Assessing the Effectiveness of Social and Political Innovations in the Development of Interaction between the Authorities and the Population during COVID-19: The Implication of Open Innovation

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Abstract: Open innovations combine the interaction of the authorities and the population in regions of Russia. Social and political interaction of Russian network users demonstrates new open forms of political participation, mobilization practices (initiative appeals, petitions), the use of expert systems data, and remote access technologies. The increasing number of initiatives and the growth of online communities involved in the discussion and adjustment of the results of innovation activities require the use of a big data format. The demand for open innovation based on the principles of transparency of social and political interactions is being updated during COVID-19. This study aims to assess the effectiveness of open innovations in social and political interactions during COVID-19. The innovative practices of communication between the population and authorities were studied using DataMining tools based on digital platforms: “Russian Public Initiative”, “Change.org” and “GoogleTrends”. Users’ social graphs represent the visualization in terms of thematic and territorial groupings. The results obtained allow for a conclusion about the dependence of the regional innovation activities on the openness of their communications and their location relative to authoritative and other types of resources. The physical location of the region (center–border region–periphery) and dependence on implementation at the federal, regional or municipal levels are circumstances influencing the effectiveness of social and political innovations.

Keywords: open innovation; COVID-19; innovation index; authorities; population; social innovations; government policy; large amounts of data: modeling and analysis

1. Introduction

In the early 2000s, the term “social innovation” began to be actively used in a social context, on the political agenda of many countries of the world, as a description of new practices of intersectoral interaction between the authorities and the population to solve social problems better and meet the social needs of the community. Social innovation is developing in such areas as health and social services, education and structural unemployment, population aging, youth employment, poverty reduction and improving the quality of life, problems of globalization and migration, ecology and climate change, issues of transport and people’s mobility, energy consumption, etc.

In present-day society, the practices of civil and social participation of the people are being updated. Traditional managerial political decisions aimed at the future require flexibility and consideration of people’s political sentiments and the attitude toward them. Social and political innovations are directed to meeting the population’s social needs and achieving socially significant goals [1]. Nowadays, innovation is an effective tool for transforming interactions between the state and civil society. Multidirectional levels and trajectories of public involvement influence new formats of resource allocation [2–4].
formation of innovation communities’ networks is a long-term process from the viewpoint of building trust among communities’ users (participants) [5]. Still, at the same time, it becomes qualitatively more complicated in the context of digitalization.

Researchers call current processes “global online diving”, noting that in the middle of 2020, social media coverage exceeded half of the world’s population. At the end of 2020, more than 4 billion people already used social media worldwide, reaching 55% coverage. In 2020, the number of social media users grew by more than 12% around the globe [6]. The content of social networks in Russia also changed in 2020. In Russian social media, the number of active users amounted to 64 million people who wrote more than 1.2 billion public messages (posts, reposts, and commentaries) [7]. In general, since 2011, the growth rate of social network users has increased to 39% (from 12% in 2011 to 51% in 2020), according to the Levada Center [8].

The growth of citizens’ digital activity, and their involvement in digital political relations, can be illustrated by the dynamics of registered users of the Single Portal of Public Services in Russia, the first version of which appeared in 2009. Before 2012, the increase in the registered users was from 0.09 to 3.6 million people, then the number of accounts doubled annually, and in 2020, it reached 126 million people [9].

The coronavirus pandemic has led to transferring some social, economic, and political interactions to the virtual network. This situation has transformed the forms of civic activism. In the conditions of the forced isolation of everyday “face-to-face” interaction, the population and the authorities were forced to consider the possibilities of virtual communication. It is important to note that the authorities set new forms of communication in the current conditions. Citizens, in turn, form their own networks of social and political communication. This process has resulted in hybrid forms of mobilization (including the protest one), mediated by digital communications [10].

New “horizontal” communications are formed; they include messengers, social networks with the resources for providing continuous and targeted content transfer and receiving online feedback [11]. The innovations of social and political interaction have sociologically measurable indicators: the content of interaction acts (interaction parties, stages, frequency and duration, socio-cultural background, etc.); “message”; semantic components of interaction; temporal characteristics (including situations where social interactions acquire “political tones”); and interdisciplinary interaction effects [10].

The concept of “sub-politics” proposed by Ulrich Beck unites participants to social and political interactions at the assemblage point of horizontal civil relations and vertical political decisions, forming an open, practically equidistant sphere representing the interests and capabilities of the interacting parties [12,13]. New communications between the authorities and the population make it possible to accelerate the discussion and preparation of solutions to urgent problems while at the same time increasing the frequency of participants’ feedback, resulting in compositional complexity.

Innovations are implemented with regard to the capabilities of specific regions. The public discourse between the population and the authorities on the scale of regional relations can indicate innovation effectiveness. Increased content-destructive communications and protest assessments of the authorities’ actions/inaction activate extensive conventional methods of interaction, increasing the number of the “official communication points” reducing the time for response to civil appeals. While the techniques of civic discussion and sharing remain uncovered, introspective analysis of user ratings and appeals involving digital markers of innovative interaction can demonstrate the professional, national, cultural, and political preferences of social network users [14].

The concept of open innovation is based on several foundations: the principle of innovation (a new phenomenon is born and lives in danger and risk); intensive structural conductivity, potential openness of innovation for all actors of social and political relations; the results of implementing innovations over time have an impact on all participants in the interaction (even if part of society perceives them passively or avoids).
The hypotheses of this study were the following assumptions: the effectiveness of open innovation is determined by the location of regions in relation to the centers of power and resources. The centralization of power presupposes the establishment of formal filters for social and political innovations, which must meet the needs and urgent interests of territorial development (Hypothesis 1); open innovations structure the demand of the authorities and the population for the content and direction of social and political interaction. Open innovations create the structure of the demand of the government and the population on the content and direction of social and political interaction. The uneven participation of the population may be determined by the conditions in the region’s social space (Hypothesis 2). The demand of the population for interaction based on a balance of social and political interests is updated during COVID-19 (Hypothesis 3).

