

## WHITE PAPER:

### C-STORES, EMV and an MNSP

*How a managed network services provider can help you transition to Outdoor EMV and lay the foundation for advanced technologies*





## EXECUTIVE SUMMARY

Convenience stores face numerous challenges as they respond to the ongoing COVID-19 pandemic, changing customer demands and dynamic market forces. Operators have had to alter their stores and business processes to meet government requirements for social distancing and address customer and employee concerns about health and safety. C-stores were already under pressure to create more customer-friendly options in a highly competitive retail marketplace.

In the midst of all this, c-stores must alter their fuel pumps to accept EuroPay, Mastercard and Visa (EMV) “chip” cards. The deadline for this transition had been Oct. 1, 2020, but the card brands extended it to April 17, 2021, because of the pandemic. On that date, liability for fraudulent purchases will shift to the party of the transaction that is least EMV-compliant. C-stores that aren’t ready could risk tens of thousands of dollars in potential costs.

Making the transition to EMV at the fuel pump is not easy. It’s not just a matter of replacing card readers — c-stores need a robust and secure data network that is compatible with EMV point-of-sale (POS) systems and meets Payment Card Industry Data Security Standard (PCI DSS) requirements.

A certified managed network services provider (MNSP) can help by streamlining outdoor EMV deployment and providing around-the-clock maintenance, management and support. The right network will also lay the foundation for other powerful tools, including digital signage, frictionless checkout and more.

## FRAUD PREVENTION DRIVES SHIFT TO EMV

Traditional payment cards store data in plain text in magnetic stripes that can be copied and counterfeited. Thieves also use illegal card readers called “skimmers” to capture and download the data when the card is swiped. Because the skimmer must be physically installed over the POS device, thieves often target gas pumps that cannot be monitored easily by c-store personnel.

The National Association for Convenience Stores (NACS) says that a single compromised pump can capture data from 30 to 100 cards per day. According to the Secret Service, skimmers steal more than \$1 billion a year from U.S. consumers, much of which is funneled into organized crime syndicates.

EMV cards help prevent this kind of fraud. Computer chips embedded in the card use advanced encryption to protect the card data. Additionally, EMV cards generate a unique, one-time code for each transaction that's far more difficult to forge than a signature. The card cannot be easily counterfeited because the code would be useless if a criminal attempted to use it again. The payment card industry has reported a 43 percent reduction of fraud at EMV-enabled merchants.

For most merchants, the EMV liability-shifting scheme went into effect Oct. 15, 2015. Because the transition to EMV is more complex and costly for gas pump card readers than for other POS systems, fuel retailers were originally given until Oct. 1, 2017, to make the transition. That deadline was extended until Oct. 1, 2020, and then until April 17, 2021. It's unlikely to be extended again.

## PCI DSS Compliance Still Required

EMV does not eliminate the need to maintain compliance with the PCI DSS. EMV is concerned with preventing fraud in card-present transactions, while PCI DSS focuses on securing cardholder data. Fuel retailers must ensure that they remain PCI DSS compliant as they upgrade their POS systems and software.



## COSTS AND RISKS OF THE EMV TRANSITION

The cost to switch to EMV is not insignificant, even for in-store POS systems. Prices for EMV readers can run approximately \$300 each depending on the vendor and the functionality of the reader. In most cases, POS software will have to be upgraded or even replaced to handle EMV transactions. Equipment must be programmed, tested and certified, and employees must be trained.

Fuel retailers face even higher costs. The POS terminals in gas pumps can be much more expensive, and the data cables that connect the gas pumps to the store's network are often buried under concrete. In some cases, fuel retailers face a bill of \$25,000 or more per site to make the upgrade.

Merchants are not technically required to implement EMV-compliant POS systems, but the cost of fraudulent transactions gives them an economic incentive to do so. In August 2020, Mercator Advisor Group released the results of an analysis of existing fraud rates at gas station locations, taking into account the risk factors associated with each site. The analysis shows that a fuel retailer with 12 locations could face potential costs of \$17,315 per site, on average, or a total of \$207,780 over the 12-month period after the liability shift.

These estimates are likely low. Mercator assumed a lower loss rate than is shown by the existing data and applied that baseline to the riskiest sites. However, fraud may rise among fuel retailers that don't accept EMV cards as they will likely be targeted by criminals.

