

THE EVOLUTION OF THE CREATIVE INDUSTRIES AS A MODEL OF INNOVATION

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Abstract

While the economic impact of the creative industries, as calculated using traditional measures, appears to be relatively modest (although growing rapidly), critically the economic value of the creative industries may extend beyond the sole production of cultural goods to cover a more broad-spectrum role in facilitating and driving a process of change across the entire economy. Innovation in the creative industries involves new ways of doing things and new patterns of human interaction (often originating in non-economic, non-commercial contexts), such as non-traditional methods of involving users in design content and service activities. This paper focuses on the role of the creative “participative consumer”, an increasingly important stakeholder within the creative industries and the digital media economy.

The paper is structured as follows: in Section One, through literature review, it is suggested that the creative industries act as an innovation driver, facilitating new knowledge processes which in turn lead to economic change and development; it is argued that the creative industries are not an industry per se, but rather a space of economic activity in which markets and organizations are shaped predominantly by social networks; Section Two illustrate how innovation theories and frameworks have evolved over time from cluster initiatives and innovation networks to open innovation and user-driven innovation, and how an analogue evolution can

be observed in the creative industries mindset and working practices; in Section Three, theoretical underpinnings emerged from literature review are confronted with innovative practices of creative industry companies, and four models for the non-conventional involvement of users in design and development activities are outlined; the conclusions are stated in Section Four.

Creative industries as a driver of innovation

Creative industries is a broader definition than cultural industries, encompassing the commercial fields of design, advertising, video games, fashion, music, TV, publishing and new media. The creative industries are also often associated with a “new economy”, driven by “digital” technologies and closely related to the “information” or “knowledge” economy; the different ways of conceptualizing the creative industries are systematic expressions of models emerging over time within different disciplines. The concept of creative industries¹ co-evolves with their

¹ The formal origins of the concept of *creative industries* can be traced to the UK-government establishment of a Creative Industries Task Force (1997), through which the newly-created Department of Culture, Media and Sport (DCMS) identified policy measures to promote the sector. One of the earliest definitions was thus provided by the DCMS (1998, 2000, 2001), in an attempt to re-conceptualize the cultural sector into a new and broader industrial classification, uniting all industries having *creativity* as a key element of their activities. One of the earliest definitions was thus provided by the DCMS (1998, 2000, 2001), in an attempt to re-conceptualize the cultural sector into a new and broader industrial classification, uniting all industries having *creativity* as a key element of their activities. Recently, The Work Foundation (2007), working with the DCMS, has put forward a concentric model, where the centre is a ‘creative core’, including all forms of original product; the next ring is constituted by the ‘cultural industries’ – including cinema, TV, radio, music industries and video games – which commercialise these creative goods; the outer ring is made up of the ‘creative industries’, which include original product but mix it with certain functionalities. In contrast, the model outlined in the National Endowment for Science Technology - NESTA (2006) report, attempts to organise the sector not in terms of the qualities of the products but in terms of the conditions on which profit is made. This model better reflects the complex interrelationships between the different fields of activity, taking into account the complex interactions between the different players and types of enterprise, including: ‘service providers; content producers; experience providers; original producers.’ NESTA is a UK endowment established by an Act of Parliament in 1998 to help maximize the creative and innovative potential of the United Kingdom. NESTA’s mission is to transform the UK’s capacity for innovation by investing in early stage companies, informing innovation policy and fostering a culture that helps innovation to flourish.

practices, therefore refining the definition of what creative industries are, and involves a continuous combination of experience and theorizing, which in turn is informed by feedback from the ongoing learning and innovative processes. This paper focuses on the innovative processes of the creative industries, an industrial force that has been largely enabled by digital technologies, which have served to link creative outputs and commercial opportunities. A literature review may suggest that the creative industries act as an innovation driver, facilitating new knowledge processes which in turn lead to economic change and development.

Metcalfe & Potts (2008) identify the creative industries as core parts of the service economy, and as illustrative of the knowledge economy, the creative economy and special economics. Consequently, they suggest that the creative industries play a role not only in the production of services, but also in the process of innovation. This consideration is directly related to new innovation system arguments, which in turn tie in with the Potts & Cunningham (2008) definition of creative industries, whereby the creative industries are seen to contribute to the process of Schumpeterian economic growth and evolution. Potts & Cunningham point up the potential value of an innovation-based approach to creative industries, and underline the fact that the economic value of the creative industries may extend beyond the production of cultural goods to cover a far broader role in facilitating and driving change processes across the entire economy. Evidence for this notion can be found in the dynamic parameters of the creative industry and the extent to which they have penetrated into the wider economy (e.g. the innovative business model and new consumer involvement strategies).

