

The World Needs Service Stations

Key Industry Trends:
Consumer Demands & Technology

Trend 5 :

**Automation and
self-service**

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Trend 6 :

**Advanced servicing,
maintenance, and
repair**

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Trend 7 :

**Payment
innovations**

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Introduction

The service station landscape

For decades, service stations have been a vital part of our infrastructure - facilitating long journeys and providing motorists with a place to take a break while travelling. In fact, they're such a part of our lives that it's impossible to imagine a world without them.

The service station of the future will be almost unrecognisable, thanks to huge changes in mobility methods and the development of new technologies. Service stations are already very different to what they once were, and they're starting to serve a different purpose. In this report, we'll look at the ways in which service stations are evolving, where the commercial

opportunities lie, and how service stations can better serve the modern consumer.

To stand out in an increasingly competitive landscape, the service stations brands need to:

- » Adapt for the electric vehicle revolution
- » Understand the data about multiple revenue streams
- » Diversify their revenue streams for optimum growth
- » Go above and beyond basic amenities
- » Incorporate data and automation
- » Become mobility hubs
- » Optimise payment methods



THAT'S A FACT

The electric vehicle market is growing between 40% - 60% each year.

Trend 1: The rise of e-mobility

Electric cars are undeniably the future, with many countries imposing strict limits on the production of non-electric cars and erratic oil prices continuing to rise. [The Netherlands and Norway both aim to ban the production of new gasoline or diesel vehicles by 2025, with Germany following by 2030 and France and the UK to be only producing electric vehicles by 2040.](#)

The electric vehicle market is growing between 40% - 60% each year, depending on the market area. Indeed, it is expected to grow faster than the market for traditional fossil fuel cars. [The Guardian reported that in August 2018, there were more than one million electric cars in Europe.](#)

This popularity has been boosted by support from governments, falling battery prices, and changes in consumer tastes in favour of eco-friendly living.

To cater to this vast rise, service stations will need to provide EV charging points that cater to all major manufacturers and brands. The precise business model for EV charging at service stations is unclear. An article on the [CCV blog](#) explores the three options:

1. Ad-hoc pay-per-charge
2. Subscription-based membership to charging schemes
3. Free charges with other commercial or advertising initiatives

One thing is for sure: the sales of petrol and diesel will be reducing over time, and electric vehicles will become the norm on our roads. Service stations will need to provide charging infrastructure, and must pivot their approach to make this commercially viable.

