Analysis of Civic Initiatives: Multiparameter Classification of Social Innovations

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Abstract: This paper focuses on the topical and problematic area of social innovations. The aim of this paper is to develop an original approach to the allocation of social innovations, taking into account characteristics such as the degree of state participation, the scope of application, the type of initiations as well as the degree of novelty, which will be elaborated on further in this article. In order to achieve this goal, the forty-two most successful social innovations were identified and systematized. The results of this study demonstrated that 73.5% of social innovations are privately funded, most of them operating on an international level with a high degree of novelty. Moreover, 81% of all social innovations are civic initiatives. Social innovations play an important role in the growth of both developed and less developed countries alike as highlighted in our extensive analysis.

Keywords: Social Innovation, Multi-Parameter Classification, Classification, Public Sector, Institutional Economics

Introduction

The contemporary socio-economic space exhibits a high degree of variability. This phenomenon is due to the strained state of the global economic system, the active dynamics of political relations, social and cultural fragmentation of the population and many other factors. In this context, a particular significance is attached to social innovations that generate new and more efficient ways of creating benefits at the lowest cost (Kimberly, 1982). Social innovations are starting to play a productive role as a tool for improving social welfare (Moore, 1995; Battistella and Nonino, 2012).

The worldwide movement towards the growth of expertise in this area is confirmed by the proliferation of forums and conferences devoted to the problems of social innovation. However, the research community has not yet coalesced around a unified concept in this discipline, despite some unifying aspects being presented in the works of Mulgan et al. (2007; Phils, 2009; Moore, 1995). An example of a large-scale research project encompassing the various aspects of innovation in the public sector was implemented by the European Union in the 2003-2006 research project entitled PUBLIN. This project investigated the main directions in the advancement of innovations in the public sector, with a specific focus on social, technological and administrative innovations in public administration and enterprises (Koch et al., 2005; Koch and Hauknes, 2005).

The suggested line of research is, therefore, still in its infancy. An important question is: What position does social innovation occupy within the socio-economic system and what role is played here by civic initiatives? The answers to these questions will not only reveal the basic features of social innovations, but also determine the characteristics of public management initiatives supporting their development (Cooney, 2006).

Therefore, the ambition of this paper is to develop an authentic viewpoint with regards to the allocation of social innovations incorporating civic initiatives. To advance this aim, this paper reviewed previous approaches to the definition of “social innovation”, whilst taking into account the theoretical and methodological principles of economic theory, in order to determine the main parameters of the systematization of social innovation and present a multi-parameter classification of social innovation highlighting the pivotal features of its distribution in social space.

Approaches to the Definition of Social Innovation

One of the most commonly accepted definitions of social innovation has been provided by Mulgan et al.
The authors define social innovation in terms of “new ideas working to achieve social objectives”. However, this definition does not reflect the essential traits of social innovation or show where it contrasts with innovation in general. Business innovation usually contributes to the attainment of an economic benefit in the form of profit, as well as the accomplishment of social goals. However, in the course of their study, the authors clarify that the definition of social innovation presented above as “the set of innovative activities and services designed to meet social needs, which are developed and distributed through social organizations” (Mulgan et al., 2007).

Phils (2009) understands social innovation to consist of any new and useful solutions aimed at meeting social needs (Phils, 2009). The specific weak point in this interpretation is its assumption of the usefulness of social innovation. In practice the effects of innovation can be unpredictable.

According to Heiscala (2007) social innovation refers to changes in the cultural, legal and regulatory structures of a society that both increase its collective power resources and improve social and economic performance. The particular value of this definition is the reference to “increasing the collective power resources”.

Furthermore, the author regards social innovation not as an idea, but as a transformation that creates an alternative approach to the determination of the essence of social innovations (Gonzalez-Padron et al., 2008).

The concept of “social innovation” closely resembles the concept of “innovation in the public sector”. Innovations in the public sector are new ideas, the embodiment of which lead to an increase in social value” (Koch and Hauknes, 2005). However, these definitions can be deceptive, implying that social innovation is one of the types of innovation aimed primarily at social needs (Koch and Hauknes, 2005; Koch et al., 2005).

In addition, social innovation can be regarded as an activity for goal-oriented organizational measures, i.e. the carrying out of procedures to increase effectiveness in the development potential of managerial staff. Within the confines of this approach, the authors focus on the enterprise level which reduces the possibilities for its application in the given context.