We begin this paper by defining the concept of social and political innovation. Revealing this concept, we consider the following (1) impact of open innovation on the interaction of authorities and population; (2) impact of social and political innovations on the interaction of authorities and population; (3) the effectiveness of social and political innovations in the development of interaction between the authorities and the population.

Then, we describe how innovative practices of communication between the population and the authorities were studied using DataMining tools based on digital platforms: “Russian Public Initiative”, “Change.org” and “GoogleTrends”.

After that we discuss how regional innovation is changing using digital technologies for the population and authorities’ participation. We note that it is aimed at solving social problems and meeting the social needs of the community, such as through the creation of networks of innovative online communities.

In conclusion, our contribution to assess the effectiveness of open innovations in social and political interactions during COVID-19, specify the main limitations of the study as well as future lines of research on the subject.

2. Literature Review

2.1. Impact of Open Innovation on the Interaction of Authorities and Population

In current publications, the research priority is given to the study of open innovation in industrial organizations and business structures [15]. Open innovation is a concept that combines business, power, and academic research structures. This interaction model demonstrates a differentiated and active attitude of interacting parties to innovation, relying on open, transparent principles of innovation relations based on the principle of open architecture in the mobilization of social, political, and other types of resources [16]. Open innovations become the defining concept of research and practical spheres of government activities and civil “field of initiatives”. European researchers emphasize the potential of citizen involvement as a way to apply open innovation in the public sector [17]. Practical use by the interacting parties in digital technologies makes innovation even more open, reciprocal and global. At the same time, researchers underline the use of mobile forms of interaction in civil politics and political administrative structures.

It is also noted that scaling up local initiatives turns out to be a complicated process, requiring all parties to the communication to scale up interests and resources [18]. In the actual researches devoted to open innovation and interaction between the population and the government, three directions can be traced: the glorification of the technological priority and wide opportunities for open innovation in the system of a global and post-global society [19–22]; comparison of open innovation with other forms of implementing new ideas, including quasi-innovative projects in the communities with “limited democracy” [13,23,24]; investigation of the nature of open innovation formation and implementation exemplified by various social and public systems [16,25–28].

2.2. Impact of Social and Political Innovations on the Interaction of Authorities and Population

In the late 20th and early 21st centuries, well-established approaches to the definition of innovation were formed in the Russian research practice. They are considered as a
systematic process of innovation introduction, dissemination, and transformation of socio-cultural processes. V.V. Shcherbina offered two types of innovation models: individual-oriented and organization-oriented ones [29]. Social innovation is the ability to solve or create solutions to social problems that were previously inadequately solved. These solutions should be both functional (effective) and have a transformational function (bring about changes), and, first of all, they should be focused on improving the situation for beneficiaries and all participants [30].

The social orientation of social innovations focus on achieving a social goal, relevance, and legitimacy in the community are recognized as its main elements, that is, the fact that innovative solutions meet the interests and needs of residents, as well as a novelty for the local context and the fact that social innovation is based on active intersectoral interaction between different groups of participants. From the viewpoint of Russian sociologist N.I. Lapin, innovation is a process of creating, developing, and implementing new means in the economic and social space to meet common and differentiated needs and interests. Innovation is characterized by such features as institutional involvement, purposefulness, practicality, initial localization, and proactivity underlying innovation [31]. For successful implementation, it should become reflexive-multilevel, starting from the primary regional innovation systems that will provide evolutionary and innovative self-development of regions, taking into account the peculiarities of each region, and being reflexively regulated “from above” and “from below” (by the state and civil society) [32–34].

International researchers distinguish four approaches to the consideration of social innovation: innovation as a change in social relations, focusing on new ways of doing, organizing, knowing, and framing; system innovation changes at the level of societal sub-systems, including institutions, social structures, and physical infrastructures; changes at the macro-development level that are perceived to change the rules in the ‘game’ of societal interaction; discourses on change and innovation, i.e., sets of ideas, concepts, metaphors, and/or story-lines about change and innovation [35,36]. Currently, the problem of commensurability of the paradigmatic approaches to social innovation is noted. Scholars distinguish between technocratic and democratic views united on the grounds of the neoliberal paradigm of innovation development in the modern world [37,38].

In the scientific community, the paradigm becomes “innovation in cooperation” when a relationship is established between the quality of new political ideas, the pursuance of the speed of mastering them, and the support of volunteers involved [39]. Substantiation of the importance of open social and political innovation is associated with the concept of “teachable policy”. R.S. Jansen [40] interpreted political innovation as new modes of political practice and concluded that it is creative recombination of existing practices by interacting political agents. The application of crowdsourcing as a mechanism of open innovation enables us to consider the possibilities of state institutions that attract citizens to stimulate open social innovation and thus implement new ways of solving social problems (“civic activism”) [41–43].

2.3. The Effectiveness of Social and Political Innovations in the Development of Interaction between the Authorities and the Population

Trends in society’s digitalization and conceptual advances in studying the spatio-temporal perspective of innovation processes require fundamental research of the relationship between development, innovation policy, and territoriality. Techniques and methods for implementing the principle of the “open region” also have broad adaptive capabilities for solving municipal or other specific problems in the development of regions and territories [44,45]. Digitalization as a whole can also cause fatigue in society or its individual members. European studies in the field of digitalization show that current information overload increases the relevance of user communities in searching for fast ways to obtain information, and high-speed Internet [46,47].

