

Meeting: Internet of Things
Committee: Enhancing ethics of IoT usage
Country: United Kingdom

Over the past years, Internet of Things (IoT) technology has been increasing in the news with many articles and usage. IoT appears to be an important new development which allow integration of internet-based technologies into every sphere of life. Meanwhile, the growth of IoT has already brought significant economic and social benefits. As developments continue, the Internet of Things (IoT) brings huge opportunities for citizens as well as UK's digital economy. The growth of IoT market is providing great opportunities for UK companies. In 2016, digital sectors contributed £ 117.5 million to the UK economy- almost 7% of the UK's gross value added. ⁱAdditionally, the export of digital sector services amounted to just over £32 billion in 2015. While the recent growth in IoT provides opportunities, UK realizes that IoT also brings risks

Social behaviour and appropriate use become even more crucial as we build out the “Internet of Things” (IoT). As its best, the IoT has the potential create and integrated ecosystem that can respond the spectrum of needs, increasing efficiency and opportunity and empowering people through technology. As its worst, the IoT can open a Pandora's Box of inappropriate and unsafe behaviour.

With one in ten adults now falling victim to cyber-crime, it is clear that the uptake of connected products and services will only increase the attack surface. ⁱⁱ Recent Mirai and WannaCry attacks which affected core public services and used internet connected devices to breach private companies, reinforce the need for effective cyber security as part of our country digital economy. Apart of this, new proposals for enhancing IoT security were laid out in a policy paper titled “Secure by Design” by Department for Digital, Culture Media & Sport in March 2018. It includes a proposed code of practice with 13 steps to assure security such as avoiding default passwords for devices and services, implementing a vulnerability disclosure policy, and keeping software updated to provide ongoing support.

The Internet of Things Security Foundation (IoTFS) in London, UK also helps to secure the Internet of Things, in order to aid this adoption and maximise its benefit by promoting knowledge and clear best practice in appropriate security to those who specify, make and use IoT product and systems. As stated by Margot James, Minister for Digital, Culture Media & Sport, said the government wants “everyone to benefit from the huge potential of internet-connected devices”. She continued” It is important they are safe and have a positive impact on people's live,” adding : We have worked alongside industry to develop a tough new set of rules so strong security measures are built into everyday technology from the moment it is develop.

In order to enhance ethics of IoT usage, it requires industry, academia, civil society and government across the world to find and implement possible solution to address security concern on IoT. While UK remains a member of the EU, the UK government will continue to engage in negotiations relating the regulatory proposals included alongside Member State.

ⁱ DCMS Sectors Economic Estimates 2017: Employment Rate, 16 August 2017. Accessed at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/640628/DCMS_Sectors_Economic_Estimates_2017_Employment_and_Trade.pdf

ⁱⁱ Crime Survey of England and Wales for year ending June 2017, accessed at <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/june2017>