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INTERNET TECHNOLOGIES IN THE DEVELOPMENT OF REGIONAL TRADE

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The problem of regional development of trade is important, it directly affects the quality of life of the population. Directly to solve the problems of supplying the regions with goods, distance trading is called upon. Digital technologies have given rise to new forms of distance trading. The textbook is intended for students in such fields of study as 38.03.06 “trading business” and 38.04.06 “trading business” as part of bachelor's and master's programs.

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Introduction

The sphere of circulation, occupying an intermediate position between the sphere of production and the sphere of consumption, has a great influence on the quality of life of the country's population as a whole. In the works of recent years, the effectiveness of the sphere of circulation is considered both in terms of quality services to the population and in terms of the standard of living of workers, as well as at the national level, in particular, the impact of the sphere of circulation on tax revenues to the budget.

One of the problems of quality service to a regional consumer is a low population density, as well as a lower level of income. In this situation, the costs of organizations in the sphere of circulation are divided into a smaller number of residents, which leads to an increase in prices and, as a result, a decrease in the purchasing power of the population. Low income levels of the population also lead to a decrease in demand for goods. In this regard, trade organizations are forced to narrow the range of goods offered to the population, which leads to a drop in the quality of life and a decrease in the social efficiency of the sphere of circulation at the regional level.

Historically, remote forms of trade should contribute to the solution of this problem. The advantage of distance selling is the fact that no logistics operations with goods occur until the consumer clearly indicates his choice. This leads to cost savings for organizations associated with regional distribution of goods. The buyer has the opportunity to purchase the goods

he needs in a fairly wide range, and trade organizations do not bear the risk of forming illiquid inventories. As disadvantages of remote forms of trade, it is necessary to note temporary losses at all stages of the purchase of goods – the buyer needs to receive catalogs, make his choice from the range of goods offered, and then report it directly to the seller. Another disadvantage of distance selling is the impossibility of thoroughly familiarizing the buyer with the offered goods. The development of telecommunication networks, in particular, the Internet has given a new round to the development of remote forms of trade. E-commerce, being a type of distance trading, avoids or reduces the impact of many of its shortcomings.

1. Electronic commerce as a modern direction of distance trade development

Electronic commerce is a commercial activity aimed at the implementation of acts of purchase and sale of goods using telecommunications networks.

The main functions of e-commerce are:

- realization of the produced use value (goods);
- organization of the relationship between production and consumption;
 - bringing consumer goods to consumers by organizing the spatial movement of goods and carrying out a number of operations to continue the production process in the sphere of circulation (transportation, storage, sorting, sub-processing of goods, bringing products to marketable appearance, etc.);
 - maintaining a balance between supply and demand;
 - reducing the costs of circulation in the field of consumption (the costs of buyers for the purchase of goods) by improving sales technology, information services, etc.
- marketing: market research, price determination, creation of services division, etc.

Today, the Internet is an indispensable part of modern life and is actively used in all spheres of activity, including commerce. E-Commerce enables commercial organizations to improve their efficiency by implementing modern information technologies, allowing them to automate various operations, reducing communication and financial costs and expanding the boundaries of their area of activity.

E-Commerce is an integral part of e-business, which, in turn, is an element of the Internet economy, a modern economy that exploits the advantages of global information and telecommunication networks. The presence of e-market significantly simplifies the process of interaction between commercial organizations and consumers, creating new business opportunities.

E-Commerce can be viewed from different perspectives. As a means of interconnections, e-Commerce enables to more efficiently distribute information about goods and services, establish interaction with counterparties, and make payments. From the point of view of business activity, e-Commerce is a tool that makes it possible to automate commercial processes. In terms of space and time, e-Commerce expands the geographical area of activity, enabling to make transactions in real time 24 hours a day.

E-Commerce can become both the basis for creating a business and an additional tool for a traditional commercial enterprise. The use of e-Commerce as the basis of business activity assumes that most business processes involve various Internet technologies. Using the e-Commerce model as an additional tool implies the presence of traditional business, which integrates business processes and the use of Internet technologies.

The classification of e-Commerce models distinguishes between pure and partial e-Commerce. In the pure e-Commerce model, all components, such as goods or services and business processes, have an electronic representation form. The use of the partial e-Commerce model involves both electronic and physical components of business activity. For example, sales of e-books that can be downloaded after payment or online booking of tours can be classified as pure e-Commerce, while online

stores that sell physical goods would be classified as partial e-Commerce.

E-Commerce covers both the goods market, actively integrating itself in the activities of retailers, and the service sector. At the same time, these two components of e-Commerce successfully complement each other.

Various participants can interact in the e-Commerce market, forming the following models of commercial relations:

B2B (Business to Business) – an e-Commerce model in which legal entities act as participants in commercial relations;

B2C (Business to Consumer) – an e-Commerce model in which both individuals and businesses interact;

C2C (Consumer to Consumer) – an e-Commerce model in which individuals act as participants in commercial relations;

B2G (Business to Government) – an e-Commerce model in which legal entities and government agencies interact;

C2G (Business to Government) – an e-Commerce model in which individuals and government agencies interact;

These models interact with each other, forming the e-Commerce market. Today, the B2B, B2C and C2C models are more common than others, forming a significant share of the e-Commerce turnover.

The active development of e-Commerce is due to a number of advantages that can be exploited by all participants in this market. The following advantages of e-Commerce from the point of view of commercial organizations can be distinguished:

1. Expansion of the geographical boundaries of a commercial organization. The use of the global Internet network allows organizations to interact with market participants at a significant distance from each other with minimal costs.