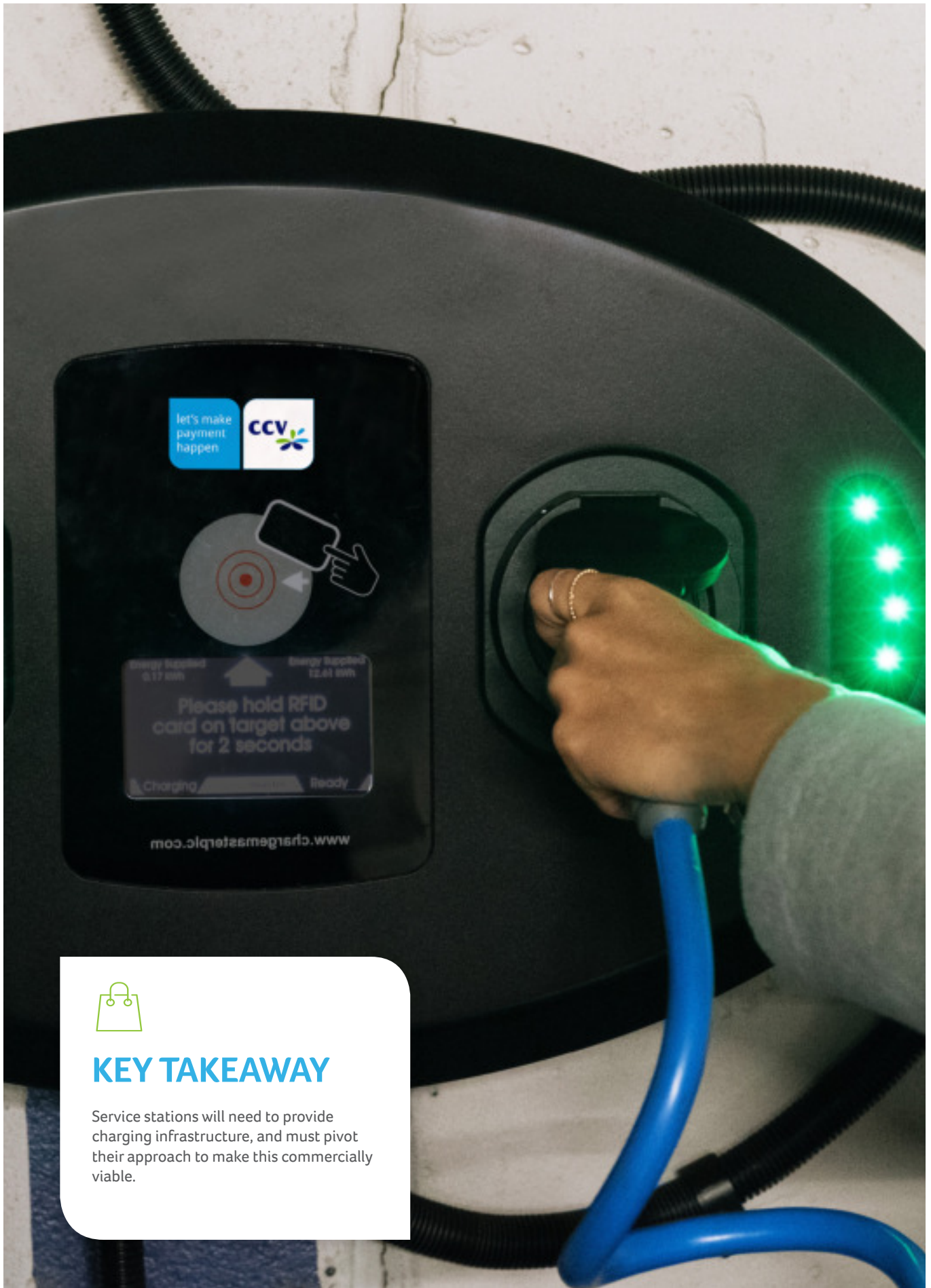
Service stations also need to ensure on-site mechanics are qualified to handle

the latest electric vehicle models. This is a challenge in itself: research in 2018 showed that [97% of mechanics in the UK can't work on electric cars](#). Indeed, electric cars have less working parts, and diagnostics or repairs are ripe to be automated. What does this mean for mechanics? This remains to be seen. Regardless, when a service station offers vehicle maintenance and repair, it must cater for a mix of electric and non-electric vehicles.

E-mobility will only become more important over the years to come, and this has huge implications for one of the primary purposes for a service station: to sell fuel.

“When a service station offers vehicle maintenance and repair, it must cater for a mix of **electric and **nonelectric** vehicles.”**





KEY TAKEAWAY

Service stations will need to provide charging infrastructure, and must pivot their approach to make this commercially viable.



Trend 2: The need for mobility hubs

At present, service stations are considered standalone entities that serve motorists only. The same single-mindedness is true for rail or bus stations, bicycle hubs, and taxi stands. They've evolved for one mode of transport: car drivers are not interested in taking the bus, and cyclists have no intention of filling up their vehicles.

But people's habits are changing in order to get from A to B with as little hassle as possible. A mobility hub is a point in the transport network that integrates multiple types of transport, providing travellers with the convenience to choose their preferred mobility method. Using existing infrastructure as a basis, mobility hubs can emerge as the solution for future transportation: Mobility-as-a-Service (MaaS).

As we mentioned in a CCV article about MaaS, there are various definitions of the concept. The most popular version is the combination of various transport modes into one digital platform, providing an end-to-end planning, booking, and payment solution for total mobility.

A mobility hub integrates various forms of transport: ride-sharing, rail, private car,

bus, bike, tram, taxi, and more. Of course, this mix depends on the background for each location. But the premise remains the same in terms of bringing together as many mobility solutions as possible. This fits closely with MaaS.

In truth, service stations are already evolving into mobility hubs in a gradual and "natural" manner. There has been a concerted focus on improving mobility and creating a seamless transition from one mode of transport to another. However, it could be argued that these improvements have been largely reactive.

The evolution of strategic mobility hubs will require a detailed plan, and a general change of mindset.

In order for MaaS to function effectively, mobility hubs must make it easy for travellers to hop between different modes of transport with minimal effort. If the person needs to walk 15 minutes in the rain to catch the bus after their ride-sharing car has dropped them off, you could say the solution has failed.

