

## METHODOLOGY OF CREATING 3D ELECTRONIC INFORMATION EDUCATIONAL RESOURCES IN THE CONDITIONS OF "UNIVERSITY 3.0"

Mirjalal Ashurov

Researcher of Tashkent State Pedagogical University.

Tashkent, Uzbekistan

### Abstract

It is not an exaggeration to say that there is no national economy and economic network that has not been penetrated by modern information technologies. Modern information and computer technologies are rapidly entering the educational process. This article analyzes the traditional and non-traditional ways of creating electronic learning resources.

**Keywords:** information technologies, modern methods, competence, efficiency.

The main theoretical provisions and the results of the dissertation work were reported, discussed and approved at the Department of Information Technologies of the Russian Economic Academy named after G.V. Plekhanov, at the XYI, XYII and XYIII International Plekhanov Readings in 2003, 2004, 2005, and also presented at the exhibition "Internetika - 2006".

The main theoretical provisions and results of the dissertation work are published in seven printed works, in which the author owns 1.7 pp.

The author expresses his deep gratitude to Candidate of Technical Sciences, Professor Volkov A.K., Candidate of Technical Sciences, Professor Shcherbakova O.V., Candidate of Technical Sciences, Associate Professor Koval P.E. for determining the main scientific directions of this study and the invaluable knowledge gained, as well as the Doctor of Economics, Professor Tikhomirov N.P. and the staff of the Department of Information Technologies of the Russian Academy of Economics named after G.V. Plekhanov for consultations, support and comprehensive assistance in carrying out the work.

It is impossible to imagine e-commerce on a modern scale without personal computers, without graphical operating systems, without the Internet, and even without its most famous part, the so-called "World Wide Web" (WWW).

The Internet has gone through a number of stages in its development. The main task that was originally set was to link the large and expensive computers of US universities operating under the programs of the military department and make their resources available to a wider range of people. At the end of 1969, the network connected 4 computers far apart from each other, in 1972 it connected 50 universities and research centers. In 1977, it became necessary to combine heterogeneous networks into a single network. The basis for the reliable collaboration of component networks was the so-called data reception / transmission protocol, still used on the Internet - the TCP / IP protocol.

The World Wide Web (WWW) was created by Tim Berners-Lee. He proposed the Web in 1989 as an ad hoc network to bring together the physicists of the world. The information was supposed to be stored in a special format, in the form of text with links.

Web technology quickly gained popularity in business, science, and politics. The main advantages of the WWW are the simplicity of publishing information on the web, the convenience and uniformity of access to electronic documents, and the availability of sufficiently developed tools for searching for information presented in the form of hypertext documents [3]. In a short time, the publication of information using Web technology has become so widespread that the World Wide Web and the Internet have in many cases become identified. The technology has evolved rapidly and has been supported by many professionally developed applications. It became clear that it is economically feasible to use Web technologies not only in the global computer network, but also in corporate networks built on the same principles and using the same software and hardware as Internet infrastructure objects [3]. Electronic commerce.

The modern economic dictionary defines the term "commerce" as "trade or trade and intermediary activity, participation in the sale or facilitation of the sale of goods and services" [4]. Based on this approach, a number of authors define e-commerce as trade using electronic information technologies [3]. However, it would be more correct to define e-commerce as an extension of business as usual through online means. Thus, e-commerce is not limited to the act of buying and selling using the Internet, but is "any economic activity using electronic information technologies [5].

The area of economic activity in the information space, focused on meeting the needs of the end user and the formation of long-term economic relations, is commonly called e-business, focused on the end user (Business to Customers - B2C). There is also an orientation towards a business partner (Business To Business - B2B).

The influence of the Internet on the idea of the forms and methods of economic activity is not limited to the use of the existing information infrastructure. The means of information support for economic activity have a radical impact on business technologies, business models are changing, business processes are being revised, and a new corporate culture is being formed [3]. Relationships with business partners and customers are moving to a new, higher level.

The economic basis of e-business is to radically expand the audience, increase the effectiveness of marketing, accelerate the process of buying and selling goods and services of all kinds. Electronic business largely determines the results of a company's activities, due to a reduction in the duration of business cycles, a reduction in costs in the process of core economic activity, an increase in the quality of services provided to customers, and, consequently, an increase in market share [1]. It is not limited to purely technological issues; in fact, it has a significant impact on the fundamental elements of the strategy of economic activity of any organization.