In this sense, an electronic platform aimed at collecting people’s opinions, comparing them with other stakeholders’ viewpoints, and harmonizing them requires constant external connection/data updating and continuous internal and external stimulation [48,49].
Opportunities to use external sources of innovation are also important components in forming open innovation relations and related social and political communications. The system of social and political interaction between the authorities and the population, organized linearly, becomes ineffective in a complex reality. It is necessary to abandon it in favor of more flexible systems that take into account not only real but also potential risks and open social innovations. Modern researchers recognize the need for a synergistic paradigm, which is aimed at studying the nonlinear effects of communication [50,51].

Russian researchers note the threat of the digital divide in the development of “digital democracy” in present-day Russia [52]. Digitalization is a priority direction in the development of Russian society; it includes the use of digital technologies in education, healthcare, and other areas and changes the ways of interaction between the community and the state [53–55]. In modern literature, the problems of the influence of open innovations on the interaction of the authorities and the population during a pandemic have not been investigated, which led to the setting of Research Methodology.

3. Materials and Methods

We share the opinion that the development of social and political innovation creates new opportunities to solve different-level managerial and coordination tasks on the part of the authorities and the population using methods close to the parameters of the physical and virtual territory [56].

The increase in the number of initiatives and the growth of online communities involved in the discussion and adjustment of the innovation activity results require the use of a big data format. Researchers note the rationality of this approach in methodological and technological aspects [57].

The logic of our research involved three stages. To test the first hypothesis, we relied on the ratings of innovative development of Russian regions as an indicator of open innovation (Russian Regional Innovation Scoreboard Rating of innovative regions of Russia [58], Association of Innovative Regions of Russia [59]).

The second hypothesis was tested using network diagnostics tools of open multiple data; the initiatives of three levels: federal, regional, and municipal, were considered as a case study of current events in the communication between the authorities and the population.

The possibility for citizens to freely participate in discussing socially significant issues of the territory development (filing petitions) and suggest their solutions (initiatives) can serve as an indicator of the regions’ openness for social and political innovations in this research.

The authors analyzed public and civic initiatives from March 2020 to March 2021, which came from various Russian regions. All initiatives were grouped depending on the implementation level and thematic focus, and concerning the territorial affiliation of the subjects—The authors of the initiatives, the applicants, which allowed us to highlight the most active regions and regions whose residents are weakly involved in the creation of initiatives.

The following platforms served as entry points for data compilation:

(1) The Russian Public Initiative (https://www.roi.ru accessed on 20 June 2021) is an Internet resource for posting public initiatives of the federal, regional, municipal levels, proposed by the citizens of the Russian Federation. The website accumulates citizens’ proposals regarding the socio-economic development of the country and the improvement of state and municipal administration. The analysis included 1347 federal, 191 regional, and 115 municipal initiatives that are at the voting stage. The analysis of the initiatives placed on the digital platform was based on the following indicators: units of references—unique digital documents that were recorded in terms of the time and territory of submission of the initiatives; thematic focus of appeals. We identified the degree of popularity of the most challenging topics in the Russian regions using the website filters “level” and “section” (there were 19 topics according to the website interface). An interactive map of Russia
posted on the website made it possible to determine the activity degree of a particular region’s residents in posting initiatives of national importance. Thematic directions of the initiatives are preserved in compliance with the resource interface.

(2) Change.org (https://www.change.org accessed on 20 June 2021) is a global platform for civil campaigns of different levels, initiated by people from all over the world. The data from this platform allowed us to record the civic activity and open proposals from residents of Russian regions. A total of 10,009 petitions were analyzed and 991 of them from March 2020 to March 2021 were included in the sample. These petitions were grouped under the same topics as those we had previously highlighted in the initiatives. The analysis took into account the addressees to whom the petitions were sent, which enabled us to identify the level of further implementation of decisions. The territorial affiliation of a petition author also made it possible to identify the most active regions of Russia. Data Mining as part of testing the third hypothesis was built using Google Trends.

(3) Google Trends (https://trends.google.ru accessed on 20 June 2021) is a web application enabling us to identify where the search for the relevant problem was performed most often. We used this tool to study the citizens’ search queries on the relevant topics of their popularity by region during March 2020–March 2021. A consistent query of challenging topics identified in the analysis of civil and public initiatives made it possible to determine the Russian regions that were leading in the corresponding search queries of the residents (the three most popular topics were taken into consideration). The visualization is represented by users’ social graphs concerning thematic and territorial groupings.

Such a triangulation aimed to construct a diffuse scheme for the formation of open initiation topics and the possibilities of articulating the problems of local (regional) development on the scale of the Russian Federation. This approach made it possible to assess the effectiveness of open social and political innovations, which is a comparison of the levels of region’s innovative development with the possibility of discussing socially significant issues of the territory development (petition-filing), the search for solutions (queries) and residents’ open initiatives. This analysis allowed us to offer the regions’ ranking (Table A1 in Appendix A).

4. Results and Discussion
4.1. Testing Hypothesis 1

Nowadays, the ranking of regions’ innovative development is a significant indicator for the study of social and political innovations in the territory of Russia. The social and political significance of Russian regions’ innovative development rating lies in constructing individual profiles of each constituent entity of the Russian Federation, which details the results for all indicators of innovative development. This is a tool for comprehensive monitoring of the regional authorities’ activities, which allows for more accurate focusing of the “federal instruments” of support [58]. The rating created in 2012 by the Association of Innovative Regions of Russia (AIRR) for monitoring and management purposes is another option for ranking regions according to the degree of their innovativeness. Based on the ranking results, five groups of regions are distinguished according to the innovative development level: “strong innovators”; “medium-strong innovators”; “medium innovators”; “medium-weak innovators”; and “weak innovators” [59]. Top-rated innovative regions of Russia are shown in Table 1.

