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IT ENVIRONMENT MODEL OF THE SENIOR CITIZENS' NETWORK WELLBEING

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Abstract

Scientific and technological progress as well as information revolution has a significant impact on all aspects of modern society modernization. The social consequences of information and technological development represent a complex set of shifts including changes in the society structure, major changes in the age structure of wellbeing, in the professional and general educational level, and in the public consciousness of the senior citizens. During last decades there has been an increase in the impact of technological modernization on the social processes, the development of which is constantly improving. This is natural because nowadays the society has changed significantly: the role of science in social life is changing; forms and methods which help to change interrelations between different generations are being formed. Rapid revolutionary shifts in the information environment of social life made it possible to lay the ground for a special form of social wellbeing – network. This form of wellbeing is most relevant for the senior citizens for whom the problem of breaking up of many habitual social ties, the loss of sources for positive emotions, health deterioration becomes urgent with age. Therefore, the integration of elderly people into the information environment of network wellbeing is necessary. This, in turn, requires the formation of IT environment model of the senior citizens' network wellbeing.

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Keywords: Information environment, social wellbeing, cognitive technologies

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1. Introduction

There are different points of view about the concept of society "information environment" in the scientific literature. For example, it is defined as a single information space that unites information, both on traditional and electronic media; computer and telecommunication complexes and interaction technologies of people of different age, sex; social system of a new level which includes material, technical, financial, economic and regulatory support (Swedberg, 1987). The information environment of society is also considered as a systemically organized set of information, technical, social-and-role support which is linked with a person as a subject of all key interactions in society (Etzioni, 1991).

Other scholarsdescribe the information environment as a multicomponent complex of intangible resources and technologies that provide information and automation of many interpersonal communication processes – information transmission, its emotional evaluation, integration into the human relation system (Aspray&Ceruzzi, 2008, Chicherina et al, 2017). There is also an opinion that the information environment of the society is an open system that combines intellectual, cultural, program-methodological, organizational and technical resources (Black et al., 2007). Some authors describe the information environment as an effective tool for managing the process of society informational support, into which all users of modern information should be involved (Blair, 2010). There is also an understanding of the information space (environment) as a combination of a single database, technologies for its maintenance and use; information telecommunication systems that provide information interaction and meet the information need of people, especially those whose values are separated by generations, personal goals and priorities, preferences – everything that accompanies the age structure of society (Capurro & Hjorland, 2002).

Thus, despite the differences in the understanding of the social information environment concept, now it is obvious for everyone that the Internet gives the senior citizens the opportunity to support their wellbeing in the process of constant education and work as consultants in their profession, participation in marketing research, mastering the technology of web design, etc.

2. Problem Statement

2.1. At the innovative-digital stage of modern society development the network social wellbeing is being formed. It is based on the convergence of computing, social and industrial technologies. Network wellbeing means a set of conditions that allow people who are familiar with modern information technologies and have high qualification level to receive income, benefits and realize them professionally.

2.2. These conditions are connected with employment via the Internet – professional medical, legal, financial consulting, international scientific interaction, global marketing, tutoring, business trainings, etc. That is, social network wellbeing can be considered truly continuous, allowing realizing professional skills throughout life by the provision of services via the Internet, as well as lifelong receipt of intellectual rent. Today, the senior citizens have access to unlimited information sources via the Internet (in Russia in general – more than half of households).

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2.3. So it is necessary to make informational environment that could help older people to receive essential social services – transport schedules, information about free medical services, advertising of discounts, forums, hobbies. It is also important to help older people to communicate through social networks without any difficulties.

3. Research Questions

3.1. Can the modern IT make a friendly environment for the senior citizens wich would correspond all their social needs?

3.2. Can the model of IT environment help creating the special wellbeing for older people – the network one?

3.3. What components the IT environment model of the senior citizens' network wellbeing must include to make it continuous?

4. Purpose of the Study

4.1. The purpose of this study was to evaluate the effectiveness of the IT model of wellbeing for considering it as the ground of continuous wellbeing for the senior citizens.

4.2. In this study, there was an attempt to create IT environment model of the senior citizens' network wellbeingcomprising a number of components – organizing, social and physiological, educational and cognitive.

