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User generated content - users, community of users and firms: toward new sources of co-innovation?
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Abstract

Purpose – *The paper aims at dealing with the role of users in the creation (or curation) and distribution of digital contents. User generated contents (UGCs) refer to a variety of media such as Wikis, question-answer databases, digital video, blogging, podcasting, forums, review sites, social networking, social media and mobile phone photograph. It attempts assessing their potential role as co-innovators. The paper follows the progressive creation of a new space for users, tracking its specific forms in each subsector of the media and content industries. Each subsector reveals a disruption in the production and circulation of new content.*

Design/methodology/approach – *The paper is based on desk research, a review of literature, review of the technical journals, and analysis of annual reports. The paper is part of an on-going research project on media and content industries.*

Findings – *The paper argued that since 2007 (release of iPhone and Kindle) the landscape went through a dramatic change, scaling up. It illustrates how the entire value chain of content (production/distribution/consumption) has opened up. The amount of UGC produced triggered a qualitative jump, ushering in new modes of interaction between the customers and creators, without necessarily turning the consumer into a full-fledge producer. The UGC model adds another source of production, thereby increasing diversity, ushering in new ways for talent scouting. It reveals various forms of co-creation and the role of a community model while also showing its limits.*

Research limitations/implications – *This paper concentrates on digital media and does not deal with any other aspect such as knowledge sharing (Wikis). The paper does not cover the reactions of traditional industry players to UGC (some elements are given for newspaper), neither possible policy and regulatory responses The paper relies mostly on reports from news agencies, consultancies or annual reports from companies so as to delineate the main trends.*

Practical implications – *It shows that the role of customers did change within this context. The new channels offer novel ways to produce, curate and disseminate contents. It offers a range of examples from different industries.*

Social implications – *The paper documents the participation of consumers in the production of content. it hints at the evolution of labour, alludes to the issue of diversity and of creativity, but does not address other societal issues.*

Originality/value – *Some reports were devoted to UGC in 2007 (OECD) and 2008 (Idate-IVIR-TNO) but in spite of the major changes that took place over the past decade, the research has been scarce, or has concentrated on a specific segment of the media industry. The paper is trying to offer a comprehensive overview of the various segments. Each sub-segment of the media industry illustrates a specific dimension.*

Keywords *Community, Self-publishing, Co-innovation, Fan fiction, Fans and modders, YouTubers*

Paper type *Research paper*

"Do you like the idea of being able to create your own short movie with pictures, videos, and audio fragments that are currently being stored on your computer?"[1] This is how, in 2015, a company promoted its downloadable software. A decade ago, the acquisition of the one-year-old YouTube by Google came as a surprise and was met with a lot of scepticism. It did nevertheless signal the appearance of the notion of "user generated content" (UGC). In fact, the acronym began to be used in the early 2000s, mostly in reference to posts on the

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internet (OECD, 2007). During the consultation for the review of the 1989 "Television without Frontiers" directive[2], questions were already being raised about the regulatory status of UGC. In 2008, the European Commission launched a study on user-created content[3].

UGC remains a vague notion that covers activities that range from real amateur content to edited/professional productions. The notion is all-encompassing and refers to a variety of media such as wikis, question-answer databases, digital video, blogging, podcasting, forums, review-sites, social networking, social media and mobile phone photography (Statista, 2016a). However, one can argue that since 2007 (with the release of iPhone and Kindle) the landscape has gone through a dramatic change (De Prato *et al.*, 2014), initiating a shift towards mobile and the mobile internet. The Idate-Ivir-TNO report was already noting, in 2008, that even if user-created content as such was not a new phenomenon, "The differences lies in the scale, economic potential and impact on traditional supply chains of modern user created content" (2008, p. 12). This paper concentrates on digital media and does not deal with any other aspect such as knowledge sharing (wikis).

The past decade witnessed fast changing conditions not only for the production of digital content, but for their distribution and reception through multi-screen/new devices. As noted by Plunkett (2015): "YouTube took the broadband internet by storm. It not only popularised user generated content on a massive scale, it proved that the internet was a viable video distribution platform". Besides, the increased availability of high-speed data, combined with more generous data plans, and the move towards larger phone screen sizes helped drive mobile viewing sharply up, further empowering users. In other words, the way of accessing and interacting with content has changed. The word "prosumer" was coined by the futurist Alvin Toffler in 1980 anticipating this emerging phenomenon of proactive consumers.

The paper attempts tracking these evolutions and the disruptions they triggered. The first section sets the scene and introduces the background of an environment that saw new forms of interpersonal communication (instant messaging, chatting, etc.) emerging, and new kinds of content being added to or enriching the legacy ones. It stresses the crucial role of demand as media consumption is gliding from push to pull.

The second section concentrates on the growing legitimacy of self-publishing because of the availability of new tools. New digital vanity presses or self-publishing companies are appearing. Ebooks on Amazon made it possible for just about any author to make a book available for sale on a digital platform that reaches millions of potential readers.

The third section follows the production of videos by amateurs or would-be professionals who seized the opportunity to distribute their content through "Dailymotion", "YouTube" and, more recently, "Twitch". The fourth section tracks the changes brought by ICTs, opening up a new space in between the realm of professionals and of amateurs, eventually allowing the scouting of new talent in the field of music. The fifth section shows how, on the news market, new players like the *Huffington Post* are pioneering new ways to open up a dialogue with their readers. It reveals as well another aspect of the blurring of the borders between professional and amateurs that hinges on new ways to distribute, outsource and remunerate labour for production of news. By the same token, the sixth section shows how the video games industry manages the link with the users, and how several firms actually rely on communities of users to design new products and services. The paper concludes with a new model of innovation, its limits, as well as on some pending issues.

The paper is based on desk research, a review of literature, review of the technical journals, and analysis of annual reports. The paper is part of an on-going research project on media and content industries.

1. The "consumerization" of content creation and distribution

New ways of sharing have been emerging with social networks, first online then shifting to mobile. Now, a variety of screens – long and wide and square, large and small, composed of grains, composed of pixels – compete for the attention of customers. Media and content activities are moving towards a five screens world (Simon, 2012, 2014): TV, PC, game consoles, connected TVs and mobile devices (smartphones, phablets and tablets), an increasing array of digital media are now vying for the attention of consumers. According to a 2012 Google study[4] for the US market: "Today 90 per cent of our media consumption occurs in front of a screen", with an average of 4.4 hours per day (Google, 2012, p. 1, p. 9), that leaves a mere 10 per cent for non-screen-based (radio, newspapers and magazines). Adding, "this multi-screen behaviour is quickly becoming the norm", as consumers split and balance their time between the devices. The screens are used mainly sequentially (mobile in the morning and commuting, PC at work, tablets peaking at night) (ComScore, 2013), but more and more often simultaneously (multitasking, complementary activities) (Nielsen, 2013; Pew, 2013).

