European Journal of Science and Theology, June 2015, Vol.11, No.3, 125-130

NATIONAL PROFILES OF INTERNET-COMMUNICATION RESULTS OF CROSS-NATIONAL CLUSTER ANALYSIS

Elena Victorovna Brodovskaya*, Anna Yurievna Dombrovskaya, Vladimir Dmitrievich Nechaev and Aleksey Victorovich Sinyakov

Sholokhov Moscow State University for the Humanities, Verkhnyaya Radishchevskaya street 16-18, Moscow, 109240, Russia

(Received 15 October 2014, revised 11 February 2015)

Abstract

The paper presents the preliminary results of the cluster analysis devoted to the national databases research of 'World Internet Project – 2012' in Russia, Sweden, China and United Kingdom. The purpose of cluster analysis is to classify the respondents in accordance with the characteristics of the Internet content they use and the dominant roles they play in Internet communication. Social profiles of different user groups in selected countries can help to identify different national strategies of online behaviour.

Keywords: Internet communication, formation, values, social profiles, youth

1. Introduction

Modern societies experience dynamic changes in the sphere of information, thus national net development turns out to be one of the most significant tendencies which transforms communicative, political and cultural environment of the societies. The Internet has become a centre where 'traditional' values are being transformed whereas 'new' values and behaviour models of citizens are actively crystallizing.

Interdependence of communicative and social components of virtual space is an important research subject for a number of Russian scientists all over the world [1-6; *Internet audience in Russia and its regions*, http://runet.fom.ru/, accessed 15/02/2014]. They analyses political effects of Internet communication. Special attention is paid to the networking approach and studies of nature, structure and functions of online networks. There are a number of sociological studies devoted to Runet users and their characteristics [7; S. Greene, *Twitter and protest in Russia: memes, networks and mobilization*,

*E-mail: brodovskaya@inbox.ru

http://www.newmediacenter.ru/ru/, accessed 25/12/2012], one of them is 'World Internet Project – 2012' in 50 countries [8].

2. Method

To collect data we used mass pool of Russians (N = 1600), Chinese (1500 respondents), Swedish (2700 respondents), and British (1800), respondents, All samples are representative for the type area of residence, district, gender and age). To verify the received data we clustered the selection of World Internet Project in Russia, China, Sweden, and United Kingdom (2012) with the help of SPSS.18.0. It was necessary because the classification of Russian users based on the content they use and their involvement into Internet communication is of theoretical nature and it only provides comparative analysis of sociological research data.

3. Main results

Cluster analysis was carried out using the method of K-means SPSS for Windows 18.0. The results of this type of analysis are the profiles of Internet users, shown in Table 1. Development and interpretation of the profiles was based on the works of a wide range of researchers studying the trends of Internet communication in the modern world [9-19; *World Internet Project* http://www.worldinternetproject.net/#news, accessed 09/02/2014].

According to the table, which characterizes the profiles of Internet usage, the most intense type of user of the global electronic network is 'human digital'. Virtually the entire livelihood of people of this profile is associated with the use of the Internet. 'Human digital' people have virtually used all of their known capabilities and resources of the World Wide Web. Profile is characterized by the fact that those who belong to it, refer to the Internet as a means of solving all the problems, including, as a way of improving their political subjectivity.

Profile of 'Human entertains' uses the Internet quite intensively, but only for recreation and leisure activities. People of this profile Internet use are rather sceptical or indifferent to the Internet as a tool of doing business or political participation. They do not feel confidence in the Internet content, therefore are ready to use it just for fun.

Profile of 'Human pragmatic' focused on the use of the Internet exclusively from business and instrumental interests. People of this type use on a regular and extensive basis the Internet, while still having some trust to Internet content. Focusing their attention primarily on pragmatic problems, these people still consider a global electronic network as a means of increasing political subjectivity.

Profile of 'Human traditional' characterizes people occasionally and sporadically using the Internet. They prefer offline communication and traditional sources of information, do not trust Internet content, and do not believe in the possibility of raising political subjectivity via the Internet.

Table 1. Characteristic profiles of Internet usage.

