

SPECIAL REPORT BY NICK GIBBS

How features-on-demand are reshaping retail

LIKE IT OR not, the car industry is moving to a features-on-demand business model. Harnessing the car's increasing ability to connect remotely, this will allow manufacturers to tap into potentially highly profitable new revenue streams.

The 'software-defined' car of the future will build on the already growing capability of many models to add options well after they've left the showroom.

In a short few years, the controversy over BMW's decision to charge for heated seats will be forgotten amid an array of choices available to new car buyers. What isn't clear yet is customers' appetite to add a raft of new subscription charges on top of those we already accrue in everyday life.

Car companies and those suppliers who are facilitating this fundamental shift are salivating at the thought of the money to

be made. Stellantis has said it thinks that by growing its fleet of connected cars from 12 million now to 34 million by 2030, it will generate around €20 billion (£70bn) of additional revenue.

The Volkswagen Group, meanwhile, has spoken of "a significant revenue pool" from software-based business by 2030.

Tesla has famously done very well by charging customers for its FSD assisted driving package (standing for Full Self Driving but actually providing only Level 2+ autonomy), which now costs \$15,000 (£13,300) to download in the US. BMW's controversial 'downloadable' heated seats cost £15 a month if available or £350 for

'unlimited' use. The heating system is of course installed on the production line but needs to be activated remotely. It's just one of a litany of features and services

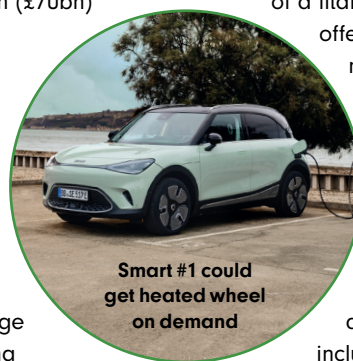
offered by BMW for its latest models, many of which are merely data-driven, such as a year of speed-camera alerts for £25. Many come with a month's free trial.

Mercedes is also offering similar downloadable features, including a tracking feature to

locate your car (if it's stolen) for £139 for a year, whereas Polestar is charging around £1000 for an extra 67bhp slug of power in the four-wheel-drive version of its 2 electric saloon. And Smart is investigating whether to offer a heated steering wheel via subscription on its new #1 electric SUV.

The appeal to the manufacturer isn't just the ability to generate revenue from a car long after it has left the showroom and maybe even from the second and third owner. It can also streamline manufacturing and theoretically reduce the difference between each model on the production line to a handful of variants, down from thousands. Less complexity equals less time lost and more productivity.

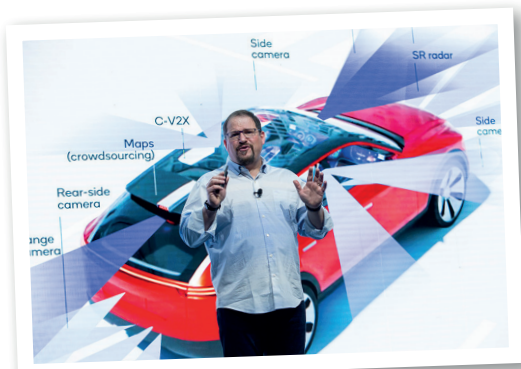
The connection with the customer changes too. "The relationship between the owner of the car is with the dealership right now," Cristiano Amon, CEO of chip maker Qualcomm, said at a recent investor conference. "But for the first time, the car companies have an opportunity to have a direct relationship with the car owner in real time." Qualcomm is one of the new



Smart #1 could get heated wheel on demand

BMW offers an array of post-purchase safety and comfort upgrades via infotainment screen

