

Yaroslava B. Samchynska (*Kherson State University, Kherson, Ukraine*)

Maxim O. Vinnyk (*Kherson State University, Kherson, Ukraine*)

THE FEATURES OF EDUCATIONAL SOFTWARE PROMOTION IN THE UKRAINIAN MARKET

This article deals with the features and legal requirements for the promotion of educational software. The focus of this article is an analysis of the current marketability of these products in Ukraine, an investigation of the main factors that influence its development, and the reasons which support the use of marketing systems by software developers, and the main strategies for the optimal marketing and promotion of educational-software development enterprises.

Keywords: *educational software, promotion, marketing, Ukrainian market.*

Ярослава Б. Самчинська (*Херсонський державний університет, м. Херсон, Україна*)

Максім О. Вінник (*Херсонський державний університет, м. Херсон, Україна*)

ОСОБЛИВОСТІ ПРОСУВАННЯ ПЕДАГОГІЧНОГО ПРОГРАМНОГО ЗАБЕЗПЕЧЕННЯ НА РИНКУ УКРАЇНИ

В статті розглянуто особливості й законодавчі вимоги просування педагогічного програмного забезпечення, а саме сучасний стан ринку цих продуктів в Україні; основні чинники, що впливають на його розвиток; причини, які зумовлюють використання системи маркетингу розробниками програмного забезпечення; маркетингові й рекламні заходи, що сприятимуть оптимізації маркетингових комунікацій для підприємств-розробників педагогічного програмного забезпечення.

Ключові слова: *педагогічне програмне забезпечення, просування, маркетинг, ринок України.*

Табл. 2. Рис.1. Літ. 10.

Ярослава Б. Самчинская (*Херсонский государственный*

университет, г.Херсон, Украина)

Максим А. Винник (Херсонский государственный
университет, г. Херсон, Украина)

ОСОБЕННОСТИ ПРОДВИЖЕНИЯ ПЕДАГОГИЧЕСКОГО ПРОГРАММНОГО ОБЕСПЕЧЕНИЯ НА РЫНКЕ УКРАИНЫ

В статье рассмотрены особенности и законодательные требования продвижения педагогического программного обеспечения, а именно современное состояние рынка этих продуктов в Украине; основные факторы, влияющие на его развитие; причины, обуславливающие использование системы маркетинга разработчиками программного обеспечения; маркетинговые и рекламные мероприятия, способствующие оптимизации маркетинговых коммуникаций для предприятий-разработчиков педагогического программного обеспечения.

Ключевые слова: педагогическое программное обеспечение, продвижение, маркетинг, рынок Украины.

Introduction. A key component of information technology is software. Software development in developed countries has been the foundation of hi-tech industries that has driven the globalization of the world economy.

The objective reality of the current market is that modern equipment and advanced production technologies for creating different types of software are not enough; software-development developer enterprises must also focus on efficient marketing, aimed to create stable market positions and the enhance competitiveness of its products.

Literature analysis. Domestic scientists, such as O.V. Spivakovsky, L.F. Ezhova, O.O. Karpischenko, V.S. Kruglik and others, have been engaged in researching software promotion in the Ukrainian market (Spivakovsky, 2010; Yezhova, 2002; Karpischenko, 2011; Kruglik, 2011). The prospects and issues associated with the development of communication technologies to promote and

distribute educational software in Ukraine are extremely relevant and require further research.

Problem statement. For modern enterprises and organizations focused on strategic objectives involved in the development and distribution of educational software, it is important to use integrated marketing communications to achieve maximum results. Nowadays, communication serves as the central tool for the practical realization of the goals of market entities (Yezhova, 2002).

To convey the necessary information to the intended audience, to create consumer demand, to manage this demand, as well as to reduce price instability, software-development enterprises use complex marketing communications, the role and importance of which is growing in Ukraine.

The purpose of this article is the research of the current market conditions of software products in Ukraine, in particular, the characteristics and conceptual approaches to the dissemination and promotion of educational software.

