**Autonomous vehicles – the last lap to reality or a sci-fi fantasy?**

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I,Robot. Minority Report. Herbie. What do all these films have in common? Self-driving vehicles. Hollywood movies have often featured cars that are self-driving and, in some cases, conscious. While we can enjoy Will Smith cruising down futuristic roads in his self-driving Audi in I,Robot, the question remains, are these vehicles just the wild fantasy of futuristic blockbusters or are autonomous vehicles closer than we think to becoming a reality?

The British Government certainly thinks so. During the UK’s Autumn Statement, Chancellor Philip Hammond announced £390 million will be invested into the development of autonomous vehicles by the end of the current parliament. The Government has also granted permission to Nissan to begin testing of their self-driving cars in London, marking the first on road autonomous vehicle trials conducted in Europe. However, there are lesson to be learnt from on road trials that have already taken place in the US.

**Innovation vs. Safety**

At the start of 2016, one of Google’s fleet of Lexus SUVs collided with a bus in California. An even more tragic incident occurred a few months later, when the first reported death occurred in a Tesla Model S on ‘Autopilot’. Similarly, Uber’s self-driving vehicles have been seen running through red lights, narrowly avoiding pedestrians crossing the road. All raising considerable questions on the safety of autonomous vehicles.

Another well-publicised issue is the problem of ‘hackable’ vehicles. Concerns have been raised regarding cyber security as vehicles become more connected, particularly from the FBI. The threat of ‘over-the-internet’ attacks on cars and trucks is now very real. There has already been a number of ‘stunt hacks’ such as a well-publicised one on a Jeep vehicle in 2015,and a product recall of 1.4million Chrysler vehicles due to fears over a hackable software vulnerability.

As vehicles become ever more reliant on internet connectivity, it is crucial that the innovations made possible by automated technology don’t become an entry point for cybercriminals with malicious intent.

**The future workforce**

Typically, robots and automated technology have been used to fill the jobs humans do not want to do, such as bomb disposal, one of the first jobs to be fulfilled by robots. Similarly, mundane tasks like repetitive assembly line work in factories has long been taken over by robotic technology. In the age of artificial intelligence (AI) and automation, the impact of job losses will be felt most severely in the service sector. It has been predicted that up to 30 per cent of jobs will be lost due to AI. As driverless vehicles become the norm, the obvious impact will be on professional drivers, whether it’s delivery or taxi drivers, as these roles are likely to become obsolete due to the rise of driverless vehicles. As such, it is crucial that Government and business prioritise the retraining and upskilling of those effected by autonomous vehicles.

Ultimately, retaining consumer trust in autonomous vehicles is imperative to success. To do so, the UK Government must ensure manufactures are taking steps to prove to consumers such advances in technology is as safe, if not safer, than human control. Failure to do so could see autonomous vehicles consigned to the scrapheap of automotive history. While the Government ploughs time and resources into making self-driving vehicles a reality, they must work with automotive manufacturers to retrain those affected by the rise of autonomous technology. Self-driving vehicles are the future, but before they become the norm it is up to manufactures and Government to address the challenges they present here and now.