



Driverless Futures?

Self-driving cars create both opportunities and uncertainties for the public.

How can we find out what the public thinks about a technology that doesn't yet exist?





Less than a decade ago, self-driving cars seemed impossible. Now, we are told, they are inevitable. The benefits and the risks are not yet clear, but the technology is likely to make a profound difference to people's lives. We have heard a lot from the developers, but, if the technology is to realise its potential, we also need to understand what members of the public think and, just as importantly, *how* they think about self-driving cars.

A NEW WAY OF LIFE?

According to OECD projections, global passenger demand will more than double before 2050, most of it in Asia¹. The new mobility technologies that will meet this demand could be an opportunity to change transport systems, or they could simply make existing problems worse. Self-driving cars, as part of increasingly smart transport systems, could help ease problems of safety, congestion, pollution and accessibility. But this will not just be a matter of a computer taking over the driving; there will be a number of different ways motorists, pedestrians and other travellers will be affected. Self-driving cars could be a 21st Century disruption as big as the introduction of the motorcar in the 20th Century. Our streets, our ways of life, the rules of the road and the shape of our cities could all change.

We might not know exactly how this disruption will play out, but Ipsos MORI surveys and dialogues give us hints on how the public tend to respond to new technologies; as well as giving us early thoughts on views of autonomous vehicles.

ENTHUSIASM VARIES BETWEEN

COUNTRIES

Early surveys suggest that members of the public are interested in self-driving car technology, but also sceptical. Worldwide, fully autonomous driving is rated as the most interesting potential new feature of a car of the future², but the level of enthusiasm varies markedly from place to place.

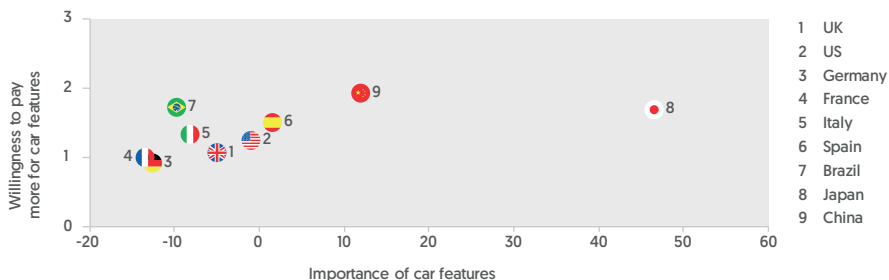
People in Britain are among the most negative in the world. Over half of Brits think travelling in a self-driving car will be easier, but only 36% think it will be more enjoyable and 44% think it will be more comfortable. In India, nearly 80% look forward to the benefits of greater ease, comfort and enjoyment³.

Britons and Germans like driving themselves. Half say they are worried that self-driving features would take away too much control from the driver⁴. The same number would always, or nearly always, drive themselves even if there was an autonomous driving function. Other nations tend to be more ready to sit back and let the computer do the driving⁵.

As well as national differences, there are differences by age group and cohort, which might affect the ways that autonomous car producers bring their ideas to market over the next few years. Older drivers are disproportionately buying new cars (the average age of a car buyer in the US is around 50)⁶, but these groups are much less interested than younger drivers in features like automated parking, fully autonomous driving, connected route services, and tele-diagnostics⁷.

HOW IMPORTANT IS FULLY AUTONOMOUS DRIVING, AND HOW WILLING ARE THE PUBLIC TO PAY?

Fully Autonomous Driving - no need to touch the steering wheel, cars can drive the whole trip (both on freeway or in cities).



Base: UK n=19,249; United States n=22,665; Germany n=14,580; France n=31,612; Italy n=16,814; Spain n=10,859; Brazil n=5,218; Japan n=9,060; China n=7,283

THE PUBLIC ARE CITIZENS, NOT JUST CONSUMERS

Self-driving car technology is clearly more than just another set of features on a conventional car. We need to understand what citizens think, when they are in cars and when they are not: Do they trust that the technology will be safe? How safe will be safe enough? Are they concerned about inequalities? What do they think about their data as cars become computers? Who do they think will benefit? Do professional drivers worry about their jobs?