According to Potts & Cunningham, the economic analysis of the relationship between an industry sector and the rest of the economy is therefore constructed in terms of the dynamic inter-relationship between them. In order to investigate the dynamic relationship between the creative industries and other economic sectors, Potts & Cunningham propose four models (representing four possible kinds of relationship): (1) welfare, (2) competition, (3) growth and (4) innovation. In Model 1, the welfare model, the creative industries consume more resources than they produce; they are important for social, political and cultural reasons, but are only economically viable thanks to the transfer of resources from elsewhere in the economy. In Model 2, the competition model, the creative industries are “just another industry”; they are not viewed as economically negative, nor

as providers of special goods of higher moral significance (e.g. the entertainment or leisure industry). In this model, a change in the size or significance of the creative industries has a proportionate (but structurally neutral) effect on the economy as a whole. This model fits the more industrially-developed sectors of the creative industries, such as cinema, TV and print media, which have similar economic indicators to those of economy as a whole. However, this model does not provide a fit for some new media sectors in which the creative industries facilitate economic growth. Model 3, the growth model, suggests a positive economic relationship between growth in the creative industries and growth in the broader economy. In this model, the creative industries are a growth driver “in the same way that agriculture was in the early 20th century, elaborately transformed manufacturing was in the 1950s–60s, and ICT was through the 1980s–90s” (Potts & Cunningham, 2008). This model hypothesizes that the creative industries introduce novel ideas into the economy that then permeate to other sectors (e.g. design-led innovation, user-centered innovation), or that the creative industries facilitate the smoother adoption of new ideas or technologies in other sectors (e.g. ICT). In this model, the creative industries are seen as positive for the overall economy because they introduce and develop the new ideas that drive economic growth. Findings for the US, Britain and the EU for the period 1999–2006 (Work Foundation, 2007) suggest that the creative industries are growing at a faster rate than the aggregate economy. The European Commission has estimated the annual growth of the cultural and creative sector in Europe at about 8%. Potts & Cunningham infer from these and other data, that the creative industries are now growing at about twice the rate of the aggregate economy (despite low profit figures due to reinvestment). In Model 4, the innovation model, the creative industries are not considered to be an industry *per se*, but rather as an element of the innovation system of the economy as a whole. Model 4 is based on the contemporary innovation literature (Metcalf, 1998) and claims that the significant role of the creative industries is their contribution to new ideas or technologies, and consequently to processes of change (for example, some of the most noteworthy changes in recent years have involved business models inspired by new uses of the Internet). This model is an evolutionary model, whereby the creative industries are considered to be a complex evolving system deriving its economic value from the process of innovation. Change in the

creative industries may thus produce structural change in the economy. According to Potts & Cunningham (2008) therefore, “the creative industries might in this sense be better understood as a kind of industrial entrepreneurship operating on the consumer side of the economy”. The “innovativeness” driven by the creative industries is evident and emergent, for example, in the various industrial applications of games technologies (videogames are being incorporated into many working environments for educational and training purposes), the increase in user-centered innovation (von Hippel 2005) and the impact of user creativity on internet and mobile media (Cunningham 2006).

Clearly, the models proposed by Potts & Cunningham describe creative industries activity across the spectrum, so it may be that different models are more appropriate at different times and places. Nevertheless, evidence to endorse this innovation model may be found in the current regeneration of existing industries and the emergence of new sectors as result of creative industry activity. Other good reasons to support Model 4 include the related high levels in human capital within the creative industries - 46% of people working in the field are university graduates, versus 25% in the aggregate economy (Work Foundation 2007) - which permits greater specialization; the growth in ICT, which is the technology base of the creative industries; and globalization, in terms of access to global markets due to both demand and factor mobility.

Potts & Cunningham (2008) also suggest that the relative growth of the creative industries is not an anomaly, but in line with the predictions of open-system economic theory, based on the effects of technological change and a changed consumption set. They view the creative industries as the 21st century equivalent of the creative destruction “wrecking ball”, represented in the 19th century by the engineering of open, rather than closed, systems. Cunningham (2002, 2004); Flew (2002) and Hartley (2005) also underline how the innovation element, the proliferation of platforms and distribution channels (mobile phones, internet, satellite etc.), the application of creative content to new areas such as education, health and information services, and the provision of “experiences” generally, indicate a new market-driven responsiveness to new types of consumers. In

addition, the increase in the phenomenon of user-generated content², the “long tail” (Anderson 2006) providing wide-ranging consumer choice and the more active organisation of consumers via the Internet have further altered the cultural, social and economic landscape.

