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*Kruglikova V. V., Kulabnieva O. A.***DIGITAL MARKETING OF A PHARMACEUTICAL ENTERPRISE ON THE PATH TO SUSTAINABLE DEVELOPMENT****National University “Zaporizhzhia Polytechnic”, Zaporizhzhia, Ukraine**

The article examines the specifics of applying digital marketing in the pharmaceutical industry, which faces high competition, modern concept of sustainable development, strict regulation, and changing consumer behavior during wartime. Modern tools and channels of digital communication are analyzed - social networks, search engine optimization, content marketing, mobile applications and telemedicine services, omnichannel marketing and digital platforms. It is emphasized that analytics and AI technologies have become central tools for optimizing the assortment policy of a pharmaceutical company. Particular attention was paid to issues of brand trust, personalization of communications, and compliance with regulatory restrictions on the promotion of pharmaceutical products. Key digitalization trends are presented, including the use of big data, artificial intelligence, and automation of interactions with patients and the medical community. It is concluded that digital marketing is becoming a strategic tool for increasing the effectiveness of pharmaceutical product promotion and strengthening long-term relationships with the target audience. It is noted that the war in Ukraine stimulates the development of digital marketing tools. For this purpose, the experience of digitalization of marketing approaches in Germany was studied.

**Keywords:** pharmaceutical market, digital technologies, sustainable development, digital marketing, online communications.

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***Introduction***

Recent research conducted by Ukrainian scientists has demonstrated the impressive speed with which key digital marketing technologies are being implemented. As for the situation in the pharmaceutical market, it is not exceptional. It is known that the health of the country's citizens depends on the pharmaceutical industry, and marketing practices have a direct impact on the availability, awareness and decision-making regarding the use of medicines.

Under the influence of global digital transformations, the use of old, traditional marketing approaches cannot be effective. They have been replaced by innovative digital strategies focused on personalization, communication technologies, and patient engagement in digital channels.

Under these circumstances, when Ukraine is implementing a program of strategic sustainable development goals, solving the problems of implementing sustainable pharmaceutical marketing: ecological marketing (eco-marketing), social marketing, corporate social responsibility without the help of local communities is impossible.

Recently, artificial intelligence (AI) and personalized medicine have been crucial in transforming the pharmaceutical market. But the application of these new technologies in marketing strategies poses a number of new challenges for pharmacists, including: introducing innovations in marketing communications, adapting enterprises to the modern environment, and ensuring effective consumers (patients) communication.

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### ***Analysis of recent research and publications***

Digital marketing in the pharmaceutical market is of interest to many researchers, due to innovative changes in communication technologies, the structure of demand for medicines. Research in recent years has emphasized the digitalization of marketing processes, personalization of interaction with patients, and the integration of digital technologies into the strategic planning of pharmaceutical companies.

In the context of the digital transformation of the pharmaceutical sector, scientific research highlights the rapid growth of the role of innovative marketing, combining Big Data technologies, social media, automation and personalization of communication. According to the study by Miozza, Brunetta and Appio, digital transformation in the pharmaceutical industry is the multi-level dynamic that includes not only technological changes, but also managerial adaptation to new business customer-oriented models [1].

Ventola's article made a significant contribution, outlining both the benefits (broadening audience reach, increasing awareness of drugs) and the risks (unregulated content, ethical dilemma) for healthcare professionals.

Ventola et al. [2], in their review, show the potential of social media in increasing the efficiency of healthcare, while at the same time, drawing attention to the need for the reliability of information and control of sources.

Eysenbach, in his concept of “Medicine 2.0”, has demonstrated a framework for understanding the digital era in healthcare as an open, interactive environment where the patient becomes an active participant in the treatment process [4]. In this context, new research highlights the growth of online platforms for the sale and promotion of pharmaceutical and cosmetic products, which is influencing the marketing strategies of companies.

### ***The purpose of the article***

Studying the main directions of implementing digital technologies in marketing programs developed by pharmaceutical companies in order to achieve long-term sustainability in the market. The results obtained can become the basis for research and development of strategic recommendations for pharmaceutical companies seeking to effectively apply digital technologies in modern marketing programs.

### ***Presentation of main content***

As mentioned earlier, digital marketing helps to: increase sales; build a brand and increase its awareness; improve the company's reputation; attract new customers or reduce the cost of attracting them; retain customers and lead them to repeat purchases; create a detailed portrait of each segment of the target audience.

As you know, Goal No. 3: “Ensure healthy

lives and promote well-being for all at all ages” was approved at the UN Summit in September 2015. The wording of Goal No. 3: “Ensure healthy lives and promote well-being for all at all ages”. It is currently impossible to realize this goal without the digitalization of marketing, without the participation of pharmaceutical companies in international sustainable development projects.

Digital marketing differs from traditional marketing in the platforms where promotion takes place. While traditional marketing uses radio, television, classic media, billboards and other physical media, digital marketing involves interaction with the audience via a computer, phone, tablet, etc.

The main areas of digital marketing are discussed in the author's Table.

