Introduction to business models of crowdsourcing platforms

K. M. Netsvetaeva The author was supported by the Erasmus+ MULTIC II Department of Information Engineering and Computer Science University of Trento Trento, Italy e-mail: ksuyshechka@list.ru

Abstract¹

The article deals with elements of crowdsourcing platforms, advantages and disadvantages of using crowdsourcing and business models crowdsourcing platforms. Business model is a position in the value chain, the choice of the customer and product pricing. This article discusses the business models that create value by using the crowd. Understanding business models reveals features of the use of certain groups of people.

1. Introduction

Crowdsourcing is a relatively new and rapidly developing approach to execute work. Crowdsourcing is the outsourcing of a unit of work to a crowd of people via an open call for contributions [1]. The word is a combination of the words 'crowd' and 'outsourcing'. The idea is to take work and outsource it to a crowd of workers. Famous example of crowdsourcing is Wikipedia, open resource and huge database for people all over the world share own knowledge and find useful information.

Using crowdsourcing allows for crowd to receive additional income, to share experience, to have hobby or to take part in volunteering activity. For customer, who launches the CS task, it can be used for solving complex tasks or large amount of routine work.

Often there are the following advantages of using crowdsourcing [2]:

- 1. Large coverage. Offering a solution of a large group of potential contractors, the customer automatically reaches a wide coverage. However, he does not put additional resources or effort.
- 2. User involvement. This is definitely one of the key moments Crowdsourcing technology. When a person is taken to perform the task, exchanging ideas,

Proceedings of the 18th international workshop on computer science and information technologies 18thCSIT'2016, Czech Republic, Prague, Kunovice, 2016 discussing the results, says about the project to your friends, it's incredibly motivated and incredibly valuable to the company.

- 3. The sea of options and a variety of choices. Of course, this mainly refers to the creation of any kind of content or the search for a solution, but this fact is so important that we cannot miss.
- 4. The only possible option. Often able to solve the problem solely with Crowdsourcing. Of course, this applies primarily to the scientific field, where the uniqueness of the solution is much more important than his creativity.
- 5. Fixed dates. Most of crowdsourcing projects is strictly limited period of time, during which the participants should solve problem. This makes it possible not to delay the solution of the problem, but rather to have a clear time targets.
- 6. Saving of financial resources. This statement is not always true, as we describe below, but more often Crowdsourcing actually achieves results with less. This is primarily due to the fact that the financial remuneration received only one or a few winners, and the people involved in the several orders of magnitude greater.

The disadvantages are the following aspects:

- 1. A key tenet opponent's crowdsourcing is that the crowd, in their opinion, may not be reasonable. She was not able to create something of value, because it is composed of very different people who are not able to agree, and to give an integral solution. This statement has some truth, but the secret of success in many respects depends on the task, on the understanding by the customer what he really wants, and from the communication platform capabilities.
- 2. Another weak point is the principle of unfair compensation. Indeed, as mentioned above, the prize receives only a limited number of people. The remaining essentially laboured in vain.

Workshop on computer science and information technologies 18thCSIT'2016, Czech Republic, Prague, Kunovice, 2016

- 3. Also crowdsourcing is not always the cheapest way. For example, the creation of a logo or design is often cheaper to order from low-cost designer.
- 4. Another disadvantage is necessary to call an information leak. Even a confidentiality agreement does not always save. After all, the client company may apply to the people's decision is very private but important tasks associated with their business. And competitors are closely watching the emergence of such tasks. But except the jobs there are and the solutions themselves, which are often exposed to public access.

2. Business models of crowdsourcing platform

A business model is the plan implemented by a company to generate revenue and make a profit from operations. The model includes the components and functions of the business, as well as the revenues it generates and the expenses it incurs [3]. The author in the book about crowdsourcing [4] was identified the eight business models:

- Media and data: Creation of media, content and data by crowds.
- Marketplaces: Matching buyers and sellers of services and financing through mechanisms including bidding and competitions.
- Platforms: Software and processes to run crowd works and crowd projects, for use with internal or external crowds.
- Crowd ventures: Ventures that are predominantly driven by crowds including idea selection, development and commercialization.
- Crowd processes: Services that provide value-added processes or aggregation to existing crowds or marketplaces.
- Crowd services: Services that are delivered fully or partially by crowds.
- Content and product markets: Sale of content or product that are created, developed or selected by crowd.
- Non-profit: Tapping crowds to create non-financial value.

