Application of Crowdsourcing in Marketing

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Abstract
Nowadays, a growing number of companies is focusing on cost optimisation and lowering labour expenses. In this climate, companies are turning to talented and educated individuals who are ready to participate in their projects. Whether it is for profit or non-profit purposes, or it is done by using online technologies or without them, this new business model is called crowdsourcing. This term is used for describing outsourcing process that focuses on the power of people for solving different types of tasks. The aim of this paper is to define crowdsourcing and its difference from similar models such as open innovation, user innovation, open source and outsourcing. The authors put focus on the application of crowdsourcing in marketing, particularly in market research, product development and promotion, as well as on examples of successful practice in these areas. Finally, the conclusions regarding further use of this model will be presented by taking a closer look at its advantages and limitations.

Key words: crowdsourcing, business model, marketing, market research, product development, promotion

1. Introduction
The introduction of Web 2.0, opposite to the traditional Internet has marked the beginning of new business era that companies are currently adapting to. Le Deuff (2007) and O’Reilly (2005) describe Web 2.0 as “the utilisation dimension and not to the physical network that supports it”, which tends to encourage sharing between users and collaboration that opens many new options for everyday business. By using Web 2.0, a company can switch from outsourcing activities to other countries or firms specialised in certain field to engaging individuals in its everyday activities (Nešković et. al., 2012). This model enables companies to gather ideas and suggestions regardless of the person’s location. Crowdsourcing is one model of using people’s ideas for improving everyday business, as well as gathering ideas for future projects of the company.
The concept of crowdsourcing has been present for a while, but the first use of the term was in an article published in Wired magazine in 2006 and written by Jeff Howe and Marc Robinson. Since 2006 the word “crowdsourcing” has been mentioned many times in the growing Internet community, in magazines and books. The term “crowdsourcing” has been discussed by Dahlander and Magnusson, (2008), and Agerfalk and Fitzgerald, (2008) and it has only been mentioned as an example of Web 2.0 by Tapscott and William (2007) and Albors et al. (2008). “The power of the crowd” (Howe, 2006) is related to many different versions of the contribution that a crowd makes, as well as different areas of use. Therefore, it is very important to distinguish crowdsourcing from similar models of using the contribution of a crowd. Most commonly, the terms mistaken for crowdsourcing are open innovation, user innovation, open source and outsourcing.

Open innovation and user innovation start from the same point as crowdsourcing – in the world of distributed knowledge, companies should not rely on their own research and development, but they should decide to gather some of their ideas and R&D functions from other companies and individuals. Open innovation is related to cooperation between firms, and user innovation is focusing on cooperation between product users who are solving issues with final products. Both open and user innovation are focusing on innovations and originality, while crowdsourcing is not restricted to innovations and often provides solutions that are not innovative at all. Open source can be explained as the application of crowdsourcing in IT industry. Howe (2008) describes crowdsourcing source as “an application of the open source principles to other industries”. Brabham (2008) adds to that by saying that “it is obvious that crowdsourcing is not restricted to software development”. While it is obvious that there are undisputable similarities in the business model of open source and crowdsourcing, crowdsourcing is a wider area and has a wider application than solely IT industry. The basic process of crowdsourcing and outsourcing is the same, with a client company that is seeking help from another subject. The basic difference between these two is that outsourcing is mainly focused on getting support and help from institutions, while crowdsourcing focuses on getting ideas from individuals.

2. Definition of crowdsourcing

Crowdsourcing is composed of two words: crowd and outsourcing and basically it means outsourcing to the crowd. It was first used on an Internet forum, but it was widely popularised by Howe and Robinson after
they published an article in Wired magazine. Howe (2008) gives definition of crowdsourcing: “Simply defined, crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call.” He adds that “the crucial prerequisite is the use of the open call format and the wide network of potential labourers”. In a book he recently published and in posts on his blog (2008 and 2009), Howe gives two more precise definitions of crowdsourcing – The White Paper Version, and The Soundbyte Version. In The White Paper Version he describes crowdsourcing as “the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call”, while The Soundbyte Version describes crowdsourcing as “the application of Open Source principles to fields outside of software”.

This is the basic process of crowdsourcing: First of all, a company identifies processes and activities that need to be improved by outsourcing them. Instead of turning to another company for help, or trying to complete these actions within a company, they are “released to a crowd of outsiders who are invited to perform the task on the firm’s behalf for a stipulated fee” (Whitla, 2009). It can be done in two ways: by limiting the crowd to a group of people with qualifications of previous experience in the area, or by issuing an open call to all interested parties. These two options can be combined by limiting the call to the people from the area of expertise or to people who are most likely to have skills for successfully completing the task. Whitla (2009) notices that “sometimes a single task can be completed by many different users and each can be paid if they successfully complete the task”. This sentence sums up the idea of crowdsourcing – enabling talented individuals to get paid for the jobs they do in their own dynamic and by using available resources. It also explains why crowdsourcing is becoming widely used: companies are able to get the solutions they need by paying less and being able to choose who they are hiring for the job.

