MINISTRY OF HEALTH OF UKRAINE

NATIONAL UNIVERSITY OF PHARMACY

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department of management, marketing and quality assurance in pharmacy

QUALIFICATION WORK

on the topic: **«Analysis of digital transformation trends in pharmaceutical marketing»**

Prepared by: higher education graduate of group Phm20*(4,10д)eng-02

specialty 226 Pharmacy, industrial pharmacy

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ANNOTATION

The qualification work is aimed on the study of digital transformation trends on the example of the pharmacy chain. The development and current state of digital marketing, as well as its key areas of application in the pharmaceutical industry, are described. An analysis of the use of websites, chatbots, and mobile applications by pharmacy chains has been conducted, and marketing funnel options for pharmacy chains have been proposed.

The work is presented on 50 pages of printed text and consists of an introduction, three sections, conclusions, a list of references and appendices. The work is illustrated with 25 figures and 1 table and contains 30 sources of scientific literature.

Key words: pharmaceutical marketing, pharmacy, pharmacy chain, digital marketing, website, chatbot, mobile application, marketing funnel

АНОТАЦІЯ

Кваліфікаційна робота присвячена аналізу тенденцій цифрової трансформації фармацевтичного маркетингу на прикладі аптечної мережі. Описано розвиток та сучасний стан цифрового маркетингу, ключові напрями його використання у фармацевтичній галузі. Проведено аналіз використання вебсайту, чат-ботів і мобільних додатків аптечної мережі, запропоновано варіанти маркетингової воронки для аптечної мережі.

Робота викладена на 50 сторінках друкованого тексту і складається зі вступу, трьох розділів, висновків, списку використаних джерел, додатків. Робота ілюстрована 25 рисунками і 1 таблицею, містить 30 джерел літератури.

Ключові слова: фармацевтичний маркетинг, аптека, аптечна мережа, цифровий маркетинг, веб-сайт, чат бот, мобільний додаток, маркетингова воронка.

CONTENT

INTRODUCTION

The pharmaceutical industry has been undergoing a significant transformation driven by advancements in digital technology [15]. In recent years, digital transformation has reshaped traditional marketing strategies, leading to more personalized and efficient approaches to engaging with healthcare professionals and patients. These changes have been fueled by the increasing adoption of digital tools, including artificial intelligence, big data analytics, and customer relationship management platforms. As a result, pharmaceutical companies are now able to streamline their operations, improve customer targeting, and enhance patient outcomes through data-driven insights [26, 29].

Digital marketing communications are integral to the success of pharmacy chains, enabling them to connect with a wider audience and foster stronger relationships with customers [12, 14]. Utilizing platforms like social media, email, and dedicated websites, pharmacies can deliver tailored content, including promotional offers, health-related advice, and updates on products or services. These efforts not only enhance brand visibility in a competitive landscape but also strengthen customer trust and loyalty through consistent and value-driven engagement [24].

The purpose of the qualification work is to study digital transformation trends in pharmaceutical marketing of the example of the pharmacy chain.

To achieve this goal, the following tasks are defined:

• to study and generalize the data of scientific literature regarding the evolution, current state and tools of digital marketing;

• to review key directions of digital marketing in the pharmaceutical industry;

• to analyze the structure and functionality of the pharmacy chain's website;

• to analyze the effectiveness of the pharmacy chain website usage;

• to analyze the use of chatbots and mobile applications of the pharmacy chain;

• to create a digital marketing funnel for a pharmacy chain.

The object of the research is data of scientific and specialized professional

literature, reports of international consulting and research marketing companies, a website, a chatbot and mobile application, electronic mailings of the pharmacy chain, data of conferences and seminars in digital marketing, statistics.

The subject of the study is digital marketing communications of the "Podorozhnyk" pharmacy chain, which is one of the largest pharmacy chains in Ukraine.

Research methods. The qualification work uses methods of desk marketing research (descriptive method, content analysis of the website, chatbot and mobile application, comparison and generalization). Quantitative indicators for evaluating a website were obtained with the SimilarWeb analyzer website.

The practical significance of the results. The findings of this qualification work provide valuable insights for marketers and digital marketing specialists in pharmacy chains, aiding them in refining and optimizing their digital marketing strategies.