Other examples of the proliferation of screens come from the games industry: 25 per cent of all US gamers play on all screens (Warman, 2013). Gamers a few years ago were mostly using console/TV/PC, but now they can allocate their gaming time across two additional screens (smartphones and tablets) in combination with the previously existing ones. This multiplication of screens enables ubiquitous or cross-media gaming across platforms.

1.1 The shift towards mobile and the mobile internet

As of May 2016 (GSMA Intelligence, 2016a), there were 4.75bn unique mobile users and 7.8bn SIM connections, slightly more than the total world population of 7.357bn. The number of mobile broadband subscribers around the world reached 3.2bn (GSMA Intelligence, 2016b). At the end of 2015, broadband connections (3G, 4G) amounted to 50ù of total connections (GSMA Intelligence, 2016c, p. 11). Indeed, smart devices are much more than just phones. The smartphones phenomenon not only contributed to the upgrading of devices but it also changed the way customers use their mobile phones, e.g. by shifting the patterns of use towards the internet world. With 2.6bn smartphones in 2014 (GSMA Intelligence, 2015, p. 6), smartphones are now accounting for more than 40 per cent of the world's active handsets (i.e. handsets connected to an active mobile subscription).

Smarter devices and updated networks (3G, 4G, etc.) can accommodate mobile video content with a much higher bit rate than other mobile content types, thereby generating much of the mobile traffic growth through 2019 (Cisco, Visual Networking Index, 2014, p. 13; Cisco, 2015). Cisco predicts that mobile data traffic will increase 10-fold between 2014 and 2019 (at a compound annual growth rate (CAGR) of 57 per cent between 2014 and 2019). The growth is mainly media led, video being the driver: IP video traffic will be 80 per cent of all IP traffic (both business and consumer) globally by 2019, up from 67 per cent[5] in 2014 (Cisco, 2015).

This impressive growth results from the increasing availability (and affordability) of mobile broadband (cheaper data plans), the increasing availability (and affordability) of smartphones (over 2.5bn devices as of 2015, KPCB, 2016, p. 10) and now phablets, as well as the changing role of customers as avid demander – or even co-creators – of mobile content and applications (Feijóo *et al.*, 2009). The result is a new circle between supply (network, devices) and demand led by the latter – the "app" economy (De Prato and Simon, 2015).

In addition, cloud applications allow mobile users to overcome the memory capacity and processing power limitations of mobile devices; reliance on cloud computing increases demand for the quantity of bandwidth as well (Feijóo *et al.*, 2009). Besides, Content Delivery Networks (CDNs) play a key role for the distribution of content (Benghozi and Simon, 2016), for the development of a new set of IT content players such as Google or Netflix. Indeed, CDNs improve the quality of the provision of content by developing the capacity to duplicate content, to store them locally, as close to the users.

The distribution of films on devices such as a mobile, once seen with scepticism, “is increasingly the place where young people in particular are choosing to watch film” (Gubbins, 2014, p. 75). The Ericsson 2015 TV and Media reports[6] confirm that “those aged 16-34 spend 53 per cent of all the video viewing time on a smartphone, laptop or tablet” (Ericsson Consumer Lab, 2015, p. 3). The same company predicts that by 2020, 50 per cent of content will be consumed on mobile screens (Riaz, 2015).

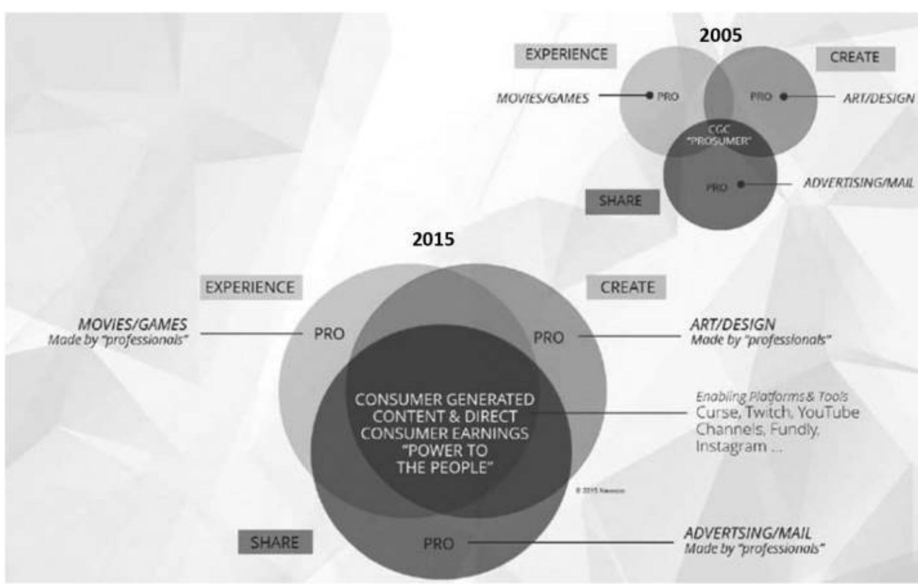
These evolutions lead to the consumption on the same device or in the same room of a new blend of various types of content: truly “edited” content, UGC ranging from almost professional productions to content provided by “friends”, transaction (utilitarian audio-visual like tele-shopping, tele-transaction, interactive advertising, etc.), (Busson and Landau, 2011). The blend is likely to change over time but new entrants, especially social networks, are the engines of these changes towards multitasking, multiscreening behaviours.

1.2 From push to pull

Media consumption is gliding from push to pull. An increased number of distribution channels combined with the potential of directly addressing the public reinforced the need to pay attention to audience reach/demand/distribution. The logic of demand is gaining considerable momentum. According to Gubbins (2014, p. 10), “demand has become much more demanding” Not only users are posting pictures or circulating the pictures they took through their favourite social networks (Facebook) or specialised provider (Instagram), but they started circulating videos as well. As stressed by an industry report “Gone are the days when content creators had the ability to dictate when, where, and how consumers enjoyed media” (Avid, 2014).

Figure 1 illustrates the change in relationships between UGC and edited content, from 2005 on, up to 2015. Figure 1 is designed to show that between 2005 and 2015, the overlap between professional and consumer-produced content increased. Plain customers morph into prosumers. Consumers are generating more and more content, which occupy a

Figure 1 Consumers in 2005 vs prosumers in 2015



Source: Newzoo (2015a, p. 11)

growing place; nonetheless, movies/games made by professionals still maintain a strong role.

