Progress of information society in Russia and deficit of staff potential

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Abstract. The problems of progress of information society in Russia are reported. The author emphasizes that the deficit of competent IT-specialists is the main challenge of social informatization and its resolution relates to education updating. As one solution of training staff potential for the information society, the professional education content should be adapted to the requirements of IT-market. It is also remarked that the universal staff potential should be optimized by re-training the employees for all spheres of man activity with the account of information society requirements.

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Introduction

Establishment of innovation economy is the strategic trend of progress of Russia in the 21st century. The man attribute of innovation economy is extensive application of information and communication technologies (ICT) and creation of information community, in other words, a passage to the new phase of civilization progress the products of which is the information knowledge.

The strategy of "Progress of information society in the RF" remarks that the information society features a high level of ICT development and their intensive use by the public, business and state power bodies. High technologies, including the ICT, have already become the locomotive of social any economic progress in many countries, while the assurance of guaranteed free access of the public to information is the most important task of states [1].

Adaptation of the ICT assures more effective browsing, utilization, storage saving and transmission of information leading to the life standard improvement in the society in general. To this end, the information society requires that each member should study, work, and live in a new environment adopting the terms of high technologies: internet, cloud technologies, corporate and social nets, various online and mobile services, electronic state, electronic money and other realities in the innovation world.

In order to intensify the informatization in Russia, Federal target programs have been endorsed. The State program "Information society (2011-2020)" is intended to provide in Russia the modern ICT- infrastructure and achieve a high degree of integration of Russia unto world information community [2].

The Russian Agency of information society progress has been set up and implements a number of projects of information society evolution in Russia aimed at expanding the information society involving the public in active life in electronic space: the International Festival "Electronic future"; the Russian program of teaching computer literacy "KiberLikbrez"; research project of public readiness to active life in the information society "InformANALIZ"; Federal congress of electronic democracy and other events [3].

But the competent sources like the Ministry of communications of Russia, Association of computer and information technologies, IDC Company, Official portal of IT-managers of Russia – Global CIO, Information and analytic agency "Center of humanitarian technologies" and other bodies, manifest that the processes of informatization in Russia evolve on the deficient level.

The information and analytic agency "Center of humanitarian technologies" report that during last three years (2011-2013) Russia has occupied 40th place in the international rating based on the index of ICT development, while 2nd place by the electronic government development, among 160 countries in the world [4].

The information analytic agency analyzing the staff potential comments that, while the raw materials economics in Russia needs 50 thousand of IT- specialists, with the innovation economy the demand will grow to 250 thousand; it signifies the deficit of 200 thousand. The statistics manifest that they deficit of IT- specialists has been growing in recent years [5].

The deficit of staff potential in Russia shows several main reasons: demography, migration,

employee turnover and, most important and easily resolvable - educational reason.

Main part

A partial solution of the staff deficit of the information society in Russia relates to the need of comprehensive educational system updating at all levels: profile school – college – baccalaureate – magistrate's course – post graduate course.

The effective vocational education is in the first place the product of school education. At present, in full opposition to the requirements of information society, fewer and fewer precise sciences are studied at school; the informatics at many schools is considered the secondary subject. Every year the proportion of Russian schools of humanitarian tendency has been growing. The school leavers mainly become lawyers, economists and other trades. It aggravates the deficit in the information society [6].

On the other hand, the staff deficit cannot be alleviated just by increasing the number of IT-graduates. Over 40% IT-graduates may fail to find job because of poor professional training.

The effective professional education in this respect relates to visible shortage of qualified teachers. The deficit of instructors of IT-disciplines aggravates in the information society. Because of the growing demand and slack competence, the requirements to qualifications of IT-instructors become noticeably loose. It, in its turn, affects the training quality.

A high turnover of IT-instructors is taking place. It is the IT-instructors which have work much more than teachers of other subjects (mathematics, physics, history and others). In fact, the subjects in the IT-domain become obsolete every 1-2 year by over half, so the IT-instructor has to educate oneself regularly. So, the qualified IT-instructors prefer to be employed at commercial bodies as engineers hey they are paid more, as a rule. The available payroll system at educational institutions drives off young job seekers (possibly profoundly knowing IT-subject).