Approbation of research results and publication. The results of the qualification work were presented at the III scientific and practical Internet-conference with international participation «Навчання протягом життя (Life Long Learning)»: наука, освіта, практика» (2024, October 23-24) [30].

Structure and volume of qualification work. The work is presented on 50 pages of printed text and consists of an introduction, three sections, conclusions, references, and appendices.

PART 1

EVOLUTION OF DIGITAL MARKETING AND CURRENT TRENDS

1.1 Transformation of digital marketing over the past few decades

Digital marketing refers to the use of digital channels, platforms, and technologies to promote products, services, or brands to consumers. It encompasses a wide array of online strategies aimed at reaching and engaging target audiences. Unlike traditional marketing methods, digital marketing leverages the internet and electronic devices to connect with users effectively and efficiently [9, 11].

Digital marketing has undergone significant transformations over the past few decades, driven by technological advancements, shifts in consumer behavior, and the proliferation of new platforms. This paper outlines its evolutionary trajectory in distinct phases, highlighting the key technological and methodological developments that have shaped the discipline [28].

1. Initial Phase: Emergence of Online Marketing (1990s).

1.1   Development of Internet Infrastructure. The commercialization of the World Wide Web in the early 1990s enabled businesses to establish an online presence. Initial marketing efforts focused on static banner advertisements, which marked the inception of internet-based promotional activities.

1.2   Email Marketing as a Communication Tool. The widespread adoption of email facilitated direct communication between businesses and consumers, establishing email as an early and effective digital marketing channel.

1.3   Introduction of Search Engines. The proliferation of search engines such as Yahoo and AltaVista introduced rudimentary search engine optimization (SEO) practices, as organizations aimed to improve their online discoverability.

2. Expansion Phase: Search and Website Optimization (2000s).

2.1   Search engine innovation. The launch of Google (1998) and subsequent advancements in search algorithms redefined digital marketing strategies. SEO became more sophisticated, focusing on keyword optimization, link-building, and content relevance.

2.2   Rise of Pay-Per-Click (PPC) Advertising. The introduction of Google AdWords in 2000 enabled businesses to execute cost-effective advertising campaigns based on targeted keywords, incentivizing click-based payments.

2.3   Advances in Web Analytics. Analytical tools like Google Analytics, introduced in 2005, offered empirical data on user behavior, session durations, and conversion metrics. This data-driven approach enhanced decision-making and ROI analysis.

2.4   Content Marketing Emergence. Blogging platforms and long-form content gained prominence, emphasizing the importance of high-quality, informative materials to attract and retain consumers.

3. Social Media Integration and Mobile Transformation (2005–2015)

3.1   Proliferation of Social Media Platforms. Platforms such as Facebook (2004), YouTube (2005), and Twitter (2006) revolutionized consumer engagement. Social media marketing became integral, leveraging user-generated content and community interaction.

3.2   Introduction of Social Media Advertising. Platforms integrated advertising functionalities, enabling micro-targeting based on user demographics, psychographics, and behavioral data.

3.3   Mobile-First Strategies. The rapid adoption of smartphones necessitated mobile-responsive websites and applications, driving innovation in mobile-optimized advertising and geolocation-based marketing.

3.4   Influencer Marketing Paradigm. The rise of social media influencers, who possess significant reach and credibility, shifted marketing strategies towards partnerships and endorsements.

4. Data-Driven Marketing and Automation (2015–2020)

4.1   Integration of Big Data and Artificial Intelligence. The utilization of large-scale data sets enabled hyper-personalized marketing efforts, leveraging predictive analytics to anticipate consumer needs and preferences.

4.2   Marketing Automation Platforms. Tools such as HubSpot and Salesforce facilitated efficient campaign management, lead scoring, and customer relationship management through automated workflows.

4.3   Programmatic Advertising Evolution. The deployment of algorithms in programmatic ad buying streamlined the targeting and placement of advertisements, optimizing campaign efficiency.

4.4   Voice Search Optimization. The emergence of voice-activated devices like Amazon Alexa and Google Assistant necessitated new approaches to SEO, focusing on conversational queries.