2. Books, authorships and communities

2.1 Vanity press: the return

Self-published authors were the object of scorn. However, new digital vanity presses or self-publishing companies like Lulu[7], JePublie and BiblioCrunch are appearing. Other companies like Barnes & Noble's PubIt!, Blurb, BookSurge (now owned by Amazon), Bubok (Spain) are offering complete self-publishing, on-demand printing and online distribution services. These new entrants are driving the beginning of a change in attitude throughout the publishing industry about the legitimacy of self-publishing. Like Blurb, one of the most well-known firms for self-publishing, they are offering a wide scope of services[8] to would-be authors, so as "to create, publish, sell, and distribute photo books, trade books, and magazines in print and digital formats" (Blurb website). Some companies can offer highly focused services like, for instance, instaFreebie[9] offers a way to authors to easily distribute free copies of their books to their fans. These companies stress their role as intermediaries to publish and sell books on all major e-retailers, even emphasising that authors can keep 100 per cent of their earnings (Pronoun.com[10]).

The role of such intermediaries is illustrated by the strategy of Amazon. Ebooks on Amazon[11] made it possible for just about any author to make their book available for sale on a digital platform that reaches many millions of potential readers. Some of those authors turned into best-selling authors[12]. Revenues generated by self-published e-books on Amazon account for 40 per cent of the total sales of e-books (Forum d'Avignon, 2015) Amazon also provides an entire set of services to authors and independent publishers. The company stresses the new link between authors and readers its ecosystem (see Box 1) enables to establish. It is a part of its disruptive strategies based on disintermediation: after disintermediating publishers and bookshops with the direct production and sales of books, the e-commerce behemoth is disintermediating critiques. Through Goodreads (the largest site[13] for readers acquired in 2013), it can provide direct guidance to readers (and book recommendations).

While Amazon is disintermediating professional critiques, at the same time, some re-intermediation is taking place: players; known as "booktubers" are using YouTube to create their own channels (reaching a community, Scott, 2014) of book reviews[14]. The phenomenon of posting a video to share a book review started in the USA around 2006 (Rimaud, 2015). One of the most famous US "booktuber", PolandbananasBOOKS, claims around 230,000 subscribers and nearly 2.5m views (Rimaud, 2015).

Interestingly, companies such as Lulu or Manuscrit (France) were identified as "Talent Search – Writing" by IDATE *et al.* (2008, p. 19). The case of self-published photo books in Spain provides a borderline case of the use of ICT for self-publishing for professionals or would-be professionals. It is an interesting case of self-promotion/self-organisation through ICT tools. Indeed, as an institutional backing was lacking in Spain (galleries, curators, public support) these artists started self-editing their own books. The results have been rather amazing as the photographers received international acknowledgments (and prices) over the past few years: Cristina de Middel's *Afronautas*, initially offered for 35 euros, was selling 2,200 a month after having been released. The photographers became leaders (Baron, Cases, de Middel, Monzon, Plademunt, Spottorno and Xoubanova) in that particular "genre".

Some players are very optimistic/enthusiastic about this proactive role of authors. Assuming that "Sharing content is the best way to build audience", they deduce that "The future of publishing is in the author brand", and therefore, the trend of authors becoming independent will continue. They deem that legacy publishers do not have the attention and resources to develop relationships with readers.

This may be overoptimistic. Low barriers to entry are not equivalent to a new form of pervasive online publishing, the expertise of the publisher may be more crucial in that case (not to mention the marketing/promotion of the product). Indeed, for unknown authors, their lack of popularity is likely to be a major obstacle. However, this is not the case for well-established authors and this may turn out to be a threat for publishers (Blog Instafreebie).

Nevertheless, marketing and other core competences will remain key but it may open up some niche markets either on the professional, technical side or on the more "creative" but highly specialised side, with poetry for instance. This may allow new forms of "vanity press" to bloom. On the technical side some highly specialised consultants/authors can sell directly (to their own customers) or through online distributor. Just like in the case of music, it provides a novel way to scout for talents.

2.2 Fan fiction and communities

In 2013, Amazon also established a new publishing service, Kindle Worlds, so as to enable fan fiction stories of certain licensed media properties to be sold in the Kindle Store[15]. Fan fiction is another dimension that went through some qualitative changes because of the internet. Fan fiction has been boosted by the internet. The *Star Trek* fanzine *Spockanalia* contained the first fan fiction in the modern sense of the term (Boog, 2008; Jenkins, 1992). Specialised websites, the digital equivalent of printed fanzines, appeared. In 1998, FanFiction.Net, a not-for-profit site[16], came online, allowing anyone to upload content in any fandom[17]. The site was created as a repository for fan-created stories that revolved around characters from popular literature, television, comics or real-world celebrities. As of 2013, there were nearly 2.2m registered users and stories in over 30 languages. Fan fiction comprised in 2008 "one third of all content about books on the Web" (Boog, 2008).

Box 1. Luring consumers: the Amazon ecosystem

Amazon treats content (books, music and the like, edited or user generated) as the "gateway drug" that lures customers into its immersive world of devices and digital services.

The company that was planning to be "Earth's most customer-centric company" since 1995, has set an entire ecosystem to that end around its Kindle (introduced in 2007). Its online platform Kindle Direct Publishing, lets independent authors and publishers choose a 70 per cent royalty option and make their books available in the Kindle Store.

Amazon for instance grants to a self-published author, $6.99 for each e-book (instead of the net $1.75 to be received from most major publisher for a similar e-book) sold on Amazon's Kindle e-bookstore for $9.99 (Fowler and Trachtenberg, 2010).

Amazon Publishing is composed now of 14 imprints: AmazonEncore (launched 2009) is a program whereby Amazon will use information such as customer reviews on Amazon.com to identify exceptional, overlooked books and authors. Amazon Publishing, its full-service publishing branch, describes its mission as to invent new and better ways to connect authors and readers.

Its subsidiary, CreateSpace, created in 2009 through the merge of BookSurge and CustomFlix (both acquired in 2005), is aiming at becoming the publishing and manufacturing on-demand leader for independent content creators, publishers, film studios and music labels. BookSurge (launched in 2000) grew to support leading publishers and independent authors, offering complete self-publishing, on-demand printing and online distribution services.

In 2013, Amazon acquired Goodreads (launched in 2007) the world's largest site for readers (30m members) and book recommendations (34m reviews). Its mission is "to help people find and share books they love". Goodreads Author Program is a free feature designed to help authors reach their target audience.

This is highly attractive for users (easy accessible low cost tools) and none the less highly disruptive for media legacy players.

Source: Simon, (2015a)

“Fanfiction” is booming with readers using well-known characters to produce their own stories with the endorsement of authors like J.K. Rowling and Stephanie Meyer[18] (Digital Book World, 2014, p. 15).

Support is less obvious for some categories of fan fiction such as “slash” that involve fictional, homoerotic pairings between male characters in mainstream television programs and films, usually science fiction (e.g. *Star Trek*’s characters, Kirk and Spock) (Katyal, 2006, p. 479). In science fiction, a large number of the practitioners and other professionals in the field, not only writers but editors and publishers, traditionally have themselves come from and participate in science fiction fandom (Ray Bradbury, Harlan Ellison, etc.); and the “fan” vs “pro” dualism not being as clear cut as in other media entertainment industry.

