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Engagement of Participants in the Crowdsourcing Projects

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Abstract: The study deals with the capabilities of managing the engagement of participants in the crowdsourcing projects. Analysis has been given to the key scientific researches devoted to motivation of participants in crowdsourcing activities. Considering the scarcity of scientific developments in the given field, the study considers possible ways to strengthen the engagement, based on the Gallup Institute Conception of Personnel Engagement (emphasizing the specifics of crowdsourcing activity). The indicators of engagement used in the conception have been adapted for using in crowdsourcing activities.

Key words: Crowdsourcing, organization of crowdsourcing, motivation of crowdsourcers, engagement of participants in the crowdsourcing projects, conception

INTRODUCTION

The need to transform the national economy bring it in line with the requirements of the social innovative paradigm necessitates the introduction of relevant models, providing significant and massive use of scientific knowledge in the production of goods and services in various fields of activity. It implies involving the maximum number of scientific, educational and productive forces to generate new ideas, identify promising areas of social development, countries, states and organizations. Therefore, researching the possibilities of attracting and retaining mass community of individuals interested in solving urgent problems seems relevant. One of the technologies of interaction among the parties concerned and community network is crowdsourcing.

One of the major problems of using this technology is related to the crowdsourcers' specific organization and motivation due to small amount of theoretical and methodological developments in this area. Classical approaches to motivate the employees in relation to crowdsourcing are unacceptable, financial motivation opportunities are limited. Supposedly, it would be correct to speak not about motivation but about the engagement of crowdsourcers in problem solving.

In this study, we will discuss the engagement of participants in crowdsourcing projects. We begin by considering the essence of crowdsourcing and engagement of participants as well as the need for their bundles into a single construct.

THE ESSENCE OF CROWDSOURCING AND FEATURES OF ITS ORGANIZATION

Crowdsourcing can be deservedly called the technology of the 21st century. It embodies the principles of Web 2.0 the concept that the users themselves are involved in filling and multiple verification of information in projects and services. Burov *et al*. (2011) this term was firstly used by Tim O'Reilly in 2005 to describe the technique of filling of the Internet content that will dominate in the near future. Despite the variety of definitions of crowdsourcing (Howe, 2009; Surowiecki, 2004), it can be specified as the approach to solve very clearly defined tasks which involves engagement of many people concerned.

Crowdsourcing is based on the ability to encourage people to direct participation in collective creativity and decision-making. The range of its possible use covers relatively simple actions such as collection and re-uses of existing knowledge and content objects (regulations, links, etc.) as well as much more complex tasks. Its scope can affect nearly every aspect of human activity-business, education, health, work, entertainment, etc.

Implementation of crowdsourcing usually comprises 4 stages (Fig. 1). Let us consider the content of each stage in detail, emphasizing the importance of engaged participants in crowdsourcing activities at each stage.

Step 1; recruitment and community involvement: It can be seen from Fig. 1, crowdsourcing begins with

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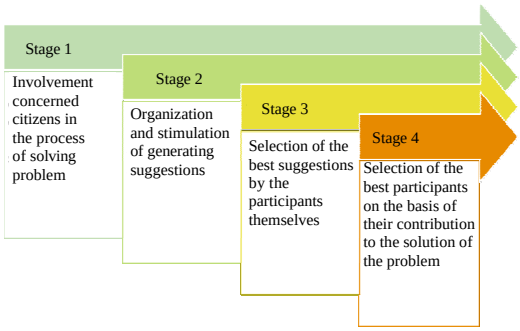

Fig. 1: The sequence of crowdsourcing implementation

involvement of the participants concerned in the project. The effectiveness of all following steps in crowdsourcing project depends on how this process will be organized.

As a rule, the implementation of crowdsourcing project is carried out through a closed discussion of ideas with a limited number of participants closed community. The beginning of this stage is associated with the setting the task which will determine the requirements for project participants.

Accordingly, the main objective of this phase is associated with the mobilization and notification of potential participants on the basis of task conditions. The value of this phase is determined by the fact that crowdsourcing participants should not only meet certain requirements defined by the project theme but also be socially receptive to new experience have the necessary motivation. These factors largely determine the effect of teamwork.

