Hypothesis:

“Copyright licensing, involving rights owners, rights managers, rights users and end users across the different media types, in the three defined copyright markets, is not fit for purpose for the digital age.”

Our response focuses on the following elements of the argument for a Digital Copyright Exchange identified by the call for evidence:

Copyright licencing is not fit for purpose because:

- It is insufficiently transparent;
- It is victim to a misalignment of incentives between rights owners, rights managers, rights users and end users.

As a result:

1. New digital businesses within the creative industries are being held back;
2. Innovation is being held back.

In this submission, we provide evidence for our view that copyright policy in the UK must encourage new digital business models which meet the changing needs of consumers and foster innovation in the UK both within, and beyond, the creative industries.

Note: We illustrate our arguments using evidence from the music industry. However, we believe that our key points on the relationship between the copyright system and innovative digital business models apply across the UK creative industries.

Our submission is structured as follows:

1) Copyright and the UK ‘innovation ecosystem’ ................................................................. 2
2) New digital business models ............................................................................................ 3
3) Consumer behaviour and digital content ........................................................................ 4
4) Effect on innovation / the whole market of these changes? ............................................ 5
5) Who should pay for content on the web, and how? ......................................................... 8
6) Implications for the copyright system ............................................................................ 11
7) Postscript .................................................................................................................... 12
8) Who are we? ................................................................................................................ 13
1) Copyright and the UK ‘innovation ecosystem’

We believe the most appropriate approach to understanding the role of copyright in innovation is as part of an ‘innovation ecosystem’.¹

By this we mean a perspective which considers the national capacity for economic innovation created through a network of institutions, processes and methodologies that promote innovation and facilitate its development and commercialisation.

We see innovation at a national level as emerging from a complex web of interactions between technologists and scientists, businesses, finance, consumers, universities, skilled workers, public agencies, government and other institutions. A judicious mix of such agents is required in order to facilitate the flow and discovery of information. An innovation ecosystem perspective means considering how an enterprising state can mobilise the creative ability of both the private and public sector by supporting the efficient flows and application of knowledge and information.

One implication of the ecosystem perspective is that individual markets, for example the digital music market, need to be considered in the context of the broader system – particularly where technology and knowledge required by innovators apply to several different markets. A narrow focus on individual markets – say for particular formats of a media product, or distribution through individual channels – is unlikely to provide a clear picture of either:

a) The role that copyright and intellectual property rights (IPR) are playing within the system;

Or

b) The impact of any changes to that system on growth and innovation.

Instead changes in market structures, consumer behaviour, and in business models must be viewed as part of part of an inter-connected innovation system. Unless the way that the wider innovation system operates is taken into account it is very difficult to identify what an IPR system capable of supporting growth and incentivising investment should look like.

Contextualising individual markets within a wider innovation ecosystem reveals that even enormous – and at first glance value-destroying – upheavals in narrow markets may in fact be beneficial to the national innovation ecosystem as a whole. We will elaborate on this argument in Section 4 of this consultation response.

From an innovation ecosystems perspective, then, it is necessary to start by looking at the interaction of different kinds of changes to the whole ecosystem of the creative industries, particularly around the kinds of business models which are enabled or prevented by those changes. We need to think about how innovation flows through the whole system in terms of creating new business models – particularly as these new models relate to changing consumer preferences and behaviours.

In this consultation response, we therefore look at, firstly, what is driving the creation of these new business models, before looking at the impact of those changes on existing market structures which rely on intellectual property, with a particular focus on the example of the music industry.

2) New digital business models

The Internet has changed the economy – and our lives – in innumerable ways. We use the internet to facilitate transactions that relate to ‘real world’ markets for products, services and information, for example by ordering shopping online or providing a website that will allow our customers to find out information about a store’s location and stock. But the internet has also spawned an economy of its own: a digital economy, in which anyone can be a content producer, where lines between using and producing are blurred, and where the product being traded may be as ethereal as an ability to express an authenticated identity (Facebook), to connect people with information (Google), to capture the attention of anonymous masses (Flickr, YouTube, Twitter). This digital economy is expanding and changing rapidly, and has spawned some of the fastest growing and most innovative companies of the past decade.

