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# A RETAILER IS ONLY AS STRONG AS ITS DIGITAL INFRASTRUCTURE

Ensuring a Solid Foundation to Meet Today's Fast-Evolving Needs

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RETAIL INFO SYSTEMS

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POWERING INTELLIGENT COMMERCE

# RETAIL IS EVOLVING FASTER THAN EVER

The dramatic global upheaval of the Coronavirus (Covid-19) pandemic is just the latest evidence showing the retail industry how quickly business needs can shift in today's world. It's times like these that make crystal clear the value of an end-to-end Managed Services Provider (MSP) for digital infrastructure who doesn't just provide network services, but acts as a true partner to a retailer's business. While a retailer's internal IT is focused on addressing critical business needs, a highly qualified MSP partner ensures the network is agile enough to respond to changing business needs and everything on it is working securely and at peak efficiency.

The fact is, a high performing digital infrastructure is integral to succeeding in retail today; agility, digital transformation and omnichannel services rely completely on:

- A **high-performance, resilient and well-managed network** across all locations
- Robust, 24/7 **cyber-security**
- Consistent, uninterrupted **cloud and data access**
- **Advanced analytics and Artificial Intelligence (AI)** to optimize performance

For a retail IT team racing to keep pace with business and market changes, **maintaining and operating this digital infrastructure is**

**becoming more challenging than ever**, requiring substantial investment in time and resources as well as high levels of expertise. Many retail IT departments are struggling to achieve this internally, or are contracting and managing a complex set of point solution providers.

A growing number, however, are choosing instead to consolidate management of their digital infrastructure to a true partner, one who understands their business and where it is going and can make sure their digital infrastructure is an enabler instead of an impediment to innovation. **Unlike a standard MSP providing a specific task or capability, an experienced, well-qualified MSP partner can deliver a complete end-to-end service suite.** This allows retailers to increase the efficiency, reliability and flexibility of their enterprise digital infrastructure so they can respond nimbly and thrive in a rapidly evolving retail marketplace.

# RETAILERS' DIGITAL INFRASTRUCTURE FACES UNPRECEDENTED DEMANDS

## CHALLENGE #1

### MEETING THE EXPLOSION IN BANDWIDTH REQUIREMENTS

Even before the pandemic shuttered brick-and-mortar stores, today's omnichannel retail world demanded ever more from its digital infrastructure, thanks to big growth in demand for **rich media, cloud computing** and bandwidth-hungry **in-store technologies**. Across the retailer's entire footprint, including headquarters, stores, distribution centers, e-commerce operations, call centers and other locations, retailers are pressed to meet these spiking network demands:

- 32% of retailers cite store bandwidth and infrastructure as a top obstacle for the next three years. – [RIS 2020 Retail Tech Study](#)
- 64% say that inconsistent performance and being unable to access their network is disruptive to their store operations. - [Digital Transformation Drives Distributed Store Networks to the Breaking Point, Forrester, 2018](#)

#### RETAILERS PLAN LOTS OF CHANGES TO THEIR NETWORKS

##### DIRECT CONNECTIVITY TO CLOUD PROVIDERS



##### DIRECT CONNECTIVITY (MULTIPLE CONNECTIONS TO SAME LOCATION)



##### IN-STORE WI-FI



##### SD-WAN (OVERLAY NETWORK ENABLING REAL-TIME TRAFFIC PRIORITIZATION BASED)



##### BANDWIDTH



##### CUSTOMER-FACING IN-STORE WI-FI



■ Implemented and working well    ■ Add/Upgrade within 12 months    ■ Add/Upgrade within 1-3 years