As a rule, crowdsourcing platform admits the participants whose test results let them enter the project. Evaluation procedures are needed not only to assess the crowdsourcers' skills, qualifications but also to comply with orientation tricks of the crowdsourcing platform. Candidates with other interests are eliminated in the first place. The importance of the selection of participants, initially focused on engaging work to generate ideas can be illustrated by the words Jonas Ridderstralle (the researchers of the book "Funky Business") he said hire for attitude, train for skills.

Step 2; organization and stimulation of ideas generating/suggestions, discussion of the project theme in the community: During this stage the community members place ideas about the published project, comment on version of the document, forming branches of debate.

- At this stage, community members; select valuable ideas/messages/comment, vote for the selected ideas and usefulness of the information, decide on the most interesting proposals from the general debate tape
- Criticize and reject the ideas put forward to solve the problems which results in formulating critical objections, indicating weaknesses in the ideas suggested by the project participants
- Select similar ideas
- Modify the proposed ideas/solutions/versions of a document. The participants are united around the chosen ideas, collectively modify the ideas

Step 3; selection of the best proposals, ideas and solutions: At the end of the main part of the project, there is presented a complete list of received ideas, solutions and offers on the project:

- TOP proposals of the researchers proposals that have received the biggest support of the community
- Rating of the best researchers, the researchers whose proposals got the most positive assessment
- The number of published proposals, the ratings and comments on the proposals
- The number of the researchers who have written proposals and participants, who have had an access to the project

The customer analyzes ideas/solutions/proposals presented by crowdsourcers and selects the ones relevant for implementation.

Step 4; selection of the best participants of crowdsourcing: According to the results of crowdsourcing selection is made of not only of the best ideas first and foremost to be implemented to solve the problem but also of the best participants who demonstrated maximum efficiency on the project. In subsequent crowdsourcing projects, these people should be involved in the first place. To some extent, it can be argued that the main objective of this phase is to select the best participants of crowdsourcing for the formation of the professional community involved in the crowdsourcing activities of the participants.

Domestic practice has accumulated considerable experience in crowdsourcing projects. As a basis for considering the feasibility of crowd-sourcing in the company, let us turn to the experience of the Sberbank of Russia which is a pioneer in the technology of collective decisions relevant to business and society issues.

The use of crowdsourcing in domestic companies: The first practice of using crowdsourcing in Sberbank was associated with the creation in 2009 of the "Exchange of Ideas" which is essentially an internal crowdsourcing platform. This system includes the technical platform from which each employee of the bank is able to offer any innovative idea that would improve the performance of the bank as well as employees can review and evaluate the proposed ideas. On the internal portal any employee of the savings bank may enter the "Exchange of Ideas" and place their innovation. After that a group of specially, selected experts considers the innovation. The researchers of the ideas that will be considered successful and will be used in the bank receive compensation corresponding to 10% of future economic benefit from its implementation.

The "Exchange of Ideas" was first launched in the domestic banking agencies and from 2011 and on the external customer portal. Today almost half of the employees are registered on the "Exchange of Ideas" in 2010 there were about 7% of innovations in 2009-2011 there were 86,000 applications. Thanks to the "Exchange of Ideas" in 2011 Sberbank saved about 17 billion rubles. In 2010 it managed to save 27.4 billion rubles, the researchers of the proposals embedded in business processes, received 8.1 million rubles. Winners under the I innovation forum in April 2011 received compensation of 15 million rubles. Among the already implemented projects are free Wi-Fi in some branches of the bank, monitoring of documents passing, online counseling, the opportunity for a Sberbank employee to get a loan without provision of information about income and length of work. These are specific proposals achieved through the use of employees' intelligence.

In autumn 2011, Sberbank of Russia implemented the first crowdsourcing project on the territory of the Russian Federation on the website. Its scope is impressive.

According to the survey, about 19 million people in Russia and abroad have expressed an interest in the first domestic crowdsourcing project (17% of the adult population of Russia). Total 787,000 people attended at least one site where the discussion was held. The project involved 106,520 participants who contributed to the process of generating innovative ideas and proposals 43,000 man days of work (which corresponds to 162 employees working on a permanent basis a year) and >18000 comments. To select the most competent actors (in the project called experts) methods of rating, filtering, active moderation and competition (450 experts moderated discussion) were used. For each participant was generated up to 40 different metrics which together gave their overall rating. Of the total number of the participants, selection was made of 30 winners and champions in all areas, 9 finalists and 3 crowdsourcers whose solutions were the best.