However, digital technologies are also disrupting established economic structures and challenging the business models of the ‘content industries’. It has proven to be difficult to get customers to pay for material accessed via the Internet for a number of reasons. Content-creating businesses must operate in an environment in which free works are readily available. Amateur creators, creative professionals and content-creating firms may all choose to make their work available online without requiring payment from end users. In addition, there is tension between the ways in which it is now possible for users to engage with creative works and an intellectual property system and business models that have evolved alongside analogue technologies that made it relatively easy to control copying and distribution. Users now expect to be able to share, edit, remix and re-create and the open architecture of the World Wide Web is making it possible for them to simply ‘route around’ closed distribution channels when copyright owners attempt to prevent them from doing so. In other words, content in the digital economy displays many of the characteristics of public goods.

The rich creative resources and opportunities to use, share and interact with content, rather than just to ‘consume’ it are at the heart of the explosion in innovation that digital technologies are making possible. Nonetheless, many organisations – including news outlets, magazines and music companies – are struggling to find strategies for engaging with Internet users profitably. In the past, efforts by content industries and policymakers to address this challenge focused attention on how intellectual property could be better enforced on the internet. This essentially involved extending intellectual property rights to include new media forms and on increasing levels of enforcement in order to boost the ability of ‘rights holders’ to dictate the terms on which access would be granted. An example of this was the discourse surrounding the Digital Economy Act of 2010.

However, this approach runs into two key problems. First, as the government has recently acknowledged, it is almost impossible to police piracy and uphold all rights on the web. Second, and more seriously, it ignores the realities of how the internet works and what it means for firms to exist in a read-write world and ‘global’ markets. The internet has the power to spread information and to give people access to huge, interactive networks of content and to promote innovation. But in doing so, it is disrupting established economic relationships, industry structures and business models. Rather than trying to replicate the conditions of the physical economy in the online market, the debate must move on to wider questions about how creative businesses of all kinds can make money on the internet and how institutions such as the IP system can be used to stimulate and facilitate innovation.

---

New Technologies are facilitating Social Uses of Content

New technologies, creative practices and business models have always co-evolved. However, the disruptive effects of the Internet and communication technologies are accelerating the pace and scale of these transformations. The music industry provides a particularly clear example of this process, and the difficulties experienced at an industry level when business models are left behind by new technological possibilities and the changing expectations and behaviour of consumers.

In the past, the value proposition offered to music consumers centred around the notion of ‘ownership’—generally of a physical product, such as a record or CD, which could then be ‘consumed’ in a manner that had been pre-determined by a copyright owner. Networked technologies such as next generation consumer electronic products (including mobile devices) and the World Wide Web are resulting in a shift in emphasis towards ‘access’ to music, often across a range of devices and through interactive, increasingly social services such as Spotify and LastFM. As a result, the forms of music that are most popular and the formats and business models that are operating most successfully are continuing to change, reflecting the possibilities provided by new technologies, as well as the requirements of new devices and evolving functions for music itself.

As technology is facilitating ever more active and social modes of engagement with music, music is being used in new ways to define and express identity. It is also giving rise to demand for complimentary products and services, which are co-evolving alongside changing patterns of use and demand. In China, for example, the vast majority of revenues in the music industry are derived from mobile music services and very little revenue is being derived from the sale of physical music products such as CDs. Mobile music services are presenting users with a value proposition that is very different from that offered by major labels in the United States and Western Europe in an analogue era. Chinese mobile music customers are paying for mobile ring-tones and ring-back-tones because they are perceived as fun, attractive ways of personalising a mobile device and expressing a personality, identity and, in the case of personalised ring-back-tones, a relationship with the person calling.

