STUDY OF THE PROSPECTS OF USING CROWDSOURCING IN BUSINESS PRACTICE OF RUSSIAN COMPANIES

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Abstract

The possibilities of using crowdsourcing in business practice are considered in the present study. The advantages of using the potential of the participants involved to solve business tasks are shown. The scientific literature devoted to the possibilities of using crowdsourcing in business practice is reviewed. The results of a sociological study of the attitude of crowdsourcing experts to the prospects of using this technology in business practice are presented. The survey respondents included people who have experience in organising and implementing large crowdsourcing projects, as well as active crowdsourcing participants who have achieved certain results in the platforms. Nineteen experts from Moscow, Novosibirsk, and Yekaterinburg were interviewed. Interviews were conducted with seven experts having previous experience in the use of crowdsourcing in various organizations, as well as twelve participants who already participated in various crowdsourcing projects, including four project winners. As the study showed, crowdsourcing in Russia has not received significant application in business yet. The results of the research make it possible to assert that despite the potential demand for this practice, the current level of its development is not sufficient for the active and effective use of crowdsourcing in solving business problems. Currently, only a few Russian companies use crowdsourcing to optimize simple processes, solve single problems, and attract consumers’ attention to company products. The study shows that the specialized online platform for utilizing crowdsourcing in business practice, selection procedure for participants joining the projects, security and non-disclosure of content are required. According to the experts, when implementing crowdsourcing projects it is necessary to combine crowdsourcing and crowdfunding to take full advantage of intellectual, labour, and financial resources of interested participants.

Keywords: Innovation, crowdsourcing, crowdsourcing perspectives, professional communities

1. INTRODUCTION

In today’s economy, businesses are working hard on reducing their costs and at the same time on engaging the customers in their activities to increase the level of customer loyalty. Crowdsourcing is one of the practices applied to achieve the goals set. This practice is becoming increasingly popular worldwide. In fact, crowdsourcing is a specific management tool used to engage the intellectual and labour potential of
interested users to solve various tasks.

Nowadays Russian companies are interested in using crowdsourcing as it offers a number of advantages in solving unusual problems and completing tasks when compared to employing conventional workforce. The first advantage is the massive scale, as crowdsourcing enables companies to access a large pool of participants and create a global product fast. The second advantage is the opportunity to share risks with task performers. In most cases, if the participants are financially rewarded for their work, the payment is received only after the profit is earned. The third advantage is the opportunity to reduce costs by using cheap online labour. Taking into account all these advantages for businesses, crowdsourcing should be in great demand.

1.1. The review of the literature on crowdsourcing use in business

The term crowdsourcing (Eng. crowd – “a large number of people” and sourcing – “use of resources”) is a relatively new one, which, in fact, represents the practice applied at least several centuries ago. Most researchers agree that the first mention of crowdsourcing use was a contest held by the British Parliament in 1714. A prize was offered to develop a reliable way of determining a ship’s longitude (Ellis, 2014). Everyone was encouraged to offer ideas, participants including such famous scientists as Isaac Newton, but a working class joiner John Harrison, previously unknown in the scientific community, worked out a solution. Even then crowdsourcing proved its efficiency demonstrating the advantages of engaging a large crowd of people to solve a problem.

Although the practice has been used for centuries, the term crowdsourcing was first introduced by Jeff Howe in 2006. According to Howe, crowdsourcing is a process in which a company delegates certain tasks that were previously assigned to existing employees, outsourcing companies, and suppliers to an undefined but a large number of people in the form of an open call (Howe, 2006).

Over the past ten years, crowdsourcing has gained importance, and the number of scientific publications addressing crowdsourcing has increased (Figure 1). When considering the most cited published literature on crowdsourcing use, two publications should be noted. The first is the publication of Enrique Estellés-Arolas and Fernando González-Ladrón-de-Guevara, in which the authors obtain “an exhaustive and global definition to describe any given crowdsourcing activity” (Estellés-Arolas, González-Ladrón-de-Guevara, 2008); and the second is the paper by Brabham that describes the potential of using crowds to solve problems (Brabham, 2008).

Figure 1. Total number of publications on crowdsourcing for the period from 2006 to 2015
Over the past five years, the number of publications addressing crowdsourcing has increased almost 9 times, and if, in 2010, Scopus contained 163 publications on the topic, then, in 2015, there were 1473. The data for the year of 2016 is not included as it was not available at the time of preparing the present article; however, it should be noted that the number of publications addressing crowdsourcing and printed in the Russian media has a tendency to decrease.

Of all the publications addressing crowdsourcing, it is important to highlight those that describe enterprise crowdsourcing. The most widespread applications of the practice in companies are:

- processing of scanned documents for companies (Karnin et al, 2010);
- IT inventory management (Vukovic, 2009);
- sites for end-user support (Lopez, Vukovic, Laredo, 2010);
- interested customers integration (La Vecchia, Cisternino, 2010);
- market forecasting (Chen et al, 2005), etc

2. THE METHODOLOGY FOR STUDYING THE POTENTIAL OF CROWDSOURCING USE IN ENTERPRISES

To assess the possibilities of using crowdsourcing as a specific form of labour relations in organisations we conducted a sociological survey to find out what crowdsourcing experts think of the prospect of introducing crowdsourcing to solve business problems.

