Co - creators in innovation ecosystems. Part II: Crowdsprings ‘Crowd in action

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Abstract. Nowadays the customers changed their roles from co–producers to co–creators as a result of technology disclosure, open innovation acknowledgement and the use of innovation as the main driver for organizational growth. This switch to a complex and adaptive ecosystem became an anchor point for the development of new products, especially within value co-creation processes. From this point of view, the emerging industries are the most relevant for key aspects identification in terms of innovative products and processes, and creativity enhancement. This paper aims to highlight the main features of crowdsourcing implementation within these industries. The research methodology is based on the use of case study approach in order to illustrate how creative companies implement crowdsourcing within their activities. Thus, there will be identified the most relevant features and crowdsourcing activities or processes adopted by the company Crowdspring. A detailed analysis of the platform will reveal how company interacts with their clients or other relevant stakeholders. Also, there will be highlighted the importance of the power of crowd within product development process, starting from the ideation stage. The analysis of creative industries platforms, such as Crowdspring, will reveal the main process of ideas gathering, development and implementation through creative tasks.

1. Introduction
Internet–of–Things represents the most relevant approach to the digitalization of organizational processes. As it was shown in the first part of the research, digitalization and the use of new technology developments represent the main drivers for innovation ecosystems arising within emerging industries. Social engagement acts as motivational factor within this context. The transition from value co–producers (in manufacturing) to value co–creators (in business ecosystems) and value co–innovators (in innovation ecosystems) encourages social involvement into product design and development process.

The case of Creative Industries is especially preferred in terms of revealing and using creative social potential. By following the main goal from the first part of the research, in this paper there will be treated in depth the most relevant aspects within Creative Industry Innovation Ecosystem. From this point of view there will be analysed the key aspects such as: the digitalization, the co–creators versus the co–innovators and the crowdsourcing digital instruments.
2. Creative industries: open innovation and crowdsourcing instruments

The main framework for creative industries emergence was proposed by the European Commission and it was further developed by providing the main domains which are defining them. From this point of view creative industries comprise the following domains: advertising, architecture, crafts, design, interactive software, music and arts, television and filmography, as it was presented by Bujor and Avasilcai based on the information found on the Department of Culture, Media and Sports from United Kingdom [1]. The key aspects which are highlighted by the creative industries are the flow of creative resources (artistic and scientific creativity) and the use of new technology [2], [3], which are relevant for the exploration of emerging opportunities [4]. The creative nature of creative industries increased the companies’ awareness about the necessity to broaden their vision by using open innovation techniques.

At first, open innovation was seen as opposite to the closed one. Companies had to rely on internal and external capabilities and resources in order to produce innovative products [5]. However, open innovation became a result of a common effort as the need for collaboration increased and new structures arose (such as business ecosystems, alliances, partnerships, value networks) [5]. Lorenzen specifies that such industries as advertising, design and architecture are chasing continuously to create strong relationships with their customers [6]. Vanheverbeke, Roijakkers, Lorenz and Chesbrough support the idea that those ties should rely on networks analysis in terms of structure and management (figure 1).

![Figure 1. Network context for customers’ engagement](image)

There should be pointed out the major importance of the sources of innovation: internal or external technology development [8]. Stolwijk, Vanhaverbeke, Ortt, Pieters, den Hartigh and van Beers pointed that both, internal and external technology sourcing, are relevant for companies’ performance and respond to the need of specific knowledge base creation [8]. From this point of view the information technology instruments are closely related to creative industries as their application responds to the development of cultural creativity [9]. Battistella and Nonino stated that companies in order to innovate should use virtual instruments, such as online platforms [10]. The authors suggested that crowdsourcing represents a specific open type form of collaboration. Also, they identified that an open innovation process is comprised from: foresight (the activity of anticipating), creativity (ideas generation) and design (building the product) [10]. The key aspect of this process is represented by social involvement, each step of open innovation process involving end users [10]. From this point of view crowdsourcing can provide valuable insights in terms of specific features, such as:

- The use of the crowd rather than professionals – the main difference is about the experience and expertise which both categories possessed. Despite the experience of the professional agents, in crowdsourcing the main interest is concentrated on using the community especially in ideas generation stage [11]. Unlike the professionals, the community provide two types of information: the needs and the solutions.
- Self–selection – depends on the type of proposed tasks: individual or collective, and represents the degree of solvers readiness to participate in crowdsourcing activities [11], [12], [13]
• Problem solving – it depends on the main characteristics of the crowd (the expertise and the extent of self-selection), of the problem source (depends on the main actor who acts as a source of information) and the solutions [12]
• Task design – designing the tasks according to the type of potential solvers [14]
• Crowdsourcing activities (type of tasks) – design of complex tasks, seeks an array of solutions based on specific solvers capabilities (selective crowdsourcing), routine tasks (simple and cheap – integrative crowdsourcing), creative tasks (innovative solution proposition – creative crowdsourcing) [15], [16].

