

Actual Issues of Electronic Commerce Development in the Republic of Uzbekistan

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Abstract

In the article there considered foreign experience in the development of electronic commerce on the basis of the study of scientific and methodological aspects of the organization and functioning of e-commerce system and revealed possibilities of its application in the Republic of Uzbekistan. There also studied factors affecting development of e-commerce and correlation-regression model of predicting the improvement of trade in virtual environment. There identified main directions of increasing the efficiency of e-commerce development in the country.

Keywords: Information and communication technologies, Internet business, e-commerce, authorized third party, Internet banking, electronic digital signature, electronic payment system.

1. Introduction

Development of information and communication technologies is a display of formation of innovative information society, the progress of which largely depends on information, knowledge and education. Rapid growth of e-commerce is connected with the development of information infrastructure, improving payment systems and their reliability. E-commerce is an integral part of e-business, which covers the whole system of industrial relations apart from commercial activities.

Maintaining dynamic development of national economy is directly connected with activating efforts of the state and domestic entrepreneurs on increasing participation in Internet business. Application of the theory and methodology of electronic business in Uzbekistan at the expense of the use of modern information technologies, mathematical models and methods will allow solving efficiently a number of economic problems, including tasks of long-term presence of business structures in target market.

E-commerce is one of the prospective components of innovative economy. That is why methodology for measuring the level of its growth is in the center of attention of both foreign and domestic scientists and specialists.

The issues concerning theoretical foundations of formation of e-commerce system and entrepreneurship in the sphere of information and communication technologies have been studied in the works of such foreign scientists and economists as N. Vulkan, G. Duncan, D. Kozie, M. McCartney, L. Mitchell, A. Sammer, T. Wilson and others.

These problems, organizational and economic issues in e-commerce have been studied in the works of the following scientists as I.T. Balabanov, L.E. Varakin, N.I. Gerashchenko, A. A. Kantarovich, O. A. Kobelev, G. Ya. Rezgo, L. D. Reiman, V. I. Skiba, I.V. Uspensky, V.V. Tsaryovin near-abroad countries.

In the Republic of Uzbekistan the issues of structural transformations and development of the sphere of information and communication technologies have been investigated by A.N. Aripov, R.I. Isaev, A.A. Dzhurabaev, Kh.A. Mukhitdinov and L.I. Shibarshova.

The issues of theory and practice in e-commerce have been researched in the works of R.I. Isaev, T.K. Iminov, Kh.A. Mukhitdinov, M.M. Yuldashev considered conceptual instrument of the essence of e-commerce system as well.

The questions of electronic documents circulation and digital subscription are investigated in the works of R.I. Isaev, P.F. Khasanov, Kh.P. Khasanov and others. Practical examples of econometric analysis in the sphere of ICT have been studied and suggested in the works of S.V. Chepel and L.I. Shibarshova. The works of R.I. Isaev, M.M. Karimov, R.Kh. Khamdamov, Kh.P. Khasanov and others can be marked out among special studies devoted to the information security.

Scientists-economists studied basic theoretical principles of formation and development of electronic commerce, elaborated scientific foundation for the improvement of electronic commerce, prepared the source for their further implementation. Among special studies devoted to information security, there can be singled out the works of R.I. Isaev, M.M. Karimov, R.Kh. Khamdamov, Kh.P. Khasanov and others. The works of M.A. Makhkamova, R.I. Isaev, T.M. Butkeeva are among them as well.

However, conducted research on the development of electronic commerce showed that some aspects of this issue have not been studied enough despite their versatility and depth.

2. Methodological principles of the organization and functioning of electronic commerce system

Currently, there is no unity in the approaches to the definition “electronic commerce “in scientific literature. Law of the Republic of Uzbekistan (RUz) “On electronic commerce” is interpreted as “implementation of transactions by parties stipulated by law for actions and operations in negotiating and executing transactions on sailing and delivering goods, operations, provision of services, and accomplishment of other operations in accordance with agreement concluded with the use of information systems aimed at making profit on the basis of electronic procedures” [5]. In modern economic literature there is definition of the concept of “electronic commerce” (EC) it’s commercial interaction of business entities through Global Internet [52,59,61,66,72,77]. SoG. Ya. Rezgo, L.D. Reiman, V.I. Skibaprevail over the vision of electronic commerce as combination of subjects of commerce and transmission telecommunication environment’s. Yuldashev studied the approaches to this direction deeply in his work [71, C.14].

