Information and Communication Technologies in Azerbaijan and Importance of Their Use

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ABSTRACT

The paper deals with the analysis of the development of information and communication technologies in the Republic of Azerbaijan. In recent years, great advancement in development and improvement of the ICT has been gained in the country, including adoption and implementation of the related state documents, creation of competition in the market of communication technologies as well as mobile operators, spatial enlargement of use of internet through the country's territory, launch of the national telecommunication satellite, and othernumerous events and significant processes. The progress in establishment of informational environment found its reflection in the higher position of Azerbaijan among world's countries for the definite indexes. The factors and needed terms responsible for further acceleration of improvement of ICT are shown in the paper.

Introduction

The Republic of Azerbaijan reached progress in all socioeconomic areas as well as the sector of communication during period of independence. Information and communication technologies (ICT) is considered to be the second priority area afteroil sector, and this activity developed in Azerbaijan with higher speed in recent years. The modern communication and information technologies allowed have success in overall development of the country, raise level of intelligence of the population, and create new opportunities for involvement to global integration processes.

In the contemporary condition, the following works and measures are needed in the country: efficient use of the available potential as well as further development of this potential at higher level; improvement of communication- and information technologies in term of their organization, juridical support, technical development, and staffing; formation of the industry of ICT; attraction of new investments and support of businesses; following of principles of free market and fair competition; implementation of projects of socialimportance, and others.

As the international practice shows, countries with higher employment ofICT,see less influence of economic crisis. In this regard, it is estimable that interconnected development of science, education and ICT is paid attention by the government of Azerbaijan. A number of consistent measures on employment of science-and technology-related innovative projects are implemented.

'National Strategy on Information and Communication Technologies (2003-2012) for development of Azerbaijan Republic' approved in 2003 was an essential step in the development of ICT in the country. In this connection, the main principles of state policy on development of ICT in Azerbaijan has been declared as a part of National Action Program at the World Summit on Information Society organized by the United Nation and International Telecommunication Union on December 10-12, 2013 in Geneva.

In order to accelerate the development of ICT in Azerbaijan and improve the normative and legal base in this sector, important works on liberalization of service base and development of private sector have been done in the country. Thus, the Laws of Azerbaijan Republic on'Postal Service', 'Electronic Signature and Economic Document' (2004), 'On Telecommunication', 'On electronic commerce' (2005) are adopted. In addition, 'State Program on development of communication and information in 2005-2008' ('Electronic Azerbaijan') is approved. In 2013, the first telecommunication satellite of Azerbaijan was released into the orbit, and "The Year of Information- and Communication Technologies' was declared in the country.

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It is particularly mentionable that the first telecommunication satellite of Azerbaijan Republic named 'Azerspace-1', has been launched on February 2013 by the carrier rocket 'Ariane-5' from the Guiana Space Center of KourouCosmodrome located in French Guiana. This event entailed the followings in the country:

- organization of digital broadcasting;
- establishment of centralized automated radio monitoring network;
- improvement of the infrastructure of e-government;
- growth of integration of the related state structures;
- expansion of the use of e-services;
- research and employment of nano-technologies;
- modernization of telecommunication and postal infrastructure;
- practical development of broadband services in all settlements, and other significant works.

According to State Statistical Committee of Azerbaijan Republic, the average yearly growth of incomes in the ICT sector made 25-30% from 2004 to 2010. In this period, the output of ICT sector increased by 6 times and the export of product raised by 5 times as much. The volume of incomes in this sector increased by nearly 12% in 2011, and this indicator was approximately 2 times higher than that of the world.

The main strategic line of economic policy pursued by the state is targeted to develop non-oil sector, diversify the economy, and establish larger opportunities for development of the new industries. Particular role here can be played by ICT as the leading non-oil area. The ICT sector of Azerbaijan continues to develop dynamically, consisting 1.74% of the overall GDP and 3.7% of GDP of non-oil sector. It is mentionable that 65.4% of revenues is shared by the mobile operators which are functioning since 1994.

The creation and dissemination of global informational environment is being carried out by mobile operators. In this connection, many works have been implemented at the state level. Mobile communication is considered to be one of the most-developed areas in Azerbaijan. Approximately 80-90% of the citizens are users of mobile phones. Popularization of mobile communication strengthens competition between mobile operators, and urges them to work with more modern technology. On the other hand, this increases employment of mobile communications in different areas.

According to the report of the World Economic Forum 'Global information technologies 2013', Azerbaijan holds 56^{th} place among 144 countries for 'Networked Readiness Index'. The list of the report shows that Azerbaijan is the leading country among the CIS and Central Asian countries for the share of users of internet. The country is on the 8^{th} position among 144 countries for 'index of progress in governmental support of ICT', the 9^{th} place for 'expected significance of ICT in prospects of government', and the 20^{th} place for access to internet.

Obviously, ICT is one of influential factors, affecting the development of society today. The circle of its influence encompasses government agencies and institutes of civil society, economic and social areas, science, education, culture and mode of human life as a whole.

The main peculiarities of informational society are:

- Establishment of informational environment by employment of modern technology;
- Improvement of economic activity with employment of ICT;
- Exchange of information at international and regional level;
- Increase of acknowledgement level of the population.

It is necessary to create special innovation zones on ICT and e-production in order to provide sustainable development of this sector and creation of alternative sources of income, increase of the attractiveness of local markets for foreign investments, and also sustainable development of the non-oil sector.

The level of employment of ICT in a country depends on intellectual and scientific potential, and it is one of main indicators of development of transparency and democracy. The growth of role of e-business in the international trade and competitiveness of a country leads to the dependency on ICT. As the world practice shows, growth of using of ICT contributes to the overall development of countries, allowing also solve socioeconomic problems, and reduce poverty.

Relying on the existing informational resources, and the analysis of juridical and normative base, the followings can be shown as the needed factors:

- Higher literacy rate among the population;
- Employment of the new ICT-related projects;
- Creation of favorable condition for investment;
- Development of mobile phone network in the territory of country.

The more developed countries are controlling over majority of the global scientific and technical potential. In this connection, they dominate in world's technological markets, and manage rapid development of industry.

In Azerbaijan, the development of ICT is supported by the government, and the implemented works on modernization of infrastructure has been increased in recent years. The role of external economic factors is also mentionable. Thus, consumption market stimulates mass production, and this factor affects economic growth. Besides with this, economic and political independence of subjects of market is significant factor, serving as a strong base for development of business relations of ICT. The development strategy of ICT is defined by determination of volume of market which is reflected on quantitative and qualitative indicators of sold product.

Determination of volume of market in the ICT sector is managed based on the potential- or real volume. Thus, potential volume of the market, determined on the basis of individual and social requirements, is considered as the real volume, whereas the potential and real volumes may not be equal. So, significance, economic efficiency based on market principles, and also prospects of development in the ICT sector of Azerbaijan, are definable with taking into consideration the above-mentioned factors. Enlargement of export potential in the ICT sector is one of main priorities of the future development planning. Progress on this way may enable Azerbaijan to become large exporter of informational services.

References

Bagirov, D.A.(1999). Tax Audit. Baku: Maarif.

Blank, I.A. (2007). Financial Management. Kiev: Elga Nika-Center.

Feyzullabayli, I.A.(1973). Trade Economy. Baku: Maarif.

Karimov, X.Z. (2005). Financial Management Methods.Baku: Elm.

Sheremet, A.D.(2007). Finance of Enterprises: Management and Analysis. Moscow: Infra-M.

Statistical Yearbook of Azerbaijan.(2013). The State Statistical Committee of Azerbaijan Republic. Baku: Sada.