НЕОБХОДИМОСТТА ОТ УПРАВЛЕНИЕ НА КРАУДСОРСИНГА И ИНОВАЦИОННАТА ДЕЙНОСТ
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CROWDSOURCING AND INNOVATION ACTIVITY ARE IMPORTANT FOR MANAGEMENT
Emanuela Esmerova [44]

Abstract

From an overview of the different types of crowdsourcing, our work has highlighted those where the crowd is used to obtain creative ideas (crowdsourcing creative tasks) or to obtain solutions to problems (crowdsourcing complex tasks). So far, there is little knowledge about the characteristics of the process used to aggregate ideas from the crowd. Therefore, this research has examined the characteristics of processes activity for the two types of crowdsourcing.

A qualitative study based on a semantic analysis allowed us to confirm the characteristics of the innovation process of crowdsourcing that contribute to the achievement of complex tasks and creative tasks.

Keywords: *Crowdsourcing, Innovation, Crowdsourcing process, interaction, feedback, the crowd, creative ideas, complex tasks.*
JEL Codes: *M10, O31, O35*

Introduction

Innovation has been a phenomenon for centuries which has for sole purpose to make human beings live more comfortably. In effect the implementation of innovations has been of paramount importance not only for the well-being, but sometimes the survival of individuals, entities and in some cases even for all civilizations and nations. Also the need

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to innovate is today one of the priorities of the company (Barsch, Capozzi and Mendonca, 2007; Andrew, Manget, Michael Taylor and Zablit, 2010). An innovation is generally described as a practice or a new object (Rogers, 2003). Innovation has been understood as «an implementation of a new product or the dramatically improved (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations "(OECD, Eurostat 2005). After the development of the concepts of innovation, these are the models of the innovation process that have emerged (for example Carlsson et al, 2002; Godin, 2006). All models are converging toward the idea that innovation management activities can be more or less correctly be described and viewed in process models. Some models describe the life cycle of the innovation by the S-shape and logistic function, which is composed of three distinct phases: Emergence, growth and maturity (Howard and Guile, 1992).

1. The process of innovation activity

Literature describes the process of innovation as a linear process. Such a simple representation of the innovation process can be found in the first books. Joanna as that of Cooper who asserts that the management process of innovation "begins with an idea, developed by the technical activities and marketing which is done within departments in which decisions are taken and among which information is circulating " (Cooper, 1979). In the second definition, it is considered the idea of new product as a given, then that one of the main difficulties encountered door on the passage of the invention to innovation, and therefore on the generation of this idea (new product). In Marquis" model (Marquis, 1988), the process begins with the initial recognition of the technical feasibility and the assessment of the potential market which requires, at its opinion, the formulation of idea, the resolution of problems (research, experimentation and calculation; information easily available), solution (solution by invention; solution through the adoption), development (bugs and scales) and of the use and dissemination (implementation and use).

Kline -Rosenberg (Kline and Rosenberg, 1986) has developed a model that focuses on the feedbacks, on the ski lifts of phases located downstream to the upstream phases, on the interactivity of the research and of the different phases of the innovation process. In this model, the commencement of the activity is not a function of the final state of the previous activity. Nevertheless, it retains the phase of decision at the end of each activity. Compared to the sequential structure (linear model), this structure allows you to reduce the duration of the innovation process, but increased, according to some authors (Will Have ogy, 1991), the financial risks , because the evaluation of a step takes place while the next step is already started.

In addition, these definitions do not allow apprehending the "dynamic" of the process, that is to say, the rules of occurrence of the activities constituting the process,

each of which authors spoke in its definition. While on this point, and more precisely on the level of linearity of the process, that most of the authors based their modeling.In effect this limit has led several researchers to develop other process models. Indeed Rothwell has submitted five generations of models of innovations. in the picture he said that innovation is a process (The Scenario and the relationshipInteraction/Work) where there are several actors, who demand a high level of integrations both at the international level that intra company and which is increasingly facilitated by the network on the basis of TI (technology information).