There are challenges in talking about emerging technologies. Risks and benefits are uncertain and the direction of the technology can change. It is therefore important to understand how members of the public think. Qualitative evidence is just as important as quantitative. Different public groups will prioritise different issues. Some will consider self-driving cars from a practical, personal perspective: how can I get around quickly and safely? There may be a simple risk-reward trade-off. 47% of the British public support the development of driver assistance technology if they are asked in the context of “improving safety”⁸. Others, however, will be concerned about wider economic or environmental issues. These are harder to tease out in surveys, but dialogue and

deliberation on the principles which should underpin the governance of automation will be constructive⁹.

WHAT ARE PEOPLE WORRIED ABOUT?

The Ipsos Global Trends Survey has Britons as optimists when it comes to technology overall, despite their relative lack of enthusiasm for autonomous cars. 70% think we need advanced technology to help solve future problems (as against a global average of 56%). The French are more pessimistic, with only half (50%) agreeing. Americans are somewhere in between at 63%. Nearly eight in ten (78%) Britons cannot imagine life without the internet – ahead of Germany and the US (73%), and well ahead of France (64%)¹⁰.

WORLDWIDE, MORE THAN SEVEN IN TEN PEOPLE IN CITIES AGREE THAT ONLY TECH CAN SOLVE OUR FUTURE PROBLEMS, WHILE IN RURAL AREAS, THIS DROPS TO 57%¹¹

When it comes to automation, concern focuses on human work becoming redundant. Most economists suggest that automation will create more jobs than it removes. Members of the public are not so sure. A survey from 2017

found 54% of the public agreed that more jobs will be lost than gained due to automation in the next 15 years [just 11% disagreed]¹². In the UK, 45% of MPs agree with this¹³.

This finding was similar between younger, degree-educated groups and those who were older and with fewer qualifications, despite the greater risk automation poses to this latter group. Employees in four countries in another survey told us that the biggest concern for workers over the next 10 years is a lack of job security [37%]¹⁴. In GB this was the biggest negative impact of automation for almost half [44%]. There is a desire for easy solutions [50% in GB agree that “human quotas” should be imposed, 44% support an automation tax]¹⁵. Surveys of professional drivers would likely reveal some sharper concerns about how automated cars will affect them.

For many people, opinions about technology are shaped by a sense of fatalism. They feel as though technological change is inevitable and that they have little say. We see this fatalism very clearly in public dialogue. The public tend not to feel that they have a voice or a choice in the way new technological products and services are developed. For self-driving cars, people are likely to be concerned about whether the technology will become the norm, making people dependent upon it and crowding out other options. Some will feel they have less independence and less control in a self-driving world.



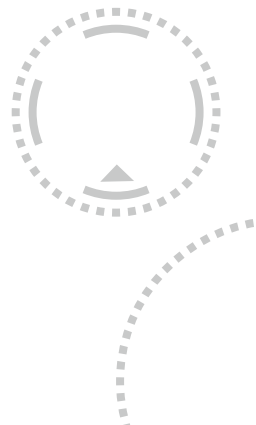


Between forty and sixty per cent of people globally say they are concerned about data protection and security relating to connected or autonomous cars¹⁶.

Public dialogue exercises in the UK show that people want their data to be shared if it is for public benefit. But most people worldwide do not know how companies and governments hold and use their data and they do not trust big organisations to do so in their interests.

Globally, those who are most concerned about privacy are those least interested in autonomous cars.

GLOBALLY, ON AVERAGE, ONLY
36% TRUST VARIOUS TYPES OF
ORGANIZATIONS WITH HOW
THEY HANDLE PERSONAL DATA¹⁷.



PUBLIC ENGAGEMENT IS VITAL

FOR THE FUTURE

Industry is understandably wondering what the future market for mobility will look like. Policymakers are thinking about how to ensure that transport, particularly in cities, is safe, reliable and efficient. Developing the technology in the public interest will require real imagination. This should be done in dialogue with the public. Innovators need to build on what we already

know the public wants from new technology - greater social equity, greater transparency over who benefits, and making sure tech-disadvantaged groups aren't left behind.

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