In the course of the study, there appeared that it is necessary to consider e-commerce more broadly, including financial institutions that provide electronic payments in virtual environment. In addition, they should include methods for managing e-commerce, especially in connection with country's entry into digital economy. In terms of modern requirements of business there proposed to implement such measures of government regulation as licensing activities, standardization and certification of funds and insurance of electronic commerce entities (elements of unification of state regulation) besides the measures of fiscal, money-and-credit, and international trade policy. It’s essential to pay particular attention to the security of electronic transactions.

Taking into account the above-stated we suggest considering “e-commerce “as functionally interconnected complex of entities with the participation of buyers, sellers, financial institutions, elements of unification of state regulation, transaction security, and information and communication technologies on the basis of integrated approach. According to above-stated definition there have been developed conceptual scheme for interaction of entities of electronic commerce. At the same time the elements of the state regulation are beyond the system and affect them from outside.

Fundamental types of electronic commerce in international practice and operating in Uzbekistan are presented in table 1.1. The main share of e-commerce business relations in world practice falls on points 4, 5, 6. In Uzbekistan, there developed the following companies: “Companies to company” (B2B), “Companies to consumer” (B2C), “Government to companies” (G2B), “Government to Consumers” (G2C) and “Government to Foreign Citizens” (G2F) [92]. Inclusion of important categories “Government to Government”, “Government to Business”, and “Business to Business” in the theory stipulates that they are today priority for the republic, because they facilitate

foreign currency inflow and development of exports of resources, goods and services. There produce the greatest interest categories “State to business”, “Business to business”, “Business to consumers” in connection with the declaration of 2019 year as the “Year of Active Investment and Social Development “in Uzbekistan.

Obstacles to the development of electronic transactions, including regulatory, economic, organizational, technological, social, personnel and security issues are identified in the study along with the known classification of main types of electronic transactions as models of relationships between participants in e-commerce market. For each factor there assessed reasons that facilitate and refrain the development of e-commerce. The issues of low level security on the Internet as the results to high risks of electronic transactions occupy a special place among the barrier of progress (Table 1.).

Table 1

Classification of priority types and development barriers of electronic transactions

№	Types	Market environment	Development barriers
1.	State to state	E-government	- low level of security on the Internet and, consequently, high risks to electronic transactions;
2.	State to business	Public procurements, submitting statistical reporting, tax collection, customs payments, etc.	-the absence of mechanism of argument solution for electronic transactions and, consequently, the impossibility of providing written evidence in the court on the fact of virtual transaction;
3.	State to consumers	Utilities payments and social payments, etc.	- the absence of a single reliable information resource in all spheres of electronic commerce;
4.	Business-to-business	Virtual trading floors (electronic auctions, tenders); electronic payment systems, insurance services	- the complexity of mechanism of cooperation with international financial institutions; - high tariffs for Internet services; - high prices of online stores;
5.	Business – to – consumers	Online shopping, auctions, electronic payment systems, electronic employment	-shortcomings in cooperation with international EDS; - high prices for goods and services delivery; -the absence of licensing and certification procedures for e-commerce services;
6.	Consumers to consumers	Electronic auctions, electronic bulletin board	-underdevelopment of issues of standardization and insurance of operations in electronic commerce; - the need for specialists in the sphere of electronic commerce, etc.

Source: materials are drawn up by authors on the basis of UzACI.

Traditional business risks are fully inherent in e-commerce and in addition to that specific risks arising from e-commerce technologies revealed as well. In particular they are the risks associated with information security: information privacy risk; information falsification risk; information loss risk; information failure risk.