	Human digital	**Human entertains**	**Human pragmatic**	**Human traditional**	**Human non-digital**
Intensity of using Internet in general	More than 16 hours a day	About 8 hours a day	Not more than 6 hours a day	Less than 2 hours a week	Does not use the Internet at all
Using Internet to communicate (e-mail, chat, networks)	+	+	+	-	-
Intensity of creating Internet-content	Every day, all types of content	Does not create, but uses Internet-content	Every day, business- and instrument-oriented content	Does not create Internet-content	Does not create and does not use Internet-content
Type preferred content	All types	Music, social networks, movies, humor, online games	Connects with partners, information for making business	Instrument-oriented content from time to time	No type of Internet-content
Attitudes to political empowerment of the Internet	+	-	-	-	-
The level of trust to Internet content	High	Low	Middle	Low	Not defined

Table 2. The distribution of clusters in selected countries (%).

	United Kingdom	**China**	**Russia**	**Sweden**	**Average**
Human digital	14.6	8.1	5.9	12.8	12.9
Human entertainment	13.5	17.3	33.4	8.8	16.6
Human pragmatic	27.3	13.5	4.4	49.5	25.9
Human traditional	21.7	5.3	23.9	16.4	17.2
Human non-digital	22.8	55.7	32.4	12.5	27.4
Total	100	100	100	100	100

Finally, the 'Human non-digital' is that part of the population excluded from the Internet communications. As a rule, the cause of this failure from the use of the Internet is its inaccessibility (no computer, the high price of Internet access, lack of skills to use the Internet). Among the small proportion of people who are 'ex-users' refers to the dominant share of the lack of interest to the Internet, time and reasonable reasons for the global electronic network. Table 2 shows the distribution profiles of Internet use in selected countries.

According to the survey, there is a pronounced national specific strategy using the Internet. Another interesting distribution of respondents according to the profiles using the global electronic network indicates that the representatives of profiles 'Human digital' and 'Human non-digital' are mostly Chinese. Obviously, this is due to the extremely high level of income differentiation in China. More than half of the Chinese (55.7%) were excluded from Internet communications for reasons related to the unavailability of the Internet. At the same time, 8.1% of Chinese people, who belong to the profile of 'Human digital', having access to the global electronic network, using all its resources and actually spend their lives on the Internet. Chinese are quite optimistic about the possibility of a global electronic network. This is largely due to the perception of the Internet as a social benefit, access to which is restricted.

Very noticeable is the fact of domination in the number of Swedes profile of 'Human pragmatic'. On the one hand, this is due to features of the national character of the citizens of Sweden, on the other - a rather long history of inclusion of Sweden in Internet communication, an objective assessment of the advantages and disadvantages of the 'World Wide Web' and the choice of only justified way to use the Internet - a pragmatic Internet communications strategy.

Two aspects of Russian reality may explain the dominating of Internet usage profiles 'Human entertainment' and 'Human traditional'. Firstly, the Russians have a relatively low level of trust in the Internet content and, therefore, primarily focused on entertainment and relaxation. Secondly, most of the middle-aged and older people form the basis of the profile of 'Human traditional', which prefer direct communication and use the Internet 'for a special occasion' In Russia, the Internet got really widespread much later than in Europe, and most of the people don't use Internet the major part of their life. They refer to the global electronic network more as a 'gimmick' than as a tool for solving practical, political, and economic problems.

Distribution of respondents by the number of profiles of Internet use in UK is pretty much correlated with the average trend in the number of different profiles of Internet use in all selected countries. However, if we talk about the most dominant profile type of Internet use, the British, as well as the Swedes, focus on the pragmatic use of the 'World Wide Web'. As Swedes, the British people have already a long history of using the Internet and also prefer to use the electronic global network as purely instrumental.

4. Findings

There are five profiles of Internet users, 'Human digital', the most intensively included in Internet communication and using all the opportunities and resources of the global electronic network; 'Human entertains' focused on the use of the Internet as a resource for recreation and leisure; 'Human pragmatic' having a fitting on the utilitarian use of the World Wide Web mostly for conducting the business or professional interests; 'Traditional man' almost not included in the regular Internet communication, using a global electronic network in rare cases, and preferring traditional sources of information and direct communication; 'Human non-digital' that does not use the Internet.