Initially internet users were offered three main themes to discuss: "Sberbank-2021", "Russia-2021" and "Co-2021" followed by the creation of promo which directed the participants to the social network Professionaly.ru (103,000 participants, 16,000 comments, 2679 proposals).

Thence registered users passed to the platform WikiVote where they selected the most interesting ideas as well as the most competent participants (1525 co-authors, 9812 comments, 3029 proposals and formulations).

The most qualified participants, who had passed numerous tests got to the platform Witology (The discussion was attended by 450 experts with the publication of >10,000 comments. Originally there were proposed 1582 the solutions from which by successive selection method at 5 stages selection was made of 15 most effective solutions).

The difference between WikiVote and Witology projects came from the character and specifics of problems being solved at the sites: point, highly suggesting the possibility of generating and finalizing of complex, unique ideas-projects Witology and massive projects to finalize existing ideas and documents in WikiWote. A similar project was launched in 2012 on narrower areas of generating ideas such as:

No Lines!: the purpose of the project was to find effective and easy to implement solutions that will reduce customer maximum waiting time to 10 min.

CSR business for a common future: the project was aimed at adjusting of the current CSR programs, the development of new CSR programs, business planning for non-financial indicators, adjustments of the bank policy for sustainable development, reporting of CSR for 2012, meeting the requirements of CSR reporting standards.

Non-credit products: project participants were invited to review the current offer of Sberbank non-credit products and develop proposals for their improvement and change.

Retail office; comfort and quality service: in the course of the project participants were invited to explore and select the best practices to create an optimal service model in the retail office of the bank. During the work on crowdsourcing sites in these areas, the selection was made of the 50 TOP solutions that are appropriate to introduce in the bank.

Currently Sberbank crowdsourcing is ongoing on the internal site "4I" and on the external site: idea.sberbank21.ru access to which is restricted to party members. On 01.04.2013, the external site registered >16,000 employees of Sberbank who came up with about 15,000 copyright proposals and exposed >186,000 evaluations.

Thus, crowdsourcing involves attracting a large number of participants. Let us consider what is meant by "engagement" (involvement), what properties it has and why it is relevant for crowdsourcing activity.

CONCEPT AND ESSENCE OF INVOLVEMENT OF CROWDSOURCING PARTICIPANTS

Despite the fact that crowdsourcing is a fairly new practice for technology, there is a sufficient number of studies on the motivation of the participants in crowdsourcing projects. These are primarily foreign research projects devoted to certain issues of goal setting, motivation of crowdsourcers (Zheng *et al*., 2011; Scekic *et al*., 2013).

Russian scientists have also considered the issues. In particular, A. Zhuravlev, T. Nestik studied the psychological aspects of a joint venture, co-creation and sharing of knowledge in organizations, social networks and social capital, group reflexivity and corporate memory, including using crowdsourcing (Zhuravlev and Nestik, 2010; Nestik, 2012). We have also examined some possible approaches to motivation of the participants of external and internal crowdsourcing projects (Dolzhenko, 2013).

All researches emphasize the motivation of crowdsourcers, the ways of increasing their interest in the outcomes of their activity. However, the inability to use the classic ways to motivate participants, the frequency of their work, isolation from the customer and territorial remoteness of the site, make it possible to speak about the possibilities of attracting and retaining participants in crowdsourcing activities, i.e., the management of their involvement. Despite the relatedness of motivation and engagement as special forms of relation to the activities between them there are some differences.

According to some scientists, involvement of the individual is primarily a person's predisposition to participate in a particular activity, consisting of three components: knowledge, interest and effectiveness (Verba *et al*., 1995). The knowledge of the activities carried out by the participant, combined with the desire to understand the trends, keep abreast of innovations and the apparent effectiveness of their research, forms their involvement.

British researchers from CIPD mean by "involvement" concentration on the task of the worker, their satisfaction and commitment to the organization and its goals and values.

Involvement starts when the employees take an active participation in their organization. In relation to people involved verb forms are commonly used (take part; become engaged; join; take responsibility; become a member and promote; immerse yourself in show enthusiasm show interest, etc.). All these words are expressed in certain active behaviors.

Behavioral aspects reflect human involvement, it detects and identifies what individuals do, how they behave and not only what they feel and what emotions they experience in a long term activity, regardless of changes in external circumstances.

An important aspect of engagement is that it is characterized by the amount of physical and psychological energy that a person spends on additional organizational processes not caused by rational assumptions.

