AN INNOVATIVE MECHANISM FOR MANAGING THE DEVELOPMENT OF ADVERTISING CONTENT ON EDUCATIONAL PLATFORMS

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Abstract. The current situation with the quarantine regime and measures aimed at combating COVID-19 has led to the intensification of the development of educational platforms by the private and public sectors, as well as scientific and public ones. The purpose of the academic paper lies in studying the features of the innovative management mechanism for developing advertising content on educational platforms. Methodology. The present research uses content analysis and statistical analysis to investigate the market of educational platforms and the services they offer. The research was conducted based on the content analysis of educational platforms. The authors studied the content structure, basic channels, methods, and tools for promoting educational platforms. Results. Digital technologies are a decisive factor in the success and promotion of advertising content of educational platforms, which, under the condition of their optimal combination, provides significant competitive advantages. Digital marketing of educational platforms is a comprehensive approach to promoting services, its products in the digital environment and it also covers offline consumers. Digital marketing makes it possible to integrate numerous technologies for content promotion (social, mobile, web, CRM systems, etc.) with sales and customer service, ensuring constant high-quality communication between the advertiser and the end users of educational services. Digital marketing is based on analyzing data about users, their behavior, penetrating traditional types of communications and ensuring the achievement of the target audience. Digital marketing involves personalization, which strengthens the impact of marketing tools on the target audience – users of educational services.

Keywords: educational platforms, the content of educational platforms, digital marketing, content advertising, educational services.

1 Introduction

The current situation with the quarantine regime and the consequences of measures aimed at combating COVID-19 have activated the development of educational platforms by the private and public sectors, and scientific and public ones. The distance education market began to grow significantly internationally and in Ukraine, in particular, causing a change in general trends and development factors. As a result, the volume and structure of the online education market in Ukraine, and the market of educational services have been transformed. The above-mentioned has also led to the emergence of innovations in the field of advertising content management: the management of educational platforms combines various tools, methods, and technologies of publishing information to attract the target audience and popularize the offered services of educational platforms. Open educational platforms provide a unique opportunity for a person with any level of wealth, social status, or nationality to getting access to educational resources for free or for a nominal price, as well as to improve one's qualifications and expand the range of activities.

The subject matter set forth above actualizes the problems of investigating an innovative mechanism for managing advertising content development on educational platforms. The purpose of the academic paper lies in studying the features of the creative management mechanism for developing advertising content on educational platforms.

2 Literature Review

Educational platforms in the research are considered a set of technologies that are used as a basis for providing educational services, and interaction of participants in the educational process. Advertising in the research is defined as information about educational platforms and their educational services and opportunities. It is disseminated in any form and by any means and intended to create or support the awareness of their consumers and their interest in educational services. At the same time, content management is a set of processes and technologies that support collecting, managing and publishing information in any form or medium. Thus, advertising content management can be defined as a set of processes and technologies for placing advertisements (in fact, information, data) about educational platforms and their services, and processes. It is used for studying ways and methods of placing advertisements, managing advertisements, planning the placing of advertisements (information) to promote awareness of interested parties, and attracting, and promotion of sales of educational services. Considering the fact that educational platforms are presented on the Internet, the present research will consider digital marketing as an innovative mechanism for managing advertising content, which includes the selection of digital channels, the choice and optimization of the content structure of advertising methods, and advertising campaign tools.

From among the basic types of content for advertising an educational platform, promotion on the Internet and attracting an audience, the following ones should be highlighted, namely: publication of interviews, lists, information resources, social content, polls/voting, updates, reviews, comparisons, news, case studies, public opinion, stories, predictions, expert opinions, emotional posts, contests, ratings, blogging, etc. (Wymbs, 2011; Fierro, Cardona Arbelaez, & Gavilanez, 2017; Mujica, Villanueva & Lodeiros-Zubiria, 2021).

Another classification of content divides it into as follows: blog posts, articles, publications, research, e-books, sales page copy, e-newsletters, social media campaigns, and SEO (Crittenden & Crittenden, 2015; Kusumawati, 2019; Sierra, 2020).