Similarly, social music streaming services are allowing users to listen to music through a range of devices in ever more networked and interactive ways. Music fans are now able to engage with works as part of virtual communities, through multiple devices in a virtual world in which national borders have little relevance. Such services are allowing music consumers to extract semiotic value from content through platforms that blur the boundaries between on and off-line relationships and identities. As the technologies through which users engage with music are changing, so are the formats that they find most valuable. As the graph below illustrates, the decline of the album has coincided with a sharp increase in the popularity of the single. Similarly, in China where mobile music services are most popular it is ring-tones and ring-back-tones written specifically for mobile devices that are generating the highest levels of revenue.

This has important implications for the way that the ‘value’ of back catalogues is understood and, potentially, realised. If new technologies demand new forms of music product, then creative innovation in the form of sampling, remixing and re-contextualising (or allowing fans to) may be the best way for copyright owners to generate value from their existing stocks of intellectual property.

---

Graph 1 illustrates the technology life cycle followed by music formats. A life cycle of a technology can be used to describe the technological maturity of a product, and is an important variable in explaining the evolution of industries. Technology life cycles are always bell-shaped because the adoption or use of a technology declines after it reaches maturity. We see that peaks in the popularity of successive music formats last for about 10 years (1975-1985 in the case of LP, 1987-1997 in the case of the music cassette, and 1995 to 2005 in the case of CD).

4) Effect on innovation / the whole market of these changes?

Facilitating Value Creation through Reuse:

The importance of copyright for the creative industries has often been couched in terms of preventing unauthorised distribution and reuse in order to maintain incentives for investment in costly processes of creative innovation. These arguments reflect standard theoretical approaches to the economics of intellectual property, which focus on intellectual property’s role in providing incentives for value creation driven by the origination of new ideas. Widely accepted economic arguments for copyright

---

suggest that new ideas produce social benefits, but because it is less costly to copy ideas than to produce innovations, new ideas are undersupplied in competitive markets.\(^7\) Thus, intellectual property rights are seen as a mechanism through which market failure can be addressed and the supply of new ideas increased.

On the face of it, reuse might appear to be little more than a form of replication that, in a dynamic system, leads to standardization as the most popular ideas dominate the market. However, in reality each instance of reuse in the creative industries occurs within a unique context that includes complex networks of other ideas. The result is that reusing a particular instantiation of an idea in new contexts and in conjunction with new combinations of other works and ideas increases variety. And with that comes exploration of entrepreneurial opportunity space, which is simultaneously a private and public good. This variety-increasing reuse is deeply ingrained in the creative industries: jazz improvisation, the editing and re-mixing of video content associated with YouTube and the fashion consumer’s selection of a ‘fashionable’ ensemble are just three examples.\(^8\)

Although it is possible to imagine new inventions that might be brought to the market in a form that never needs to be revised or adapted for new uses or contexts (for example, in pharmacology or biotechnology), this kind of knowledge production is rare. In the creative industries, in particular, it is much more common for new ideas to be made available, taken up, revised, applied to new contexts and revised again. The diffusion of ideas and their adaptation to suit the specific context in which they might be applied are important factors in value creation. An ability to access, reuse and alter creative works is a vital component of these processes of innovation and knowledge growth.

Reuse is also connected to the growth of knowledge through the transfer of ideas and information between different industries. This may occur when ideas developed in one domain, for example chemistry, are applied in another domain, such as biology. This can process is an essential driver in the development and commercialization of transformative technologies, such as the Internet. It also occurs in relation to creative works and highlights the challenges facing copyright licensing at a moment or rapid technological change; for example, when one piece of visual art is reused or re-contextualized in the creation of new art; or when content from one domain is used in another, such as when visual art is reused in advertising or when music is used in film. In some instances, changing the format in which content is available creates new markets; for example, the market for live music as distinct from a market for musical ringtone services for mobile devices, or the market for Dickens in a format suitable for an iPad as distinct from the sale of printed serial instalments or a live production of Oliver Twist.

