Open innovation in creative industries. Part I: Innovation and design

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Abstract. Innovation is a fashionable word about which people have different attitudes. Businessmen think it is important for their businesses’ development, even if there is no common view of what innovation is or what is meant by it. From an economic point of view, we are going through a period in which emerging economies / industries no longer place a strong emphasis on R & D investment. This is due to the fact that innovation processes have become more and more oriented towards diffusion and absorption of knowledge, therefore these economies / industries are increasingly trying to take advantage of the benefits of adoption and international transfer of technology. The open innovation requires both the use of internal and external intentional knowledge resources to develop a technology that will then open even more the horizons of a market or in other words to accelerate internal innovation and expand markets for external use of innovation. With the adoption of open innovation, the organization's borders become permeable and allow for the combination of company resources and external collaborators. The use of innovation, creativity and human capital represents the keystones for the emergence, development, and evolution of creative industries, which are ever increasing industries, playing a huge role in the economies of many countries, at different levels: local, regional or national level, and covering almost everything from crafts, music, visual arts to design, advertising, publishing and media (thirteen sectors in total, according to DCMS). Based on the literature review, the purpose of this work is to present an intro of the open innovation as a technique or process within the organizational context. The use of this type of technique illustrates the company’s capacities to increase their own performance in term of innovation, open access, co-creation, and the use of the crowd as co-designers. The foreseen results are: to understand the emergence of the creative industries within the national and international economy, to highlight the transition process between traditional and creative industries in order to achieve a new innovative path for economic agents, and also to emphasize the power of crowd as an important driver for open innovation implementation.

1. Introduction
Innovation is currently one of the most popular terms when it comes to ways to increase the performance of a business, as it is considered by most economists to be the main determinant of long-term economic performance and prosperity, as well as a key influence on the functioning and performance of individual firms and markets [1].
The well-known and influential chain-linked model of the commercial innovation of Kline & Rosenberg (1986) considers innovation to be a learning process in which knowledge is constantly being developed and modified in an iterative series of feedbacks. According to this view, innovation
takes place in a complex system of interactions between research, the knowledge base, invention, design, production, distribution and marketing, and existing or potential markets [1].

![Figure 1. Innovation system [1].](image)

Based on ideas and creativity, innovation process has become an increasingly open process, thanks to a growing division of labour. A company develops a new idea but does not bring it to the market, yet decides to collaborate (through co-creation, using the crowd as co-designers) or sell the idea to another party, which then sells it. To make the most of this new innovation system, known as open innovation, companies need to open their business models by actively seeking out and exploiting external ideas, and allowing unused internal technologies to move outside, where other firms can unlock their latent economic potential [2].

2. Open innovation as a strategy for business performance’s growth

Open innovation has become a widely discussed phenomenon all over the world, especially since the publication of Henry Chesbrough’s book, Open Innovation. Nowadays, there are many examples of individual companies that have adopted open innovation as a strategy for their business performance growth, like those in creative industries, instead of the traditional one.

The term of open innovation has known many meanings during the time, especially till Chesbrough, after a thorough research, defines open innovation as “the purposive use of inflows and outflows of knowledge to accelerate innovation in one’s own market, and expand the use of internal knowledge in external markets, respectively” [3]. It is about using and combining both internal and external ideas into platforms, architectures and systems.

The American theorist classifies open innovation in two important categories [3]:

- outside-in: refers to opening up a company’s innovation processes to many types of external inputs and contributions, and
- inside-out: requires organizations to allow unused and underutilized ideas to move outside the organizations in order to be used by others that might need them in their businesses and businesses models.

If the first type of open innovation has received the greatest attention, the second type was less explored and consequently less well understood, both in academic research and in industry practice.
The differences between closed innovation and open innovation are presented in figure 2.
In addition to R&D and innovation process, open innovation involves any part of, any function or department of the company at all stages of the innovation process [4].

The three main stages (figure 3) that take place during the open innovation process are each broken down into different activities, involving both inside-out, and outside-in types of open innovation [4]:

- the research: when the best ideas and technologies are searched for;
- the development stage: the ideas are transformed into R&D projects (the ideas can benefit from intellectual property); and,
- the commercialisation stage:
- the commercialisation of products resulted from the idea to product stage inside the firm,
the commercialisation of products resulted from the collaboration and co-creation with external stakeholders (the power of the crowd, the use of the crowd) involved in products’ development at different stages,

• the commercialisation of products developed based on a license purchased from outside the company, etc.