The involvement of staff in the first place is activity-manifestation; it is commonly associated with the actual behavior of the employee. This is the behavior which is an indicator objectively describing the positive attitude of the worker to his own labor.

Taking into consideration the features we have formulated we came up with the following definition of "involvement" with regard to the participant of a crowdsourcing project: it as a sustainable attitude characteristic of crowdsourcing participant, assuming their long concentration on solving the problem, bringing additional effect for the project, finding its expression in the more emotional attachment of the member to crowdsourcing activities. Thus, the involved crowdsourcer is someone who:

- Devotes a lot of time energy in activities to a crowd-sourcing project
- Actively participates in various crowdsourcing projects, offers ideas for all areas of work at the site, works in team and association of crowdsourcing
- Spends his spare time to study additional materials related to the problem to be solved not only in his area of knowledge but also in related areas and in general for the project
- Actively interacts with participants in different areas of discussion of the problems
- Positively presents crowdsourcing at external events, communicating with different people, encourages them to actively participate in crowdsourcing
- Constantly invents and implements new ideas for the site which has positive effect for the project

- Disclaims any behaviors that may cause direct or indirect harm to participants and crowdsourcing site as a whole
- Positively perceives the changes occurring on the site is ready to continue the discussion of participants' ideas despite the circumstances

DIRECTIONS FOR THE FORMATION OF PARTICIPANTS' INVOLVEMENT IN CROWDSOURCING PROJECTS

As a basis to develop directions for formation of participants' involvement in crowdsourcing projects, we used the concept of employee engagement used at the Gallop research institute. The company is known to conduct surveys of employees in >170 countries. Since, the inception of the survey in 1998 >22 million workers speaking 69 languages in 189 countries took part in the survey. Considering the nature of crowdsourcing, the Gallup approach can be adapted in relation to the involvement of participants in crowdsourcing project.

The Gallup Method involves the use of a questionnaire Q12 (original title: the Gallup Workplace Audit (GWA)) which includes 12 statements. The basis of this questionnaire is to maximize talent approach, according to which:

$$\text{Performance of activities participant} = \text{His talents} \times \left(\frac{\text{Relationship} + \text{Right expectations recognition}}{\text{Award}} \right)$$

Improving the performance in 12 areas, set out in the statements, you can identify those aspects of work that need improving to increase the involvement of stakeholders. These statements presented below are according to Gallup, effective indicators of the state of employees' engagement.

Q01 (I know what is expected of me at work): Participants of crowdsourcing need to know exactly and understand what is expected of them on the crowdsourcing platform. If expectations are unclear or vaguely expressed, crowdsourcers can poorly cope with the tasks which will lead to a permissive attitude to the ideas generating and finally to stop of working at the site. Thus, the participants of crowdsourcing have to work with very clearly defined objectives for the implementation of an important goal. According to Andryushchenko, describing the behavior of the people involved, "Exceptional results come as a consequence of gaining exceptional knowledge".

The core of engagement of crowdsourcing participants should be the understanding that the value of their activities is determined not by the amount of their labor spent on the project but by the usefulness of its results.

Q02 (I possess the materials and equipment that I need for my work): Participants should have everything they need to maintain their skills, experience and abilities enabling them to carry out work to generate ideas on an acceptable level. Due to the fact that the object of the crowdsourcers' work is information, its availability and completeness directly affect their performance.

The key to crowdsourcing is not the possession of information but the ability to use old information and generate new one. Participants in crowdsourcing projects cease to be consumers of information they become producers.

However, it should be emphasized that the documents, attributed to a trade secret as well as documents containing personal data should not be placed on the crowdsourcing site.

Q03 (At work I have a daily opportunity to do what I can do best): Each crowdsourcing participant must be able to visit the site on a daily or weekly basis, at any time of the day. Participants must be selected in order to select them to participate in specific future projects. This is the only way a crowdsourcer can realize their potential and to ensure its effectiveness.

Q04 (Over the past 7 days, I was thanked or praised for a well done job): Reward is a powerful tool to engage participants to generate ideas on a crowdsourcing site which allows crowdsourcers to work better and more productively. This area of involvement can be realized by informing participants about the achievements of colleagues on the site for example, using the Vision Board (the information panel, the control panel on the website, dashboard) which is located on the front page of crowdsourcing platforms and visually presents the list of the key achievements of the participants during the reporting period as well as their place in the overall ratings of the participants and their ideas.