The reasons for emergence of risks are that they flow from specific threats of electronic commerce, including external (viruses and malware; hacker attacks; fraud; spam; the threat of seizing the intellectual property of copyright holder) and internal threats (information theft; sabotage; the absence of professionalism or negligence of employees). Risks can be classified according to the following criteria: by nature of occurrence; possible consequences; scale; content; area of origin; possible insurance; the types of entrepreneurial activity; possible diversification.

Transactions accomplished in virtual environment are not registered anywhere and, if necessary, there is no legal evidence of transaction confirmation. In solving arguments and conflicts between the parties, it is impossible to provide legally confirming document on the existence of transaction. There required legally authorized body in the form of certifying center that can issue a certified document on completed transaction.

International practice of solution of the issue is presented as authorized legal body - Trusted Third Party (TTP), certification center that issues certified document on the transaction, so-called “electronic notary”. According to

ITU recommendations, TTP is an organization or agent that provides one or several security services, and is trusted by another entity according to the activities associated with these security services.

Responsibilities of TTP include providing guarantees to participants in cooperation with messages and transactions that are timely and accurately transmitted to the intended recipient, ensuring integrity, authenticity and authorship, and that in case of any arguments, there are certain methods for creating and providing necessary facts confirming performance of actions and the course of events.

These guarantees are provided to participants of information interaction in the form of electronic receipts, tags, stamps issued and certified by TTP services. On the basis of international experience, we have proposed approach to creating TTP in Uzbekistan. A block diagram with the participation of the structure is suggested on the basis of the analysis of functioning EC system (Fig. 1.).

TTP technology is based on public key infrastructure (PKI), as technical, organizational and legal component that can provide confidence from the subjects of relations.

TTP services, guidance on their use and TTP service management are defined in ITU Recommendation X.842 (10/2000) Series X: Data transmission networks and open communication system. According to ITU Recommendation X.842 TTP services are additional services in the application of electronic digital signature (EDS) and are recommended for the use by entities that wish to increase reliability and business confidentiality in electronic cooperation.

