AVIVA

The Connected Car

A study of motorists' views on cars and technology

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The Queen's speech following the 2017 General Election confirmed the Government will introduce an Automated and Electric Vehicles Bill to ensure the UK is at the forefront of the modern transport revolution, and the Government has just unveiled plans to ban the sale of new petrol and diesel cars in the UK from 2040.

Other European countries have made bold moves too. France plans to ban petrol and diesel cars by 2040, while in Sweden, Volvo has announced that that every new car in its range will have an electric power train available from 2019.

As a large motor insurer in the UK, these innovations are fundamental. We are taking steps to support this evolution of mobility, while making sure we understand our customers' views on cars and technology.

Whilst a fully driverless car in the average car showroom may still be a few years away, we are seeing increased vehicle connectivity today, providing enhanced driver services and safety features - everything from automatic braking, to USB points, to smart phone apps to track and control cars.

This report compiles the views of 2,134 UK motorists on vehicle-related technologies, including dash cams, driving apps, in-car-tech, telematics and driverless cars. It examines their thoughts, concerns and plans for the future.

Auto technology is evolving at an unprecedented rate to match consumers' need for connectivity that they are experiencing in other areas of their lives. It appears not all motorists of today are ready to hand over every aspect of motoring to technology, but this seems inevitable over time.

Beyond question, the experiences of tomorrow's drivers will be very different to those of today.

Paul Heybourne

Paul Heybourne,
Head of Digital Innovation Operations, Aviva

Contents and key findings

Drivers and **dash cams**

This Aviva study of more than 2,100 UK motorists found that dash cams are one of the most desirable devices for use in vehicles, with 17% of drivers saying that they currently use one and a further 30% of motorists saying that they plan to use a dash cam in the future.

Of the people planning to purchase one, the vast majority (84%) plan to do so within the next year. Based on these figures, this could mean that 4 in 10 drivers - equivalent to more than 19 million motorists - could be using dash cams on Britain's roads in the next 12 months.

Safety is a key consideration for many people who use or plan to use dash cams, with four out of 10 (42%) drivers in this bracket saying they feel safer using one. The most common motive for using a dash cam is a desire for proof of any incidents on the roads - a reason given by 76% of motorists who own or intend to own a dash cam.

Specifically, a third of motorists say they would use a dash cam because they are worried about fraudulent motor claims such as 'crash for cash'. This concern is not without foundation. Aviva is currently investigating more than 16,000 suspicious bodily injury claims and declined one in 10 whiplash claims for proven or suspected fraud in 2016.

However, while there is no doubt that dash cams are proving popular, not every motorist is convinced by them. Of the motorists questioned, 53% said they didn't use a dash cam and didn't plan to do so.

* DVSA data https://data.gov.uk/dataset/driving-licence-data

Reasons for wanting to **use dash cams**

- 76% want proof of any incidents on the road
- 42% feel 'safer' using one
- 33% are worried about 'crash for cash' / fraudulent motor claims
- 21% think dash cams might reduce motor insurance premiums
- 15% have had a claim disputed in the past

Reasons for **not using dash cams**

- 32% feel there is no point as they don't stop accidents happening
- 18% are confident in their driving skills
- 14% say they are an expense they can't afford
- 11% wouldn't know how to use one

In-car **technology** and **driving apps**

"Vehicle **safety technology** has come on leaps and bounds, and has played a part in the casualty reductions we have seen in recent decades. Understanding and prioritising safety technology when purchasing a vehicle is really important, helping to create **safer roads for all**."

Richard Coteau, Brake road safety charity

The usage of apps to improve people's motoring skills is still relatively low, with just 5% of drivers saying they have used an app to monitor their driving skills and 11% saying they have used an app to improve their knowledge of driving theory.

However, usage of apps is noticeably higher amongst younger drivers, with 13% aged 17-24 having used one to monitor their driving skills and more than a quarter (27%) of drivers in this age group having used a driving theory app.

Younger drivers, who traditionally pay more for their motor insurance than more experienced motorists, may be more interested in using apps - such as the Aviva Drive app - which could potentially reduce the cost of their motor insurance.

