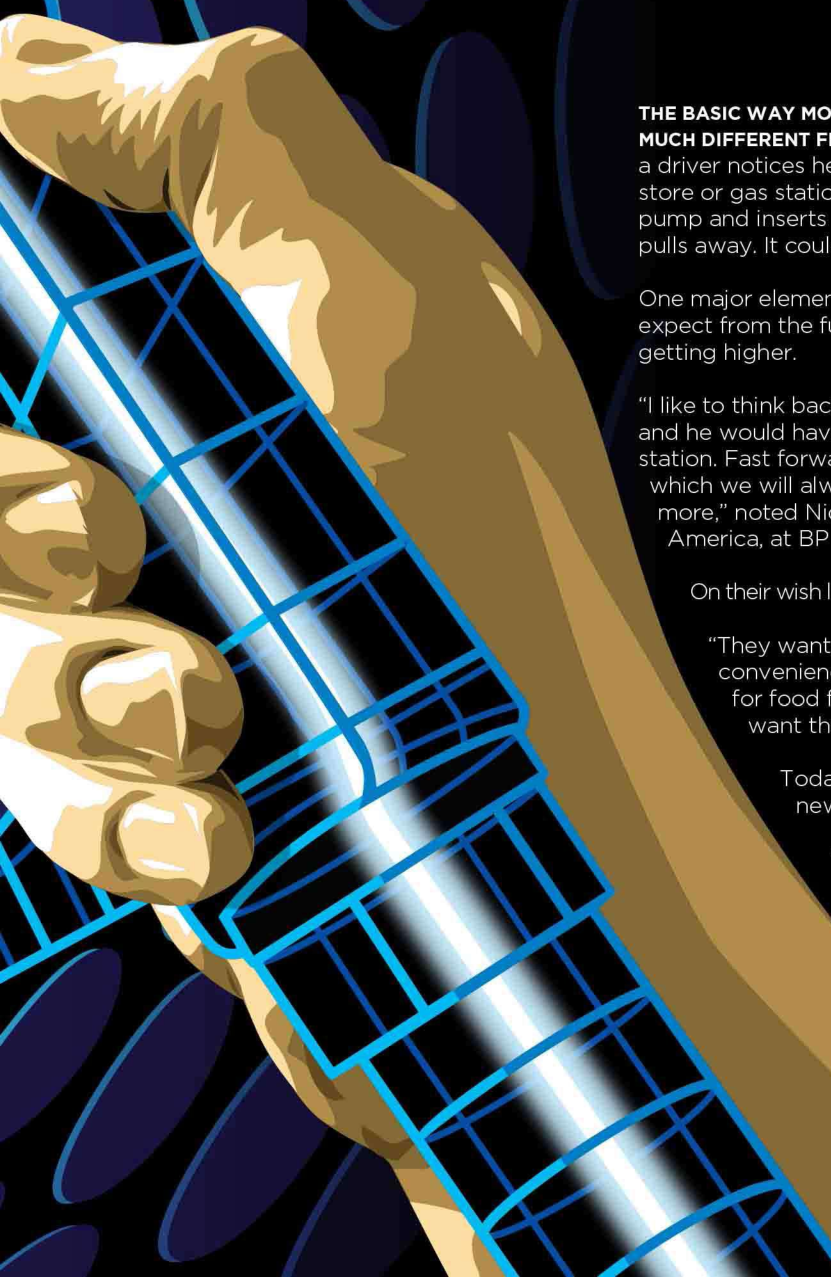
THE FUTURE OF FUEL RETAILING

FROM THE ENERGY SOURCE TO THE FUELING EXPERIENCE, “FILLING UP” IS IN FLUX

A *Convenience Store News* Staff Report



THE BASIC WAY MOTORISTS FILL UP THEIR VEHICLES TODAY IS NOT THAT MUCH DIFFERENT FROM A GENERATION OR TWO AGO. In most U.S. states, a driver notices he or she is low on gas, pulls into a convenience store or gas station, gets out of their vehicle, lifts the nozzle off the pump and inserts it into their fuel tank. Once full, the driver pays and pulls away. It could be 1978 or it could be 2018.

One major element that has changed, however, is what motorists expect from the fueling experience — and their expectations are only getting higher.

“I like to think back to 50 years ago when my grandad was filling up and he would have bought fuel and maybe lubricants from a gas station. Fast forward to today and we are still discussing those fuels, which we will always be famous for, but consumers want so much more,” noted Nicola Buck, vice president of marketing, Fuels North America, at BP plc.

