

# Agenda

## Advancing economics in business

### Does the cloud have a silver lining? The Internet's effect on the creative sector

The Internet has been altering the way we create, distribute and consume creative content. This has led to some proponents of the Internet claiming that the creative sector is 'booming', while parts of the sector itself claim to be 'devastated' because of the side effects of the Internet. One topical issue where policy choices are likely to shape market outcomes in the creative sector is the licensing of cloud services, which is explored here

The economic impact of the Internet on the creative sector is rarely well-understood, and often evokes strong reactions from stakeholders. On the one hand, Internet and technology lobbyists have made suggestions such as:

Contrary to the dire warnings of the legacy entertainment industry the market is booming<sup>1</sup>

On the other hand, some parts of the entertainment sector have made criticisms such as the following:

the accumulative impact of millions of songs downloaded illegally – and without any compensation to all the people who helped to create that song and bring it to fans – is devastating<sup>2</sup>

In reality, these extreme views are likely to mask the complex range of impacts that the Internet is having on the creative sector. In order to reach an informed view on this, it is necessary to understand the ways in which the Internet is affecting the creative sector, and how both the type of content that is produced and the way in which it is distributed are changing. While innovations in distribution platforms and consumer preferences will shape outcomes in commercial and non-commercial creation, policy-makers also have a role in designing a market framework for new remuneration models. Indeed, there are a number of ongoing policy initiatives that aim to combat piracy, improve digital licensing and, for example, clarify copyright exceptions to make them more suited to the digital age.

A relatively recent, and possibly very important, new chapter in this debate relates to cloud services, which

essentially host content remotely from a user. In order for a user to access the content, it is streamed to them at their current location and on their current device, whether a computer, mobile handset or tablet. These services are therefore changing both the supply of creative content and the way in which it is consumed. With this development in cloud services come policy issues about how to ensure that creators are adequately protected and remunerated for their work, while at the same time widespread access is facilitated.

The mechanisms through which the Internet affects the content industries are discussed below, highlighting some policy considerations. Building on these mechanisms, the focus is on the implications of cloud services, in relation to which important policy decisions are about to be made, at both the national and EU level, as discussed below.

#### Who are the creators?

The nature of creative content is changing. It may be typical to think of the creative sector in a narrow sense, such as that of commercial songwriters and film-makers. However, there are many other creative sub-sectors that use the Internet to distribute content, and, increasingly, new types of content creation. There are also elements of the creative sector that are not manifest in market transactions—such as user-generated content, or content published under the 'Creative Commons' licence.<sup>3</sup> In addition, the boundaries between production, aggregation and distribution of content are becoming increasingly blurred, and there may be a case for taking some parts of the distribution and broadcasting into account when defining and evaluating the 'creative sector'.

## How has the Internet influenced creators?

The Internet has had a range of effects on creators, in terms of both the creative process and the distribution of creative content. Some representatives of the creativity industry have highlighted piracy—for example:

In 2008 the European Union's creative industries most impacted by piracy (film, TV series, recorded music and software) experienced retail revenue losses of €10 billion and losses of more than 185 000 jobs due to piracy, largely digital piracy.<sup>4</sup>

On the other side of the debate, proponents of the Internet's impact often highlight the growth in total content produced simultaneously with the growth in Internet usage—although they often do not question whether the growth in content produced could have been even stronger without piracy.<sup>5</sup>

In order to understand fully the impact of the Internet, however, several mechanisms need to be assessed together. Some of the most important ones are as follows.