Processes of value creation through reuse are especially important in the context of digital technologies. Opportunities to build on the creative works of others, to draw on global pools of content and to explore creative and entrepreneurial spaces made possible by developments in networked technologies are potentially the most powerful benefits of the Internet for creative workers, industries and consumers. While there can, of course, be no reuse of an idea without an idea’s initial creation, it is important to recognise that economic value is not simply created at the point of origination. Rather, it accrues through an ongoing process of adoption and adaptation in which the value of an idea is realized as it is combined with other ideas, placed in new contexts and used in new ways.\(^9\)

Furthermore, during moments of rapid technological transformation when it is not always clear how technologies and content might be combined to produce value for users and for firms, population-wide experimentation is a powerful driver of innovation and economic growth.


Sharing Music: Market Substitution or Market Creation?

The market creation effects of P2P file sharing identified by Andersen and Frenz (2007) are an example of how entrepreneurial consumers experimenting with new technologies and networked modes of communication are able to inadvertently drive the growth of emerging digital markets – in this case by ignoring restrictions placed on their activities by copyright. Andersen and Frenz (2007) surveyed 2100 Canadian Households in order to understand patterns of online and offline music consumption and the motivation behind consumer behaviours. The study’s sample was representative of the Canadian population aged 15 and above. When peer to peer file-sharers were compared to respondents who were not engaged in such activities it was revealed that free music downloading, including peer-to-peer (P2P) file sharing, was neutral in relation to CD purchase. In other words, there was no difference in the number of CDs purchased by people who shared files online and those who did not.

However, those who engaged in free music downloading were more likely to purchase electronically delivered music.11 However, Andersen and Frenz (2007) also found that the more people engaged in P2P file-sharing, the more music they purchased overall. This effect remained significant even when levels of ‘music interest’ were adjusted for, indicating that the result did not simply reflect the fact that music lovers who engaged in P2P file-sharing also bought more music. The increase in music purchases by more active P2P file-sharers is consistent with a significant ‘market creation effect’ of P2P file-sharing outweighing the ‘market substitution effects’ of music downloading.

Serendipitous Spillovers (Unpredictable and Unintended Market Creation Effects):

The market creation effect associated with free downloading and file sharing arises because such activities result in increased awareness, and thus increased popularity, of digital content in much the same way as a viral marketing campaign might. So file sharing and free downloads may help music fans to discover new content or artists, or simply motivate users to purchase content related to what they have found and liked. Thus, free sampling may have major positive consequences for the music industry, providing that the opportunity to legally purchase digital music is also made available.

The potential for music obtained without payment via channels such as peer-to-peer file sharing to have a positive impact on overall levels of consumption is confirmed by an analysis by Gopal, Bhattacharjee and Sanders (2006) of 200 US college students who found a strong positive effect between downloading from free MP3 sites and the intention to subsequently purchase the CDs or MP3 files downloaded.12 It resembles the findings of Blackburn (2004), who used micro data of the retail sales of 14,000 outlets and file-sharing activity in the USA in his analysis of the effect of file-sharing on CD sales.13 He distinguishes between the substitution effect (where some consumers may download free music as opposed to purchasing it), and the penetration effect which increases sales, as the free spread of the artist’s work makes the artist more well-known throughout the population. Bounie (2005) also reduces the online MP3 file-sharing population into two groups: explorers who

discover new music and increase their CD purchasing, and the pirates who substitute CD consumption as it is all about ‘(un)willingness to pay’, and thus has a negative effect.\textsuperscript{14}

It is also interesting that the above mentioned research reveals that networked distribution increases diversity in consumption and diminishes the ‘Super-Star’ pattern of music sales, in which a few artists account for the majority of revenues. Whereas the substitution effect is strongest for well-known artists, the penetration effect is strongest for unknown artists. Thus, even though Blackburn (2004) finds that file-sharing has an aggregate negative impact on music industry revenues, this is mainly because the industry is dominated by a few well known artists. Thus, an impact of file-sharing is not merely that it helps to introduce new artists to audiences, but also that it impacts on the way in which revenue is distributed within the music industry. As such, if the goal of policymakers is to stimulate growth in the market for digital music as a whole and to address the negative externalities associated with over-concentration of revenues, file sharing may in fact be viewed as beneficial.