• the purchase of a finished product from outside the company by using co-branding.

3. Classification of open innovation
Since the introduction of the open innovation term, several ways in which a company is committed to using this type of innovation have been identified, whether it is inbound (in which case knowledge flows inside a company), or outbound (in which case knowledge goes beyond the company's borders), as it can be seen in figure 4. It should be noted that there are cases when this knowledge can be non-monetised, so there is no direct financial compensation/reward [5].

![Classification of open innovation](image)

Figure 4. Classification of open innovation [5].

Nowadays, the co-creation and crowdsourcing, classified as inbound non-pecuniary open innovation, are the most trending ones, the first term being more recent than the second one. For this very reason to know the differences between them, it is compulsory for a business in order to make the right decision to use one of these for its performance development.

The use of open innovation has started since companies have realized that traditional business models have stopped giving satisfactory results. This is the moment since they had to become bolder, moving away from the traditional business ways, and embracing innovation, in any of its modes. Researchers have proved that doing that a company has witnessed successful use and implementation of these processes, and the results did not delay to appear [6].

The first open innovation marketplace in the world is InnoCentive, according to their description, with a business model centered on broadcasting science problems, and considering that a problem shared is a problem solved. In practice, InnoCentive is a scientific research and development company that dissemiante difficult scientific problems that client companies, called Seekers, meet, to an online community of Solvers who provide solutions to the challenge, solutions that are financially awarded [7].
Open Innovation                      Crowdsourcing                              Co-creation
- creates an environment where both internal and external actors can actively get involved in the creation of the best solutions for both parties;  
- occurs when a company decides to outsource specific projects to the public, with the purpose to use the crowd’s knowledge and experience, and this way the input comes from a large and unknown group of people;  
- considered an open call to the general public, looking for solutions from the crowd;  
- establishes a challenge to the crowd/everyone that wants to get involved, and waits for their points of view and solutions to that challenge;  
- based on people creating a great idea for a business.
- gives to the decision-making process a democratic feature;  
- allows a courageous approach to solving a problem;  
- builds collaborative communities through the interaction/engagement of broader groups of actors on a mutual issue or challenge;  
- considered an inclusive, social way to solve difficult issues and to improve different processes within a business.  
- based on the relationship between a company and a defined group of stakeholders, most of the time its customers;  
- means working with the end users of a product or a service, exchanging knowledge, experience and resources, to finally deliver a unique experience using the company’s value proposition;  
- represents a way of engaging customers by directly involving them in the products’ development processes.

4. Open innovation in Creative Industries
The 13th sectors belonging to Creative Industries, that covers (almost) all artistic and creative domains, from crafts, music, dance, visual arts to design, architecture, advertising, and publishing, were first classified by Department of Culture, Media, and Sport (UK), back in 1998. According to The Work Foundation, these emerging industries have collectively in common the origin of the expressive value that they commercialize [8], the reason why finding and developing new ways of working in creative industries, in order to increase businesses performance, has become a critical factor [9].

Even though the definition proposed by the UK’s Creative Industries Taskforce in 1998, “Activities which have their origin in individual creativity, skill and talent, and which have the potential for wealth creation through the generation and exploitation of intellectual property” [10], does not include the innovation term, the importance of creativity to the innovation process has known an important appreciation. More than that, creativity (as well as ideas) is defined as the ability imaginatively to invent in a so-called chain link model of innovation [1].

At the moment, processes of origin and marketing are subject to the influence of digital technologies. From the perspective of innovation, new technologies have had a profound impact on how content (product) develops (disintermediation, user involvement, digitization, etc.), on the channels through which they are distributed and consumed (for example, digital music distribution); and the business models of new and existing organizations as a response to a new generation of consumers who do not seem to follow the traditional intellectual property (IP).

Open innovation strategies are nowadays used by businesses in order to overcome the challenges and opportunities that they have to face today. Consequently, the registered success of co-creation, crowdsourcing, crowdfunding as open innovation strategies encourages creative industries to take into consideration creative co-production as a viable option for their development. Unfortunately little is known about open innovation in creative industries, even though it has been adopted by many of creative industries’ sectors, from gastronomy (haute cuisine) to photo-video, or design (especially fashion, or graphic).