The definitions presented have two major drawbacks. Firstly, they are not distinguished from other forms of innovation and are, therefore, too vague. Most are defined in general terms, such as “based on the common life of the community”, “solving problems” or “making society better”. Secondly, the majority of definitions erroneously posit the fulfillment of social needs as the sole purpose of social innovation (Frens and Lambert, 2008). As mentioned, while business innovations can often be useful in terms of meeting social needs, they cannot be attributed to social innovation; conversely, ideas that are developed to meet social needs are widely used in business.

The review conducted concentrated on three central approaches to the definition of social innovations. Representatives of the first approach consider the term as innovations aimed at the realization of social goals (Mulgan et al., 2007; Murray et al., 2010). The second approach, taken by Heiscala (2007; McElroy, 2002) and the Centre for Social Innovation at Stanford University, refer to social innovations as those innovations leading to improvements within the social space. The third approach considers social innovations to be the innovations taking place in the public sector (Koch et al., 2005; Koch and Hauknes, 2005). Regardless of the findings of this review, it illustrates the urgent need of a distinctive definition of the nature, limits and characteristics of social innovation, which is of great methodological importance for the further improvement of this sector.

Summarizing the results of both domestic and foreign researchers and taking into account the original approach to the definition of the term, it may be concluded that social innovation possesses the following general features: A certain level of novelty, implementation in the social space; and a focus on improving the performance of contemporary activities aimed at solving social problems. As such, social innovation is understood to refer to new ideas, opportunities and actions within the social space that increase the possibility of utilizing resources to address economic, social, cultural and environmental issues with social space being interpreted as the multidimensional space of interrelated social processes, relations, practices and positions.

Civic Initiatives in the Economy

The emphasis on the importance of civic initiatives is becoming more pronounced with each year that passes (Dekker, 2009). From an economic point of view, this phenomenon manifests itself in areas of research such as social capital, informal institutions and civil society.

The Russian researcher Polishchuk notes that the capacity of citizens for collective action comprises a form of social capital (Menyashev and Polishchuk, 2011). This phenomenon is seen, on the one hand, in the context of a substitute for state institutions and, on the other, as a complementary circumstance. The special role of collective action is noted in transition economies where the production of public goods is at a low level (Fafchamps, 2006).

Informal institutions are constructed by special rules from the participants of differing social groups, acting as guarantor for that group (Malkina and Auzan, 2013). These rules underpin the design of collective action. As indicated in the research of Dorward et al. (2005), each stage of economic development entails the occurrence of the relevant transaction costs and reveals the
shortcomings of public institutions. Here, informal institutions enter the arena, regulating new ways of interacting with citizens in order to overcome information asymmetry, solving social problems and providing social amenities.

The importance of social capital and informal institutions is not only coordination of actions, but also the development of a stable communication network (a necessary part of civic cooperation). Communication is used to develop social capital through the exchange of information. It is also significant to note that a strong communication network is a solid basis for social innovations.

Civic society consists of an alliance of individuals, a collective, in which all members discover the highest human qualities. One of the specific functions of civic society is to promote the public interest. On the one hand, the promotion of public interest increases the state’s accountability to the population and enhances the production of social amenities. Yet, the phenomenon also helps to avoid the “free-riding” of other participants, which makes the economic exchange of “taxes-public goods” more effective (Niskanen, 2008).

The existence of civic initiatives can be considered from different points of view. However, facts such as improving the production of social amenities, overcoming information asymmetry and improving the ability to solve socially significant problems are undisputed. Civic initiatives, accordingly, gain their fundamental character in the field of social innovation.

The Problem of Systematization of Social Initiatives

Developing a theory of social innovation involves a systematization of the object of study. Systematization allows social innovations to be grouped according to a number of the most important parameters, forming a basis for the development of common principles of efficiency and economic incentives. It also enables a more accurate analysis of the investigated problem and identification of the most promising advancements in the surveyed areas.

Analysis of prior research into the typology and classification of social innovation has revealed the lack of a universal method for the systematization of this research object. However, there have been certain developments in this regard, as described in the works of various authors (Mulgan et al., 2007; Cowen, 1992; Phils, 2009; Pol and Ville, 2009; Golubeva and Sokolova, 2010). In their research on social innovations, Mulgan et al. (2007) do not classify social innovations explicitly, but rather establish the properties and classification features of their origins according to their spheres of application (Mulgan et al., 2007).

