Succeeding in retail petroleum requires managing a lot of moving parts at once. Today those skills are being put to the ultimate test, as the retail petroleum industry faces challenges on multiple fronts. C-stores must manage rapidly evolving consumer expectations for fresh, fast and friction-free products and experiences while facing a number of IT needs such as mobile pay and EMV at the pump, increasing use of cloud services and applications and replacing in-store routers before support ends later in 2019.

The good news is that by undertaking a thoughtful, comprehensive approach to digital transformation, convenience stores can not only address their immediate needs, but build an agile, customer-centric infrastructure primed to face future challenges.

High-Pressure Technology Deadlines
Technology has had a positive transformative effect across every aspect of our lives, and that is true of the C-store as well. But along with the benefits comes the need to keep systems secure, well-maintained and in compliance, while also ensuring they can support the fast-changing demands of the marketplace. Currently, several important technology imperatives require immediate attention:

**EMV AT THE PUMP**
C-stores face an October, 2020, deadline to deploy EMV at the pump, or accept increased liability. Experts widely agree that the lion’s share of credit card transactions occur at the pump, as do the lion’s share of fraud incidents.

**PCI COMPLIANCE**
Operators must keep up with annual assessments and evolving PCI requirements. The next major update is expected in 2020. And this is just the bare minimum, additional security measures must be implemented to truly manage overall risk.

**SHIFT TO THE CLOUD**
Software-as-a-service, data center outsourcing and uses such as IoT demand an always on, always available network. Without an effective network, cloud applications are unusable.
SUNSETTING OF EZR AND OTHER ROUTER EQUIPMENT

Market leaders Verifone and Gilbarco are both recommending router upgrades.

• Gilbarco is requiring upgraded software and new routers to support outdoor EMV.
  Source: Gilbarco POS EMV Roadmap, January 2017

• Verifone announced end-of-life plans for its Enhanced Zone Router that enables remote support of the Commander POS; retailers are being encouraged to move to a Verifone-certified Managed Network Service Provider (MNSP).
  Source: Hughes: Make the End of EZR the Beginning of a Better Network

Changing Consumer Market

At the same time the rate of change of technology is accelerating, tremendous market forces are radically changing what consumers want and expect from a C-store. Omnipresent mobile devices have increased appetites for authenticity, transparency, instant gratification and seamless, unified commerce.

HEALTHY AND FRESH

C-stores are taking on restaurants and grocers in the battle for the grab-and-go, healthy food dollar.

Foodservice is customers’ #1 C-store purchase in the last 12 months.

Source: Alix Partners 2017 Convenience Store Consumer Survey

62% of US convenience store retailers report sales increases of better-for-you items in 2018.

Source: NACS C-Store Retailers Say Sales Increase in 2018
REDEFINING CONVENIENCE:
MANDATES, MARKET FORCES, AND DIGITAL TRANSFORMATION

AT THEIR FINGERTIPS
Consumers are drawn to effortless, intuitive experience.

43%
of high-income Millennials are more likely to visit a gas station if its app offers them convenience, loyalty and savings.

Source: Pymnts.com

Digital signage rated an average 4 on a scale of 1 to 5 in importance to C-store customers.

Source: Alix Partners 2017 Convenience Store Consumer Survey

WITH FAST, EASY CHECKOUT
Lines are a huge deterrent: checkout must be fast and easy.

Mobile pay is rated an average 4 on a 1 to 5 scale in C-store technology importance by consumers.

Source: Alix Partners 2017 Convenience Store Consumer Survey

Self-checkout is consumers’ second-most important C-store technology offering.

Source: Alix Partners 2017 Convenience Store Consumer Survey

Fully automated, frictionless checkout:
59%
of consumers would like to use grab-and-go stores with self-checkout from their own smartphones.

Source: RIS News Retail 2025 Shopper Study
Available on demand, across channels

Consumers want options.

Order at the pump:

82% of consumers want a mobile app experience that will let them pay for C-store items.

Source: Pymnts: Pay at the Pump Report, 2018

Delivery:

70% of consumers are interested in C-store delivery.

Source: Alix Partners 2017 Convenience Store Consumer Survey

Transforming for Next-Gen Retail: Establishing a Foundation

Faced with the many challenges of evolving technology and customer expectations, the first instinct may be to focus on one at a time. But that can end up costing more, taking longer and requiring individual infrastructure investments that ultimately need to be quickly ripped up and replaced.