The research also suggests that many drivers treat apps and in-car technology with some caution – although this reticence is often without foundation. Nearly a third of motorists (29%) believe safer driving apps can be 'distracting' and a similar number (30%) say they don't see the point of them. However, these figures largely relate to people who haven't actually used the devices and therefore could be making certain assumptions. Proportionate figures are far lower amongst people who have actually used safer driving apps: only 9% of users say they have found an app distracting, while only 3% say they don't see the point.

It is also significant that 39% of drivers who have used a safer driving app felt they were better drivers as a result. Only 4% felt it didn't improve their motoring skills.

Adoption of car-related tech devices

Whatever people's views on technology and driving, there is clear evidence that motorists are making use of devices to improve life behind the wheel. Almost three quarters (74%) of drivers say they use some form of tech device in their vehicle, the most popular being the sat-nav system, used by more than half of drivers questioned (53%).

The most popular in-car tech devices are as follows:

- **Sat-nav system:** used by 53% of drivers questioned
- **Rear parking sensors:** used by 36% of drivers questioned
- **Hands-free phone kit:** used by 32% of drivers questioned
- **Front parking sensors:** used by 18% of drivers questioned
- **Dash cam:** used by 17% of drivers questioned

Younger drivers are more likely to have at least one tech device for their vehicle, with the proportion of drivers who use no vehicle-related gadgets growing with age. For example, 80% of drivers aged 17-24 use car-related tech tools, compared to 67% of drivers aged 55 and over.

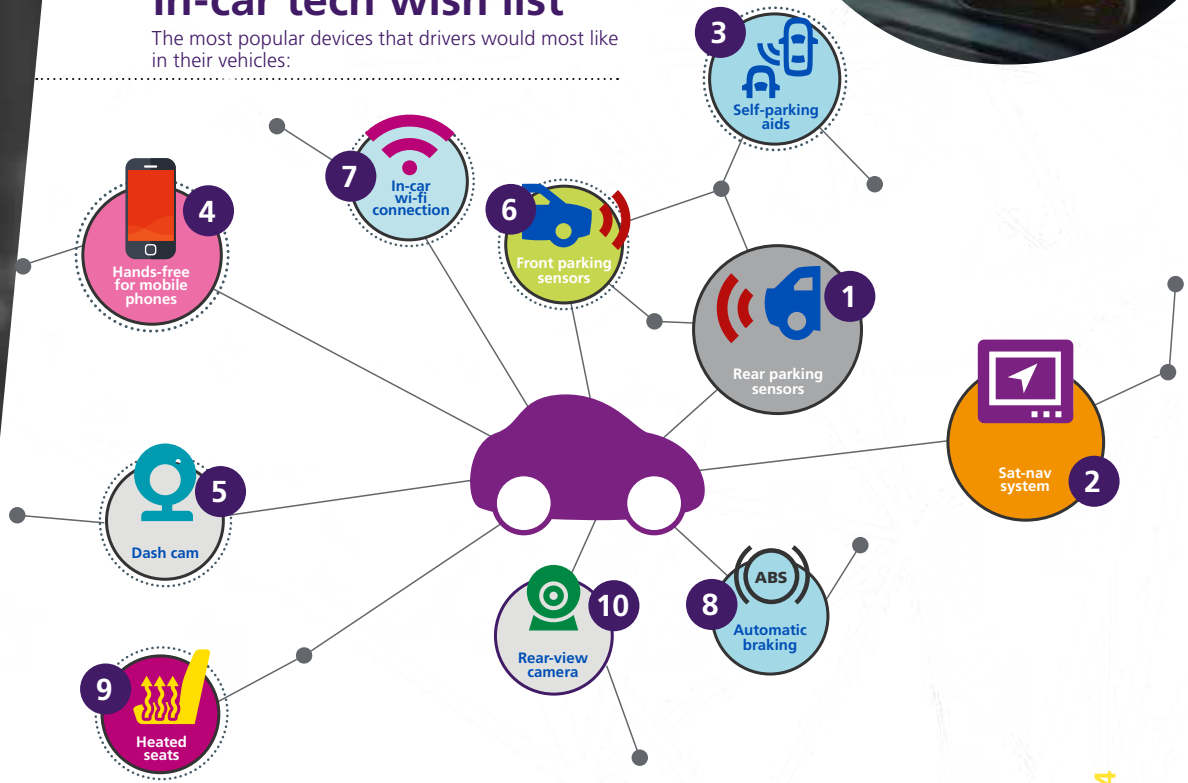
However, the opposite is true when looking at specific devices. For example, 56% of drivers aged over 55 years say they use a sat-nav system, compared to 45% of drivers aged 17-24. The same is true of rear parking sensors, with 37% of motorists aged 55+ using them, against 22% of drivers in the younger age group.