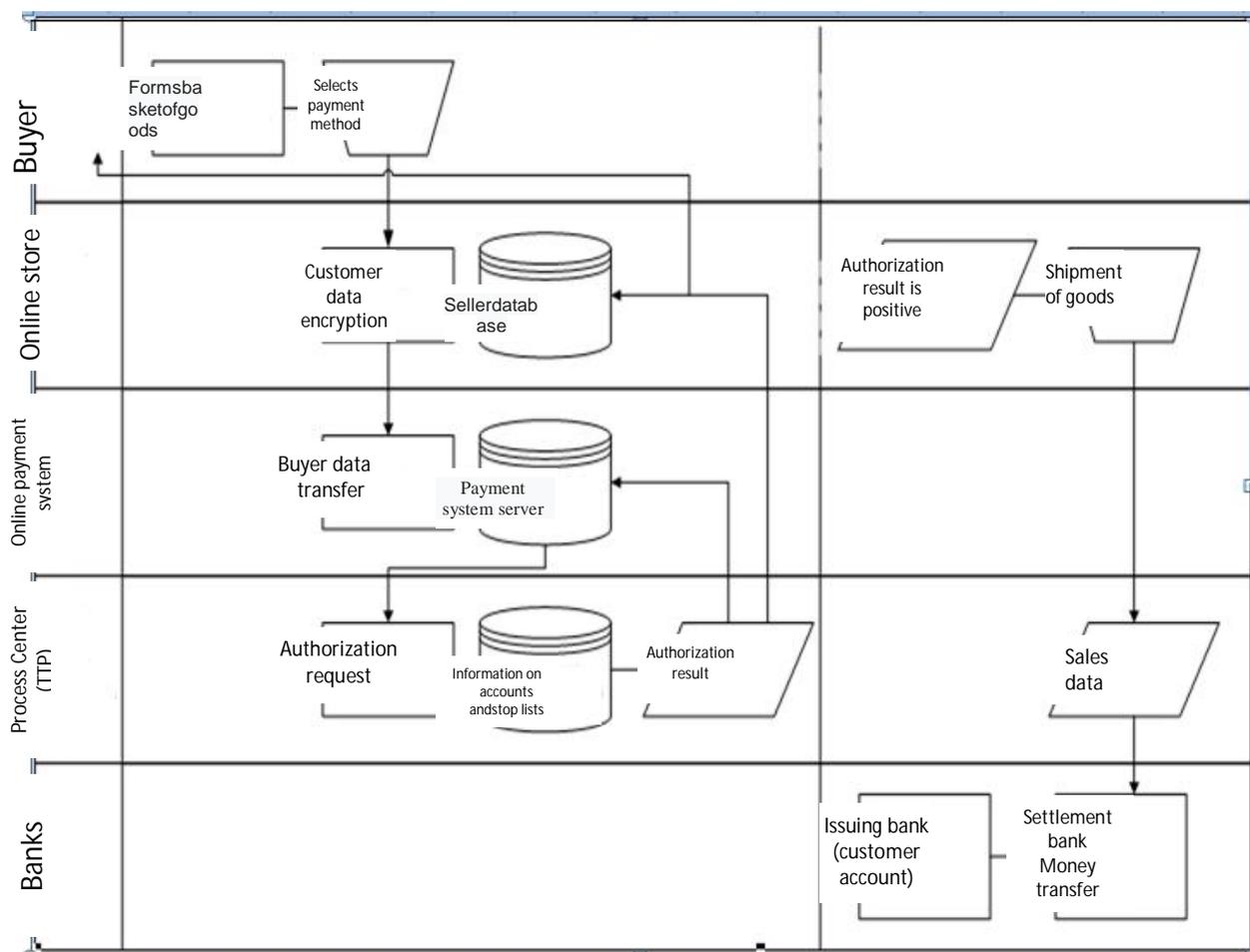


Fig. 1. The process of operations of e-commerce system with the participation of TTP

Source: compiled by authors

On the basis of ITU Recommendation there presented principal scheme of TTP operation (Fig. 1.4). More than 13 trust services have been determined by Recommendation ITU X.842 (Appendix 3). During the analysis, there

assigned following services of Trusted Third Party as the most significant and necessary element for the development of EC in the Republic:

The attribution service is intended to store additional information on identified subjects or objects of information exchange in order to differentiate the access to the resources and detect the level of privileges of the subject. Reliability service implements maintenance of indisputability of the subject from participation of evidence or facts on the basis of cryptographic verification.

Time break service provides certification of electronic document when it is necessary to indicate the date and time of signing and, therefore there used a guaranteed trusted time source. The service for managing keys and key certificates is responsible for key generation processes, registration and certification of keys, as well as for distribution, installation, storage and cancellation of keys.

Certificate management service is intended to organize implementation of certificates of public signature keys and guaranteeing their life cycle; structured publication of signature key certificates and information on revoked certificates; keeping these publications up to date.

Electronic Notary Service provides acknowledgement and certification of a document with the assistance of electronic signature or other means, rendering directory inquiries service in the form of electronic receipt signed by TTP.

Trusted third party along with the listed services arranges long-term archival storage of electronic documents, which facilitates active introduction and use of electronic means in everyday life. In future, TTP may differentiate its activities in allocation of additional services: information and marketing, trade and analytical, advertising, information security and consumer rights.

Registration of electronic transactions will give an opportunity to control tax payments in virtual environment and solve the problems of tax evasion of electronic transaction for Government of Uzbekistan. TTP functioning will allow statistical accounting of transactions to operate on the Internet, which is very problematic issue of today. Participation of the structure will increase the dynamics of development of electronic commerce; accelerate the growth rate of electronic commerce in the network as well. TTP can also be used in e-government, electronic payments (transactions) and in informational interaction (EDM).

To solve the problems that hold the use of EC there often implemented Trusted Third Party services in world practice, which is affirmed by the dynamics of EC development in the USA and in Western Europe. The use of TTP services is advanced as impulse for improvement of EC, representing innovation in EC system.

3. Results

Recently, specialists' attention has been focused on the study of various subsystems of electronic business. However, in domestic and foreign literature there is no single methodology for measuring the level of development of electronic commerce. There elaborate done of the methods for predicting dynamics of development of electronic commerce using econometric equations.(Fig 1).