Tab. 1 - Kinds of relationship between the creative industries and other economic sectors, according to Potts & Cunningham (2008)

Relationship Models	Characteristics	Creative Industries” Value	Relationship dynamics with other economic sectors
(1) welfare	Creative industries consume more resources than they produce	important for social, political and cultural reasons	transfer of resources from elsewhere in the economy
(2) competition	creative industries are just another industry	not economically negative, nor providers of special goods of higher moral significance (e.g. the entertainment or leisure industry)	a change in the size or significance of the creative industries has a proportionate (but structurally neutral) effect on the economy as a whole
(3) growth	creative industries as a growth driver	introduce novel ideas into the economy that then permeate to other sectors, or facilitate the smoother adoption of new ideas or technologies in other sectors	positive economic relationship between growth in the creative industries and growth in the broader economy
(4) innovation	creative industries are not an industry <i>per se</i> , but an element of the innovation system of the economy as a whole	complex evolving system deriving its economic value from the process of innovation	contribution to new ideas or technologies, and consequently to processes of change. change in the creative industries may produce structural change in the economy

² User-generated content, also known as User-created Content refers to various kinds of media content, publicly available, that are produced by end-users. The expression is used for a wide range of content, including news, gossip and research created and distributed through digital video, blogging, podcasting, mobile phone photography etc.

Thus, according to a number of different theorists, the creative industries do not drive economic growth directly, but rather facilitate the conditions whereby innovation drives an increase in knowledge creation, leading in turn to fresh economic development.

Creative industries as a social network market

Potts et al. (2007) also propose abandoning the concept of industry altogether, instead defining the creative industries as a space of economic activity in which markets and organizations are predominantly shaped by social networks. Within this framework, the creative industries are described as “the set of agents and agencies in a market characterized by adoption of novel ideas within social networks for production and consumption”, Potts et al. (2007). This is the result of a “creative destruction” as evidenced by the evolution of creative industries themselves – from the modernization of the “old” de-industrializing cultural economy to the “new knowledge economy”, via social networking. The creative industries are therefore a set of economic activities involving the creation and maintenance of social networks, and the generation of value through the production and consumption of network-valorised choices within these networks³.

Furthermore, Hartley (2007) links the emergent social networking market to the convergence with digital media and the rise of user-generated content, underlining the extent to which innovation, change and growth are not attributable to firms alone, but also to consumers organized in social networks, and to non-market activities that are fall entirely outside of traditional economic categories. This is observable in the rise of a variety of digital technology social-networking tools, including different types of specific social, cultural and entertainment groups, as well as creative practice sites, such as *Flickr* for images, *YouTube* for video, along with an overabundance of blogs and collaborative publishing environments on the Internet. The increasingly thriving video game industry is also ever more reliant on the participation of gamers as content creators; in fact, the video

³ A related concept is put forward by Lanham (2006), Hartley (2007), Currid (2007) and Ormerod (2008) with the notion that the creative industries represent the ‘attention economy’. The central idea here is that the creative industries are defined in terms of the aspects of economic activity which derive value from the scarce resource of attention.

games production paradigm has shifted from producing closed text products, to providing a rich social environment in which multiple users cooperate to develop additional features for the games. In addition, the news and publishing industries have been also affected to some degree by the phenomenon of “citizen journalism”, and now employ some of their users as journalists and commentators. Users are also involved by firms in “collaborative filtering” activities – this is the more or less overt approach to the user participation phenomenon adopted by the online bookseller Amazon or the online music radio Lastfm, whose recommendations are based on the evaluation, listings, and purchase patterns of their large user communities.

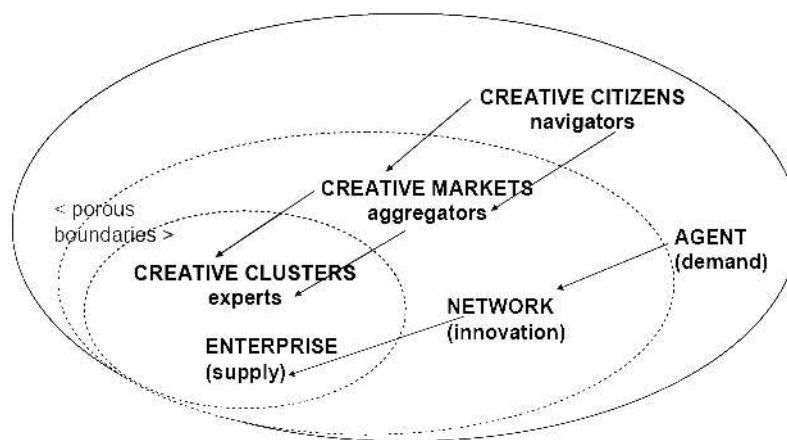
Innovation in the creative industries, therefore involves new ways of doing things and new patterns of human interaction (often originating in non-economic, non-commercial contexts), such as non-traditional methods of involving users in design content and service activities.