On their wish lists? Cleaner energy. Technology. Apps. Convenience.

“They want technology to improve the experience. They want convenience in its broadest form. So, what does that mean for food for now, food for tonight, food to go? And they want the experience to be transformed,” Buck explained.

Today’s fueling industry must change to meet these new expectations.

“Honestly, the fueling industry, if you think about it, hasn’t really changed in 20 years because of the way our sites are built. How many products and services are like that today? Very few,” said Buck. “Consumers are expecting different types of experiences. Look at Amazon. Everything is changing, and even the fueling experience needs to change.”

But what exactly does the future of fuel retailing entail? Is it about the types of fuels? The fueling experience? The way consumers get around in the first place?

The answer, according to industry insiders, is: All three.

Rethinking the Market

To date, the biggest change in the fuel retailing market came in the 2000s, when the market saw a downturn. To stay competitive, retailers had to find ways of increasing customer-generated profits that were not necessarily fuel-related.

"Retailers had to start diversifying their products," said John Eichberger, executive director of the Fuels Institute, a nonprofit organization dedicated to evaluating issues affecting the vehicles and fuels markets. "I think we've seen an acceleration of that."

The change in focus included a heavier emphasis on operations and quality of service, and an integrated approach to drawing customers in from the fuel pump to make in-store purchases.

"It's all about being ahead of the game. Not too far ahead that you lose money from your customers, but far enough ahead that you are ready."

— Roy Williamson, BP plc

Looking to the future, regardless of how gas prices are affected by the economy and other factors, Eichberger expects the constant push for fuel-efficient vehicles to affect trip frequency and thus, retailers must be prepared to meet new and changing consumer needs.

"We have to rethink how we go to market," Eichberger said, suggesting that companies rethink things as basic as a gas station's layout. "It might be time to take the entire facility … throw that into a blender and see what comes out."

He pointed to the rise of ride sharing as a way retailers can adapt and offer new solutions. They could offer car care for Uber and Lyft drivers — not necessarily maintenance, but services to help keep a car clean and

attractive. Retailers could also target Uber and Lyft drivers by providing them a place to take breaks between rides.

While individual services and initiatives will vary by retailer, the important thing is to "capitalize on the opportunity the market is bringing us," Eichberger stressed.

The Future of the Fuels

Advancements in the retail landscape within the past decade have included an ongoing trend of high-volume retail site fuel dispensing, according to Kevin Kinney, general manager, Light Oils Marketing, at CITGO Petroleum Corp. The configuration of sites have trended toward larger plot sizes to accommodate larger convenience store prototypes and increased fueling positions.

As site footprints have grown, so too has the variety of fuel/energy options offered at retail sites. There is considerable debate in the industry over which types of alternative fuels/energy will emerge the victors and garner the most support in the near- and long-term.

Fuels blended with ethanol, such as E85 and E15, have the advantage of a low cost of production, but these fuels also bring certain infrastructure hurdles that still need to be addressed — such as federal law that prohibits fuel with ethanol from being sold during the summer months in order to limit ozone, according to Eichberger.

"There's a lot of confusion associated with that," he said, which has slowed some retailers' adoption of E15. "The rules are clear, but the enforcement is not."

If this regulatory issue is resolved, Eichberger predicts that several thousand locations will add E15 in the next few years.

While the ultimate future of biofuels hinges on federal policy, the Fuels Institute chief believes there is much to be gained from working with automakers, who are continuously looking for fuel that is more efficient. He also strongly advises the liquid fuel industry to look outside the current market and recognize coming competitive threats, particularly as the pace of electric vehicle (EV) development is only going to accelerate.