The Table lists its strengths and weaknesses:

- omnichannel marketing and digital platforms. At the same time, companies combine various online channels: their own websites (branded and corporate), special projects, aggregator pharmacies – for comprehensive interaction with the audience via the mobile web and applications. The main source of traffic is considered to be effective search, especially from mobile devices Pharmacy online. E-commerce accounts for about 12% of the pharmaceutical market. Key components of successful digitalization are omnichannel, CDP platforms and logistics;

- online communications with healthcare professionals. The importance of direct digital contacts is growing: chat rooms, specialized sites for doctors, closed platforms with access for medical professionals. Agile marketing and active use of online events have become important during field service restrictions, such as due to the war. Pharmacy Prescriptions;

- remarketing and Programmatic messengers. Remarketing and programmatic advertising are used for precise targeting; messengers (mainly Viber, Telegram) are actively involved as convenient channels of communication with Apteka online customers;

- mobile apps and in-store technologies. Mobile pharmacy applications offer functions: information about medications, online consultations, promotions, reminders, cashbacks, descriptions of medications, and prescription scan codes – with the aim of increasing loyalty and digitizing the point of sale. Tablets in pharmacies allow you to collect customer data and adapt advertising campaigns in real time;

- data analytics and CRM solutions. With the help of analytics (Proxima Research Cloud CRM, Proxima research cloud) pharmaceutical companies can track the activity of medical representatives, brand promotion activities, marketing effectiveness, and interaction with doctors in real time;

Table

**Strengths and weaknesses of digital marketing**

Digital trends in the pharmaceutical market	Strengths	Weaknesses
1. Omnichannel marketing and digital platforms	Consistency of messages across channels. Convenience for patients and doctors in choosing a communication channel. Increased brand loyalty and awareness	High implementation cost. Complexity of integrating different channels. Need for specialized personnel
2. Online communication with medical professionals	Speed and convenience of information exchange. Ability to reach a large audience. Reduction of costs for physical meetings	Lack of trust in online formats among some doctors. Legal and regulatory restrictions. Risk of information overload
3. Remarketing, Programmatic, messengers	High targeting accuracy. Personalization of communications. Optimization of advertising budget	Risk of negative perception due to excessive retargeting. Dependence on data quality. Difficulty in controlling third-party platforms
4. Data analytics and CRM solutions	Deep understanding of customer needs. Ability to forecast demand. Increased marketing efficiency	High requirements for data quality. Need for analytics specialists. Risk of leakage of confidential information

Source: developed by authors'

– personalized and interactive content. Adapting content to the needs of doctors and patients, creating digital brand ecosystems, feedback issues, and forming Communities are key components for building relationships with the Pharmacy Online audience.

Researchers confirm that the active use of digital channels directly correlates with the growth of sales of both OTC and Rx drugs [5].

Therefore, it can be argued that digital marketing in Ukrainian pharmacy is already actively using: omnichannel and online platforms, including e-commerce, messengers, mobile applications, in-store technologies, and analytical CRM systems such as Proxima Cloud CRM.

Additionally, it should be noted that the role of personalized, interactive content for different target audiences is also growing. These tools help adapt to changes, engage the audience, and increase the effectiveness of the marketing strategy.

If we characterize digital marketing in the pharmaceutical sector of Ukraine during martial law, we can separate the areas of marketing activity taking into account modern changes:

– marketing goals: Sales growth, market expansion, brand strengthening, ensuring drug availability, customer and physician support, social responsibility;

– communication strategy. The tone of communication is creative, sometimes emotionally charged, with elements of goodwill;

– promotion channels. Personal visits by medical representatives, conferences, offline events, digital as

an application 100% digital orientation: messengers, social networks, email, webinars, mobile applications;

– geotargeting. Mostly stable geography of campaigns. Dynamic adaptation to changing audience location (IDP);

– content: product presentations, scientific materials, promotions. Information on the availability of drugs, pharmacy addresses, humanitarian initiatives, online consultations;

– analytics. Scheduled performance assessment (monthly/quarterly);

– real-time monitoring, rapid changes, integration with e-commerce, CRM, marketplaces [6].

In addition, it is necessary to consider additional work with notification services, shelter maps, humanitarian platforms. Minimalism in visuals, avoidance of traumatic topics, continuity of supply, service and trust are important.

These characteristics demonstrate the fact that marketing strategy during wartime became less commercial and more service-humanitarian, and speed of adaptation and mobile tools became critically important.