Both Potts et al. (2007) and Hartley (2007) suggest that the “social network market” status of the creative industries underlies the shift in the causal sequence from a supply-driven to a demand-driven dynamic. This demand-led model of creative consumers and users requires a reformulation of the traditional “value chain” approach to creative and cultural production, from a one-way causal chain - which typically goes from the producer to the consumer, via commodity and distribution - to a dynamic and productive interrelationship between agents (who may be individuals or firms), social networks (direct or Internet-mediated) and market-based enterprises. Potts et al. (2007) and Hartley (2007) share the view of a dynamic model in which individuals originate ideas, networks adopt them and enterprises retain them. In this new environment, the “industrial” concept of the “consumer” is challenged by the idea of the creative user. User culture, knowledge, choices and social networking are therefore factors in innovation, and need to be taken into account in order to harness the creative knowledge of all the agents in the system, while the creative and communicative choices and activities of users need to be coordinated through the social network market.

For example, the role of videogame players as innovators and risk takers is now an important element of the industry structure and should not be overlooked. As the game publishing industry consolidates and the cost of development rises, R&D and testing is increasingly outsourced to the

gamer communities that spring up around games. Furthermore, “user-creative participation” is already an important economic phenomenon despite its non-commercial origins⁴, and the spread of this phenomenon appears to constitute a considerable disrupting force for how products and services are created and consumed and for traditional products and services suppliers.

Fig. 1 - A demand-led creative market, as proposed by Hartley (2007)



This disruption creates opportunities for firms but also challenges strategies and business models, demanding organizational innovation.

An organization’s ability to create, retrieve, and use knowledge to innovate is a critical strategic asset, and the creative industries, especially the new media firms operating within the sector, are increasingly adopting alternative strategies for innovation, in which sharing and co-operation play a critical part. In addition, Montgomery & Potts (2008) claim that the creative industries are re-use industries, and adaptive in terms of their ability to flexibly adapt their business models.

The next section presents open innovation as a strategic organizational decision and identifies different innovation models, from clusters to user

⁴ The OECD (2007) broke down the socio-cultural ‘impact’ of user-created content into the following components: Altered economics of information production; democratization of media production; user autonomy, increased participation and increased diversity; collaborative, sharing information, ideas, opinions and knowledge.

driven innovation, while the section after investigates some of the practices and strategies adopted by the creative industries in order to open up their innovation process to users.

The evolution of the creative industries innovation model, from clusters to user-centered innovation

Innovation theories and frameworks have evolved over time from cluster initiatives and innovation networks to open innovation and user-driven innovation, an analogue evolution can be observed in the creative industries mindset and working practices.

In organizational and innovation theory, for example, the phenomenon of clusters, “a geographically concentrated group of firms linked through both vertical and horizontal relationships” (Porter, 1990) has been often linked to knowledge dynamics which are considered fundamental for creative and innovative firms. For this reason the most dynamic creative clusters (for example Silicon Valley) have been investigated from a knowledge-based perspective (Bahlmann & Huysman, 2008; Florida, 1995).

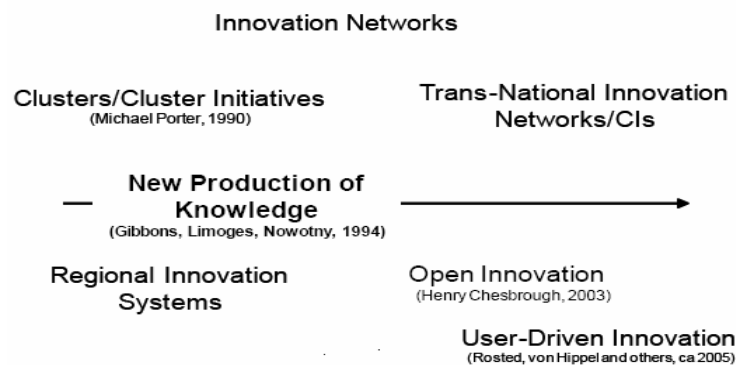
However, the notion that firms depend solely on their local knowledge network for their creative input has been debated. Amin & Roberts (2008), for example, consider creative knowing, and the exchange thereof, to be potentially the least geography-related form of knowing; while Pratt (2004) argues that creative clusters are formally a sub-set of business clusters, with the drawback of a lack of attention both to the specificity of the creative industries and to non-economic variables; and Bathelt (2005) suggests that creative clusters can only create new knowledge and continue to grow if the cluster firms have linkages with external markets.