[A design by the Massachusetts Institute of Technology \(MIT\) envisions the](#)



THAT'S A FACT

The evolution of strategic mobility hubs will require a detailed plan, and a general change of mindset

[mobility hub as a sustainable petrol station that offers a clean, comfortable, and easy experience.](#) The team at MIT describes the holistic mobility hub as "inter-connected, data-driven, and automated".

We're already seeing the transition from traditional private car ownership towards a more sustainable, multi-modal form of transportation. Taxi stands, ride-sharing hubs, bicycle rentals, and bus stations are already being located close to one another, but this needs to become more seamless and connected. Planners can develop existing locations rather than starting from scratch, bringing together the whole transport network in new and exciting ways.

Service station stakeholders must focus now on driving intentional transition, designing mobility hubs with strategic purpose to create comprehensive units where people can travel seamlessly. For some, the method of travel means a great deal, but for many everyday shoppers and commuters, convenience is paramount in getting from A to B. Mobility hubs play a huge role in facilitating a better way to travel.



Trend 3:

Advanced retail

Service stations are already de facto retail spaces. For some legacy locations, these elements were left as an afterthought. This has changed in recent decades, and service stations are set to progress further from simple pit-stops to becoming retail destinations in their own right. We've seen that service stations are developing into mobility hubs. As a result, they are perfectly positioned to provide retail experience.

Retail has become smarter through the use of data and increased personalisation, together with advanced loyalty schemes and other initiatives. If a customer has a connected digital account linked to their vehicle or smartphone app, the service station can log the driver's arrival and aggregate the data to provide local advertising to an average on-site demographic, direct retail offers to that specific

individual based on their preferences and past behaviours, or target offers and incentives more effectively to encourage future visits.

To achieve this, service station brands need smart integration of data, strong security (and GDPR compliance), and the power of a great CRM system. This is complex data-led retail, needing the right expertise and a strong strategy. Hardware and software must integrate seamlessly to provide an unbeatable customer experience whilst meeting the service station's commercial goals.

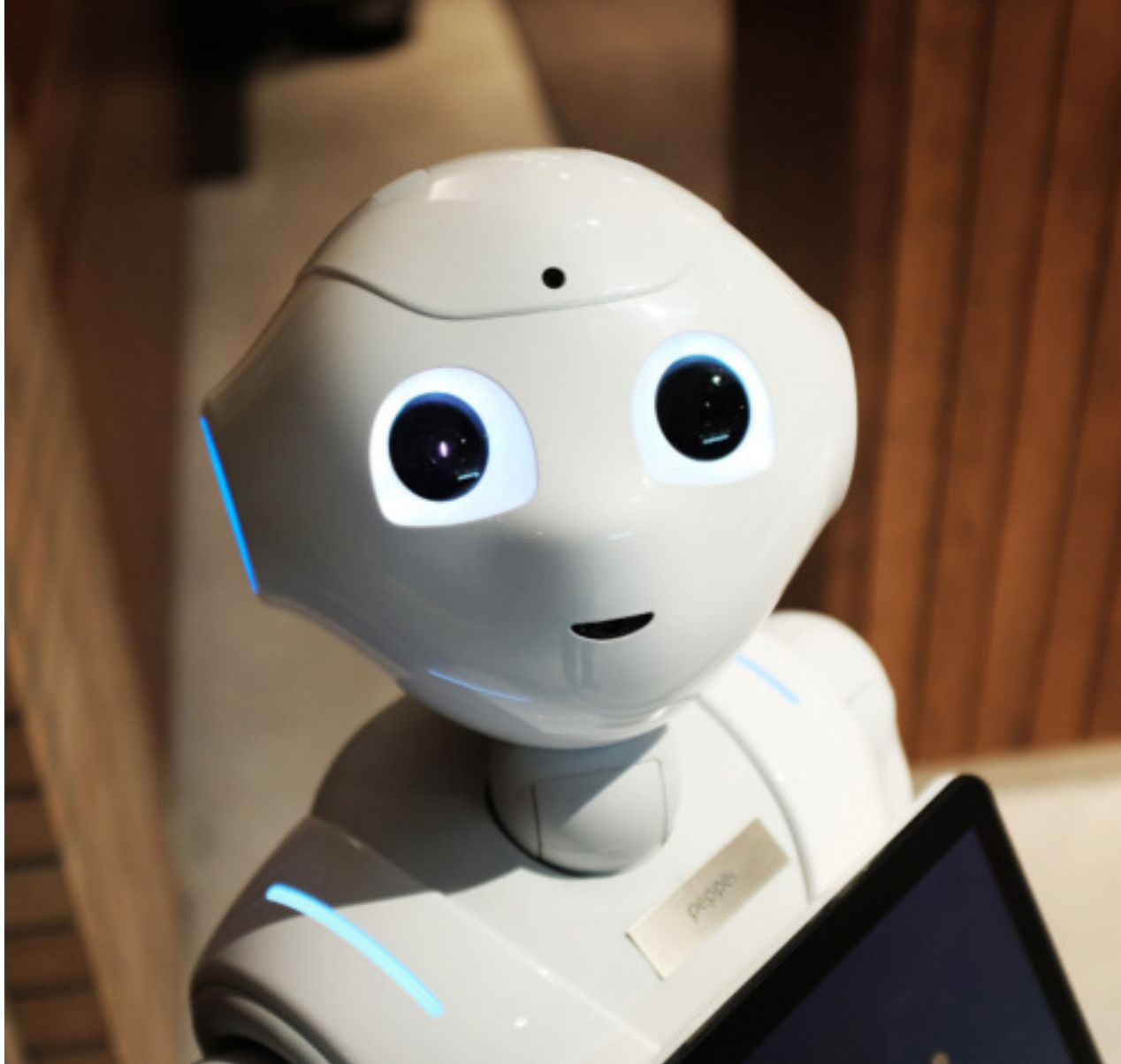
On a more simple basis, service stations must adopt tried-and-tested retail tactics. [Studies suggest that people who sit down during a shopping trip spend up to 40% more, which is why strategic seating must be considered in the overall design of the building.](#)