5. Contemporary Era of Omnichannel Strategies and Ethical Practices (2020–Present).

5.1   Omnichannel Marketing Paradigm. As consumer expectations evolved, businesses adopted integrated marketing strategies that ensured consistency across digital and physical touchpoints.

5.2   Video Content Dominance. Short-form video content, particularly on platforms such as TikTok and Instagram Reels, demonstrated superior engagement metrics, prompting brands to prioritize this format.

5.3   Privacy Regulation Compliance. Data protection frameworks such as GDPR and CCPA have reshaped marketing practices, emphasizing transparency and consumer consent in data usage.

5.4   AI-Driven Engagement. Advanced AI systems, including chatbots and personalized recommendation engines, enhanced user experiences and improved operational efficiency.

5.5   Emerging Technologies. Augmented reality (AR) and virtual reality (VR) applications have introduced immersive marketing techniques, particularly in e-commerce and gaming sectors.

5.6   Sustainability as a Marketing Imperative. Environmental and ethical considerations have become central to brand messaging, aligning with increasing consumer concern for sustainability [28].

The evolution of digital marketing exemplifies the intersection of technological innovation and consumer-centric methodologies [3, 4]. As new technologies emerge, the discipline continues to adapt, necessitating ongoing research and strategic agility to meet dynamic market demands.

Advantages of digital marketing include:

- ability to connect with audiences across the globe;
- precise targeting based on demographics, interests, and online behaviors;
- cost efficiency (more affordable than traditional advertising);
- detailed metrics on campaign performance allow for continuous improvement;
- flexibility (adaptation to various formats, including text, video, and interactive media) [10].

Key components of digital marketing include:

1. SEO — enhancing website visibility on search engines like Google by optimizing content for relevant keywords.

2. Content marketing — creating and distributing valuable, relevant content to attract and retain audiences (e.g., blogs, videos, and infographics).

3. Social media marketing (SMM) — engaging users on platforms like Facebook, Instagram, Twitter, and LinkedIn to build brand awareness and foster connections.

4. Email marketing — sending personalized emails to nurture relationships with prospects and customers [13].

5. Pay-per-click (PPC) advertising — paying for targeted advertisements on search engines and social media platforms to drive traffic and conversions.

6. Affiliate marketing — partnering with individuals or companies to promote products, often with a commission-based reward structure.

7. Mobile marketing — reaching audiences through smartphones via applications, SMS, and mobile-optimized websites.

8. Analytics and Performance Measurement — using tools like Google Analytics to track the effectiveness of campaigns and optimize strategies.

Hence, digital marketing leverages digital platforms and technologies to effectively promote products and services, offering significant advantages such as global reach, precise targeting, and cost efficiency. Over time, it has evolved through distinct phases — from the emergence of online marketing and SEO to data-driven and AI-enhanced strategies, with recent trends emphasizing omnichannel approaches, privacy compliance, and the integration of immersive technologies like AR and VR.

1.2 Current state in the global adoption of digital technologies and digital advertising

We analyzed "The Digital 2024" report that highlights significant trends in the global adoption of the Internet, mobile marketing, and social media [18, 30].

The global number of Internet users reached approximately 5.55 billion at the start of 2024, representing over 69% of the world's population. Internet adoption has grown by about 2.8% year-on-year. However, approximately 2.66 billion individuals remain offline, with the majority residing in regions like South Asia and Africa [18].

Mobile devices dominate digital interaction, with 5.68 billion unique mobile phone users globally (70% of the population). Mobile Internet usage now accounts for over 60% of global web traffic. Median mobile Internet speeds have increased significantly, reaching 55.8 Mbps globally, with some countries exceeding 100 Mbps.

The number of active social media users surpassed 5 billion, accounting for 63% of the global population. Social media platforms continue to see robust engagement, with the typical user spending around 2 hours and 23 minutes daily on these platforms. This represents a total increase of 266 million users compared to the previous year [18].

According to the "Digital 2024 Report", the average internet user spends approximately 6 hours and 35 minutes online daily. However, time spent online varies significantly by country. For instance, in South Africa, users spend the most time online, averaging 9 hours and 24 minutes daily. Brazilians rank second, with

an average of 9 hours and 13 minutes. Filipinos spend about 8 hours and 13 minutes per day online.