At this time, it would be appropriate to investigate the specifics of digital marketing in the pharmaceutical market in a European country (Germany), which combines regulatory restrictions, technological trends, and specific approaches to the audience. Namely:

– strict regulation of advertising and communications. Prohibition of advertising prescription drugs to consumers: The Heilmittelwerbegesetz

(HWG) strictly restricts advertising of prescription drugs – it is only permitted for a professional audience (doctors, pharmacists) with scientifically based and transparent information;

– advertising of OTC products is possible, but limited by the facts: for over-the-counter products, it is permissible to advertise factual data, but avoid excessive claims of benefit or effect;

– avoiding hidden advertising: Marketing through influencers or patients must be clearly labeled “Anzeige” or “Werbung” – only this meets the requirements of the BfArM and the Federal Cartel Office (FCO) kinda;

– compliance with digital health solutions standards. Digital Therapeutics (DiGA): Germany is the first country to integrate the DiGA system, allowing doctors to prescribe digital therapeutic products and insurance to cover them (~300 € per course);

– the shift to personalization and technology (MarTech). Omnichannel: Pharma companies integrate emails, webinars, offline events, professional portals, and social networks into a single way of interacting with doctors and patients, which increases the effectiveness of their outreach;

– content marketing – educational and “leadership.” For example, associations (such as Pro Generika) create informative pages and content clusters, covering complex topics in an accessible and neutral way – this increases trust and public respect;

– interactivity and personalization: Individual content portals for HCP (Healthcare Professionals), interactive quizzes, surveys, e-Detailing are used – this enhances engagement and allows you to collect data for targeting;

– the rise of MarTech and analytics: marketing automation, analytics dashboards, CRM solutions help track campaign performance and adjust strategies in real time;

– government initiatives and regulations in digital health. Electronic prescription registration and telemedicine services. Thanks to the Digital Healthcare Act, electronic patient records, e-prescriptions, and online consultations are receiving strong support; this stimulates digital marketing and the telehealth tool implementation.

Based on the study of these features, it can be noted that in Germany, digital marketing in pharmacy forms a balance between: strict legislative regulation (HWG, DiGA, BfArM, FCO), modern technologies and digital channels (omnichannel, MarTech, DiGA), educational, interactive content that builds trust and expertise.

### **Conclusion**

The above sources provide insight into the key dynamics of digital marketing in the pharmaceutical

industry. Analytics and AI technologies have become central tools for campaign optimization. Omnichannel strategies, video formats, content modular approaches and e-detailing.

Barriers to the implementation of digital technologies in pharmaceutical enterprises can be considered: low technological awareness, lack of skills, organizational inertia, insufficient legal framework, which delays the digital transformation of pharmaceuticals. Without them, it is currently impossible to implement the sustainable development goals.

But the war in Ukraine has largely stimulated the development of digital marketing tools, confirmed in local analysis. In addition, the experience of digitalization of marketing approaches in the countries of the European Union was taken into account.

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## ЦИФРОВИЙ МАРКЕТИНГ ФАРМАЦЕВТИЧНОГО ПІДПРИЄМСТВА НА ШЛЯХУ СТАЛОГО РОЗВИТКУ

Кругликова В. В., Кулабнієва О. А.

У статті розглядаються особливості застосування цифрового маркетингу в фармацевтичній індустрії, яка стикається з високою конкуренцією, сучасною концепцією сталого розвитку та строгим регулюванням і поведінкою споживачів, що змінюється під час війни. Проаналізовано сучасні інструменти та канали цифрової комунікації – соціальні мережі, пошукова оптимізація, контент-маркетинг, мобільні програми та телемедичні сервіси, омніканальний маркетинг і цифрові платформи. Зроблено наголос на те, що аналітика і AI-технології стали центральними інструментами для оптимізації асортиментної політики фармацевтичного підприємства. Особливу увагу приділялося питанню довіри до бренду, персоналізації комунікацій та дотримання нормативних обмежень щодо просування фармацевтичних товарів. Наведено ключові тенденції цифровізації, включаючи використання великих даних, штучного інтелекту та автоматизації взаємодії з пацієнтами та медичною спільнотою. Зроблено висновок, що цифровий маркетинг стає стратегічним інструментом підвищення ефективності просування фармацевтичної продукції та зміцнення довгострокових відносин з цільовою аудиторією. Зазначено, що війна в Україні стимулює розвиток digital-маркетингових інструментів. З цією метою вивчався досвід цифровізації маркетингових підходів у Німеччині.

**Ключові слова:** фармацевтичний ринок, цифрові технології, сталий розвиток, діджитал-маркетинг, онлайн-комунікації.

## DIGITAL MARKETING OF A PHARMACEUTICAL ENTERPRISE ON THE PATH TO SUSTAINABLE DEVELOPMENT

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The article examines the specifics of applying digital marketing in the pharmaceutical industry, which faces high competition, modern concept of sustainable development, strict regulation, and changing consumer behavior during wartime. Modern tools and channels of digital communication are analyzed - social networks, search engine optimization, content marketing, mobile applications and telemedicine services, omnichannel marketing and digital platforms. It is emphasized that analytics and AI technologies have become central tools for optimizing the assortment policy of a pharmaceutical company. Particular attention was paid to issues of brand trust, personalization of communications, and compliance with regulatory restrictions on the promotion of pharmaceutical products. Key digitalization trends are presented, including the use of big data, artificial intelligence, and automation of interactions with patients and the medical community. It is concluded that digital marketing is becoming a strategic tool for increasing the effectiveness of pharmaceutical product promotion and strengthening long-term relationships with the target audience. It is noted that the war in Ukraine stimulates the development of digital marketing tools. For this purpose, the experience of digitalization of marketing approaches in Germany was studied.

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