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Title **DESCRIPTION OF ELECTRONIC TRADING SYSTEMBY CONCEPTUAL MODEL**

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DESCRIPTION OF ELECTRONIC TRADING SYSTEMBY CONCEPTUAL MODEL

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Annotation: The article describes the process of designing an electronic trading platform, where the conceptual model is presented in the form of a diagram reflecting the relationship between entities and precedents and being an integral part of the precedent model, which allows to describe the system at a conceptual level.
Keywords: conceptual model, processes, entities, precedent, electronic trading platform

Abstract—this article discusses the features and trends of process of development and creation of a multi-functional electronic trading platform is aimed at efficient and profitable interaction of suppliers and buyers. Interaction takes place through electronic communication systems, so it is always operative and relevant. Electronic trading platform is a complex of information and modern technical solutions. There are several types of electronic trading platforms - for commercial customers, for placing government orders. The sites on which electronic transactions are performed by commercial customers are divided into specialized and multi-profile. Users, participants of the sites, held auctions and trades themselves can decide on which of the sites it is more convenient and profitable to work with. In addition, on a multiprofile resource the customer can act as a supplier, the seller - this is dependent on the scope of his activities, on the possibilities.
***Keywords*—multi-functional electronic trading platform, information flow, data flow, information flow objects, users, customers, suppliers.**

Introduction

Competition, as you know, is a powerful incentive and decisive factor in the development of an innovative economy, innovative entrepreneurship and the "main factor susceptibility of an enterprise to technical innovations," it stimulates production, etc. The incentive to attract foreign investment in developing countries is trade promotion. Ever since the Great Silk Road and long before it, goods found their markets and their customers, new sales markets were mastered, new countries with their rich culture, traditions, way of life, social and economic system. A good quality product is always attractive to the consumer. Over time, development has reached such a level that now you can purchase goods without leaving your place. Fantastic. Technologies of the 21st century are amazing and surprising. And in our country, electronic commerce is developing, websites and online trading platforms are being created. The ICT sector has become one of the most promising and self-sufficient, both in our country and in the world[1].

PROPOSED METHODOLOGY

The growth in world trade, according to preliminary estimates by experts of the currency fund, increased in 2017 by 4.2% compared to 2.4% a year earlier.

At the same time today, we need to improve our success and gain a foothold in the market of IT-technology. The national electronic trading platform will allow creating a single information and trading space for all its participants with the necessary integration of international payment systems.

This will maximally simplify the search for consumers for manufactured goods, both for the local consumer and for the international one, which causes transparency and accessibility in the choice of products and goods. The use of advanced information technologies, the presentation of national producers will effectively demonstrate and attract potential buyers of domestic products.

Today, e-commerce is developing exponentially in emerging economies. According to expert data http://profi-site.info/e-commerce.html., The turnover of the e-commerce market in 2015 in the world is 1.8 trillion US dollars.

There were also articles with forecasts for 2017, it will be 2.4 trillion US dollars. The subject of e-commerce appears at all international events and venues, such as ASEAN (Association of Southeast Asian Nations), APEC Forum (Asia-Pacific Economic Cooperation), WTO (World Trade Organization) G20, OECD, BRICS, etc.

The growth of world trade according to preliminary estimates by experts of the monetary fund, the volume of trade in the world showed a growth rate in 2017 by 4.2% compared to 2015 from 2.4%.In developed countries in the field of online sales (retail), for several years in a row, the People's Republic of China has been the leader with total revenue for 2017 totaled $ 600 billion. After China, the next country is the United States with an income of 475 billion dollars, Japan is in third place with 105 billion dollars, followed by Great Britain 103 billion dollars, and Germany closes in the fourth place with a sum of 57 billion dollars. Despite the undeniable advantages of the emerging e-commerce markets, the turnover of retail e-commerce is increasing in Asia. According to the forecasts of the European analytical service Statista, "the average annual growth of B2C turnover in the future will be among the leaders (23.7%), slightly ahead of India (23%) and Indonesia (20.7%), the Philippines (18.3%) and China (17.4%). " The most active online audiences are residents of the countries of China and South Korea, where, as a percentage, the share of the population actively purchasing goods and services through online purchases is 83%, only 1 percent more than the UK, then Germany 81%, Indonesia 79%, India and the US each with 77% [2].