The research of the Russian economists Golubeva and Sokolova (2010) organizes innovation in the social sector. It is worth noting that their classification by initiator type, i.e., where the creation of innovation and the degree of novelty is derived from, is well-founded, but their criteria do not allow for a description of other crucial facets.

Pol and Ville (2009) also label social innovation in terms of intentionality, but additionally note the relevance of parameters such as the scope of the creation of social innovation, the degree of support and the level of use of support and the level of use of (Pol and Ville, 2009).

Despite these developments, a unified classification of social innovations or a universal method for their systematization has so far remained elusive: The original multi-parameter classification of social innovation presented in this paper sets out to address this deficiency. The procedure of its construction is detailed in the following section.

Method

In developing an original, research-based approach to the distribution of social innovation in the social and economic space, both analysis and synthesis, compilation and systematization methods as well as a four-dimensional graphical representation technique were applied.

The theoretical analysis of the sources aimed to identify the most important parameters of the systematization of social innovations, as presented below. Firstly, there is a type of activity, in which social innovation is created. It is proposed that areas such as education, health, housing, public safety, environmental protection and social infrastructure are incorporated by social innovations.

Secondly, social innovation includes a level of state participation. This parameter is needed to track its effectiveness, supported by either or both public and private sources. It allows social innovation to be divided into the following groups:

- With full state participation
- With partial state participation
- Without state participation (Golubeva and Sokolova, 2010)

The third and most important parameter of the systematization of social innovation is its scope, indicating its application level. The significance of this parameter lies in the fact that it represents the degree of influence the social innovation will achieve. Depending on their extent, social innovations may be implemented at the following levels:

- The level of the enterprise
- Micro level (industry sector) (Popov, 2005)
- Local level (urban, rural settlement, municipal)
- Regional level (separately selected region)
• National level
• International level (social innovations covering a certain number of countries)

The next parameter is the *initiation level*. This parameter refers to the source of the initiative to create a social innovation. When analyzing the effectiveness of a social innovation, it is useful to keep track of the initiating party: government, bureaucracy, or ordinary citizens. Depending on their initiator, social innovations may be divided into:

- “Top-down” innovations (instigated by the state or by organizations and institutions that stand higher in the hierarchy of power)
- “Bottom-up” innovations (initiated by ordinary people, public-sector workers, public servants) (Golubeva and Sokolova, 2010)

The fourth significant parameter is the *degree of novelty* (Tanimoto, 2012). With regards to the degree of novelty, social innovations are subdivided into:

- Gradual social innovations (minor improvements to existing services, processes, institutions)
- Radical social innovations (radical changes to existing services, processes, institutions)
- Systemic social innovation, i.e., the creation of a new system or a fundamental change to an existing system (Golubeva and Sokolova, 2010)

The list of criteria constituting the basis for the formation of the multi-parameter classifications for social innovation is presented in Fig. 1.

The application of the proposed theoretical development to the distribution of social innovation allows the innovations to be constructed within the social space. This enables a prediction to be made of its effects on the advancement of public sector management at various levels (global, national, regional, or municipal).

The collection of data for every specific theme was a thorough analysis of publicly available information about implementable social innovation. In order to analyze the most trending social innovations, we observed frequently mentioned and promoted social innovations executed by organizations as Young Foundation, Social Innovation Center of Stanford University, Agency of Strategic Initiatives in Russia, Center for Health Market Innovations, Grameen Foundation, Center of Social Innovations (CSI), Europe Tomorrow, Public Space. Moreover, all mentioned social innovations from Elibrary, Google Scholar, SCOPUS and Web of Knowledge databases, where the key words “social innovations” were used, have been added to our selection.

![Multi-parameter classification of social innovation](image-url)
A list comprising 42 social innovations was created. From a practical point of view, the number of social innovations is small; however, it is sufficient for the formation of a common understanding of the socio-innovative development of the economy.

The central phase of the study consisted of the organization of the 42 social innovations according to the multi-parameter classification criteria. The results of the distribution are graphically reflected in Fig. 2-8.

Fig. 2. Dependency of the social innovation's level of usage on the proportion of state involvement in education. An explanation of the numbering is presented in the annex to this article.

Fig. 3. Dependency of the level of usage of social innovation on the proportion of state involvement in health care.
Fig. 4. Dependency of the level of usage of social innovation on the proportion of state involvement in HCS

Fig. 5. Dependency of the level of usage of social innovation on the proportion of state involvement in ensuring public safety
Fig. 6. Dependency of the level of usage of social innovation on the proportion of state involvement in environmental protection.