Just like readers can share their view and recommendations on Goodread, some sites bring together users posting articles, stories, fan fiction and poems allowing them access to a wider audience, creating a community of users’ book review platform. Goodreads had 40m reviews in 2015 in the USA (Statista, 2016a). Wattpad, launched in 2006, paved the way for online publishing communities with over 35m users and 75m stories created. The founder planned to create a new online ecosystem to connect writers and readers, “a YouTube for stories” (Bello, 2012).

As for the search of new talent, Bello notes that “for the publishing world, Wattpad serves as a scouting ground, where literary agents discovered debut authors Abigail Gibbs and Brittany Geragotelis”. Indeed, publishers are using new forms of community of readers (away from book clubs). For instance, a 2013 study of publishers’ use of online communities Bowker Market Research (BM commissioned by Publishing Technology) found that publishers’ commitment to online communities was set to double by 2015. The survey revealed that two-thirds of the publishers surveyed already hosted one or more online community (Digital Book World, 2014).

3. Cinema and video: creation, streaming and parodies

Before the advent of digital technologies, the split between “amateurs” and professional films was clear cut, even if “amateur” filmmaking was a very popular and widely spread hobby (Odin, 1995, 1999). However, the distribution of these “amateurs” films, “domestic films”, to quote Odin, was limited to family and friends. These productions were not meant to reach a wider audience.

3.1 Short video and portable movies

YouTube, before being bought by Google in 2006, started with some amateurs’ short videos; other sites like DailyMotion in the EU, or Pandora TV in South Korea followed. By 2012, YouTube was serving 4bn videos per day by 2012 and it has just kept growing: 1bn people visit the site each month, and it is the third most popular website in the world (behind Google and Facebook) (Plunkett, 2015). UGC generated revenues of nearly US $1bn, in 2010 (Statista, 2016b) for the social network. YouTube was bringing the distribution channel amateurs were looking for, turning TV into a two-way medium: its users are now uploading 300 hours of video every minute, with 50 per cent of all views now on mobile. Kyncl (YouTube’s chief business officer) claims that the growth of mobile technology supports the success of digital video, “while also showcasing the diversity of content generated by digital video services such as YouTube” (Springham, 2016). UGC platforms account for a growing share of consumers’ TV and video viewing: close to one out of ten consumers watch YouTube for more than three hours per day (Ericsson Consumer Lab, 2015).

At the same time, the dramatic fall of the costs of audio-visual production tools contributed to the blurring of the borders between professional and amateurs, as stressed by Flichy (2010). iPhones already allow for some kind of motion pictures. Manufacturers are introducing new cameras that may not be different from the camera they produced for the professional sectors[19], at least for the lighter ones. Amateurs can now access to tools even in the highly specialised and technical domain of visual effects. For instance, Image Metrics, a leading provider of facial animation technology, allows self-representation and personalised content through its proprietary algorithms that make the recognition and real-time animation of nuanced expressions and emotion possible with nothing more than a camera on a laptop, tablet or smartphone (Benghozi *et al.*, 2015, p. 53). "Everyone can now use professional tools – Protools, Ableton Live or simply desktop tools – to create their own music", notes Salmon (2013, p. 14), adding nevertheless: "Self-production remains trickier in the cinema sector, despite the rise of digital cameras for achieving quality films" (Salmon, 2013, p. 14).

On the professional sides of the equation, bouncing on the opportunities opened by mobile phones, J.L. Godard also created his own rudimentary 3D camera out of two mobile phones fitted with lenses for his last film "Goodbye-to-language" (2014). A. Fleischer (a French filmmaker, photographer and writer) and P. Delbono (an Italian playwright and director) shot films with a mobile phone (Odin, 2014, p. 47). Nowadays, advances in mobile technology are turning the mobile device into a portable studio.

Voci (2010) spotted some interesting examples, in a fast growing mobile market such as China, of amateurs circulating short videos shot with their mobile cameras. According to Voci (2016), "And thanks to portable and affordable digital technology, cinema today is also made up of a myriad of amateur videos that contribute creative and often dissonant perspectives on what China is". Voci analysed what she called "portable movies" giving examples of Chinese amateurs' short films: "Portable movies are generally freely circulating (i.e. shared rather than purchased) and almost exclusively targeting transient – online or on-phone – audiences. In particular, mobile-made and viewed movies often emphasize portability, playfulness, connectivity, and sharing as their main defining elements" (Fowler and Voci, 2011). Voci considers it is an attempt to develop an aesthetic of brevity away from a more traditional approach (Voci, 2010, pp. 77-78).

The production of these videos can be triggered by an array of factors. For instance, the huge viral success of the South Korean rap artist, "Psy", "*Gangnam Style*", posted on YouTube in 2012 (about 3bn views to date!), gave birth to a lot of parodies, some originating without any doubt from professionals (including some Angry Birds, Minecraft style), but others not. Parody on YouTube is a genre that is attracting amateurs and professional alike. YouTube offers a top ten of these musical parodies as well as parodies of films[20] produced by "clever, creative YouTubers" (Lazar, 2014)[21].

It does not mean that all the videos produced by users may become global hits, or even that the still to be perceived as amateurs are trying to become professional players. Most likely the vast majority of users producing content will stick to some of the previous patterns of amateur film-making and just take the opportunity of the new channels of distribution to circulate their content. For others, it opens up a new path into professional production as illustrated by the story of the Singapore-based creators Munah and Hirzi duo (see Box 2).

3.2 Consumers entertaining consumers

One of three consumers stated it was very important to watch UGC on their TV at home (Ericsson Consumer Lab, 2015, p. 5, see Figure 2). Figure 2 shows that a solid majority (75 per cent) are doing so at least once a week. For the consultancy, Newzoo, it means more and more consumers entertaining other consumers (Newzoo, 2015b). Newzoo deems that with the arrival of platforms such as YouNow, Periscope[22], Meerkat, YouTube Gaming and Twitch, live viewing has created a new dimension of possibilities for streaming content. This brings a domination of "reality shows" over broadcast TV and digital channels, which will be "predominantly used to watch the adventures, opinions, product reviews, creations and fails of other consumers" (Newzoo). The borders between production and reception are blurred, like the borders between entertainment and reality (Flichy, 2010, p. 42). Again, Box 2. The case of Singapore-based YouTubers Munah and Hirzi

Singapore-based creators Munah and Hirzi were one of the first performers in Singapore to wade into independent online video creation, the duo has racked up some 24m views and close to 124,000 subscribers since setting up their YouTube channel MunahHirziOfficial in October 2008.