A large selection of payment systems divides users according to their preferences, for example, payments made by VISA MASTERCARD credit cards (42%), payment systems mainly PayPal (39%), debit cards (28%), payment on delivery (23%), bank transfers (20 %), promotional codes and gift cards (15%), payment from a mobile account (14%), cryptocurrency (3%). Every day, PayPal is increasingly capturing the market, for example, in 2012, 111.7 million people used, and in 2017 their number exceeded 218 million.

In Armenia, the Ministry of Finance pays special attention to the introduction of online payments and online commerce. The Ministry of Finance has introduced a mechanism for customs accounting of international postal and courier items to simplify the procedure for issuing postal

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items. The pursued goal is the implementation of door-to-door delivery. Based on the protocol on the organization of the preliminary exchange of information on goods transported between the Republic of Armenia and the Russian Federation, work is underway to introduce an information system for the preliminary exchange of information.

Scheme 1. List of categories of conceptual classes

Transactions Recommendations: these classes are especially critical because they often describe financial transaction, so the process of separating conceptual classes should begin with them	• customer (buyer), product (product), zakaz (order), oplata (payment)
Elements of transactions Recommendations: Transactions often consist of elements	• Zakaz (product) Product (goods)
Products or services associated with transactions or their elements Recommendations: transactions are performed on certain elements (goods or services)	• Product-korzina; korzina-zakaz
The roles of people or organizations related to transactions. Execution of precedents. Recommendation: you need to know who is involved in the transaction	• Customer (buyer), seller (supplier), admin (administrator).
Place transactions. Important events for which you need to store time and place	• Product; zakaz; oplata, zakaz; oplata
Physical objects Recommendations: such objects usually correspond to software systems designed to control or simulate	• Catalog (catalog), product (Goods), Catalog (catalog), product (Goods)
Description of objects	• Catalog-product (Product catalog) product-characteristika
Catalogs Recommendations: the description is often given in the catalog	• ProductDescription (Product Catalog), FlightDescription (Flight Directory)
Containers of other objects (physical or informational)	• Oplata
Container Content	• Customer; product
Other systems external to this system	• Oplata; web-oplata; bankovskie_kartochki

Scheme 2. List of standard associations

A is a transaction that is associated with another transaction B
product-korzina (product basket);
korzina-zakaz (basket-order) A is a transaction element
Product A is a product or service for transaction B
Product- zakaz (product-order) A is the role associated with transaction B
Customer-oplata (BuyerPayment); Product- zakaz (product-order)
A is a physical or logical part of B Customer-zakaz (customer orders)
A is physically or logically contained in B
Catalog-product (catalog-product); Product-characteristika (Item Description
A is a description of B Product-characteristika (Item description)
A known / registered / recorded / included in
Zakaz-autorize (order of goods, the authorization of the buyer); zakaz-oplata (scorching-order goods)
A is a member of B Product catalog (product catalog)
A is an organizational unit B Users- (vneshniy user; vnutrenniy user); Vneshniy user- (customer; seller)
A uses, controls or owns B Customer-product; Seller-product
A follows B SalesLineItem- SalesLineItem (Product Name - Next Product Name)

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Fig. 2 E-Commerce Class Chart

Figure 2 shows a conceptual model. It highlights 5 main conceptual classes: "Users", "Product", "Zakaz", "Oplata" and "Korzina". These classes, in turn, are divided into several classes, which are shown below in Figure 2. Each class has its own attributes and operations.

The attributes of each of the classes are designed so that they are described as clearly as possible. As can be seen in Figure 2, almost all classes are related to each other.

In the process of developing a term paper will take into account the basic requirements for the functioning of the development of electronic commerce.

The full value and accuracy of the information is also one of the most important requirements for the topic being developed.

The class diagram is the one that allows you to structurally describe the projected topic, to show its main structural blocks, the relationship between them.