The process of selling goods and services is usually divided into marketing, advertising and sale, concepts that are certainly interconnected and interdependent, but still cannot be reduced to each other. Marketing is what is done to attract potential consumers and customers and tell them about the goods and services offered. Electronic (Internet) marketing is the marketing activity of entities in the electronic market. The practical implementation of electronic marketing, which ensures the creation of consumer value of the product, i.e. the provision of quality goods and services in accordance with the needs of the buyer, is carried out on the basis of a corporate integrated information system that has access to the world's network resources. Internet [8]. The most frequently cited advantages of e-marketing include its worldwide scope, high efficiency compared to other marketing tools, and the ability to provide new services based on the use of Internet technologies [5].

Advertising is part of marketing, it is a story about the company and what it offers. Selling is the next step, making a deal with a consumer or customer.

A web page on the Internet can become an assistant at all stages of the economic cycle. An interactive Web page provides information for determining the goods and services that potential buyers need at the moment, allows you to maintain the interest of regular customers and conduct targeted and therefore cheaper advertising campaigns. At the end of the business cycle, a Web page allows you to communicate where, when, and under what conditions goods and services can be purchased.

The main tasks of an organization entering the level of e-business:

- o improving the efficiency of the organizational structure; about transformation of information resources of the organization into means of achievement of commercial purposes;
- o support for the introduction of information technology in all areas of business activity;
- o improvement of management technologies based on electronic document management.

Despite the annual significant growth in e-commerce turnover, the number of buyers using the Internet as a store is increasing by about 5%. According to analysts, Internet commerce has entered a new phase of development - the work aimed at increasing the volume of the market is becoming a thing of the past, the struggle for the existing clientele is coming to the fore [3]. The motivation of buyers of electronic stores has been studied by domestic and foreign researchers [2]. What are the top reasons for shopping online?

1. convenience of buying goods via the Internet;
2. price advantages of online sellers.

Thus, after several years of development of electronic stores, shopping habits remain unchanged, which makes many market participants primarily care about the convenience of the shopping process and competitive prices. B2C models

In a short period of development of economically significant activities of organizations in the field of e-business, the following end-user-oriented business models have been clearly identified:

o Electronic advertising; o E-commerce; o Information Services; o eHealth; o Distance learning; o Customer relationship management.

Electronic advertising is one of the first e-business models. Electronic advertising is based on the idea of using an additional information channel to transfer information to a potential user about goods and services presented on the market by a company.

The use of the Internet as an advertising channel is attractive to the advertiser for several reasons: it opens up the possibility of reaching a solvent audience that is ready to use new technologies for purchasing goods; it is possible to carry out a multifaceted impact on a potential buyer (use text, audio, video). At the same time, it is clear that the development of advertising for this sector requires taking into account the specifics of the distribution channel [1; 7]. In addition, unlike traditional media advertising, electronic advertising allows and actively uses the ability to navigate (user-controlled movement) through the ad units.

Electronic commerce. One of the most popular types of business in the Russian segment of the Internet was the creation of an Internet store. This business model is the most intuitive for most Russian entrepreneurs. In fact, this is the implementation of the scheme of an ordinary trading enterprise using information technology. The attractiveness of Internet technologies is that a company's website can be visited by a very large number of potential buyers at the same time (several million people a day). Other important advantages are the possibility of reducing the cost of renting a room, a significantly smaller number of staff, the possibility of presenting a large range of products [2].

## **Literature**

1. Lukov V. Internet technologies at the beginning of the new millennium. // Planet Internet - 2000. - №10. - With. 66
2. McGillivray K., Head E. The use of 3D technologies in creating WEB sites. -M.: HT Press, 2006 - 336 p.
3. V. P. Molochkov, Computer Graphics for the Internet. Tutorial. - St. Petersburg, Peter, 2004. - 368s.
4. Morozov A., Semak I. Electronic commerce: search for success criteria//Internet World - 2000.- No. 9.-p. 45
5. Moskalyuk A. A new phase of Internet commerce: the struggle for the existing clientele. // Computer Review - 2002. - No. 27.
6. Myasnikova L.A., Frid M.I. postmodern commerce. - St. Petersburg: Business press, 2001. - 208 p.
7. Nikulin E. Computer geometry and computer graphics algorithms. - St. Petersburg: BHV- St. Petersburg, 2005. - 576 p.
8. Oparin A. E-commerce on the threshold of 3D. // eCommerce World -2000.-№5
9. Pasko V. P. Effective work on the Internet. - St. Petersburg: Peter, 2004., -544 p.

10. Parent R. Computer animation. Algorithms and methods. -M.: Kudits-Obraz, 2004. - 560 p.
11. Prokopova T. V. Internet technologies for creating information systems. Training course. - St. Petersburg: Peter, 2005. - 304 p.
12. Prokhorov. A. Modern technologies for creating Web3D-KOHTeHTa. // Computer Press - 2001. - No. 11.