

Akhmetova Z., Kim I.
**Prospects of the E-commerce
market development in
Kazakhstan**

The accelerated technological development in the field of information technology has become a prerequisite for an intense build-up of information in all spheres of economic activity. E-commerce is a tool of the informational processes in modern society, which enables efficient operation, promptly reaction to changing market conditions, as well as to expanding the impact of economic entities. In this regard, search for solutions in a sphere of e-commerce development is one of the most important aims to Kazakh information society conformation. This article focuses on the development prospects of e-commerce in the Republic of Kazakhstan. Computer security indicators, the structure of the electronic transactions of goods' purchase and sale, customer relationship to a segment of e-commerce were analyzed from different perspectives in this work. According to the results of the analysis, main trends of e-commerce market and number of constraints have been identified. The relevance of the study is shown through the program «Information Kazakhstan -2020» and the current changes in the e-commerce legislative framework in connection with the Kazakhstan entry into the World Trade Organization.

Key words: e-commerce, buying and selling goods via the Internet, computer security, legislation, information security.

Ахметова З., Ким И.
**Қазақстан нарықтық
электрондық коммерцияны
дамыту келешегі**

Ақпараттық технологиялар саласында жедел технологиялық даму экономикалық қызметтің барлық салаларында, ақпараттық қарқынды ұлғайту үшін алғышарт болды. Қазіргі қоғамдағы ақпараттық процестерді жүзеге асыру құралдарының бірі болып табылады электрондық коммерция, бизнес әсері аясын кеңейтеді, сондай-ақ, өзгеріп нарықтық жағдайларға тез жауап, тиімді операцияларға мүмкіндік береді. Осыған байланысты, электрондық коммерция дамыту жолдарын іздестіру алыс Қазақстанның ақпараттық қоғам құру маңызды міндеттерінің бірі болып табылады. Бұл мақалада Қазақстан Республикасында электрондық коммерцияны дамыту келешектеріне назар аударады. Жұмыста компьютерлік қауіпсіздік көрсеткіштері бойынша егжей-тегжейлі тауарларды сатып алу-сату, электрондық коммерция, сегментке тұтынушы қатынасы электрондық операциялардың құрылымы зерттелді. Талдау нәтижелері бойынша нарықтық үрдістерді электрондық коммерция, сондай-ақ бірқатар шектеулер анықталды. Зерттеудің өзектілігі «Ақпараттық Қазақстан–2020» бағдарламасы және Дүниежүзілік сауда ұйымына Қазақстан енуіне байланысты электрондық коммерция саласындағы заңнама аясында ағымдағы өзгерістер арқылы көрсетіледі.

Түйін сөздер: электрондық коммерция, интернет арқылы тауарларды сатып алу және сату, компьютерлік қауіпсіздік, заңнама, ақпараттық қауіпсіздік.

Ахметова З.Б., Ким И.А.
**Перспективы развития рынка
E-commerce в Казахстане**

Ускоренное технологическое развитие в области информационных технологий стало предпосылкой интенсивного наращивания информатизации во всех сферах экономической деятельности. Одним из средств осуществления процессов информатизации в современном обществе является электронная коммерция, позволяющая эффективно осуществлять операции, оперативно реагировать на изменения конъюнктуры рынка, а также расширять границы сфер влияния хозяйствующих субъектов. В связи с этим, поиск путей развития электронной коммерции на сегодняшний день является одной из важнейших задач построения информационного общества РК. Данная статья посвящена изучению современных тенденций и перспектив развития электронной коммерции в Республике Казахстан. В работе были подробно изучены показатели компьютерной обеспеченности, структуры электронных сделок купли-продажи товаров, отношения покупателей к сегменту электронной коммерции. По итогу проведенного анализа были выявлены тенденции развития рынка e-commerce, а также ряд сдерживающих факторов. Актуальность проведенного исследования проявляется через реализацию программы «Информационный Казахстан–2020» и текущим изменениям законодательной базы в сфере электронной коммерции в связи со вступлением РК во Всемирную Торговую Организацию.

Ключевые слова: электронная коммерция, покупка и продажа товаров через интернет, компьютерная обеспеченность, законодательная база, информационная безопасность.

**PROSPECTS OF THE
E-COMMERCE MARKET
DEVELOPMENT IN
KAZAKHSTAN**

During the last years the Internet has been transformed into a medium of communication, advertising and business. Technological development has led to the emergence of an alternative way of doing business – e-commerce. The concept of «e-commerce» can be defined as a using of global computer networks for business activities. It may be said, that the Internet and the personal computer is opened up new generating income prospects for different categories of citizens.