However, this may be due to the fact that older drivers have more disposable income and may be able to purchase these devices - or vehicles which include them - more readily than younger motorists. The fact that a larger proportion of older drivers say they use no devices also suggests that some use more than one tool to aid their driving.

Of those who don't use in-car tech devices, the majority (65%) feel confident in their driving abilities without additional devices and 33% are put off by the cost.

In-car tech wish list

The most popular devices that drivers would most like in their vehicles:



Driver priorities: choosing a vehicle

In spite of innovations in recent years, both in terms of technology and aesthetic design, most drivers take a very practical approach when it comes to choosing a new vehicle. When asked to pick three things which most influence their decision, fuel economy and price are far and away the biggest 'deal breakers' affecting the choices of 51% and 49% of drivers respectively.

Safety features come next on the list, although significantly lower and surprisingly only picked by 29% of respondents. This is closely followed by low mileage (25%), performance (22%) and cost of motor insurance (22%).

Gadgets and in-car tech were only chosen by 5% of respondents as one of their top three concerns.

However, there is evidence that technological advances in car manufacture seem to be influencing people's purchasing ambitions. One in 10 people (10%) say they plan to buy a hybrid fuelled vehicle when choosing their next purchase, while 2% intend to buy a fully electric vehicle.

However, the majority of drivers still expect to be using fossil fuels, at least in the short-term: 68% plan to buy a petrol-fuelled vehicle for their next purchase, while 20% expect to buy a diesel-powered model.

The growth of electric and hybrid models also tallies with figures from the Society of Motor Manufacturers and Traders (SMMT) released in July 2017*.

Latest figures indicate this is an area of growth, with an increase of 39% year-on-year between June 2016 and June 2017 for new petrol-electric hybrid vehicles registered in the UK, and a year-on-year increase of 46% for pure electric plug-in vehicle registrations over the same period.

However, SMMT figures for 2016 also show that diesel and petrol cars were by far the most popular fuel types for consumers, with alternatively fuelled vehicles accounting for 3.3% of all new cars registered in the UK. This suggests that the Aviva study could be more aspirational than a true reflection of the immediate future.

In line with this, the Aviva research also shows that people have a number of concerns about the price and the range capabilities of current electric and hybrid vehicles:

Reasons for not considering an electric / hybrid vehicle for next purchase:

High purchase price	55%
Limited range	44%
Length of time to charge	39%
Fear of being stranded	33%
Performance compared to petrol / diesel vehicles	19%

* https://www.smmt.co.uk/vehicle-data/

"**One in eight drivers** (12%) say that their next car purchase will be either a **hybrid** or **fully electric** model. But motorists have a number of concerns about these types of vehicles"

Driverless vehicles

Dr. Egil Juliussen, an expert on vehicle-related technologies for IHS Automotive, is quoted as saying that global sales of autonomous vehicles will reach nearly 600,000 units in 2025. He also forecasts a a 43% compound annual growth rate between 2025 and 2035.

Aviva's research shows that one in five motorists would be happy to use a driverless car. However there is currently some nervousness from consumers about embracing the driverless car movement.

Would-be-adopters are skewed towards younger drivers. Amongst drivers aged 45-54 and 55+, the proportion of people who would be willing to embrace driverless cars falls to 17% and 15% respectively.

Currently 49% of motorists say they wouldn't use a driverless car, while a further 31% say they aren't sure.

When asked about how they feel about the concept of driverless cars, the pervading mood amongst drivers is one of uncertainty, with almost a third believing that driverless cars will actually make our roads more dangerous.

Four in 10 drivers (43%) worry about the idea of technology being in control rather than the driver, while more than a third (36%) fear that driverless cars could cause motorists to become lazy and inattentive.

However, there is also a faction of supporters for the concept and 16% say they think our roads will become safer with driverless cars on the roads – although only one in 12 (8%) actually think there will be fewer collisions as a result.