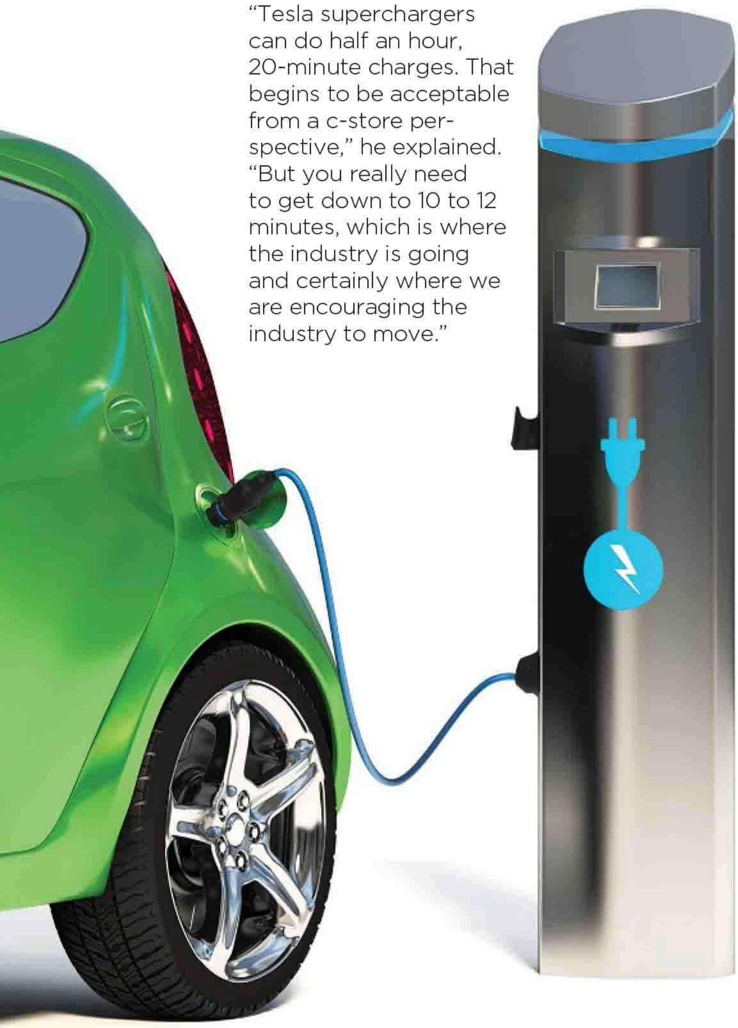
"There's an opportunity for [liquid fuel producers] to increase their roles in the future market, but in-fighting in the industry is compromising that," Eichberger said.

In the near term, Roy Williamson, vice president of Mobility at BP, sees electric as the likely winner in the alternative fuels/energy race. In the long term, however, he thinks hydrogen fuel cells look like the best bet. Also, in certain specific use cases, gas — compressed natural gas (CNG) and liquefied natural gas (LNG) — will have their applications, he added.

"If you were going to put your money on something today, I think it would be electric," he said, acknowledging that more work needs to done to push electric to the top.

Today, 85 percent of EV charging is done at home. Charging time is a factor when you talk about bringing this service to the convenience channel, according to Williamson.

"Tesla superchargers can do half an hour, 20-minute charges. That begins to be acceptable from a c-store perspective," he explained. "But you really need to get down to 10 to 12 minutes, which is where the industry is going and certainly where we are encouraging the industry to move."



From a vehicle manufacturer perspective, the industry needs batteries that can handle a speedier rate of charge and equipment that can deliver it — including the infrastructure, which is quite expensive, said Williamson. As it becomes more common, he believes the cost will come down.

As far as the convenience channel is concerned, ultra-fast EV charging is the answer, he said. "We need to make sure we encourage that in the marketplace," he added.

BP does not currently have an electric vehicle charging platform in the United States, but the company is looking to develop one in the U.S., as well as in Europe and China.

"Certainly, we are looking at being a key provider of energy to low-carbon vehicles in the future," Williamson said. "The penetration is very low. It is not a crisis of disruption at the moment because there are so few electric cars. But they will come. The question is just a matter of [when], not a question of if. It's all about being ahead of the game. Not too far ahead that you lose money from your customers, but far enough ahead that you are ready."

To that end, the company's BP Ventures division recently announced a $5-million investment in FreeWire Technologies Inc., a manufacturer of mobile rapid-charging systems for electric vehicles. BP will roll out FreeWire's Mobi Charger units at select BP retail sites in the United Kingdom and Europe during 2018.

Sales of electric vehicles and plug-in hybrids are already on the rise, jumping 26 percent in 2017, Eichberger cites. Still, it will take quite a while for sales to increase significantly enough to affect the number of vehicles on the road. If electric vehicle sales continue to see exceptional annual growth of 20 percent each year, eventually reaching 42 percent of vehicles sold in 2035, they would still make up only 10.5 percent of the cars on the road.

"They're coming, they're going to grow market share, but it's going to take some time," Eichberger said.

Retailers therefore have some time to plan for how they can capitalize on the electric vehicle market. Most charging will be done overnight at drivers' homes. Unlike traditional vehicles, drivers of electric vehicles are likely to charge at gas stations in smaller increments to aid the battery. "They're going to plug in when and where they can," noted Eichberger.

Drivers of electric vehicles will do more advance planning for longer trips, though, which will give retailers the opportunity to have a competitive advantage. Placing chargers along routes where consumers drive 100 to 150 miles will be strategically important.