This time includes various activities such as social media usage, entertainment, communication, and online work. The growing penetration of mobile devices contributes to these high averages, as mobile internet now represents over 60% of global web traffic [18].

The global landscape of online activities demonstrates the dominant role of social media and messaging platforms in daily digital interactions. Over 97% of working-age internet users engage with social networks or messaging applications monthly (fig. 1.1). Among these, messaging services are slightly more prevalent, with 94.7% of internet users aged 16 to 64 reporting usage in the last 30 days. Social networks follow closely, used by 94.3% of the same demographic within the same timeframe.
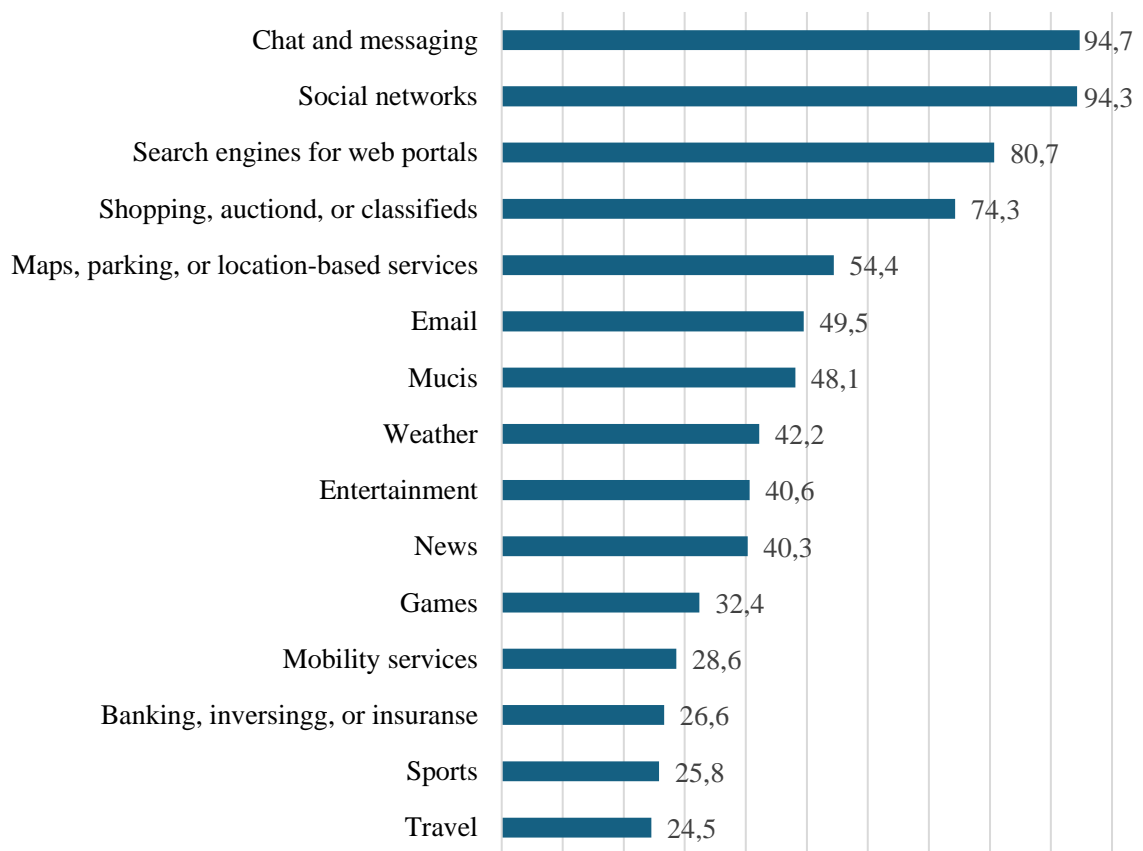

Fig. 1.1 Top types of websites visited, and application used

Search engines rank third in online activities, utilized by **80.7%** of internet users each month. E-commerce activities are also significant, with just under **75%** of users engaging in online shopping during the same period. Finally, location-based services, such as mapping and parking apps, complete the top five, with over half of respondents identifying as regular users of these applications [18].