5. Research Methods

The importance of the information and educational environment of network wellbeing is enormous, but it is its quality that largely influences on the satisfaction of older people from being involved in the digital world. As it was mentioned above, researchers understand the information environment in different ways, but all of them agree in one – it is a complex multicomponent structure that must connect all society members using a variety of resources both physical-and-technical and informational. The access to such resources will determine, in our opinion, the level of network wellbeing of the senior citizens.

To the tasks that the information environment should implement in relation to the formation and improvement of network wellbeing we refer the following:

• providing information support for positive perception of the surrounding world by the senior citizens;

• providing unlimited access to the interpersonal communication;

• achieving transparency and convenience of information support of social and domestic processes;

• facilitating access to the entertainment and other useful resources;

• organizingthe remote interaction of the senior citizens with health care workers, social services and cultural organizations.

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We believe it is possible to define the most acceptable structure of the information environment of social wellbeing of the senior citizens and to determine its most significant components. However, it is quite obvious that all of them are interconnected and a change in one component will lead to a change in the others and consequently in the entire environment.

6. Findings

The problem of assessing the effectiveness of network wellbeing emergence is rather relevantall over the world. Despite the cost, all countries continue to invest money in the development of information support in the communicationsphere of the senior citizens. Having analyzed the main motives for investing in the introduction of information technologies in the senior citizens'life, it was found that the main reasons are the following (Burke, 2007):

• thenecessity to keep personal qualities for the whole life period, in many respects due to the intensity of person's communication with the surrounding world at an aging;

• the desire to ensure the availability of various vital services;

• thesupport of changing the attitude of younger society members towards the senior citizens - as being more wise and equally active.

It is quite logical that with large private and public investments in the process of information support of the society, the requirements for evaluating the results of this process are increasing. And the countries that are at different stages of involvement in the information supportprocess define different evaluation parameters of the performance. For example, countries which were at the initial stage of the global information support process not so long ago (India, Russia, Brazil, Argentina, etc.) give priority to the accessto the Internet, computers and gadgets, and acquisition of basic IT skillsfor the senior citizens. Countries that have a long tradition of IT widespread use (the United States, Japan, Britain, France, Germany, Italy, etc.) are guided by other considerations - managing the process of involving the senior citizens in network wellbeing, helping to overcome barriers in relations between generations, supporting and training the elderly people rapidly developing new technologies.

In this regard, the issues of methodology development of modeling and studying the effectiveness of the information environment influence in modern society on the senior citizens' network wellbeing and the creation of international comparative monitoring are of particular importance. The Stanford Research Institute, together with partners from other countries, including Russia, conducted an international study of innovative teaching called Innovative Teaching and Learning–ITL, which showed that the use of IT technologies cannot be considered withoutusing practice of these tools. This is largely due to the fact that IT technologies and tools themselves are neutral to the people, regardless their age, financial or health status.

In other words, the fact ofusing IT by the senior citizens does not guarantee the desired result – improvement of their social wellbeing. Therefore today the developers of modern information technologies have a special task: to create an environment that will allow the senior citizens in the self-learning mode to be involved in the network wellbeing system. This corresponds to the mission of modern education declared by UNESCO: to help the elderly in using IT for successful cooperation and

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interpersonal interaction, solving emerging problems, mastering the leaning skills and, as a result, to remain full citizens and, in some cases, employees (using remote access technologies).

Considering all mentioned above, we have developed a model of the information environment of the network social wellbeing of the senior citizens, which is based on four components: organizing, social and physiological, educational, information technological. For each component possible content was developed. All components of the model are interconnected, a change in the content of one component will lead to a change in the content of the others and a change in the entire environment as a whole (Fig. 1).