SOURCE: 2020 POS/Customer Engagement Survey Report, Retail Consulting Partners

## CHALLENGE #2

### FENDING OFF INCREASINGLY SOPHISTICATED ATTACKS

Keeping a network secure requires a never-ending cycle of **identifying, defending and preventing ever-more-sophisticated attacks**. At the same time, new channels and a distributed IT architecture mean the number of threat vectors is rising dramatically – especially in times of economic and societal uncertainty. Retailers must protect IT assets while also complying with mounting privacy regulations such as General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA). Maintaining the necessary and highly specialized expertise to ensure state-of-the-art readiness and 24/7 proactive monitoring grows increasingly difficult – not to mention costly:

- 504,316 US job openings for cyber-security workers are unfilled, making talent supply “very low” - [Cyberseek](#)
- 22% of security decision-makers cite lack of resources as a major challenge – [Security Boulevard](#)

### FACT:

*The average cost of a retail data breach is \$1.84 million/\$119 per record – [Ponemon Cost of a Data Breach 2019](#)*

### FACT:

*Global cybercrime generates 12x Walmart’s 2019 annual \$514 billion earnings – [Dark Reading](#)*



## CHALLENGE #3

# MANAGING A COMPLEX MATRIX OF BROADBAND PROVIDERS, TECHNOLOGIES AND SERVICE PLANS

A strong digital infrastructure across multiple locations **must leverage best-available technologies at every site** – this is no one-size-fits-all proposition. Yet, stitching together a network of broadband carriers to cover a retailer's entire geographic footprint requires striking deals with dozens of different providers. For a typical 1,000 site retailer in the US that means juggling:

- Different transport technologies, bandwidth rates and circuit sizes by carrier and location: Cable Modem, Fiber, Wireless, Satellite, etc.
- As many as 24 different Internet Service Providers (ISP) to get the best service at each location
- Up to 20 different service plans and sets of contract terms for each ISP
- Complete integration with each ISP's processes and touchpoints for provisioning, onboarding, trouble ticketing, billing, analytics platforms, reporting, and field service team

Managing a multitude of vendors and service terms eats up hours of critical IT resources for management and coordination of digital infrastructure tasks that **could be better spent on the retailer's business.**

## FACT:

*There are 2,669 internet service providers in the US.*  
– [Broadband Now](#)





## CHALLENGE #4

### DELIVERING OPTIMIZED NETWORK OPERATIONS AND MANAGEMENT

Monitoring and maintaining today's retail network across a complex broadband footprint **requires considerable resources**. Network operations staff must not only keep networks secure, but **respond expediently** to issues ranging from the common, such as circuit outages, to the extraordinary, like regional storms and floods. This requires:

- Extended operational hours, with most retailers requiring 24x7
- Specialized network operations, management and analytics skill sets (talent that is costly and in high demand)
- Investment in artificial intelligence and other analytics tools to optimize performance
- Smart application of automation to dynamically react to network and security changes and to identify and apply optimization and improvement techniques where needed

Plus, operations teams are tasked with optimizing performance across an array of communications technologies and usage patterns – not just responding to issues, but proactively analyzing patterns and identifying mitigations.

## FACT:

*Enterprises' top priorities for network task automation are Security incident remediation (62%), Network state verification/analysis and Network OS management (61% each)*  
*- [EMA, Enterprise Network Automation for 2020 and Beyond](#)*



# PARTNERING FOR DIGITAL INFRASTRUCTURE MANAGEMENT

Building and maintaining a strong and agile digital infrastructure is a priority for today's retailer. Yet the typical retail IT team is challenged to do it alone while also keeping pace with the other IT changes driving the industry, as the COVID-19 crisis illustrated. Practically overnight, IT demand shifted from supporting high volume, in-store consumer shopping to powering click-and-collect orders placed via digital channels that had to be located, picked and packed in stores and processed for curbside, home delivery, and third party shipping. **IT resources were stretched thin** supporting these operational changes as well as integrating with new suppliers and delivery partners, accommodating work-at-home orders, and other business changes.

Increasing demands have convinced a growing number of retailers to engage an MSP to handle some or all of their digital infrastructure management. **Fully two-thirds of stores** would like to use a third party either exclusively or in conjunction with their IT department to help **manage their networks**, according to Forrester Research.