In common with such countries as Russia, Belarus and Ukraine, the Republic of Kazakhstan is one of the most promising markets in terms of the E-commerce development in general, and Internet marketing in particular. Increasing importance of e-commerce in today's society is primarily due to a general increase in the number of Internet users among the citizens of Kazakhstan, as well as the positive results of the information and communication technologies development.

In order to consider promising areas of E-commerce market development, current market indicators were discussed.

In general, at the beginning of 2015 the volume of e-commerce market amounted to 700 million. dollars, which is 2.5 times higher than in 2012. For comparison, according to the experts at the end of 2014, the Russian e-commerce market was estimated at \$ 15 billion (2% of share in sales), Ukrainian – to \$ 2.2 billion (2%), e-commerce segment in Belarus was estimated at \$ 350 million (1,2%). It could be concluded that Kazakhstan market accounts for a little more than 0.7% of the total shares in retail.

In terms of acquisition amount, currently average check in the E-commerce segment is amounted to \$ 57. A large portion of online-purchases occurred in the largest Kazakhstan cities, 55% of purchases accounts for Almaty, 17% for Astana, 11% for Karaganda.

As of today's date there are about 600 companies of e-commerce segment in Kazakhstan. The structure of the online shopping showed that a large portion of Kazakhstan citizens use e-commerce for booking air and rail/tickets. The total stream of commerce for this category was amounted to \$ 120 million in 2014. Top companies of this segment: Air Astana (71%), followed by Kazakhstan Temir Zholy with a share of 13%, the third company is Aviata (6%), and

the fourth – Chocotravel (4%). The second largest segment of e-commerce industry has become a category – clothing and footwear, with trade turnover in 136 million dollars. Major players of the market – Lamoda with a share of 43%, OTTO Kazakhstan (22%), Wild berries (16%), AliExpress (11%), KupiVip (8%).

The third-leading segment was a brown and white goods, with an average quantity traded of \$ 75 million. Leaders of industry: Sulpak (30%), White Wind (17%), Alser (13%), AliExpress (11%), Technodom (11%), Chocomart (8%), Disti (7%).

Except that there are several other established companies. For instance, «Kazkommertsbank» have been working for more than 10 years in the market of e-commerce, HalykBank in partnership with Processing.kz have functioned since September 2011.

Coupon services have a small market share, although such segment can be considered as high developing sphere. In general, the e-commerce development in Kazakhstan is characterized by positive dynamics. For example, the number of market respondents, (see Figure 1) has significantly increased for last 7 years.

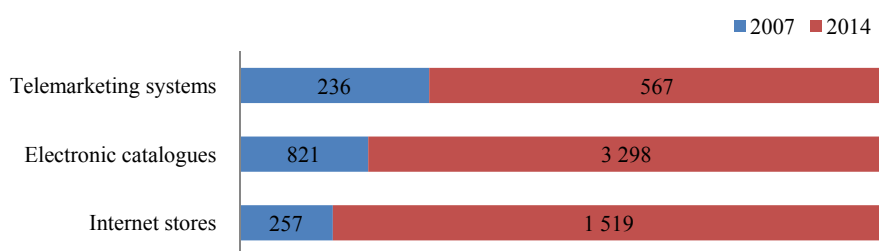


Figure 1 – E-commerce in the number of respondents [1]

Following an analysis of the current market conditions it may be concluded that the e-commerce market of Kazakhstan has overall positive trends. The importance of this segment is shown through e-commerce relevance as a modern and promising method of doing business.

Prospects for the E-commerce development in Kazakhstan should be analyzed in a number of impact factors:

1. Access the Internet for citizens.
2. The level of relationship with consumers.
3. Favorable legislative framework for electronic shopping.

Elucidating the first indicator, statistical data for the period of ten years were analyzed in details. In the period from 2005 to 2014 it could be observed a positive trend in the number of fixed Internet subscribers (see Figure 2).

Internet subscribers' average growth in the last ten years has been identified during the process of data analyzing, indicators forecast to 2020 has been composed for reasons given, in such case mark variance may be over the range $\pm 3\%$ from each indicator (Graph 1).

The number of Internet subscribers has been steady increase during the all study period, according

to this, formula have been used for calculating of growth rates, average value, as well as forecast for the next year.

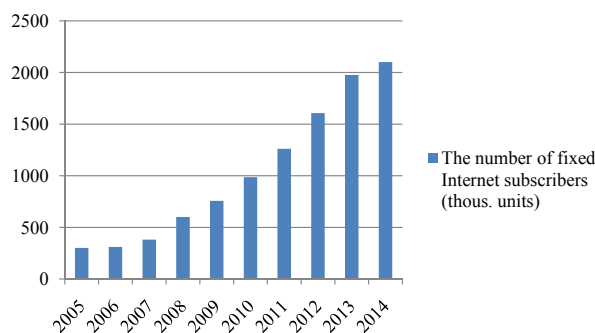


Figure 2 – The number of fixed Internet subscribers (thous. units) [1]

Graph 2 shows the application of the formula, and given the transcript notation. It should be noted that this technique is relevant for the calculation of the forecasting data, which were characterized by a positive trend in the past few years.

