Adoption of AI is still at an early stage, despite the hype. However, its adoption and the potential use cases are increasing rapidly. The ability for countries to develop and license this technology is a game-changer. There is intense rivalry between countries to become the AI leader.

Predictions for advances in automation alone suggest more than 30 per cent of jobs in the UK and US can be replaced by automation within 15 years (McKinsey (US); the Resolution Foundation (UK)). In Artificial Intelligence and the Law (ITNOW, Spring 2017), we touched upon the EU and UK highlighting the need for legislation and ethical guidance/governance around development and adoption of automation and AI. Nearly a year on, further work is needed.

In December 2017, the UK Institute for Public Policy Research reaffirmed the need for these issues to be addressed, stating: ‘An authority for the ethical use of robotics and artificial intelligence should be established to regulate the use of automating technologies.’ As ever, laws across the world are disparate or yet to be developed in this area. So, where does that leave us?

Worker’s rights?
Companies who replace employees with automation and/or AI could face a number of employee and industrial relations issues. In the UK, we saw strikes over the rail industry’s proposal to remove train guards due to automation. We see employers grappling with the application of current law, with similar issues arising when they replace worker’s roles by outsourcing, as well as the employment law landscape across the world having to evolve to keep up with innovation, particularly when caused by AI.

Liability for issues caused by automation and AI
In 2017, we, at Eversheds Sutherland, predicted that laws would come into force specifically to address issues, accidents and faults caused by automation and AI. Nine months on, this is coming, although slower than expected. The automotive industry appears to be leading the way here. For example, in 2017, Germany introduced legislation which clearly sets out that AI must be built to favour lives over property in autonomous vehicles.

Germany has also drafted the first set of ethical guidelines for self-driving car programming, albeit high level in nature. In 2017, the UK adopted laws also specifically to deal with liability for technology in autonomous vehicles.

We predict much more legislation will come - certainly on an ad hoc basis to address sectoral issues. What this means is that industry is going to have to horizon-scan heavily as they look to innovate and to implement these technologies to ensure their products/services are compliant and future-proofed and/or, conversely, that they are happy with the implications of implementing the technology. In the meantime, absent of specific legislation in this area, traditional product liability and civil and criminal rules will continue to apply.

Intellectual property law as a differentiator?
In 2017, we laid out some of the intellectual property landscape for AI in the UK and the US (and parts of Asia). It was clear that the...
There is a serious ongoing debate in the UK, and beyond, as to whether patents should be available at all for autonomous computer-generated inventions.

Types of patent applications, which involve computer systems, will be granted and these need to have a certain ‘technical’ contribution. There is a serious ongoing debate in the UK, and beyond, as to whether patents should be available at all for autonomous computer-generated inventions. Of course, for those following robotics and AI generally, you will have seen that a robot in Saudi Arabia was granted its own citizenship in 2017 – if this follows elsewhere this will further complicate this area as robots and AI may have their own persona and rights, and potentially more rights to be owners as a result.

Copyright – a clearer picture?

Copyright law in the UK takes the approach of defining the author of a ‘computer-generated work’ as the ‘person by whom the arrangements necessary of the creation of the work are undertaken’, thereby vesting the copyright in that person.

In the US, recently revised US copyright rules state that the ‘[Copyright] Office will register an original work of authorship, provided that the work was created by a human being.’ This rule appears to be based on an early pronouncement by the U.S. Supreme Court (dating back to 1879) that states: ‘[U.S.] copyright law only protects “the fruits of intellectual labor” that “are founded in the creative powers of the mind.”’ Since U.S. copyright protection is limited to ‘original intellectual conceptions of the author’, the Office refuses to register any works that are not created by a human being.

So, if AI alone cannot create copyrightable content, a human collaborating or interacting with AI is a necessary actor to create protectable content under US copyright law. It follows that the human, being an author under US copyright law, will initially own the copyrightable content.

Asia

The legislative framework for AI generally was examined by the Asia Business Council as part of its Asian Index of Artificial Intelligence (AI2) to analyse the ‘preparedness and resilience’ of eight Asian economies (China, Japan, South Korea, Hong Kong, Singapore, India, Taiwan and Indonesia) with respect to an AI-led future for their economies and societies.

The findings of this study were published in October 2017. The study concluded that, out of these eight economies, Japan was the most developed in its legal strategy for dealing with AI, which includes introducing new protections for individual and business copyrights for creative assets made by AI.

As for South Korea, in December 2016, the government recognised in its Mid-to-long-term Master Plan in Preparation for the Intelligent Information Society; Managing the Fourth Industrial Revolution, a need for a regulatory regime that addresses new technologies. In the same month, China’s State Standardisation Agency announced proposals for new national regulatory standards for the robot industry, with the first 30 standards to be finalised in 2018, and a further 30 by 2020. The Council is sensibly keen to pave the way for innovation in this area. Law could, in this way, make it more attractive to innovate in such countries.

Currently, according to The Economist (July 2017), the UK, China and Britain have the most AI intelligence companies (approximately 4,000 between them). It will be interesting to see if and how this changes in 2018.

Clarity is paramount

This article barely scratches the surface around the legal landscape for AI and automation. Legal issues remain territorial in nature. A hotch-pot set of rules for automation and AI will undoubtedly develop.

What is clear is that the ethical and legal issues have still not fully been addressed; that countries continue (mostly) to apply laws which did not envisage some of the ground-breaking technologies we are seeing; that some countries are embracing the need for legislative change and ethical guidance and more will do so; that (absent of sufficient legal rules) contractual clarity between businesses around creation and adoption of AI is paramount to success in this area; and that this is very much a space to watch.