

SOCIOLOGICAL DIAGNOSTICS OF CROWDSOURCING TECHNOLOGY IN THE PRACTICE OF REGIONAL MANAGEMENT

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Abstract

Purpose: The problem of introducing crowdsourcing technology into the practice of regional management is considered. The content aspect of crowdsourcing use at the regional level is analyzed. The basic elements of crowdsourcing potential are revealed. The article substantiates the possibility of a new technology of the interaction between the government and society – crowdsourcing on the basis of the results of a sociological survey of Russian and foreign experts. The article proposes a methodology for identifying and analyzing the technology of crowdsourcing, examines the main stages of the formation, and analyzes the implementation of crowdsourcing technology into the practice of regional management.

Methodology: Based on the analysis of previous studies, the authors of the article formulated the definition of "crowdsourcing potential", which is understood as a system of interrelated elements that explains the main scientific approaches to improving social activity of the population, defines social objectives, methods and principles of management of crowdsourcing technology in regional governance.

Result: Crowdsourcing technology in regional governance, moreover, is a communication, efficiently constructed and acting constantly, which means that several mandatory conditions must be met to ensure the communication process.

Applications: This research can be used for universities, teachers, and students.

Novelty/Originality: In this research, the model of Sociological Diagnostics of Crowdsourcing Technology in the Practice of Regional Management is presented in a comprehensive and complete manner.

Keywords: *Crowdsourcing, Crowdsourcing Potential, Crowdsourcing Technology, Informal Society, Regional Authorities, Social Technology.*

INTRODUCTION

The problems of crowdsourcing in the sociological literature were considered by domestic and foreign scientists ([Albors, 2008](#), [Azzam, 2013](#), [Almond, 2003](#), [Gatautis, 2014](#), [Prpic, 2014](#), [Ries, 2011](#)). Conceptual and methodological foundations of crowdsourcing technology ([Hekman, 2013](#), [Howe, 2008](#), [Majchrzak, 2013](#), [Simmons, 2011](#), [Rogova, 2013](#)).

Their groundworks allow us to analyze the general social aspect that forms the full potential of crowdsourcing at the state level ([Almond, 2007](#), [Owyang, 2015](#), [Gatautis, 2014](#)).

An analysis of the studies allowed identifying elements of crowdsourcing potential of the region: readiness and ability of citizens and authorities to participate in crowdsourcing projects ([Babintsev, 2014](#), [Rogova, 2017](#)). The problem of the research is that the development of conceptual and methodological substantiation of the introduction of crowdsourcing technology in the regional governance practice is practically not represented in the Russian scientific literature ([Rogova, 2017](#)).

The democratic transformations in contemporary Russia and institutional developments in the Russian political system in recent years encourage researchers to study problems of crowdsourcing in the practice of regional governance, as well as new forms and methods of expression of individuals and their associations.

At the same time, the idea is becoming even more established: the main means of formation and expression of public opinions are institutions of civil society and techniques not institutionalized, but recognized by the state and society, by which citizens influence activities of the authorities. It is civil society, as one of the most receptive and mobile political systems, that manifests itself as an exponent of different positions and opinions of people.

METHODS

The relevance of the introduction of crowdsourcing technologies implemented through social networks and various dialogue Internet platforms in the regional governance is primarily dictated by the establishment of a constructive dialogue between the government and the civil society in solving the socially important problems of the region through the involvement of the "collective mind".

The collection and processing of civil initiatives significantly expand the horizons of management decision-making due to the mass character of ideas and proposals of the interested civil society at minimal cost.

The introduction of crowdsourcing projects at the regional level supports the continuous functioning of an inexhaustible source of ideas generation, the formation of a civil expert community, the personnel reserve of managers, and the socio-economic development of the region.

In this regard, would be useful to conduct a sociological survey of experts in order to determine the awareness of the phenomenon of crowdsourcing.

The concept of "crowdsourcing potential" in considering the introduction of crowdsourcing technology in regional government is of major importance. Based on the analysis of previous studies, the authors of the article formulated the definition of "crowdsourcing potential, which is understood as a system of interrelated elements that explains the main scientific approaches to improving the social activity of the population, defines social objectives, methods and principles of management of crowdsourcing technology in regional governance.

Also developed a system of crowdsourcing potential of a region, which includes the following main elements:

- The ability of citizens and authorities to implement crowdsourcing technology;
- The willingness of citizens and authorities to implement crowdsourcing technology.