2. Ability to respond more quickly to changes in the external and internal environment, leveling fluctuations in supply and demand.
3. Ability to get more detailed information about consumer preferences and, due to this, increase of the personalization of the service.
4. Reduction of both initial investment and operating costs compared to the traditional form of business. However, the process of entering the market usually takes less time due to the reduction in the number of activities required to create a commercial organization.
5. Possibility of expanding the range of goods and services at a lower cost. This advantage is especially noticeable for retailers selling goods using the Internet, because in such case the expansion of the range does not lead to the need to increase the selling space.

For consumers, e-Commerce provides the following benefits:

1. A wider selection of organizations offering goods and services, as well as the range of goods and services themselves. Geographical restrictions in e-Commerce are less stringent, and consumers can get goods and services that are not traditionally represented in a particular region;
2. Reduced cost of goods and services;
3. Time efficiency of the process of obtaining information and comparing alternatives. There is no need to physically visit organizations that offer goods and services;
4. Ability to purchase goods and services around the clock;
5. A wider choice of payment forms;
6. Ability to obtain a large amount of additional information.

It should be noted that most of these advantages are inter-related. For example, a wider choice of organizations offering goods and services is due to the global nature of e-Commerce, wherein the geographical boundaries of the organization's activities are significantly expanded. The reduction in the cost of goods and services is directly related to the ability of commercial organizations to reduce the operating turnover costs by saving on marketing and advertising, smaller selling and warehouse space and lower number of the required personnel.

The factors constraining the development of e-Commerce can be classified into technical and non-technical ones. Technical factors include such factors as the low level of Internet penetration in the regions, the need to ensure network security and data transmission reliability. The significance of this group of factors gradually decreases.

Non-technical factors include the following:

1. The lack of direct contact between participants making transactions in e-Commerce may lead to a decline in trust among consumers, as well as to the spread of fraud in the network;
2. Insufficient computer literacy among some segments of the population;
3. Low level of logistics, which may affect the delivery of goods to the regions.

E-Trading as an element of e-Commerce has a multi-criteria classification that characterizes various aspects of e-Trading activities, such as economic, organizational, legal and technical ones.

The main element of the e-Commerce infrastructure is the Internet. Its use for commercial purposes and as a means of communication has a number of clear benefits. First of all, the time spent on transmitting information is significantly reduced. The

ability to quickly exchange information without territorial restrictions, as well as access to a significant amount of open information, is an important component of improving the competitiveness of commercial organizations. It should also be noted that communication in the Internet is interactive in nature.

In addition, the Internet can be considered a global electronic market that enables to make transactions online from anywhere in the world. This market has a number of specific features, such as a more active position and a higher degree of consumer mobility, low market entry boundaries, global nature and round-the-clock access to the market. All these features should be taken into account by organizations operating in this market.

In addition to the global Internet network, e-Commerce may use other networks that are local in nature. Intranets are used for transmitting information within a single organization, and Extranet networks are used for communication between multiple organizations. Such networks do not enable public access and can provide more protection for the transmission of information than the Internet.

Retail trade with the use of Internet technologies is currently actively developing, being an important element in the structure of e-Commerce. It belongs to the B2C format and can be implemented through various business models.

The “pure” e-Trading model involves electronic interaction between organizations that sell goods and end users through an online store. Goods can be sold either from the supplier’s warehouse or from the retailer’s own warehouse. In the first case, a retail company can significantly reduce warehouse costs, but it will be more dependent on the supplier for product range stability and timing of delivery. In addition, in this version of the

organization of trade, it is more difficult to expand the range of goods.

The second version of this model involves the presence of one's own warehouse, enabling to more efficiently manage the range of goods. Also, in this case, it is easier to organize a pickup service. Retailers often combine the two versions of this model: one part of the goods is purchased and stored in their own warehouses, and the other part – in the warehouses of suppliers.

In general, this e-Trading model can offer to customers more favorable prices compared to traditional stores due to the absence of costs for organizing a trading floor, reduced number of staff, and lower marketing costs. However, competition in the e-Trading market is significantly higher than in traditional trade due to the absence of territorial restrictions. Therefore, in order for the online stores to function successfully, they need to form strategic competitive advantages.

The model of the Internet division of a traditional retailer involves the presence of an offline retailer, for which the online store is an additional channel for the sale of goods. Interaction between the buyer and the seller in this model does not differ significantly from the first model, but the presence of a traditional store can give the organization both a number of advantages and some disadvantages. The advantages include the ability to use the competitive advantages and reputation of a traditional store, but creating an online store can lead to an outflow of buyers from the brick-and-mortar store. In addition, the pricing policy of a retailer may not be able to compete with that of online stores of the “pure” e-Trading model.

Collection of pre-orders as a model for organizing online retail trade involves the ability for the buyer to independently

choose such characteristics of the goods being purchased as color, size, configuration, and others. This model can most often be used by product manufacturers selling furniture, cars, and some other products.

An online auction can both pertain to the retail organization model and function in the B2B market. The principle of auction trading is to form the final price of goods through bidding. Auction trading via the Internet enables to attract bidders regardless of their geographical location, put up for auction a more extensive and diverse range of goods, and provide more information. All this makes auctions more accessible to different categories of buyers.

The classification of online auctions is quite extensive and covers a significant number of classification features. The most common models of online auctions in the retail e-Trading market are those with incomplete support, wherein the auction acts only as an intermediary between the seller and the buyer, providing a platform for bidding. Auctions with full support involve participation of the auction in the processes of evaluating the goods, putting them up for auction, their delivery, payment, etc.

Each auction is required to determine the rules for price changes during the bidding process. To date, most online auctions are those with price increases, having some varieties. For example, when goods are put up for auction, in addition to the initial price, the seller can determine the minimum price for which the goods can be sold. If this option is present, it will be an auction with a minimum price. In the absolute online auction model, it is not possible to specify the minimum price. In addition to auctions with increasing prices, one can find Dutch and double auctions on the online market.