Trends in Internet communication have a significant national identity, reflected in a significant dominance in the national samples of certain profiles of Internet use.

China leads in the number of representatives of the profile 'Human non-digital' due to restricted access to the 'World Wide Web'.

Russia ranks the first in the number of two cluster-profiles: 'Human entertains" and "Human traditional'. Dominance of the first profile is associated with the perception by Russians of Internet space resources as not credible, and therefore, suitable only for rest and recreation. Quite a large number of Russians have only basic skills on using of the Internet and make it very rarely.

Sweden is leading in the number of 'Human pragmatic' profile, thereby identifying the national characterological features with the instrumental value and practicality.

In the UK, the proportion of clusters distribution has been very close to the median values of the shares of these clusters in the totality of the selected countries. Thus, the development of Internet communications in the UK reflects the average trend of the process and can serve as role carrying case for cross-national research on this subject.

Acknowledgement

The study was funded by the Ministry of Education and Science of the Russian Federation in the framework of the implementation of the state task 'Identifying patterns of the relationship of political systems and Internet communications' for 2014-2016. Code of the state task is 2816.

Group of authors thank Jeffry Cole as a leader of 'World Internet Project', Grant Blank (United Kingdom), Pamela Davisson (Sweden), Jannee Elvelid (Sweden) and Liu Xin (China) for providing the database of national research trends in the development of Internet communications.

References

[1] M.G. Anokhin, *Social computing in forming the 'reputational capital': a synergistic effect*, Proc. of the First International scientific - practical conference 'Social Computing: Fundamentals, technology development, social and humanitarian effects' (IISC-12), Sholokhov Moscow State University for the Humanities, Moscow, 2012, 136-145.
[2] E.V. Brodovskaya and O.E. Shumilova, Monitoring of public opinion: economic and social changes, **3** (2013) 5-18.
[3] A.Y. Bubnov, O.V. Dmitrieva and V.L. Shapovalov, Monitoring of public opinion: economic and social changes, **3** (2013) 19-27.
[4] A.Y. Bubnov, *Ideology in the political segment of social networking*, Proc. of the First International scientific - practical conference 'Social Computing: Fundamentals, technology development, social and humanitarian effects' (IISC-12), Sholokhov Moscow State University for the Humanities, Moscow, 2012, 112-120.
[5] A.M. Dolgorukov, Social Computing. Scientific journal, **2** (2013) 56-68.
[6] A.D. Elyakov, Sociological researches, **7** (2009) 85-94.
[7] M.N. Grachev, *'E-democracy': opportunities and threats*, Proc. of the Conference 'Internet and Modern Society', St. Petersburg State University, St. Petersburg, 2009, 76-80.
[8] R. Davis, *Network policy: the impact of the Internet on the American political system. Actual problems of Europe. The media and democracy in the modern world*, RANINION, Moscow, 2002, 231.
[9] R. Freeman, *Democracy in the Digital Age*, Demos, London, 1997.
[10] B. Barber, Harvard International Review, **23** (2001) 42-48.
[11] B. Bimber, Polity, **1** (1998) 112-119.
[12] F. Cairncross, *The Death of Distance: How the Communications Revolution Will Change Our Lives*, Harvard Business School Press, Boston, 1997.
[13] M. Castells, *Communication power*, Oxford University Press, Oxford, 2009.
[14] S. Coleman, New Media Soc., **2** (2005) 177-198.
[15] A. Etzioni, *The Spirit of Community: rights, responsibilities, and the communitarian agenda*, Crown Publishers, New York, 1993.
[16] P. Norris, *Digital Divide. Civic Engagement, Information Poverty, and the Internet Worldwide*, Cambridge University Press, Cambridge, 2001.
[17] M. Poster, *Cyberdemocracy: Internet and the Public Sphere*, Routledge, New York, 1997.
[18] S. Ward, R. Gibson and W. Lusoli, Parliament. Aff., **56** (2003) 652-668.
[19] L.M. Weber, A. Loumakis and J. Bergman, Soc. Sci. Comput. Rev., **21** (2003) 26–42.