Picture 1- **CHART A**
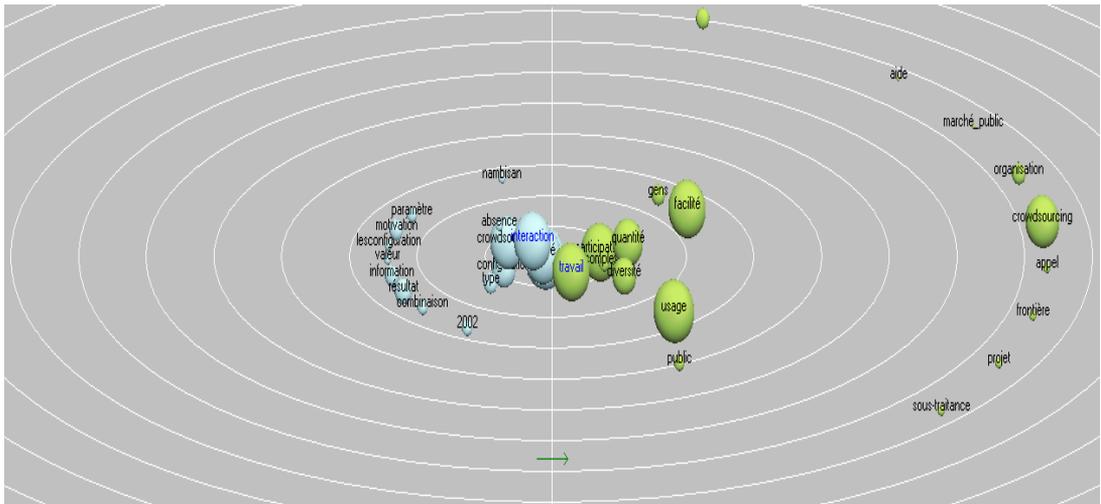
The Scenario and the relationship Interaction/Work

The main interest of these different approaches to the modeling lies in the fact that they can allow to situate, to understand and optimize the decision-making in relation to the process. We have to see for example that logic of sequential type imposes constraints of time on decision-making, but, on the contrary, it allows a reduction of the risk. The parallel logic as to it ensures a better completeness in the constraints taken into account, but implies a system of multicriteria decision. We come closer to the last approach of modeling, in considering that a large part of the problem of the control of the management innovation process is to ensure a perfect match between a given state of the technological system (perceived through the product model) and the states of the information system and the system of corresponding decision (collected through process models). However these models will change each time a new innovation project is started. We can also argue that there is no real innovation project, but rather there are overlaps in the activities of different form and intensity which form the basis for the next

generation of innovation. The importance of innovation and innovative activities for the favorable functioning of management organizations in particular and the economy in general is extremely high The importance of innovation and innovative activities for the favorablefunctioning of organizations in particular and the economy in general is extremely high (Georgiev, I., Tcv. Tcvetanov, D. Blagoev. 2013).

Innovations are one of the most important factors necessary to ensure the sustainable development of business organizations and the economy as a whole. Inthis respect, they are identified as the key driver of social development and adecisive factor in human progress. (Ratka.Ivanova,2017), Innovation-modern means of achieving competitiveness ‚Journal of Sience, Економија и Управление (Economics and Menagment)God XIII br, 1/2017 година, Економски факултет-Благоевград, usuue #1 Retrievet 1January/2017, from:**http://ep.swu.bg/images/pdfarticles/2017/ INNOVATION – MODERN MEANS OF ACHIEVING COMPETITIVENESS. Pdf, p. 145**. Orientation of the business organizations tocontinuous search for new ways and means of satisfying consumer preferences is aprerequisite for increasing their competitiveness on the basis of the development of research, development and innovation.(Ratka. Ivanova, 2017), Innovation-modern means of achieving competitiveness ‚Journal of Sience, Економија и Управление (Economics and Menagment)God XIII br, 1/2017 година, Економски факултет-Благоевград, usuue #1 Retrievet 1January/2017,from: **http://ep.swu.bg/images/pdfarticles/2017/ INNOVATION – MODERN MEANS OF ACHIEVING COMPETITIVENESS. Pdf, p. 145).**

2. The foundation of Crowdsourcing

The word Crowdsourcing is constructed from the English word "Crowd" which means "the crowd" and a contraction of the word "Outsourcing" that can be translated as "outsourcing". Thus, "Crowdsourcing" can be translated by "outsourcing to the crowd", by convenience and because it is between in the current language we use the term Crowdsourcing in this text (Schenk, 2009). It is a recent concept, its genesis is itself characteristic of the phenomenon of web 2.0: it is in effect during a discussion on an internet Forum that the term appears for the first time, created by an anonymous Internet user. But it is the article, which appeared in the famous online log Wired, written by Jeff Howe and Mark Robinson who popularized this new term.