Results. Today, the software industry, along with the nanotechnology industry is the most hi-tech, highly profitable sector of Ukraine's economy. Its key feature (and difference from other areas of information technology) is that it does not require significant investments, either public or private. Furthermore, it does not require large amounts of natural resources, is environmentally friendly, and promotes the high academic, intellectual and technological potential of the state.

The software industry is well developed in Kiev, where we can find more than 50% of all employed professionals in this field; it is rapidly growing in Lviv, Kharkiv, Dnepropetrovsk, Donetsk, Simferopol and other cities of Ukraine (Recommendations of the parliamentary hearings on "Creation of Favorable Conditions for the Development of the Software Industry in Ukraine", 2012).

According to recent statistics, the information technology (IT) market of Ukraine amounts to two thousand companies employing over 150,000 people. According to expert opinion, the companies' gross income in the software industry is over 15 billion UAH, with an average annual growth rate of 30-40%. Each year, up to 30,000 university graduates specializing in IT services or hired (Recommendations of

the parliamentary hearings on "Creation of Favorable Conditions for the Development of the Software Industry in Ukraine", 2012).

According to "Annual Global Outsourcing Report GS100," Ukraine is in 11th place of the Top 20 of the largest world centers according to the number of employees in IT (Annual Global Outsourcing Industry Analysis GS100, 2012). Ukraine is the first in the list of Central and Eastern Europe, ahead of Russia, Belarus and Poland.

The current market condition of the software industry is characterized by the following key trends:

- ✓ increased competition and price wars among the companies involved in the development and implementation of software;
- ✓ changes in business strategy of the software manufacturers;
- ✓ preference for reusable software.

Price competition first appeared in the hardware market and then subsequently moved to the software market. Competition among software products is more focused because it favors leading manufacturers of computer engineering and impacts the activity of small firms. As a result of price competition, software producers often lose money, although these losses are significantly lower than those of the manufacturers of computer hardware.

Changes in the business strategies of software manufacturers focus on the product delivery strategy to the end user, pricing and sales systems. Firms engaged in the development and sale of software products usually work in one of the following three areas:

1. applications development;
2. applications sale;
3. service.

The profitability of these areas varies because by reducing the costs of marketing and distribution, software vendors get additional income and functions from marketing and distribution, which are often transmitted to distributors and other organizations involved in their subsequent commercial implementation.

The distribution between the developers and distributors of software is the most efficient and cost-effective way to quickly make new products available, as the costs associated with market research, shipping, advertising, and other measures are implemented through the budget of distribution enterprises. At the same time, today's leading software vendors serve both as developers and distributors.

The question of reusable software development was put to professionals a long time ago, as it produces significant cost and resource savings. To this end, object-oriented applications and mobile objects to avoid duplication (which is typical for any large program) were created. But users refused to invest heavily in untested programming methods which hadn't received any support. So now developers offer users only original object-oriented systems, and the creation of working modules for multiple usages is left up to users.

Thus, the software market today has seen a steady decline in prices for mass-produced products, and suppliers seek to use more effective channels to expand their presence in certain market sectors. This causes an increased interest in the business sector to optimize the marketing system in the field of software, particularly to promote these products in the marketplace.

In countries with market economies, the software used in the educational process is considered to be a commodity that is subject to intellectual property rights. Today, its most active consumers in Ukraine are teachers and principals, followed by the parents of pupils in secondary schools.

The main developers of educational software in Ukraine are presented in Table 1.

The specificity of educational software is its creation for direct use in the educational process. Thus, according to the order of Ministry of Education, Youth and Sport of Ukraine from 08.02.2012 No. 882 "On the use of study materials in secondary schools," secondary educational institutions are only allowed to use those curricula, textbooks and teaching manuals that are approved by the Ministry, or approved by a committee of the Scientific and Methodological Council on Education.