The two creators explained in an interview how they got started and the evolution of such YouTube channels:

1. *Munah:* We had just graduated and had always been doing crazy things and thinking that no one wants to take a video of us, so why don't we do it ourselves. So that's how we started creating content. It was really just for us to share with friends. When we started posting we didn't realise that YouTube was going to be a growing medium. So when people who were watching (our content) and started asking for more we thought, "Okay. Let's do it".
2. *Hirzi*: Online media is far different today from what it was seven years ago. Nowadays when people start a YouTube channel they have this agenda to get a fan base or earn money from it. Seven years ago you never thought there was a possibility of making money from it. You were thinking more about how you were going to make a fool of yourself, share it with my friends. The difference for us was it took us seven years to see this gradual success rather than a lot of our counterparts in Singapore who saw overnight success. Singapore now has an infrastructure that cultivates the YouTube community.

Source: Anderson, (2015)

YouTubers are creating their own channels on YouTube as illustrated by the case of Munah and Hirzi.

Bouncing on the third mobile wave (Simon, 2016a,2016b), streaming services such as "Twitch"[23] for all games and "Mobcrush"[24] specifically for mobile titles "allow people to broadcast what is on their devices without specialist technology, opening up these live broadcasting to millions of people" (Newzoo, 2015c): in other words, the reach of livestreams far surpasses television shows, in terms of frequency and availability on a global scale. For Newzoo, it means that "anyone can, with the help of 'Twitch' or even 'Periscope', become a broadcaster" (Newzoo, 2015c).

What could have been perceived as a handicap, the amateur style of the videos can turn into the opposite, as stresses Sarrazin (2015), instead of repelling the viewer it may give way to a feeling of familiarity and trigger some kid of identification with the "streamer". There are reasons to remain prudent about the assessment of "quality". As noted by Sanz (2012, p. 46): "A straightforward and unqualified judgment of content is bound to underestimate certain communication practices simply because they do not fit into a social and cultural framework that they are perhaps contributing to change, distort or open up for democratic inclusion through deep personal and collective meanings".

Figure 2 Percentage of consumers watching YouTube with different frequency (2011 & 2015)

Notes: More than three hours a day: ; at least daily: ; at least weekly: ; less than weekly: ; never:

Source: Based on Ericsson (2015, p. 5)

Another dimension of this phenomenon is that now the legacy audio-visual formats (feature, premium) are competing with smaller formats, participative one way or another, and streamed most of the time (Bain, 2014, p. 8).

4. DIY in music: novels avenues for creativity?

YouTube started as a repository for music, for the dissemination of all kind of music stemming from amateurs. User generated audio content varies, as noted already by OECD (2007), from a combination of a couple of song to the posting of self-created music by amateur musicians. Music shares some of the features already seen with books (self-publishing) and video (production). As we will see in the video games section, it shares also some elements of remixing existing elements (mash-up[25]) within a specific UGC.

Much like in the case of books, one finds providers that offer services for dissemination or publishing[26] music. Soundcloud[27] allows artists to upload, to record, promote and share their music. The audio uploading and streaming site claims being the world's leading social sound platform and of attracting, in 2015, more than 175m unique monthly listeners (Lunden, 2016).

A 2009 study[28] reveals that 45 per cent of the artists in their association made at least one recording via self-production between 2008 and 2010, and that the figure is likely to go up to almost 60 per cent (Pichevin, 2009, p. 7). Amazon is providing would-be musicians and writers with tools and even some funds to self-produce, just like in the case of videos (Simon, 2015a). The DIY (Do it yourself) model may add another source of production, thereby increasing diversity, and may offer some novel avenues for creativity David Byrne (singer of the US band Talking Heads) noted: "The totally DIY (Do it yourself) model is certainly not for everyone – but that's the point. Now there's choice"[29]. Kusek (2014, p. 8) describes a new artist model under which the artists can be in direct connection with their fans through social media and the internet, and can collect money directly from their fans via their own online stores and platforms.

The music industry went through a succession of cost-reductions with reel-to-reel tape (≈1948), DAT (≈1985), Pro-Tools and Garage band (Apple's pre-installed tool). Barriers to entry for recording have been falling dramatically as music can now be recorded for little to no costs on a computer or tablet or in a small studio. Musicians do not have to meet physically any more in a rented professional studio, they can transfer their musical files over the internet. This fall of the costs of production tools contributes to the blurring of the boarders between professional and amateurs. Amateur musicians have been able for a while to act as professionals or semi-professionals occasionally, as illustrated by various kinds of folk music (blues, country, flamenco, etc.), but the changes brought by ICTs open up a new space in between the realm of professionals and of amateurs, eventually allowing the scouting of new talents.

The Beatles played for some years in the famous rock and roll club in Liverpool, The Cavern, as well as at the Star Club in Hamburg, Germany, accompanying US artists touring the country like Jerry Lee Lewis, or playing standards. This network of small clubs in the 1950s and 1960s enabled musicians not only to have an audience but also record companies to spot them. Posting music on UGC sites allows artists to reach an audience; it is a new form of talent scouting. Creators are gaining visibility while at the same time the adoption of these new tools allows to detect talent at lower risk (Salmon, 2013, p. 21).

5. Newspapers: dialogue with readers or unpaid contributions?

Internet technologies have impacted the core function of newspapers as the very notion of copy disappears with the electronic media at a time when the well-established newspaper business models were under several challenges (the erosion of readership started decades ago). Investments required to produce thousands of newsprints are replaced by investments in software solutions and qualified staff to the online edition: customer relationship is easier but of a different nature, the cost of distribution and storage is almost zero; the update of information is continuous; hierarchical procedures, proofreading and verification by content editors are increasingly under the control of journalists themselves, collective production of content based on original forms of participation is taking place. This overload challenges the traditional modes of remuneration of editors, distributors and journalists (Benghozi and Lyubareva, 2014).

Besides patterns of consumption changed, news is being shared and the ascent of mobile connectivity via smart phones accelerated the trend. Readers are willing to participate one way or another, to comment or share. The 2015 Reuters report (Newman *et al.*, 2015, p. 83) reveals that, in all countries of their sample[30], more people are willing to share than to comment. As stressed by Pew (Pew Internet and American Life Project, 2010), in a new multiplatform media environment, people's relationship to news is becoming "portable, personalized, and participatory":

- *Portable*: In 2010, 33 per cent of cell phone owners accessed news on their cell phones.
- *Personalised*: 28 per cent of internet users have customised their home page to include news from sources and on topics that particularly interest them.
- *Participatory*: 37 per cent of internet users have contributed to the creation of news, commented about it, or disseminated it via postings on social media sites like Facebook or Twitter.