<p>BMW Safety Camera Information</p> <p>BMW Safety Camera Information alerts you to fixed traffic enforcement cameras.</p> <p>starting at £ 25.00</p> <p>Details</p>	<p>Driving Assistant Plus</p> <p>Driving Assistant Plus supports you on your journey by automatically maintaining your desired speed...</p> <p>starting at £ 35.00</p> <p>Details</p>	<p>Front Seat Heating</p> <p>Seat heating quickly heats up your front seats to a relaxing temperature you can adjust to...</p> <p>starting at £ 15.00</p> <p>Details</p>	<p>High Beam Assistant</p> <p>High Beam Assistant automatically switches your high beams on and off when there is oncoming traffic ...</p> <p>starting at £ 10.00</p> <p>Details</p>
<p>IconicSounds Sport</p> <p>A driving experience that stirs all the senses: transfer your vehicle's unmistakable, sporty BMW sound...</p>	<p>Map Update Package</p> <p>Keep your vehicle's Map up to date by receiving the most current navigation map data either via a...</p>	<p>Online Entertainment Voucher</p> <p>A range of music you can't refuse: with BMW Online Entertainment you have unlimited access to mor...</p>	<p>Service Inclusive</p> <p>BMW Service Inclusive offers you peace of mind with locked in service costs for a time period of your...</p>



Cristiano Amon: "Car companies can have a real-time relationship with customers"

automotive suppliers diversifying from consumer tech (in this case smartphones) to address the chronic lack of digital smarts in the car industry. By installing its powerful system on chip (SoC) in the car and layering over software that can remotely connect to all manner of features in the car, from seats to cameras, it's dragging the car into the modern era.

As you might expect, Qualcomm is promising untold wealth in return. "We believe some of those new business models are going to generate as much earnings for the auto companies as the profit from selling the car in the first place," Amon said.

Car companies are getting excited about the possibilities, including revolutionising the used-car industry. The opportunity to completely upgrade the car to run the latest software and offer brand-new features would boost residuals to the point car companies themselves see themselves participating in a way they haven't really so far – particularly when it comes to electric cars, which can be optimised in ways simply not available to ICE cars. Adding a lifetime subscription to heated seats and boosting power by 50bhp costs nothing to the car maker and is as simple as clicking a button but might add £500 to the used car price.

"We're convinced EV and connectivity will be the key enabler of the used car business," said João Leandro, CEO of Group Renault's Mobilize Financial Services, the division tasked with looking for opportunities in this space.

The definition of a used car is also changing as flexible subscription models shorten the possible customer time with the car. In this model, cars are required

to be as adaptable as possible to encompass the needs of many drivers. For example, a company might charge more per month for a car with ADAS semi-autonomous capabilities or turn that off if the customer doesn't want to pay the extra. "By moving from a cyclical business to a subscription-based model, we increase the potential to obtain recurring revenues from software sales and services," Volvo said in its most recent annual report.

The size of the opportunity is debatable, however. Not all car makers think they can monetise via subscription what buyers have been used to paying for up front or have come to expect from smartphone updates. It might be that all the nice-to-have upgrades should just be used to grow the warm feelings customers have about a brand.

"The internet-of-things connection, pre-conditioning your house, opening the garage without pushing a button and all those magical things that should happen in your car are going to make people's lives better," said Ford CEO Jim Farley in June. "But I don't think most of that is chargeable."

What could be chargeable is smart assisted driving, Farley said. As the levels of autonomy grow, the benefit to customers to take their hands off the wheel and do something else could be extremely

valuable. It's also extremely expensive to install the sensors and high-definition maps, which is why the Volkswagen Group has spoken about ordering it up for specific journeys rather than paying for it flat out.

Car companies without the brass neck of Tesla are also realising they can't just offer one car with one sensor set-up that can be expected to tackle all the situations in a Level 2+ or Level 3 autonomous driving situation once activated online. It may be great for simplified production, but the sheer scale of hardware needed precludes the maker from offering cheaper versions.

Chinese Tesla rival Xpeng offered its XPilot ADAS suite on demand across all models but changed its mind on the new G9 electric SUV to offer a higher-spec model with smarter, built-in semi-autonomous ADAS features. Essentially, the company went back to the old-school method of adding functionality on the production line that the customer paid for up front.

Of course, the dream of having services and features on demand falls apart if a car maker can't devise ones that people think are worth paying for – or ones that Google and Apple already offer on people's phones, such as Apple's Parked Car feature. The road to the true software-defined car is still long, but many in the industry have no trouble visualising the pot of gold at the end.

"COMPANIES ARE EXCITED ABOUT THE POSSIBILITIES FOR USED CARS"