Among the open innovation strategies, in order to produce the best products or to offer the best services to their clients, the most used ones are co-creation and crowdsourcing. Besides the outcomes,
once adopted by a company, open innovation plays an important role in a community birth that offers the perfect environment for the realization of more exciting and interesting, entertaining and creative product/information for a company [11].

Creative industries based on digital content (digital creative industries for short) are the ones that use the innovation process the most. Within them, user communities are very involved in developing products and services, playing and providing new ideas, and developing tools for new product uses and environments. A community of users, considered a new place of innovation, is an organizational structure where the company controls the innovation process, even if it relies on user/leader ideas [12]. User communities, whether online or off-line, are generally organized around three main pillars: individual goals and motivations; community governance and leadership; and circulation of information and running recurring events [12]. These communities that arise once with open innovation adoption represent the main source of open innovation success. It’s not about lacking ideas; it’s about listening to the voice of the crowd, moving this way from the traditional business models, and allowing everyone that desire to become part of something important for both parties.

Some of the companies from creative industries that embraced open innovation as a strategy for future business’s development and so far have registered success are:

- **99designs**: considered the world’s largest online graphic design marketplace, the crowdsourcing platform connects anyone who needs great work, from creative people to entrepreneurs, or savvy businesses with talented freelance designers [13]. Designers compete among them in order to offer a great custom design to their clients. So far, with the help of open innovation, the platform has managed to gather 444,306 happy customers and paid 200 million dollars to designers.

- **AwaytoMars**: a fashion platform that has managed to find a way to get closer to all fashion lovers through co-creation as an open innovation strategy. AwaytoMars is about engaging and empowering people in the process of innovation for fashion products realization, in two ways:
  - **by using crowdsourcing**: the innovation work is done online by a creative community;
  - **by using crowdfunding**: to obtain the money for products’ manufacturing from online donations, by anyone interested [14].

- **Barrila Group**: mostly uses co-creation as open innovation strategy by organizing different contests with various themes, mainly for its customers, but allowing everyone to vote for the best ideas. Besides these contests, the company selects a group of people, stakeholders that are invited to participate, in an active way, in new products creation through collaboration between them and Barrilla’s designers. They are not just tasters, but also pro-active persons involved in the development process through all the stages [15]. Some of the contests are financially rewarded, as those from Barrilla Factory platform [16], but there are cases in which the prize consists in the production of the product that wins the contest, according to Mullino Bianco contests’ rules [17].

- **iStock**: since 2000, when iStock created a crowd-sourced stock industry, the platform has become the original source for user-generated stock photos, vectors and illustrations, and video clips. Using iStock, artists all over the world have the chance to make money with their passions by licensing their stock content to different businesses, and individuals also around the world [18].

- **Threadless**: has opened its doors in 2000, in Chicago, to help all art unknowns become art “totally-knowns” [19]. Artist Shops founded on the platform support the artist community in every way possible for them, from the unknown phase till the moment when artists finally come out of the shadow cone, even till when some of them decide to open their own companies. Threadless practices a commission-based award system to motivate artists, also, to help them become known, they are featured in interviews and their names are tweeted to the world.

- **ArtistShare**: was founded in 2001 and since then has been widely recognized as the Internet’s first “fan-funding” platform. Hence, ArtistShare was used as a model for the establishment of many other such platforms, as KickStarter, IndieGoGo, PledgeMusic, and WeAreHere (a Romanian crowdfunding platform). Seen more as a crowdfunding platform, in the beginning, the company provides a strong solid platform and award-winning professional services, especially for the entrepreneurial artists. But from its description one can say that the platform uses not only crowdfunding as an open-innovation
strategy, but also co-creation, as it connects artists with fans not only to share the excitement and beauty of the creative process, or to participate by funding, but also to allow fans to follow the creative process, in order to sometimes get involved in the creation of new artistic works. Thus, the relationship between artists and fans is preserved, no matter the changes in the industry or technology. Being a strong supporter and advocate of artists’ Intellectual property rights, the ArtistShare’s artists always own and control the rights to their creations through a completely transparent business model. As a result of using open innovation strategies, the company’s projects have received many awards, including, since 2003, 30 Grammy nominations and 10 Grammy award wins [20].