One of the advantages of e-Trading is the possibility for a retailer to automate various business processes. Depending on the degree of automation, such models as an online storefront, an electronic vending machine, and an online trading system can be distinguished.

An online storefront is a website with information about a retailer and goods being sold, with no possibility to place an online order. Such website is for advertising rather and can be used, for example, to attract customers to a traditional store.

An electronic vending machine makes it possible to automate the process of ordering goods. This website, in addition to the product catalogue, has a consumer basket and an order placement function. The order is subsequently processed by an employee of the online store.

The most comprehensive features of automation of trade and technological processes are provided by the model of the online trading system. This technical complex is designed for automatic management of operations such as product demonstration, order processing, document generation, invoice issuance, payment acceptance, warehouse and accounting system management, product delivery planning, and some others.

From the buyer's point of view, the last two models do not differ significantly, and the choice of the necessary option for organizing online trading is determined solely by the needs and capabilities of the retailer. These two models can be combined under a single name – an online store.

An online store can be created in various ways:

1. Register and rent a store in an electronic strip mall.
2. Purchase a ready-made package online store.
3. Develop software for an online store by an individual order.

4. Develop an online store independently.

To function, the online store must be placed on the server. The service of placing the software of an online store on a server of a specialized company is called hosting.

The online store operation process consists of several stages. At the first stage, the buyer studies the information provided on the website of the online store, gets acquainted with the range of products and prices, terms of delivery and payment for products. For the convenience of the buyer, it is advisable to structure all the necessary information. The product range is presented as a catalogue with a certain hierarchy, which depends on the breadth and depth of the product range. In addition to the catalogue, the online store website must provide for the possibility to search for products based on certain criteria. Information about the product must be provided as fully as possible in order to replace direct contact with the product. Ease of navigation on the website of the online store and search for products and additional information is one of the most important criteria of the efficiency of the online store.

The next stage is the process of creating a consumer basket and placement of an order. The consumer basket can be divided into a main and auxiliary basket; in such case, the buyer selects all the preferred products, putting them in the auxiliary basket, and fills the main basket immediately before ordering. A similar algorithm can be implemented by creating a list of selected products. This mechanism of dealing with an online store can normally be effective if a buyer registers on the site. However, many stores enable to place an order without registration, which is convenient in the case of a one-time purchase.

After placement of an order, it is added to the database, and its processing depends on the online store model. Mandatory elements are the processes of checking the availability of the product, reserving it in the warehouse or at the supplier, getting approval for the order from the buyer, completing the order, and preparing documents. Then, the process of order delivery and payment follows. Together, these operations form the online store's trading and technological process.

The success of an online store largely depends on the methods used to attract buyers and stimulate sales. Today, most potential buyers in the network use search engines to search for products and online stores. To attract such buyers, you need to perform search engine optimization of the website. This procedure will enable to improve the website's position in the search engine results for certain queries, which will significantly increase the likelihood of a purchase. The search engine optimization process involves changing the structure and content of the website in accordance with the selected keywords, as well as increasing the number of external links to the website.

Another efficient tool for attracting customers is online advertising. Unlike other types of advertising, it enables to focus your advertising message on the target audience, get feedback, and monitor the progress of the advertising campaign by tracking performance indicators.

The following types of online advertising are distinguished:

1. Banner advertising, involving placement of an image ad on the web pages, with the possibility to go to the advertiser's website.
2. Contextual advertising, placed on search engine websites or thematic websites and is strictly linked to certain search queries.

3. Mail advertising, enabling to send advertising messages using e-mail.
4. Link exchange, involving placement of an advertising link on the website of another organization in exchange for placement of their ads on one's own website.

The choice of the type of online advertising largely depends on the goals and objectives of the advertising event, the specifics of the organization's activities, and the size of the budget.

Self-Test Questions

1. Define the concept of an online store.
2. List the main functions of an online store.
3. What is the difference between an online storefront and a vending machine?
4. What are the main advantages and disadvantages of the "pure" e-Trading model?
5. List the main stages of the process of purchase in an online store.
6. What are the main ways to create an online store?
7. List the positions and functions of employees of the online store that are not typical of a traditional store.
8. List the main types of online auctions.
9. What are the main differences between an online auction and a traditional one?
10. List the main methods of stimulating sales on the Internet. What do they include?
11. What are the specific features of non-price incentive methods?
12. List the main factors that affect the choice of a sales promotion method.
13. Describe the main types of advertising on the Internet.

14. Name the advantages and disadvantages of E-mail advertising and banner advertising. In the B2B model of e-Trading, the participants in commercial relations are commercial organizations, therefore, this model can be defined as wholesale trade using telecommunication networks. It includes transactions for the purchase of raw materials and supplies, energy resources, equipment and technologies, the sale of finished products, as well as intermediary services in the conclusion of the above-mentioned transactions. In all these cases, the main purpose of using e-Commerce tools is to reduce transaction costs by reducing the expenses on the search and comparison of various commercial offers, placement of offers, discussion of specific transaction details, document flow, monitoring of transaction performance, etc.

As in traditional wholesale trade, commercial transactions in the B2B model can be concluded either directly between the seller and the buyer or using intermediaries. In the first case, one of the two models for arranging transactions is used: organization of trade based on the manufacturer's catalogues, or organization of trade based on the buyer's request.

Organization of trade based on the manufacturer's catalogues is in many ways similar to the organization of online retail trade and has the same varieties:

- an online storefront, enabling to get acquainted with the catalogue of products, their comparative characteristics, prices, delivery terms, etc.
- an analogue of an online store, enabling not only to get the necessary information, but also to carry out a trade transaction. This variety of the B2B model can function either as

a vending machine or as a full-featured online trading system, integrated with warehouse and accounting systems.

The main difference between this B2B model and online retail trade is the mandatory conclusion of a contract for the supply of goods with the possibility of its adjustment and approval in on-line mode and the use of only non-cash payment forms.

