

Intellectual Property

Definition: BCS understands IT is a key enabler of the digital economy, which describes the exchange of information, goods and services through an information technology platform. The digital economy exists within an international framework of extant commercial and intellectual property (IP) laws and regulation, which often struggle to keep pace with technology change. BCS seeks to ensure everyone benefits from IT and we work to promote wider social and economic progress through the advancement of information technology. In order to achieve these objectives, we recognise the need for a digitally-optimised IP system that is fit for the digital economy.

Background/Context: Technology has always played a key role in the evolution of human culture. The latter half of the 20th century sparked a revolution in the use of digital and internet technologies to create and deliver novel products, services and behaviours. Pervasive computing power, devices and connectivity are fast approaching a tipping point of unprecedented, ubiquitous digital availability and accessibility which desperately calls for a concerted global effort to structure the emerging 'internet of things' into a robust and safe environment for all users (including people and devices). The acceleration towards true contextual computing (i.e. anywhere, anytime and any entity) is increasingly evident with advances in: mobile processing (e.g. mobile payments / mobile security / biometrics / NFC); digital economic mechanisms and currencies (e.g. BitCoin / the sharing economy); wearable computing (e.g. Google Glass / Jawbone UP / Nike Fuelband), manufacturing methods (e.g. 3D printing); as well as smart and disposable sensors with myriad applications for health, energy and security.

In contrast, the evolution of intellectual property and associated rights, which drive and enable the commercial exploitation of digital technology and information, has been markedly glacial in light of the profound importance of IP to the global and UK economy. Only recently, with such initiatives as [Digital Economy Act](#); [Hargreaves Review on IP and Growth](#); and [Sir Richard Hooper's Copyright hub](#), plus key resources / frameworks (e.g. [UK IPO](#)), has there been any sign of progress on these issues. However, even such estimable efforts are far from adequate in tackling what is ultimately a global challenge and opportunity.

Furthermore, the UK economy relies on a strong creative, innovative and entrepreneurial base; therefore an IP regime that is fit for the digital age and economy, in all its forms, becomes increasingly important if the UK is to continue playing a leading role in the age of digital innovation. Again, various government-backed initiatives (e.g. [TechCity](#) and [Digital Growth Vouchers](#)) exist to encourage creativity, entrepreneurship and innovation, but they are still far from optimal at this time.

Fortunately, BCS is active and well represented, with various specialist groups (e.g.: law, internet, social, mobile and data), initiatives, events and members actively engaged in addressing key issues and topics related to the digital economy. Also, BCS is clearly well placed to articulate, and in some cases lead, the discourse on how the IT profession and its membership can impact the development of key initiatives in this regard.

Key issues: BCS understands the following key issues will need to be prioritised and addressed:

1. The pace of technology change is driving ever more innovative and dynamic products, services and behaviours, which in turn accelerate the evolution of said technologies. Such rapid **change often leaves behind the IP construct** which exists to provide economic benefit for creators,

authors, inventors and owners of related IP. A mechanism is needed to keep IP in sync with developments in the emerging digital economy;

2. An enormous amount of money is spent annually on **IP-related litigation** (particularly [when IP is viewed & used as a tactical weapon](#)). Respective trends across: business (e.g. consumerisation / social-mobile commerce / business model innovation); society (e.g. sustainability / social media & political upheavals); and technology (e.g. big data / cloud / mobility / social), are only made more complex in combination with IP;
3. According to [BCS feedback from the last Parliament and Internet conference](#) in 2013, **intangible and virtual goods online** extend to more than just music, the written word or software. The scope of IP should cover the entirety of the online ecosystem, including emergent forms of content and usage paradigms;
4. The [EC announced an initiative](#) to define a position on **taxation of the digital economy** – there is great potential for sovereign wealth creation via taxation of the internet and digital economy, but this requires overcoming various challenges posed by an inherently borderless platform such as the internet;
5. According to [a BCS survey of digital leaders](#), **information security is seen as a key priority** by over half the respondents. Protection of IP and information assets is becoming more fraught, especially given recent embarrassing incidents involving Wikileaks and Edward Snowden.

BCS position on the key issues:

1. Evolve the IP system – BCS recognises and understands that IP will need evolving to meet the needs of the digital age and economy, particularly with regards to the following:
 - a. Synchronise digital and IP - This will require some feedback mechanism to regulate the impact of IP changes on the digital economy, in a transparent manner. Obviously, this will need to work in different ways for different IP types (e.g. copyright, designs, trademarks and patents);
 - b. Refine digital IP – BCS believes that traditional IP boundaries IP are becoming blurred, (especially for trans-media content and experience forms). There is a need for fast, automated and dynamic IP mechanisms to cope with the resulting huge amount of high volume / low value transactions, similar to that promised by the Copyright Hub, but with much wider scope;
 - c. Keep digital in context – BCS recognises the rapid rise and impact of digital technology means that society is still at a very early stage in understanding and adapting to the changes brought by digital technology. Therefore, BCS advocates an appreciation of the fact that society and human culture is in a period of transition with possibly no end state to speak of.
2. Engage all stakeholders - BCS understands the need to ensure all major stakeholder groups (i.e. the five key groups of: creative / technology / commercial / governance / consumer stakeholders) must be consulted, engaged and involved in the creation of digital-ready IP structures for the future. BCS has representative groups / forums that cover all five stakeholder groups / interests
3. Leverage the UK advantage – BCS believes the UK is in a great position to play a leading role in helping define new digital IP measures and structures for the digital economy – it has the capability and resources, economic motivation and political appetite, as well as the credibility to build on its historical provenance for introducing far reaching IP mechanisms such as the Statute of Anne (aka the world's first copyright law). It seems a global digital equivalent is in order, and BCS has a lot to contribute towards its realisation.

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