The motivations behind internet use highlight a range of practical and social drivers (fig. 1.2).
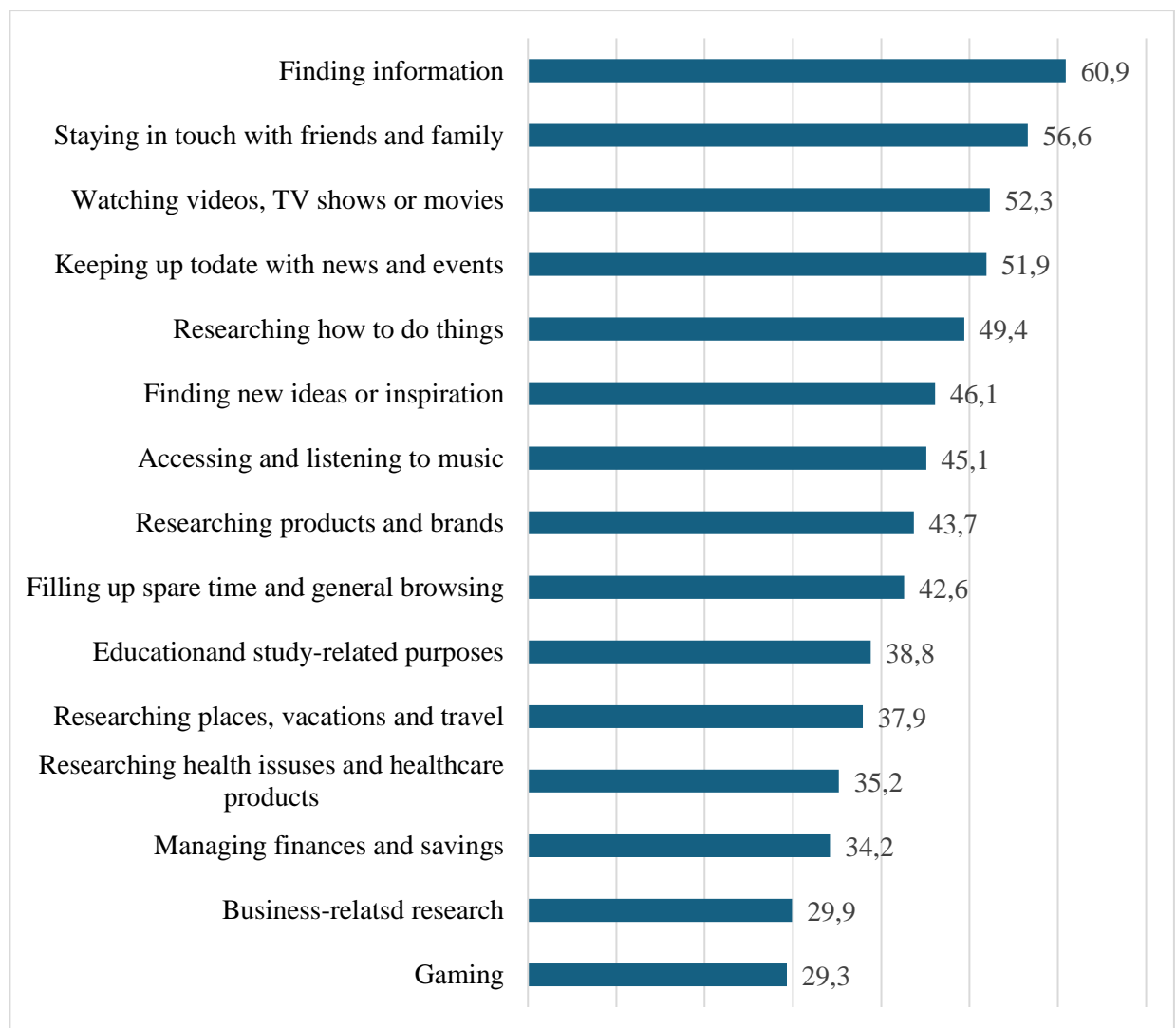

Fig. 1.2 The main reasons for using the Internet worldwide

According to recent global surveys, the most common reason cited by 61% of working-age internet users is "finding information", emphasizing the internet's role as a tool for knowledge acquisition. This is followed by "staying in touch with

friends and family", a priority for 56.6% of respondents, underscoring the importance of communication platforms in maintaining personal connections [18].

