

Contemporary Internet as a Means for Leveling Social Inequality in the Context of Relationships between Civil Society and the State

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ABSTRACT

The topicality of the research depends on the existence of social inequality which emerges as various social groups of the civil society interact with the state. With regard to this, the paper aims to find out the relation between the current social stratification and the usage level of modern information and communication technologies by different social groups. The leading approach to dealing with the problem is analyzing primary and secondary data of sociological research that allows a comprehensive study of the citizens' opportunity to access the relevant information. The paper presents statistic data of Web surveys and the results of qualification testing of teachers. It also describes the role of virtual environment and distance learning in solving the problem of information inequality and provides grounds for the necessity of enhancing the educational activity of the state and upgrading the educational process. The materials of the paper may have practical use for the professionals working on the problems of social stratification of the modern society, social inequality characterizing various social groups of the civil society interacting with the state.

KEYWORDS

Civil society, state, social inequality, Internet, social network

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Introduction

The problem of social inequality is acute in today's society and this holds true both for the world scale and for Russia taken individually (Mamedov & Kovalchuk, 2014; Sushko & Pronchev, 2014). Alongside with the "old" inequality kinds (between various social groups within one nation, between the "title" nation and national minorities etc.) that drift to the background yet still remain, new kinds of inequality appear and get an ever-greater significance: the ones between "rich" and "poor" countries, "advanced" and "low performing" regions of the world and so on (Kovalchuk, 2014).

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Nowadays, the inequality of access to the information becomes one of the most important kinds of inequality in the human society (Muravjov, Pronchev & Proncheva, 2013). The modern society is a strongly penetrated by IT one and, consequently, the significance of the "information sector" of social life is increasing (Pronchev et al., 2014). Throughout the world, the information sector – information, knowledge, information services – is currently growing faster than the economy as a whole. Today information is coming to the foreground, science is becoming a direct production force and the economy is gaining a super-sophisticated character (Kuznetsov et. al., 2006; Proncheva, 2014). Ultimately, it is the multilateral information interaction that provides for the movement of capital, technologies and human resources – i.e. the basis of the modern social development (Kuznetsov, Kul'ba & Mikrin, 2006; Proncheva, 2014). Not only man's welfare, but also his material survival depends much on the access to the relevant information (Goncharova & Pronchev, 2015; Pronchev & Goncharova, 2016).

The time we live in is often called the "information era". Many researchers share the opinion that it is information technologies that are one of the major driving forces in the modern world (Pronchev et al., 2013; Monakhov and Pronchev, 2015).

The accelerated proliferation of IT penetration process is associated with globalization of the world, growing intensity of various contacts in the economy, politics, culture, and education, as well as with the need of faster mutual understanding and interaction. Success of both an individual and an entire state depends much on the prompt access to the required information.

When considering the relationships of the civil society and the state from this viewpoint, one can notice that ordinary people and state employees have got unequal access to the information which is important in the respect of social life. With regard to this, while state employees possess a much higher level of access to certain kinds of information (all sorts of statistic data, details of state legislation and scheduled change thereto), it is ordinary people who are much more informed about others (most information about certain unique events in the most varied spheres of social life) (Pronchev and Muravjov, 2013).

At the same time both the state and civil society are interested in certain leveling of the existing inequality of access to the information. For successful activity, ordinary citizens have to have an idea about the actual state of affairs and development of society (and the state) on the whole while for state employees, in some cases the complete information about certain events (e.g. breaches of the current law including criminal actions) witnessed and participated by ordinary people is critical. On balance, higher awareness of state employees about certain facts of life activity of the civil society can help them satisfy social needs and requests of individual citizens in a more efficient and prompt manner. On the other hand, as they become more informed about the activity of the state agencies and actual state of affairs in the state, its citizens will trust it more and will understand the reasons of the state machinery actions better (Muravjov, Pronchev & Proncheva, 2013).

Materials and Methods

The notion of "information inequality" involves a "new kind of social differentiation resulting from different opportunities of using the newest information and telecommunication technologies" (Mark, 2004).

The term was first voiced in the report of the US National Telecommunications and Information Administration in 1995 where they pointed out considerable differences in the access to the new information technologies and the Internet network. By the new information technologies, NIT, taken in the most general meaning, a total of software means, methods and models of processing the information with the direct intellectual access of a human to the computer system is meant.