3. Crowdsourcing crowd: from co–producers to co–innovators
Crowdsourcing marketplace implies the use of virtual crowd’s wisdom especially in ideas generation and designing tasks [17]. What differentiates the marketplace from other relevant crowdsourcing instruments is the virtual community motivation in terms of reward, trust building and moderated effort. According to Sun, Wang, Yin and Che there is a linear relation between the complexity of the tasks and the solvers’ effort [17]. The scientific literature in crowdsourcing domain suggests the use of community, especially a virtual one. From this point of view, it is important to define the main transition from co–producers to co–innovators.

As it was pointed by Stolwijk, Vanhaverbeke, Ortt, Pieters, den Hartigh and van Beers both internal and external innovations are relevant for organizational development [8]. Thus, there should be pointed the main transition of innovation from closed type to network innovation. From this point of view, Hoyer suggested three main stages of innovation transition as presented in figure 2.

![Figure 2. The innovation transition and the development context [18].](image)

3.1. The transition from co–producers to co–innovators
In order to understand the transition from co–producers to co–innovators it is important to underline that this change of behaviour depends on the created value and the innovation management approach. From this point of view, the source and type of the innovation should be linked to the actors within the innovation creation process and evolution. Thus, there can be identified following behaviours:
• Value co–producers – are relevant in the case of supply chains. The main approach to supply chain analysis comprises aspects as supply, production and client [19]. Although clients were included in value creation process, the main focus remains on cost efficiency within supply activities [21]. By extending the approach to the value chains, there was observed a change in terms of resource flow direction: from clients to producers [20], [21]. The need for innovative products became the main driver for transition to value chains, where clients and customers’ engagement into development process was perceived as a value generator mechanism [21]. This fact marked the first shift from supply chain to value chains.
• Value co–creators – are relevant in case of collaborative networks, value networks. The key aspects to be explored in this case are linked to new technology advancement and customers or clients’ involvement [21]. According to Christensen and Rosenbloom co–creators within collaborative networks are defined by collaborative companies whose main goal is to develop new products and/or services [21], [22]
Value co-innovators or creative co-producers – it is about shifting the co-creation value, especially innovation, from network to innovation ecosystems (IE). As the main goal of IEs is to create, to advance and to promote innovation, it became more relevant the use of social involvement as the source of scientific knowledge and innovation [23]. However, in case of creative industries co-innovators are called creative co-producers. Their main objective is to adopt an arbitrary position and facilitate the communications and linkages between solvers communities and businesses [24].

3.2. What is a crowdsourcing marketplace?
Relevant to the present research is the understanding of the concept of crowdsourcing marketplace. It was mentioned before that crowdsourcing is about using the power of communities in innovation processes, especially virtual ones. The essence of the co-creation processes is the locus of value: the shift from resources to the experiences, from product to the interactions with the communities of customers. Social engagement into virtual networks is motivated in terms of building customer-company relations [25] or reward and trust [17].

The main goal of a crowdsourcing marketplace is to connect potential seekers with relevant solvers in terms of specific tasks or problems [25]. Ge, Caverlee and Lee distinguished two types of marketplaces, as it shown in figure 3.

In order to facilitate these type of interactions, companies usually appeal to the creation of specific virtual platforms, as it is the case of Crowdspring. Collaborative communities and contests supporting crowdsourcing activities provide interesting insights such as [27]:

- Performing problems or tasks solving
- Combines skills and capabilities relevant for creative projects
- Provide reward for problem or tasks solvers
- Use different combinations of knowledge and information
- The crowd’s diversity enables tasks modularization.

**Figure 3. Type of crowdsourcing marketplaces [26].**

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4. Case study: Crowdspring’s marketplace and co-innovation process
In order to understand how social engagement is promoted within a crowdsourcing marketplace, there will be conducted a research based on case study approach of Crowdspring’s crowdsourcing activities.

4.1. Crowdspring: company overview
Established in 2008, Crowdspring represents one of the successful stories in terms of crowdsourcing implementation. The marketplace gained popularity by using graphic design and logo as main product categories [28]. As Bari, Johnston and Tsai stated, within this type of marketplace, software developers can be seen as graphic designers [28]. The main difference between Crowdspring and other
crowdsourcing marketplaces is that they act as an intermediary, adopt an arbitrary role in establishing the relations between seekers (their clients) and problem solvers (the community of designers) [29].

The values promoted by Crowdspring’s team are closely linked to creativity. According to their statement they believe creativity has no borders and should be protected by intellectual property policies [30]. The company treats each project as a united community and promotes social responsibility by developing and implementing free of charge designs [30].

4.2. Crowdspring’s marketplace

The main motivation behind the creation of crowdsourcing marketplace for the company was to identify the need for intermediation between their clients and designers’ community. From this point of view Crowdspring’s marketplace responds to the need for creating a digital platform [31]. Their platform provides designs at affordable charges which are generated by the designer’ community – the crowd. Thus, it is relevant to understand the motivation for stakeholders’ participation, as it is presented in figure 4.