Connectivity is also expected in today's retail environments. By offering a reliable WiFi connection, international tourists in particular will favour your brand. This also provides the opportunity to acquire visitor data and build a mailing list.

As service stations brands improve their commercial game and evolve into retail destinations, they also need to build a stronger brand through social media marketing, content marketing, email marketing, and targeted digital advertising. By acquiring and analysing visitor data, service stations can get a handle on the demographics and habits of visitors and optimise their digital marketing approaches in response.



“Hardware and software must integrate seamlessly to provide an **unbeatable** customer **experience** whilst meeting the service station’s commercial goals.”



Trend 4: Advanced hospitality

Service stations of the future will become destinations in their own right, acting as out-of-town hubs offering everything: restaurants, hotels, convenience stores, entertainment centres, and more. Indeed, service stations are part of the hospitality industry, whether they are considered destinations or simply pass-throughs. As the reliance on selling fuel diminishes over time, this will become more important. What would advanced hospitality look like for service stations?



Better accommodation

Historically, the accommodation offered by service stations has been little more than a place to hang your hat. This is changing. In an age of transparent reviews and where service stations are suddenly competing with Airbnb, it's not enough to provide somewhere average to catch a bit of kip. Quality must be high and comfort must be paramount.

Hotels and motels are common all around the world. But a new concept has emerged: sleep pods. This has been successfully trialled at [airports](#) and there's no reason why this idea can't be expanded for service stations and mobility hubs, especially where long-distance international travellers are present.

Better food choices and eco-friendliness

People are favouring an eco-friendly, environmentally-focused, and health-conscious approach. They choose to spend their money with brands that are ethical. This impacts eating choices, too. It is no longer sufficient to offer two unhealthy (meat-focused) fast food chains as the refreshment option. Whilst these certainly have their place, regular travellers also need something more varied and healthy.

Service station franchises have partnered with a bigger variety of restaurant brands, and are now offering vegan and gluten-free meals. These

days it's common to see sushi, pasta, salads, mezze plates, and more. Service stations offer vegan and gluten-free options, and cater for a variety of dietary needs.

In addition, service stations aim to cut down on disposable plastics such as straws and plastic bags. There is still a long way to go to minimise waste, but cumulative action is making an impact.

Additional services

Mobile applications are certainly the go-to technology for providing a familiar and user-friendly interface, as well as offering a powerful platform for additional features. The flexibility and security aspects of mobile applications provide the perfect foundation for recurring payments.

Other key services might include clothes washing and ironing, technology repair, health and wellness, medicine, parcel pick-ups, cinemas, and much more. By offering valuable services and experiences, the future service station or mobility hub can become a destination, rather than just a temporary stop-off.