The practice shows that the global Internet web with the modern technologies having developed on its basis can become a very efficient means for leveling of the social inequality kind described above.

Using the principal Internet technologies from all the known as of today, both state employees and ordinary people can if not completely bridge the gap of unequal access to the relevant information then anyway advance in this direction quite well (Monakhov and Pronchev, 2014).

The Internet technologies are a special case of the modern information technologies, i.e. as the Russian researchers understand them "continuous processes of processing, storage, transfer and displaying of information aimed at the efficient usage of information resources, CE (computer equipment) and data transfer when controlling systems of various classes and purposes" (Muravjov, Pronchev & Proncheva, 2013). From this viewpoint, the Internet technology is a continuous process of processing, storage, transfer and displaying of information stored in the computers connected to the Internet global network.

All information stored in the Internet is input there by people in any case. From the sociological standpoint, the question by the efforts of what people and social groups the information is processed, stored, transferred and displayed is deemed to be the most important. In other words, what is essential is the question who makes the computers work in such a way and not in another.

The principal Internet technologies are directly associated with different stages of development of the Internet. As of today, the most widespread is the idea about the stages of Web 1.0 and Web 2.0 being traced in the development of the global network and the gradual transition to Web 3.0 stage taking place at present:

— Web 1.0 — the content of the Internet resources is formed by a rather small number of professionals with the majority of "ordinary people" acting as readers and users. In this case, the notion "PR in the Internet" has to be understood as communication efforts of creating and promoting the websites;

— Web 2.0 — the Web users take active part in creating the content. Here the PR task is self-fulfillment, activation of multilateral communication, gaining the dominating information status in the communities of one's interest – blogosphere and social networks;

— Web 3.0 — the users do not merely generate the content but also certify it themselves: they mark what is noteworthy for the likeminded people and communities they belong to and they systemize the content in line with their tastes. At this stage, the PR task is innovative technologies of measuring the content, involving the users into the work of recommendation service that has emerged, and further on – attempts of using it for promoting the priority products (Monakhova et al., 2014).

An Internet site can be determined as a total of Internet pages united by the same electronic address, software and hardware means, graphic and text design of the pages; meanwhile, the commonness of the graphic and text design may be fairly relative. The responsibility for processing, storage, transfer and displaying of information when using the Internet technology is borne by a rather small group of professionals whereas

ordinary users of the Internet act as consumers. The Russian research team led by A. Chumikov suggested the following broad definition of social networks in the Internet: social networks are websites or other Internet tools granting the users an opportunity to interact with each other exchanging various kinds of information. Building a social network involves organizing the Internet communities promoting people's participation and attracting new users.

By creating and using the Internet sites of various state agencies, state employees can supply the citizens with statistic data and inform them about any change to the current law. The websites also enable state employees to report about their work to ordinary people (Monakhova et al., 2014). At the same time, ordinary people can inform state employees about various events via the feedback provision mechanisms available on the Internet sites.

On the other hand, state employees get an opportunity to expand their access to the information necessary for them by watching ordinary people's communication in social networks. A case in point is the Russian Federal Bailiff Service using the social networks for skip tracing and collecting the information about debtors (Nussbaum & Intron, 2006). Social networks may well be used for organizing a relatively equal dialogue between state employees and ordinary people, which also leads to partial bridging the gap of non-uniform access to the relevant information. Quite a successful experience of organizing such a dialogue was gained by the RF Government Chairman, D.A. Medvedev (2008), during his activity in the Internet social networks (Parinov, 2012).

Results and Discussion

According to the data of TNS analytics company as of February 2013, 76,5 mln of the Russians access the Internet at least once a month (this is 53% of the country's total population). In all the federal districts of Russia, the specific weight of the Internet audience also exceeds 50% of the population size (Monakhova and Monakhov, 2015b).

According to the data of the joint research by the Institute of the Information Society (IIS) and Microsoft, since 2008, the difference between the share of the Internet users in Russia and the European Union countries (EU) has decreased more than twice. With regard to this, there is still a considerable gap – both in quantity (the quantity of computers vs. population size) and quality (the way technologies are used and state services requested and rendered electronically).

At present, in Russia, 58% of the population use the computer not less than once a week while for the EU countries this figure is 69%. The proportion of the Internet users is approximately the same: 56% in Russia and 68% in the EU (Monakhova et al., 2015). It has to be borne in mind that the very global Internet network is not only a means for leveling the existing social inequality but also a source of new kinds of that.