There given the system of interrelated equations below:

1. $LTGDP = 4.68 + 0.94 * LNEC$
2. $LNEC = -4.8 + 0.1 * LNIU + 0.07 * LAS + 0.033 * LNDOM + 0.055 * LINV - 1.3112 * LNAT$
3. $LNIU = 4.34 + 0.91 * LAS + 0.46 * LOPER$
4. $LAS = -4.044 + 1.45 * LOPER + 0.157 * LNDOM$
5. $LNDOM = 4.89 + 0.19 * LINV + 0.072 * LNAT + 1.072 * LKOL$
6. $LINV = -18.71 + 2.37 * LDOH + 1.29 * LNAT$
7. $LKOL = -11.11 - 2.74 * LNAT + 0.21 * LNDOM$
8. $LDOH = 4.81 + 0.505 * LNEC - 1.44 * LNAT$
9. $LOPER = -5.945 + 0.154 * LINV + 2.29 * LNAT$

where LGDP is the trade turnover in GDP, LNEC is the volume of electronic commerce, LNIU is the estimated number of Internet users, LKOL is the number of Internet users per 1000 people, LAS is the speed of access to international information networks, LNDOM is the number of domains in the .uz. zone, LINV - the volume of investments in the ICT sector, LNAT - the number of active threats in the zone of the .uz domain; LDOH - income from communication services.

First equation shows that the increase in the share of trade in GDP by 0.94 percentage points is due to the increase in electronic commerce by 1%. This indicates the high contribution of e-commerce development to country's GDP. The second equation characterizes main factors in the development of EC. Among them there allocated evaluative number of Internet users, the speed of the access to international networks, number of domains in the .uz. zone, investments in the ICT sector and security, expressed in the number of active threats in the zone of .uz domain. Among all factors, security has the highest coefficient of impact on the volume of ETs that is an increase in the number of active threats by 1% which leads to a decrease in electronic commerce by 1.3112%. Thus, it is necessary to note that the security of transactions in the network is the most important factor influencing EC development.

The most important area of social and economic development of Uzbekistan is its participation in formation of global information society. Introduction and accelerated extension of ICT is an influential factor in the development of e-commerce, which, in turn, leads to access to world markets, the development of industrial, trade and economic cooperation between regions and other countries, the increase of distribution channels, creation of new labor markets, capital and competitive economy, as well as stimulating necessary level of trade.

4. Discussion of the results and conclusions

Conducted analysis of foreign experience in the development of electronic commerce allows us to draw a number of significant conclusions that should be taken into account for Uzbekistan. Namely: emerging powerful, reliable and safe servers, available for the mass buyer (alternative is block chain), guarantying security of electronic transactions; growth of online culture; presence of well-established telecommunications infrastructure, including regions of the country; credit card prevalence; compliance and improvement of electronic payment systems with foreign payment systems; improvement of mechanism for interaction with international financial institutions; improving fiscal focus of customs operations of international trade; the presence of culture of orders and sales in catalogs; the existence of effective express delivery systems; development of mobile commerce, development of standardization issues in the sphere of electronic commerce, insurance of electronic commerce entities, licensing activities in the sphere of electronic commerce and certification of electronic commerce instruments, lack of human resources in the regions, which impedes involvement of population of the regions in world electronic commerce

Reasons for not using e-commerce services identified in terms of sociological survey. According to respondents, the main reason is the absence of confidence in this form of trade due to the security factor and possible higher prices. 85.5% of respondents announced about it. Distrust is largely due to lack of knowledge of the mechanism of electronic commerce (75.3%). Almost half of the respondents do not have access to the Internet, a third do not consider it necessary to use electronic commerce services. Significant issue in the organization of electronic commerce is the problem of delivery and its cost, which leads to the increase in the final cost of goods.