Therefore, the need for openness, currently ever more easily satisfied thanks to global communications, is coming more and more to the fore. In addition, Burt (2007) holds that firms with networks spanning cluster boundaries benefit from the consequent “vision advantage” (i.e. the ability to profit from multiple information flows by bridging social networks); the value of this open-linkage is that it enables access to new knowledge developed elsewhere (also by consumers/users) within a paradigm of intensified knowledge exchange and social interaction.

Alternatively, Amin & Roberts (2008) and Boschma (2005) emphasize the significance of different forms of proximity – not only geographical – such as relational proximity with different actors, in a social networking dimension in which consumers/users also represent a source of knowledge.

These recent theoretical contributions are borne out empirically by creative industry practices, since creative firms operate in an environment that is progressively more characterized by constant change, dynamic interaction between different disciplines, and multiple stakeholders and agents (users included). Networking is in fact vital for creative industry firms to be competitive, e.g. the production of new media products and services (e.g. websites, interactive television-formats, e-marketing campaigns, videogames etc.) involves collaboration between actors from different industrial sectors and professional communities, as well as an increasing, though variable, degree of user-involvement.

Fig. 2 Evolution of innovation theories and frameworks, adapted from Wise & Høgenhaven (2008)



In recent years, the principles of a more “open” innovation model have pervaded organizational literature. Chesbrough (2003) describes a transition from closed innovation to open innovation models; while von Hippel (2005) focuses on the principle that lead users (rather than firms) are responsible for a large amount of innovation; and Prahalad & Ramaswamy (2004) and Prahalad & Krishnan (2008) argue that, increasingly, value is co-created by the firm and the customer, rather than being entirely created within the firm. Over the same period, the creative industries have experienced, more than other industries, a progressive

blurring of disciplinary, geographical and organizational boundaries, broadening participation and innovation driven by user needs. From this perspective, it could be claimed that the creative industries have evolved in parallel with the field of innovation studies. From Figure 2 (below) which illustrates how innovation theories and frameworks have evolved over time from cluster initiatives and innovation networks to open innovation and user-driven innovation, it can be observed that the same type of trends are taking place in the creative industries:

The evolution of the creative industries reflects an increasingly globalized society, enabled by digital technologies, where Internet has changed the process of value creation and shifted the balance of innovation between firms and consumers/users. This requires a paradigm shift, both a change in mindset and in working practices. The process enabling this paradigm shift is user-driven innovation, which encompasses both an understanding of real user needs and systematic involvement of users in the innovation process, as well as in business models.

Amongst the reasons for this “opening up” to users, there is also the need for external sources of state-of-the-art knowledge. Accessing relevant up-to-date knowledge is usually expensive, but what if creative innovations were provided directly by customers and users at no cost? Mainstream organizational theory may still not effectively explain such a scenario, but this is far from being a theoretical vision, since user participation and knowledge transfer from users to firms are everyday practices within the creative industry domain, especially in those sectors driven by digital technology.

According to Vujovic & Ulhøi (2008), involving users in the innovation process can be seen not only as an important means of exploring the environment for opportunities but also as a source of innovation which will enable organizations to respond to the market in an appropriate and effective way. In fact, by involving users in innovation and product development processes, organizations increase the probability of successful outcomes, since the co-developers are also future users. Organizational borders become blurred, therefore, by exploiting external knowledge of the market (see Chesbrough 2003), in relation to new product or service development.

Some of the newer examples of open innovation in other sectors include open-source software communities and sports communities such as

windsurfing, snowboarding and skateboarding (von Hippel, 2005). However, amongst the pioneering aspects of creative industry practices there is also the involvement of a broader base of non-specialist users, who nonetheless participate in a variety of domains within the social network market (see Hartley, 2007).

Creative industry approaches to the user creative participation phenomenon

In this section, theoretical underpinnings emerged from literature review are confronted with innovative practices of creative industry companies, and four models for the non-conventional involvement of users in design and development activities are outlined.

The term “user” refers here to individuals who expect to benefit from using a product or a service (see von Hippel, 2005), while “user participation” means exploiting the environment for opportunities by allowing users to take part in product development processes.

In the digital sectors of the creative industries, products are artifacts around which individual experiences are created. Thus, the focus of innovation is shifting from products and services to experience environments that individuals can interact with in order to co-construct their own experiences. These personalized co-creation experiences are a source of unique value for consumers and illustratesome of the phenomena of user creative participation. It is important to recognize the fundamental problems inherent in the term “production”, which is perhaps inextricably linked to an industrial paradigm; in this context, however, the very idea of “production” may need to be challenged, since the artifacts generated are no longer products in a traditional sense: they are always unfinished, and continually under development, in an evolutionary and iterative fashion.