The research results demonstrate the formation of innovativeness foci, characterized by a geographical attraction to resource centers or “points of power” and by their location at the border of the intersection of international interests.

According to the data obtained, it is possible to identify the advantages of the leaders of the proposed initiatives and applications for solving problems. This identification refers to the regions—Drivers of innovative development, combining significant political capital, financial and intellectual resources, for example, Moscow City, St. Petersburg, the Republic of Tatarstan. Nominally, inclusion in initiative applications implies the authorities’ attention to the problem and resource support in the future. The Russian
specificity in organizing social and political communications provides for the priority of the authoritative (administrative and managerial) scheme for accumulating innovation resources, compared to market schemes for providing open innovations proposed in foreign, particularly European projects [48,60].

Table 1. Top-rated innovative regions of Russia.

| Russian Regional Innovation Scoreboard [58] | Rating of Innovative Regions of Russia. Association of Innovative Regions of Russia [59] |
|---------------------------------------------|------------------------------------------------------------------------------------------------|
| Moscow City                                 | St. Petersburg City                                                                          |
| Republic of Tatarstan                       | Republic of Tatarstan                                                                         |
| St. Petersburg City                         | Moscow City                                                                                  |
| Tomsk region                                | Tomsk region                                                                                  |
| Nizhny Novgorod region                      | Moscow region                                                                                 |
| Moscow region                               | Novosibirsk region                                                                            |

4.2. Testing Hypothesis 2

Initiatives are a manifestation of open innovations and their content allows us to assess the content and nature of social and political interaction between the authorities and the population.

The differentiation of public initiatives in the Russian Federation from March 2020 to March 2021 reflects the desire of citizens for social protection from the state, economic well-being, and security on the part of federal government bodies (Figure 1). In the manifestation of initiatives at the regional level, the top place is taken by the social infrastructure, the ecological component of the living space, and social protection (Figure 2). It should be specified that it is impossible to attribute each initiative, in its pure form, to only one thematic domain; therefore, the topics are intertwined within one initiative proposal.

The drafting of petitions on the most pressing topics at the federal and regional levels can be called another manifestation of the people’s initiatives.

Analysis of petitions on the information resource “Change.org” from March 2020 through March 2021 showed proactive activity on the following topics: housing and communal services, management companies, homeowners’ associations; safety; and business.

The most frequently mentioned problems in petitions refer to “security”, “business,” and “housing and communal services” (petitions exceed the number of initiatives by 20.25%). The topics of petitions devoted to “labor and employment” (0), “public administration” (1), “voting rights” (3) are zero or close to zero. These indicators can be used when considering civil “problem points,” for which the authorities need to form open communication platforms with the ability to monitor the state of problems dynamically.

Comparison of the thematic focusing shows the dominant pairs of initiatives “transport and roads”, “urban infrastructure” and petitions “safety”, “housing and communal services”. At the same time, public petitions are not updated in the matters of education, science, and state support. This scheme of trust does not correlate with the schemes of “triple spirals”, etc., proposed in the foreign practice of the innovative environment formation.

System-forming problems and issues are more often considered in the section of federal petitions; the transformation of the basic social practices of the people’s life may depend on their solution. Life support and territorial infrastructure issues are more often found among regional petitions. The results are reflected in Table 2.

Most of the initiatives were proposed in the Central Federal District (650): Moscow (271 federal initiatives, 51 regional ones) and the Moscow region (104 and 15, respectively) are the leaders within the district.
Figure 1. Thematic focus of public initiatives and petitions (federal level) (data from the Russian Public Initiative and Change.org Internet platforms, March 2020–March 2021) (number of initiatives and petitions).

Figure 2. Thematic focus of public initiatives and petitions (regional level) (data from the Russian Public Initiative and Change.org Internet platforms, March 2020–March 2021) (number of initiatives and petitions).
Table 2. The number of public initiatives by territorial affiliation of the initiative authors and by the levels of implementation (data from the “Russian Public Initiative” Internet platform, March 2020–March 2021) (number of initiatives and petitions).

| Territorial Affiliation of the Authors of the Initiatives | Initiative Implementation Level | Total |
|----------------------------------------------------------|---------------------------------|-------|
|                                                          | Federal | Regional | Municipal |       |
| Central Federal District                                 | 518     | 79       | 53        | 650   |
| Volga Federal District                                   | 200     | 20       | 13        | 233   |
| Northwestern Federal District                            | 158     | 30       | 13        | 201   |
| Ural Federal District                                    | 141     | 12       | 10        | 163   |
| Siberian Federal District                                | 137     | 23       | 12        | 172   |
| Southern Federal District                                | 123     | 18       | 7         | 148   |
| Far Eastern Federal District                             | 41      | 4        | 3         | 48    |
| North Caucasian Federal District                         | 29      | 5        | 4         | 38    |

In the Volga Federal District, the Samara Region is substantially ahead of the remaining regions (65 initiatives of federal significance). In the North-West Federal District, St. Petersburg is distinguished by the number of initiatives (106 of federal and 22 of regional significance). The RIA Rating Agency presents the results of the regular quality-of-life ranking in the Russian regions, demonstrating the nearest equivalent satisfaction results. In particular, Moscow, St. Petersburg, and the Moscow region occupy the first positions in the regions’ ranking regarding the quality of life in 2020; their aggregate rating score exceeds 75 (possible minimum makes 1, and maximum equals 100) [61]. It is appropriate to assume that territories possess a group of common features: the concentration of power, financial and administrative resources, centripetal social attitudes of the regions.