Presentation of an educational platform on the global Internet is the most popular way of promoting educational services. The electronic means of communication of the educational platform include at least four marketing directions (Singh, 2017), namely: creation and maintenance of the website; placement of advertising on the Internet; publication of information about educational services on thematic services; blogging educational platform. Thus, advertising is a type of promotion of an educational platform and a direction of marketing, which is a system of distribution of educational services and a system designed to generate interest in an educational platform among a particular circle of people. Advertising can be textual, television, external, etc. However, such promotion is usually standard and contains information about the educational platform's portfolio of services.

Since the most popular way of promoting educational services is a presentation on the Internet, digital marketing has become an innovative mechanism for managing advertising content. Currently, the influence of traditional advertising tools is decreasing; marketing is becoming more interactive and visually oriented, and the use of chat applications is increasing (Ionita & Asan, 2016). Modern media involves the participation of the consumer and the viral distribution of information. Marketing approaches are changing, and new marketing tools are being used (Zahay, Altounian, Pollitte & James, 2019). Natural selection is forcing marketing to change forasmuch as consumers prefer those companies that are faster at mastering digital channels of customer engagement.

Digital marketing is a general term for marketing educational services on platforms using digital channels to attract and retain customers. This concept is often equated with Internet marketing (Basha, 2019); however, digital marketing includes internet marketing but is not limited to the internet. Internet marketing includes SEO promotion of the website and educational platform, context, webinars, etc., that is, all channels available to the user only on the Internet (Bessette & Burton, 2014). Digital marketing includes all of the above, including advertising and promotion on any digital media outside the network. In other words, it involves digital communication both online and offline.

Currently, digital marketing uses five digital channels (Oré Calixto, 2021), namely: 1) the Internet and devices providing access to it (computers, laptops, tablets, smartphones, etc.); 2) mobile devices; 3) local networks (Extranet, Intranet); 4) digital television; 5) interactive screens, POS terminals.

The main methods of digital marketing are as follows (Sawlani & Susilo, 2020): contextual advertising Google Adwords, Yandex Direct; Big Data technology – data arrays of large volumes; retargeting; mobile marketing; email marketing – e-mail; viral marketing; RTB (real-time bidding); SMM (social media marketing); SMO (social media optimization) – optimization for social networks; SEO (search engines optimization) – optimization of the website in search engines; SEM (search engine marketing) is search marketing.

Only a few companies can afford all the tools simultaneously; as a rule, it is inefficient. Companies can contact digital agencies, ensuring the presence and promotion of the brand in the digital environment. The team may include a marketer, an SEO specialist, an analyst, a project manager, a designer, a typewriter, a programmer, a content manager, and a copywriter. Alternatively, agencies may hire freelancers such as videographers or photographers for occasional activities.

From among the trends of the critical tools of educational platforms' advertising campaigns, the following should be noted (Biloš & Galić, 2016; Kumar, D., Rajyalakshmi & Asadi, 2017; Langan, Cowley & Nguyen, 2019):

1) Online video – its consumption is growing intensively; it is ahead of cable television among teenagers and young people;
2) native advertising – it replaces pop-up advertising; it is organically embedded in the content; it has a greater chance of being read by the user forasmuch as it seems more natural to him;
3) personalized content – the content should be more personalized to make an impact. Accordingly, calls to action are more effective when they take into account the individual approach;
4) smart advertising with big data allows advertisers to more accurately define their audience, and spend less money on advertising aimed at those users who will not respond to it. It provides an opportunity to perform analysis with more accurate tracking of the conversion rate and other factors;
5) community development – Internet users are creating more content than ever, and their words, photos, videos and other content can significantly impact to a company's brand and sales growth. People can create content without encouragement; however, support will help build a team of influencers. Another strategy lies in paying bloggers, vloggers, and other opinion leaders to discuss a product or service.

Digital marketing has numerous tools that can be divided into three main groups (Dhote et al., 2015; Shaltoni, 2016; Li, & Peng, 2021), namely:

1) paid resources: companies should pay for using them;
2) own resources: sites, and pages in social networks, which the business entities own and can dispose of;
3) earned resources: so-called word of mouth or earned media – free or purchased communication channels.