When organizing purchases based on a customer's request, a company that needs a supply of products places catalogues of various suppliers in its own database. Then, based on the existing criteria, specific purchase orders are automatically generated and sent to suppliers after their approval.

The functions of resellers in online wholesale trade, as well as their operations, are similar to those of traditional resellers. These include resale, distribution, commission, agency, and brokerage operations.

Resale operations are performed by wholesale trading companies and dealers who pre-acquire ownership of the goods to be sold. Distributors carry out trading operations on behalf of the manufacturer, but at their own expense, but they are not the owners of the product. Commission agents (consignors) act on their own behalf, but at the expense of the manufacturer and, like distributors, are not the owners of the product. The manufacturer remains the owner until the product is transferred and paid for by the buyer. All these resellers, as a rule, use the model of trade organization based on the manufacturer's catalogues in their activities.

A significant role in the organization of wholesale trade is played by electronic commodity exchanges that ensure the functioning of an organized market of goods in the form of auctions held according to pre-established rules. The sale and

purchase of goods on the exchange is carried out through electronic brokers. Since goods on the stock exchange are traditionally sold based on samples or standards without inspection, this form of wholesale trade was one of the first to be implemented using telecommunication technologies. This model is particularly attractive to markets with unstable market conditions and constant significant price fluctuations, since it enables to quickly respond to any changes.

Wholesale trade can also be carried out using online auctions. The principles of their functioning do not depend on the model of commercial relations and are described in Topic 2.

Online trading platforms are an efficient way to organize intermediary activities in electronic wholesale trade. There are two main types of trading platforms: information and contact platforms and platforms with a full range of services. Information and contact platforms are based on the bulletin board principle and provide organizations with the opportunity to post and get the necessary information, which, for convenience, is designed in the form of a catalogue classified by product groups. Platforms with a full range of services, in addition to information, provide the opportunity to conclude online a contract for the supply of goods and prepare other necessary documents and ensure the organization of payments and control over the delivery of goods.

There are closed trading platforms that can only be accessed by a specific group of commercial enterprises, and open ones that are available to all market participants.

Among the varieties of online trading platforms are horizontal and vertical ones. Horizontal trading platforms are multi-industry platforms, bringing together organizations of

various specialization and selling goods to meet the needs of one or more business processes. Vertical or industry-specific trading platforms specialize in selling goods within a particular industry.

An online trading platform can be created by buyers, sellers, or a third party.

Platforms created by the buyer are intended to attract as many suppliers as possible. This type of trading platform was created due to the needs of large companies for optimization of the procurement process and expansion of trade contacts.

Platforms created by the seller are designed to expand the sales market and reduce costs associated with the sale of products.

Trading platforms managed by a third party. As a rule, such trading platforms are created by organizations that specialize in providing intermediary services. This is the most popular type of trading platforms. The list of services provided by a trading platform includes the following:

- creating an application for the sale or purchase of goods, with indication of the necessary terms and conditions;
- creating a catalogue of products offered for sale;
- creating a catalogue of applications for the purchase of goods;
- searching for a product, seller, or buyer based on the specified criteria;
- preparing a contract for the supply of goods and having it approved online;
- executing supply contracts and other necessary documents;
- ensuring confidentiality of the transaction;
- organizing payment for the purchased goods;

- providing real-time information about the current location of the product throughout its delivery to the buyer.

Let's consider step-by-step organization of the trade and technological process of an online trading platform. There are two modes of operation for customers of the trading platform: seller mode and buyer mode. In the seller mode, the user gets access to the existing applications for the purchase of products and has the opportunity to form his/her own offer for the sale of products. In the buyer mode, the user can view the existing sale offers or form a product purchase application.

If there is an interest, the seller or the buyer will send a counter offer, reflecting their own terms. If an agreement is reached, the supply contract and other necessary documents are automatically generated and signed by the electronic signature of the participants in the transaction.

Payment for the goods is made in several stages. At the first stage, the required amount is transferred to the settlement account of the online trading platform, after which the seller must ship the goods. If the delivery is carried out over a considerable distance, the buyer usually has the ability to monitor the progress of the carriage by tracking the location of the goods. Upon receipt of the goods, the quantity and quality of the delivered products are checked in accordance with the shipping documents and the terms of the supply contract. After acceptance, the buyer notifies the online trading platform about the receipt of the goods, and the final settlement is made with the seller. This mechanism of mutual settlements guarantees the fulfillment of the terms of the transaction to both parties.

B2B market participants are prone to technological and business risks when dealing with online trading platforms. The

group of technological risks includes such risks as network hacking and theft of confidential information, leakage of information, poor-quality communication, and some others. Business risks are the risks that arise in the course of conducting business, such as poor quality of the supplied goods, the risk of non-payment, reduced profit margins, and fraud on the part of the counterparty.

2. Internet as a factor of development of regional goods distribution

Enhancement of regional goods distribution is one of the tasks of development of modern economy. It is facilitated with a number of factors among which, in particular, the hub structure of communications, the lower consumer purchasing power that occurs with distancing from regional centers, and a number of other factors can be identified. Nowadays, the lower population density is, the more limited range of products already offered to the consumers, and so much the costs for organization of goods distribution are higher. It can be explained by the fact that, on one hand, cost of shipping of goods to the regions is higher, and, on the other hand, a probability of purchasing goods is smaller. However, availability of a range of products to regional population is an important social. Organization of a large quantity of regional decentralized goods relations is a more complex problem than a use of a hub goods supply system. Investing in creation of such a system is highly efficient.

