

TEN REASONS WHY RETAILERS CANNOT AFFORD TO IGNORE SD-BRANCH





For reasons that we know all too well, the focus of non-essential retail has been away from the physical store for what seems an eternity. But now the hiatus is coming to an end, it is time to look again at the “bricks and clicks” in-store digital applications that enhance customer experience and make your stores “sticky”. But what of the technologies that support those apps? The one that retailers really cannot afford to ignore is SD-Branch. Here’s why.



1 BRANCH SPRAWL

Over the years retail branch networks have become overloaded with many and varied technologies and apps. Point of sale systems, Wi-Fi routers, in-store video, digital signage, and, increasingly, a variety of network-connected IoT devices are sprawled across multiple locations in the estate. For many, this infrastructure has become insupportably complex, expensive, and inflexible.



2 YOU NEED TO BE “ALWAYS-ON”

Your stores are more connected than ever, which means they depend on always-on, high-performance network connectivity. As the network moves from being a commodity to become a pivotal element in delivering excellent customer experience, high availability of applications and unbroken internet access increasingly drive that experience. Centralised, software-defined policy control, traffic prioritisation, and dynamic adjustment as network conditions fluctuate are essential to ensure that users and IoT in the branch always get high performance connectivity, right across the entire branch infrastructure.



3 IOT IS GROWING EXPONENTIALLY

The Internet of Things (IoT) is the fastest growth area in today's retail businesses. Its development has been largely driven by online shopping: customers want to move seamlessly between their online and offline experience with brands. Hughes sees this as a complete “IoT ecosystem” that must be integrated and managed to deliver on this expectation.

IoT technology is increasingly used to manage employees, inventory, and point-of-sale devices. Use cases for retail IoT already include:

- > **Digital signage**, which personalises the customer experience and guides customers through the shopping journey, delivering incremental purchases and promoting slow-moving stock
- > **In-store Wi-Fi** that allows you to get similar information and insights from in-store customers to what you get online, and provides opportunities to increase customer loyalty with customer-specific communication, targeted offers etc.
- > **Smart lockers** for fast, efficient and contactless pickup
- > **Smart cameras** with video analytics to provide insights on customer satisfaction and footfall e.g. with heat maps, demographic profiling etc.

Managing and having visibility over this ecosystem of IoT-supported apps and devices, as well as processing information from them in a timely manner, is key to ensuring security and reliability in these devices. SD-Branch makes it easier to manage the IoT infrastructure and scale up as data traffic increases.



4 YOU WANT VISIBILITY

Enhanced visibility using a single window to view all of your devices enables you to understand traffic flow patterns on both LAN and WAN. You can see if devices are not working or inactive and get a good overview of network usage. The SD-Branch network's dashboard shows you how your Managed Service Provider (MSP) is managing connections, running diagnostics and delivering on maintenance calls.



5 RETAIL SPACE IS AT A PREMIUM

Retail space and resources are often limited, especially if the branch is in an urban environment. You certainly don't have an abundance of space in the storeroom or office to keep server racks, switches, computers and other devices. SD-Branch is software-defined and is delivered through a uniform technology stack. This means that the in-store hardware footprint is reduced. The applications are managed remotely, and they can be scaled up and added to quickly, for example to open up new business opportunities and enhance the customer experience.



6 IT RESOURCES ARE EXPENSIVE

Managed SD-Branch reduces the need for IT personnel on-site for deployment, configuration and maintenance, which means they can be redeployed to higher-value initiatives and analysis of effectiveness of in-store applications.



7 OPERATIONAL AGILITY

Of all the advantages that a managed SD-Branch solution delivers, you are likely to benefit most from the operational agility it brings. New branch locations can be rapidly set up with plug-and-play appliances at the network edge and network services remotely provisioned and configured via a centralised management tools console. This is especially useful for retail organisations that are starting up or scaling up, pop-up stores, and stores-within-stores.



8 SECURITY

Without effective security measures in place, distributed retail stores become highly vulnerable to security breaches and cybercrime. Traditional SD-WAN gives you security at the network transport level but leaves the LAN inside the branch store highly vulnerable, as it is no longer protected by the organisation's centralised security services. By contrast, a true SD-Branch solution provides various security must-haves such as a state-of-the-art firewall to secure both wired and wireless connections and central access controls, giving the ability to secure the entire branch network and monitor every device connected to branch LANs.