In a generalized form, digital marketing includes three components:

▪ content (blog posts, articles, publications, research, e-books, sales page copy, e-newsletters, social media campaigns, SEO);
▪ design (inclusion of photos and images for content, infographics, charts, photos, and videos);
▪ statistics (analytics, key performance indicators, goals and objectives, conversion channels, client LTV).

Thus, the mechanism for managing the advertising content of educational platforms includes an optimal combination of digital channels, methods and tools of digital marketing for placing advertisements (information) about educational platforms and their services for familiarization, attracting incentives to purchase end-user services.

3 Methodology

The present research uses content analysis and statistical analysis to investigate the market of educational platforms and the services they offer. The study was conducted based on content analysis of such platforms as EdEra, Prometheus, Coursera, TED (Technology, Entertainment, Design), Khan Academy, EdX, Udacity, Canvas Network, and Udemy. The authors studied the content structure, main channels, methods, and tools for promoting educational platforms. The platforms for content analysis were chosen based on their popularity in terms of the number of users and visitors.

4 Results

4.1 The market of educational services and platforms

The online education market can be divided into the following types: distance learning, online courses, programs and courses for self-study (books and manuals). Depending on the type of online education, its goals and objectives, the functionality of the educational platform and the content that best matches the target audience of the relevant market segment are developed.

Online education is an innovative form of production of educational services, which is carried out using the resources and technologies of the global Internet network. It is a way of learning in which learners receive information over the Internet and can get access to it via digital platforms such as computers, laptops or smartphones. It can be aimed at professional and retraining; advanced training; training in individual subjects; in-depth study of topics, sections of the disciplines of the curriculum; additional education according to interests. Accordingly, the direction of online education also determines the goals, and tasks of educational platforms and their content.

Online education is a relatively young industry, the rapid growth of which began in 2011-2012. Despite the slow start, online education instantly became popular, and the e-learning market attracted a lot of investors. The active development of the market and a significant increase in demand for online education began several years ago. Currently, the audience of such courses includes tens of millions of users. The share of online education in the market's total volume is about 3%. It is estimated at 165 billion US dollars, and it increases every year. The world driver in the market is the USA. The online education market has been growing rapidly, and the attraction of investments facilitates its active development. In 2019, the investment in Edtech (the results of technological solutions for education) reached 18,66 billion US dollars, which is 14,2% more compared to 2018. The largest share falls on the USA (42,9%) and China (21,4%). Investors prefer to invest in learning tools based on AI (artificial intelligence) – this category in the structure of investments has taken 19,7%, while e-learning – 1,7%, and mobile learning – 15,9%, respectively. According to studies, in 2022, the global market of EdTech (educational business projects built using information technologies) and online learning will grow by 5,08%, and the total value will be 243 billion US dollars. The

education industry has been experiencing radical changes in the provision of educational services; therefore, the growth of the share of online education is a naturally-determined process. Such platforms as Coursera, Udemy, EdX, and The Open University have opened access to educational programs from the best universities, companies and experts worldwide.

In Ukraine, even though the online format has been used for a long time, in general, the online education market is still at the stage of formation. Online foreign language courses became one of the first forms of such education. Such services could have been found on the Internet 10 years ago. The remaining types began to develop with the introduction of such platforms as Prometheus, EdEra, Coursmos, VUMonline, Wisecow, etc., where those wishing can take online courses and, in some cases, even receive a certificate. With the development of Internet technologies and the emergence of more modern devices, training is moving into a format using mobile applications. In Ukraine, investment in Edtech takes place mainly creating a start-up and charitable fundraising for it or attracting investments from international venture funds.