Reasons for not wanting to use a driverless vehicle:	
I would rather be in control	42%
I wouldn't trust the technology	41%
I don't understand enough about them	9%
I'd be concerned about being on the roads with non-driverless cars	7%

Reasons for wanting to use a driverless vehicle:	
I think that the roads will be safer:	49%
I will be able to do other things while travelling	26%
It's an exciting development in technology	18%
I don't like driving	7%

"Currently 94% of road deaths and injuries involve human error and risk-taking. We believe that driverless technology could be critical in reducing the terrible and lasting impact that this has on our families and communities"
Richard Coteau, Brake road safety charity

Telematics

Telematics devices are used in vehicles to monitor people's driving behaviours. This can be used as a way of potentially bringing down the cost of motor insurance. Analysis by General Accident Insurance estimates that use of telematics in the UK increased by 40% between 2015 and 2016, with even greater potential for growth in the future.

This Aviva study found that an overwhelming majority of drivers (74%) believe that telematics products could make our roads safer.

However, in spite of this, many drivers show some reticence about using telematics products themselves, with 49% of motorists saying they hadn't used such a device and wouldn't consider doing so.

However, it is possible this reluctance may be due to a lack of understanding. When asked whether they knew what was meant by a telematics product, 25% of drivers admitted they didn't know what one was.

And while there is evidence of scepticism around telematics, there is also a strong indication of support to counter-balance this view. Almost four in 10 drivers (38%) say they would consider using a telematics device in order to try to reduce their motor insurance premiums, while 7% said they had used such a product and would do so again.

Perhaps surprisingly, while younger drivers were most likely to have used a telematics device in the past, it is older drivers who are more enthusiastic about using one in the future. Nearly half (46%) of drivers aged 55 and over said they would consider using telematics, compared to 39% of drivers aged 17-24. This perhaps suggests that older drivers are more confident in their driving abilities than younger motorists who are likely to be less experienced behind the wheel.

In the **UK**, the first set of public road trials with driverless cars are due to take place in **Milton Keynes** and **Coventry** by the **end of 2017**.

Experts predict that **motorists of driverless vehicles** will still have to **take a driving test** - but they could be **very different** to the **current test**

The Chinese company **NextEV** has developed a **100% electric race car** which it claims can travel at up to **185 mph**.

Conclusion

Paul Heybourne

Paul Heybourne,
Head of Digital Innovation Operations,
Aviva

There can be no doubt that innovation is having a huge impact on all aspects of our lives, and driving is no exception.

Technology is helping to make journeys safer, more comfortable and more enjoyable. In some cases, devices such as telematics are helping to make motoring cheaper, the prevalence of GPS and navigation in our cars and on our smartphones has made map-reading a thing of the past for many car users and dash cams are helping drivers feel safer. So it comes as no surprise that the vast majority of drivers - some 74% - use in-car gadgets or apps as part of their driving experience.

But there is nervousness about some of the most progressive inventions. Whilst one in five motorists would be happy to use a driverless car, some drivers today are unsure about autonomous vehicles for the moment, with almost half of drivers saying they wouldn't want to use one, and a further third of motorists saying they weren't sure.

Even hybrid and electric-powered cars are cause of some debate. While there appears to be a growing interest in these types of vehicles - one in eight people say they plan to buy such a model for their next purchase - there are also some concerns when it comes to price and performance.

But this is par for the course for technology. New inventions often breed nervousness as well as excitement, but this uneasiness often wanes as people get used to new ideas and experience them for themselves.

We can expect some virtual bumps in the road as new technology evolves, but there can be little doubt that innovations are being done with safety and comfort in mind, and we can expect a very different motoring landscape in the future.

"There can be no doubt that **innovation** is having a **huge impact** on all aspects of our lives, and driving is no exception."

Methodology

Unless stated otherwise, all statistics relate to a survey of 2,134 UK drivers who drive at least once a week. The poll was conducted by Censuswide research in April 2017.

Other information sources include:

- The Department for Transport
- Driver and Vehicle Standards Agency (DVSA)
- The Society of Motor Manufacturers and Traders (SMMT)

For further information, contact
Sarah Poulter, Senior Media Relations Manager, Aviva UK: sarah.poulter@aviva.com

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