Interestingly, these motivations present a paradox. While social media platforms dominate in usage frequency, the primary motivation for going online appears centered on information retrieval rather than social interaction. This suggests a discrepancy between user intent and the platforms they engage with most, reflecting diverse uses of the same digital environments.

Facebook, YouTube and Instagram are the most popular social networks worldwide in 2024 (fig. 1.3).
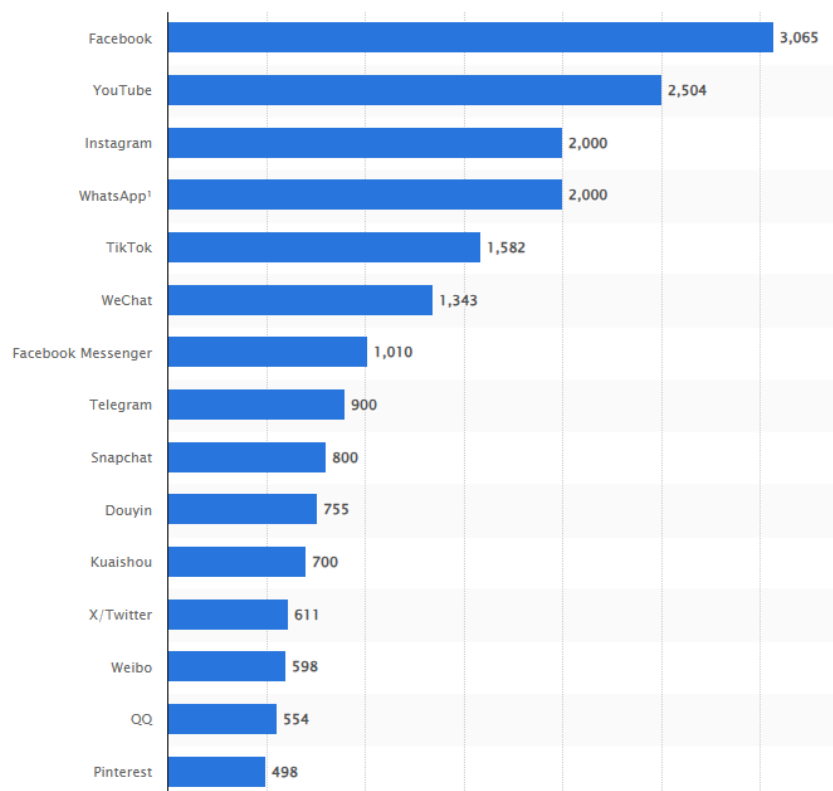

Fig. 1.3 Most popular social networks worldwide as of April 2024, by number of monthly active users (in millions)