Many people shape their work around travel, and vice versa. In the era of remote working and increased self-employment, travellers will be looking to do work on-the-go. Therefore, service stations and mobility hubs are excellent locations for coworking offices and flexible workstations.

Service stations are also well-placed to become hubs for tourists. By definition, tourists are travellers. Service stations can offer travel advice, bookings, tours, accommodation, and much more to this market.



THAT'S A FACT

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Trend 5: Automation and self-service

What can be automated will be automated. The key elements of modern service stations are increasingly unmanned. We have already seen the spread of pay-at-pump technology across Europe, removing the need for the customer to enter the building and queue at the cash register. This will become more commonplace as the switch to cashlessness gains traction. CCV is well-placed to help guide service station brands optimise this shift.

Connected digital accounts

The true benefits of automation can be discovered when the customer has created a connected digital account with the service station brand. We will tackle this topic in detail later in the eBook.

Put simply, if a customer has pre-registered their identifiers – such as their smartphone, contactless card, or vehicle number plate – the service station can apply artificial intelligence to recognise them as they arrive. This can be used to unlock fuelling stations, but also to streamline retail or hospitality experiences. Payment is conducted in the back-end, without the customer taking any physical action.

Automated advertising and offers

As we've already mentioned, data can also feed the automation of advertising and direct discount offers. Service stations can establish a set of triggers and conditions to fire off certain campaigns at certain times, depending on who is at their establishment. These can be delivered through a variety of media.

Automated retail environments

Self-service has become commonplace in retail stores across Europe. Micro-markets and smart vending (or dispensing) machines can be implemented to reduce waiting times and increase choice for customers. If visitors are in a hurry, these systems are very appealing. [Vending machines used to carry crisps, sweets, chocolate, and soft drinks. These days, they are much more advanced.](#)

Automation might also create unforeseen opportunities. Premium

services can be more personalised and attentive, with concierge or attendants going the extra mile to give a more comprehensive offering.

Mainstream consumers generally opt for convenience and low prices over how a service is delivered. Automation and self-service could push this even further, but it also highlights new ways to impress people by going above and beyond the simple commodity. Automation provides new opportunities for personalisation, and to ultimately provide experiences that people will remember.

For automation to succeed in the service station retail environment – for fuel and other items – it must have bulletproof security (fraud prevention and data protection) and must be fully aligned with the business strategy. The automated self-service experience must be simple, intuitive, and consistent. This demands deep collaboration with technical experts; especially with regards to payment processes.

Connected vehicles

When people are driving connected (IoT) electric cars, they'll be able to request information and also make purchases on-the-go, simply by talking to the AI in their vehicle. They can order a coffee whilst on the road, and then pick it up from the next drive-thru; paying automatically from an associated account.

Taking it a step further; if a daily commuter stops at the same service station every morning for their cappuccino, they can schedule a repeat order. The vehicle will track its own location and feed data to the cafe via the customer's connected account. The coffee will then be ready at the perfect time every day; and verified for pick-up by confirming the number plate of the vehicle by ANPR – or by facial recognition.

This might seem visionary, but these programmes are already being tested. Service stations must account for this level of automation, and plan to integrate their systems with this type of live data feed.

Self-driving vehicles

Automated self-driving vehicles are entering the market, but also have their fair share of controversy. It is widely predicted that self-driving vehicles will eventually dominate the roads, once the teething problems have subsided and the technology becomes more consistently adopted. This will impact the service station industry in a number of different ways.

Most importantly, less people will own their vehicles. If the mass market is summoning their subscribed ride-sharing car to their doorstep to get from A to B, that vehicle will be fully-charged and ready for the journey. To maximise efficiency, charging would occur when the vehicles are idle and waiting; thus reducing the need for mid-trip stops at service stations. Furthermore, the ever-improving battery technology will increase the length of non-stop trips on one charge.

Of course, this represents a threat to service stations. However, this is where the aforementioned mobility hub comes into play. By catering for the mix of transport and providing a one-stop-shop for all types of transport to integrate and interact, service stations still keep location footfall and can create value-added experiences. In the long-term, this type of pivot is required in order to stay relevant.





THAT'S A FACT

98% of new cars will be connected to the internet by 2020.