The Republic of Uzbekistan is implementing a set of measures aimed at introducing and developing ECs that meet the requirements and rules of international trade, which will allow the republic to become an equal member of WTO and participant in the world market. Customs legislation regulating entrepreneurial activity, for example, in legislation on licensing and certification are being improved here. It's necessary to consider draft legislation on the protection of personal data; to develop standardization the issues in the sphere of e-commerce, insurance of e-commerce entities, licensing of activities in the field of e-commerce and certification of e-commerce instruments, on obligations for electronic transactions; on information security; on electronic stock market; criminal and administrative legislation to strengthen the responsibility of e-commerce participants. It is essential to systematize the subject list of goods accessible to mandatory certification and harmonization with international and national standards in EC sphere.

Elaboration of the conditions of recognition of EDS and certificates of keys of foreign citizens in Uzbekistan in legislative order will help to solve legal side of trans boundary cooperation. Conduction of monitoring of regulatory framework of the Republic of Uzbekistan and international legislation permits developing new regulatory documents aimed at accelerating further development of relations in EC sphere. The absence of human resources in the regions is particularly serious drawback, which impedes involvement of population of regions in the global electronic commerce. It is also necessary to raise mechanism for training e-commerce specialists.

One of the most important factor suppressing perfection of EC is the low level of security in the network, which involves the threat of intrusion, theft and fraud in virtual environment, respectively, mistrust among users of EC services.

In order to create conditions for the development of small business and entrepreneurship in EC sphere (for example, administrative, tax, information and other benefits), it is expedient to review income rates and integrated social taxes, customs duties (by creating single customs zone with countries near and far abroad) and simplification of procedures for passing through the customs zone for EC facilities. And it's essential to stimulate the development of EC in rural areas by providing various forms of benefits, preferences, creating mechanism for preferential lending to the population on purchasing ICT products and using EC services.

Establishment of specialized credit systems for small and medium-sized enterprises using EC services will attract manufacturers of goods and services to online sales, which will create competitiveness in virtual environment.

To increase sales in virtual environment, it is also indispensable to enhance the volume of exports of goods and services via the Internet. Formation of Internet banking system and development of mobile banking will contribute to the growth of remote account management. Development and implementation of electronic insurance system, including Internet insurance for the introduction of EC will increase users' confidence and, consequently, the demand for services in virtual environment. There required constant exchange of positive experience with the countries of near and far abroad in the sphere of informatization. The increase in the number of online stores and expansion of the range of goods and services will lead to lower prices for the delivery of goods via online stores. Improvement of electronic payment system with the expansion of the range of services, including interbank cooperation provides different functioning financial institutions. There realized wide-range application of the use of universal electronic plastic cards to cover all possible types of electronic payments. Formation of favorable conditions will serve for advantageous basis of wide attraction of investments, including foreign, grants from international organizations, financial institutions, companies, firms, etc.

The growth of EC indicators is characterized by prospects and conditions for attracting investments. In the course of studying the infrastructure of EC system there suggested to include the issues of certification of electronic commerce instruments and licensing activities in the sphere of electronic commerce. It's obligatory to take measures to improve certification procedures, which include: simplifying access to the information necessary for applicants to receiving certificate in order to determine technical requirements and procedures; optimizing terms of certification procedures that will quickly bring technology to the market; establishing rational payment for conducting certification procedures, including costs on trial, which allow manufacturers to hold control or choose from several test laboratories where exactly appropriate tests should be carried out; introduction of consistent conformity assessment procedures that allow manufacturers to make rational and realistic business plans; automatic renewal of certificates - recertification (it is needed to simplify procedures for re-certification in the event that product changes affect technical parameters).

In this regard, the use of specialized software and hardware-software protection instruments that meet requirements of the State certification system on acquisition of information security deserves consideration.

On the assumption of the analysis of foreign and domestic experience, it is indispensable to form transparent conditions for licensing operations in the area of EC. It is reasonable to offer the following recommendations: substitute licensing information protection activities with the replacement of its certification, which will provide the necessary quality of information protection instruments and services for its protection; introduction of mechanism for non-governmental regulation of ICT sector - for example, independent associations, business communities, etc. To determine integrated standards and rules for managing EC in the country and abroad it is necessary to build standardizing system in the sphere of EC.