We have tried to give an interpretation of each of the models in terms of their specificity and the work process. In type of business model "Media and data", content is created by the crowd, get some knowledge base. Writers can make blogs. Blogs can become popular. Writers opt in to have banners on their blog. Platform attracts advertisers and maintains ad inventory and performs distributions. Platform earns through advertising and subscriptions. Marketplace works some ways similar to a job board. Requesters advertise jobs they are willing to pay people to do. Workers look at the jobs available from all of the Requesters and choose to work on the jobs that interest them and the ones they qualify for. Requesters review submitted work either manually or programmatically and agree to pay for the work or not.

In business model "Platforms" users create a profile on platform and once they are members of a community, they can submit ideas; comment and vote on other ideas, and the most popular ideas are prioritized at the top based on the number of votes the idea receives. Once a promising idea has been identified, the software allows teams to form around the idea. The team can add more information to the idea, refine it, propose it to leadership and the best ones are selected using sophisticated decision matrix capabilities. The company uses the freemium model of engagement, offering free communities on an open basis and additional, customized functionality to paying clients.

"Crowd ventures" is a community created to help enterprise or startups. Members earn points or potentially cash for performing tasks in the process. This includes submitting ideas that earn points if others like them, doing specific tasks, managing projects, performing due diligence, and so on. The intention is that people get value from their contribution to a wide variety of ventures.

The customer sent us a job and we will post it on the Internet through our various channels, and we get a lot of people working on his work immediately. Or is the platform a particular person that's best for your work. It's interesting for business, because they can expand and scale down. After solution user problem occurs check the result. If the answer is correct, the user will receive the money, and the customer will get the result. This business model is typical for "Crowd processes".

Common strategy business model "Crowd services" allows to perform quick and cost-effective research to evaluate a new sector or industry, or validate a new strategy. It has helped clients learn about the any software sector and assess SaaS adoption in emerging markets, to name a couple. Often creators use idea of brainstorming.

A crowdsourcing business model "Content and product markets" describes the way of creating value for customers and the way business turns market opportunities into profit through different activities and collaborations. This kind of crowdsourcing platform takes crowdsourcing ideas and turns them into an actual business. As a rule it has its own in-house staff of engineers and developers along with an online community of global contributors.

Platform makes money by getting part (fix percentage) of the revenues and gives back the remainder of the percentage to the influencers and original inventor.

Introduction to business models of crowdsourcing platform

Work process can be represented as:

- 1. Individual submit ideas for a new product design.
- 2. Choose best idea from influencer's votes and start working on it.
- 3. Once the product is sufficiently influenced by the community, the staff work on their design as well as logistics to make an end product.

Most of non-profit crowdsourcing platforms are a hub for volunteerism and community service on the Internet. They envision the site as a meeting place for organizations and individuals, providing a communal platform that allows people to see where change is needed, and makes it easy for them to engage. As rule powered by the largest online database of volunteer opportunities, often they is connecting people with nonprofits large and small.

3. Conclusion

This article discusses the concept of crowdsourcing and business model, identified the advantages and disadvantages of crowdsourcing. Based on the book [4] we gave general description of the existing business models of crowdsourcing platforms. This will further determine which business model is most appropriate for different groups of people, to reveal the specifics of each crowdsourcing platform. In future work, we plan to continue to consider the existing classification crowdsourcing platforms.

Acknowledgments

This research project has been supported by Erasmus+ MULTIC II 1 of the European Union. Also, I would like to acknowledge Prof. Fabio Casati of the University of Trento who assisted in the investigation and provided knowledge and experience. I want to thank the team, in particular, Marcos Báez, Francisco Ibarra and Carlos Rodriguez who provided information about the topic of research.

References

- 1. J. Howe. "Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business," Crown Publishing Group, 2008.
- 2. Cindy Floren "The advantages and disadvantages of using crowdsourcing to improve your ecommerce business", URL: http://myecommerce.biz/blog/2012/07/the-advantages-and-disadvantages-of-using-crowdsourcing-to-improve-your-ecommerce-business/
- 3. Nigel Slack, Stuart Chambers, Robert Johnston "Operations and Process Management: Principles and Practice for Strategic Impact", Pearson Education, 2009.
- 4. Ross Dawson, Steve Bynghall "Getting results from crowd", Advanced human technology, Incorporated; 2nd ed. Edition, 2012, pp.183-194. (*Chapter 22 Crowd business models*).