

WHITE PAPER:

6 Paradigms, 6 Tech Tools for the Next Normal

How retailers, convenience stores and restaurants can leverage six key technologies to address the new paradigms of the COVID-19 pandemic





EXECUTIVE SUMMARY

The COVID-19 pandemic has forced organizations to adapt their operations on the fly and compress many years' worth of technological changes into a few months. The retail sector has been especially challenged to deliver services profitably and efficiently while meeting government mandates and addressing consumers' health and safety concerns.

Business executives have had to reshuffle priorities and come up with solutions to problems they never anticipated. They're also recognizing that changes in customer behavior will persist long after the pandemic has abated, requiring long-term restructuring of operational models.

Although the pandemic has impacted each organization in unique ways, SageNet has identified six common paradigm shifts across all multisite retail, convenience store and quick-service restaurant customers:

1. Ensuring health and safety is the primary driver behind business decisions.
2. Unprecedented financial uncertainty must be addressed creatively.
3. Technological change continues to accelerate.
4. Throw out all the old rule books. Agility and adaptability are the name of the game.
5. The ability to transform operations depends upon technology.
6. Partnering with a trusted advisor is essential to success.

What hasn't changed are the fundamental business objectives of retailers — profitably delivering quality products with high levels of customer service to attract and retain loyal customers. However, organizations must leverage the latest technologies in new ways in order to achieve those objectives.

In particular, six technology tools can help multisite retailers weather today's challenges and forge a successful path forward:

1. Popup connectivity
2. Extended Wi-Fi
3. Integrated digital signage
4. Expanded cybersecurity
5. Actionable analytics
6. Managed network services

This whitepaper will explain how these six technologies can help retailers, convenience stores and restaurants address the new paradigms of the COVID-19 pandemic.

POPOP CONNECTIVITY

Agile organizations in the retail sector can't wait weeks to provision traditional WAN connectivity. They need the ability to deploy secure broadband in any location, almost instantly.

Technologies like satellite and cellular can provide flexible, reliable and cost-efficient popup connectivity. It can be deployed within hours or days and has the performance to support the most demanding applications. These services also provide robust authentication and built-in encryption to protect applications and data.

Today, cellular is ubiquitous, thanks to significant infrastructure investments by the major carriers. There are some places where it's unavailable, however, and that's where satellite comes in. Satellite connectivity can extend the reach of the popup network to all but the most remote locations. It can also be set up quickly using portable and mobile solutions.

Popup connectivity allows organizations to open temporary locations to respond quickly to changing customer demands and market forces as well as economic and pandemic-related conditions. In the pandemic context, parking-lot popups provide a safe outdoor space for selling products and engaging with customers.

Organizations can use popup connectivity to explore the viability of a new location without significant investments while creating a sense of accessibility and availability to customers. Popup locations also offer an opportunity to test new products or services or move excess inventory.

Trusted Connections: SageCONNECT



Through SageCONNECT, SageNet delivers cost-efficient broadband, cellular and satellite connectivity to every device in all locations. The SageCONNECT software-defined WAN solution offers the highest levels of flexibility for widely distributed multisite organizations.

EXTENDED WI-FI

Getting WAN connectivity to a site is only the first step. Organizations need robust guest Wi-Fi to meet consumer demand, while ensuring secure segmentation of operational Wi-Fi connectivity for POS and other network equipment.

Today, Wi-Fi services need to extend beyond a location's walls. Retail organizations have implemented a wide range of operational changes to enhance health and safety, from contactless payment to curbside pickup. Staff need the ability to use mobile devices outdoors to ensure efficiency and high levels of customer service.

With indoor dining constrained by social distancing, many restaurants are creating and surviving on outdoor dining areas. Wi-Fi connectivity is needed to support contactless menus and ordering as well as POS equipment.

Extended Wi-Fi can also provide customers with the free and reliable Internet access they've come to expect. Guest Wi-Fi can be a strategic differentiator that drives sales and customer loyalty. It also offers an opportunity to enhance the guest experience with customized content, mobile-enabled loyalty programs, video entertainment and more.