For Lebraty (2007) the Crowdsourcing is only a new mode of outsourcing: "The Crowdsourcing means the outsourcing by a organization, via a web site, of an activity of a large number of individuals whose identity is the more often anonymous".

Traditionally the word "outsourcing" means creating value from outside the organization. Outsourcing has become a mode of governance of major activities the Crowdsourcing of an organization for management (Lebraty, 2007). It is an agreement

which stipulates that an organization makes perform one part of the activities which it provides the treatment by another organization Arnold (2000).In a paper published by Ari de Geus in Harvard Business Reviewtitled "Planning as Learning", he confirmed on a basic and a new idea in his timethat is he only competitive advantage that the company enjoys is its leaders' ability to learn faster than its competitors , (Naser A. Aboyassin, Najm A. Najm, Mohammad S. Alhmeidiyeen13 2017, Toward a model for managing and measuring intangibles, , Journal of Sience, Економија и Управление (Economics and Menagment)God XIII br, 1/2017 година, Економски факултет- Благоевград, usuue #1 Retrievet 1January/2017,**TOWARD A MODEL FOR MANAGING AND MEASURINGINTANGIBLES, Pdf, p.96).**

The Crowdsourcing is a new modality of management activities by an organization. This modality will develop alongside the traditional approaches (internalisation and externalisation classic). The Crowdsourcing is inscribed in search for more flexibility: the flexibility applies to both the employees who risk the fragmentation of their activity in a multitude of microtâches the leading then to receive several micro-incoms. Thus, an individual wishing to work in this framework will always have a broad portfolio of tasks so as to achieve a satisfactory salary. The flexibility concerned then the organizations that have used the Crowdsourcing. In effect, it appears easier for it to break a contract or to find new suppliers that bind to a partner well identified (Lebraty; 2007).

The opinions concerning the potential effects the Crowdsourcing are divergent. Thus, for some the Crowdsourcing appears as a phenomenon having positive implications. However, others (mostly of non-Internet users identified) believe that it is a negative phenomenon which tends to strengthen the uncertainty (the risk of loss of skills for organizations and even for society as a whole) and the precarious. Orientation of the business organizations tocontinuous search for new ways and means of satisfying consumer preferences is aprerequisite for increasing their competitiveness on the basis of the development of research, development and innovation.(Varamezov, L. 2013). The generation of new ideas is essential to increase the competitive advantage of business organizations in terms of constant search for ways and means of improvement. (Ratka. Ivanova, 2017), Innovation-modern means of achieving competitiveness,Journal of Sience, Економија и Управление (Economics and Menagment)God XIII br, 1/2017 година, Економски факултет- Благоевград, usuue #1 Retrievet 1January/2017, form: **http://ep.swu.bg/images/pdfarticles/2017/ INNOVATION – MODERN MEANS OF ACHIEVING COMPETITIVENESS. Pdf, p. 141**. New ideas are the basis of innovation and innovative activity of enterprises. The fast pace,at which consumer requirements change, requires investing in innovative solutions toensure the continued existence and development of business organizations. Namely *innovations are the main driving force of the market economy.(* Ratka. Ivanova, 2017), Innovation-modern means of achieving competitiveness ,Journal of Sience, Економија и Управление (Economics

and Menagment)God XIII br, 1/2017 година, Економски факултет- Благоевград, usuue #1 Retrievet 1January/2017, form: **http://ep.swu.bg/images/pdfarticles/2017/ INNOVATION – MODERN MEANS OF ACHIEVING COMPETITIVENESS. Pdf, p. 141).**

In synthesis of the different comments, Lebraty (2007) stressed the convergence regarding the nature of the phenomenon of the Crowdsourcing, and a divergence of interpretation as to its effects. Furthermore, these interpretations appear similar to those set out in the major waves of outsourcing of years 80 (Galbraith and Kay, 1986).We note that relatively little of the scientific literature that discusses the process of the Crowdsourcing. Most of the process variables in this research are based on the knowledge of literature on the open source innovation. This type of innovation is suspected of having the greatest similarity with the Crowdsourcing (Schenk and Guittard, 2009). In this literature, the variables of following processes have been identified: the information and interaction. Those business organizations for management that do not have thepotential to independently develop scientific and technical research may usevarious forms of technology transfer, which is divided into commercial and noncommercial (Georgiev et al., 2013, p. 130; Panteleeva, 2013, p. 226; Varamezov,2013, p. 199).