Many organisations realise this too late, allowing branches to deploy their own security appliances, firewalls etc. at local level, which creates complexity, a lack of transparency at HQ, and consequently, further administrative burdens on IT.



9 ABILITY TO INNOVATE

The virtualised architecture of SD-Branch gives a retail organisation unprecedented ability to innovate, with minimum risk. IT teams can implement new in-store solutions such as digital signage and Wi-Fi analytics, rolling them out to distributed and even remote or tricky high-street locations, software-defining them into a single consolidated appliance.




10 SUPPLIER RATIONALISATION


When you take the SD-Branch approach you reduce the number of active IT suppliers you have to deal with. You benefit from decreased cost of support and maintenance contracts because fewer vendors will be involved. And if you move to a managed SD-Branch solution you not only rationalise your supplier landscape; you also offload all of the issues and get guaranteed service levels from a single vendor.

MANAGED SD-BRANCH: A CHECKLIST

There are a lot of vendors who claim to be offering SD-Branch, but they may be little more than SD-WAN. This may not be a problem for certain deployments in some other sectors, but in retail it is especially important to understand the difference. To be able to deliver the benefits outlined above the solution must meet the following requirements.

 **Orchestration of network functions**


The key difference between managed SD-Branch and SD-WAN is largely where network functions are managed. Whereas SD-WAN is strictly geared towards data flows over the transport layer, managed SD-Branch extends orchestration and control one layer upwards to cover the network functions that support smart retail. With managed SD-Branch, these functions can now be managed at the head office level and jointly orchestrated over both sides of the WAN connection. The ability to view these network functions together with your MSP helps streamline operations and makes your IT resource more efficient.

 **Integration of branch LANs**


Think of this as SD-WAN technology that integrates LAN functionality – SD-Branch does to the LAN what SD-WAN did to traditional WANs, allowing the branch LAN to be fully integrated into a centralised network platform. It thereby simplifies device management within the LAN of each branch site. Even if some branches have multiple VLANs for data separation, administrators can use SD-Branch to set access policies centrally based on the device type, user, or application for that particular site or a group of similar sites.

 **SD-WLAN for perfect in-store Wi-Fi**


Automatic Wi-Fi configuration for innovative in-store concepts, integration of new access points or applications such as hotspots, definition of the SSIDs, authentication method and bandwidth limitations. The SD-WLAN is easily and rapidly rolled out to all branches with auto-configuration.

 **Central decisions rolled out to every branch or store in real time**


SD-Branch should give you seamless communications between the main office and your stores. Central orchestration of all network processes ensures secure communication between the head office, branches, and external partners. A branch rollout can be achieved quickly and later scaled just as easily because the same software build runs at every branch.

 **Prioritisation of business-critical traffic**

A managed SD-Branch network is able to detect and compensate for sudden drops in connection performance automatically by implementing policies that prioritise business-critical over non-essential traffic, rerouting traffic over different connections before it impacts the shopper's experience.

 **NGFW security**

Without tight security, software-defined branch becomes a software-defined risk. SD-Branch security introduces Next-Generation Firewalls (NGFWs) at the branch's gateways. These serve as a control point that intelligently filters data entering or exiting the branch network.

 **Role-based network access and PCI-DSS compliance**

With a managed SD-Branch network IoT, staff and customer traffic can be separated to protect security and privacy. Among other things, this means retailers can ensure Payment Card Industry Data Security Standard (PCI-DSS) compliance by segmenting traffic to protect cardholder data.

Conclusion

In conclusion, managed SD-Branch extends the functionality of SD-WAN by simplifying the enterprise branch into a single, software-centric platform. It offers enhanced management, increased network visibility, and security for the branch network, IoT and end-user devices.

Whereas in the past it was possible to talk about bricks versus clicks in retail, it is clear from the way people want and expect to shop that the future of bricks-and-mortar is digital, the fully digitally enabled store. Given this new reality, any up-front investment in a managed SD-Branch deployment is going to save you a lot of the time, effort and resources needed to manage your branch estate and deliver on customer expectations.

It could be the biggest factor in your retail business's future success.

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