The representation of the North Caucasus Federal District is the least pronounced from the viewpoint of declarative initiative activity. In its structure, the Stavropol Territory (24 federal initiatives) can be noted as the most active region, compared to individual initiatives of other regions in this district.

Open innovations structure the demand of the authorities and the population for the content and direction of social and political interaction.

When correlating the regions that are leading in terms of the number of citizens’ public initiatives and the rating of innovative Russian regions, it can be noted that the territorial entities shown in Figures 3 and 4 belong to the groups of strong and medium-strong innovators. The data obtained reflect the uneven distribution of the people’s proactivity, emphasizing the special activity of the cities of federal significance.

The results presented in Table 3 demonstrate the dominance of public appeals submitted by residents of the Central Federal District (383 petitions in total for the specified period). In general, the number of public appeals is distributed regarding three levels for all regions. The dominant number of appeals was recorded in the central regions close to political and financial resources. A less significant number of initiatives identified in the North Caucasian Federal District may be conditioned by the national-ethnic character of the region, methods of direct political appeal, and the presence of latent mechanisms for representing local interests.

The possibilities of reflecting the results of communication between the population and representatives of the authorities are found mainly at the micro-level [62]. This fact allows us to note that open innovations create the structure of the demand of the authorities and the population for the content and direction of socio-political interaction. The uneven participation of the population in the implementation of open innovations can be determined by the conditions in the social space of the region.
Figure 3. Leading regions in terms of the number of initiatives having federal significance posted by their residents (the leader from each federal district is marked) (number of initiatives and petitions).

Note that this is also not always related to the size of the population in the territory. In particular, we compared the ratio of the number of initiatives and petitions put forward to the density of the economically active population per square meter. So, the highest density was recorded in the Central Federal District (32.7 thousand people/km$^2$) and the North Caucasian Federal District (26.9 thousand people/km$^2$); comparing them with the number of initiatives and petitions, we note that the residents of the Central Federal District put forward 356 initiatives and 142 petitions, and the residents of the Caucasus only ten initiatives and twelve petitions. The North Caucasian Federal District is the region

Figure 4. Leading regions in terms of the number of petitions having federal significance posted by their residents (the leader from each federal district is marked) (number of initiatives and petitions).
where the least number of petitions and initiatives are put forward. Additionally, the regions with the lowest density are the Siberian Federal District and the Far Eastern Federal District, which are not outsiders in terms of the number of initiatives and petitions. This fact requires further study. Thus, an extensive research field has been formed for the study of open innovations in the future.

Table 3. Number of submitted petitions, by territorial affiliation of authors and addressee levels (data of the “Change.org” Internet platform, March 2020–March 2021).

| Territorial Affiliation of Applicants | Petition Implementation Level | Total |
|--------------------------------------|------------------------------|-------|
|                                      | Federal | Regional | Municipal |       |
| The territorial affiliation of the applicant is unknown | 236     | 42       | 50        | 328   |
| Central Federal District              | 186     | 75       | 122       | 383   |
| Volga Federal District                | 56      | 40       | 29        | 125   |
| Northwestern Federal District         | 53      | 37       | 34        | 124   |
| Ural Federal District                 | 31      | 33       | 31        | 95    |
| Siberian Federal District             | 36      | 34       | 16        | 86    |
| Southern Federal District             | 11      | 16       | 11        | 38    |
| Far Eastern Federal District          | 12      | 14       | 8         | 34    |
| North Caucasian Federal District      | 8       | 4        | 3         | 15    |

4.3. Testing Hypothesis 3

We recorded changes in the population’s demand for social and political interaction based on open innovations during COVID-19 using Internet search queries. Figures 5 and 6 show the study of citizens’ search queries on relevant topics and their popularity by region within March 2020–March 2021. With a consistent query of challenging topics identified in the analysis of civil and public initiatives, the leading regions of the Russian Federation were determined in terms of the residents’ appropriate search queries. Thus, top regions leading in innovation activities (Moscow and St. Petersburg) are significantly far behind the leading regions in terms of the aggregate scores for assessing the ‘popularity’ of thematic queries. Political and resource centers and “border territories” are among the regions that select the maximum number of topics for queries.

Figure 5. Leading regions in terms of aggregate scores for assessing the popularity of thematic queries (based on the results of Google Trends data analysis for March 2020–March 2021).
The density of certain queries demonstrates the existing problems in the regions and confirms that well-resourced regions are not always equally socially active. When forwarding initiatives and petitions, people retain a steady demand for social changes in state social support, environmental well-being, and urban space development to maintain the quality of life. The results of assessing the open social innovation effectiveness demonstrate a gap between the state and civil demands for solving a social problem and their materialization.

5. Discussions

Under conditions of the global pandemic (COVID-19), traditional communication systems are not fully functioning [63]. Network platforms for collecting and discussing information, used to build a dialogue between civic interests and government representatives, are becoming innovative forms of interaction. Open digital communications helped send or duplicate citizens’ appeals, identify relevant topics, search, and request information necessary to support everyday life. The changes in socio-political interactions in the formation of directions for the implementation of open innovations in the regions of the Russian Federation are revealed. The content and impact of these changes need further study.

In practical terms, the consideration of what is the understanding of the importance of open innovation outside high-tech industries, and illustrations of how organizations (companies, regions) are able to implement open innovation in practice are the essential results of studying open innovation in modern society [64–66].

In the situation under consideration, the regions with ongoing pilot innovation projects can form a particular group of territories [67]. Our findings are consistent with other researchers’ data, when experts and researchers name the differences between the European and current Russian models of choosing priorities as characteristic features of the development of pilot innovation clusters. While in Europe cooperation between companies in clusters is a priority, in Russia the main task is to create conditions and maintain a dialogue between business and the state [68,69]. International practices show solutions in the form of collaborations for actors implementing innovations with “external specialists”, including crowdsourcing with the population (coordination and accounting of public initiatives) with...
the possibility of material and other types of stimulating the citizens and communities’ participation [70,71].