The major factor determining a possibility of sale of one or another range of products is the buyers' demand. As it is known from statistics, the greater sampling is, the more exact results are allowed to be received by forecasting. But in small towns a population size is small and the forecast of buyers' demands determining appears to be a sufficiently complex task. Use of e-commerce mechanisms can contribute to solving of this task. The order made through a network will be delivered directly to a trade organization with a high probability of its purchase,

moreover, data on orders made by buyers can be used for the purpose of further demand forecasts. Other information received through a network as well can also be used for demand forecasts. Use of information technologies makes it possible to form a range of products more promptly and to organize remote trading at a higher level. Use of such technologies allows to facilitate buyer experience.

Reduction of level of prices on goods being sold is the important task of regional goods distribution. Unfortunately, lower population density in regions leads to that the goods delivery cost will be divided by a smaller number of people, which leads to increasing of goods cost. On the other hand, buying activity of local population is lower. The important characteristic of goods distribution system is reliability of economic relationships. And this problem is also the most acute in regional goods distribution. A consumer who ordered goods wants to receive it on time and a small failure in goods supply leads to its violation. One of the key factors determining reliability of delivery is an organization's goodwill. By organizing economic relationships, work with a counterparty who obtains a high goodwill leads to decreasing of necessary time reserves, and it allows increasing of efficiency of goods supply system. Remote technologies in trade have sufficiently extensive experience of use. A combination of traditional and remote forms of trade possesses a great potential. However, the process of remote buying of goods was previously associated with certain inconveniences – a description of goods had to be received, then it had to be reported about one's choice, then one had to wait for the ordered goods. But at low population density using of remote technologies makes it possible to organize sale of goods with a small demand to population.

Development of Internet technologies stimulated remote trading, namely, an e-commerce. At the present time situation is being often observed for a number of goods when a Web shop sells goods without having such stock-in-trades at all in relevant region, and, if necessary, goods are promptly purchased and delivered from suppliers. In such a way trade organization has an option not to purchase the products in advance for which it is not sure in demand. It leads to reduction of costs of goods delivery, the batch that is being delivered is formed for the particular customer needs. Small Web shops can have joint stock-in-trades, thus allowing to reduce an impact of consumer demand variation.

At the present time a flow of goods sold via Internet is very large, the vast majority of population used Web shop services just for once. But e-commerce development has led to a number of problems limiting the process of development of this kind of trading as well. At the remote sale of goods a purchasing consumer can acquire goods having acquainted himself with them in a prospectus, catalogue, through Internet and other communication facilities as well as with a help of other means of familiarization with goods which exclude immediate acquaintance with them or with their sample.

A purchase of goods via Internet is related to a number of risks to buyers. Buying goods via Internet the buyer does not have a possibility to visually inspect goods, assess its convenience – he is forced to focus only on the description of goods submitted by a seller. This risk shows itself particularly strongly for goods represented only in a limited number of Web shops, as well as for goods which require fitting before a purchase. The buyer has a right to refuse a goods purchase immediately dur-

ing its delivery, but it is related to a number of psychological difficulties – and this right is not being always exercised. Additionally, according to legislation a buyer is obliged to pay for goods delivery. As a result a buyer significantly more often prefers to accept goods of an adequate quality which do not suit him somewhat than to refuse it.

As a rule even if buyer pays for goods at home, the psychological barrier appears because of which it is hard for him to refuse of paying for goods since efforts on goods delivery were expended and a courier spent his time. And a courier completing a lot of orders during a day begins to hurry a buyer without allowing him to fully acquaint himself with goods. In addition, for a buyer's detailed familiarization with goods special knowledge is often required which usually a courier does not have. Of course, if buyer does not have a possibility to familiarize himself with goods in detail he should refuse purchasing of goods, but firstly he will need to endure moral coercion exerted against him by a courier and then he will need to wait for a new courier from another store. For solving of this issue a store's goodwill has a vast role. If buyer knows the store has a good business reputation and that all the quarrelsome questions were decided for the buyers' benefit, it simplifies the process of goods purchase.

This problem manifests itself even more strongly when goods are delivered to the buyer by mail. At the same time firstly a buyer is obliged to pay for cost of a parcel itself and of its delivery and only after that he can acquaint himself with acquired goods. In this case if goods do not suit a buyer he becomes forced to resolve a problem of reverse transmission of goods on his own, which requires additional expenditure of

time. In addition, the term of return of buying cost is defined by the rules of remote product sale to be within 10 days and a cost of goods transmission to a buyer as well as from him will not be returned. In this connection when a buyer receives goods in such a manner he will even more rarely return inappropriate goods. But for buyers from regions, especially from small towns, exactly a mail delivery of goods ordered via Internet is fundamental, because long distance delivery of goods by courier increases cost of purchase significantly.

According to legislation of the majority of countries a seller is obliged to provide basic product and personal information to a buyer. But many buyers may wish to receive further information which can not be considered as the main one. Remote trading is characterized by the fact that a buyer does not directly contact with acquired goods and can acquaint with goods only from a description provided on the site. Although an obligation to provide basic consumer properties of goods is prescribed by law the buyer may wish to receive some information he personally needs by virtue of alleged peculiarities of using of goods. One can receive such information only with a direct contact, but at the moment of making an order goods are in seller's disposal who is the only one person able to arrange such a contact. For a number of goods such information can not be received even by referencing to other stores, additionally, if a buyer refers for information to another store, he can acquire them there in the event of acceptable terms offered to him. Thus, absence of any product information is decreasing competitiveness of a store, which is a significant problem. Consultations badly conducted by Web shop employees also negatively affect competitiveness, which leads to increasing require-

ments for staff. Different categories of buyers prefer different ways of such a consultation receipt, a lot of buyers prefers “live communication” with consultants, other buyers like communication in a written form. To reduce costs the buyer may use special phone numbers the call to which is free or has a service of the back call.