![Figure 4](image_url)

**Figure 4.** Seekers and solvers motivation behind using the Crowdspring marketplace [32], [33].

4.3. The marketplace structure

The Crowdspring’s marketplace comprises five main sections: categories, explore, how it works, testimonials and pricing. Hereafter, there will be provided a short description of the sections in terms of information provided and specific implemented processes.

4.3.1. Categories

Includes the categories of the specific products and services to be chosen. As the company concentrates its efforts in design direction, the main products are represented by graphical design of logos, web and mobile design, art and illustration, book and magazine covers. As the company addresses to Business-to-Business clients, they also provide branding and naming, advertising, product and packages design, and clothing and merchandise [34].
4.3.2. Explore
At this section there can be found the designers’ accounts. In order to identify and find a specific designer, Crowdspring implemented a quick search engine according to specific sorting criteria: project activity, price, deadline and number of entries (figure 5).

![Sorting criteria](image)

Figure 5. Sorting criteria for designers' search [35].

Crowdspring is using also specific filters in order to provide the client with the best experience in finding a designer, such as: category (refers to the provided product and/or service), industry, status (open calls, completed projects, less than 24 – 48 – 72 hours remaining), type of the pricing package (premium, elite, silver and gold), the type of award (featured or assured) and the type of galleries (public or private). The main difference between private and public galleries is that private ones are closed for other viewers, approval-based view or participation [36]. Also, in this type of projects designers must agree to undisclosed policy imposed by the client or project. From this point of view the designer will be able to see just his/her own entries or use his/her own portfolio. Basically, in private galleries there is used a blind review process [36]. Each project comprises two main sections (brief and entries). The briefing section includes a statistic summary (number of entries, number of designers, feedback and award), information about the client and/or businesses and the target audience (industry), information about the concept (preferred style, things to avoid, colours, additional information), and the required resources only if it is necessary [37]. In terms of increasing reputation, each designer and project gets a feedback score. According to the company, this score reflects the main mechanism in reputation and image building. Basically, Crowdspring tries to increase designers’ reputation and to optimise the clients’ projects success [38].

4.3.3. Co–design processes within Crowdspring’ marketplace
In order to respond to the main goals of the crowdsourcing marketplace, the process of proposing projects and delivering an interesting outcome is realised within 7 days. At this section usually there are presented the main steps of the project realisation process, as it is presented in figure 6.

The clients gain the possibility to choose the specific pricing package at the start of the project’s realisation. However, they can propose the project’s theme only after the first step. At the second step, the project’s briefing, there is implemented a specific questionnaire which comprises clear and precise information. The main goal is to obtain as much as possible information regarding the project: theme, the main need for the design, colours, and other relevant data necessary for designers’ future work. The third step implies the designers’ competition. The project owner will receive designs for review. This is the step where the marketplace will act as an intermediary, as it will facilitate the feedback and communication between the community of designers and project owner. The last steps are referring to choosing the winning design and the last decision of the client: to accept and approve it or to reject it [39].
4.3.4. Testimonials and pricing
These sections comprise the most interesting and successful stories and the pricing packages. It is relevant to mention that each category of deliverables requires different pricing packages. The testimonials comprise the most relevant features in terms of quality and short time of the deliverables, the diversity of designers (a wide range from unexperienced to professionals), the creative ideas submitted, and other relevant aspects [40], [41].

4.4. Crowdspring's marketplace resources
In order for designers to stay up to date with current trends in the design domain, the marketplace includes also a special section represented by the blog. In this blog the Crowdspring is posting the most interesting articles referring to branding, how illustrations are relevant to small businesses development, the tricks to retain employers, new marketing tools, the guidelines for young entrepreneurs, information about the current trends in design, book writing, web design, logo creation, and other relevant information [42].

5. Discussion and conclusions
In order to illustrate how the crowd can participate into the product development process there were taken into consideration two point of views:
- The context view – by illustrating how an innovation ecosystem is formed and who participates within this context
- The marketplace view – by providing description of marketplace features, crowdsourcing modules and structure.

From this point of view there is relevant to understand that each participant represents a co–innovator, as the main goal of an innovation ecosystem is to create, promote and deliver innovation. The Creative Industries were chosen as a primary unit of analysis especially because they provide, explore and
exploit creative potential. Among these, the focus was on design field. Open innovation represents at this point the main trigger for innovation ecosystem creation and developing through crowdsourcing techniques.

To illustrate how companies are implementing and/or using crowdsourcing techniques, it was chosen a case study approach and it was presented Crowdspring’s marketplace in terms of structure and the main implemented processes. It was shown that this marketplace acts as an intermediary between businesses and the designers’ community. The main deliverables are represented by innovative and creative products in terms of graphic designs. The creative potential enhancement is promoted through designers’ contests, where each creative solver can participate. The most important aspect is the motivation of the designers in terms of individual creativity engagement, rewards and building the reputation and career opportunities.

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