Table 1. The main developers of educational software in Ukraine, authors'

Developers of educational software in Ukraine		% of software market
1. Scientific and educational institutions	– Institute of Artificial Intelligence of the Ministry of Education and Science and National Academy of Sciences of Ukraine in Donetsk	11% of software
	– H.S. Skovoroda Kharkiv National Pedagogical University	
	– The National Technical University of Ukraine “Kyiv Polytechnic Institute”	
	– Kherson State University	
2. Commercial institutions	– Closed joint-stock company “Kvazar-Mikro Tehno”	89% of software
	– “Karvali” Ltd.	
	– Closed joint-stock company “Malva”	
	– Private company “Kontur-Plyus”	
	– Kiev Institute of Advanced Technologies	
	– E.A. Shestopalov	
	– Closed joint-stock company “Transportni Systemy”;	
	– Closed joint-stock company “Institut Peredovyh Tehnologiy”	
	– “Diez-Produkt Company” Ltd.	
	– RGdata	
– “Ukrpryborservis” Ltd.		

This is an important feature of the distribution of educational software in the Ukrainian market that slows the introduction of software and complicates the distribution progress to the final consumer.

In 2008-2012, Kherson State University (The Department of Support for Academic, Informational and Communication Infrastructure and The Department for Economic and Contractual work and Exhibitions) took a survey of 400 representatives of secondary schools concerning the use of educational software. 89% of the respondents expressed the need and desire to use educational software in the educational process. Approximately 35% representatives of secondary schools had heard about the available software, and only 10% actually were involved in the search and purchasing of educational software.

Unfortunately, we have noted the low activity of these representatives after the survey and offered to provide free copies of the educational software for testing. For example, Kherson State University donated to schools for use in the educational

process some kind of educational software products of its own production: TERM 7.9 (Algebra 7-9 classes); Videointerpreter; System of Linear Equations; Equations Library of Electronic Visual Aids (Algebra 7-9 classes).

As a result, Kherson State University expected some reviews concerning the use of educational software products. No reviews were received, indicating a low level of interest by the teaching staff in connection with the aborted computer-based learning process.

An analysis of the market trends of educational software in Ukraine shows that the actual implementation of educational software occurs slowly. The main factors that affect the educational software market in Ukraine are:

1. limited access to computers in schools;
2. lack of funding for schools to purchase ES;
3. lack of a systematic approach by the State to the educational process;
4. lack of teacher motivation to use software products;
5. the high level of piracy;
6. low level of IT competency from teachers;
7. limited demand for ES in the open market;

8. low return on investment by educational software products, which increases the relative cost of development and thus inhibits the development of the market for this software and its implementation.

The main negative factor in the development of the educational software market in Ukraine is piracy. According to a survey by the Business Software Alliance, which covered more than 100 countries, the global level of piracy in 2010 was 43%; In Ukraine, this level is much higher: 85% of Ukrainian computer users use software obtained from an illegal sources (BSA, 2010).

Systems of marketing communications are called different specific measures and techniques, with the direct task and purpose of the formation of relationships with targeted audiences. Means and approaches of marketing communications are very different. The main areas are as follows: creating of demand; sales promotion; advertising; promotion.

Effectiveness of sales promotion depends on the properties of the product, the capabilities of the firm, the chosen marketing strategy, and the stage of the life cycle of the product (Figure 1).