Given the time that it takes for creators, consumers and firms to understand emergent technologies it seems unlikely that anyone could have predicted the market creation effects of P2P file sharing for overall music consumption. It seems equally unlikely that artists recording music in an analogue world could have predicted the emergence of P2P file-sharing software such as \textit{Limewire}, digital intermediaries such as \textit{YouTube} or the creative ways in which fans might remix, re-contextualise and reuse their works in the twenty-first century. The time that it has taken many established firms to move beyond attempting to map analogue business models onto a digital world highlights how even the most experienced players in this industry have struggled to come to terms with emergent technologies.

5) \textbf{Who should pay for content on the web, and how?}

The digital economy clearly throws up both challenges and opportunities for firms. The key question is how firms can adapt their business models in response to this challenge, and how an enterprising state can assist them in doing so.

At its heart, a successful business model must enable a firm to do two things: create something valuable, and persuade someone to pay for it. In a physical economy each product can only go to one buyer and a firm can charge that buyer at the point of sale. In an analogue era, when access to the means of mass copying was limited, content markets had many of the features of markets for other physical products. Some of the biggest costs for content businesses were associated with the production and distribution of physical copies of their products, for example, print editions of newspapers or pressing and distribution of CDs to retailers. However, in a digital world where copying is instantaneous and users can also act as mass distributors of works, content has taken on many of the features of a \textit{public} good. This means that it is harder for firms to charge for products and easier for customers to access them for free.

Like all intangible goods, online content is non-rivalrous; once it has been produced, it can be shared by millions of people without being ‘used up’. This makes it very powerful – it can reach huge audiences cheaply. But it also makes it harder to prevent it from being shared freely. Of course it is technically possible for firms to put firewalls around digital content and to pursue strategies that limit the extent to which it can be shared and reused, but completely eliminating such sharing is both difficult, and potentially counter-productive at a national or industry level, as doing so can negate many of the value-creating effects of digital technologies – as we noted in the previous section. Content in the digital economy benefits enormously from being part of a network; free sharing of

information, links from one website to another and the reuse of works and ideas helps to drive the creation of value in the wider digital economy. So although putting content behind pay barriers and employing digital rights management strategies to limit copying and reuse may allow an individual firm to increase revenue, it also reduces the value of content to both users operating in a digital environment and to the digital economy as a whole.15

The flow of content and information across national borders is at the heart of the way in which the open architecture of the World Wide Web functions. Steps have been made towards the construction of global frameworks for the protection of intellectual property rights through mechanisms such as the World Trade Organisation and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs). However, in reality it is almost impossible for content owners to achieve uniform levels of copyright enforcement in every national market that their work might now reach. This means that global distribution strategies that were effective before the Internet are often sub-optimal in a digital world in which data flows take little notice of national boundaries. In some cases, strategies such as distribution ‘windowing’ for films may even result in decreased sales.16

Developing new business models will be vital to the capacity of the UK’s creative industries to compete effectively in emerging markets that are quickly becoming some of the biggest consumers of creative and cultural products.17 As Chart 1 below, illustrates, the fastest growing markets for UK exports are also markets with weak IPRs18 such as China and Russia. This remains the case in spite of several decades of lobbying for better enforcement by industry groups and the UK government.