- **New creative sectors: commercial creative content**—the Internet enables entirely new forms of creativity that were previously impossible, such as multi-player online games like Playdemic, and website design.
  - **New creative sectors: non-commercial creative content**—the Internet has helped amateur creators to create and share their own content. The existence and sharing of user-generated content has been one of the challenges for policy-makers when considering how to address file-sharing, since distinguishing between commercial content that is subject to copyright and user-generated content requires close monitoring.
  - **New business models**—the Internet creates opportunities for new business models to sell existing content, owing to the way in which it permits content to be distributed at a low cost. Although some of these models may replace existing distribution businesses in the entertainment industry (such as online sales 'cannibalising' CD sales), the efficiency cost savings achieved from the Internet can still lead to a gain to the creative sector and, more broadly, to society as a whole (which is, essentially, the economic concept of creative destruction).<sup>6</sup> This can, however, create challenges for existing bricks-and-mortar businesses, and policy-makers may wish to consider the distributional implications.
- The ease of consuming content at home may reduce attendance at live 'arts' events, although the low or zero marginal costs of accessing and 'trying' new content over the Internet may, in turn, boost revenues from live events.<sup>7</sup>
- **Facilitating creativity**—the Internet can help creators to produce their content by giving them access to a range of tools. For example, online music composition applications let users create, view, print and hear music notation. The Internet can also be a source of advice and training, whether these are provided formally, or informally via Internet forums or other sites. Additionally, online networks can help to facilitate collaboration among the creative community. Sites such as v-band.com help creators to meet others who can complement their own creativity.
  - **Distributional effects**—the Internet helps to promote the scalability of creative content, in that increasing numbers of consumers are able to access and consume the same product. This can lead to a skewing of the distribution of success, with a small number of 'superstars' accounting for an increasingly large proportion of revenues. However, it also creates opportunities—for example, British singer-songwriter Adele was discovered through MySpace, and the Arctic Monkeys became famous after their fans uploaded the band's songs onto the Internet. Indeed, the Internet facilitates content distribution for amateurs (it is easier to distribute content over the Internet than through physical platforms), although there is empirical evidence on the distribution of music consumption, suggesting that consumption is concentrated among a small proportion of the available tracks in the digital realm (legal and illegal).<sup>8</sup>
  - **Greater threats of piracy of creative content**—since the Internet reduces the cost of copying and distributing content, it also increases the risk and scale of piracy in its various forms. While the Internet itself does not encourage piracy (it merely facilitates it), it should be recognised that it does allow opportunities for copyright to be disregarded (a recent study examined in some detail websites that facilitate copyright infringement<sup>9</sup>). In doing so, the incentives to invest in new creative producers may be reduced, owing to the lack of protection of their future work. The challenge is to find ways to protect rights-holders from piracy without onerously restricting the freedom of Internet users. It has been suggested that piracy became widespread because legal, attractively priced content was not made available to the extent to which it could have been.<sup>10</sup> This argument may have some merit, but it masks the other side of the story; namely, that file-sharing sites have crowded out—and are still constraining—legal online distributors.<sup>11</sup> Where a market failure is identified, there may be a case for

public intervention, such as warning and disconnecting consumers who are directly engaging in illegal downloading. These interventions belong to a separate debate, but it has been suggested that a rigorous approach to combating piracy may benefit the online content market, success of which seems to be a key factor for content creation.<sup>12</sup>

## What does this mean for policy?

The mechanisms above demonstrate how the online world presents creators of content with both opportunities and risks. On balance, it appears that the Internet, and the expanding number of ways to access it, provides an opportunity for the content industry and a platform for non-commercial creation. However, the evidence on damages caused by piracy conveys a consistent message: careful consideration is required to manage the evolution of innovative ways of distributing content so that the incentives to produce it in the first place are secured. Aside from commercial strategies adopted by the entertainment and technology industries, policy-makers will also have a role to play in shaping the content market going forward. Their decisions are likely to have consequences for market outcomes and remuneration models in various parts of the future digital environment—including for cloud services.

## Cloud services and licensing—rules of the game for the 'game-changer'?

As recently noted by the European Commission, cloud storage facilities (and various related services) are significantly changing the ways in which both user-generated and commercial content are consumed—which the Commission describes as a 'game-changer'.<sup>13</sup> A range of cloud services are already available, some of which simply provide server space for uploaded back-up material, while others involve 'scan and match' functionalities, whereby the cloud service 'scans' a user's music library and provides them with cloud-based access to the music which can then be consumed on various devices. In addition, music and video streaming services, such as Spotify, are cloud-based, even if users do not necessarily have their own music libraries scanned and matched when using them. As PRS for Music, the UK society for songwriters, composers and music publishers, puts it: 'cloud services are fast becoming the future platform for music consumption due to the simplicity of access to music libraries'.<sup>14</sup>

Cloud services do, however, come with some controversy. A critical issue for rights-holders is whether the acts of saving content onto, and/or consumed from, a cloud should be subject to

market-based licensing (between the service providers and the rights-holders), or, alternatively, how far copyright exceptions, and the private copying exception in particular, should go in allowing such uses on an unlicensed basis.<sup>15</sup> This issue is topical both in the context of the Commission's ongoing work on copyright and its recently launched cloud strategy, and in the implementation of changes to copyright legislation that are under way in individual countries, such as the UK (the 'Hargreaves review'<sup>16</sup>). In the UK, for example, rights-holder organisations have strongly opposed covering cloud services by the copyright exception for private copying. This is because, as Music UK, an umbrella body representing the interests of the UK's music industry, notes:

A broad-brush private copying exception that extends to the reproduction of music downloads and copying music to cloud services could have a devastating effect on the music industry's future prospects. It would immediately and irrevocably reduce licensing income by bringing into the scope of an exception usage that is currently permitted only under licence.<sup>17</sup>

Rights-holders' concerns are understandable from an economic perspective. Oxera has previously highlighted the relative merits of licensing—in terms of both economic efficiency and fairness.<sup>18</sup> Rights-holders and cloud service providers can negotiate licence terms, including, for example, reproduction rights, and a right to access files that are uploaded or 'scanned and matched'. In turn, they can also negotiate how the 'pie is shared', with an aim to allow both parties to earn an efficient share of the revenues generated downstream.

Insofar as licences can be designed and implemented to cover uses of content on different platforms, they can also be differentiated in price, and therefore permit consumers to pay in accordance with their willingness to pay for the uses that they need in the downstream market (ie, by choosing a type of cloud service that best suits their preferences). Cloud services can therefore enable efficient price discrimination, where the value that different types of consumer place on the ability to consume content conveniently in different locations and on different devices can be priced on market-based terms.<sup>19</sup> From an economic perspective, such cloud services are therefore a fair and efficient way to remunerate rights-holders for the use of purchased content on different devices. The effectiveness of licensing depends on how flexible it is in reflecting different types of service (such as a situation in which the cloud service is linked with original sale of content), and how well it can be accommodated to different types (and sizes) of service provider.<sup>20</sup>

Cloud services already exist that demonstrate how the acts of accessing purchased content through various platforms can be licensed according to market-based conditions, and how innovative and legitimate business models can be built on top of those licences. There are concerns that broadly or vaguely defined private copying exceptions covering cloud-based uses could dilute the incentives to develop new licensed cloud services, and would undermine the existing ones (such as Apple's iTunes Match and Amazon's recently licensed Cloud Player).<sup>21</sup>

The rationale for a private copying exception—often accompanied by statutory levy schemes—stems partly from the notion that certain acts of private copying that are beneficial for users cannot be reasonably licensed, and sufficient remuneration to rights-holders is not achieved through market-based mechanisms. This market failure rationale seems inappropriate in the context of cloud services where licensing seems to be feasible. While the various types of cloud service and their implications are not all examined here, it seems questionable to consider exceptions that come with controversial statutory compensation issues for new means of content consumption that are both licensable and already have market-based remuneration solutions. In all, clarity on the boundaries of copyright exceptions does therefore seem essential, especially given the pace at which new business models are being introduced. The Commission's cloud strategy paper recognises these issues, but does not yet provide clear guidance on the matter.

## Some conclusions

As the discussion above has highlighted, it seems apparent that the Internet creates significant opportunities for the creative community, and, indeed,

a platform for new forms of creativity. At the same time, there is evidence to suggest that online copyright infringements have resulted in some poor outcomes for rights-holders.<sup>22</sup> It is therefore not that informative to seek to quantify the positive or negative impacts that the Internet has had on the creative sector—it is not possible to have a counterfactual situation of no Internet against which to compare the factual situation. A more insightful starting point for such an analysis is to identify the mechanisms through which the creative sector is benefited or harmed; what exactly the trade-offs are between content creation and technological innovation; and to what extent current outcomes could be improved. In this context, policy-makers are faced with a number of challenges relating, for example, to piracy policies, exchanges for digital licensing, net neutrality, and rules for content rights sales. Understanding the mechanisms through which the Internet can have a positive or negative impact on creators can help in designing a 'future-proof' policy framework for the next chapters of the digital age of content distribution.

The above discussion has covered one specific, and very topical, issue in which it is important that the copyright legal framework is clarified sooner rather than later: the implications of copyright exceptions for the licensing of cloud services. The example of cloud services demonstrates how rules that were applicable in the world of physical distribution now require careful reconsideration in order to ensure that viable digital market-led models are not crowded out. Public intervention may be required when markets fail to generate the desired benefits to consumers or to compensate creators adequately; intervening where markets can succeed may cause distortions and have unintended consequences throughout the supply chain.