It is urgent to develop the content of disciplines to be studied and determine the list of the disciplines. The academic centers implementing new Federal state educational standards have been made free to elaborate the structure and the content of educational programs. Proceeding from the requirements of potential employers, the higher education bodies should independently determine what and how to train of the particular trends of professional education [7].

Apparently, training the specialists the society needs namely the analysis of employers should be at the base of content of modern professional education. The qualification requirements of specialists should be fixed in professional standards and orient the educational institutions training particular specialists. This said President of Russia at the end of 2013 and in the early 2014 at a special meeting dedicated to professional standards and their role in the con innovation progress [8].

To relieve considerably the deficit of IT-staff, it is necessary to optimize the staff personnel on the spots and to intensify the qualification improvement and retraining. The social informatization involves directly or indirectly various categories of workers:

1. Scientists dealing with research in the ICT sphere, practical implementation and introduction of innovation technologies, development of alternative home hardware and software for computerization;
2. Engineers in the domain of informatics and computers developing systems and packages of software for solution of various problems relating to the functioning of computer systems an application problems in different subjects;
3. Application scientists with sufficient competence in a specific subject (economy, education, medicine and others) and in the matters of application an adaptation of ICT into the professional sphere;
4. Users – workers of different levels and profiles of professional training who fulfill their duties using already adopted and adjusted computer technology for these purposes, being already by the fact active members of information community.

Namely these groups of workers when improving their qualification and their retraining can replenish the information community staff potential [9, 10].

Conclusions

Thus, the solution oa the robe of staff deficit oa epy information society by updating the education is encumbered with the following particular tasks:

- Making IT-professions more attractive for schoolchildren, increasing the number of profile schools of precise sciences.
- Increase the number of IT graduates.
- Improve the quality of IT professional training.
- Improve the quantity and professional competence of professors and educators of IT disciplines.
- Constant improvement of actuality and content novelty of teaching of IT disciplines.

- Employment of modern and adequate requirements to the information society technologies of knowledge management and development, education indivulization and elaboration of perspective and needed competence.
- Comprehensive improvement of qualification and retaining of all workers and members of information society. These tasks cannot be solved separately from other problems in order to eliminate positively the staff deficit in the information society of Russia.

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References

1. The strategy of development of information society it the Russian Federation dated February 7, 2008. # Or-212. ww.rg.ru/2008/02/16/informacia-strategia-dok.htm.
2. Federal target program. Decree of the RF Government dated 20.10.2010 N 1815-p (edition dated 15.08.2012) "Russian Federation state program "Information society (years 2011 - 2020)". www.fcp.economy.gov.ru/cgi-bin/cis/fcp.cgi/Fcp/ViewFcp/View/2012/369/.
3. Russian Agency of information society progress, www.rario.ru/ .
4. Information analytic agency “Center of humanitarian technologies “. www.gtmarket.ru/news/2013/10/08/6296 .
5. Association of computer and information technologies, www.apkit.ru/ .
6. Matusovich, H., R. Streveler, R., and R.Miller, Why do students choose engineering? A qualitative, longitudinal investigation of students' motivational values. Journal of Engineering Education, 99(4), pages 289–303.
7. Abdulgalimov G.L., 2013. A New Model of Russian Professional Education. World Applied Sciences Journal, 27(7): pages 826-829.
8. Preparation of professional standards. Kremlin. President of Russia. www.kremlin.ru/accreditation/19802.
9. Knowles, M., 1980.. The modern practice of adult education: From pedagogy to analogy. The case for diversity in global business, and the impact of diversity on team performance. Competitiveness Review, 8(2): 3–17.
10. Boe, M. V., Henriksen, E. K., Lyons, T., and T. Schreiner, 2011. Participation in science and technology: Young people's achievement-related choices in late modern societies. Studies in Science and Education, 47(1): 37–72.

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