When extending the Wi-Fi network outdoors, it is especially important to have security controls that ensure compliance with the Payment Card Industry Data Security Standard (PCI DSS). Additionally, captive portals can be used to limit the duration of user sessions during the busy times of the day and to shut down the guest network after business hours.

Captive portals and Wi-Fi analytics offer valuable insights into customer preferences and behaviors. Retailers can explore traffic patterns through shopping malls, airports and travel centers as well as behaviors such as dwell time, first-time versus return shoppers and more – in real time. This information can be used to optimize product placement, increase advertising effectiveness and determine optimal staffing levels.

Trusted Connections: SageWi-Fi

SageNet offers fully managed Wi-Fi solutions that increase staff productivity and enhance the customer experience. Through our SageWi-Fi and captive portal offering, SageNet also helps organizations utilize Wi-Fi analytics to identify trends, improve operational strategies and boost sales.



INTEGRATED DIGITAL SIGNAGE

Many retailers recognize the value of digital signage for enhancing the customer experience. It has moved far beyond the realm of simply a modern alternative to static menu boards and promotional posters. Advanced digital signage technology is a highly effective communications medium ideally suited to support today's environment, both inside and outside the store and in the front and back of the house. Whether customer-facing or staff-facing, digital signage provides up-to-the-minute information in an engaging format.

Retailers and restaurants can use digital signage to display procedures for scheduling curbside pickup of online orders, returns, etc. Digital signage can provide maps and other wayfinding tools to guide visitors through the business, and show video explaining steps the organization is taking to ensure customer safety.

Digital signage conveys this information in a compelling and engaging way while limiting physical interaction between customers and employees. Displays should be large enough and positioned in such a way as to discourage people from congregating close to one another.

Behind the scenes, digital signage can provide information on company policy regarding social distancing and the wearing of masks. Messages from leadership can enhance employee confidence and engagement.

A strategic, integrated approach to digital signage maximizes the value of the technology. Organizations should consider all the ways the technology can deliver the right messaging to various audiences.

Trusted Connections: SageVIEW



SageVIEW is a comprehensive digital signage offering designed to enhance the customer experience while eliminating the headaches associated with deploying and maintaining digital signage. This holistic platform incorporates consulting services, integration and deployment, network connectivity, content management, 24x7 monitoring, and maintenance and field support.

EXPANDED CYBERSECURITY

As organizations have extended their networks to support new locations and growing numbers of users and devices, security vulnerabilities have also increased exponentially. Cybercriminals have taken advantage of the health crisis to exploit these vulnerabilities and introduce new threats.

They are also preying on pandemic fears to dupe users into clicking on malicious links or attachments. Some attacks are targeting company executives and knowledge workers who are accessing corporate IT resources from outside the organization's secure perimeter.

To combat these threats, organizations must integrate cybersecurity into every IT initiative and extend perimeter defenses to all users and locations. This requires a strategic approach to cybersecurity with tools that work together seamlessly to protect against the latest threats.

Organizations should begin by thoroughly assessing their environment to identify gaps. Security program assessments compare existing security tools, policies and procedures against ISO, NIST and PCI DSS standards. Vulnerability assessments help find weaknesses in network infrastructure, applications and cloud environments. Risk assessments can help organizations understand both the risk and potential consequences of cyberattacks.

Armed with an understanding of the environment, organizations can make the right investments in cybersecurity tools. "Smarter," more automated tools with artificial intelligence and machine learning capabilities can help IT teams respond more quickly to identified threats.

It's important to remember that security is never a "set and forget" proposition. Security information and event management (SIEM) platforms can provide greater visibility across the environment, while periodic vulnerability scans and penetration tests can ensure that the security infrastructure continues to provide adequate protection.

Trusted Connections: SageSECURE



SageNet's SageSECURE offering includes consulting services, strategy development, assessments, penetration testing, vulnerability scans, solution implementation and integration, and managed SIEM services. SageSECURE provides a robust security layer across all our technology solutions, enabling organizations to minimize threats and meet regulatory compliance requirements.