Not only Web shop employees, but other network users, can execute notification of the buyers. In this case additional expenditure for personnel and its training isn't required, but buyers usually place greater confidence in feedback of buyers same as them. A guestbook can carry the same functional burden. In this case the Web shop has a dilemma how to be admitted with negative feedback. On one hand, their presence is diminishing reputation of a store, on the other hand, presence only of positive feedback is sharply reducing confidence of buyers in such feedback. Competent response from the shop to negative feedback could be a solution to this problem.

The organization of notification of a buyer about complementing goods, goods-analogues in all stages of an order creation, positively influences competitiveness of a Web shop.

The way of goods receipt by end buyers is an important factor of a consumer's choice.

Traditionally, in the Web shop goods delivery is used as the main method of goods receipt. The trade organizations bear costs for organization of goods delivery to the buyer, which directly exerts influence on pricing. Inclusion of delivery in the price of goods leads to a possibility of positioning a service of free shipping, but at the same time costs for delivery are allocated to all purchased goods. It leads to the fact that delivery cost is proportional to value of a buyer's basket, which leads to

outflow of the most profitable customers. At present differentiation of cost of a delivery service depending on its parameters, is the positive trend. Delimitation by the time interval of goods delivery and their terms, as well as based on their location in the cutaway of the day are the examples of such differentiation. One is to note important social function of some Web shops.

In many countries the duration of the delivery interval in a course of which the buyer must expect a courier is not clearly determined by legislation. Different buyers have different requests. Some buyers are ready to wait for goods during a day and this isn't inconvenience for them, for other categories of buyers such a term of expectation is unacceptable and they are ready to pay a bigger price, but to receive delivery in certain hours. One must note, in many Web shops the terms of delivery are formulated vaguely or the intervals of delivery are extremely large.

Courier delivery for a consumer associates with a risk factor. During a purchase of costly goods, especially, luxury items, many consumers fear to give their address. The situation is exacerbating by the fact that even the stores, fearing a theft, refuse to deliver such goods anywhere. For transportation of jewel goods observance of special terms of transportation is required, which leads to increase of delivery cost. The vast majority of Web shops refuse to carry out courier delivery of this group goods. Possible damage of goods during their delivery is another risk factor, at the same time not for all goods it's possible to found damages at the inspection of goods or in the first days of their usage. If damage was revealed at receipt of goods by a buyer at the moment of an inspection, it all the same leads to inconveniences related to expectation of repeat delivery. At

the same time risk of psychological pressure from the part of a courier is possible.

The buyers traditionally place greater confidence on stationary trading enterprises. In many cases it's justified because the stationary enterprise is to larger extent controlled by public bodies than Web shops. Thus even existence of pickup possibility has a positive effect on the business reputation of the shop, which leads to increase of its competitiveness.

The buyer can not always specify a place of goods delivery or that place will not suit the Web shop. In such a case the service of pickup is the only possibility to receive goods. Precisely this thing led to the next stage of electronic trading development, when the majority of some Web shops began to offer the buyer a service of purchased goods pickups.

This situation is in itself contrary to the concept of e-commerce being promoted in the beginning of its development because it was one of the conceptual slogans as the time is a possibility just buying a product, without leaving home. In other words, a buyer was taking the service of goods delivery by itself as additional convenience and hardly the buyer will refuse it. However, practice has shown the opposite. Moreover, even positioning of pickup, was not justified as a possibility of a buyer to refuse delivery for the purpose of reduction of its costs – in many Web shops the service of self-removal is provided more expensively than buying with delivery, in other stores a restriction on the range of products is supplemented during a purchase with use of pickup and application of a benefit program is also limited.

For any trade organization goodwill makes a great importance. The service of self-removal is also contributing to solution of this problem – during a purchase on the conditions of

self-removal the specific risks of electronic trading are absent, in this situation the moment of decision-making by a buyer about buying is completely identical with the buying process in traditional trade. However, having acquired goods on the conditions of self-removal several times, the buyer is forming his own goodwill of a trade organization. And subsequently he doesn't fear any more to make purchases of goods with delivery from this Web shop. At the same time franchising plays a special role. The business model of online shopping and traditional stores (and even more good producer) differ, Internet shop is advantageous to use a franchise, using cumulative franchiser's goodwill. During provision of a self-removal service the Web shop uses elements of a franchiser design and during the first visit to the self-exit station the buyer's respective impression will emerge.

The buyer's being able to acquire additionally some goods together with earlier ordered goods, increasing thus goods turnover of an organization and efficiency of the economical activity of trade organizations, on the whole, it is the following advantage of a self-removal service.

The service of self-removal is useful and for trade organizations, in comparison to provision of a delivery service for the buyer, the seller doesn't bear costs in case of absence of the buyer, goods are delivered from the warehouse back to the warehouse among other goods if it is necessary too. It's particularly relevant with consideration for buyers' behaving during delivery of goods often incorrectly, instead of paying for a service of delivery, how it's provided for by legislation, the buyers state they were not registering the order at all. And the trade organization doesn't have evidence allowing to require paying of delivery.

In comparison to traditional trade after registration of an order, the trade organizations with high probability know where the buyer will come – and, when there are a lot of retail stores, they know into which of them to supply what range of products necessarily. It allows to significantly expand an assortment, especially in regional stores with buyers' small thread. It should be noted that the use of self-removal doesn't reduce the advantages of electronic commerce. The service of pickup organically fit into the process of electronic trading, having taken best of traditional trade, as well as of electronic. With the service of pickup the buyer is spending far less time directly on a purchase in the store – the buyer is sure, moreover, of presence of a corresponding range of products, moreover, the order, consisting of a set of positions is ready and the seller doesn't waste time on completing the order.

In the terms of pricing the level of price competition is the main peculiarity of the online commerce. If in routine trade the buyer hardly prefers to attend the store territorially remote because of an insignificant price difference, this factor is absent in of the online commerce. As the major factors of the goods choice in the Web shop, the price of goods plays one of the key roles. In the opinion of a number of authors, the conducted market research itself in the field of pricing is important intangible assets.