It is significant to introduce international standards in the area of EC and commercial transaction support procedures recognized by international community. It is essential to conduct organizational measures in order to accelerate the development of EC in the country.

In order to improve delivery system for goods and services, it is prudent to expand postal and transport services, including application of electronic system for tracking movement of goods. Rural population connection to a single electronic document management will be provided with the further creation of centers for registering EDS keys in the regions.

Establishment of sustainable multi-purpose collective access offices in rural areas (in libraries, educational institutions, post offices) at moderate prices or for free access to various information resources, primarily the Internet, compliance with the intellectual property rights and encouraging the use of information and knowledge sharing will accelerate the process of integrating population of the country into virtual environment.

Eradication of computer and Internet illiteracy is possible by encouraging media to promote and implement EC in everyday life. The study and analysis of international trends in the creation and development of electronic commerce shows that it is important to train and retrain personnel for working in the sphere of electronic commerce. Therefore it is significant: studying the need for e-commerce specialists, planning and forecasting training specialists, considering global, regional and national trends in the supply and demand of specialists in EC; elaboration of training standards for specialists; improvement of proposals to coordinate training e-commerce specialists in economic sectors; creation of specialized training centers in the sphere of “electronic commerce”; guaranteeing connection of training with production through the organization of placements in the structures involved in EC process; formation of curricula and educational and methodical literature in national language and in various formats for teaching bachelors and masters in the sphere of “electronic commerce”; improving and developing the system of training on the basis of world experience, retraining and advanced training of personnel in the sphere of EC by producing information-marketing and educational-consulting centers; employment of graduates in the direction of “electronic commerce”.

Solution of social aspects of electronic commerce services practice in the regions by increasing the culture of their use, producing multi-purpose office of collective Internet access remains as important issue (in libraries, educational institutions, post offices) in order to improve public services and improve the quality of life.

Studying national priorities and international requirements for EC there suggested to include a list of recommendations in the EC development program in the medium term: to continue working on sustainable improvement of EC by expanding access to national and international infrastructure of EC, including the Internet of wide layers of EC participants; completion of creation of local and corporate information and communication networks in the main sectors of economy; creation and operation of foreign trade information portal; completion of the formation of regulatory framework for EC management, to form the program for the expansion of EC infrastructure; to implement modern electronic document management systems using electronic digital signatures in organizations of various forms of ownership; to complete the development of software products for the organization of electronic trading floors, electronic stores and salons, operation of foreign trade and information portals; to create electronic trading floors in each regional center and monitoring of commodity market; further development of electronic stores, salons in the regions of the country; formation of public procurement system using EC; development of online payment systems and implementation of remote bank account management systems; further development of electronic export site of Uzbekistan; stimulating investment by the private sector, encouraging formation of new applications and developing content, developing partnerships between the public and private sectors, conducting joint events at the national, regional and international levels.

References

Regulations of the Republic of Uzbekistan

- Law of the Republic of Uzbekistan “On Telecommunications” from August 20, 1999, №822-I.
Law of the Republic of Uzbekistan “On Informatization” from December 11, 2003 №560-II.
Law of the Republic of Uzbekistan “On electronic digital signature”, from December 11, 2003, №562-II.
Law of the Republic of Uzbekistan №611-II “On electronic document management”, from April 29, 2004
Law of the Republic of Uzbekistan “On Electronic Commerce” from 29.0.2004 № 613-II (Law was adopted in a new version in accordance with the Law of the Republic of Uzbekistan from May 22, 2015, № ZRU-385 “On Amendments and Additions to the Law Republic of Uzbekistan “On electronic commerce”).
Law of the Republic of Uzbekistan №13 “On electronic payments” from December 16, 2005
Decree of the President of the Republic of Uzbekistan N up-4947 “On the Strategy for Further Development of the Republic of Uzbekistan” from February 07, 2017
Decree of the President of the Republic of Uzbekistan “On additional measures for the implementation of digital economy, e-government, as well as information systems in the public administration of the Republic of Uzbekistan” from December 13, 2018, № UP-5598.
Decree of the President of the Republic of Uzbekistan "On measures for the development of the digital economy in the Republic of Uzbekistan" dated July 3, 2018, №PP-3832
Decree of the President of the Republic of Uzbekistan “On measures to accelerate the development of electronic commerce” from May 14, 2018, №PP-3724
“On measures to further improve the field of information technology and communications”. February 19, 2018, №UP-5349
Regulations of the President of the Republic of Uzbekistan Shavkat Mirziyoyev Oliy Majlis–December 28, 2018.
Access mode: <http://uza.uz/ru/politics/poslanie-prezidenta-respubliki-uzbekistan-shavkata-mirziyeevas-28-12-2018>.