All of these trends share a critical common trait: their reliance on a robust, secure and intelligent network infrastructure to make sure the related applications perform as required. For this reason, retailers are embracing Software-Defined WAN (SD-WAN) networks to enable their next-gen retail applications to perform as desired and deliver the critical customer experience that will allow them to win over customers.
SD-WAN enables technologies such as **pay at the pump, EMV, mobile apps and digital signage** by managing around performance-killing congestion and preventing application failure and bad customer experiences:

• Intelligently **prioritizing traffic**, such as recognizing **mobile and POS payments** as critical to prevent delays

• Providing a **secure, direct, always-on path** to the Internet and cloud

• Providing **dual circuits** and path control to route traffic around disruptions

• Automatically **sensing and adapting** to new apps and app changes on the fly

• Enabling apps to be added and dropped **without a network engineer**

• Accommodating the **online connections** required for EMV

“**You can have the most available and reliable network, but still have lousy application performance due to congestion, latency and other issues.** And more often than not, the hidden key to that optimized network and customer experience is the implementation of a Software Defined WAN (SD-WAN) technology that is application-aware and has built-in intelligence on how applications perform.”

— **IHL Group, Prime Challenge: How Amazon has Changed Retailing**

With a solid SD-WAN solution in place, convenience retailers create the agile infrastructure they need to adapt to both today’s trends and tomorrow’s.
Healthy and Fresh

Ensuring a steady supply of healthy, grab-and-go prepared foods requires fresh item management. In-store, c-store retailers will rely on the Internet of Things (IoT), cloud and therefore an intelligent network to leverage these systems:

- Inventory management, including monitoring expiration dates
- Transparency - consumers increasingly want to know the ingredients and sourcing detail for the things they eat
- Compliance and accountability
- Proper training in food handling

Fresh items typically offer high margins

71% of consumers will pay a higher retail price for foods and beverages made with ingredients they recognize and trust.

C-store dining frequency has increased more than 13% over the last five years while QSR, grocery and casual dining have stayed flat or declined.

At Their Fingertips

Everywhere they turn, consumers are bombarded with messages on where, how and why to buy — an endless array of businesses are vying for their attention.

In this environment, shoppers are drawn to experiences that cater to their values, communicate the value proposition clearly and authentically, make doing business easy and recognize and reward them as individuals.
C-stores who check these boxes knit themselves into customers’ daily routines. Essentials include:

**MOBILE LOYALTY**
Consumers call mobile loyalty programs c-stores’ most important technology. While 61.7% of c-stores offer mobile coupons and 54.1% offer limited time specials, only 49.7% currently tie in a loyalty program.

Source: CSN 2018 Technology Study

**MOBILE APPS**
52.9% of c-stores have implemented mobile apps, 24.5% plan to add them.

Source: CS 2018 Tech Study

**DIGITAL SIGNAGE**
Digital signage highlights value in the C-store and can provide up to a 25% sales uplift.

Source: IHL Group: Prime Challenge: How Amazon has Changed Retailing

**CROSS-CHANNEL PERSONALIZATION**
Retailers enjoy a 107% average sales increase when they track and use customer preferences across channels, compared to retailers that do not.

Source: IHL Group: Unified Commerce Landscape Report
Fast, Easy Checkout

C-stores not only need to promote and sell items like fresh, healthy foods consumers can grab – but also make it easy to go, fast. Amazon Go and similar experiments are increasing enthusiasm for technologies that streamline checkout. Options include:

**SELF-CHECKOUT**

Just **8.4%** of c-stores offer self-checkout now, but **48.3%** plan to implement it soon.

*Source: CSN 2018 Technology Study*

**MOBILE PAY**

C-stores offering mobile payments such as Apple Pay and Google Pay:

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<thead>
<tr>
<th></th>
<th>In-store</th>
<th>At the pump</th>
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<tbody>
<tr>
<td>Installed</td>
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<td>35.9%</td>
</tr>
<tr>
<td>Plan to add</td>
<td>26.5%</td>
<td>38.5%</td>
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*Source: CSN 2018 Technology Study*

**FRICTIONLESS CHECKOUT**

Adopters include Standard Cognition in San Francisco, AiFi in Santa Clara, Walmart’s Store No. 8 with a cashier-less lane and Albertsons with its touch-pump-go system.

*Source: CS News: Disruption: 6 Technologies that Will Change Convenience and Fuel Retailing*
Available on Demand, Across Channels

In an on-demand world, convenience stores must be prepared to serve the customer wherever and whenever that customer chooses. That means expanding purchase opportunities well beyond the perimeter of the store.

Orders and payments are mission critical, so networks must be capable of automatically recognizing and prioritizing this traffic over a growing number of competing applications.

ORDER AT THE PUMP

Just 3.3% of C-stores enable merchandise ordering at the pump, but 35.5% more will add it.