The motivations for social media use reveal a diverse set of priorities among users (fig. 1.4). According to recent surveys, the most common reason is "keeping in touch with friends and family", with almost 50% of working-age social media users identifying this as a primary purpose. However, the fact that approximately half of users do not prioritize this reason suggests broader uses of social platforms.
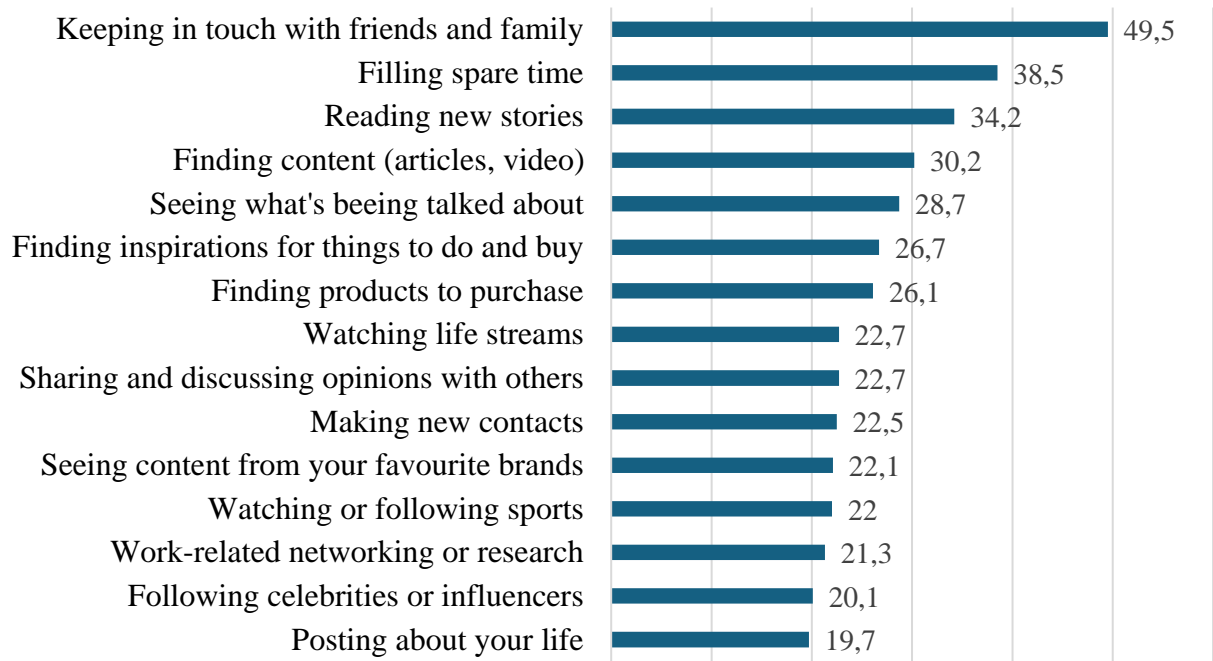
Reason	Value
Keeping in touch with friends and family	49,5
Filling spare time	38,5
Reading new stories	34,2
Finding content (articles, video)	30,2
Seeing what's beeing talked about	28,7
Finding inspirations for things to do and buy	26,7
Finding products to purchase	26,1
Watching life streams	22,7
Sharing and discussing opinions with others	22,7
Making new contacts	22,5
Seeing content from your favourite brands	22,1
Watching or following sports	22
Work-related networking or research	21,3
Following celebrities or influencers	20,1
Posting about your life	19,7

Fig. 1.4 The main reasons for using the social media worldwide

Notably, 38.5% of respondents report using social media to "fill spare time," reflecting the growing role of these platforms as sources of entertainment rather than purely for communication. This trend is exemplified by the popularity of entertainment-focused platforms like TikTok, which prioritize short-form, engaging content. These insights underline the evolution of social media from tools for connection to multifaceted platforms offering entertainment, news, and community engagement [18].

The analysis reveals that TikTok recorded the highest average time spent per user among leading social platforms from July to September 2023 (fig. 1.5). On average, Android users globally spent approximately 34 hours per month on TikTok, equating to more than one hour per day. In comparison, YouTube ranked second, with its Android app users averaging just over 28 hours per month, approximately 6 hours less than TikTok. These findings highlight TikTok's dominance in user engagement, driven by its short-form, highly engaging content.
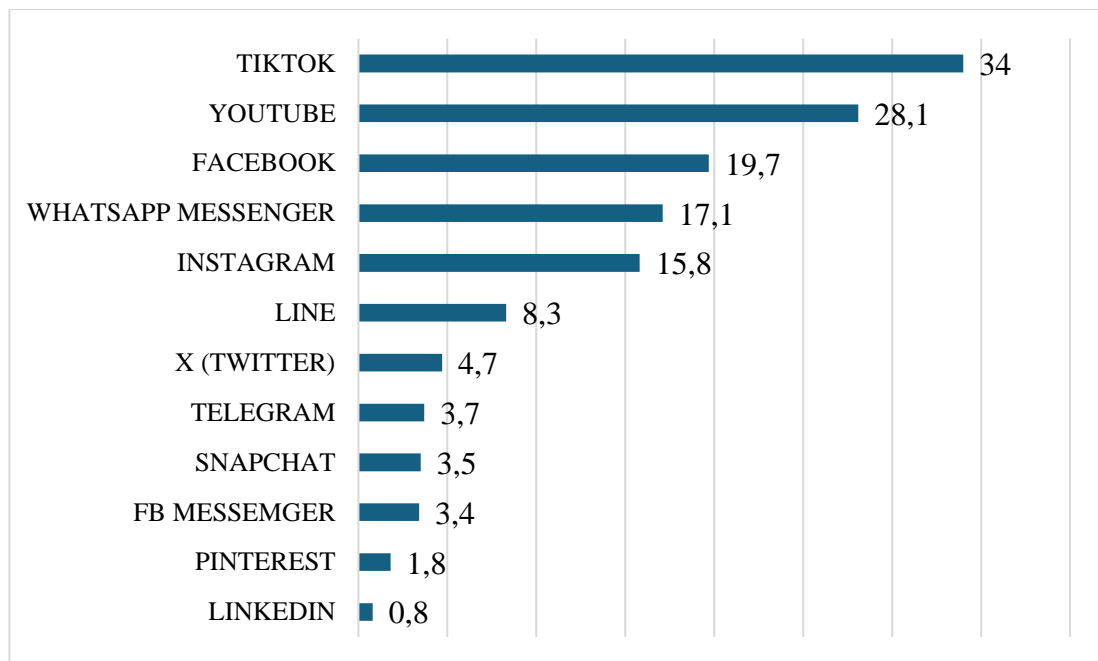
Fig. 1.5 Time spent using social media applications (in hours)