Fig. 7. Dependency of the level of usage of social innovation on the proportion of state involvement in social sphere.
A separate schedule was constructed for each activity. The x-axis shows the degree of public participation. The y-axis represents the scope of social innovation. The size of the figures characterizes the novelty of the innovation, with a small circle representing incremental innovations, a medium-sized circle representing radical innovations and a large circle representing systemic innovations. The color of the figure characterizes the level of initiation of social innovation: Colored innovations are instigated from above and non-colored innovations originate from below.

Insufficiently protected social innovations, as well as a list of supposed causes of this phenomenon, were created on the basis of the results of the allocation of identified areas.

The main challenge faced by the authors in the course of this study has been the formation of a sample of social innovation reflecting the objective tendencies of socio-innovative development; this is also a consequence of the lack of a generally accepted interpretation of social innovation in the scientific community. Additionally, a certain barrier exists in terms of the information available concerning the measured characteristics. However, this problem can be addressed through an analysis of the most significant socially innovative projects.

**Results**

The allocation of social innovations, identified according to the authors’ proposed multi-parameter classification criteria, including type of activity, scope, degree of government involvement, level of innovation and type of initiation, are presented below.

**Education**

The level of development affects the entire socio-economic sphere of society. In particular, the vital importance of this sphere is shown by its effects in areas such as social mobility, employment, the labor market and the standard of living. Social innovation in this area is primarily aimed at improving the efficiency and quality of the educational process, as well as ensuring access to education. Figure 2 shows the distribution identified in the field of education.

The analysis of Fig. 2 shows that the bulk of innovations are privately owned and operate on an international level. However, they also possess a high degree of novelty (radical innovations). Moreover, in education there are social innovations with both full and partial state participation.

Innovations in education that are initiated from the “bottom up” are international and radical, while the innovations with “top-down” initiation are gradual and implemented at the country level. This pattern is due to state policy regarding the development of the social realm, as well as the characteristics of the institutional structure of the social amenity sector.

In general, the evaluation of social innovation in the field of education shows a lack of social and innovative initiatives with full or partial state participation. Social
innovations at the regional and municipal level have not been represented, due to the selection process.

**Health**

Health developments consist of activities that provide a level of social welfare, public satisfaction with the quality of life of the working population and, as a consequence, underpin the dynamics of economic development (Markström and Karlsson, 2013). At the same time, overall global trends regarding the health of the population are fairly dismal: Age-related diseases have been affecting increasingly younger people; the average lifetime of the population, especially for men, is reducing; population growth has for some time been negative; the infant mortality rate in developing countries is growing; and other factors. These influences bear directly on the observed results. Moreover, an alternative way for progressing this method of action is the active development, introduction and spread of social innovation. Figure 3 shows the distribution in the field of healthcare according to the multi-parameter classification criteria.

Looking closely at Fig. 3, it may be observed that the social innovations presented are of a private character, but that the innovations themselves are conducted at the international level. This correlates with the functional effectiveness of informal cultural and social institutions. In terms of the degree of novelty of the innovations, it is both radical and gradual. For example, while state participation is completely absent in the above-mentioned social innovations, they show a high level of novelty (radical innovations).

**Housing and Communal Services (HCS)**

The HCS is designed to provide the population with the necessary engineering infrastructure for creating favorable housing conditions. The development of this sector has a direct impact on the level of well-being and quality of life. Most social innovations in this area are intended to enhance the adaptability of institutions to cater for the rapidly changing needs of the population. For example, in order to meet the needs of the population of pensionable age, the French project label Habitat Sénior Services is aimed at the development of new service standards for senior citizens (Rhodes and Donnelly-Cox, 2014; Czischke, 2013).

Social innovations in the field of HCS are mainly represented at the national level. Most of the projects are fully or partially supported by the state and have a high degree of novelty (radical innovations). The vast majority of improvements in this kind of activity is initiated from the “bottom up”. For example, the aforementioned label Habitat Sénior Services was initiated from bottom up and are labelled as a radical innovation. Also, it is worth noting that there is virtually no innovation at the municipal and regional levels.

**Ensuring Public Safety**

The main purpose of national security is to ensure public order. Social innovation in this method of enterprise is based on the active involvement of the population, who additionally provide security where state or international organizations cannot guarantee it. The International Alert organization serves as an example here. This organization, which specializes in peaceful conflict resolution also advises the government on this issue. Another example consists in the Israeli “Mishmarezrahi” (from Hebrew-“Civil Guard”) organization of voluntary police helpers, which numbers about 35 thousand volunteer citizens of Israel. The purpose of this organization is to counter riots.