Special literature

- E-commerce: Tutorial/ Kobelev O.A.; edited by Pirogov S.V., - 4th edition, Revised and add. - M.: Dashkov I. K, 2017 - 684 p.: 60x84 1/16 ISBN 978-5-394-01738-4 - Access mode: <http://znanium.com/catalog/product/340852>
Digital economy: management of electronic business and electronic commerce: Monograph / L.V. Lapidus. - M.: INFRA-M, 2018 - 381 p. - (Scientific Thought). - [www.dx.doi.org/10.12737/monography_5ad4a677581404.52643793](http://znanium.com/catalog/product/945447).-Access Mode: <http://znanium.com/catalog/product/945447>
Digital economy: management of electronic business and electronic commerce: a textbook / L.V. Lapidus. - M.: INFRA-M, 2018 - 479 p. -(Higher Education: Undergraduate). - [www.dx.doi.org/10.12737/textbook_5ad4a78dae3f27.69090312](http://znanium.com/catalog/product/947029). - Access Mode: <http://znanium.com/catalog/product/947029>
Digital economy: management of electronic business and electronic commerce: Tutorial/L.V. Lapidus. - M.: INFRA-M, 2019 .-- 479 p. - (Higher Education: Undergraduate). - [www.dx.doi.org/10.12737/textbook_5ad4a78dae3f27.69090312](http://znanium.com/catalog/product/995938). - Access Mode: <http://znanium.com/catalog/product/995938>

Internet resources

- World Trade Organization. <http://www.wto.org/>
Materials from the official website of Information and Consulting Center for Electronic Business. / <http://www.e-commerce.ru>
Material from Wikipedia - free encyclopedia <http://www.wikipedia.org>
Online scammers. Safety Guide // <http://www.batman.ru/rogue.htm>.
Tax code of the Republic of Uzbekistan - 2010 www.lex.uz/.../kons-kodeks_list.html
National Association of Electronic Commerce Participants www.nauet.ru
National ICT Summit www.summit.ictp.uz
Overview of ICT development in Uzbekistan for 2002-2005 www.ictp.uz
Overview of ICT development in Uzbekistan for 2006-2008 www.ictp.uz

Official website of banking association <http://bank.uz/>

Official website of Uzinfocom <http://www.infocom.uz/>

Official website of Uzbektelecom OJSC is www.uzbektelecom.uz.

Official website of “Economic Review” www.cer.uz.

Official website of the Ministry of Foreign Economic Relations, Investments and Trade (MFERIT) www.mfer.uz

Official website of Tashkent University of Information Technologies (TUIT) www.tuit.uz

Official website of Uzbek Agency for Communications and Informatization www.aci.uz

Official site of the Center for Scientific, Technical and Marketing Research www.unicon.uz

Government Portal of the Republic of Uzbekistan www.gov.uz

Site “National infrastructure of public keys” www.pki.uz

Website of UNDP Digital Development Initiative Program www.ddi.uz

Server www.axent.com company data Axent Technologies

Electronic Journal <http://www.cibnews>

Electronic website of Uzbek Republican Commodity Exchange <http://www.uzex.com/>

Electronic site EPS <http://www.paynet.com>

Electronic journal Infocom.uz <http://ru.infocom.uz/>

I.B. Partners, LLC - <http://www.business2business.ru> LLC “IB Partners”

Electronic site of the search engine <http://www.google.com>