![Chart 1](image.png)

**Chart 1**: To what kind of Intellectual Property Regimes is the UK increasingly exporting?

---


As mentioned earlier, many of the approaches that appear to be emerging as frontrunners in an evolving creative and technological landscape are operating according to ‘attention economy’ models of value creation. Advertising, for example, is allowing intermediary firms to turn attention into revenue. Although this has been described as the art of turning ‘clicks into customers’, more nuanced conceptualisations of both the value proposition for users and the ‘product’ being traded in the context of a social web are also possible. According to the technology writer Josh Constine “[Facebook] …trades on the transformative power of authenticated identity on the Internet - a concept that hardly existed a decade ago and that many technologists still don't fully understand.”

Globalisation, digitalisation and convergence are having a profound impact on the ways in which consumers access and interact with the media, as well as who those consumers are. The capacity of digital technologies to collect and store data is making it possible for advertisers to obtain faster, more accurate feedback about the impact of their activities and to hone their investments accordingly. Although some businesses have found it difficult to operate in this new commercial landscape, new technologies are also giving rise to entire new kinds of firms and very rapid growth in other areas of the creative economy. The European Interactive Advertising Association (EIAA) annual member survey predicts a minimum of 15% year-on-year increases in online advertising spend by their clients for the foreseeable future. This shift has been led by UK advertisers, with the UK’s share of domestic online advertising spend reaching 18.9% of all advertising spending in 2009 – and rising fast – compared to 13% in the US.

The role of advertising in the digital economy has been partly enabled by the rise of a new type of company: the online intermediary. These companies – which include hugely successful firms like Google, Facebook and Twitter – generate enormous value by making it easier for internet users to find and share information. By making it easier for consumers to find what they are looking for and by creating large networks for exchanging content, these online intermediaries are creating new, more efficient ways for content providers to connect with their audiences, and thus enabling new business models. Online intermediaries have generated huge benefits by making online markets work more efficiently, and by unlocking the power of digital networks. And because a large proportion of internet traffic goes through these intermediaries, they are also able to streamline advertising revenue, allowing them to generate significant income for themselves and also enabling the companies whose products and services are being advertised to connect with customers and to grow their markets.

This is not to say that copyright and licensing have no role to play in the digital economy. But it does highlight the importance of ensuring that the approach to copyright and digital licensing recognises that a key strength of UK’s creative industries’ is their capacity to change, adapt and innovate.

A licensing system that is flexible enough to facilitate experimentation with new business models, the formation new kinds of relationships between creative professionals, creative industries firms and consumers will play a vital role in the creative innovation that will help to drive the UK’s economy forward in a digital age.

---

http://dx.doi.org/10.1016/S0167-8116(02)00119-2

20 Facebook: “It trades on the transformative power of authenticated identity on the Internet — a concept that hardly existed a decade ago and that many technologists still don’t fully understand.”
http://techcrunch.com/2012/02/14/facebook-voting-rights/

6) Implications for the copyright system

The growth of a digital economy and the rise of online intermediaries have profoundly disrupted the business models of firms who evolved in the analogue era. But despite the negative effects of this disruption on some market players – including creators and distributors - policymakers must ensure that approaches to intellectual property rights in a digital world do not stymie continued innovation and the emergence of business models capable of functioning in rapidly changing global markets. This is particularly the case because content and culture will be vital to the long-term prosperity and competitiveness of the UK’s creative industries in the digital era, just as they were in the pre-digital era.

If it is to ‘grow the value pie’, rather than just slice it up differently, it is vital that the copyright licensing system does not simply protect established players in the industry or seek to map an analogue model of rights and ownership onto a digital world. Rather, the copyright licensing system must be capable of supporting the growth of innovative new business models, particularly service-oriented models that allow users to engage with content across platforms and territories.

Digital technologies are changing rapidly and it is not always clear what possibilities they will enable when placed in the hands of creative populations and professionals. Draconian limits on the ways in which content can be re-used has the potential to curtail down-stream processes of innovation and value creation. This is the case regardless of whether down-stream innovators are commercially-motivated firms, professional artists, amateur creators or interested fans.

