

MAKING CONNECTIONS WITH IOT

The Internet of Things is becoming increasingly important for the convenience channel to understand and utilize *By Chelsea Regan*

COMMONLY REFERRED TO BY ITS SHORTHAND IOT, the Internet of Things is a shorthand in and of itself — a catchall term for connecting devices to the internet that, in turn, connect with each other.

As both a concept and a practice, IoT has long been making headway in the retail space and is becoming increasingly important for convenience and fuel retailers to understand and use to their advantage. Connectivity through IoT makes it possible for retailers to more efficiently manage their sites, from revenue and security to fuel supply chain and food safety. It can provide real-time data, save energy, improve profitability and provide for a better customer experience.

“The biggest threats to a c-store’s profitability are downtime and inefficiency,” Veeder-Root CEO Andrew Robinson told *Convenience Store News*. “In both cases, a connected system improves your visibility to operation status and allows that information to be routed quickly to individuals responsible for the overall health and maintenance of the facility.”

Robinson added, “The IoT-empowered retailer will have additional time to reinvest in the business and make better decisions, leading to incremental revenues and growth.”

Ray Clopton, CEO of loyalty rewards program company Wilbur, believes IoT provides the vital capability of offering customers the personalization they’ve come to not only want, but expect.

“The most important application of IoT for retailers, in an ideal world, is the ability to deliver personalized customer experiences that resonate with visitors and contextualize sales messages based on whether they are first- or long-time customers,” said Clopton.

However, he cautions retailers against taking the possibilities of IoT too far, which could drive away the customers they want frequenting their stores.

“It is equally important that retailers do not inadvertently create a world where customers feel like they are walking into a version of Aldous Huxley’s ‘Brave New World’ or Black Mirror’s ‘Fifteen Million Merits’ when they enter the online or brick-and-mortar store. Where everywhere they turn, they are attacked by inescapable sales messages telling them what to do, buy or consume,” Clopton warned.

While being mindful of pushing customers too far into the future, new developments in the convenience channel demand a closer look at connectivity. Among them is the rising relevance of connected cars. These vehicles, through IoT, provide another touchpoint for retailers to make the fueling experience better for customers and encourage them to make in-store purchases.

IoT & Blockchain

Blockchain, a newer buzzword in retail technology, has emerged as a way to manage loyalty programs — loyalty programs that can be engaged with via consumers’ connected cars and, of course, via their connected phones.

A distributed ledger, blockchain is a tamper-proof, problem-solving technology that enables distributed storage and timestamp entries. It can be used for loyalty reward transactions made between parties,



as it functions as a type of digital currency like bitcoin.

Real-time processing and saving money are among the potential benefits of blockchain.

Robinson thinks blockchain is an “intriguing technology” because of the traceability that it provides in terms of understanding what actions or interactions have happened at every step of the journey of any piece of equipment or thing that might be out there.

He highlights blockchain’s potential usefulness when it comes to monitoring perishables, fuel and fuel quality, traceability throughout the entire fuel supply chain and payment technologies, including those that work in tandem with retailer loyalty programs.

“Given that there’s actual monetary value there, especially as we think of fuel discounts, I think blockchain has a very useful aspect to ensure that the points someone has accumulated are actually points they earned and accumulated and that they haven’t been tampered with in any way,” said Robinson. “And that’s helping to build greater trust in the system.”

IoT & Artificial Intelligence

The jury is still out on whether the hype around blockchain and its applications in retail — in convenience stores particularly — is just hype.

There’s more consensus around the applications of artificial intelligence (AI).

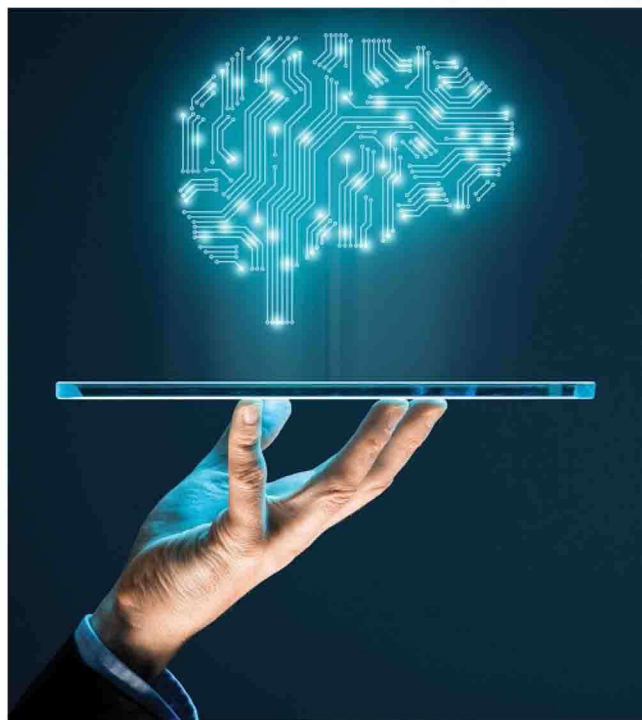
As it falls under the IoT umbrella, relying on computer science and specifically how computers can simulate intelligent behaviors, AI can not only aid retailers when it comes to marketing and merchandising, but also with foodservice, supply chain and out-of-stocks.

Charles Jarrett, senior vice president and chief information officer at Cumberland Farms Inc. and *Convenience Store News’* 2018 Technology Leader of the Year, believes we’re “just scratching the surface of what it can do in the retail environment.”

“I think AI could ‘crawl the web’ and help at the very localized level as events are occurring and forecast demand for this or that store and place a very accurate order for that store,” said Jarrett. “Weather forecasting. Demand in other towns. Regional and national events that can affect our stores. The promise of AI sounds like it’s right in the middle of the wheelhouse.”

Veeder-Root’s Robinson echoes Jarrett’s belief in the importance of artificial intelligence, especially as it pertains to the future of fuel retailing.

“[Forecasting] is something we’re using a lot of human brainpower to go after. I think artificial intelligence will allow us to extend the capability of our agents and analysts to make even more decisions like that and be able to help our customers even further,” Robinson said. “Those disruptions



and how we work around those disruptions and anticipate them allow us to maintain our consumer commitment of never running out of fuel, but also our retailers’ desire to minimize the level of inventory they have so that they can be as financially prudent as possible.”

Is There a Downside?

With all of this added technology in-store and on the forecourt, there comes with it increased security concerns. There is the potential downside of data breaches, which could affect both the business and the customer.

“Adding more internet connected devices is like adding more doors to your house — doors that you might forget to lock,” said Wilbur’s Clopton. “IoT hacks pose a wide range of security threats because of their interconnected and dual nature. Since the devices serve an ‘offline’ purpose, but are also connected to the internet, they can be compromised without impacting their original purpose, which makes the compromise much harder — if not impossible — to spot.”

So, as with anything, with the great power of IoT, there also comes a great responsibility. Yet if the current state of technology in retail is anything to go by, retailers should be eager to take on the responsibility for the possibilities the power creates. **CSN**