Figure 1: The structure of the demand for online education by format
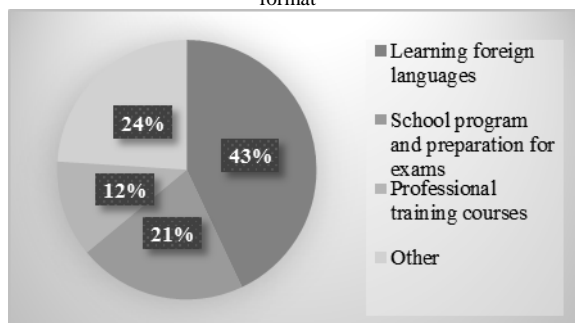
Source: Proconsulting (2021).

In 2019, the learning content provider segment accounted for about 60% of the eLearning market, providing content on various topics and collaborating with domain experts to help them develop content. SweetRush, Kineo, Infopro Learning and AllenComm can be identified among the main content providers on the global market.

The main product of educational platforms is content. There are several possible ways to produce it: 1) displaying the finished content; such aggregators do this as Uchinovoe, UniverTV and others; 2) adaptation of someone else's content; for instance, Lendwings translates popular courses from the American Udemy websites; 3) the use of user-generated content, such as recordings of Zillion webinars; 4) own production: Eduson, Universarium, Web.University and several others.

Own content production involves:

I. Creation of a new paid course, which includes the stages as follows:

1) Studying the target audience
2) Market positioning analysis
3) Development of the educational design of the course
4) Creating a graphic design for the course
5) Shooting and editing of video lectures
6) Development of a system of educational tasks
7) Content introduction to the platform and its testing
8) Access to the course through the web and Android/iOS mobile applications
9) Course promotion: informing 1 500 000 Prometheus course participants, advertising campaign beyond its borders
10) Providing certificates of successful completion of the course
11) Detailed statistics of sales and interaction of students with the course

II. Placement of a pre-created course that involves the stages as follows:

1) Content introduction to the platform and its testing
2) Access to the course via web and Android/iOS mobile applications
3) Informing 1 500 000 Prometheus course participants about the course
4) Providing certificates of successful completion of the course
5) Detailed statistics of students' interaction with the course

III. Creation of a free course that involves the stages as follows:

1) Development of the educational design of the course
2) Creation of the graphic design for the course
3) Shooting and editing of video lectures
4) Development of a system of educational tasks
5) Content introduction to the platform and its testing
6) Access to the course through the web and Android/iOS mobile applications
7) Informing 1 500 000 Prometheus course participants about the course
8) Detailed statistics of students' interaction with the course.

An analysis of the order for online educational courses and training programs in 2021 has revealed that the highest demand is for the easiest content to monetize: business and technology (almost 40% of all online education seekers studied in these directions).

While investigating the requirement for e-learning according to the structure of consumers, it should be noted that it is possible to distinguish three main sectors of online education seekers, namely:

1) the academic sector, which includes preschool and school education of children, higher education and vocational training. In this group of consumers, the funding and the initiative to obtain certain competencies come from the acquirers themselves or their parents.
2) the corporate sector uses e-learning services to train their employees. At the same time, the demand for online educational courses from small and medium-sized companies is significantly different from the requests of large enterprises. For instance, the first ones use already developed online courses to train their staff. Large enterprises, possessing significant financial resources and investments, can order the development of certain courses or programs for the training of their personnel in several areas or processes.
3) the public sector includes organizations, associations and institutions belonging to government structures where e-learning technologies are used to train or improve the skills of civil servants.

The most popular providers of online education in the world are the American platforms Coursera, edX and Udacity, as well as the British FutureLearn. The leading Ukrainian educational online platforms are Prometheus, EdEra and VUM online.

In Ukraine, the following models of educational activity are mainly used:

▪ provision of paid access to content posted on the Internet (video lectures, online webinars, etc.);
▪ creation of platforms for the interaction of sellers (service providers) and buyers (consumers) of educational services and receiving a commission from concluded contracts;
▪ distance education provided by subjects of educational activity with the issuance of a corresponding document on education;
▪ provision of free access to part of the courses to attract customers to paid services provided by the resource or platform.