First, there is inequality between the Internet users and the ones who for the most diverse reasons have got no access to the network (Vartanova, 2002). This is true not only for Russia but also for the entire modern world as a whole. Currently growing non-uniformity of the development of the information society is evident. Using computers, the Internet and other new technologies is daily life for some people while two thirds of the humanity have not made a single telephone call in their life. Social class, age, sex, education level, nationality, language, geographic location etc. turn into barriers or variables as you enter the Web (Monakhova et al., 2015). Even in the USA, the country which saw the start of technological revolution and which has got a markedly higher average annual income of the population than in the vast majority of other countries, the difference in the access to new information and communication technologies and

skills of using them has necessitated conducting a careful serious study – as a result of which the very term "digital divide" was coined. The more actively the Internet is going to be used by various state agencies and services, the more critical the inequality is going to become (Smirnova, 2009).

Second, there is inequality between the different Internet users – that of the experience of using the Web, of the technical literacy level and so on. For instance, it influences greatly the process of the Internet user searching for some information in the network. It can be expected that the users looking for information will be likely to find websites that are artificially ranked by the search engine developers. Ranking is performed as the website owners pay for boosting their ratings. So the users can hardly find smaller and less popular websites including ones that are not supported by experienced professionals. As a rule, they have a lower rating. Some users can use different search services while the majority will use without thinking the default one set by the Internet service providers or organizations. Yet another situation is possible when an ordinary person using the Internet proves to be more professional than a state employee responsible for the work of the state agency website. This can be a source of danger both for individual citizens and for the state as a whole (Mikhailov et al., 2015).

The authors believe the today's information divide consists not in the lack of hardware or software but in underformed readiness of people to use the information and communication technologies in social and professional activity. For providing the social equality in the sphere of information, various methods are used by the state:

1) points of access to information and communication technologies are installed in the public places (libraries, schools, universities, state institutions, parks, subways etc.);

2) information awareness of people is being raised which is provided for by the State Program of the Russian Federation "Information society 2011-2020";

3) older age users are taught at a number of higher education institutions in line with the RF SP "On the development of further education system for senior citizens" (Nussbaum & Intron, 2006);

4) information technologies are taught to the disabled people according to the Russian Federation SP "Accessible environment" for 2011-2015, the law "On social protection of the disabled people in the RF" and social programs at the regional level aimed at teaching the information technologies to the disabled for subsequent employment of the latter.

"Experts believe the information capital of a personality is a very significant resource, especially at our time. Hence the difference in information education, information opportunities existing between people living in our country does create the so called information divide, or digital divide, digital inequality. While those living in a large metropolitan city have virtually every opportunity of both accessing the Internet and using the mobile communication means, ones living in small residential areas have almost none. It is this digital inequality, digital divide, that we have to bridge," said D.A. Medvedev (2008) in his speech at Presidium of the State Council in Petrozavodsk. His words remain relevant as of today.

This is why we consider the notion "readiness for using the information and communication technologies" in educational, social and professional activity to be the basic one and to present an integral quality of the human personality consisting of the following components: information one – this includes mastering the theoretical knowledge essential for the use of ICT in educational, social and professional activity; value and motivation component which reflects the developed readiness for the

integrated activity in the information and communication environment forming as a result of purposeful learning at school, higher education institution and further continuous learning that can be of a mixed character – alongside with synchronous group learning at further training courses, there is asynchronous individual learning which uses the training toolkit with the dynamic, multimodal, nonlinear presentation of the study information in the ICT area, with mobile learning as an option too.

In 2013-2014, within certification the computer literacy and ICT competence in the sphere of education, the data were obtained that allow concluding that teachers of Russia are motivated to master the information and communication technologies but do not possess sufficient competences. So it is important to expand the network of retraining system organizations, especially to develop distance learning courses, arrange webinars and online workshops.

In other words, the development of teachers' professional expertise can and must be transferred into the virtual information environment (Zassoursky, 2001).