Graph 1 – Target indicators by the number of Internet subscribers

Index	The number of fixed Internet subscribers (thous. units)	Growth rate by preceding year in%
Year		
2005	301,5	
2006	310,8	3%
2007	381,2	23%
2008	600,2	58%
2009	756,5	26%
2010	986,2	30%
2011	1261,5	28%
2012	1607,2	27%
2013	1976	23%
2014	2100,9	6%
2015	2624,291	25%
2016	3278,073	25%
2017	4094,729	25%
2018	5114,837	25%
2019	6389,08	25%
2020	7980,773	25%

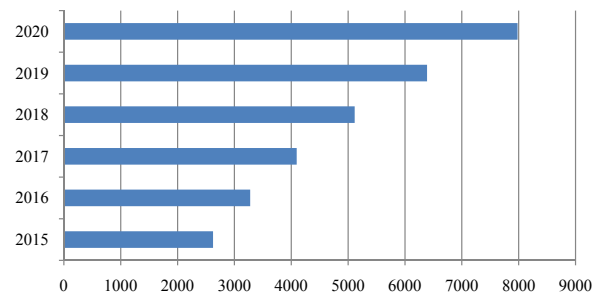


Figure 3 – Forecast growth in the number of Internet subscribers up to 2020

According to statistics from of 2014 it was revealed that cash payment is the most popular means of calculation among online products’ (services) consumers. Such segmentation is linked with the low level of consumer confidence in non-cash calculation on the Internet (see Figure 4).

Mostly part of online purchases is paid by cash, since 80% of bank cards do not have access to the Internet; accordingly, there is a large percentage of the cash payment. According to the statistics agency more than 95.2% of all online transactions are international systems payments with the vast majority of Visa (86%); local charge cards occupy only 4.8%.

Graph 2 – Calculation formulas of predicted data

Formula	Nomenclature
$Rg = \frac{Y_i - Y_{i-1}}{Y_{i-1}} \times 100\%$	Rg – rate of growth (%) Y _i – index of comparison period Y _{i-1} – index of previous period
$Y_{i+1} = Y_i + (Y_i \times Rg)$	Y _{i+1} – index of subsequent year Y _i – index of comparison period Rga – arithmetical average of growth rate (%)

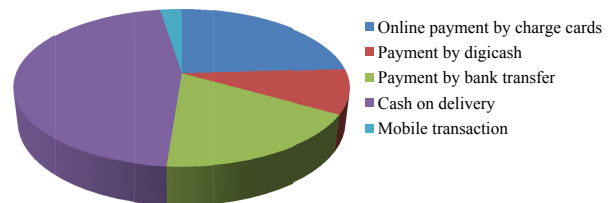


Figure 4 – Payment for goods and services via the Internet in 2014 [1]

The Figure 3 shows the positive dynamics of the information society indicators in Kazakhstan during the future period from 2015 to 2020. Thus, it is possible to judge the availability of the Internet as a favorable factor in the further development of e-commerce market. In addition, there are some indicators which characterize the computer security and literacy. For example, the number of Internet users had increased 25 times higher and amounted to 64% by the period from 2007 to 2014.

The second aspect of the e-commerce market growth is manifested through the level of commercial relations between the seller and the buyer. This category implies a certain level of security and ease of transactions.

Besides, it was revealed that Kazakhstan citizens prefer to buy goods in foreign shops, this fact indicates the low level of trust to the local system of online payments. 90% of consumers carry out orders through international stores, and only 10% use the services of local businesses.

The security context is important factor in the relationship between the e-commerce market participants. Mostly parts of users are concerned about pledging of security, including maintaining the information confidentiality about participants and transactions made by them. The reason for this is a case of data leaks from client’s payment card.

Another important aspect is the confidence in the quality of the ordered product.

With regard to common problems using the Internet, it was revealed that only 2% of Internet users are faced with a fraud during paying for goods and services ordered via the Internet (see Figure 5). In addition to the general problems of work in the Internet, typical problems for the sphere of e-commerce might be highlighted: the speed and quality of logistics, underfunding of subjects.

