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Technology Trends

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Technology Trends 2017

By Barry Fishley

As 2017 begins, we consider the following key technology related trends for the year:

- Artificial Intelligence – going beyond the boundaries;
- FinTech – modern industry, same old issues; and
- Impact of Brexit.

Artificial Intelligence – going beyond the boundaries

artificial intelligence; what is it?

[ahr-t*uh*-**fish**-uh l] [in-**tel**-i-j*uh* ns]

noun: **AI**

> *the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.*

"Big data" has been a hot topic for a number of years, with the key question being how will companies monetise big data and make the most of the extensive data they collect on a day to day basis. The answer appears to be… AI.

We have seen the launch of a number of AI products over the last year, in particular in the personal assistant space with the likes of Amazon's Alexa now controlling every appliance in your home via simple voice commands. "AI" is used (often incorrectly) as an umbrella term to capture an array of new technology. However, AI in its purest form is where self-awareness and human-like characteristics are replicated, enabling a system to use data (which can include voice) in any manner it likes in often unpredictable ways, as well as to create apps and other systems without further human input.

Recent investment and acquisitions

- China's CSC private equity firm's partnership with British start-up incubator "Founders Factory" which focuses on early-stage AI start-ups
- Microsoft's acquisition of Swiftkey, the London based predictive keyboard maker

2017 and beyond

An increase in investment: In 2016, investor funding in AI was up 16% quarter on quarter, with over 608 venture capital funds participating in at least one funding round for AI start-ups since 2010. 2017 looks set to see even greater increases in investment in AI.

Greater uptake across all industries: It is clear that AI can pervade the entire spectrum of industries, from increased use in retail to provide personalised recommendations for shoppers, to law firms adopting AI driven tools to make research more efficient. Those who embrace AI early will gain a first step advantage over their competitors.

2017 hurdles

The law is no stranger to struggling with the speed of technological advances which is constantly pushing the boundaries of our legal framework, however, arguably AI is a whole new beast which already starts its journey beyond the boundaries of our legal system.

Liability – Is my AI to blame?

For all the advances which we have seen in the field of AI, the majority of products still require human input and commands to produce an output. Our legal system can handle issues which arise from use of this type of AI. For example, liability for any subsequent infringement of third party rights is likely to rest with the end user inputting his/her command into the AI.

However our legal system struggles when we move to AI in its purest form, that is, where no (or very limited) end user input is necessary and/or the AI 'thinks' for itself. Arguably this form of AI goes beyond the current boundaries of IP law. When it comes to deciding where liability lies for infringement, the law searches for a natural person who triggered the infringement. It seems appropriate to attribute liability where a developer or end user codes or commands an action which is intended to infringe a third party's IP rights. However, it would seem somewhat draconian to attach liability where the initial developer or end user may never have even foreseen what the ultimate outcome would be of the AI's independent actions.

IP ownership – is it mine?

Where IP is developed by AI, who is the rightful owner? The law again looks for a human creator to whom to grant certain rights. For example, the author of a literary, dramatic, musical or artistic work which is computer generated is the person by whom the arrangements necessary for the creation of the work are undertaken. In the case of the pure form of AI, this could mean the first inventor could be the owner of all derivative IP rights subsequently created by the AI, but such analysis would seemingly ignore any contribution made by the relevant end users and the possibility that ownership could attach to the AI itself. More difficulties arise if we envisage multiple end users per AI interface, which may trigger the need to revisit our laws on collaborative works and joint ownership.

Any legal tools in the armoury?

In light of the above mentioned uncertainties, we may see companies using contractual methods to plug the gaps around liability and ownership. For example, making it clear that the end user is responsible for the consequences of using AI.

How to assess an AI company?

With the uncertainty around key issues such as liability and ownership of IP, acquirers and investors will need to assess whether the target business is alive to these issues. They should also pay closer attention to any measures which the business has used to clarify and protect its position, particularly with respect to liability for infringing third party IP and ownership of IP created. Clearly setting out its ownership rights and the user's acceptance of these in the end user licence or contract will be important. It would also be prudent to understand whether suitable insurance is in place.

FinTech – modern industry, same old issues

Investment in FinTech has gained traction over the last five years, with more than £40.4 billion poured into FinTech globally between 2011 and 2015. For existing players in the market, the need to become more efficient as they grapple with increasing compliance costs has seen partnerships with and acquisitions of a number of **enablers** over the last year or so, for example:

- a US company which builds apps and end user tools for blockchain systems announced its partnership with a top consultancy firm this year to build a digital bank;
- a data science company that helps companies with fraud detection received investment from a large venture capitalist; and
- a US company enabling traders to comply with current regulations received investment from numerous sources including one of the world's largest banks.