Various weblogs have grown into important players on the news market – for example, the US *Huffington Post* and the South Korean *OhMyNews*. European examples are *Agoravox*, *Baksheesh*, *Street 89* and *Mediapart* (France), *Readers Edition*, *Opinio* (Germany), *You Reporter* (Italy), *Nyhetsverket* (Sweden) and *Nu.jij* (part of Nu.nl, The Netherlands) (Leurdijk and Nieuwenhuis, 2014, p. 156). Various type of aggregators appeared. Isbell (2010, p. 2) distinguishes four: feed aggregators, specialty aggregators, user-curated aggregators, and blog aggregators; among them, two (user-curated aggregators[31] and blog aggregators[32]) are mostly relying on third-party content generated by users.

These newcomers are trying to make the best out of the participatory nature of the internet, they are pioneering new ways to open up a dialogue with their readers. What is called citizen journalism (or "participatory journalism", "grassroots journalism") and volunteer news co-creation activities are increasingly prominent (Katz, 2011, p. 52). The UK parenting website *Mumsnet* is an example of an independent networked journalism enterprise achieving scale and significance. Launched by professional journalists it has a core paid staff but depends overwhelmingly on input from its members. As stressed by Beckett (2011, p. 13), "It represents a series of communities that journalism did not seem to tap into before".

However, legacy newspaper also seized the opportunity to modify the ways they were interacting with their readers. *The Guardian* under the banner of "open journalism" has been a pioneer, experiment with the format of "live blogging" or seeking to connect itself to grass-roots networks through its local web project. In 2007, *The Daily Telegraph* (*Telegraph.co.uk*) became the first among the mainstream UK newspaper to allow readers to create their own blogs online. It was the beginning of "*My Telegraph*", a community that had already in 2011 over 60,000 registered users, with something between 10,000 and 15,000 currently actively blogging (Beckett, 2011, p. 7). It progressively became part of the format used by legacy papers offering some space to external bloggers, subscribers (*Le Monde.fr*) or any reader (*20Minute.fr*).

The success story of online newspapers seems to suggest that appearing on the online service delivers sufficient status to compensate for the lack of real payment: the *Huffington Post* does not pay its writer (Katz, 2011). Blog publishing companies such as *Gawker Media*[33] or *Spreeblick*[34] Verlag combine a number of blogs and pay the authors who write for them, or at least provide them with a platform to raise their profile. It looks as if appearing on the online service was delivering enough status to compensate for the lack of real payment. The French online news website "*Le Post*" (a subsidiary of the firm *Le Monde Interactif*) relies also on voluntary contributions. For their online edition, most newspapers frequently rely on their readers' contributions. A 2008 report claimed that overall "58 per cent of the newspapers offered some form of user generated content in 2008" (The Bivings Report, 2008 quoted by Katz, 2011).

This introduces another aspect of the blurring of the boarders that hinges on new ways to distribute, outsource and remunerate labour. These various forms of crowdsourcing in the media can obviously be perceived as an easy option to reduce the overall costs of labour to better adjust to the sea of changes. Thereby, it leaves some pending questions about the status of the "voluntary" labour force: new sources of distributed labour? "Creative" worker or unpaid labour? However, according to Bughin (2010) the fear that this flexible form of outsourcing will "drain jobs from the regular work force" is not justified. On the opposite, he stresses that, what he described as co-creation, is indeed an entirely new type of work much along the lines of Benkler (2006).

6. Video games: co-innovators?

6.1 New streams of revenues

Bughin (2010) gives two examples of new forms of co-creation in the video games industry. The first example is about professional gamers in South Korea who manage to make a living by competing in multiplayer games like "StarCraft" because they are broadcasted to a large audience (now called eSports, see Box 3). The second, also in Asia (China), is the case of so-called gold "farmers" playing online games, who are paid to dig up virtual treasures (Bughin, 2010, p. 37) and making revenues through the sales of virtual items.

Box 3. eSports and the ESL Gaming Network

eSports commonly refer to competitive (pro and amateur) video gaming that is often coordinated by different leagues, ladders and tournaments, and where players customarily belong to teams or other "sporting" organisations who are sponsored by various business organisations (Hanari and Sjöblom, 2015, p. 2). Esports is indeed an innovation coming from Asia that has been spreading to other regions recently.

Warr (2014) reported 71,500,000 viewers watched competitive gaming in 2013. The global Esports Audience was 226m gamers and the number of Esports Enthusiasts reached 115m in 2015 (Newzoo, 2016).

ESL Gaming Network is a German company founded in 1997 and owned by Turtle Entertainment GmbH, another German company, since 2000. In 2015, the Swedish digital entertainment company Modern Time Group acquired 74 per cent of Turtle Entertainment for 78m euros. The same company bought DreamHack that same year, another organiser of e-sports.

The main sources of income are sponsorship revenue (with sponsors like Adidas, Intel or Volkswagen), online advertising, merchandising and international licensing business. The ESL is the largest and most important league for gamers in Europe consisting of more than 940,000 active members and more than 470,000 registered teams.

ESL offers more than 1,800 professional leagues and amateur ladders from a variety of games. More than 190,000 matches per month are being played worldwide using the ESL technology. The ESL website currently reaches above 1m unique visitors a month and about 10,000 people register every month.

The ESL has ten franchise holders and two subsidiaries working in 20 countries around the globe. In close cooperation with the Chinese ProGamerLeague, ESL opened the ESL Asia section in 2007.

Sources: Crunchbase, www.crunchbase.com/product/esl#/entity; Hanari and Sjöblom, (2015); Hottot, (2015, p. 2); Warr, (2014) Other sources or revenues have been enabled by YouTube channels. We already came across the case of streamed entertainment and YouTubers. Streamed entertainment has been spearheaded by live game content, YouTubers like PewDiePie[35], NerdCubed and Squid Gaming have tapped into the desire for gaming content among fans, and offered them short gaming videos on the go. The Electronic Sports League (ESL) Gaming Network (see Box 3), which broadcasts most eSports, has grown into a multimillion-dollar business outside the remit of mainstream television, while individual creators reaching millions of subscribers have been able to generate substantial revenues to promote a game (Newzoo, 2015c). These channels are among the most popular among YouTube channels, ranked by number of subscribers.

As of January 2016, Swedish video game commentator PewDiePie was ranking first with 41.62m subscribers (Statista, 2016c). As of July 2015, PewDiePie had close to 10bn channel views (Statista, 2016d). The notorious YouTubers earned $7.4m in 2014. Newzoo (2015a, p. 8) estimates that there are at least 16 YouTubers making over $1m a year from game content. Sarrazin (2015) gives monthly revenues of French streamers, in 2014, varying between 27,000 and 15,000 euros. These revenues are derived mostly from advertising, but also from subscriptions and donations. Whatever the amount, this represents highly significant sources of revenues.

