A modern value chain for the modern consumer

How retailers are connecting their end-to-end environment for long term growth

Going beyond the store

In retail, change is always right around the corner. As technology continues to develop, there are more and more opportunities for the improvement of a core pillar of commerce: the value chain. Basically, a retailer’s value chain can involve five main parts—raw materials, manufacturing, distribution centers, logistics, and finally, the retailer. Each link plays an important role in getting products into the hands of customers.

And, when all parts work together easily and quickly, the result for both the customer and the retailer is efficiency and positive experiences. Cisco’s modern infrastructure delivers that efficiency with the help of a few key elements. We’re going to take a look at what exactly the modern value chain is, as well as the role of Cisco’s always-connected approach.
A better network

Every kind of retail business has some sort of a value chain. Traditional supply chains often suffer from poor connection between links—raw material providers not being able to contact manufacturers for instance, or distribution centers unable to communicate well with people handling logistics. The problems that stem from not being able to share information easily and quickly can be as small as a slightly delayed delivery, and as large as an incorrectly designed manufacturing run.

So where does Cisco come in, and how do our solutions provide a different approach for connecting your value chain? Our solutions are designed to bridge the gaps between people and processes. In this case, this means providing a centralized place for information that’s useful to all parts of the value chain, as well as supporting each stage individually. Being fully connected means no more guess-work, no more waiting on untrackable deliveries, and no more delays in production resulting from unavailable real-time information.

A network at work

While all stages of a retailer’s value chain benefit from connected data, there are a few concrete examples that demonstrate exactly how a value chain supported by Cisco can help a retail business perform better:

At the distribution center,
the improved value chain comes to life with equipment and asset tracking, as well as streamlined docking and loading processes. Technology such as augmented reality can reduce pick times and improve load accuracy. Video monitoring and machine learning help with workplace safety and quality assurance. Automated workflows help with incident management, and can reduce downtime and the costs involved, as well as ensuring compliance with OSHA and other regulations.

In the back-of-house environment,
inventory management improvements give retailers a firm grip on their stock. That connection cuts down the time between when an item is sold and when it gets restocked. A customer can’t walk out of a store with an item they’d like to purchase if inventory is down. The appearance of an item being out of stock can also mean losing the sale for the customer’s entire basket (not to mention, a poor customer experience).
Data, in store

Customers expect rich, interactive store experiences. Retailers want efficient operations that improve both their employees’ performance and their customer’s experience. That’s where connections come into play. With the current expectations for retail service, it’s important to have optimal bandwidth, end-to-end security, and most importantly adaptable technology that is always ready to change to meet the growing needs of customers and retailers.

The rapid development of changes at the edge requires retailers to pay close attention to how their digital strategy will align with what’s coming. For instance, 5G is coming, and coming soon. It will impact retail operations and customer experiences, and if not supported by an intelligent network infrastructure, the outcomes might not always be positive. The 4G network has faced challenges with maintaining signal strength, which is something that needs to be taken into consideration with 5G knocking on the door. Implementing the right IT backbone can help retailers ensure that their customers don’t face the challenges that result from dropped calls or internet connections.

WiFi 6 and OpenRoaming

offer a seamless transition between cellular and wireless networks both for customers and for retailers. Since the “edge” of the store itself is blurring with offers like curbside pickup or local doorstep delivery, the ability for both the customer and the retailer to access online data whenever and wherever they need is key.

Bringing together information

For retailers, making sure their business operates as efficiently as possible is dependent on how they can analyze information. As it stands, data silos are a fact of life. From POS to Inventory Management, people-counters to eCommerce, much of the information retailers need to help their businesses grow lives in totally different systems. In order to get the most out of that data, the silos have to be brought together quickly and efficiently.
Retail today
In the last 12 months, 76% of retailers have adopted supply chain technologies to improve the customer experience.

Dwell data,
for instance, is a useful tool for determining how long a customer spends in a store. However, only when combined with POS data does it turn from simply useful to great. By combining those two sets of information, we can tell if merchandizing is effective and if the customer is spending more time in the store because they’re buying more, or because they’re confused or need help.

The IoT (Internet of Things) is increasingly being tapped as a data source as well. One way is by bringing together information gathered by physical sensors (like when and where an item is scanned into a warehouse) together with the various platforms that retail and distribution businesses use to keep track of critical information like available warehouse stock. More and more, Artificial Intelligence and Machine Learning are used to make sense of huge amounts of information for retailers. Making sure your data is secure at every point where it’s processed is vital, which calls for end-to-end security. This is especially relevant for IoT, as technologies such as IoT sensors make for a larger at-risk attack surface if there isn’t a strong, proven security system in place.

The value chain, evolved
Bandwidth availability has grown by leaps and bounds in the past ten years. However, that bandwidth is far from free or limitless. Accordingly, there is still a lot to be considered when it comes to optimizing a retailer’s bandwidth—especially its strength and security.

**Software-Defined WAN (SD-WAN)**
is a policy-based solution that directly addresses those concerns. Combining multiple service providers (encompassing 4G and 5G), SD-WAN allows for digital traffic to be prioritized and sorted based on type, destination, or other customizable criteria.

That means that retailers can prepare for occasions like Black Friday or Cyber Monday, because the system can be adjusted to deal with the surge traffic that comes with big sales days. Being prepared on the back end for a high-traffic day nonsurprisingly results in increased sales, and better retention for customers and associates alike. End-to-end secure communication between corporate locations, partners on other networks, and to cloud services during surge online traffic is invaluable.
Bring it all together with Cisco.

Cisco has been working with retailers for more than three decades, spanning 116 countries around the world. Our secure networking, collaboration, wireless, and data center technologies have long been a fixture – and our deep portfolio offers practical, forward-thinking solutions for retailers looking to accelerate their impact on the market.

See Cisco’s digital solutions for Retail

Dive into Cisco’s Portfolio Explorer for Retail

Security plays a big role in how retail value chains will continue to grow into the future. It isn’t just the security within a network that needs to be considered, but the security between networks. Most retailers use a single cloud provider, but it’s likely that somewhere along the value chain they will interact with another cloud service. Cisco’s secure network infrastructure empowers retailers to manage a multi-cloud environment that ensures effective cross-platform access, protection, and visibility.

Unchained potential

Many consumers experience the benefits of the Cisco network without even knowing it’s happening. That’s because at Cisco, we believe in connecting the unconnected to make managing a dynamic retail environment easier, and any shopping experience more engaging. Speed, security, and utility of information is at our core, and it’s why we have the unique ability to create the most modern, useful value chains possible. We help retailers and businesses across the board to scale efficiencies and enable innovation, by partnering with them as the strategic technology arm of their organization. With new retail technology capabilities advancing all the time, we’re excited to continue to help drive the future of what retail will look like.