Q05 (It appears that my immediate supervisor or someone at work cares about me as a person): Within crowdsourcing project to increase the level of crowdsourcers' involvement it is important to employ crowdsourcing facilitators-special participants of a

crowdsourcing platforms engaged in the organization and conduct of team work in order to improve their effectiveness.

The task of the facilitator is to follow the regulations and promote a comfortable atmosphere, group cohesion and a fruitful discussion to clip the negative and provocative mood at their incipient stage which allows directing the discussion in a constructive direction.

Facilitators should permanently interact with participants, be interested in their thoughts give them attention and encourage further reflection on ideas. This will allow the crowdsourcer to feel part of the project to achieve the best results in their work.

Q06 (I have a person at work who encourages my growth): It is recognized that the more motives the participant has, the stronger his involvement in it and the more the extent of his involvement will be. Very powerful tools for engaging of crowdsourcing participants are promotion opportunities, implementing virtual career as a certain advancing motion on the organized hierarchy which bring more opportunities for decision-making, more responsibility more perks and privileges.

Of course, it is impossible to build the career through participation in crowdsourcing projects. However, now crowdsourcers are provided with the so-called "virtual cloud career" which not only involves "the class" of the participants, the impact of their performance on the following offers to cooperate with them on future projects and but also the account of their achievements when making decisions about staff turnover in the organization at the main place of work.

In other words, information on participants in crowdsourcing projects which accumulates with their activity (as a rule, these are features that are not available from other sources) may be provided to personnel services, organizations and significantly affect the further career prospects of a crowdsourcer.

Q07 (It seems to me that my opinion is valued at work): Facilitators need to listen to the participants on the site and take into account their views which will generate the sense of being in demand and the sense of loyalty.

Q08 (The mission of my company makes me feel the importance of my work): Crowdsourcing activities are based on the desire to act in accordance with universal values to show talents to improve society organizations. The more the crowdsourcing participant will understand the significance of the problem being solved, the higher the level of his involvement in the crowdsourcing activity will be.

Q09 (My colleagues are committed to perform quality work): Facilitators should ensure that all crowdsourcers make a feasible and uniform contribution to the common cause. Otherwise, the participants who have achieved greater results at the site can "break away" from all the other participants, the less successful at the initial stages of ideas generation, to reduce their involvement.

Q10 (One of my best friends works for the company): Confidence and positive attitude during the discussion of ideas and proposals contributes to reducing the burden and stress on crowdsourcers, thereby allowing them to work more productively. The presence at the site of people with similar values, attitudes behavior forms the common vector of their relation to the crowdsourcing activity.

Q11 (Over the past six months, someone at work talked to me about my progress): To maintain the level of crowdsourcers involvement at a constant level, it is necessary to attract him at least to one project every 6 months.

Q12 (During the past year I have been on the job opportunities for learning and growth): Jobs in crowdsourcing project should provide a unique experience for the participants. To provide crowdsourcers with learning opportunities, the site should organize training on related topics. Distance teamwork on the ideas is done on the Internet. Earlier collective sense of community arose when people gathered together, today in the space contact is compensated through technology but it affects crowdsourcers' training opportunities. Training participants at the site in the format of the conference TED (see website: www.ted.com) video lectures coursera, etc., should be an integral part of the crowdsourcing platform.

These are the general direction of increasing the level of participants' involvement in crowdsourcing projects, based on the concept of employee engagement, developed by the Gallup Research Institute.

CONCLUSION

The study is focused on crowdsourcing a new phenomenon for the practice of domestic companies. Its potential is huge but despite the fact that the organization tools for the crowdsourcing activity have been developed, the participants of economic relations often ignore the possibility of their use in practice.

In accordance with the set task, we have considered the essence of crowdsourcing as well as the specifics of the organization which determines the need to control the participants' involvement in crowdsourcing projects. Using the adapted managing methods of involvement, developed by the Gallup Institute, we have developed recommendations to strengthen the involvement of crowdsourcing members.

The main conclusion to draw is that the involvement as a particular relation of the actors (mass community, government, business) occurs at the point of contact of their interests. As long as the interest in the implementation of crowdsourcing will be manifested among individual participants not just the economic community of the country, we cannot talk about mass involvement in crowdsourcing activities.

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