Beyond streaming and the quasi-professionalisation of some YouTubers, they are other ways for consumers to be evolved in the creation and sharing of gaming video content. Fan programming is one, but users can also use the game engines to create cinematic experiences, creating stories or works out of existing sequences of video games. The latter that has been blossoming over the past 20 years[36] is called "machinima", an activity which turned into also a multimillion dollar medium (Newzoo, 2015a, p. 11). Machinima.com is a website dedicated to fandom and gaming culture, providing access to such videos shot from video games like *World of Warcraft* or *Halo*. Machinima.com is a programming site: in 2015, it reached more than 151m viewers and 3.3bn video views a month (Newzoo, 2015a, p. 6).

6.2 Modders and communities

The amount of time spent watching game content on YouTube keeps on increasing. Newzoo (2013, p. 18) reported that as of 2012, more than 50 per cent of game video views on YouTube was user generated: game powered entertainment (community-created content, funny videos and parodies, less than 5 minutes long), tutorial (community-created content, how-to videos, 1-5 minutes long), walkthrough (community-created content, gameplay footage, 15 minutes or more) and third-party review (4-5 minutes long).

In recent years, consumers have become central to the video game industry: consumers have become increasingly involved in the creation, streaming and sharing of gaming video content Newzoo (2015b). For examples, King[37], Rovio[38] and Zynga[39] manage intricate relationships with their fans/gamers (Simon, 2016a: part 2; Benghozi *et al.*, 2015). For the monetisation of free games, monitoring these relationships became crucial; games companies pioneered the use of Big Data to that end (Simon, 2015b). The relationship has shifted from one consumer on one side and one creator on the other side, to a relationship of mutual collaboration where the consumer helps produce the game: gamers-as-producers.

For instance, Zynga is built around a metrics-driven culture, listening to customers so as to find out whether the games are fun or not. The hit game "*FarmVille*" was modified to take into account customers' reactions: "In the original version of Farmville, animals were merely decoration. However, data showed that more and more people started interacting with the animals and even use real money to buy additional virtual animals. So, in *Farmville* 2.0 animals were made much more central" (van Rijmenam, 2013).

The fan culture for digital games is deeply embedded in shared practices and experiences among fan communities. Their active consumption contributes to the production: fan programmers (generally known as "modders") played a role in the success of the PC digital games industry. Gaming fans can have a big impact on content developers as shown by "*Farmville*" and *Mass Effect*" (BioWare). In March 2012, the fandom was displeased with the new release from BioWare's *Mass Effect*, and fans pressured for change. BioWare released a modified packet later that same year, an unheard of move from the games industry that previously never went to such lengths to comply with a fan base's desires. Consumers and developers can collaborate to produce such entertainments.

To manage the link with the users ("player experience first"), the video game industry introduced a new middleman: the community manager (Kerr and Kelleher, 2015). Indeed, several firms actually rely on communities of users to design new products and services. The communities of users are considered as new sources of co-innovation (Parmentier and Mangematin, 2014). One of the most recent example has been the release of the Steam box and its controller designed to facilitate product innovation by the users themselves. The company (Valve[40]) explains that, "We plan to make tools available that will enable users to participate in all aspects of the experience, from industrial design to electrical engineering" (Newzoo, 2013, p. 21). "Through Steam, fans can easily buy, play, share, modify, and build communities around Valve products as well as titles from other independent game studios" (company website).

7. Conclusion: new forms of creativity: the community model and its limits

"The future lies with the fan" does not hesitate to claim the consultancy Newzoo, stressing the role of fans in the production of video games (Newzoo, 2015, p. 11), but also with fan fiction. May be, but fans are also customers, and the relationships between the two dimensions are far from simple. We still lack some robust evidence to support such strong statements; however, what the review of the various industries and business cases has shown it that the entire value chain of content (production/distribution/consumption) has opened up. The amount of UGC produced triggered a qualitative jump, ushering in new modes of interaction between the customers and creators, without necessarily turning the consumer into a full-fledge producer. UGC within the digital media worlds plays a more and more central role, as suggested by Figure 1, tracing its evolution over the past decade. Web content is increasingly dominated by UGC, at least from a quantitative viewpoint as the data show (including the traffic generated over the networks).

The UGC model adds another source of production, thereby increasing diversity. Self-publishing allows amateurs to disseminate their musical or written work, and to select the relevant regime for allowing access to their work (free, paid, etc.). Content producers are gaining visibility. They benefit from novel ways to promote their work as illustrated by the example of the Spanish photo books.

The new technology is ushering in new positions, which are logical. A new category of intermediaries is appearing, the YouTubers (as well on other UGC sites), who may or may not become full-blown professionals. Not all "vloggers" are likely or willing to become such but there is an opportunity to follow that track.

For the media industries, it provides a novel way to scout for talents as we have seen with books, music or video. Besides, from a marketing viewpoint, if offers new opportunities to deal with the customers' base for instance through communities. From that angle, the new involvement of customers may just boil down to updated marketing practises (Simon, 2015c). Some specialised entities, like SparkReel, are now offering services so as to harness the power of UGC. Social networks have become a marketing tool, used to promote brands and for new advertising campaigns: 25 per cent of search results for the world's 20 largest brands are links to UGC (Smith, 2015). For the media industries, it brings some threat as they under the risk of being circumvented either by the artist/ content producer or by new intermediaries.

Various forms of co-creation may be perceived an entirely new type of work (Benkler, 2006). The new situation and its potential growth creates room for another model: the community model, in which modules of media creation and play modules will be created by decentralised peers, collaborating loosely with each other. On the one hand, it may involve another, less mainstream, form of creativity. On the other hand, they are limits to this creativity as well to diversity. Amateurs are very often more involved in an aesthetic of cut and paste, than planning to come up with some more original pieces of work (Flichy, 2010, p. 90), although blending existing elements can produce original works. On the diversity side, one can note a mismatch between the creation of digital content, its dissemination and the way content is being consumed. Patterns of consumption seem to display a more conservative behaviour as its typology did not change that much. Leading artists tend to concentrate the majority of revenues: 1 per cent of the artists raised 77 per cent of the revenues in 2013 (Forum d'Avignon, 2015, p. 6).

Besides, co-creation as illustrated with the case of news but also with video games and modders, raises questions about the status of the "voluntary" labour force: creative or unpaid labour? Menger (2003, 2010) has argued that creativity also needs some stability and that firms and workers need a long-term relationship.