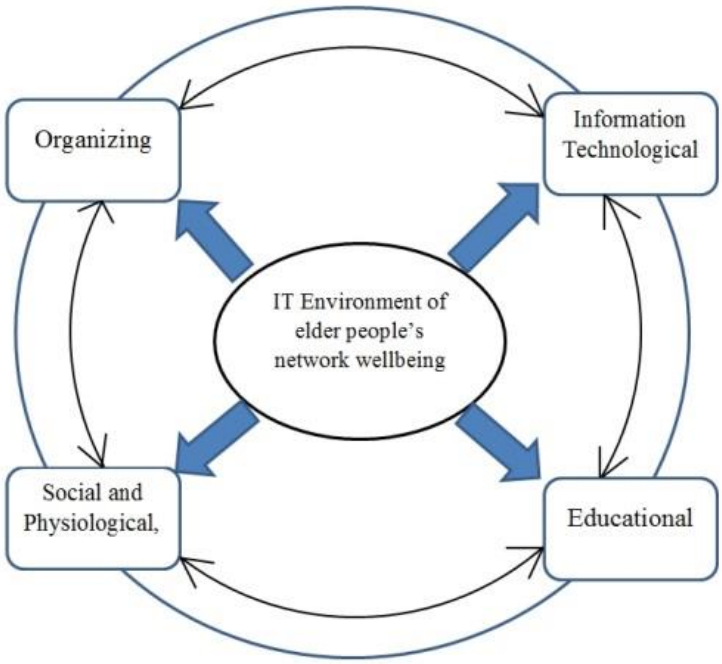

Figure 01. The model of IT environment of the senior citizens' network wellbeing

Let us consider the content of each component of the model:

1. Organizing component. The goal is to create an electronic information exchange platform for the elderly, to organize group interactions and to develop remote communication with friends and relatives.

2. Social and physiological component. We believe that in the process of information support for the wellbeing of the senior citizens the willingness to perceive information via the Internet is a critical factor, since the elderly person is in principle oriented towards keeping those relations with the society members which had been developed for decades in the absence of the Internet. Changing them to a new communication paradigm based on IT is a big problem for many senior citizens. That is why, for successful activity in the innovative digital environment, it is important to teach the elderly by training them, supporting them, creating conditions for successful integration into the network interaction. The goal of the social and psychological component is to develop a system of training, self-leaning of IT technologies for the elderly and stimulating interest in their integration into social practices.

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3. Educational component. Its target continuous nature means that understanding the basics of Internet technologies by elderly means learning not only the achievements of the past, but also the technologies which will be useful in future. Obviously, with this approach, one of the key competencies that are actualizing in the network communication system is the formation of the information culture of the elderly. The modern information environment of the network wellbeing can be built on the use of various network tools: social networks, information portals, blogs, Google services, time tapes, etc. What can become a criterion for selecting the network services for the educational environment? Only a person's ability to match the service opportunities with specific personal needs, create "cognitive scenarios" of using network services in his personal life. The goal of the educational component is the introduction of practices aimed at obtaining information with minimal time and psychological comfort in everyday life of elderly people.

4. Information technological component. It is represented by the whole complex of Internet technologies and technical means of access to it – personal and tablet computers, smartphones, digital audio, photo and video equipment.

It should be noted that the model of information environment of the network wellbeing of the senior citizens (Fig. 1) is built on the principles of structural integrity and objectivity, and does not contain a subjective component – the human being: the creator and the observer, which undoubtedly should be. As it is necessary for someone to evaluate the correctness, accuracy and usefulness of the model created. We believe that the analysis of effectiveness of the model of information environment of network social wellbeing should be carried out on the basis of those changes that may occur in the senior citizens' life as they become involved in the IT sphere. We interpret these expected changes as the movement of people from the current situation to another, improved and desired, new state through a set of established and planned actions. Since such actions, applying to our research, mean the transfer of a part of emotional, cognitive and creative activity of the senior citizens to the Internet applications and social networks, positive changes in their wellbeing will be subjectively evaluated by them according to the "embedding" in the model of wellbeing information environment.

Consequently, it is impossible to avoid the influence of a person on the process of creating a model and prohibit those who evaluate it to show their attitude towards it. Therefore, one more component should be added to the model – the attitude of the senior citizens to the innovations in their life (the use of gadgets and PCs for communication, social services, entertainment, work and other information activity).

7. Conclusion

Modelling of the information environment of network wellbeing of the senior citizens is aimed at creating the most effective conditions for their involvement in the process of Internet communications. For this we proposed the following components of the model: organizing, social and physiological, educational, information technological. The implementation of this model will make it possible to simplify the access to modern Internet technologies which can replace lost social ties and become the sources of positive emotions for the senior citizens.

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