Social innovations working in these areas are also to a higher degree initiated from “bottom up”, while they are presented in all sectors. From Fig. 5 it can be seen that there are no social innovations with partial state funding. However, the presence of a large number of private innovations suggests an inefficient state institutional structure. A majority of the innovations in this category are radical.

**Environmental Protection**

In the field of environmental protection innovations are represented not only by the use of new methods for solving existing problems, but also by the formation in the population of a responsible attitude towards the environment. In this regard, the bulk of the innovations are of a systemic and radical character and realized at the international and national levels. It should be noted that the innovations in this field are the most popular. This is due to global environmental problems. For example, in raising the environmental issue on a global level, the Greenpeace movement has not only managed to reduce harmful impacts on the environment, but has also drawn millions of people into its ranks and changed the perception of environmental issues in the minds of billions of people.

In addition, unlike other activities, development also takes place at the regional level. For example, the “Russian Rivers Network” project, which is geared to protecting Russia's largest rivers. The goal of the project is to raise awareness of natural wealth and contribute to the preservation of natural heritage.

This class of social innovations are usually managed at national and international levels. As such, modernizations at the international level have the highest degree of novelty and include systemic innovation. At the national and regional levels, radical innovations tend to predominate. Therefore, the innovation is completely lacking in full public participation at the municipal level and initiated via a “top down” scheme.
Table 1. Distribution of social innovation as a percentage according to the degree of government involvement and scope of the project

| Scope by the state | Full (%) | Partial (%) | Absent (%) | Total (%) |
|--------------------|----------|-------------|------------|-----------|
| International      | 2.4      | 7.1         | 34.3       | 43.8      |
| National           | 7.1      | 7.1         | 29.6       | 43.8      |
| Regional           | 2.4      | 0.0         | 4.8        | 7.2       |
| Municipal          | 0.0      | 0.0         | 4.8        | 4.8       |
| TOTAL              | 11.9     | 14.2        | 73.5       | 100.0     |

Table 2. Distribution of social innovation as a percentage according to the level of initiation and degree of novelty

| Novelty Initiation | Incremental (improving) innovation (%) | Radical innovation (%) | Systemic innovation (%) | Total (%) |
|--------------------|----------------------------------------|------------------------|-------------------------|-----------|
| “Bottom-up” innovation | 67                                    | 2                      | 81                      |
| “Top-down” innovation   | 12                                    | 5                      | 19                      |
| TOTAL               | 79                                    | 4                      | 100                     |

Social Sphere

In contrast to the previous activity, social services have wider boundaries and represent a set of enterprises, institutions and organizations designed for solving serious social problems. An example of this is the ASA Project which aims to combat the inefficient use of water from the rivers of Brazil and provide clean drinking water to the population of the arid areas of the country. It is important to note that the largest number of socially innovative projects take place in the social sphere itself. The vast majority of social innovations presented at the international level are conducted without state involvement. Meanwhile, social and innovative projects with state participation tend to be implemented directly at national and regional levels (Nawaz, 2015). The example of participatory budgeting in Porto Alegre may serve as a model here, since it represents a novel decision-making mechanism involving the population in budgeting decisions. Another example is the Green Corridor project, which is aimed at providing fast track documents in the provision of municipal services to the population in the town of Shakhty in the Rostov oblast. But despite this, the smallest amount of social innovation takes place at the municipal level.

Summing up the list of social innovations presented, it can be concluded that 71.5% of the projects have a private character; of these, 33.3% are presented at the international level, 28.6% at the national, but only 4.8% at the regional and municipal levels. Projects with partial state participation accounted for 14.2%, while the proportion of projects with full public participation did not exceed 11.9%. Here, social innovations at the municipal level are completely absent (Table 1).

Analysis of the distribution of social innovation by the level of initiation and degree of novelty is presented in Table 2. The largest share of innovation 81% was initiated from the bottom up. Of these, 67% are radical, 12% improving, whilst 2% was systemic. Innovations initiated from the top down account for only 19%. Of these, 12% are radical, 5% improving and 2% systemic.

Thus, the majority of innovations are radical at the national level and are mostly of a private nature (71.5% of social innovations).

