## **Artificial Intelligence (AI)**

Responsible AI is a framework used to define artificial intelligence's ethical and legal considerations (AI). It addresses the challenges governments and companies face when implementing AI solutions and outputs to check its accountability, fairness, security and regulations. GDPR is implemented under the Data Protection Act 2018 where the responsibility of data is followed under strict rules. Some of the challenges faced by AI development such as; the right against automated decision-making, the right to erasure, the right to data portability, and the right to explanation are some of the main concerns facing data protection in AI. It is important to understand that these challenges are only obstacles in the creation of AI. Design and implementation guidelines do slow the process of AI creation but hold importance on data protection and ethical concerns to stop any wrongdoing in AI.

An occurrence where Al triggered many ethical and human-centred concerns was the launch of Microsoft's Al chatbot 'Tay' in 2016. The chatbot was used as an experiment in "conversational understanding" on Twitter. The intention was for the chatbot to learn and engage through conversation with people. This quickly changed when people started tweeting misogynistic and racists comments to the chatbot. With this information being fed to 'Tay', she was repeating similar comments back onto Twitter. Now looking back at this Al occurrence, it can be seen that other users had programmed 'Tay' to copy their comments by typing 'repeat after me'. It is fair to say that some comments made by 'Tay' were unprompted, but with deleted tweets and a complete shutdown of the chatbot, there will not be further investigation of how these comments were made or came about.

Another real-world AI test gone wrong was the self-driving uber car. The trial was carried out in San Fransisco in 2016, and the self-driving cars drove through many red traffic lights. The ethical and legal issues with this study stem from the fact that there were no permissions or approvals by the State of San Francisco. Even with high-end vehicle sensors and networked mapping software, the self-driving car still resulted in misuse of the highway by driving through red lights. GDPR Law now prevents you from making solely automated decisions, this means that some human involvement is needed within the decision-making process. This Uber example could have used human involvement by allowing the 'drive' to have enough control of the car to stop the vehicle from running through a red light. With approval from the state, this trial could have gone more smoothly and could have potentially ironed out AI choices by the involvement of a government body.

Organisations can be responsible for AI and data by following GDPR laws and ethical guidelines. With continuous advancements in AI, organisations need to have guidelines in place that are followed in every AI occurrence. When it comes to responsibility pwc address the topic through 5 dimensions; governance, interpretability and Explainability, Bias and Fairness, Robustness and Security, Ethics and Regulation. This Toolkit is a clear structure of areas to consider when being responsible with AI and data.