The experts with experience in implementing crowdsourcing for different organisations throughout the Russian Federation were the object of our survey.

The subject of our survey was the respondents’ attitude to the prospect of using crowdsourcing as a new form of labour relations.

The purpose of the sociological survey was to collect and analyse sociological data for a qualitative assessment of the prospect of using crowdsourcing in labour relations.

During the survey, we conducted structured interviews with key crowdsourcing participants. They included crowdsourcing project coordinators who, during the past two years, either have completed or are still carrying out work on organising internal or external crowdsourcing projects involving not less than 500 participants, with at least 100 proposals accepted by the clients and implemented into business practice; as well as experienced participants of crowdsourcing platforms listed in the top 10 active users, with four of them being the winners of either “the most active” or “the most productive” awards. In total, nineteen experts from Moscow, Novosibirsk, and Yekaterinburg were interviewed. Seven respondents have had experience of utilising crowdsourcing in different organisations, and twelve respondents participated in crowdsourcing projects, with four of the respondents being the winners with their ideas considered effective and proposals implemented into practice. The nature and themes of the projects were not taken into account, as we were particularly interested in the specifics of crowdsourcing, as well as the challenges faced by the participants.

To achieve the goal set, an analytical-descriptive study was conducted. Then, structured interviews with crowdsourcing experts were performed to collect the necessary data.

3. THE RESULTS OF THE SURVEY ON THE PROSPECTS OF USING CROWDSOURCING IN ORGANISATIONS

The interviews with the crowdsourcing experts revealed low expectations of the prospects of crowdsourcing. Almost all the respondents consider the current state of crowdsourcing in our country as one not having many prospects. They recognise the need for further development and the necessity of addressing some important issues specific to this activity.

According to the respondents, only a very limited number of simple projects can be implemented without a specialised crowdsourcing platform. In fact, as many previous studies demonstrate (Vukovic, 2009; Lopez, Vukovic, Laredo, 2010; La Vecchia, Cisternino, 2010), a crowdsourcing platform is one of the crucial factors for the success of crowdsourcing projects. This crowdsourcing platform is a specialised site where participants publish their opinion on the issue discussed, vote for and comment on other participants’ ideas.

Next, we elicited information on the reasons hindering the active use of crowdsourcing to address current business issues. From the experts’ point of view, the first reason is the lack of the regulatory framework (as a
result, there is a shortage of guarantees for crowdsourcing participants), and the second reason is the absence of experienced specialists able to provide facilitation services.

Disappointingly, only 17% of the respondents with experience of participation in crowdsourcing platforms mentioned the importance of engaging senior management and administration in crowdsourcing activities, which demonstrates the low importance of the factor.

One of the main objectives of our study was to explore the importance of using different incentives in crowdsourcing platforms. Thus, we analysed what motivates people to participate in crowdsourcing projects.

During in-depth interviews with the crowdsourcing experts, we identified five most significant forms of motivation which, according to experts, influence the success of crowdsourcing in Russia. It should be noted that when choosing these five forms of motivation the key requirement was their equal importance for both the organisers and the participants of crowdsourcing activities.

Then, the experts were asked to base their rating of each of the forms on a 0 to 10 scale (where 0 indicates no influence and 10 indicates maximum influence, with the influence remaining unchanged).

Next, the experts were asked to choose five most effective forms of motivation for internal crowdsourcing and five for external crowdsourcing. Among the questions on the forms of motivation, there were questions asked to ascertain the interviewees’ knowledge of the forms of motivation, the nature and the intensity of use of a particular form of motivation previously. Based on the experts’ answers the significance of each of the forms was calculated on the 0 to 10 scale.

The findings are presented in Table 1.

Table 1 - The findings on most effective forms of motivation in crowdsourcing (on the 0 to 10 scale).

<table>
<thead>
<tr>
<th>Forms of motivation in crowdsourcing</th>
<th>The degree of significance</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Internal crowdsourcing</td>
</tr>
<tr>
<td>Material incentives (bonuses and gifts) for winners who offered the best proposals</td>
<td>2,9</td>
</tr>
<tr>
<td>Social incentives (meetings with company heads/ crowdsourcing organisers, acknowledgements of achievement, etc)</td>
<td>8,3</td>
</tr>
<tr>
<td>The recognition of active participation in crowdsourcing activities when making decisions on job rotation</td>
<td>7,6</td>
</tr>
<tr>
<td>No incentives are necessary as the activity itself is voluntary</td>
<td>4,4</td>
</tr>
</tbody>
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The internal and external crowdsourcing projects were analysed separately. Only a few experts acknowledge the importance of material incentives for internal crowdsourcing. Most experts consider rating systems and moral incentives to be the key motivators encouraging people to participate in crowdsourcing activities. These findings are comparable with the previous studies of motivation in crowdsourcing. For example, in the book by Thomas W. Malone monetary reward in crowdsourcing is proved to increase the number of proposals, but it does not affect the performance (i.e. the quality of the proposals does not increase) (Malone, 2009). In other words, bonuses offered for active participation can increase the number of crowdsourcing project participants, but they do not have a significant impact on the quality of their participation in the crowdsourcing platform. Moreover, the effectiveness of the crowdsourcing platform is reduced, as the experts have to handle an increased number of impracticable proposals to get the viable ones.