In the existing conditions of online interaction, instead of cooperation generated by family and neighbor ties, growing territorial communities began to consolidate relations based on tactical, rational choice and striving for individual and personal goals [72]. Networks “constitute the new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture” [21,73,74]. These processes can have implications for the spread of open innovation.

New conditions for discourse organization (“digital sources”, reactive relationships, and online communications) are distinguished by the use of “post-truth populism” and the active reproduction of mass simulacra by the society in communications [75,76].

The implementation of open innovations at the present stage is associated with big data technologies and involves a revision of their algorithms, which draws attention to the study of transparency and social responsibility in the network [77,78]. The big data format, the use of social networks in open social and political innovation force us to consider the fact that public trust can be abused and manipulated using these tools [79,80].

The challenging conditions and constraints associated with the 2020 pandemic have increased the number of remote forms of social and political communication [81–85]. There is a decrease in public activism of the major part of citizens, while the load on network communications increases, and problem areas are considered in a simplified form. At the same time, researchers note a reassessment of power dispositions. The result is the need to abandon the static definitions of the local and the global to trace the multiple global relationships that make up the texture of our reality [86].

The implementation of initiatives requires the activation of administrative and political resources, institutional intervention ‘here-and-now’, which is problematic due to the lack of the mechanism transparency [87]. Although new communication tools are used by the authorities and the population in the Russian regions, it is required to diagnose regional problems, and to determine the practical significance of open innovations for citizens.

The predominantly social aspects of interaction between the authorities and the population have intensified during the pandemic. Public rather than personalized requests prevail (social support, ecology, city infrastructure, etc.). We note a decrease in the political activity of the population in open innovations during the COVID-19 period. The results obtained do not allow us to assert whether these manifestations are situational, or will become new trends in social and political interactions. The impact of open innovation on these processes is to be studied in further research.

6. Conclusions

Currently, open innovation provides new opportunities for social and political interaction between the authorities and the population of Russian regions. All parties employ new tools to social and political communication with caution: the differentiated approach of residents to the application of innovations, regarding the “center-periphery” interests are recorded, and thematic certainty is manifested in the broadcast appeals and petitions. Analysis of public initiatives at the federal level reveals the citizens’ desire to implement requests that can be realized only with the authorities’ participation and emphasize the applicant’s status and role, while the queries of residents of a specific territory prevail at the regional level (‘here and now’).

Based on the content of the ratings and regional data presented in the research, it can be concluded that the innovation activities of the regions depend on their openness (readiness) to develop new ideas and their location relative to authoritative and other types of resources.

The region’s physical location (center–borderline region–periphery) is the next factor influencing the effectiveness of open innovation in the regions. The significance of initiatives is not balanced regarding the resources of the territorial entity. The assessment of
the effectiveness of open social and political innovations showed the dependence of the initiative on its implementation at the federal, regional or municipal levels during COVID-19. Support for the people’s queries about the need for transformations is determined by the topic of the problem field, the project content, and the goals of the region’s strategic development.

According to the declared public initiatives and regional development ratings, there is a formalization of the problem field of social and political innovation, indicated with regard to the corridor of opportunities, requests, and urgent interests of regional development. Initiatives that have received support at the federal level act as formative grounds for choosing similar initiatives at the regional and local levels.

The results of drawing graphs of the innovation activity values on the scale of certain regions demonstrate the absence of uniform participation on behalf of the population and authorities [88]. This circumstance may be caused by the specific conditions of innovative partnership in the region’s social space. The digital measurement methods used in the study demonstrate a set of assessment tools exemplified by graphs, analysis and comparison of rating values, and review of the online queries from Russian users.

Summarizing the discussion about the problems of open innovation in social and political interaction in the space of Russian regional network communities, it should be noted that the transformation of communicative practices, the active transition of social and political interaction participants to digital platforms was initiated primarily by organizational, managerial and political initiatives of government officials. However, civic activism and participation in innovations are demonstrated by the growth of digital presence in everyday activities, citizens’ participation in the network and “cloud” (mobile, wireless platforms, including self-organizing communities) communities, and the formation of a networked environment of digital interaction with government institutions.

The limitation of this study is that the transformation of communication practices, the active transition of participants in socio-political interaction to digital platforms (even during the COVID-19 period) were initiated, first of all, by organizational, managerial and political initiatives of civil servants. However, civic engagement and participation in innovations demonstrate an increase in digital presence in everyday activities, participation of citizens in networked and “cloud” (mobile, wireless platforms, including self-organizing) communities, as well as the formation of a networked environment for digital interaction with government agencies. It is important to take into account the rapid and reactive nature of such socio-political interaction. Based on these limitations, the development of dynamic models for evaluating innovation processes will become a priority for further research. In the future development of the research topic, it is possible to envisage consideration of network protest assessments of the implementation of innovative projects in the regions of Russia.