A part of Web shops is selling the range of products on which government regulation of pricing is exercised. This leads to a limited top-level trade allowances. It leads to the fact that on a part of goods possibilities of pricing are being limited.

The reasons of the one or another Web shop choice are different for different buyers. The store's goodwill, convenience of a purchase, and many other factors must be assigned from this situation to the factors of a choice. However, in every market

segment, one can single out any quantity of the Web shops, competing between each other, the choice of a buyer between which is determined based on the price level. The range of services provided is important for improving the competitiveness of online shopping. There are such services, with which absence some of buyers will refuse to purchase. One can assign to such services a service of pickup, convenience of payment forms, and many other services.

Sales promotion is the important one for Internet trading. In search of the best offer in goods a buyer's behavior directly determines a number of factors, at the same time some factors are in competition between each other – on one hand, the buyer strives to acquire goods at maximum profitability, on the other hand, search of such a Web shop requires the determined time. As a rule, the majority of users of the Internet network use for search of a saleable proposal either sites of search systems or aggregator sites. In case of search systems use, buyers frequently go through only the several first provision pages, although often the best offers are displayed only in the subsequent pages. This also contributes to the fact, that for display of an issue of search systems in the first pages, the trade organization needs to produce some costs that are inevitably included in the price of goods.

Use for search of a Web shop of aggregator sites is limiting buyers in a choice. The buyers will be able to see on such sites offers only of the Web shops which are registered in the system. Therefore a presentation of one's proposals on aggregator sites is the important task during attraction of buyers.

Usually the user during search goes through only several pages of a search system and the store even offering lower prices will not be noted by the user. Despite a number of advantages,

the process of customer involvement in e-commerce faces some difficulties. Such difficulties are to larger extent conditioned by peculiarities of relation of separate customers categories to up-to-date technologies. Customers in age are the problematic categories. They already have established habits in sphere of goods receipt and services which is hard to change. Level of the Internet network use in this age category is far below the common level. A large incomes differentiation is observed in the mentioned age group. During attraction of customers of the mentioned age group with high level of income such classic advantage of e-commerce as reduction of cost of goods and services isn't significant. Many commercial relationships for this category of consumers have already emerged and the customers possess sufficiently high level of conservatism. Thus the enterprises in sphere of e-commerce need to look for new ways to attract such customers. In this case costs don't have defining effect, convenience of use of corresponding technologies is the principal criterion. At present rapid development acquires application of electronic ink. Electronic ink possesses a number of the advantages which one can employ – a great energy independence, inter alia, retention of an image for a long time, low cost, safety for health. Thus the mobile application built with use of an electronic paper will simplify a customer's adaptation to up-to-date technologies. The electronic device will be taken by a customer as a sheet of high density paper. Technology use by the client should be as familiar, the customer must obtain information in his usual form to fill in a standard form of order services. Due to the fact that each customer brings a company a high enough income, the electronic devices can be provided free to permanent customers. Involvement of new clients

should be supported by certain events for such technologies use stimulation. In the modern stores from a deluxe class such devices can be issued for temporary use. There is a less acute problem of thefts in such stores and the computer system can make analysis of a customer's preferences. In case of successful use and during determination of priority of this customer the electronic device can be offered for a present. Collection of statistics about a customer's behavior is indirect advantage of this technology.

Cost cutting is advantage of e-commerce, which allows to offer lower price level. This specificity emphasizes relevance is involvement in e-commerce of consumers with low level of income, which is extremely relevant for residents of regions. For these types of clients the fact of reducing the price, unlike the previously considered a category in itself is a major motivator. Thus, an object of the trade organization isn't prompting consumers to use technologies, but aid in their use. Proposed software must be maximally straightforward, as well as organization of consumers consultation is necessary. At present a number of socially significant services is already implemented with use of such technologies, which in itself contributes to the involvement of customers, but causes inconvenience and difficulties. Thus the process of counselling to the customers can become important competitive edge of trade organizations. In the regard to great social significance, there is expediently a solution of this task on a state level as well. Organization of free courses relevant by the State, which will enhance the computer literacy of the population, will allow further reduce the cost of providing public services, and promote the involvement of population in e-commerce.

Electronic trading increasingly switches to mobile devices. The use of mobile devices has its own peculiarities. On the one hand, mobile devices have a number of limitations, such as smaller screen, slower speed of the Internet, as well as a wide variety of software used.

Thus it leads to increase of competitiveness of a Web shop uses of versions of site adapted to mobile devices. In the market segment defined by users of mobile devices, competition is some lower because it doesn't engage those stores whose site on the device isn't available or isn't functioning correctly.

The trend of mobile devices use is such, that the majority of users establish specialized applications for the purpose of certain tasks solution. If the web-shop managed to motivate a user to install such an application, it sharply increases likelihood of repeat buyings by this buyer, which in its turn is increasing competitiveness.

However, at present only a small fraction of Web shops uses mobile applications, as well as mobile commerce.

At present the mechanisms of e-commerce are most spreaded in retail. Only a small number of wholesale enterprises use possibilities of economic relations arrangement to use of internet technologies, in addition, mainly only large producers are employing such technologies and the small regional producers are distributing their goods in the local market only.

Formation of single structure providing direct interaction of all of the wholesale market participants can contribute to it, can be implemented through the creation of integrated electronic trading systems, uniting producers, suppliers, customers, transportation and financial institutions, which will reduce the time and monetary costs of interaction of the market participants

process, to reduce merchandising chain, space to expand business cooperation that will eventually lead to significant economic benefits for both economic agents of the market and for consumers. Creation of such electronic trading systems can become an effective mechanism of support and control of functioning enterprises of small and medium business.