But often, offloading specific IT tasks to an MSP, or **choosing a provider with a limited range of services, doesn't bring much relief**, because retailers still carry primary responsibility for the day-to-day management of their network—plus the now-added task of coordinating provider services. In addition, this fragmented approach doesn't maximize the retailer's investment or enable them to get better performance than they could get using in-house resources.

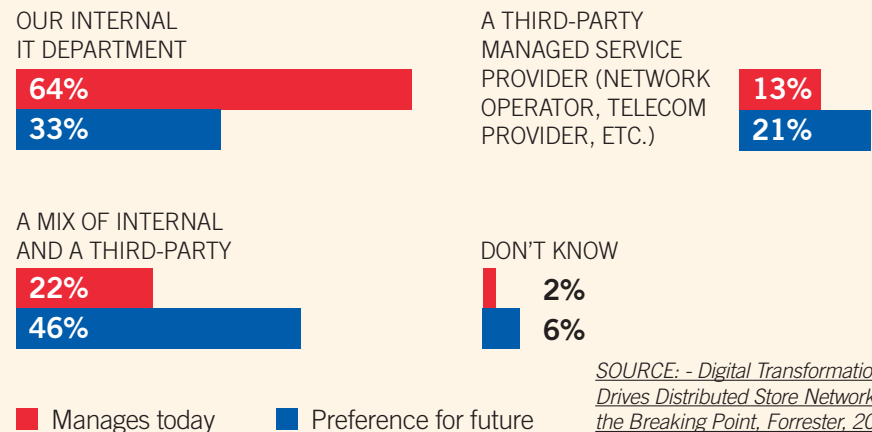
Retailers get a far better value for their investment by choosing a provider capable of taking a more **comprehensive, strategic approach—not just a managed services provider, but a Managed Services Partner**. A true partner offers a full suite of services to ensure optimal performance of a retailer's entire digital infrastructure. This includes advanced network operations management, performance

optimization technologies and state-of-the-art security—as well as **deep domain expertise** in retail, so they can **truly understand and tailor services** to their retail customers.

This approach relieves retail IT teams of routine activities such as diagnosing a store bandwidth issue or resolving a trouble ticket with an ISP. Instead, they can **lead value-added activities that help enhance the business** such as automating business processes, improving network and security policies, integrating new applications or perhaps working on cloud adoption, or leveraging analytics to enhance the customer experience.

By aligning with an MSP partner who is in sync with its business priorities, not just its IT delivery, a retailer can identify new business capabilities, speed time to market with new technology, simplify IT management, and reduce complexity and integration overhead – all steps to **enhancing IT delivery and helping the business thrive**.

## “WHO MANAGES YOUR NETWORK TODAY? WHO WOULD YOU PREFER TO MANAGE YOUR NETWORK IN THE FUTURE?”



SOURCE: - *Digital Transformation Drives Distributed Store Networks to the Breaking Point, Forrester, 2018*

# RELIEF FOR OVER-TAXED RETAIL IT DEPARTMENTS

A high-quality MSP partner provides a full complement of digital infrastructure services. This means **comprehensive, end-to-end management of a retailer's network and everything that runs on it**, as well as all the pieces that support that network. A seasoned, experienced MSP partner offers a **full suite of innovative, cloud-ready network managed solutions tailored to transform business networks**. That means not just keeping them running, but ensuring they are higher performing, more secure, more reliable and more cost-efficient.

A true MSP partner takes care of the **all** the equipment, **all** the software, **all** the vendors/providers, **all** the details of deployment and operation, **all** future-needed support and maintenance, **all** configuration and policy controls, and provides a **single point of contact** and a single responsible organization for the customer to lean on.