In September-October 2014 and February-March 2015, a survey was conducted by us encompassing about 2000 respondents. Within our survey, the question "Are you interested in the opportunity of mobile learning (using tablet PCs and any portable devices)?" was answered positively by 50% of the respondents, with 13% being not sure and 6% giving a definitely negative answer. The question "Are you interested in the opportunity of distance learning" was answered positively by 59% of the respondents, with 12% being not sure and 12% answering no. The survey results confirmed the adult population being oriented toward the distance learning form.

In Russia, distance learning (DL) via the Internet began to develop in 1988. Evolution of hardware, computer telecommunications, global networks and new information technologies lead to accelerated development of the distance learning system.

Proliferation of distance learning forms is a natural stage of evolution of the education system. Passing from the chalk and board to computer teaching software. Distance and traditional learning forms should not be perceived as mutually exclusive, however. Today, a good education is a synthesis of the most diverse forms of obtaining knowledge and the state-of-the-art technologies the optimum combination of which for a learner can only be determined by the learner himself.

The requirements follow from the need of professional retraining and further training of personnel, especially in villages that are remote from big cities. Statistics shows that over 2/3 of the adult population are not involved in any forms of education although there is a need of that. Virtual environment not only gives an opportunity of distance learning but it also ensures a totally new level of availability of education.

It is considered by us that the virtual information and education environment is a system of distance learning means including the electronic information resources, electronic educational resources, the total of information technologies, telecommunication technologies, the relevant hardware and ensuring the learners mastering educational programs or parts thereof, as well as the means of development, storage, transfer of and control of access to them.

The virtual information and education environment allows expanding the geography of learners as well as the topical range of courses taught and enhance their quality. Time of learning is reduced owing to fast communication between the teacher and the student.

The system of modern distance learning gives an opportunity to access the world resources, virtual libraries and databases.

Distance learning using the virtual environment is the most promising integral form of further vocational training.

The modern society needs continuous education and self-education of its members. According to the data of the Federal state statistics service, the quantity of employees receiving further professional education via distance learning made just 7,7% of the total – 2410056 people – in 2013. However, as compared to 2011-2013, motivation for improving their professional expertise, especially in mastering the information and communication technologies (hereinafter ICT), increases from 38% to 49%, with over the half of the respondents being ready to enhance their information and communication culture by distance and mobile learning (Monakhova and Monakhov, 2015a).

So, while emerging of distance learning was conditioned by the needs and social mandate of the society, as for the evolution of DL, it is determined on the one hand by technical advance of communication and digitization means of the Russian information space and on the other hand – by the processes of IT penetration into education and the latter gaining a more democratic character. The transition from one historical development stage to another is conditioned by the development of information and communication technologies. The condition for eliminating the information inequality and ensuring the information security of the modern society is raising the level of information and communication competence of teaching personnel that can be effected via a broad network of distance courses of retraining and further training.

Conclusion and Recommendations

Summing up, there is a positive trend to be pointed out – one for bridging and reducing the information inequality in Russia. State, municipal, regional programs for that are in action. At the state level, Russia is out for occupying a leading position in the area of access of all categories of citizens to information services.

Evolution of education led to the era of global humanistic education targeted at personality self-development in line with "lifelong education" formula. In the modern society, the information processes are the basis of development. This, in its turn, boosts the IT penetration being one of the major conditions for upgrading the Russian education system – as it is in the education sphere that the people forming the new information environment of the society are trained and brought up. With regard to this, the Internet becomes an efficient means for leveling the social inequality in the sphere of information.

The material presented in the paper is of interest for the professionals working on the problems of social stratification of the modern Russian society and social inequality emerging in various social groups of the civil society interacting with the state. The authors suggest enhancing the educational activity of the state and upgrading the educational process in order to eliminate the current issues.