According to the experts, the recognition of active participation in crowdsourcing activities when job rotation decisions are made and different social motivation like the acknowledgement of achievement and meetings with company heads are among the main motivators for internal crowdsourcing participants.

However, when considering motivation for external crowdsourcing, the experts insist that material incentives
are essential. A few experts note that internal crowdsourcing needs material incentives only at the early stages in order to attract the participants, and when the sufficient number of participants is reached, material incentives become irrelevant.

Several experts highlighted the importance of documenting participants’ external crowdsourcing activity, as one of the main motivational drivers for many participants is improved job prospects. Other experts disagree with the idea of documenting participants’ activity, as at the present time crowdsourcing practice is insufficiently developed, and public opinion of the practice is still low; however, almost all of the experts acknowledge the participants’ need to advance their careers, and believe that in future the necessary arrangements should be made to help crowdsourcing participants market themselves.

Then, we explored some of the major challenges faced by crowdsourcing projects organisers and crowdsourcing costs that are of great importance to our study. The information on the data received during the interviews is presented in Figure 2.

![Figure 2. Problems faced by crowdsourcing organisers](image)

According to the experts, the high cost of crowdsourcing is currently the biggest issue. According to the data on first crowdsourcing initiatives carried out by Sberbank, the annual costs exceeded 100 million rubles, which is an impressive amount even for the largest commercial bank in Russia. These costs were met either because of an evident economic effect or complete confidence of bank’s top management in the likelihood of the crowdsourcing initiative success. This data limits the use of crowdsourcing as potential economic effectiveness is difficult to calculate (Dozhlenko, Bakalenko, 2016).

The experts also expressed concern about the fact that the companies which regularly use crowdsourcing tend to apply the practice only for the purpose of optimising current business activities.

Other difficulties that crowdsourcing organisers can experience include the need to attract a large number of participants as well as choosing the right crowdsourcing platform provider with good market reputation and the extensive experience in fulfilling certain tasks.

What are the possible risks of applying crowdsourcing in business activities? The data on the answers received is presented in figure 3.
According to the experts, the risks of applying crowdsourcing include the possibility of confidential information leakage (71% of the respondents believed it to be the most important issue); almost half of the respondents highlighted the risk of ratings and voting results tampering. One expert mentioned a considerable dependence of crowdsourcing on participants’ active collaboration and stressed that the participants’ activity may slacken really fast.

During the interviews, the experts were also asked on the most prospective ways of using and developing crowdsourcing. The most promising approach to crowdsourcing, according to the experts, includes the development of mini crowdsourcing initiatives uniting professionals and their resources (by means of crowdfunding), bringing in more participants from Y and Z generations (people born after 1983 and 2003, respectively), and encouraging leading universities to engage students in crowdsourcing.

Based on the results of the interviews with the experts, the effectiveness of using crowdsourcing in business was concluded to be lower than it had been predicted, mainly due to high costs of crowdsourcing implementation.

According to the experts, effective crowdsourcing in business practice requires the following: the Internet platform with proper software; a rating system to assess participants and their proposals; selection procedure for participants joining the projects; a system to filter incoming data to weed out bogus replies; instruction manuals for first time users; clearly explained and focused tasks; a reward system; a results reporting system; trained facilitators in crowdsourcing platforms; an organized security system to prevent data loss or disclosure; and a search system to enable specific proposal retrieval.

4. CONCLUSION

The results of the survey have demonstrated that the practice of crowdsourcing in Russia has not been embraced by many businesses yet. It emerges clearly from the presented findings that at the present time the costs of applying the practice are relatively high and are not comparable to the results achieved. Crowdsourcing initiatives carried out by businesses demonstrate that organisational crowdsourcing is losing its major advantage (the opportunity to attract the expertise of interested people in order to improve business activities) and turns into the practice applied mainly to optimise processes and to test products. At the same time crowdfunding, which is a practice similar to crowdsourcing but utilised to raise funds, is increasingly popular in Russia and attracting more interested users. From our point of view, this popularity is mainly due to lower costs and different approaches to pricing in platforms. By combining crowdsourcing and crowdfunding the issue of the high costs of the former could be solved.

This article studied the potential of using crowdsourcing in solving business issues. On the one hand, this potential is huge, and crowdsourcing which is successfully utilised in many countries worldwide is slowly
gaining popularity in Russia; on the other hand, high costs and the lack of necessary skills limit the prospects of using crowdsourcing in business practice.

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