From an economic viewpoint, Noam has highlighted that the community model may help to reach a critical mass, as it was the case for radio in the 20s and internet in the 80s (Noam and Pupillo, 2008), to create the market but that then model is then dismissed. Wi (2009) offered similar views for video games. It seems dubious that UGC can become the main source for the provision of content at least in the case of the highly capital-intensive sectors of cinema and video games, with high fixed costs of production as noted by Cameron and Bazelon (2011, p. 36): "With a major film costing over $200 million on average, of which $39 million is spent just on marketing the film, it is hard to imagine that selling credits or garnering attention in social media sites will ever be able to cover the costs or inspire investors to back such a large undertaking". Even in the case of music with recording costs between $20,000 and $60,000, but it may help for some of *ex ante* crowdfunding (Kappel, 2009, p. 377). Consumers are generating more and more content, nonetheless, movie/ games made by professionals still maintains a strong role. In this situation, the professionals remain the orchestrator, central to projects, and garner the greater profit.

Crowd funding provides "a complement rather than as a substitute for the existing publisher toolkit, along with traditional approaches" (Bain, 2013, p. 11). Indeed, "very frequently projects presented on crowd funding platforms are low budget, and often financed by a large audience where each individual provides small amounts of money" (Ramos, 2014, p. 54). "Crowd funding today represents less than 1 per cent of the investments" in the book, cinema[41] and video games industries (Salmon, 2013, p. 46).

Nevertheless, crowd funding allows the consumer to participate in the emergence of tomorrow's artists, to take part in the scouting of talents. The new channels offer novel ways to produce, curate and disseminate content. The role of customers did change within this context.

Websites

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Image Metrics, available at: www.image-metrics.com/company/history/

instaFreebie, available at: http://click.publisherslunchdaily.com/cp/redirect.php?u=NTAwNnwzNDQ4OXxqcHNtdWx0aW1lZGlhQGhvdG1haWwuY29tfDkxODQ3OXwxOTM0ODMwODB8MTI0MjcxMQ==&id=25780931

Machinima, available at: www.machinima.com

Available at: *MunahHirziOfficial*

Polandbananasbooks, available at: www.youtube.com/user/polandbananasBOOKS/featured

Pronoun.com, available at: http://click.publisherslunchdaily.com/cp/redirect.php?u=NTAwNnwzNDQ4OXxqcHNtdWx0aW1lZGlhQGhvdG1haWwuY29tfDkyNjAyM3wxOTM0ODMwODB8MTI1NDUxMQ==&id=26196518

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PeopleForCinema, available at: www.peopleforcinema.com

PewDiePie, available at: www.pewdiepie.com/

SoundCloud, available at: https://soundcloud.com/

Sparkreel, available at: www.sparkreel.com/

Twitch, available at: www.twitch.tv/p/about

Valve, available at: www.valvesoftware.com/

Notes

1. Portable Windows Movie Maker 6.1. *Source*: www.microsoft.com
2. Amended by the directive 2010/13/EU of 10 March 2010 on the provision of audio-visual media services (Audiovisual Media Services Directive).
3. The report (Idate *et al.*) provides a rather comprehensive view of the 2007 landscape with some 50 case studies.
4. Based on a survey: 1,611 participants.
5. Does not include the amount of video exchanged through peer-to-peer (P2P) file sharing.
6. The study claims to represent the views and habits of 680m consumers across 20 markets although it is based on a sample of 22,500 online interviews.
7. Lulu will pay $5.99 to authors for e-books sold through the iBookstore for $9.99: 60 per cent.
8. Free creation and layout tools, a host of customisation features, print on demand, warehousing and fulfilment, and handling the e-commerce, shipping, and customer service.
9. Created in 2014 as a project of Libboo, Inc.
10. And free ISBNs.
11. For Kindle eBooks: up to 70 per cent. For print books: royalties up to 60 per cent as the printing fees are offset. https://kdp.amazon.com/help?topicId=A32I2OF1510VZV
12. Hardwick (2014) gives a list of "10 Best Selling Self-Published Authors".
13. Idate *et al.* spotted in 2008 two others for book recommendation: LibraryThing (USA: www.librarything.com) and Biblioteket.se (Sweden: http://biblioteket.se).
14. Basically posting a video of the "booktuber" reading or commenting a book: in a "vlog", i.e. video blog.
15. With terms including 35 per cent of net sales for works of 10,000 words or more and 20 per cent for short fiction ranging from 5000 to 10,000 words. However, this arrangement includes restrictions on content, copyright violations, poor document formatting and/or using misleading titles
16. "Archive of Our Own" is the other lead fan site.
17. "Potterfictions" lead the way with over 700,000 stories.
18. Creator of the "Twilight series". http://stepheniemeyer.com/ts_fansites.html
19. Today's best phones can record in 4K according to YouTube's chief business officer Robert Kyncl (quoted by Springham, 2016).

20. See for instance http://azbigmedia.com/scottsdale-living-magazine/lists/top-5-movie-parodies-youtube
21. www.huffingtonpost.com/shira-lazar/the-best-oscar-movie-paro_b_4855996.html
22. Real-time video feeds "enabling individuals to see the world through another person's eyes". Acquired by Twitter on 10 March 2015.
23. Founded in June 2011, Twitch claims to be the world's leading social video platform and community for gamers. The company was bought by Amazon in 2014 for nearly US $1bn.
24. A mobile game live streaming platform and community founded in 2014.
25. Mashups have a broader role in the evolution of social software and Web 2.0.
26. The wording publishing in that sense is not completely correct as it refers more to the recording industry segment of the industry than to its publishing segment.
27. Berlin based but Stockholm founded in 2007.
28. For ADAMI, a French special-interest group for the Administration of the Rights of Artists and Musicians (Salmon, 2013, p. 15).
29. From an article in *Wired* magazine 2007 quoted in Bacache-Beauvallet *et al.* (2011).
30. A survey of more than 20,000 people in 12 countries: Australia, France, Germany, Denmark, Finland, Ireland, Italy, Spain, Brazil, Japan, UK and the US.
31. "A 'User-Curated Aggregator' is a website that features user-submitted links and portions of text taken from a variety of websites" (Isbell, 2010, p. 4).
32. "Blog Aggregators are websites that use third-party content to create a blog about a given topic. The Gawker media sites are perhaps one of the best known examples of Blog Aggregators" (Isbell, 2010, p. 5).
33. www.gawker.com/about
34. www.spreeblick.com/impressum
35. A Swedish web-based comedian and producer with a degree from Chalmers University. His earnings were widely reported by media.
36. According to Newzoo (2015a), the first machinima, "Diary of a Camper" used the "Quake" game engine.
37. Founded 2003, creator of "*Candy Crush*".
38. Founded 2003, creator of "*Angry Birds*".
39. Founded 2007, creator of "*Farmville*".
40. Valve is an entertainment software and technology company founded in 1996. Steam is available in 237 countries and 21 different languages. www.valvesoftware.com/
41. "PeopleForCinema" is a crowdfunding platform, founded in Paris in 2009, to enable people to participate in the promotion of films, or fund part of the distribution budget. The company claims having raised 2.5m euros to compare with the $200m quoted by Cameron and Bazelon for just one film. *Source*: website.

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