User participation in the innovation model significantly alters the business models of an organization. However, this does not imply that traditional producers or products have no more value; often, for example, firms offer initial inputs produced along traditional lines, but then apply the distributed knowledge and creativity of user communities to further revise their artifacts. Similarly, some traditional production organizations have reshaped themselves, by opening up their business model to include a user participation process, in order to gain from the knowledge emerging from

the user community. Other strategies may involve provision of value-added commercial services, around a main set of services provided free of charge to online user communities. In this context, user creative participation can be seen as a set of behaviors and activities performed by users. However, user creative participation can vary according to the type and degree of participation.

After scanning the horizon for an overview of distributed co-creation in global media and entertainment industries and a review of existing literature, we sought to use the overview to group the user centred innovation practices within a more general typology. This selection is made in order to enable us to investigate different approaches to the user drive innovation. The following is an attempt to define the different levels of user participation characterizing the online social networking strategies of firms or commercial bodies. Four archetypical approaches to user creative participation are put forward: (i) the embedding approach; (ii) the patronage approach; (iii) the freemium approach; and (iv) the crowdsourcing approach.

These four approaches are placed on a continuum and may overlap with one another. This categorization was complicated by the degree to which each network exhibits multiple and overlapping design features, enabling the tailoring of these platforms of collaboration and co-creation to meet the needs of specific communities and demands.

Our typology can be more concretely understood by a brief outline of each user centred innovation approach, showing how these features of the collaboration networks are organized and utilized.

Embedding approach: is when users are involved by firms in “collaborative filtering” activities or in order to harness an added value to products and services. An example is the review feature offered by Amazon.com, which is an influential function for users and one of the main reasons for Amazon.com’s success in selling books. As part of their review, users must rate the product on a rating scale from one to five stars, these rating scales provide a basic idea of the popularity and dependability of a product. With different models of user participation, another example is the online music radio Last.fm which builds a detailed profile of each user’s musical taste by recording details of all the songs the user listens to;

Last.fm offers therefore numerous social networking features to recommend and play artists similar to the user's favorites.

The value of these networks lies in the way users rate, recommend, view, and comment. The key performance issues here relate to the degree to which social networking platform draws actors to make contributions (e.g. answers, ratings, votes). The rating of books on Amazon.com is claimed to be evidence of the site's success because books are often rated by many individuals.

Patronage approach: this model describes the situation where industry players maintain the online operational environment (social networking site) and offer "patronage" to site users. This patronage partly predetermines the conditions under which the creative work is produced and consumed. YouTube Inc, for example, can be seen as a "patron" of collective creativity, by inviting the participation of a very wide range of content (mainly video) creators, and in so doing controlling the conditions under which creative content is reproduced. YouTube's role is that of platform-provider rather than producer, while YouTube's value (the videos) is produced from the collective play-work of its users. Along with similar social networking sites, the YouTube model acts as a disruption driver to existing media business models characterized by open, only partly formalized and emergent relations with users.

Even when they are not creating videos, users spend time on the site contributing content, referring to, and critiquing. In terms of innovation theory, these are "lead users" who collectively identify and exploit opportunities to improve the way YouTube works through their own practices (Von Hippel, 2005). And of course, the activities of these users are significant drivers of the attention economy (Lanham, 2006) of YouTube.

While YouTube is pursuing advertising as its business model, its value relies on the support of co-creative users; in fact, platform providers like YouTube are active in retaining users, and entice them to build relationships with the social network platform. YouTube demonstrates how, as the exploitation of digital copyright becomes harder to enforce and the abundance of free content online increases, it is the information aggregators, rather than content creators, who are implementing true innovation models.

Further examples come from the news and publishing industries which employ some of their users as journalists and commentators - e.g. Current TV, an independent media company which shows short programs, a certain proportion of which are created by viewers and users.

A similar approach, with different content, is carried out by most news aggregation sites (e.g. reddit, del.icio.us, StumbleUpon, iDigg). Here stories can receive positive as well as negative votes. By aggregating these ratings, aggregating services can be help to highlight stories of interest to the larger community of news readers.

Freemium approach: this model refers to the provision of value-added services to user communities, as implemented for example by *Flickr*, an image archive website and online community platform. Flickr asks photo submitters to organize images using tags (a form of metadata), which allows searchers to find images regarding a certain topic such as a place name or subject matter, and also allows users to organize their photos into "sets", or groups of photos that fall under the same heading. Users may want to pay for extra services, but basically the service is free of charge. It can be considered, "Freemium", therefore, any approach consisting in offering a basic level of service or content for free, with more content-rich or feature-packed versions of the products available on a tiered pricing system. In reference to this business model, Anderson (2008) refers to the "1% rule" in which one percent of the users of a site or service, pay for the other 99%. As technologies for supporting these kind of networks become more accessible and powerful, it will become increasingly important for enterprises to confront the crucial challenge of envisioning and constructing a strategy for developing an ecology within which all stakeholders have clear "wins".