## C-Stores Making Progress Toward EMV Conversion but Much Work Remains

In an electronic survey of c-stores conducted by Conexus from Aug. 19 to Sept. 4, 2020, just 31% of respondents said that none of their pumps are EMV-ready. However, less than 15% are fully compliant, a number that has remained flat since Conexus began conducting the surveys in the summer of 2019.



More than 82% of respondents said they plan to convert their fuel pumps to EMV at some point in the future, with none indicating they had no plans to do so. Almost 18% remain undecided, stating that the cost was too high and the risk of not converting did not justify the expense.

## HOW A CERTIFIED MNSP CAN HELP

An MNSP with specific expertise in c-store operations can help facilitate the transition to EMV at the gas pump. MNSPs specialize in the design, implementation and support of highly available and secure networks, and can provide robust connectivity between outdoor gas pumps and indoor POS systems and payment processors.

The ability to securely connect gas pump payment terminals to payment systems is a critical capability. Leading fueling systems and payment providers including Gilbarco, Verifone and Wayne Fueling Systems have developed solutions to enable c-stores and fuel retailers to securely accept EMV payments at the pump.

Gilbarco, Verifone and Wayne developed a certification program to help meet PCI requirements and provide for secure remote support and software distribution. C-stores and fuel retailers must replace end-of-life zone routers with a PCI-certified managed firewall before implementing EMV at the gas pumps. MNSPs that are certified by the manufacturer can assist with this process.

The right MNSP will provide an end-to-end solution that includes always-on connectivity and 24x7 maintenance, management and support. The network will provide a foundation for a wide range of technology tools as well as secure EMV transactions.

## SageNet Delivers EMV-Ready Managed Network Services



The c-store industry's leading electronic payment solutions partners have certified SageNet to deliver EMV-ready managed network services. Our SageZONE™ solution facilitates EMV deployment on Verifone's Commander or Gilbarco's Passport POS systems, and allows for remote support and download of software changes.

## BEYOND EMV AT THE GAS PUMP

When implementing connectivity for EMV at the gas pump, c-stores and fuel retailers should consider other technologies that could enhance the customer experience. With adequate bandwidth, c-stores can implement digital signage inside, beside or on top of gas pumps to entertain and inform customers while they're fueling their vehicles. Forward-thinking c-stores are also developing strategies for pump-side ordering and delivery, facilitated by digital signage and mobile technologies.

Increasingly, c-stores are adding fresh food options, with drive-thru service to compete with quick-service restaurants. With proper planning, the outdoor network can support digital menu boards in the drive-thru. These electronic displays can be programmed and updated remotely, and easily changed based upon time of day, promotions and other criteria.

The network can also support Wi-Fi services that extend outdoors into the forecourt. This not only provides customers with guest network access, but allows c-stores to use location-based analytics to detect the mobile devices of loyalty program members. The store can then deliver promotions and other content based upon the customer's buying patterns and preferences.

These are just a few of the technology solutions that a highly available and secure network infrastructure can support. The MNSP should sit down with key stakeholders to discuss the possibilities and develop a strategy that takes full advantage of the network.

## CONCLUSION

The impending shift to EMV at the fuel pump might seem like a low priority given all the challenges c-stores and fuel retailers are facing. The COVID-19 pandemic has forced these organizations to retool their operations to meet both government mandates and customer concerns for health and safety. Consumers are also looking for a more streamlined, frictionless experience with contactless payment, delivery and drive-thru options.

But failure to implement EMV creates significant financial risk. Liability for fraudulent payment card transactions could cost tens of thousands of dollars per location. Although the transition to EMV is difficult and expensive, it's essential for minimizing risk and ensuring consumer confidence.

An MNSP can help c-stores and fuel retailers overcome the challenges associated with EMV at the gas pump. With expertise in the design, implementation and support of network infrastructure, an MNSP can provide the secure connectivity needed to support outdoor EMV card readers. An MNSP that is certified by Gilbarco and Verifone can ensure that gas pump POS networks meet regulatory requirements.

The right MNSP will serve as a trusted partner for a wide range of technology initiatives. The network that enables EMV at the pump can also provide the foundation for technology solutions that enhance the customer experience.

## **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.