Why IP matters

The term "innovation" is used to describe the process by which ideas are applied to create new or improved products or services, ways of producing them and ways of delivering them. It occurs in and across all sectors of society, from music, literature, design and film in the arts (where it is often referred to as "creation"), through more traditional industrial sectors such as the energy, construction and transportation industries, through "high tech" industries in the digital and medical sectors. The "4th industrial revolution" based on Artificial Intelligence and development of green technologies will affect and be based on innovation across all sectors.

Innovation, particularly in developed economies, is key to economic growth and lies at the heart of modern life and businesses. It increases productivity, leads to market growth and creates and supports high-value jobs. It is sustained by a robust and balanced framework of intellectual property (IP) rights.

Innovation can involve big breakthroughs which can have significant benefits to society, but these are comparatively rare. More often, and equally valuable, it involves smaller changes, adaptations and improvements to existing products and processes the benefits of which, when viewed in aggregate, at least match those of the breakthroughs.

Those who innovate range from individuals through SMEs, through academic and philanthropic organisations, through the largest multi-national corporations. Although some are driven to innovate without a profit motivation, a large proportion of innovators and those who provide their funding are looking to derive a commercial return.

Although ideas may come free, all innovation – the application of those ideas to practical uses – involves cost. There is the historical cost of creating, transferring and acquiring the background skills and knowledge which give rise to and which are used to apply the idea and the cost in time and effort developing the new product. In addition, there is the often very significant financial cost of providing the resources needed to develop the new or improved product or service.

Innovation funding comes from both the public and not-for-profit sectors and the private, for profit sector. Although the role of the public sector should not be underestimated, in the UK over two-thirds of innovation funding comes from the private sector. That funding may come from the funds of the innovator itself or from third parties, for example private equity funding.

The cost of innovation is incurred at risk – risk that the hoped-for innovation cannot be achieved or that its hoped-for benefits do not materialise. These risks are inherent in innovation. Those involved in undertaking or funding innovation assess the risks and decide whether to commence or fund a project. Little can be done at a systemic level to reduce or eliminate these risks.

There is a further risk when a project succeeds and delivers benefits – the risk of imitation. An imitator will usually be able to produce the product at significantly less cost than is incurred by the innovator and will incur little commercial risk because it knows that there is demand for the product. Without control of imitation, there would be no incentive to incur the cost and risk of innovation, and innovation at scale would simply not occur.

The risk from imitation is alleviated by the IP system. IP rights, whether copyright, patents, rights in designs or trade marks, define certain types of protected innovative subject-matter and enable specific activities which imitate or copy that subject matter to be prevented. For example, production of a product can be prevented by the owner of a valid patent for that product for 20 years.

By regulating imitation, IP rights enable the value of innovation to be captured. They are vital incentives to invest in innovation and create a framework for collaboration and knowledge transfer which facilitates and drives innovation.

Modern history shows that the most successful economies are those that have robust but balanced IP systems. For example, the UK has a high-class IP system. In 2016, firms in the UK market sector invested an estimated £63.8 billion in IP-protected assets and industries with above average use of IP rights accounted for 26.9% (£298.5 billion) of UK non-financial value-added output, 15.5% of UK employment and 52.1% of goods exported.

Innovation takes place in a complex ecosystem. Such things as education and skill level, infrastructure, and research funding all play important parts but a effective IP framework is critical to a thriving innovation ecosystem. A robust IP system will not guarantee innovation but it is almost guaranteed that without it innovation will not thrive.

Whatever the quantifiable economic benefits of IP may be, they pale into insignificance compared to the unquantifiable impact. The products being used, adapted and developed to fight Covid-19 are a product of today's IP framework. Remarkable advances in the application of communication, health, transport, computer, digital and energy technologies in the last 50 years have transformed the lives, lifestyles and quality of life of billions of people. Many, perhaps most, of those advances would not have happened without strong IP systems and further advances will be based on those systems as they improve and adapt in the face of new technologies.

That is why IP matters.

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