Crowdsourcing approach: this practice deliberately aims to exploit the knowledge or creativity of users for economic gain. An outstanding example of the crowdsourcing approach is the innovative business model of the US-based company Valve Software, which is based on user product modifications. The users' innovative work is organized in dispersed modification "modding" teams. "Modding" is the modification of existing hardware or software to add a new feature which had not been designed or implemented by the original manufacturer. In the case of Valve Software,

this approach led to the creation of one of the most popular videogames ever, *Counter-strike*, which was based on modified parts of the original Valve game “Half-Life”.

In this context, user innovators are usually highly motivated consumers with technical abilities and specific needs for a novel product feature or a solution to a given problem with a product. The success of video games such as Counter-Strike shows that users can be a source of products with the potential to succeed on the mainstream market (Wise, E. & Høgenhaven, C., 2008). Manufacturers can derive great benefit from users, when they allow users to carry out innovations which the manufacturers themselves are either unable to make or find too costly. However the company must be able to build up user communities (which is a cost itself).

Another example is given by *A Swarm of Angels* a website network based in the UK but which uses its “crowdsourcing” model of movie making to include, from anywhere in the world, distributed collaborators who pay a small fee to join the production. The Director of the project assumes the role of a “benevolent dictator” but enables the community to be polled on controversial issues. Shared information is central in the co-production process, as are discussion groups and polling.

Crowdsourcing approaches have also been utilized by the developers of traditional products (Howe 2008). In this case, companies utilize online communities to generate the collaborative co-creation of ideas, which can then be converted into physical or information products, including for example Apple’s harvesting of ideas for new versions of the iPod. Another example is that of *Threadless*, a community-centered online apparel store. Members of the Threadless community submit t-shirt designs online; the designs are then put to a public vote. A small percentage of submitted designs are selected for printing and sold through an online store. Creators of the winning designs receive a cash prize and store credit.

The described approaches to creative co-creation of services and products go beyond traditional organizational boundaries, raising major questions about how to manage networked individuals and capture the value of their activities. A growing number of researchers view these kinds of developments as illustrating the value of tapping into the “wisdom of crowds”, the idea that “the many are smarter than the few”, the results of an

informational utopia⁵. Nevertheless, understanding the most appropriate organizational model of these networks is a key aim, such as the degree to which the metaphor of a “crowd” or a more managed networking of individuals is more appropriate, as well as the important role played by forms of management and control in gaining value from users driven innovation.

Tab. 2 - Different levels of user participation characterizing the online social networking strategies of firms or commercial bodies

User centered innovation approach	Description	Main examples
<i>Embedding</i>	users are involved by firms in “collaborative filtering” activities or in order to harness an added value to products and services	review feature offered by Amazon.com and Last.fm
<i>Patronage</i>	industry players maintain the online operational environment (social networking site) and offer a “patronage” to site users which partly predetermines the conditions under which the creative work is produced and consumed	YouTube - inviting the participation of a very wide range of content (mainly video) creators, and in so doing controlling the conditions under which creative content is reproduced
<i>Freemium</i>	any approach consisting in offering a basic level of service or content for free, with more content-rich or feature-packed versions of the products available on a tiered pricing system	Flickr image archive website and online community platform
<i>Crowdsourcing</i>	aims to exploit the knowledge or creativity of users for economic gain	Videogame industry: user innovators seen as highly motivated consumers with technical abilities and specific needs for a novel product feature or a solution to a given problem with a product

The management of social networks depend on the ways in which they are used to reconfigure services, content and entertainment, the type of social networks they define. The success or failure of these networks lies primarily in the innovation approach of their management, with the contributions of individuals and expertise channelled towards either

⁵ See, for example, Benkler (2006), Surowiecki (2004), Sustain (2006)

predetermined specific goals or wider meta-goals. Providers of social networking sites have to shape the patterns of behaviours and norms of use for their networks in ways that yield useful outcomes through a variety of management levers in order to capture the full potential of user driven innovation. The management levers include the online social networks architecture design. Another key point of control relates to who participates in the network and the degree of openness adopted (e.g. the wide-open access to readers of Wikipedia; or the request by A Swarm of Angels for contributors from anywhere to pay a modest fee). It is also possible to have tiered levels of access to different elements of the application. For example, Wikipedia managers can: close an entry, thereby closing off editing completely; limit access by allowing trusted members of the community to resolve editorial issues; or give some trusted contributors the permission to delete the work of others. Most networks create a hierarchy of rights and privileges that determine who can do what within the network, enabling them to configure access to key resources in numerous ways. The management structures of various networks vary, but several have more hierarchical than egalitarian arrangements for handling peer production.