5. Conclusion
Open innovation and co-creation involve a higher level of engagement and involvement of the crowd/stakeholders in product and service development than crowdsourcing, but this does not mean that crowdsourcing is less important as an open innovation strategy for company’s future development. Regardless of the strategy chosen, the companies that have embraced open innovation, instead of traditional ways, for their performance’ growth, have registered success. Using the power of the crowd, putting the trust in total strangers, but truly believing that using inflows and outflows of knowledge to accelerate innovation in order to make a company face the present challenges have proved to be the right and safe way.

As a rule, the positive outcomes of open innovation do not delay to be seen if the instrument is used correctly, right from the time of its adoption and use by a business. Even if the main purpose is to increase the company’s performance, many benefits arise from the use of open innovation strategies, one of which is the creation of various online communities, in the first phase, around a particular problem or area of common interest.

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6. References
[1] Bakhshi H, McVittie E and Simmie J 2008, Creating innovation: do the creative industries support innovation in the wider economy, Research Report: February 2008 (London, NESTA) http://www.nesta.org.uk/assets/pdf/creating_innovation_report_NESTA.pdf, Accessed: 02/03/2018
[2] Chesbrough H 2007, Why Companies Should Have Open Business Model (MIT Sloan Management Review), https://sloanreview.mit.edu/article/why-companies-should-have-open-business-models, Accessed: 02/03/2018
[3] Chesbrough H 2003, Open Innovation: The New Imperative for Creating and Profiting from Technology (Cambridge, MA: Harvard Business School Press) 21-63
[4] Podmetina D, Kuttoven A, Albats E and Dabrowska J 2016, Open Innovation Process Innovation Education Reloaded: Nurturing Skills for the Future (Lappeenranta University of Technology) 167
[5] Chesbrough H and Brunswicker S 2013, Managing Open Innovation in Large Firms The Garwood Center for Corporate Innovation at the University of California, Berkeley, in the US and the Fraunhofer Society in Germany) 10
[6] Wazoku, https://www.wazoku.com/open-innovation-vs-crowdsourcing-vs-co-creation/, Accessed: 05/03/2018
[7] Alexa L, Avasilcai S and Bujor A 2017 An Open Innovation Marketplace: The Case of Innocentive Annals of the University of Oradea, Fascicle of Management and Technological Engineering ISSUE #3, December 2017) 1-4
[8] The Work Foundation 2007, *Staying Ahead: the Economic Performance of the UK’s Creative Industries* (London, Department for Culture, Media and Sport) 19

[9] NESTA 2008, *Innovation Index Working Paper* (London, National Endowment for Science, Technology, and Arts) 11

[10] DCMS 2001, *Creative Industries Mapping Document* (London, Department for Culture, Media and Sport) 4

[11] Bujor A and Avasilcai S 2016, Co-creation in Romanian Consumer Goods Industry *Annals of the University of Oradea, Fascicle of Management and Technological Engineering, ISSUE #2, August 2016* 5-8

[12] Parmentier G and Magemantin V 2013, *Orchestrating innovation with user communities in the creative industries*, 3-8, https://halshs.archives-ouvertes.fr/halshs-00848861/document, Accessed: 02/03/2018

[13] 99Designs, https://99designs.com/about, Accessed: 02/03/2018

[14] Bujor A, Avasilcai S and Alexa L 2017, Co-creation in Fashion Industry: The Case of AwaytoMars *Annals of the University of Oradea, Fascicle of Management and Technological Engineering* 3 22-25

[15] Bujor A and Avasilcai S 2014 Co-creation Innovation in Consumer Goods Industry: The Case of Barilla Group (A) *Annals of the University of Oradea, Fascicle of Management and Technological Engineering* 3 1-6

[16] Bujor A and Avasilcai S 2015, Co-creation Innovation in Consumer Goods Industry: The Case of Barilla Group (B) *Annals of the University of Oradea, Fascicle of Management and Technological Engineering* 1 163-168

[17] Bujor A and Avasilcai S 2015 Creativity and innovation by empowering the customer: The case of Mulino Bianco. Part II: The digital customer value added *Modern Technologies in Industrial Engineering (ModTech2015) IOP Conf. Series: Materials Science and Engineering 95 (2015) 012147, doi:10.1088/1757-899X/95/1/012147*

[18] iStock, https://www.istockphoto.com/, Accessed: 08/03/2018

[19] Threadless, https://www.threadless.com/, Accessed: 08/03/2018

[20] artistShare, https://www.artistshare.com/, Accessed: 10/03/2018