The evidence presented in this submission indicates that innovation and value generation in the creative industries are often closely linked to the reuse and re-contextualisation of ideas and works. A copyright licensing system that focuses on the right of copyright owners to control how their work is re-used and re-contextualised but which does not recognise the value of giving creative communities, users, entrepreneurs and firms opportunities to explore and experiment is likely to impede growth in the wider ‘value pie’ of the emerging digital economy.

Future IP policies must focus on creating and expanding markets for ideas and creative expression, rather than being bogged down in analogue-era debates about how narrowly defined interests of individual industry sectors, formats, channels or business models can be protected. This is crucial because it is through the growth of these markets that research and development costs will be recovered, innovation incentivised, knowledge spread and competition and entrepreneurship stimulated.

In order to strengthen the UK’s innovative sectors, places and markets it is therefore vital to adopt a broad approach to understanding relationships between intellectual property rights, emerging technologies, business models and interactions between users and producers of content.
7) Postscript

**Question 2:** Do you agree with these definitions including the market definition? If not, why not?

The defined copyright markets suggested by the proposed definition appear to presume that a clear distinction between ‘creators’ ‘distributors’ and ‘consumers’ exists and that the ‘value’ of content and technology is both understood and fixed.

However, our analysis in this consultation submission highlights the importance of being cautious about a definition that fails to recognise that distinctions between ‘creators’ ‘consumers’ ‘distributors’ and ‘users’ are being blurred by transformative technological changes and the emergence of new relationships between agents within the creative economy. It also draws attention to the fact that such blurring can be economically productive and may be acting as a driver of growth in the broader digital economy and in the innovation system as a whole.

Artificially imposing distinct categories of firms and markets onto a complex, dynamic system that is being enabled by networked modes of creation, communication and content use may impede business model innovation. It may also discourage value creating entrepreneurial experimentation that will be needed to ensure that the UK remains a world-leader in creative innovation and the growth of the creative industries.

There is also a danger that a segmented approach to licensing requirements that might arise from the proposed definition (for example, fair use for exchanges in Market C but not in Market A) might prevent processes of value-creation through the formation of new relationships between agents in the broader system and the entrepreneurial re-combination, re-contextualisation and re-use of individual works. The content produced by Market A may be a valuable resource for downstream creative innovators and the smaller organisations and creative individuals in Market C, for example.

A conceptual approach that encourages flexible interaction and experimentation across and between areas of the emergent digital economy, which reflects continuing processes of change in creative practice, user expectation and technological affordance is more likely to help to reduce barriers to innovation and entrepreneurial activity and to promote economic growth and business model innovation.

We, therefore, **suggest an ecosystems approach to defining dynamic markets for copyright and content.**
8) Who are we?

The Big Innovation Centre

The Big Innovation Centre is an initiative from The Work Foundation and Lancaster University that launched in September 2011.

The Big Innovation Centre exists to make the UK a global open innovation hub, to build a world-class innovation ecosystem, and re-balance and grow the UK economy. It brings together some of the world’s leading companies with key institutions from across the policy landscape, all united by a commitment to innovation. It will carry out business-oriented research, taking emerging ideas and backing them with evidence. With support from all political parties, the Big Innovation Centre will make recommendations on how the UK can become a global innovation hub and transform the UK economy.

Professor Birgitte Andersen

Birgitte (PhD Economics) has been the Director of the Big Innovation Centre since April 2011.

She has an international reputation as an expert in business innovation and technology policy, the productivity of services, the economics and strategic aspects of intellectual property and intellectual property rights (IPRs), as well as university-industry knowledge flows. Her work is regularly published in peer-reviewed journals, discussed in the media and highlighted in national and international government reports such as the World Development Report, among others. Her research on IPRs is used by courts, where she has acted as an expert defence witness on several occasions. Her authored and edited books include Knowledge and Innovation in the New Service Economy (2000); Technological Change and The Evolution of Corporate Innovation (2001): The Structure of Patenting 1890–1990 (2001); and Intellectual Property Rights: Innovation, governance and the institutional environment (2006).