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Appendix A

Table A1. Leading regions summary.

| Rating of the Subjects of the Russian Federation by the Value of the Russian Regional Innovation Index: 2017 | Rating of Innovative Regions of Russia. Association of Innovative Regions of Russia. Version 2018 | Leading Regions in Terms of the Number of Initiatives Posted by Their Residents (the Leader from Each Federal District Is Marked) | Leading Regions in Terms of the Number of Petitions Posted by Their Residents (the Leader from Each Federal District Is Marked) | Leading Regions in Terms of the Aggregate Score of the “Popularity” Rating for Thematic Queries |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Moscow City                                     | St. Petersburg City                             | Moscow City                                     | Moscow City                                     | Republic of Tatarstan                           |
| Republic of Tatarstan                           | Republic of Tatarstan                           | St. Petersburg City                             | St. Petersburg City                             | Krasnoyarsk territory                           |
| St. Petersburg City                            | Moscow City                                     | Samara region                                   | Krasnoyarsk region                              | Krasnoyarsk region                              |
| Tomsk region                                    | Tomsk region                                    | Chelyabinsk region                              | Republic of Bashkortostan                       | St. Petersburg City                             |
| Nizhny Novgorod region                         | Moscow oblast                                    | Krasnoyarsk region                              | Sverdlovsk region                               | Moscow City                                     |
| Moscow oblast                                    | Novosibirsk region                               | Novosibirsk region                              | Primorye territory                              | Khanty-Mansi Autonomous Okrug—Yugra             |
| Sverdlovsk region                               | Kaluga region                                    | Stavropol region                                | Krasnoyarsk territory                           | Primorye territory                              |
| Novosibirsk region                              | Nizhny Novgorod region                           | Amur region                                     | Stavropol region                                | Stavropol region                                |