Still, despite advances in alternative vehicles such as electric cars and hybrids, the "fundamental reality" is that even in the most aggressive transition models, the internal combustion engine will dominate for the next four to five decades, according to Eichberger.

The Future of the Fueling Experience

Having EV charging stations and alternative fuel blends may help retailers draw in consumers who are seeking those options, but it's going to take them upping their game around the fueling experience to keep the everyday motorist coming back.

Competitive prices are one piece of the puzzle. At the same time, easy and convenient payment solutions, enjoyable consumer experiences and changes in fuel preferences are moving to the forefront of the fuel retailing industry, according to Phillips 66, which markets refined petroleum products in the United States under the Phillips 66, Conoco and 76 brands.

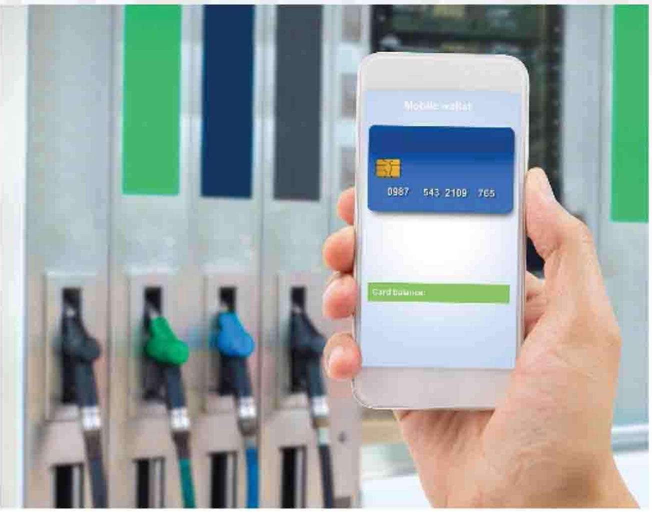
"The consumer experience is more important than ever," said Rod Palmer, general manager of marketing services for Phillips 66. "Millennials especially have a unique power of influence over buying behaviors. They demand a delightful, modern and convenient buying experience. The solutions we develop must meet the demands of this connected consumer."

To stay competitive, innovation is a must, Palmer stressed.

As part of its innovation strategy, Phillips 66 is rolling out an easy-to-use mobile payment solution. It was recently introduced to Phillips 66's network of branded retail locations.

"It's not just about being able to pay at the pump — it's about being able to pay with your smartphone," Palmer told *Convenience Store News*.

The goal is to make it easy and low-cost for the company's branded customers to implement, according to Jim Macari, Phillips 66's director of innovation.



"The Phillips 66 Mobile Pay Solution works at the pump and inside the store. It's designed to benefit our customers' entire business by attracting consumers and increasing security," Macari explained.

BP's Buck echoes the importance of innovation and says, at the very least, fuel marketers and retailers should be looking at ways to shave time off the fueling experience.

"Time is so important to [consumers]. Anything we can do to make that site experience frictionless is going to be important. That's where things like mobile pay start to come in," she said.

With pay at the pump, a driver still has to get out of the car, still has to put a credit card in the reader, still has to type in a ZIP code — and still has to stand out in the cold in certain locales.

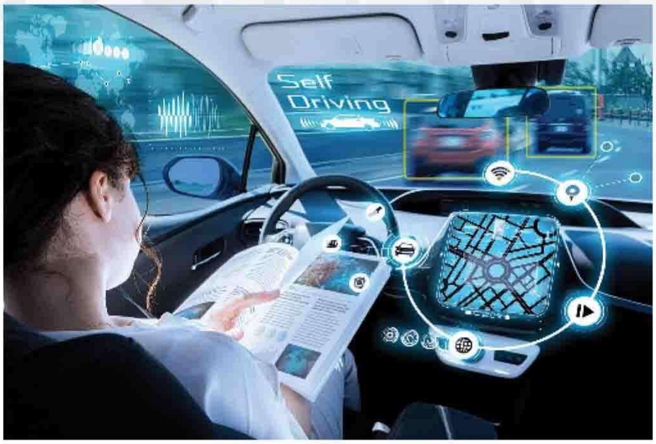
Once retailers have things like mobile pay — which may seem like a small step — they start to save consumers a few precious moments, and every second counts when you are in the mindset of getting back on the road, Buck explained.

"It makes a frictionless experience and that, for us, is the start of a journey," she said. "It may start with an app today, which is all about payment and rewards that are loaded into one system, one step. Then, we continue down that path. How do we collect data on our consumers to push personalized offers and services? How do we get feedback through the app? How do we interact to make the experience more fun?"