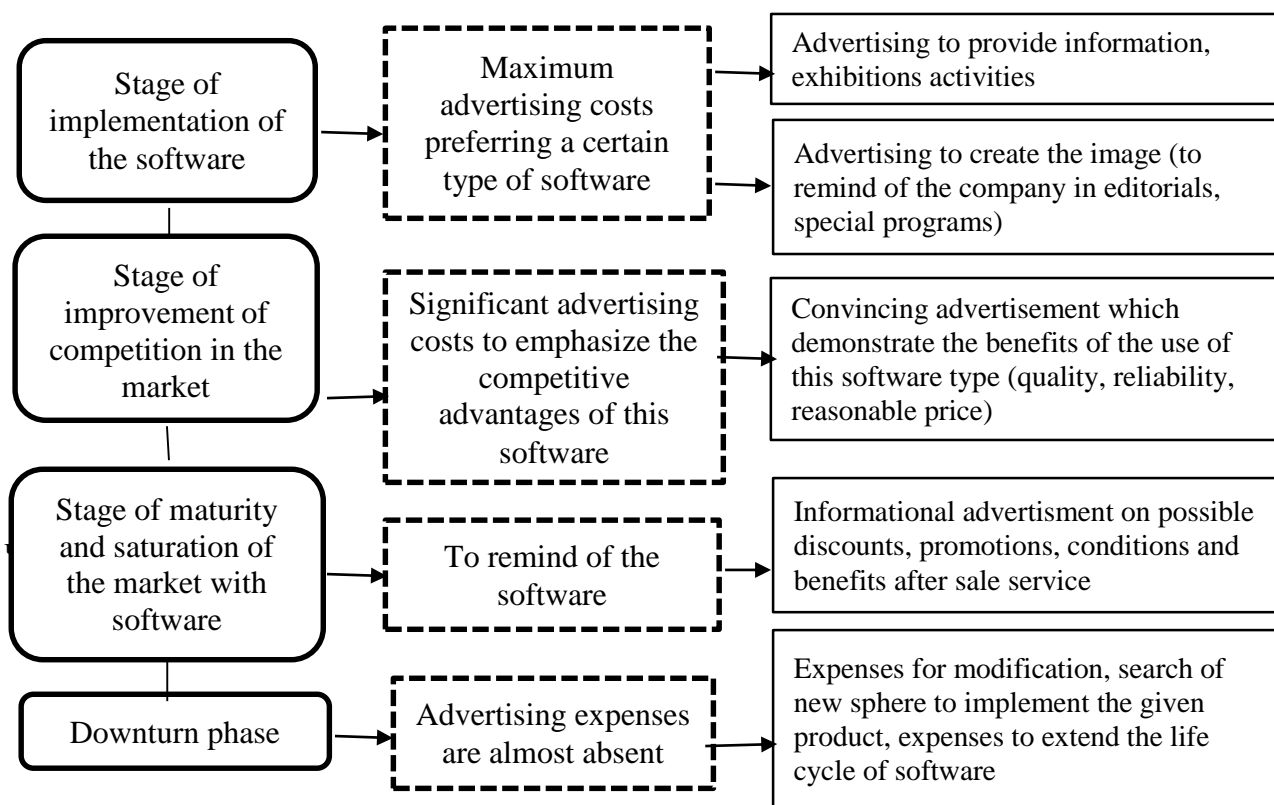


Figure 1. Sales promotion depending on the stage of software life cycle, authors'

Waiting periods, claimed features and benefits of software, deadlines before commercial distribution, the expectations degree of experts and leading professionals published in the media or by other means are all features of modern methods for creating demand for software products, elevating a company's image, and, consequently, increasing profits.

Taking into consideration the given properties of software products as a special type of intellectual-property good, let's consider the basic means of its sales promotion and advertising (Table 2).

One of the features of information products and services is that their implementation in the market is impossible without prior advertising and persuading buyers of their need, utility, advantages, and opportunities to adapt to the requirements of the user and its compulsory education. This requires costs that are 5-10 times more than the cost of development of these software products, and

Table 2. Means of sales promotion and advertising software, authors'