Whitla (2009) describes the crowdsourcing process by using an example of Amazon’s Mechanical Turk. Amazon’s Turk was named after Hungarian nobleman Wolfgang von Kemplein who invented “the Turk” - the first machine capable of beating human at a chess game. Mechanical Turk is a platform that provides simple tasks - HIT’s (human intelligence tasks) to individuals. These tasks require very little time and effort to complete, but they cannot be done by computers. Therefore, individuals are solving them and getting paid from couple of cents up to a US dollar, depending on their effort. Whitla (2009) uses HIT’s to describe the process of crowdsourcing.
The basic model of crowdsourcing is the same and it is shown in Figure 1. There are alterations to this model depending on the industry and the type of tasks, but the idea of paying the crowd to complete certain processes remains as previously explained.

3. Application of crowdsourcing

A call for crowdsourcing can be published in form of an open call or it can be limited to a certain number of people, as was previously mentioned. The question that arises is: What types of tasks can be crowdsourced? There are three types of tasks that can be outsourced to a crowd: routine tasks, complex tasks and creative tasks (Schenk and Guittard (2009)).

Routine tasks are a type of tasks that can be done very quickly and easily while requiring minimum time, such as data collection or marking text and images. This type of effort is usually awarded by micropayments. A
perfect example of this routine are ReCaptcha, Open Street Map (OSM) and TxtEagle. ReCaptcha is widely used by websites for text recognition, when it is necessary to distinguish virtual robots from humans. OSM is used for collecting geographical data for creating a world map. Finally, TxtEagle helps mobile phone users to complete tasks by sending a text message. Routine tasks are, in most cases, published as an open call, given that almost anyone can participate in solving them.

Complex tasks that require more skills and knowledge are often limited to a closed group of people. This type of tasks can be solved in both profit and non-profit sector, and the companies pay more due to the effort required to complete the task successfully.

Finally, the third group of tasks are creative tasks. This is the earliest type of crowdsourcing which started long before the Internet, in the form of designer contests and competitions.

Companies usually crowdsource creative tasks with limitations only in the form of the solution that is required. This way the original and creative solutions are provided to the company. Monetary compensation for these tasks depends on the type of task, but usually these tasks are paid the most, varying from couple of hundred to couple of thousand US dollars.

4. Application of crowdsourcing in marketing activities

Even though there are many areas where crowdsourcing can be used, this paper will focus on the application of crowdsourcing in marketing. The main reason to do so is due to the fact that a growing number of firms is turning to customers and focusing on their requirements and preferences. The best way to do it is by turning to crowds for inspiration and ideas by using crowdsourcing.

According to Dawson (2011), there are several ways of applying crowdsourcing in marketing. These are shown in Table 1.

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<th>Table no. 1: Marketing application of crowdsourcing</th>
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<td><strong>Application</strong></td>
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<td>Content creation</td>
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<td>Product development</td>
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Source: Dawson, R. (2011), Getting Results From Crowds: The definitive guide to using crowdsourcing to grow your business

Content creation is widely crowdsourced by giving customers a chance to provide content in different forms. Idea generation has been one of the most useful applications of crowdsourcing, given that there is a number of companies that benefited from having creative ideas coming from the crowd.

One of the best examples is Starbucks’s portal My Starbucks Idea, which has generated over 100,000 ideas for different aspects of business. Some of these ideas are related to the third area of application – product development. Dell’s IdeaStorm portal is another great example of company benefiting from its loyal and creative customers, as well as people with good ideas for new products. Customer insight, engagement and advocacy are a type of crowdsourcing primarily focusing on a narrow crowd – the customers, given that it is required to be a user of a product/service to be able to contribute in these areas. Finally, the question of pricing is often resolved by asking the people how much are they willing to pay for a certain product or a service.

Whitla (2009) was researching Human Intelligence Tasks (HIT’s) and he identified the fields of marketing that are most suitable for their use, taking into consideration the nature of the tasks. By reviewing literature and already published HIT’s, he singles out marketing research, product development and advertising and promotion as areas of marketing where crowdsourcing is most successfully used.