3. Payment for goods in distance trade

Today, the e-Commerce market has a variety of methods for payment of goods and services that differ significantly in their parameters. The differences are in the level of identification of the parties, the ability to track monetary transactions, as well as the conditions of their application. All payment methods used are divided into two categories – with or without the use of Internet technologies.

The first category of payment methods includes the following:

1. **Cash payment.** This method is used at the time of receipt of the goods or services in the case of courier delivery, or at the organization's office or pick-up point. This payment method provides security guarantees to both parties of the transaction, and the buyer can check the goods or evaluate the quality of the service before payment.
2. **Payment using cash on delivery.** This payment method can be used when goods are sent by mail: payment is made at the post office before receiving the goods. The buyer has the opportunity to inspect the goods before payment, and in case of deviations in quantity or quality of goods, problems with their return may arise, since the goods may have been damaged during postal delivery. Nonetheless, this method of delivery and payment is frequently used due to the relatively low cost of postal delivery, especially to remote regions.
3. **Bank transfer.** In this case, payment is made using the details of a commercial organization by debiting the required

amount from the buyer's account. This method pertains to the prepayment category and, as in the previous case, payment is made before the goods or services are received. Therefore, as in the previous case, it is not possible for the buyer to check the quantity and quality of the goods before payment.

4. Payment from a mobile phone account. Payment is made by sending SMS messages to a designated number. This method is most often used for making payment for low-cost services.
5. Telebanking. Payment is made by managing a bank account using a regular or mobile phone.

The second category of payment methods involves the use of various online payment systems. Such systems may use a variety of payment means, the most popular of which are electronic money and bank cards. Development of non-cash methods of payment for goods and services using the Internet is one of the fundamental factors in the development of e-Commerce in the country.

The use of online payment systems requires compliance with a number of significant conditions. First of all, it is necessary to ensure the security of information transmitted to the payment system. The payer must be sure that the confidential information (such as bank card details) would be securely protected from unauthorized access.

Any payment system must ensure that authentication and authorization procedures be performed as efficiently as possible. These procedures involve checking the right to use certain payment methods and the ability to make a payment. On the one hand, these procedures should reliably protect the sys-

tem and users' funds from illegal use, on the other hand, they should not make the payment process too much complicated. Security of payments is one of the main factors of successful functioning of a payment system.

A payment system must be scalable, i.e., an increase in the number of users of the payment system should not cause failures in its operation or affect the speed of payments. The use of a system should be simplified as much as possible, whilst the security level must not be compromised.

Online payment systems are divided into credit systems, involving remote management of a bank account, and debit systems, using electronic checks and electronic money.

The Internet banking service is one of the opportunities to access a bank account via the Internet and perform a number of operations, including payment for goods and services. This service is currently quite popular and is implemented by most banks. It enables to replace a physical visit to the Bank with an online visit, significantly saving the customer's time and allowing to remotely monitor the account status around the clock. With that, the list of available operations includes getting information about the account status and operations being performed, paying utility bills, paying for communication services, making money transfers, paying bills for the purchased goods and services, and some others. With the development of mobile Internet, this service can be accessed using a cell phone, and many banks are developing applications for this with a similar set of functions.

In addition to online banking, the group of credit payment systems includes systems of payment using bank cards. The issuing bank performs the function of issuing bank cards, and

the process of making payments with the card is serviced by the acquirer bank. Oftentimes, one and the same bank performs these functions.

The process of payment using bank cards consists of several stages. After placing an order on the online store's website and selecting bank card payment as the payment method, the buyer must transfer the bank card details to the payment system. This procedure can be performed both on the store's website and on the payment system server. The second option is implemented more often, because it provides greater security of the transmitted information. The next stage is the identification and authorization processes that are performed by the payment system processing center, and if they are successful, funds are transferred from the buyer's account in the issuing bank to the online store's current account.

Debit payment systems include payment systems using electronic checks and electronic money. The settlement process involves two parties – issuers and users. An issuer is an entity that issues electronic payment units that are used as a means of payment.

Systems that use electronic checks as a means of payment function similarly to systems with paper checks. The difference is in the way the check is presented and in the process of its transfer and presentation to the issuer. The check itself in such systems is virtual and is certified with an electronic signature; it is transmitted via the Internet.

Payment systems based on electronic money are quite popular today and are frequently used. Electronic money is a non-personalized means of payment, circulated via the Internet. To use electronic money, the buyer must exchange regular money

for electronic one in advance, using the system designated by the issuer. After the exchange, it can be stored on various media or in an electronic wallet.

When making payments, electronic money is transferred to the seller, who verifies its authenticity by presenting it to the issuer. Subsequently, money can be exchanged for real money or continue its circulation using the online system.

There are two types of electronic money: fiat and non-fiat. Electronic fiat money is necessarily expressed in one of the state currencies and is a type of monetary units of the state's payment system. This money is the official currency, along with traditional ones, and is accepted for payment in most organizations. Electronic non-fiat money is non-state payment means and is circulated in accordance with the rules of non-state payment systems. Only the issuer can ensure the paying capacity of such money.

Electronic money can only be issued by specifically accredited organizations. In different countries, the requirements for such organizations are somehow different: in Russia, electronic money may be issued by bank and non-bank credit organizations.

The development of payment systems based on electronic money is thanks to a number of advantages;

1. Electronic money has excellent divisibility.
2. The cost of issuing electronic money is quite low.
3. High degree of portability of money.
4. High speed of payments.
5. Electronic money does not lose its qualities over time.
6. Ability to protect money from theft and forgery.

Electronic money is most convenient to use when making payments of small amounts. In addition, the lack of personalization enables to make payments with a high degree of

anonymity. All this leads to the development of payment systems based on electronic money.

The introduction of online payment systems can only be successful if a number of factors are observed. These include the security of making a payment, high speed of settlements, ease of use of the system, anonymity and a well-developed legal framework.

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