DEVICE LOCATION & WI-FI ANALYTICS

IoT sensors and "smart" devices are key to contactless, frictionless interactions. Contactless payments, for example, are enabled by near-field communication (NFC) antennas embedded in payment cards and NFC-enabled smartphones. The consumer places the card or device within 4cm of the card reader to process the transaction.

Location-based technologies can facilitate buy-online-pickup-in-store (BOPIS) transactions. A mobile app signals employees when the customer is near the store so that orders can be processed and brought to the customer immediately upon arrival.

Before the pandemic, retailers used Wi-Fi tracking and analytics to monitor traffic patterns and optimize store layouts to maximize sales and staff efficiency. Wi-Fi analytics platforms pull data from customer mobile devices, which don't even need to be connected to a wireless network. Today, those systems can also monitor checkout lines, displays and aisles to identify unsafe overcrowding.

IoT applications can collect information from POS systems, fuel tank sensors and other sources to determine when stock needs to be replenished. Device management systems can track handheld devices to provide real time information about the device usage, user analytics, battery health data as well as time-saving troubleshooting insight for technicians.

Trusted Connections: SageIoT



SageIoT gathers data from multiple sources and uses predictive analytics to pinpoint network problems and enhance the overall user experience. It is designed to provide visibility into network performance from the user and device perspective.

MANAGED NETWORK SERVICES

Pulling together all the technologies needed to implement these solutions is difficult in the best of circumstances. The pandemic has left many in-house IT teams struggling to meet existing demands, much less launch new initiatives.

A qualified managed network services provider (MNSP) can handle the design, deployment, and support of these technologies across hundreds or even thousands of locations. The right provider will understand each of these technologies individually and how they work together as a whole.

Of course, the unifying characteristic of these solutions is network connectivity. The MNSP should be able to design a high-performance, highly available WAN that combines broadband, cellular, satellite and other wired and wireless access technologies. The WAN serves as the foundation that supports Wi-Fi and a wide range of connected devices.

The MNSP should develop a trusted relationship with the customer, taking the time to understand the customer's needs and objectives. Behind the scenes, the provider must have the technical and financial resources and best-practice-driven methodologies to provide continuous monitoring, proactive maintenance and SLA-driven support. Best-in-class MNSPs offer an end-to-end approach that incorporates 24x7 Network Operations Centers and Security Operations Centers backed by a strong field support organization.

CONCLUSION

Retailers, convenience stores and restaurants have been faced with extraordinary change in operational requirements and customer behavior due to the COVID-19 pandemic. Organizations have had to move quickly to ensure the health and safety of both customers and employees while facing the financial uncertainty of the pandemic-fueled recession.

In order to adapt to this "new normal," organizations must embrace technology to become more agile and flexible. Based upon its decades of experience serving the retail sector, SageNet has identified these six technology tools that can help organizations address this paradigm shift. With a qualified managed network services provider as a partner, organizations can effectively utilize these tools to meet today's challenges and be well-positioned for the post-pandemic future.

About SageNet

SageNet is passionate about trusted connections. The company believes that by creating, discovering and nurturing trusted connections with its customers, associates and community, SageNet enhances the world that connects us all.

As a leader in managed network and cybersecurity services, SageNet connects, manages and protects technologies and devices across the enterprise. SageNet's collaborative approach provides peace of mind and systems-confidence that empowers an organization to focus on its core mission.

The company offers world-class service and support via its three US-based 24/7 Network Operations Centers (NOCs) and Security Operations Centers (SOCs), geographically-diverse teleports, a central National Logistics Center, multiple data centers, and a nationwide field service organization.

With a three-decade track record in managed services, SageNet boasts a long-term customer base that includes the nation's largest retail, healthcare, financial, utilities and energy organizations. SageNet manages communications at more than 220,000 endpoints. Headquartered in Tulsa, SageNet has regional offices in Washington, D.C., Atlanta, Chicago and Philadelphia.