- <sup>1</sup> Computer and Communications Industry Association, Engine Advocacy and floor 64 (2012), 'The Sky is Rising', January.
- <sup>2</sup> Recording Industry Association of America. See [http://www.riaa.com/physicalpiracy.php?content\\_selector=piracy\\_details\\_online](http://www.riaa.com/physicalpiracy.php?content_selector=piracy_details_online).
- <sup>3</sup> The principles of Creative Commons licensing are explained at <http://creativecommons.org/about>.
- <sup>4</sup> TERA Consultants (2010), 'Building a Digital Economy: The Importance of Saving Jobs in the EU's Creative Industries', March, p. 3.
- <sup>5</sup> Computer and Communications Industry Association, Engine Advocacy and floor 64 (2012), op. cit.
- <sup>6</sup> Creative destruction refers to the phenomenon of new industries replacing previously successful ones owing to technological progress—such as cars replacing horses and carts, and wind farms replacing coal mines. The process is a necessary part of economic growth, since, although some older businesses lose profit, they are replaced by newer, more efficient ones that benefit society.
- <sup>7</sup> There are a range of legal avenues through which users can access content with low or zero marginal cost, such as subscription- or advertising-funded services. Also, for example, the Australia Council for the Arts suggests that 80% of live music attendees use the Internet for research before attending an event. See <http://artfacts.australiacouncil.gov.au/participation/>.
- <sup>8</sup> Page, W. and Garland, E. (2009), 'The Long Tail of P2P', May 14th. The concept of a 'long tail' refers to a distribution where there is a small number of artists/songs that are very popular and a very large number of 'niche' artists/songs that have limited exposure/popularity.
- <sup>9</sup> BAE Systems Detica (2012), 'The Six Business Models for Copyright Infringement – A Data-Driven Study of Websites Considered to be Infringing Copyright', commissioned by PRS for Music and Google, June 27th.
- <sup>10</sup> For discussion, see, for example, Curien, N. and Moreau, F. (2005), 'The Music Industry in the Digital Era: Towards New Business Frontiers', working paper, Laboratoire d'Econométrie, Conservatoire National des Arts et Métiers, July 4th.
- <sup>11</sup> See Oxera (2011), 'Competing with Free? The Damages of Music Piracy', *Agenda*, October.
- <sup>12</sup> *The Economist* (2010), 'A Rare Victory against Piracy, Repelling the Attack – South Korea's Music Industry Succeeds in Fending off Pirates', April 22nd.
- <sup>13</sup> See European Commission (2012), 'Digital Agenda: New Strategy to Drive European Business and Government Productivity via Cloud Computing', press release, September 27th.
- <sup>14</sup> PRS for Music (2012), 'PRS for Music Licenses Amazon Cloud Player', press release, October 1st.
- <sup>15</sup> That is, copying of content from legal sources that is not licensed but is nonetheless permitted within the scope of a 'private copying exception' prescribed in national law or practice (applicable in some countries)—for example, copying of private music collections or libraries from CD to iPod (format-shifting).
- <sup>16</sup> Hargreaves, I. (2011), 'Digital Opportunity: a Review of Intellectual Property and Growth', May.
- <sup>17</sup> UK Music (2012), 'HM Government: Consultation on Copyright', March, para 74.
- <sup>18</sup> Oxera (2012), 'Could "Fair Compensation" be Fairer to All? Finding an Alternative to Copyright Levies', *Agenda*, March.
- <sup>19</sup> Price discrimination refers to the practice of charging different prices to consumers for the same product when the costs to the producer are the same, or the same prices when costs differ. Essentially, price discrimination is possible because consumers have different willingness to pay for the same goods, and the output can be maximised by pricing in accordance with consumers' willingness to pay.
- <sup>20</sup> For a discussion, see, for example: <http://musicbusinessresearch.wordpress.com/2011/06/07/there-is-music-in-the-cloud/>. See also PRS for Music (2012), 'Response to the Consultation on Copyright', March 21st, p. 31.
- <sup>21</sup> PRS for Music (2012), 'PRS for Music Licenses Amazon Cloud Player', press release, October 1st.
- <sup>22</sup> For example, Zentner, A. (2005), 'File Sharing and International Sales of Copyrighted Music: An Empirical Analysis with a Panel of Countries', *Topics in Economic Analysis and Policy*, 5:21, pp. 1–15.

If you have any questions regarding the issues raised in this article, please contact the editor, Leonardo Mautino: tel +44 (0) 1865 253 000 or email [l\\_mautino@oxera.com](mailto:l_mautino@oxera.com)

Other articles in the October issue of *Agenda* include:

- behavioural problem, behavioural solution: the case of extended warranties
- 'financing' outside the box: non-bank lending to businesses *Tim Breedon*
- high-frequency trading: towards capital market efficiency, or a step too far?

For details of how to subscribe to *Agenda*, please email [agenda@oxera.com](mailto:agenda@oxera.com), or visit our website

[www.oxera.com](http://www.oxera.com)