standards.

Diverse Cisco Wireless Product Suite

Cisco offers a wide variety of wireless products and technology, including many important WLAN innovations from Cisco that help to enable the retail wireless LAN:

- The choice of a distributed or centrally controlled architecture
- Integrated location-based services
- Optimization for VoIP
- A total security portfolio, including robust IDS, interference and rogue access point detection, industry-leading firewall services, and client security
- RF management simplification for dynamic RF intelligence
- WiFi client integration for radio security and network management

Why Cisco?

Cisco Mission-Critical Mobility solutions are developed to meet the specific needs of retailers. Used by market leaders around the world, these solutions give you true control over your stores by providing unified access and better management of mission-critical information. Cisco combines end-to-end security, mobility, interoperability, IP Communications, and a flexible networking infrastructure that allows retailers to deploy current and future applications to trim operating costs, improve productivity, and maximize customer satisfaction across the enterprise.

For more information on the Cisco Intelligent Retail Network, please visit our Website at <http://www.cisco.com/go/retailsolutions> or call your Cisco dealer.

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