Source: CSN 2018 Technology Study

DELIVERY

C-stores offering or testing delivery include Wawa, QuikTrip and 7-Eleven.

DRIVE-THROUGH, CURBSIDE PICKUP

More than 70% of consumers are interested in drive-thru windows at C-stores.

Source: Alix Partners 2017 Convenience Store Consumer Survey

Retail consultancy King-Casey predicts that by 2023, more than half of C-store brands will offer digital ordering and delivery options.

Source: CSNews, Should C-Stores Dive Into Delivery?

Now more than ever, consumers seek out speed, ease and convenience in every facet of their lives. That has convenience retailers seeking ways to reinvent the store experience. At the same time, they’re facing an alphabet soup of technology requirements – EMV, PCI, SaaS/Cloud, WiFi – that also require significant investment. By laying a firm foundation that includes a robust SD-WAN network, C-store operators can position themselves for success on all of these fronts, enabling all the next-gen technologies required to become consumers’ next-gen retailers of choice.
QuickChek Steps Up Staff Communications with Hughes Digital Signage

When your workforce is spread over two states, 150+ stores and round-the-clock shifts, getting the message out about exciting new products, promotions or processes can be challenging. That was the situation facing Whitehouse, NJ-based **QuickChek**. Corporate communications manager Amy DaSilva says email reached managers and team leaders, but not the rest of the team.

“Emails were missing a lot of the marks,” says DaSilva. “Not everybody was getting the right messages.”

So DaSilva turned to Hughes, which was already providing its **HughesON Managed SD-WAN solution** to the retailer. Hughes proposed **MediaSignage** for Smart TVs, a digital signage solution that would put screens in store backrooms as well its support center, to deliver messages through compelling digital content.

**Staying Connected Via SmartTVs**
Hughes’ cloud-based MediaSignage for Smart TVs is an all-in-one, cost-effective alternative to external digital signage, housing everything QuickChek needs within the SmartTV itself, including a media player and hard drive, thus simplifying infrastructure and hardware requirements needed for digital signage. This advanced, smart app-driven, wireless and LAN/WAN-enabled digital signage solution provides live and on-demand HD video, image, data, and text playback. Remote monitoring and support
provided by Hughes means any performance issues are quickly flagged and resolved.

Now, instead of writing emails, DaSilva uses the system’s Web-based portal to schedule compelling content for the entire organization. Content is distributed to each SmartTV’s hard drive to store and play throughout the day.

DaSilva can set each piece of content to play when it’s needed, where it’s needed, such as delivering information about a new NY law only to NY stores. Promotion messages can start and end with the event. QuickChek’s content has also included store openings, photos, customer comments, job postings and town halls, and provides an additional way to train employees with integrated Video OnDemand on the same screens.

“I can update screens from wherever I have access to the Internet,” says DaSilva. “I really enjoy the ease of being able to use the system. Before I had computer monitors running Powerpoint slides and it was not very intuitive. This just made it so much easier for me.” The portal also shows what is playing on any screen at any moment.

QuickChek’s SmartTVs are connected via its store Wi-Fi, which is supported by the company’s HughesON Managed SD-WAN running on their HR Secure SD-WAN Gateway.

**High Impact**
The new SmartTVs are a hit with support center staff and store teams alike. “Our team members like it,” DaSilva says. “We have a lot of movement between stores, so I’ve had team members who have left a store that had screens and go to another that didn’t, and they miss it. They like being aware. If we have a new hash brown product coming out, for example, they can tell customers about it, improving customer awareness.”

In fact, from 2017 to 2018, turnover in the first eight stores with the SmartTVs dropped an average 15% compared to stores not yet installed with the solution. “There are many factors that lead to turnover and I can’t directly translate changes in turnover to my QCtvs,” says DaSilva. However, “I think that overall awareness and communication has a big impact on team member satisfaction and retention.”

QuickChek is also enjoying these benefits:
- Consistent messaging across all shifts and locations
- Fast, easy uploads even from a smartphone for fresh, up-to-the-minute content
- Network-friendly design with content stored within the SmartTV rather than streamed

In addition to internal communications, QuickChek is exploring SmartTVs on end caps and behind the checkout for customer-facing content to drive additional revenue.

“I’m a big fan of digital communications,” says DaSilva. “This sends messages directly to team members, which makes it easier to do their jobs.”
Managed SD-WAN

Meet the Network Built For Your Convenience

HughesON™ Managed SD-WAN gives convenience stores the bandwidth, agility and security they need. To find a more convenient way to power your business, visit hughes.com/c-store.