The online education market is characterized by developers and owners of educational content obtain "passive income", that is, earnings that a person receives from his product without direct involvement in the production process. Having spent money on creating an online course and its promotion in a certain period, the owner of the content receives income for a long period. Great attention is paid to the author's authority of the educational course or the educational platform, its relevance, diversity and understandable content; these factors define the demand and the process of consuming online educational services.

4.2 Educational platforms: content features

The following educational platforms deserve a more detailed review: EdEra, Prometheus, Coursera, TED (Technology, Entertainment, Design), Khan Academy, EdX, Udacity, Canvas Network, Udemy.

EdEra (https://www.ed-era.com/) is a Ukrainian project that offers established online courses, special projects, interactive textbooks and educational blogs. The vast majority of content is relevant for teachers and schoolchildren, as there are courses on the Ukrainian language, literature, history, physics, computer science, English, biology and much more. Everyone can find exciting courses according to one's demands; here are a few examples: an online course on media reliability; human rights in the educational space; critical skills of the 21st century; academic integrity; web developer basics; DNA of leaders; transparent energy; pre-medical assistance, etc. Partners of EdEra are Ministry of Education and Science of Ukraine, Osvitoria, ImpactHub Odessa, VoxUkraine, Intel, RaccoonGang, KSE, Studway, Pro.Svi, edcampUkraine.

Prometheus (https://prometheus.org.ua/) is a massive open online course platform based on OpenEdx, developed by the Massachusetts Institute of Technology and Harvard University and had an open source. This project aims to provide free access to the best courses from leading teachers, higher education institutions and organizations worldwide. This online platform proposes a variety of techniques, namely: massive open online courses, online education, innovations in education, education for everyone, and blended courses. The following course cycles are available on this platform: "English language", "Data analysis", "Public education", "Improving the qualifications of teachers", "Preparation for independent external assessment", "Entrepreneurship", "You can do everything! The possibilities are endless!"

Coursera (https://www.coursera.org/) is an online platform launched in 2012. US educational institutions cooperate with it, including Stanford, Princeton, California, and Columbia universities; universities of Tennessee, New York, and Nebraska; leading cultural organizations, for example, the US Museum of Natural History. This year, Zhytomyr Ivan Franko State University has joined the cooperation. Students can choose from more than 450 courses in various disciplines (biology, mathematics, economics and finance, mechanical engineering, medicine, law, art, computer science, etc. Studying is mainly conducted in English. Registered users have free access to all online courses. After successful completion of the course, the student receives a personal certificate.

Khan Academy (https://www.khanacademy.org/) is an open online platform that does not require direct registration; a Google or Facebook account is enough to start classes. The website presents short video lessons from various disciplines: mathematics, computer science, biology, physics, economics, astronomy, etc. The courses are also divided by roles (for teachers, parents, and students). After listening to the material, there is an opportunity to take tests to take tests to consolidate the acquired knowledge. The content is presented in English; however, it is supplemented with subtitles in many languages. This resource will be useful for secondary general and higher education students, or teachers seeking to implement the idea of interactive learning in their own group, which is quite relevant nowadays. Statistical documents are created that contain such

data as study time, topics covered, and number of correct answers, which provides additional advantages for group mentors to assess the work of group members.

EdX (http://www.edx.org/) is a joint project of Harvard University and MIT, which offers online training in the following courses: computer technology, chemistry, mathematics, ethics, music, statistics, literature, etc. Some of them are good courses at Harvard, Cornwell University, Polytechnic Federal Lausanne, Hong Kong, Kyoto, and Peking University. This platform has free and paid courses. Online tutorials, and the opportunity to discuss materials and assignments on the forum are provided at each course. There is a system of financial assistance (up to 90% of the cost) for those who want to study on the platform and do not have the financial ability.

Udacity (https://www.udacity.com/) is a platform focused on learning IT-related materials. This platform is a private development of a group of scientists led by Sebastian Thrun. Materials on mathematics, business, design, physics, and biology are allocated in separate sections. Courses are divided by levels of difficulty: beginner, experienced, and professional. The video series consists of slides, diagrams, and formulas. The language of instruction is English; some courses have subtitles in other languages. The acquired knowledge is verified by passing quizzes and tests. The certificate is a confirmation of completed course.