Trend 6: Advanced servicing, maintenance, and repair

A service station is the safest place for motorists to stop whilst travelling on the motorway. This is why the sector needs to keep a close eye on the automotive industry; to upgrade their service and repair offering and stay on the cutting-edge. The future of vehicle repair is uncertain at the moment, amid the influx of electric vehicles and the ongoing development of self-driving cars.

It is certain that vehicle repair will incorporate a more technological approach. This could mean everything from equipping technicians with augmented reality devices, to using video technology for mechanics to call upon specialists from around the globe.

Whether the service station industry develops in-house expertise or uses partners to enhance repair services, the capability must align with which types of

vehicles are dominating the roads.

The good news is that service stations will have help in the form of specialised robots, designed to carry out automated repairs and calibration. These would incorporate machine learning and could potentially identify problems before they become a danger, improving safety while simultaneously providing motorists with an attractive reason to pay a planned visit.

Vehicles will feature more advanced sensors that tell drivers and technicians exactly where to look. Tesla already issues automatic software updates to its vehicles, mitigating the need for owners to take their cars to a Tesla garage. And when parts are mission-critical, many of them will be 3D printed on premises, instead of leaving cars (and motorists) stranded. Service stations must build this infrastructure.

It's estimated that as many as 98% of new cars will be connected to the internet by 2020, while 55% will have voice recognition at some point in 2019.

This means that cars can tell engineers what's wrong with them - but also means that engineers must learn how to diagnose connectivity problems on the fly.

Ultimately, service stations are perfectly placed to offer expertise and advanced vehicle diagnostics and repairs. It is a natural fit with the current offering, and could add a key revenue stream.



Trend 7: Payment innovations

S This is where CCV comes in. The payment landscape in Europe is very fragmented, with varying levels of cashless adoption and differing consumer habits. In this environment, service stations have a wealth of innovation at their fingertips. But regardless of technology, we need to make payments happen.

What should service stations consider when looking at payment infrastructure?

“Service stations should explore how their payment systems **integrate** with **MaaS partners** such as public transport providers.”



Connected digital accounts

Loyalty is big in the fuelling industry and for service stations. Consumers have incentives to return to the same brand time after time, especially when they collect reward points and/or miles for their purchases. This kind of return custom is ripe for further innovation in the form of connected digital accounts.

Customers can sign up to an app-based account with the brand, and register their payment details in the back-end. The merchant will then be given a token that can be used for future purchases, and the customer can enjoy a seamless experience without needing to physically pay ever again. This can be applied to fuel or recharging, but also to retail and hospitality services.

Whilst this can be smartphone-based, there is no reason why connected cars shouldn't integrate the same technology to improve the experience yet further.

Ad-hoc payments

It would be foolish to put all of your eggs in one basket. Not everybody will be keen on a tokenised account. International tourists and infrequent travellers won't be easily tied into a particular brand, and some people are less tech-savvy. Ad-hoc payments are key for the service station industry. This involves taking multiple forms of payment: cash, chip-and-pin, and contactless (NFC). These payment solutions should be applied across manned and unmanned terminals.

MaaS integrations

In the context of MaaS, payments are conducted in the back-end through fully-connected digital accounts - usually based on a subscription model. Service stations should explore how their payment systems integrate with MaaS partners such as public transport providers. Is there an opportunity to collaborate and include value-added products and services? For example, the traveller might be offered a free sandwich if they upgrade to a first-class travel package.





KEY TAKEAWAY

The payment landscape in Europe is very fragmented, with varying levels of cashless adoption and differing consumer habits. In this environment, service stations have a wealth of innovation at their fingertips.

Summary: Key takeaways



Service stations already host a range of amenities, from cafés and restaurants to retail outlets, hotel rooms, showers, and even gyms. It is a struggle for service stations to get truly clear insights into their multiple revenue streams at the moment. We understand this difficulty, but it can be achieved successfully using smart technology. This puts service stations in a brilliant position to diversify for optimum growth, maximise revenue streams, and adapt perfectly to consumer demands.

Service stations are intrinsically tied to mobility innovations, and the advent of electric, autonomous, and connected vehicles will certainly make an impact. This presents challenges and opportunities alike.

Throughout this eBook, we've talked about everything from EV charging to personalised retail, automated systems, advanced vehicle repair, smarter parking, new payment options and more. But even after covering all of these topics, we've barely scratched the surface of what is possible in the service station industry. The next ten years will see exciting developments in mobility, and the role of the service station will evolve and transform simultaneously.

READY TO KNOW MORE ?



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