Discussion

The results obtained in the previous sections of the study allow the following distribution patterns to be formulated:

- In economic terms, the most common social innovation is initiated from the bottom up. As noted above, 81% of social innovations are proposed, not by public bodies or government agencies, but by ordinary citizens
- Most social innovations are carried out without state support; 71.5% are implemented without any government involvement at all
- The most popular innovations are of an international (42%) and national (42.8%) character. The share of regional innovation is only 7.2%, while the municipal level accounts for a mere 4.8% of social innovations
- The majority of social innovation is of a private nature. Only 14.2% of social innovations are conducted with partial state support, while 11.9% of social innovations are implemented with full state support

The entire evaluation gives cause to rethink the role of this phenomenon in terms of the socio-economic development. The most important aspects may be presented according to the following propositions.

The distribution characteristics of social innovations are defined in terms of the specifics of institutional development of the territory (North, 1989). The main purpose of social innovation is to address public sector failures. In the case of a lack of public sector institutions the gap is compensated through the creation of the necessary public goods through modern initiatives. As a
large number of innovations are initiated from the “bottom up”, it can be concluded that it is the citizens' eagerness that develops new solutions for socially important problems (Chaudhry, 1993; Fafchamps, 2006). However, this trend applies mostly to developing countries with a weak public sector of the economy. For example, the abovementioned project Mothers2Mothers mitigates the function of a health institution.

Social innovation in developed countries has a slightly different role. These are focused on increasing the legitimacy of the people and new social requirements, which the public sector does not have time to respond to. For example, more than 80% of the adult population of the United Kingdom have taken part in a voluntary community police support program at least once in their lives. This social innovation is focused principally on increasing the legitimacy of the legal system and the decisions of the authorities in this area (Dorward et al., 2005; Fafchamps, 2006; Knowles and Owen, 2010; Lu, 2013; Martinus, 2014).

The graph presented in Fig. 6 illustrates the distinct roles of social innovation in the long-term evolution of developing and developed countries. The theoretical foundation for this graph is the approach taken by Dorward et al. (2005). This research shows the trajectory of developed and developing countries according to their technological and institutional development (Mumford, 2002; Wilmot, 2003). Applying this approach to the public sector, it has been shown that the level of development of the institutional environment can explain the active social innovation in developing countries, as demonstrated in Fig. 6. The x-axis represents the level of satisfaction of public goods, the y-axis shows the degree of public sector institutions. Social innovations are designated by small circles.

Careful evaluation has shown that, of the considered list of social institutions, developed countries account for only 12 innovations (Fig. 8), while developing countries comprise 30 innovations. This reaffirms the role of social innovations as an alternative to the production of public goods by the state.

Of special note is the role of social innovation in the elimination of state failures. Social innovation can reduce the level of the state bureaucracy and the accompanying transaction costs when dealing with socially and economically significant problems (Tirole, 2014). A prime example is the unique social project “The Big Issue”. “The Big Issue” is a British magazine, founded A. Roddick D. Byrd in order to help citizens who have no place of residence. The essence of the project is as follows: The editorial provides those falling into this category with the magazine at the price of £1.25, after which they are legally sold on the streets of the major cities in the UK at a cost of £2.25. The project has been running for 20 years with positive results. Currently the magazine works with more than 2,000 homeless in the UK. The project has helped to reduce poverty in the country, increase financial and social responsibility of citizens, as well as reduce the cost of the budget for the maintenance of the poor.

All of the above demonstrates that the government is often unable to fulfill the main task of the public sector – i.e., provide the desired standard of living – due to inefficient institutional structures, high information asymmetry, weak institutional management and coercion. In such circumstances, citizens' initiatives contribute to the creation of the necessary institutions, which represent the socially innovative solution for ensuring the delivery of vital public goods.

Conclusion

This study, which was conducted to develop an original approach to the allocation of social innovations based on civic initiatives, yielded the following results.

Firstly, it introduced a new, authentic concept of social innovation on the analysis of approaches with regards to innovative social actions.

Secondly, the five most important criteria for social innovation were identified, supporting the effective organization of social innovation. The criteria presented formed the basis for the original approach in the allocation of social innovation. As part of this study, a multi-parametric classification of social innovation was developed, serving as the foundation for the original approach.

Thirdly, the systematization of 42 social innovations was identified according to the proposed classification criteria worldwide. The above analysis allowed us to determine the practical features of the distribution of social innovation. The study confirmed the specific role of civil initiatives for the development of the public sector.