3. Types of Crowdsourcing

Literature on the Crowdsourcing distinguishes several practices of Crowdsourcing. The typologies exercise the most used Crowdsourcing are: the original typology by Howe (2008), the one developed by Kleeman, Voss and Reider (2008), Schenk and Guittard (2009) and Brabham (2010) and the typology of the site "Crowdsourcing.org", an authority on the Crowdsourcing founded by professionals in the field, is included (Crowdsourcing.org, 2011).

The typologies have lots of similarities. They are based on the nature of the practice of the initiative of Crowdsourcing. The Crowdsourcing can be used for many purposes such as marketing, outsourcing or the resolution of problems. Thus, the difference between the typologies exercise lies in the absence of practices for certain typologies. However, after several comparisons of typologies and their practices, it may be pointed out that some authors like Howe (2008), Schenk and Guittard (2009), Brabham (2010) Kleeman et al. (2008) and Crowdsourcing.org (2011) propose five practices or groups (see table 3). The first group of typologies is based on the practices aimed to obtain solutions to the problems posed. The second group seeks to get creative ideas from the crowd. The third group seeks to obtain the opinion of the crowd, for example the vote by the crowd (opinion poll). The fourth group is based on the outsourcing of tasks to the crowd as the translation tasks (sub-contracting). Finally, there

is also a use of the Crowdsourcing for the purpose of raising funds for the crowd (collection of funds).

By against other authors such as Schenk and Guittard (2009) have developed three types of Crowdsourcing: Crowdsourcing complex tasks, Crowdsourcing creative tasks and Crowdsourcing routine tasks. However, as explained previously in our study we will consider two types of Crowdsourcing to know the Crowdsourcing complex tasks as well as the Crowdsourcing creative tasks.

The Crowdsourcing of the complex tasks: is described as the ability of the crowd to find solutions to the problems (Schenk and Guittard, 2009), this is in line with what Howe (2008) calls the access to the "wisdom of the crowd" to find solutions to a defined problem and in accordance with the typology of Kleeman et al. (2008) and Brabham (2010). Brabham (2010) also compares this practice to the fact of finding a needle in a haystack. There may be several solutions to the problem (Schenk and Guittard, 2009). The Crowdsourcing of the creative tasks: Schenk and Guittard (2009) describe the Crowdsourcing of the creative tasks as a practice in which the crowd offers a certain novelty and creativity. This is in line with the typologies of Brabham (2010), Howe (2008) and Crowdsourcing.org (2011).

The Crowdsourcing.org (2011) adds that the crowd has full of creative minds to develop the design and increases the originality. Brabham (2010) stipulates that in the crowd there are also wrong answers, however, the good ones are the ones supported by the market. The development of innovative activity is associated with the smart growth of economies, which has drawn attention for recent years (Georgiev, I., Tcv. Tcvetanov. 1997).The organizational learning: it is one knowledge management fields in sharingexperiences, innovation publishing in the whole company, and it is also a sourcefor competitive advantage especially when it is more intensive and more rapid thancompetitors. (Naser A. Aboyassin, Najm A. Najm, Mohammad S. Alhmeidiyeen13 2017), Toward a model for managing and measuring intangibles, Journal of Sience, Економија и Управление (Economics and Menagment)God XIII br, 1/2017 година, Економски факултет- Благоевград, usuue #1 Retrievet 1January/2017,**TOWARD A MODEL FOR MANAGING AND MEASURING INTANGIBLES, Pdf, p.95**).

Conclusion

The goal of this article was to provide new insights and to better define the concept of process of Crowdsourcing (stains creative and complex tasks). After achieving this goal and answer the research question we have chosen to perform a semantic analysis on a sample of 23 motivated volunteers (including thirteen women) and interested in the web, the E-management and the practice and the management of virtual communities. On the basis of literature, a theoretical framework has been constructed and questions for a

list of topics were made. By means of a qualitative analysis, the dominant configurations have been found. The data of the interviews have provided explanations for the configurations encountered. This conclusion gives an answer to the research question posed at the beginning of this article: Does the concept of Crowdsourcing constitute a process of innovation for the execution of the creative tasks and complex tasks? The answer to this question is given by the conclusion of the results for the three scenarios on the competence, learning (feedback), and the interaction in the process of Crowdsourcing. Thus, based on our study and by a deductive approach, this concept based on the crowd can be assumed that the Crowdsourcing a process innovation management which is not neither of the first nor of the second generation. This process of innovation has variables which have the same effect on the Crowdsourcing complex tasks and Crowdsourcing creative tasks.

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