On the flip side, where historically lack of trust and inexperience previously acted as insurmountable hurdles for newcomers looking to enter the financial market, disillusionment with traditional financial institutions has helped to pave the way for **disruptors** to offer something new to a more receptive audience, for example:

- a P2P insurance company launched its first product in September 2016;
- a student banking app raised substantial funds in 2016 and is rumoured to be in talks to partner with major banks; and
- a fully licensed digital bank was launched to provide services to FinTech companies.

2017 hurdles for FinTech players

- **Cybersecurity** - The financial industry is already leading the way in cybersecurity prevention which is set to continue in 2017 and financial institutions will look to impose equally high hurdles on service providers and FinTech partners.
- **Data privacy** - Regulatory compliance will continue to be a hurdle for FinTech companies in 2017. Companies will need to gear up for the arrival of the EU General Data Protection Regulation (GDPR), and given the new upper end of the sanctions carries a price tag of the higher of €20 million or 4% of worldwide turnover, this is not an area of compliance companies can afford to ignore. Cybersecurity is a key element of the new GDPR with new stringent breach reporting obligations with which companies will need to comply.
- **Legacy systems** – Outdated and cumbersome legacy systems create the biggest road block in payment companies' efforts to provide innovative digital payment solutions. Further investment will be required to update systems and more institutions will need to launch open platforms to provide open access to software app developers to ensure they remain central to new, innovative designs.

Perhaps one area where we may see some relaxation of the rules for new FinTech companies is **financial regulation**. The FCA has introduced a "sandbox" in which businesses that are authorised can test their products on the market with the comfort that the FCA will not carry out enforcement action against them. In addition, new legislation in the payments sector is intended to increase competition with banks when it comes to innovative online solutions.

2017 and beyond

M&A: We will see an increase in some of the bigger players acquiring start-ups in 2017: some transactions to assist companies in their current operations, embracing the enablement of FinTech, and others to disrupt the disruptors. There clearly needs to be a shift in approach to M&A in this field. Traditional financial institutions need to appreciate they are not buying a finished product. Boards with bigger risk appetites may well win out.

JVs: 2017 will undoubtedly see the birth of some strategic JVs, particularly in the area of customer engagement where FinTech start-ups are leading the way. For start-ups facing a difficult regulatory landscape, JVs may also be a useful vehicle for gaining guidance from the experts in the market.

Keeping it in house: The fear of the threat of start-ups may result in greater in-house development for those traditional institutions with the willingness to invest internally.

Impact of Brexit

IP

Since the Brexit announcement, the UK Government has provided very little guidance on the future of the various IP rights which are dependent on the UK's status as an EU Member State.

EU trade marks and EU design rights act as EU-wide rights. It is possible that post Brexit, they will no longer offer automatic protection in the UK and it is unclear whether the UK will seek any EU agreements to preserve the current protections afforded by such rights. As such, companies should consider seeking protection through national registrations in the UK or through converting EU trade marks into national rights.

As regards patents, applicants will still be able to apply for national patent rights in all European Patent Convention countries via a single application. These national registrations will not be affected by Brexit. However, the new Unitary Patent, which will be enforceable across most EU Member States, may not cover the UK following Brexit. Nevertheless, the Minister of Intellectual Property has announced that the UK will ratify the agreement which will lead to the new Unified Patent Court for the UK. British patentees will still be able to apply for Unitary Patents in other Member States.

It is not expected that copyright will be drastically affected by Brexit, provided that the relevant copyright legislation implementing the EU Directives is not repealed.

Data Protection

Despite Brexit on the horizon, the Secretary of State for Culture, Media and Sport has confirmed that the UK will “opt-in” to the General Data Protection Regulation in May 2018. This has provided welcome clarity for companies, which should continue to focus efforts on putting in place mechanisms to ensure compliance in 2017. Although it still remains to be seen what the position will be once the UK eventually exits the EU, the Secretary of State’s comments could be construed as indicating that equivalent protections are likely to continue following Brexit.

Barry Fishley

Expertise

Barry Fishley is a partner in the London office and has had wide ranging experience in data protection, technology, intellectual property, e-commerce and general commercial matters.

He advises financial institutions, major international companies and private equity funds on a range of transactions and issues including data protection, technology and intellectual property aspects of M&A and banking transactions, complex international licensing arrangements, outsourcing, strategic alliances, manufacturing supply and other international commercial transactions.

In the areas of data protection and privacy, Barry has extensive experience of advising on the consequences of a security breach, international transfers of data, privacy audits and general compliance.

Barry regularly speaks and writes on various topics. His most recent work was a series of presentations on cyber security including cyber security implications for M&A.

Barry is recommended in *Legal 500 UK* for his media & entertainment expertise.

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If you would like more information about the topics raised in this briefing, please speak to your regular contact at Weil or to any member of the Technology & IP Transactions Group.