4.1. Use of crowdsourcing in market research

The most common form of applying crowdsourcing in market research is collecting data through surveys and questionnaires. Respondents are given a number of simple questions and the results are later used for creating product strategy. Given that these surveys provide monetary compensation to respondents, there is one big problem when using
crowdsourcing for research: providing false data. Whitla (2009) notices that firms may restrict online surveys to a targeted population and that there is no way to prevent someone from imitating demographic to earn extra money. The payment may affect responses in another way – by keeping in mind that the company is paying them, many respondents may provide responses that represent an unrealistic image of a company or so called “desired responses”.

The best way to prevent this from happening is by using complex questionnaires that require some fields to be filled in own words, as well as requiring a minimum number of words. Poynter (2013) argues that, in recent years, many companies are researching the market by placing projects on crowdfunding sites to see if people are willing to back it with their money. The clear distinction between people’s opinions and their will to pay for something can be noticed, which is a very useful pointer for future success of the project.

A popular example of using crowdsourcing in market research is Springwise, a company that keeps a network of over 8,000 professionals who contact the firm when they discover an interesting product, service or a business model. The company later sells the trend predictions to interested parties. Kaggle.com is another popular example, as the website gathers information from the crowds and does predictive analysis based on it.

4.2. Use of crowdsourcing in product development

Product development based on crowdsourced ideas is a constantly growing branch. Even though open innovation is most commonly used in product development, as companies are looking for innovative solutions to their issues, crowdsourcing is widely used as well. Von Hippel (1998, 2006) states that firms have been using consumer inputs for a long time and that manufacturers have been collecting inputs for developing new products for years. In crowdsourcing for product development there are three key differences to open innovation. Firstly, it is not limited only to customers, but includes potential customers or anyone willing to assist and provide their ideas. Secondly, it enables companies to get direct feedback, without the third party (such as distributors) involved in the process. Finally, companies can select specific areas where the improvements should be made and limit enquires to these areas. There are numerous examples of applying crowdsourcing in product development, including a crowdsourcing company InnoCentive, specialised in offering solutions to R&D problems to companies. Their clients include Proctor and Gamble, Boeing, DuPont, and they offer up to 100,000 US dollars as a winning prize for best solutions.
4.3. Use of crowdsourcing in advertising and promotion

Third most common use of crowdsourcing is in advertising and promotional activities. This model of crowdsourcing has become very popular in the past couple of years, given that its main advantage is enabling companies to save a lot of money and use the crowd to spread their message. The companies with bigger advertising budgets have been collaborating with the crowds for a while by including them in projects in the form of an open call, or even by paying them to post positive comments on blogs and websites. In a recent article, Kirby (2013) mentions six new modes of advertising for the future, and crowdsourcing is one of them. Her article focuses on a successful example of Oreo’s campaign “Daily Twist”. The campaign was based on launching a 100-day series of cookies inspired by the news nominated by the crowd. The campaign resulted in 4,400% rise in sharing Oreo’s Facebook page in just three months, with a significant rise in sales.

Crowdsourcing can be used in promoting or re-building brand identity of an institution, or even a location, as was the case with Connecticut (Birkner, 2013). With limited marketing budget and expensive media markets in targeted areas (especially Boston and New York City), the Office of Tourism switched to a creative approach by inviting locals to take part in a campaign “What’s Your Connecticut Story?” in February 2012. The campaign focused on getting personal experiences from Connecticut and promoting them on a website and a Facebook page. Following a success of this campaign, a new campaign “Still Revolutionary” was launched in May 2012. These two campaigns generated a total of 1.1 billion media impressions, 140,000 Facebook fans and 18% increase in awareness of Connecticut as a place to visit among neighbouring states. The successful campaign tends to become a tradition, given that another Fan Favourite campaign was launched in April 2013.

5. Conclusion

This paper presented many areas where crowdsourcing can be applied, even though it is a business model that is still in its developing stages. The increase of competition and limited budgets are some of the drivers that will help crowdsourcing become widely applied and popular model in the future. The authors presented successful examples of application of crowdsourcing in marketing; however, there are downsides to this model as well, and in the future the improvements must be taken into consideration.
First and the biggest problem arises from the sample – even though it is common to believe that more people guarantee better results, it may not be the case, especially when applying crowdsourcing in market research. This can prevent relevant information from getting to the companies. That is why it is important to work on improving mechanisms for filtering information and choosing participants. There are issues and limitations regarding the areas of expertise and qualifications required to successfully participate in crowdsourcing. Further research should focus on participants and better segmentation and profiling, so that results they provide can be improved.

Further use of crowdsourcing in marketing is heading towards social media and the use of social networks, as the source of the crowd, as well as the channel for placing a message and implementing marketing activities.

References