In the online social networks development and use is involved a complex distribution of costs and benefits. As individuals join and choose to contribute to various social networking websites, they could perceive some benefit from their act of participation as such, even through something as intangible as entertaining themselves or boosting their reputation. AS people can choose to participate in distributed collaborative networks and can enter and exit at will, the challenge of building a motivated ecology of contributors, since many efforts to create networks fail to attract a critical mass of contributors.

Conclusion

The literature review and the working practices described in the paper seem to confirm that the creative industries have evolved in parallel with the field of innovation studies, from cluster initiatives and innovation networks to open innovation and user-driven innovation. For this reason, the leading edge activities within digital sectors of the creative industries function as the Research and Development for the creative industries at

large, as well as for other industrial economies. The user-driven innovation approaches, illustrated in the article, together with digital media, are forging a new, more dynamic and innovative value chain for the production, distribution and consumption of creative content and services, and are drivers of “open innovation” as well as transformation for business and organizational models.

Amongst the reasons for this “opening up” to users, the approaches described confirm the need for external sources of state-of-the-art knowledge. Organizational theory and innovation management may still not effectively analyze and explain such a scenario, but this is far from being a theoretical vision, since, as illustrated in this paper, user participation and knowledge transfer from users to firms are everyday practices within the creative industry domain, especially in those sectors driven by digital technology.

Innovative business model and new consumer involvement strategies described in this paper may penetrate into the wider economy, and in doing so confirm the Potts and Cunningham’s (2008) vision that the creative industries may be considered as an element of the innovation system of the economy as a whole. The innovative contribution may consist in the carrying out of new ideas or technologies, and consequently to processes of change, for example, in business models and innovation management practices, as well as in the reformulation of the traditional “value chain” towards a value constellation as theorized by Norman & Ramirez (1993). This while the increase in the phenomenon of user-generated content and the “long tail” (Anderson 2006) providing wide-ranging consumer choice and the more active organisation of consumers via the Internet have further altered the cultural, social and economic landscape.

Some traditional production organizations have already reshaped themselves, by opening up their business model to include a user participation process, in order to gain from the knowledge emerging from the user community.

Of course, open innovation practices are not exclusive of the creative industries, however, amongst the pioneering aspects of creative industry practices there is also the involvement of a broader base of non-specialist users, who nonetheless participate in a variety of domains within the social network markets illustrated in this paper.

At present there is a growing trend towards wider inclusion in business models of what has been described in this paper as user participation approaches. This is demonstrated for example in the recent acquisitions of *MySpace* by News Corporation, of *Flickr* by Yahoo!, or of *YouTube* by Google, as well as in the increasing academic interest in the study of online social networking in a variety of disciplinary contexts. This trend is also due to the evident crises experienced by industries as diverse as software, journalism, music, and broadcasting, each of which have struggled to hold on to existing markets while finding it difficult to attract new consumers especially in younger age groups.

Obviously, this paper does not attempt a comprehensive analysis. For that, a much more rigorous approach to modeling, data and statistical analysis would be required, along with the investigation of other threads of analysis. For example, emergent issues are also related to organizational models as well as management and governance practices, since the described approaches to creative co-creation of services and products go beyond traditional organizational boundaries, raising major questions about how to manage networked individuals and capture the value of their activities. Understanding the important role played by forms of management and control in gaining value from users driven innovations as well as the most appropriate organizational model of these networks must be considered a key aim. Together with the investigation of how these new forms of collaboration may shift traditional balances of power, and governance, for example in the suggestion that sharing rather than hoarding information should be a new axiom and open a promising new approach to knowledge sharing that will enhance the performance of individuals and organizations.

It also remains to be seen to what extent the concepts and processes of “user led innovation” and “user generated product” will impact on areas of non-informational production. At the same time, the impact of user-created content and emergent social network markets on policy has not been properly felt but should not be underestimated. It requires investigation across many areas, including the implications of “user creative participation” for the already precarious employment conditions of creative practitioners and media professionals, who are also currently under-compensated.

Furthermore, since the online social network carries significant

economic value and has become integral to business models, will these processes of creative and affective “work” and immaterial “labour” need to be standardized, specified and priced or may they be left to the market to sort out? Although the immediate regulatory implications do not seem great, it is yet possible that the new production processes will give rise to issues for regulators in the future, particularly as the ownership of co-created content becomes more important.

Another aim of this paper, therefore, is to clearly signal the need for further theoretical and empirical work focusing on practices within the creative industries as well as in other fields where users are to some extent involved in innovation and production processes.

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