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References

- Goncharova, I. V. & Pronchev, G. B. (2015). Virtual social environment for people with visual impairments. *Politics and Society*, 5, 586-590.
- Kovalchuk, V. K. (2016). Theoretical and methodological approaches to the sociological study of contemporary Russian village. *Representative power - 21 st century: legislation, commentary, problems*, N 3(146), 33 – 36.
- Kuznetsov, N. A., Kul'ba, V. V. & Mikrin, E. A. (2006). *Information security systems of organizational management*. Moscow: Nauka, 495 p.
- Mamedov, A. K., Kovalchuk, V. K. (2014). Social inequality: options of formation. *Representative power - 21 st century: legislation, commentary, problems*, N 5-6 (132-133), 55 – 61.
- Mark, B. (2004). *Man in the era of mass media*. Moscow: LTD "AST Publishing", 507 p.
- Medvedev, D. A. (2008). *Verbating report of the meeting of the national council presidium "On the implementation of the Strategy for Information Society Development in the Russian Federation"*. Direct access: <http://kremlin.ru/events/president/transcripts/cop-y/819>
- Mikhailov, A., Petrov, A., Proncheva, O., Marevtseva, N. (2015). Mathematical modeling of information warfare in a society. *Mediterranean Journal of Social Sciences*, Vol. 6, N 5, S 2, 27 – 35.
- Monakhov, D. N., Pronchev, G. B. (2014). E-government as a factor of innovative development of Russia. *Representative power - 21 st century: legislation, commentary, problems*, N 1 (128), 4-7.
- Monakhov, D. N., Pronchev, G. B. (2015). Network technologies and cloudy services as tool of achievement of digital equality among Russian citizens. *Representative power - 21 st century: legislation, commentary, problems*, N 1-2 (136-137), 67-70.
- Monakhova, G. A., Lontsov, V. V. Pronchev, G. B. & Monakhov, D. N. (2014). *Security issues of the information society of modern Russia*. Moscow: Eco-Inform, 215 p.
- Monakhova, G. A., Monakhov, D. N., Pronchev, G. B. (2015). Information and communication competence of pedagogical personnel as tool of elimination of a digital inequality and ensuring information security of Russia. *Representative power - 21 st century: legislation, commentary, problems*, N 4 (139), 37-43.
- Monakhova, G. A., Monakhov, N. V. (2015a) Overview of tools for developing digital educational products focused on learning and control. *XI international scientific-practical conference "Russia and Europe: the relationship of culture and economy" (February 27, 2015, Prague)*. Prague, Czech Republic: Publishing house WORLD PRESS, 317-320.
- Monakhova, G. A., Monakhov, N. V. (2015b). *The results of the monitoring of professional competence of teachers in the field of information and communication technologies. The collection of materials of XIII international scientific-practical conference "Modern concepts of scientific research"*. Moscow: Eurasian Association of scientists and scholars, 54-55.
- Muravjov, V. I., Pronchev, G. B., Proncheva, N. G. (2013). Modern Internet technologies as an instrument of smoothing the social inequalities in the context of relationship between civil society and government. *Education and the Law*, 12(52), 77-85.
- Nussbaum, H. & Intron, L. (2006). *Why is the policy of the Internet search engines important*. Moscow: Idea-Press, 160 p.
- Parinov, C. (2012). *Origins of the Internet civilization*. Direct access: <http://www.inter.net.ru>,
- Pronchev, G. B. & Goncharova, I. V. (2016). The technology of EU Internet resources for people with visual impairments. *Bulletin of the scientific conferences*, 3(6), 88 – 89.
- Pronchev, G. B., Monakhov, D. N., Lontsov, V. V. (2013). Virtual Social Mediums Security in the Information Society. *Space and time*, N 4 (14), 231 – 236.

- Pronchev, G. B., Muravjov, V. I. (2013). About peculiarities of internet technologies use for the civil society development in modern Russia. *Representative power - 21 st century: legislation, commentary, problems*, N 7-8 (126-127), 59-63.
- Pronchev, G. B., Sushko, V. A., Muravjov, V. I. (2014). The Internet as social communication facility. *Representative power - 21 st century: legislation, commentary, problems*, N 7-8 (134-135), 52 – 58.
- Proncheva, O. (2014). WorldDyn as a tool for study of world dynamics with Forrester model. *Information Theories and Applications*, V. 21, N. 2, 126 - 141.
- Smirnova, O. (2009). Digital divide in journalism: Russian context. *International Conference of researchers in media and communications*. Braga, Portugal, 425-429.
- Sushko, V. A., Pronchev, G. B. (2014). Local perception of regional sustainability issues – the Volgograd case. *Austrian Journal of Humanities and Social Sciences*, N 1, V. 2, 37 – 41.
- Vartanova, E. A. (2002). Digital divide and changes in the political and media environment of post-socialist Europe. *Gazette*, 5, 449 – 465.
- Zassoursky, I. (2001). Digital divide: the prophecy and the obstacles. *Materials of the 22 International Conference of the International Association for the Study of Media and Communications (IAMCR)*. Budapest, 6-11.