The authors refer to the ability of crowdsourcing potential: awareness and overall picture of the management system in the region; awareness of the phenomenon of "crowdsourcing" both on the part of the population and on the part of state and municipal employees.

The willingness includes societal values of regional authorities and citizens of region (trust, justice, tolerance); motivation to participate in crowdsourcing projects.

This system of crowdsourcing potential makes it possible to identify crowdsourcing technology in regional governance, to determine its state and prospects of its development.

Crowdsourcing in regional governance is defined by the authors as the social technology of involving the "non-formalized public" in the process of state and municipal governance on a voluntary basis, carried out by regional authorities through the information technologies and using the people's intellectual potential to solve significant social problems.

The "non-formalized public" means a group of persons consisting of crowdsourcing participants whose activities are not regulated by formal rules and their involving in the solution of the tasks of a crowdsourcing project is carried out exclusively on the free consent and on personal desire.

RESULTS AND ITS DISCUSSION

According to the results of the sociological survey of Russian and foreign experts ([Rogova, 2017](#)) devoted to the study of the problem of introduction of crowdsourcing technology in the practice of regional governance, the authors obtained important results that explain the prospects of crowdsourcing technology development in regional governance.

62 experts took part in the sociological survey, including 31 Russian and 31 foreign experts. The criteria for the selection of experts experienced in public organizations and in research work in the field of management. Among the Russian experts, 81% of the respondents work as lecturers in Russian universities and are engaged in research activities in management and sociology; 19% are heads of state and municipal authorities. Among foreign experts, 73% are lecturers at the German University of Hohenheim (Germany, Stuttgart), 11% are employees of the city administration of Stuttgart, 16% are lecturers of the Oxford University in the UK. The authors undertook a comparative analysis of the data of a sociological survey of Russian and foreign experts, which showed that respondents from foreign countries have a clearer idea of the phenomenon of "crowdsourcing", 87% said that they know about this concept in detail. In Russia only 22 % of experts have enough knowledge and 60% have only a basic understanding. Thus, the overall awareness of the respondents about crowdsourcing technology is quite high (82% in total) (Table 1).

Table 1: Do you have a clear idea about the phenomenon of "crowdsourcing"

Experts	%
Russian	13
Foreign	87

Also, among the main reasons for the introduction of crowdsourcing in the management system, experts identified: development of information technologies 64.5% of respondents. Almost half of the respondents 45.2% chose the option "the desire to involve citizens in management", and the point" the intention of the subjects to get the result at minimum cost " was identified as the main reason by 32.3% of experts.

The authors found that according to most of the surveyed foreign experts, 77%, call such well-known brands as Mercedes-Benz, BMW, Audi, Porsche, Siemens, Bosch, General Motors, Ford, and Nike as a successful introduction of crowdsourcing in their country.

Four experts from Stuttgart and one from Oxford are unfamiliar with successful introduction of crowdsourcing, which is 16% of the total sample. 6.5% of respondents from the total number of respondents found it difficult to answer.

Russian experts among the most successful practices of crowdsourcing called the projects of the largest companies in Russia such as Sberbank, Gazprom, "National expertise" and "Active citizen" in the Belgorod region.

Most respondents (35.5%) consider launching an Internet platform for dialogue between officials and ordinary citizens to be necessary conditions for the successful implementation of crowdsourcing in the practice of regional management, 29% of experts prefer the option of "creating an open data portal similar to the state portals of other countries" (table. 2).

Table 2: The necessary conditions for the successful introduction of crowdsourcing in the practice of regional governance according to experts

Option	%
Launching an Internet platform for dialogue between officials and ordinary citizens in the region	35.5
Creating an open data portal similar to the state portals of other countries	29
Adoption of unified standards to ensure openness for public authorities at all levels, including transparent procedures for feedback and a strong voice of citizens in decision-making	19.4
Introduction of tools to combat information noise, tools to protect against spam and "robots", filters against the flow of ideas beyond the limit of sanity	6.5
Ensuring transparency of the outcome of discussions	6.5
Creation of a system of material and moral incentives for Public officials and citizens	3.2

19.4% of experts give preference to the adoption of unified standards to ensure openness for public authorities at all levels, including transparent procedures for feedback and a strong voice of citizens. Some respondents (6.5%) believe that the development and use of methods to combat information noise, tools to protect against spam and "robots", filters against the flow of ideas beyond common sense, is the best solution for the introduction of crowdsourcing in practice of regional governance.