When looking to the future, the focus for retailers is on the needs of Generation Y and Generation Z, according to CITGO's Kinney. As he sees it, these two technology-driven generations will place more importance on the speed of refueling, ease of transactions like NFC technology at the pump, aesthetically appealing sites, and the latest technology inside and outside the convenience store.

Taking the fueling experience even further into the future, Buck points to connected car technologies, where tasks are tied into the vehicle dashboard.

"Once we have this platform, which is as frictionless as possible, everything is integrated into the dashboard and remotely monitored — like fuel levels," she said. "We can remind our customers when it's time to fill up. We can remotely monitor lubricant levels and use that to upsell related products."



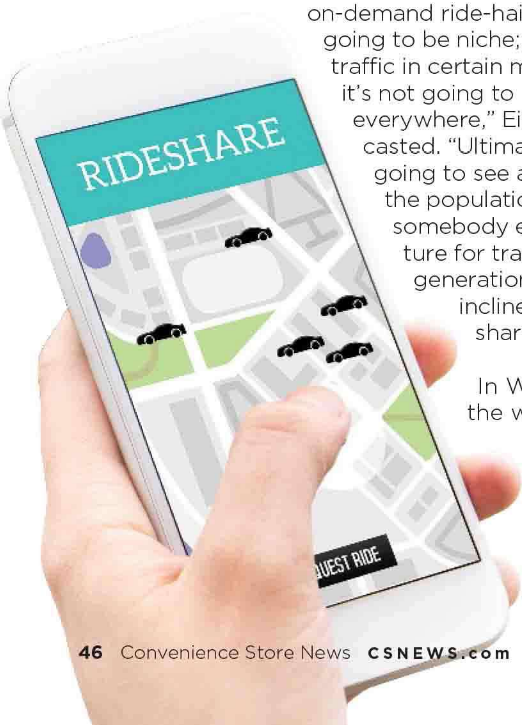
The Future of Mobility

Of course, the future of fuel retailing begins even before the issue of fueling itself. Where the conversation really starts is the future of mobility. How do people get around?

"People are not owning their own cars. They may be using their Uber and they never stop at a convenience store with the driver. So, how do we provide convenience on the go for people? How do we deliver to their own vehicles?" asks Williamson of BP.

Retailers must prepare for the shift in who owns cars and how they are used. Increasingly, fewer millennials and younger people are getting driver's licenses. Even in areas without a reliable public transit infrastructure, many people feel they don't need a vehicle and see the cost of services such as Uber and Lyft as an acceptable expenditure.

"Some organizations are projecting massive, fast conversion to this autonomous on-demand ride-hailing. I think it's going to be niche; it's going to gain traffic in certain markets, [but] it's not going to be ubiquitous everywhere," Eichberger forecasted. "Ultimately, I think we're going to see a percentage of the population opt to use somebody else's infrastructure for transportation. Those generations are extremely inclined to adopt a sharing economy."



In Williamson's view, the world is going to change dramatically over the next two decades, with urban markets evolving at a more rapid pace than rural and suburban markets.

"What you will see will be a very different experience in central, urban environments from deep, rural environments. You do today, to an extent. But that differentiation will be greater. You will have electric vehicles; you will have autonomous vehicles," Williamson said. "We already cater differently to those markets today."

Although self-driving vehicles have yet to overcome various technological challenges, Eichberger expects deployment and testing of self-driving vehicles over the next couple of years. As the technology gets better, its applications will become clearer. From there, the necessary regulations will be clarified, and the effect on consumers will be more known.

For now, Eichberger advises retailers to keep an eye on this developing technology and consider what opportunities it will bring to develop collaborative business relationships.

"It takes being aware of what's coming around the corner and asking yourself: 'How can I benefit from this?'" he said.

Retailers that recognize a new paradigm is coming can think now about what would happen if it materialized in their market. What would the impact be? How could they profit?

"Then, you're a step ahead of the game," Eichberger said.

Case in point: Growth in car-sharing raises questions as to how these services will impact not only demand for fuel, but also access to gas stations. To that end, BP has various pilot programs around the world analyzing how to approach car-sharing and its likely impact on the future.

"One of the big issues is the fleet. The fleets will be the customer of the future, probably more than individuals," Williamson noted. "That has a whole other layer of implications with respect to where would you want to fill up? How would you want to charge the vehicles? What locations would you use? What is the role of convenience in that context?

"A long-term trend, but one that is going to be quite significant," he said.