Canvas Network (https://www.canvas.net/) is an open educational platform; its courses do not have a single approach to teaching and may have an age limit. They are created by people with different levels of training and field of activity, which characterizes a significant various courses. The materials are presented as short video lectures with the possibility of discussion on the forum with the teacher and other students. There are courses with certificates of completion.

Udemy (https://www.udemy.com/) is an educational project divided into 16 categories (for instance, computer and humanitarian disciplines, hobbies and crafts, art and photography, etc.). Instructors teach courses with practical experience in business, management, finance, and technology. Consequently, all materials on the site are paid (from 10 USD to 500 USD).

TED (https://www.ted.com/) is a non-profit organization dedicated to spreading ideas, usually through short, powerful talks (18 minutes or less). TED was launched in 1984 as a conference that brought together technology, entertainment and design. It covers almost every topic – from science to business to global issues – in more than 100 languages. Meanwhile, self-hosted TEDx events help share ideas in communities around the world. Since 2009, the TEDxKyiv conference has been held. More than 50% of the videos have already been translated into Ukrainian.

5 Discussion

An analysis of the most popular educational platforms makes it possible to highlight their main advantages, namely:

- a vast variety of programs and courses: online education offers a huge selection of online courses on any topic, from agriculture to medicine;
- the ability to acquire knowledge anywhere, anytime from any device; loyal education costs: online programs are a more affordable option for education because the payment is either significantly lower or absent at all. There is no need to visit educational institutions; education is available thanks to the online time regime;
- comfortable learning conditions, flexibility: all necessary materials are provided to the student in electronic form, tasks can be completed at a pace and time convenient for the student;

- use of various educational content in courses (text, audio, video and graphic information), as well as forums and blogs;
- closer interaction with teachers, communication in open discussions on the website and ample opportunities to concentrate: education seekers claim that it is easier to focus when studying the massive open online course because you do not have to be distracted by other listeners. Another positive point is the manifestation of cooperation, i.e., listeners participate in discussions, and exchange ideas, thereby starting to share their knowledge and experience;
- supplementary education: course participants can work and study at the same time thanks to massive open online courses, increasing their knowledge, which further affects career growth;
- professional development: ample opportunities to improve the qualifications of an already existing profession or to obtain additional, more in-depth knowledge without leaving work;
- absence of any restrictions: age, educational, professional, territorial, etc.;
- expansion of education opportunities for people with special needs.

At the same time, several shortcomings can be identified, namely:

- the system excludes an individual approach to the course participant, as a result of which the education seekers learn independently;
- problems with motivation: there are no penalties for incomplete training. A considerable number of students drop out because of a lack of motivation;
- excess and chaotic nature of educational information;
- the problem of plagiarism, academic integrity, and identification of the education seeker;
- the quality of the assessment system: online learning excludes practical and laboratory classes, which are often necessary to consolidate theoretical material. There are gaps in computer-based assessment, resulting in the problem of assessing scientific and creative works. There is no control over the acquired knowledge; course participants, when answering test tasks or solving creative questions, often use additional materials, thereby excluding the self-expression of their thoughts and oral answers;
- development of mass open online courses requires material costs and qualified human resources;
- the problem of recognition of a certificate of successful completion of an online course by universities and employers.

6 Conclusions

Digital technologies are a decisive factor in the success and promotion of advertising content of educational platforms, which, under the condition of their optimal combination, provides significant competitive advantages. Digital marketing of educational platforms is a comprehensive approach to promoting services, its products in the digital environment and it also covers offline consumers. Digital marketing makes it possible to integrate a large number of technologies for content promotion (social, mobile, web, CRM systems, etc.) with sales and customer service, ensuring constant high-quality communication between the advertiser and the end users of educational services. Digital marketing is based on the analysis of data about users, and their behavior; it penetrates traditional types of communications, ensuring the achievement of the target audience. Digital marketing involves personalization, which strengthens the impact of marketing tools on the target audience - users of educational services.

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Primary Paper Section: A

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