References

1. Mulgan, G. The Process of Social Innovation. Innov. Technol. Gov. Glob. 2006, 1, 145–162. [CrossRef]
2. Borri, N.; Giorgio, G. Systemic risk and the COVID challenge in the European banking sector. J. Bank. Financ. 2021, 6, 106073. [CrossRef]
3. Yun, J.J.; Zhao, X.; Jung, K.; Yigitcanlar, T. The Culture for Open Innovation Dynamics. Sustainability 2020, 12, 5076. [CrossRef]
4. Dermody, J.; Yun, J.H.J.; Della Corte, V. Innovations to advance sustainability behaviours. Serv. Ind. J. 2019, 39, 1029–1033. [CrossRef]
5. Latouche, P. Open Innovation: Human Set-Up; Wiley-ISTE: London, UK, 2020; Volume 10, pp. 211–223.
6. Pyrma, R.V. Diving the citizens into the digital communication environment. Vlast 2021, 29, 69–76. [CrossRef]
7. Chernyy, V. Social Networks in Russia: Numbers and Trends, Autumn. 2020. Available online: https://br-analytics.ru/blog/social-media-russia-2020/ (accessed on 31 March 2021).
8. Russian Media Landscape. Levada Center, 2020. Available online: https://www.levada.ru/2020/04/28/rossiiskij-medialandshaft---2020 (accessed on 31 March 2021).
9. Popova, S. Latent exploitation of users of digital platforms as a norm of the techworld: To articulation of the problem for social research. Confl. Nota Bene 2020, 2, 11–25. [CrossRef]
10. Golovatsky, E.; Kranzeeva, E.; Orlova, A.; Burmakin, A. Social Practices of Mobilizing Population Initiatives: Prospects for Hybrid Methodology. In Proceedings of the International Conference on Communicative Strategies of Information Society (CSIS 2018), Saint-Petersburg, Russia, 26–27 October 2018; Volume 289, pp. 8–13. [CrossRef]
11. Becker, B.; Wehner, J. Electronic Networks and Civil Society; SUNY Press: Albany, NY, USA, 2001; ISBN 978-0-79145-016-1.
12. Beck, U. Risk Society: Towards Another Modernity; Progress-Tradition: Moscow, Russia, 2000.
13. Beck, U. The cosmopolitan perspective: Sociology of the second age of modernity. Br. J. Sociol. 2000, 51, 79–105. [CrossRef]
14. Kurbatov, V.; Krupenikova, L.S. The foreshortenings of sociological research of net-communities in the Internet. Humanit. South Russ. 2016, 19, 50–58.
15. Podmetina, D.; Fiegenbaum, I.; Väätänen, J. Open innovation in Russia: Productivity and industry effect. Int. J. Transit. Innov. Syst. 2012, 2. [CrossRef]
16. Chesbrough, H. Everything You Need to Know about Open Innovation. 2011. Available online: https://www.forbes.com/sites/henrychesbrough/2011/03/21/everything-you-need-to-know-about-open-innovation/?sh=3c4865d375f4 (accessed on 25 March 2021).
17. Bogers, M.; Chesbrough, H.; Moedas, C. Open Innovation: ReseaRch, PRactices, and Policies. Calif. Manag. Rev. 2018, 60, 5–16. [CrossRef]
18. Van Lunenburg, M.; Geuijen, K.; Meijer, A. How and Why Do Social and Sustainable Initiatives Scale? Syst. Rev. Lit. Soc. Entrep. Grassroots Innov. 2020, 31, 1013–1024. [CrossRef]
19. Bourdin, B. Is a ‘Common World’ in The Age of Globalization Possible? An Issue for the Dialogue between Civilizations. J. Glob. Stud. 2020, 11, 64–72. [CrossRef]
20. Jacobs, J.A. Journal Rankings in Sociology: Using the H Index with Google Scholar. Am. Sociol. 2016, 47, 192–224. [CrossRef]
56. Arici, F.; Yildirim, P.; Caliklar, Ş.; Yilmaz, R.M. Research trends in the use of augmented reality in science education: Content and bibliometric mapping analysis. Comput. Educ. 2019, 142, 103647. [CrossRef]
57. Andruskevich, O.A.; Denisova, I.M. On Some Paradoxes of the Russian Innovation Infrastructure. Econ. Contemp. Russ. 2019, 1, 49–69. [CrossRef]
58. Gokhberg, L.M. Russian Regional Innovation Scoreboard; Higher School of Economics Press: Moscow, Russia, 2020.
59. Rating of Innovative Regions of Russia. Association of Innovative Regions of Russia. Version 2018. Available online: https://i-regions.org/upload/iblock/e8f/airr18.pdf (accessed on 29 March 2021).
60. Rheingold, H. The Virtual Community; Perennial: New York, NY, USA, 2000.
61. Quality of Life in Russian Regions—Rating 2020. Available online: https://riarating.ru/infografika/20210216/630194637.html (accessed on 29 March 2021).
62. Tsoi, L.N. Social innovation: The innovative resolution of conflicts. Vlast 2018, 26, 143–149. [CrossRef]
63. Robbins, P.; O’Gorman, C.; Huff, A.; Moeslein, K. Multidexterity—A New Metaphor for Open Innovation. J. Open Innov. Technol. Mark. Complex. 2021, 7, 99. [CrossRef]
64. Chiaroni, D.; Chiesa, V.; Frattini, F. The Open Innovation Journey: How Firms Dynamically Implement the Emerging Innovation Management Paradigm. Technoinovation 2011, 31, 34–43. [CrossRef]
65. Sukhovey, A.F.; Golova, I.M. The Innovative Component of Socio-Economic Development of the Region; Institute of Economics UB RAS: Ekaterinburg, Russia, 2019.
66. Sukhovey, A.F.; Golova, I.M. Differentiation of Innovative Development Strategies of Regions for Improving the Effectiveness of Socio-Economic Policy in the Russian Federation. Econ. Reg. 2020, 16, 1302–1317. [CrossRef]
67. Gainanov, D.A.; Gubarev, R.V.; Dzyuba, E.I.; Fayzullin, F.S. Industrial potential of Russian regions: Estimation and growth reserves. Sociol. Stud. 2017, 1, 106–116.
68. Ivanov, V. Science and technology policy in context of new development strategy for Russia. Innovations 2019, 4, 3–7. [CrossRef]
69. Kutsenko, E. Pilot Innovative Territorial Clusters in Russia: A Sustainable Development Model. Foresight Russ. 2015, 9, 32–55. [CrossRef]
70. Mergel, I. Opening Government: Designing Open Innovation Processes to Collaborate with External Problem Solvers. Soc. Sci. Comput. Rev. 2015, 33, 599–612. [CrossRef]
71. Trofimova, I.N.; Khamidoullina, E.Y. State policy on innovation, techno-lobbyism and interest groups. Vestn Ross. Akad. Nauk. 2018, 9, 137–154. [CrossRef]
72. Rodger, R. (Ed.) European Urban. History: Prospect. and Retrospect; Leicester University Press: Leicester, UK, 1993.
73. Castells, M. The Rise of Network Society; Blackwell: Oxford, UK, 1996. [CrossRef]
74. Social Media and Censorship: Pros and Cons. Every Second Respondent in Russia Speaks in Support of Censorship in Social Networks. 2021. Available online: https://wciom.ru/analytical-reviews/analiticheskii-obzor/socialnye-seti-i-cenzura-za-i-protiv (accessed on 29 March 2021).
75. Baudrillard, J. Simulacra and Simulation; POSTUM: Moscow, Russia, 2015; ISBN 978-5-91478-023-1.
76. Smart, P.; Holmes, S.; Lettice, F.; Pitts, F.H.; Zwiegelaar, J.B.; Schwartz, G.; Evans, S. Open Science and Open Innovation in Socio-Economic Policy in the Russian Federation. Econ. Reg. 2020, 16, 1302–1317. [CrossRef]
77. Drexler, G.; Duh, A.; Kornherr, A.; Korošak, D. Boosting Open Innovation by Leveraging BigData. Open Innov. New Prod. Dev. Essent. PDMA 2014, 299–318. [CrossRef]
78. O’Neill, K. Killer Big Data. How Mathematics Became a Weapon of Mass Destruction; AST: Moscow, Russia, 2018; ISBN 978-5-17-982583-8.
79. Desouza, K.C.; Jacob, B. Big Data in the Public Sector: Lessons for Practitioners and Scholars. Adm. Soc. 2017, 49, 1043–1064. [CrossRef]
80. Neudert, L.-M. Hurdles and Pathways to Regulatory Innovation in Digital Political Campaigning. Political Q. 2020, 91, 713–721. [CrossRef]
81. Dynkin, A.A. Social and humanitarian measurement of responses to grand challenges. Vestn. Ross. Akad. Nauk. 2019, 4, 384–389. [CrossRef]
82. Expert Online Discussion “In Isolation: The Evolution of Social Practices in the Context of the Coronavirus Pandemic.” Poll “WCIOM-SPUTNIK”. Available online: https://profi.wciom.ru/index.php?id=2277 (accessed on 29 March 2021).
83. Kalyaev. Vestn Ross. Akad. Nauk. 2019, 4, 348–350. [CrossRef]
84. WCIOM: During the Pandemic, Most Russians Have Limited Contacts and Stay at Home. 2020. Available online: https://tass.ru/obschestvo/8734855 (accessed on 17 March 2021).
85. WCIOM: Russians Have Experienced a Peak of Anxiety Due to the Coronavirus Pandemic. 2020. Available online: https://tass.ru/obschestvo/8183827 (accessed on 29 March 2021).
86. Sedda, F. The Virus and the Glocal: Tracing Semiopolitical Interactions. Glocalism. J. Cult. Politics Innov. 2020, 3. [CrossRef]
87. Pinto, H.; Nogueira, C.; Guerreiro, J.A.; Sampaio, F. Social Innovation and the Role of the State: Learning from the Portuguese Experience on Multi-Level Interactions. *World* 2021, 2, 62–80. [CrossRef]
88. Ignatovskiy, Y.R. The role of digitalization in the transformation of the Russian political protest. *Vlast* 2021, 29, 84–89. [CrossRef]