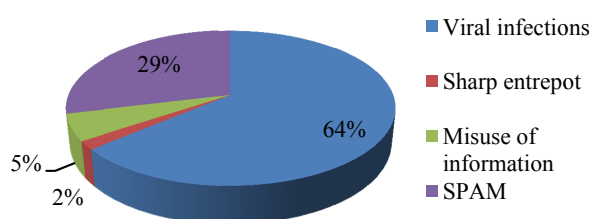


Figure 5 – Problems of using the Internet in 2014 [1]

By comparison structure of the main objectives of the Internet using, it is important to note that the volume of purchase and sale has not changed significantly in recent years, in contrast to the other indicators, (Figure 6).

Summarizing the information it is important to point out the imperfection in existing system of relationship between sellers and buyers at e-commerce market. There are some of the most pronounced problems: a low level of consumer confidence in online payment methods, the preference of foreign electronic stores, as well as the relatively slow growth of the sales share in the structure of the main Internet application targets.

An important aspect in solving the problems of e-commerce is improving the existing legal framework.

In 2015, there was an important change of the external conditions for cross-border e-commerce: Kazakhstan's accession to the World Trade Organization (WTO). This event results in necessity

to improve the transparency of e-commerce. E-commerce market of Kazakhstan requires a reliable legal framework in order to protect buyers and sellers at the same time. In February 2016 the Ministry of National Economy of the Republic of Kazakhstan accepted the order «On approval of the e-commerce rules». Order were introduced the basic concepts of electronic commerce, as well as the rules governing the execution of transactions on e-commerce market. In particular, confidentiality, prohibition of changing the electronic documents content, price fixing solely in national currency. The introduction of these legislation amendments will help to further improvement the implementation of purchase and sale transactions in the electronic commerce market.

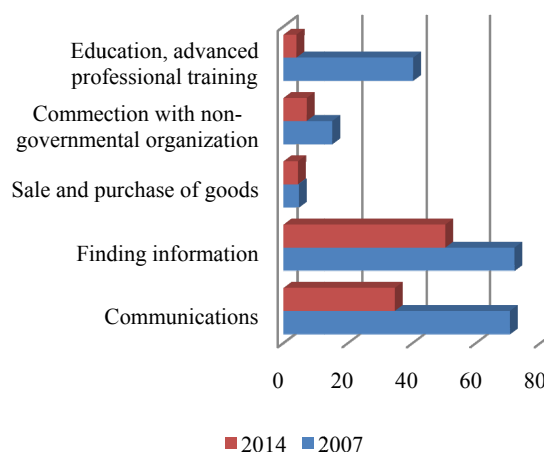


Figure 6 – Changing the purposes structure of the using Internet [1]

However, according to the UNCTAD data from 2015, it might be identified a number characteristics of the Kazakhstan e-commerce market. Graph 3 shows a more detailed data for Kazakhstan, as well as for other countries. Parallel with the presence of positive market performance, such as data protection of privacy, cyber crime cases was registered too.

Graph 3 – Features of e-commerce market in the countries of the Central Asia Regional Economic Cooperation [2]

CAREC countries	Electronic transactions	Consumer protection	Confidentiality and data security	Cybercrime
Afghanistan	Project	Unavailability	Unavailability	Unavailability
Azerbaijan	Available	-	Available	Available
China	Available	Available	Unavailability	Available
Kazakhstan	Available	-	Available	Available

Continuation chart 3

CAREC countries	Electronic transactions	Consumer protection	Confidentiality and data security	Cybercrime
Republic of Kyrgyzstan	Available	-	Available	-
Mongolia	Available	-	-	-
Pakistan	Available	-	Project	Project
Tajikistan	Available	-	Available	-
Turkmenistan	Available	-	-	-
Uzbekistan	Available	-	Unavailability	Available

According to the results of the study it was revealed that the current e-commerce market in Kazakhstan is developed on inconclusive level. In addition, there are specific issues that require further action. One way to solve the existing problems is the implementation of the program «Information Kazakhstan-2020». Under this program, there are several development indicators: increasing the business segment of Kazakhstan online stores in total sales to 40% of purchases, sponsorship of E-commerce promotion, adjustments to legislation. The implementation of these objectives will significantly improve the system of e-commerce in Kazakhstan. The importance of the e-commerce segment is made up of several reasons:

1. E-commerce is available for all types of firms.

2. There are great opportunities to expand the market, including accessing to international markets.

3. E-commerce significantly reduces transport costs.

4. The absence of any time restrictions on trading.

According to expert opinion data there are all conditions for e-commerce development in Kazakhstan. To achieve this goal it is important to improve the information infrastructure, promote the development of healthy competition in the market for staff shortages solving, and improve people's knowledge of the operations implementation through the Internet. Realization of the program in the remote regions of Kazakhstan deserve special attention, accomplish this government should serve as an example to using the Internet, and cooperation in this area with the developed countries.

References

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