## A high-quality MSP partner addresses retailers' top challenges:

### CHALLENGE #1

## MEETING AN EXPLOSION IN BANDWIDTH REQUIREMENTS

### MSP SOLUTION: HIGH-PERFORMANCE DIGITAL INFRASTRUCTURE

An MSP partner can design, test, provision and build a **high performance, resilient digital infrastructure** based on a retailer's specific needs, today and down the road. Working in partnership with a retailer to understand its challenges, unique circumstances and roadmap enables the **experienced, retail-knowledgeable networking specialists** at an MSP partner to create and maintain robust infrastructure that will enable rather than constrain future growth.

A high-quality MSP provides **everything retailers need to address their bandwidth requirements** as well as an array of products to support business needs, including:

- Underlay broadband connectivity
- Overlay SD-WAN optimization
- LAN-side services like Wi-Fi and VoIP

Retailer IT budgets are already over-weighted to maintenance vs. innovation. The right MSP partner **frees up IT resources** to focus on growing the business.

## FACT:

*Retailer leaders are investing in SD-WAN at 65% higher rates - [IHL Services Prime Challenge](#)*



## CHALLENGE #2

# FENDING OFF INCREASINGLY SOPHISTICATED ATTACKS

## MSP SOLUTION: WORLD-CLASS SECURITY RESOURCES

Digital infrastructure is an MSP partner's core business, enabling them to amortize the cost of mounting a robust security stance across many customers. This means they can **attract and retain top security talent** and **invest in world-class, 24/7 monitoring and advanced security analytics** to maintain the highest levels of vigilance, compliance and responsiveness and ensure all activity is happening in a manner that protects customer privacy and business data. It is very difficult for retailers to match this security infrastructure and staffing with in-house resources.

Key security capabilities in an MSP partner include:

- Managed Security Information and Event Management (SIEM) with incident response
- Single-pane security dashboard
- Managed Unified Threat Management (UTM)
- Managed Content Filtering
- Managed Next-Generation Firewall (NGFW)
- PCI compliance support

## FACT:

*According to a Forrester report, telecommunications companies rank in the highest security spending bracket. - [Security Boulevard](#)*

## FACT:

*By 2026, 77% of global cybersecurity spending will be for externally managed security services - [Australian Cyber Security Growth Network](#)*



## CHALLENGE #3

# MANAGING A COMPLEX MATRIX OF BROADBAND PROVIDERS, TECHNOLOGIES AND SERVICE PLANS

## MSP SOLUTION: OPTIMIZED UNDERLAY MANAGEMENT

By consolidating management of ISPs and the multiple communications technologies and service plans each ISP offers within its coverage area, an MSP partner **shields the retailer from a lot of complexity and administrative overhead**. The MSP partner takes on responsibility for **delivering a world-class underlay**, connecting each location with the best available service to meet the needs of the customer. Acting as the single point of contact for all connectivity and networking needs, the MSP manages all services on a sub-second level to ensure all Service Level Agreements are met and to respond quickly to address underperformance or other service issues.

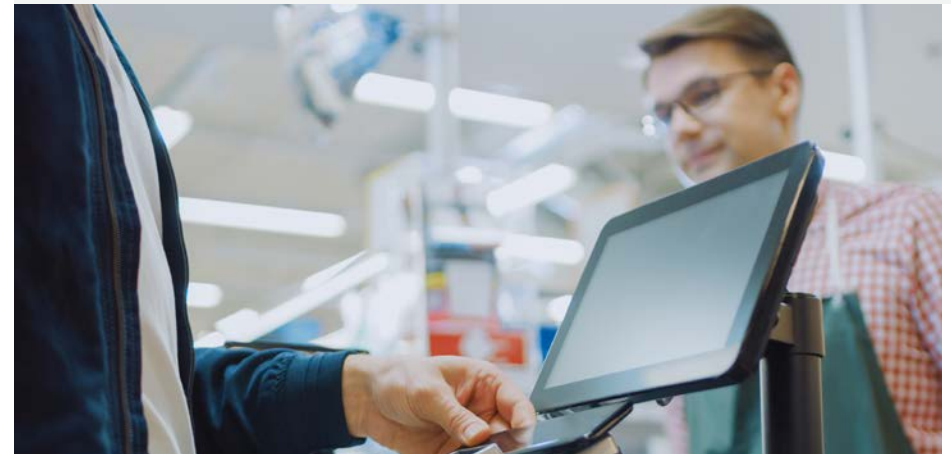
The MSP partner also **optimizes the underlay for application performance**, giving the business the confidence that its deployed technology is delivering the desired results and performing in a way that improves customer and employee experiences. A well-equipped MSP partner provides:

- A single source of billing, reporting and analytics
- Consistency in performance across the digital infrastructure

- Administration of multiple carriers and technologies, with a range of bandwidth rates and circuit sizes/types
- Technical integration of all connectivity types and services into one seamless network
- Management of separate onboarding, help desk and field service teams by ISP
- Scalability to grow or reduce the network as needed

## FACT:

*75% of retailers say having enough bandwidth is important to their network access and connectivity.*  
- [Digital Transformation Drives Distributed Store Networks to the Breaking Point, Forrester, 2018](#)



## CHALLENGE #4

# DELIVERING OPTIMIZED NETWORK OPERATIONS AND MANAGEMENT

## MSP SOLUTION: STATE-OF-THE-ART INFRASTRUCTURE, TEAM, AND DELIVERY SYSTEMS

Dedicated, private circuits are no longer the primary means of connecting an enterprise: today's broadband networks comprise a tangle of circuits and shared services simultaneously routing traffic direct to the Internet and the cloud as well as to the retailer's data center, depending on need. One location with a 10 Mbps connection, for example, must be managed differently than another location with a 50Mbps connection, to deliver the same performance. A world-class MSP brings **advanced optimization technologies** to this complex architecture, making individual adjustments by location to deliver consistent performance despite the variability.

An MSP partner's broad array of network operations services are delivered by **a team of dedicated and expert professionals** who have trained in this particular area of IT for years, and are supported by **proven processes and tools**. An MSP partner can attract and retain highly skilled network operations management talent to:

- Manage, monitor and operate digital infrastructure around the clock
- Discover and address issues before they degrade performance
- Coordinate onboarding, integration and updates
- Facilitate help desk and on-site support with one number to call across the entire enterprise
- Provide a broad scope of store services to support future business needs

A world-class MSP partner can also invest in ongoing innovation and development, such as **applying AI, machine learning and optimization tools** to make dynamic adjustments that ensure peak efficiency and performance, and support a **continuous and ongoing review of every aspect of the network's operation** to find ways to improve and enhance application delivery and security.

## CASE IN POINT

### THE POWER OF A PARTNER: QDOBA AND HUGHES

When QDOBA Mexican Eats spun off from Jack in the Box, it needed to create a whole new IT infrastructure to support 700+ restaurants.

QDOBA's partnership with Hughes and its HughesON managed network services enabled the new company to quickly establish a complete enterprise digital infrastructure, adopting a cloud-first approach, in just nine months.

*“Our relationship with Hughes allows us to focus on the most important aspect of our business: our guests.”*

— Eric Rosenzweig,  
Vice President of Information Technology  
at [QDOBA Restaurant Group](#)



## CONCLUSION:

### CHOOSE AN MSP WITH CARE

The right MSP acts as a **true partner**, understanding and supporting a retailer's unique business and goals, and then designing and managing a **fully capable, enterprise-grade foundation** to enable the retailer to thrive. By choosing an **experienced, well-qualified MSP partner**, today's retailers can enjoy the peace-of-mind that comes with an **efficient, reliable and flexible enterprise digital infrastructure** – freeing them to focus on navigating the constantly changing retail marketplace and growing their businesses.

For more information visit: [HughesON.com](https://HughesON.com)