In addition, she has directed projects, variously funded by British Research Councils, the British Academy and their Danish counterparts. Alongside this, she has co-ordinated work streams in two major international EU Framework Programmes (“DIME – Dynamics of Markets and Institutions in Europe” and “U-KNOW – Understanding the Relationship Between Knowledge and Competitiveness in the Enlarging European Union”), which include one of the largest-ever pan-EU projects on innovation, working on the influence of rules, norms and standards on knowledge exchange.

Through consultancy and collaboration she has provided knowledge transfer to economists and policy makers of national governments in and beyond Europe. These include: the government departments of Trade and Industry and of Business Innovation and Skills; the Intellectual Property Office; Brazilian Patent Office; Danish Ministry for Science, Technology and Development; United Nations (ILO and UNCTAD); Organisation for Economic Co-operation and Development; World Intellectual Property Organisation and Industry Canada; as well as leading interest organisations and large firms.

Since July 2011, she was appointed Professor of Business and Innovation at Lancaster University Institute for Entrepreneurship and Enterprise Development. Appointed to the University of London, Birkbeck College in 2000, she will retain this link by remaining Professor of the Economics and Management of Innovation in the School of Business, Economics and Informatics. Her previous roles there include director of the postgraduate (MSc and MRes) education programmes on business innovation (including specialised degrees in e-business; entrepreneurship and innovation and international technology management). Since 2005, Birgitte has also been Visiting Professor at the British Institute of Technology and E-commerce. Previously (1997–2000), she worked at the ESRC Centre for Research on Innovation and Competition (now Manchester Institute of Innovation Research) at the University of Manchester.
As Director of the Big Innovation Centre, Birgitte is leading its research programmes and its work developing practical policy proposals to turn the UK into a global open innovation hub by 2025 in order to progress the urgent task of re-balancing and growing the UK economy.

Dr Lucy Montgomery

Dr Lucy Montgomery is a Vice Chancellor’s Research Fellow at the Australian Research Council funded Centre of Excellence for Creative Industries and Innovation (CCI) at Queensland University of Technology (QUT) in Brisbane, Australia and a Visiting Fellow at the Big Innovation Centre. Her current work explores the role of intellectual property in processes of innovation and change in creative industries business models.

Lucy graduated with First Class Honours in Asian Studies from the University of Adelaide before going on to complete her PhD at QUT in 2007. Her PhD, *Governing a Copyright Culture in Post-WTO China*, examined the role of copyright and the challenges of governance associated with the emergence of China’s commercially focused film and music industries in the wake of China’s entry into the World Trade Organization.

Lucy has worked extensively as both a researcher and as the project manager on a major Australian government funded research program on China’s creative industries and has spent time living and working in China. Her book, *China’s Creative Industries: Copyright, Social Network Markets and the Business of Culture in a Digital Age* is published by Edward Elgar (2010).

Dr Benjamin Reid

Benjamin is Head of Creative Industries at The Work Foundation and a Senior Researcher in the Big Innovation Centre. His programme provides economic and policy analysis for the creative industries, focusing on maintaining the UK’s world-leading position in the creative industries in the light of changes being wrought by convergence, digitalisation and globalisation. He is also launching a major new research programme focused on organisations’ innovation ecosystems and their implications for workplace change.

Prior to joining The Work Foundation, he was a research fellow at Henley Business School for nine years, where he led major commercial research projects in evaluation, management development and HR, and was a tutor on Henley Business School’s MBA and executive doctorate, the DBA.

Benjamin holds a PhD in Business and Management from Henley Business School at the University of Reading.