Among the shortcomings of the use of crowdsourcing in practice of regional governance, experts noted excessive formalism (33%), unavailability, lack of information and, consequently, lack of understanding by citizens of crowdsourcing projects mechanisms (30%), lack of regulatory framework (11%). Among the rarely mentioned shortcomings is lack of common interests of citizens and officials (7%), insufficient use of crowdsourcing (7%), excessive delay in decision-making by authorities (7%). The financial incentive is considered by most experts as the most effective motivational factor contributing to the participation of population in crowdsourcing projects, to this conclusion came 58% of respondents.

One-third of respondents (32.3%) chose the option "social benefit from contacts". Motivation as verification of ideas through participation in interactions in social networks was noted by 25.8% of respondents.

Based on the data of the sociological survey of Russian and foreign experts, the authors concluded that the main recommendation of experts on the development of crowdsourcing concerns a regional Internet platform that would be able to ensure interaction between the majority population and state governance system, while, according to experts, it should not have any additional material support.

Thus, crowdsourcing is a way to attract the collective mind, a variety of individuals to solve problems of organization, to achieve production goals, real projects or a specific result. This is determined by many participants in the process of creating a product or service and a low cost of using the intellectual resource since the performers do not receive payment for their work, additional profits, and opportunities for non-standard solutions to problems. A general scheme of crowdsourcing technology is shown in figure 1.

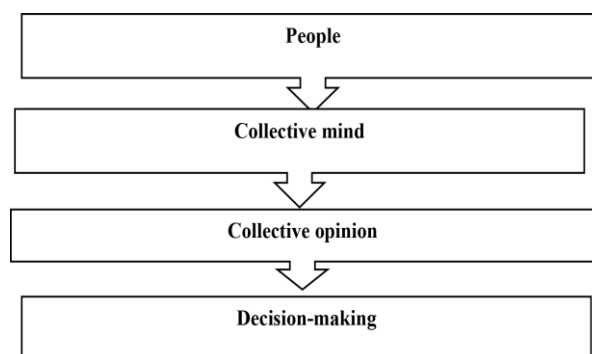


Figure 1: Crowdsourcing technology

As for the recommendations to improve the situation with the use of crowdsourcing in regional governance, the authors noted the need to introduce an independent educational course on crowdsourcing in Russian universities.

The authors of the article revealed that a large proportion of experts noted poor awareness of such mechanisms, the unwillingness of citizens to be active in this area, and unwillingness of the population to participate in crowdsourcing projects due to the mentality. At the same time, the authors noted the following problems on the part of the governance system itself – the inconsistency of crowdsourcing to the traditions of Russian management, the lack of a regulatory framework in the field of crowdsourcing and the unwillingness and reluctance of the administration to participate in crowdsourcing projects. Essential overcoming socio-cultural and technological barriers to the implementation of civil expertise are their systematic sociological analysis and development of practical recommendations for state, municipal government and civil society institutions.

CONCLUSION

Crowdsourcing technology in regional governance, moreover, is a communication, efficiently constructed and acting constantly, which means that several mandatory conditions must be met to ensure the communication process.

First, the information openness of the public administration system should be ensured. It should be as transparent as possible not only at the stage of implementation of management decisions but also in their preparation and making. Unfortunately, at present we can state that the level of this openness remains relatively low, which in turn indicates that power structures are still very difficult to shift from the traditional “isolation” to an open model of interaction with the population? At the same time, the revaluation of values occurs more at the level of “top officials” of governance than at the level of bureaucratic structures.

However, it should be noted that the communication process is bilateral, and its effectiveness depends on the position of both partners. Unfortunately, it can be stated that not only state structures, but also a significant part of the population is not yet fully ready for it.

The next important condition for effective communication is the willingness of the population to participate in governance and its ability to do it in practice. However, a passive-contemplative attitude to social reality is typical of Russian citizens.

In the context of this mindset, it becomes quite clear that the authorities and the population are mutually alienated and, as a result, most citizens do not accept the initiatives coming from the authorities, which is manifested in the low level of trust between the authorities and the population. Herewith, the distrust is based on differences determined by the special subcultural nature of bureaucracy.

Essential overcoming socio-cultural and technological barriers to the implementation of civil expertise are their systematic sociological analysis and development of practical recommendations for the state, municipal government and the institutions of civil society.

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