Fourthly, the key role of the level of institutional development, determining the features of the distribution of social innovation, was outlined. In addition, the role of social innovation in both developed and developing countries was revealed.

The theoretical significance of this study is in an extension of the theory of innovation in relation to the public sector, as well as in the formation of a platform for further analysis of social innovation.

The practical significance of the results consists in the ability of governmental institutions to use the original approach to carry out effective policies in the sphere of socially innovative development. In addition, the results of this study can be used to improve the effectiveness of innovators' activities.

It is necessary to note that in this study the role of social innovations has been defined according to five criteria. The phenomenon of Social Innovations, due to
its complexity, requires further research. We advise the forthcoming study to pay special attention to the role of social innovations in social and economic development of high-developed and less developed countries, which can be researched using a variety of approaches and from different perspectives.

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Author’s Contributions

Evgeny Popov: Development of the conceptual framework, analysis, interpretation of the results and drafting the article.

Jol Stoffers: Contributed to interpretation of the results, preparation of the final version of the article and reviewing the article critically.

Zhoomart Omonov: Data collection, analysis, interpretation of the results and drafting the article.

Anna Veretennikova: Data collection and analysis.

Ethics

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References

Battistella, C. and F. Nonino, 2012. Open innovation web-based platforms: The impact of different forms of motivation on collaboration. Innovation: Manage. Policy Pract., 14: 557-575. DOI: 10.5172/impp.2012.14.4.557

Chaudhry, K., 1993. The myths of the market and the common history of late developers. Polit. Society, 3: 245-273. DOI: 10.1177/0032329293032100302

Cooney, K., 2006. The institutional and technical structuring of nonprofit ventures: Case study of a U.S. hybrid organization caught between two fields. Voluntas, 17: 143-161. DOI: 10.1007/s11266-006-9010-8

Cowen, T., 1992. Public Goods and Externalities: Old and New Perspectives. In Public Goods and Market Failures: A Critical Examination. 1st Edn., Transaction Publishers, New Brunswick.

Czischke, D., 2013. Social Innovations in Housing: Learning from Practise across Europe. University of Technology, Delft.

Dekker, P., 2009. Civicness: From civil society to civic services? Voluntas, 20: 220-238. DOI: 10.1007/s11266-009-9089-9

Dorward, A., J, Kydd, J. Morrison and C. Poulton, 2005. Institutions, markets and economic co-ordination: Linking development policy to theory and praxis. Dev. Change, 36: 1-25. DOI: 10.1111/j.0012-155X.2005.00400.x

Fafchamps, M., 2006. Development and social capital. J. Dev. Stud., 42: 1180-1198. DOI: 10.1080/00220380600884126

Frens, M. and R. Lambert, 2008. Open and close innovations: Comparative analysis of national practice. Innovatii Economika, 7: 16-31.

Golubeva, A.A. and E.V. Sokolova, 2010. Innovation in public sector: Introduction to the problem. Vestnik Sankt-Peterburgskogo Univ., 9: 28-57.

Gonzalez-Padron, T., G.T.M. Hult and R. Cantalone, 2008. Exploiting innovative opportunities in global purchasing: An assessment of ethical climate and relationship performance. Indust. Market. Manage., 37: 69-82. DOI: 10.1016/j.indmarman.2007.06.013

Heiscala, R., 2007. Social Innovations: Structural and Power Perspectives. In: Social Innovations, Institutional Change and Economic Performance, Hamailanen, T.J. and R. Heiscala (Eds.), Edward Elgar, Celtenham, ISBN-10: 1847206999, pp: 52-79.

Kimberly, J., 1982. Managerial Innovation. 1st Edn., Oxford University Press, New York.

Knowles, S. and P.D. Owen, 2010. Which institutions are good for your health? The deep determinants of comparative cross-country health status. J. Dev. Stud., 44: 700-723. DOI: 10.1080/00220380903428399

Koch, P., P. Cunningham, N. Schwabsky and J. Hauknes, 2005. Summary and Policy Recommendations: Innovation in the Public Sector D20. 1st Edn., Publin, Oslo.

Koch, P. and J. Hauknes, 2005. On Innovation in the Public Sector. 1st Edn., Publin, Oslo.