Buyer registration on the site
Hidden
Buyer authorization
Hidden
Taking orders (from registered customers)
Hidden
Taking orders (from registered customers)
Obvious
Register a new product
Obvious
Information change (revaluation or change of other attributes)
Obvious
Taking orders (from registered customers)
Obvious
Deletion of information (when writing off or selling the last book)
Hidden
Add product; Remove item
Obvious
Submit Cart
Obvious
Single item pricing
Obvious
Total cost estimate
Obvious
Editing customer comments
Hidden
Product Verification Online
Hidden
Monitoring
Obvious
Accounting for news and advertisements on the site
Obvious
Web payment
Hidden
Receiving balance
Obvious

Scheme 3. Description of the functions of the electronic trading platform

The definition of the main functions of the system is an important step in the preparation of project documentation. Functional requirements indicate what the system should do. Functions can be of several types: hidden and obvious. The evidence of a function is determined by the obviousness of the performance of this function by the system from the user's point of view. Diagram 3 shows an example of the function description.

An association is a relationship

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between classes, reflecting some significant and useful connections between them. An association is indicated by a line drawn between the classes, with which a specific name is associated, starting with a capital letter.

An additional arrow next to the name of the association indicates in which direction to read its name. If there is no such arrow, the names of the associations should be read using generally accepted agreements, namely, from left to right and from top to bottom.

Each end of the association is called a role. The role may additionally have the following characteristics: multiplicity, name and direction of communication, scheme 2.

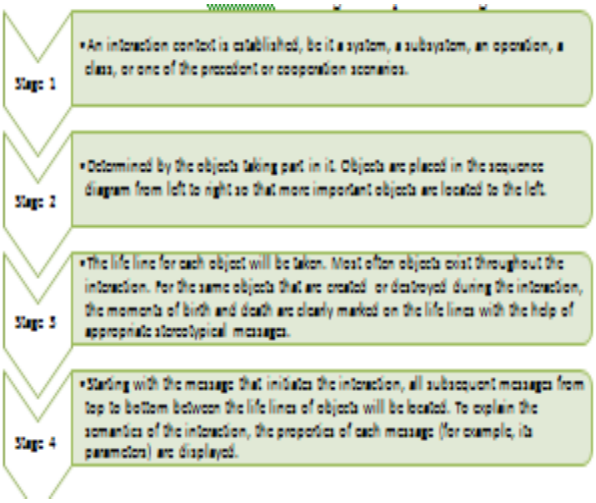
Functionality and efficiency of the information system is one of the main requirements in the qualification work being developed.

Functionality implies the fulfillment of the main function of developing video lessons, in this case, this requirement refers to accessibility to perception and compliance with the rules for the distribution of topics by content. A domain model is a visual representation of conceptual classes or objects of the real world in terms of the domain. Such models are also called conceptual models.

Modeling the temporal ordering of the control flow is as follows, Scheme 4.

The projected electronic trading platform will allow individual modeling of business processes, possessing qualities that ensure its leading position in the market of procurement management systems: self-sustaining information system; flexibility and high speed of adaptation to changes in legislation; cross-platform integration; storing the main body of data and performing key calculations in the "cloud" (IT solution infrastructure); high readiness for operational expansion, development and connection of additional modules; conducting procurement procedures in accordance with the legislation of the Republic of Uzbekistan; automatic posting of information on ongoing procurement procedures on the website of the Chamber of Commerce of Uzbekistan; Intelligent, customizable monitoring, analytics and reporting.

Scheme 4. Modeling the temporal ordering of control flow



A sequence diagram is one of the interaction diagrams. The sequence diagram illustrates events initiated by the system by artists, Figure 3.

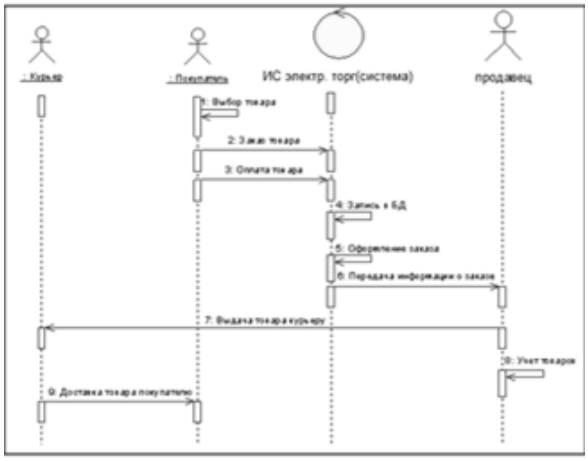


Fig. 3. Online order use case diagram.

Thus, this article defines the processes, describes the cases, shows the diagrams of cases, describes the typical course of events, describes the conceptual model, describes the functions of the system, shows the sequence diagram and interaction of actors with the system.

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