Group	Promotion Direction	Means
1. Means of "impersonal sales"	Advertising on the Internet, announcement in media	Website of the manufacturer or distributor of software, its optimization by keyword search queries Direct advertisement, thematic promotional mailing
	Websites providers	The implementation of the developed software through dealers, websites providers
2. Means "of personal sales"	Direct sales	Oral presentation of the product during conversations with one or more potential buyers to make the next sale
	Relationships with customers	Personal contacts with existing and potential customers or groups of customers within the personal selling
3. Public Relations - formation of public opinion and goodwill that promotes the sales	Participation in exhibitions, conferences and other events	<ul style="list-style-type: none"> • International industry exhibitions whose themes cover the whole field of science and technology. • International specialized exhibitions whose themes cover specific directions, sub-industry of science and technology; exhibitions held in the congresses, conferences and symposia. • National exhibitions organized in accordance with intergovernmental agreements on scientific, technical, and cultural cooperation. • Days (weeks) of science and technology, career days, jubilee exhibitions of the institution.
	Participation in exhibitions, conferences and other events	<ul style="list-style-type: none"> • Exhibitions and workshops, during which the organizers provide lectures, research reports, accompanied by a demonstration of the software. • Exhibitions held at the suggestion of the certain companies to increase sales in a certain market. • Exhibition-presentations of certain type of software, projects, companies.
	Industry relations	<ul style="list-style-type: none"> • Participation in tenders of the Ministry of Education, Science, Youth and Sports; participation in the development of scientific topics ordered by the Ministry of Education. • Relationships with potential buyers within the industry, public agencies in the intra-activity
	Public relations	Relations with business social circles, with grant makers, banking and credit institutions, etc.
	Relations with existing and potential investors, funders	Assisting the implementation of software for noncommercial institutions, distribution of free promotional versions
	Sponsorship	Disseminating information about the company-sponsor, reminding potential clients about the already known company, creation or strengthening of a favorable image of the sponsor, associating his image with the image of the party given subsidy

		Formation of favorable positive public opinion about the company-sponsor, demonstrating its financial power and reliability and stability as a partner; communications directed to the company staff and used for motivating employees; create an positive atmosphere for employees and those who come to work for the company.
--	--	---

are essential because nobody would buy unknown software.

That is why it is recommended to start advertising products at the initial stage of development of a product, meaning the demand formation will successfully predict the stage of commercial distribution, creating the waiting stage in between them.

Conclusions. The point of distribution of educational software in the Ukrainian market that slows their implementation and complicates the process of moving to the end user is a legal requirement to use only software approved by the Ministry of Education, Science, Youth and Sport of Ukraine, or approved by a committee of the Scientific and Methodological Council on Education.

Survey results of the main consumers of educational software initiated by Kherson State University indicate a low level of interest of the teaching staff in the use of educational software in connection with the aborted computer-based learning process.

References:

Рекомендації парламентських слухань на тему: "Створення в Україні сприятливих умов для розвитку індустрії програмного забезпечення" від 15 березня 2012 р. № 4538-VI.

Annual Global Outsourcing Industry Analysis GS100, 2012
[//www.globalservicesmedia.com](http://www.globalservicesmedia.com).

Наказ Міністерства освіти і науки, молоді та спорту України від 02.08.2012 № 882 "Про використання навчальної літератури у загальноосвітніх навчальних закладах".

Управление ИТ: опыт компаний-лидеров. Как информационные технологии помогают достигать превосходных результатов / Питер Уэйл, Джинн У. Росс.; пер. с англ. – М.: Альпина бизнес Букс, 2005.–293с.

Сніваковський О.В., Федорова Я.Б., Глущенко О.О., Кудас Н.А. Управління інформаційними технологіями вищих навчальних закладів: [навч. посіб.]– [вид. третє, доп.]. – Херсон: Айлант, 2010. – 302 с.

Manning, G. L., Reese, B. L. Selling today: creating customer value. – [9th ed.]– Pearson Education, Inc., Upper Saddle River, New Jersey, USA, 2004.- 527p.

Єжова Л. Ф. Інформаційний маркетинг: Навч. посібник.- К.: КНЕУ, 2002. - 560с.

Карніщенко О.О. Особливості просування програмного забезпечення як сервісу / Економічні проблеми сталого розвитку: тези доповідей науково-технічної конференції, Суми, 18-22 квітня 2011 року / Відп. за вип. А.Ю. Жулавський. — Суми : СумДУ, 2011. —

Ч.4. — С. 152-153.

Kruglik V.S. Information system of Software Distribution. Інформаційні технології в освіті: збірник наукових праць. Випуск 9. – Херсон: Видавництво ХДУ, 2011.

Business Software Alliance, BSA // www.bsa.org/globalstudy.