Lu, A.D., 2013. Harnessing social innovation through inclusive thinking. Japan Soc. Innovat. J., 3: 56-61. DOI: 10.12668/jsij.3.56

Malkina, T. and A. Auzan, 2013. Hostages of distrust. Russ. Polit. Law, 51: 71-84. DOI: 10.2753/RUP1061-1940510407
Markström, U. and M. Karlsson, 2013. Towards hybridization: The roles of swedish non-profit organizations within mental health. Voluntas: Int. J. Voluntary Nonprofit Organiz., 4: 917-934. DOI: 10.1007/s11266-012-9287-8

Martinus, K., 2014. Can public space be a platform for social innovation? A study of Sannomiya, Kobe, Japan. Japan Soc. Innovat. J., 4: 44-45. DOI: 10.12668//jsij.4.44

McElroy, M.W., 2002. Social innovation capital. J. Intellectual Capital, 3: 30-39. DOI: 10.1108/14691930210412827

Menyashev, R. and L. Polishchuk, 2011. Does Social Capital Have Economic Payoff in Russia? Working Paper. Higher School of Economics, Moscow.

Moore, M.H., 1995. Creating Public Value: Strategic Management in Government. 1st Edn., Harvard University Press, Cambridge, ISBN-10: 0674175581, pp: 402.

Mulgan, G., S. Tuckers, R. Ali and B. Sanders, 2007. Social Innovation: What It Is, Why It Matters and How It Can Be Accelerated. 1st Edn., The Basingstoke Press, London (UK).

Mumford, M.D., 2002. Social innovation: Ten cases from benjamin franklin. Creativity Res. J., 14: 253-266. DOI: 10.1207/S15326934CRJ1402_11

Murray, R., J. Caulier-Grice and G. Mulgan, 2010. The Open Book of Social Innovation. The Young Foundation, London (UK).

Nawaz, F., 2015. Microfinance, financial literacy and household power configuration in rural bangladesh: An empirical study on some credit borrowers. Voluntas, 26: 1100-1121. DOI: 10.1007/s11266-015-9585-z

Niskanen, A.W., 2008. Public Choice Economics. SAGE, Thousand Oaks (CA).

North, D., 1989. Institutions and economic growth: An historical introduction. World Dev., 17: 1319-1332. DOI: 10.1016/0305-750X(89)90075-2

Phils, J., 2009. Rediscovering Social Innovations. Stanford Graduate School of Business, Stanford (CA).

Pol, E. and S. Ville, 2009. Social innovation: Buzz word or enduring term. J. Soc. Econom., 38: 878-885. DOI: 10.1016/j.socec.2009.02.011

Popov, E., 2005. Minieconomics as a separate part of microeconomics. Atlantic Econ. J., 32: 133. DOI: 10.1007/s11293-005-1650-3

Rhodes, M.L. and G. Donnelly-Cox, 2014. Hybridity and social entrepreneurship in social housing in Ireland. Voluntas: Int. J. Voluntary Nonprofit Organiz., 25: 1630-1647. DOI: 10.1007/s11266-013-9421-2

Tanimoto, K., 2012. The emergent process of social innovation: Multi-stakeholders perspective. Int. J. Innovat. Regional Dev., 4: 267-279. DOI: 10.1504/IJIRD.2012.047561

Tirole, J., 2014. Market Power and Regulation. Economic Sciences Prize Committee of the Royal Swedish Academy of Science, Stockholm.

Wilmot, T.M., 2003. The Dynamics of Visioning and Social Innovation: A Grounded Theory Study of the Impact of Appreciative Inquiry in Sustaining Long-Term Organizational Change. Case Western Reserve University Cleveland, Cleveland (OH).

**Appendix 1. List of Social Innovations**

Open University, Cousera, Khan Academy, Zillion, italki, the flipped classroom, Médecins sans frontiers, Riders for health, Mother2Mothers, Saude Crance, Grameen-Cure2Children, Grameen Healthcare Trust, Boligsocialnet, Habitul Senour Service, Seniour Forum: A whole concept, Rehabitat, Batigere, Microspaces of Solidarity and Youth Residential Inclusion in degraded Neighbourhoods, Grord bez narkotikov, Voluntary and Community Sector Involvement in UK, Yekîneyên Parastina Gel, Neighborhood Watching, Voluntary police in Sought Africa, Voluntary police in Israel, International Alert, Green Peace, Podorozhnik, Russian Network of River, Nature of Sought Siberia and it’s defenders, Ecoline, WWF, The Big Issue, The ASA Project, Amnesty International, Oxfam, The Woman Institute, I Paid Bribe, Grameen Bank, Fairtrade, Participatory Budget, Linux, Zeleniy Koridor.