



Retail Fuel Ecosystems: The Forecourt Technology Revolution is Here



By: Matteo Ciarapica, Global Solution Marketing Leader, Wayne Fueling Systems

We live in the era of technology ecosystems, a term we use to describe the complex system of interdependent components that work together to enable cloud services. Purchase an iPhone®, for example, and you're connected to the entire Apple ecosystem, including operating systems, apps, Microsoft® Office add-ons, music, books, and more. Consumers and businesses alike employ vast platforms made up of hardware, software, and online services – not just individual pieces of hardware and software – to function personally and professionally. With various pieces working together within this cloud-based ecosystem, the user enjoys improved convenience and productivity.

The convenience of the technology ecosystem is now coming to the retail fuel industry. Though for the last several years there have been conceptual discussions about implementing cloud services to connect retailers and vendors, data and services, consumers and site owners – there have not been fully-developed implementations of a retail fuel ecosystem. That is set to change finally.

A new approach to forecourt technology is certainly needed. For fuel retailers of all sizes and locations, there exists huge complexity in the forecourt network, as fuel dispensers are connected to point-of-sale systems, tank gauges, prices signs, petroleum retail peripherals, etc. Moreover, each station has its own operation and unique complexities; in mature regions, for example, complexity means challenges in integrations, support and data integrity, while in growth areas where lower automation adoption may mean less expertise with automated tools and solutions, there is a need for tools to drive decisions based on real-time data. Additionally, compliance regulations vary country to country, introducing another level of complexity.

All station operators want the same things: improved business results through optimizing costs and maximizing revenues, which ultimately leads to better decision making. To that end, access to the right information at the right time and having the right tools and partners is key, but the various interfacing systems make it challenging to realize the value of a multi-vendor strategy. Operators and third-party vendors alike need meaningful data that can inform real-time decision making, instead of analyzing raw data. A retail fuel ecosystem benefits all parties involved.

A fully functional cloud-based system allows third parties to capitalize on the “big data” phenomenon (gaining insights into business decisions from massive amounts of data) on behalf of customers to help deliver value at a fraction of cost and time of current processes). Being fully-functional means the system is built upon accepted industry standards for network consistency, and that it is delivered by a global partner that will leverage industry technology and trends to quickly extend new functionalities and services to its subscribers. This concept means the service providers of fuel logistics management, fuel pricing engines, customer loyalty engines, mobile wallets, etc. all operate seamlessly using the same non-siloed, real-time data to drive true value for customers. The benefits of a technology ecosystem of Apple or Amazon now can be realized by fuel retailers and partners.

The retail fuel ecosystem helps to minimize the costs associated with collecting and analyzing various data sources by moving them to the cloud behind secure application programming interfaces (APIs), which specify how software components interact with each other. This efficiency allows third-party vendors to focus on delivering real value to the operator, instead of worrying about serial interfaces, legacy protocols, and other platforms unique to the operator. It also helps reduce the costs and inefficiencies of delivering information to the people who need it (customers, service providers, etc.) by making data securely available on multiple devices almost anywhere in the world.

Marketing campaigns, for example, can take oil companies anywhere from six to 36 months to implement, which can lead to significant expenses and missing the mark on the campaign idea generated in the first place. A connected ecosystem of various hardware, software, and online services across a range of vendors would dramatically reduce implementation times and produce faster, better, and more cost-effective campaign.

Consider a fuel supply logistics partner, for example. Current processes for order management, replenishment planning, supply optimization, delivery management, and so on are very complex and often manual. By leveraging data on wet stock availability at each site of the network shared via the cloud and flexible from the hardware architecture that might be different at individual stations, the logistics partner can recommend decisions based on real-time analytics to optimize fuel delivery across the network.

Site operators seeking to implement a retail fuel ecosystem should start with a forecourt server, which sits at the ecosystem’s center and provides the conduit between the retail fuel system, its various third-party partners, and the physical fuel pumps. Also providing the full capabilities of a forecourt controller, the forecourt server is designed to operate over the internet and aggregates data


from each site, helping operators command entire retail fueling station from real-time data about dispensers, point-of-sale (POS) systems, and fuel inventory to fuel costs and margins.


The convenience and productivity gains of technology-driven ecosystems are now available for site owners across the world facing issues related to fuel inventories, equipment, and general operational visibility. As consumers and businesses worldwide have benefited from the cultivation of a one-stop-shop, self-sufficient tech world, so too will the site owner in Nigeria and the mobile payment provider in the United Kingdom benefit from global platforms working together in synchronicity. By leveraging data across a multitude of platforms and devices, operators and vendors alike have access to real-time cloud-based data, bringing new tools and technologies to market faster in a single ecosystem.

Contact information



Wayne
Hanögatan 10
211 24 Malmö
Sweden

 +46 40 36 05 00

 +46 40 16 39 23

 www.wayne.com