Despite TikTok's rapid growth and significant user engagement, Instagram maintains a strong lead in audience affinity (fig. 1.6).
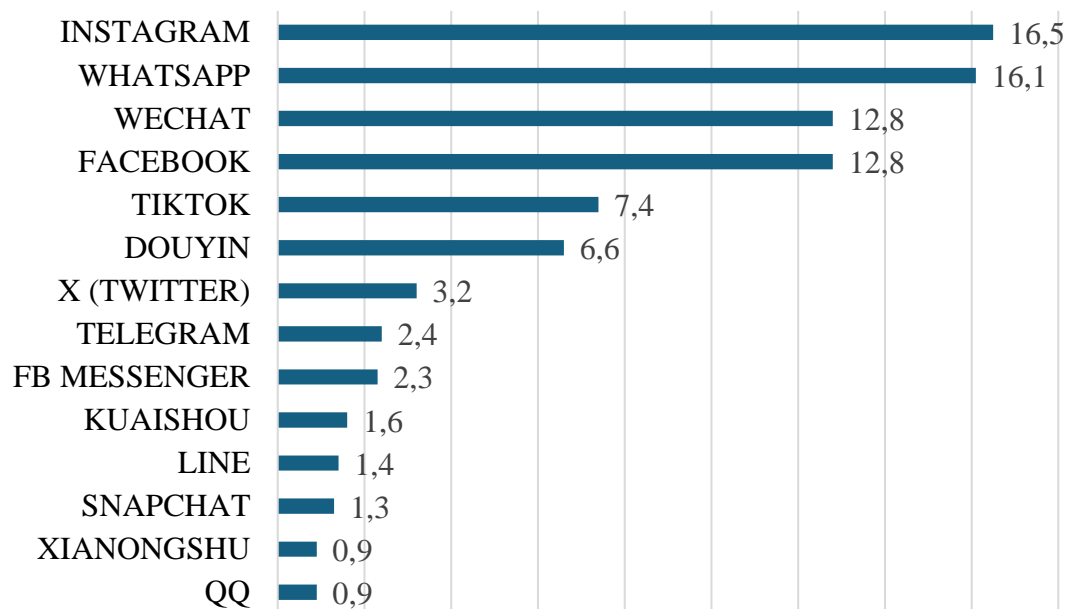

Fig. 1.6 Favorite social media platforms worldwide

According to recent data, 16.5% of internet users aged 16 to 64 identified Instagram as their preferred social media platform. This figure positions Instagram as the world's most favored social media service. In contrast, only 7.4% of

respondents chose TikTok as their favorite platform. These findings underscore Instagram's sustained appeal, likely due to its broad feature set and established presence in the social media landscape [18].

Recent data indicate that global marketers allocated a combined total of nearly USD $720 billion to digital advertising in 2023, reflecting a 10% increase compared to 2022. This significant growth highlights the expanding role of digital platforms in marketing strategies. According to Statista, digital advertising expenditure has more than doubled over the past five years, showing an increase of approximately 117% compared to 2018. The analysis further reveals that digital advertising accounted for 70% of total global ad spending in 2023, up from 67.9% in 2022 (fig. 1.7).
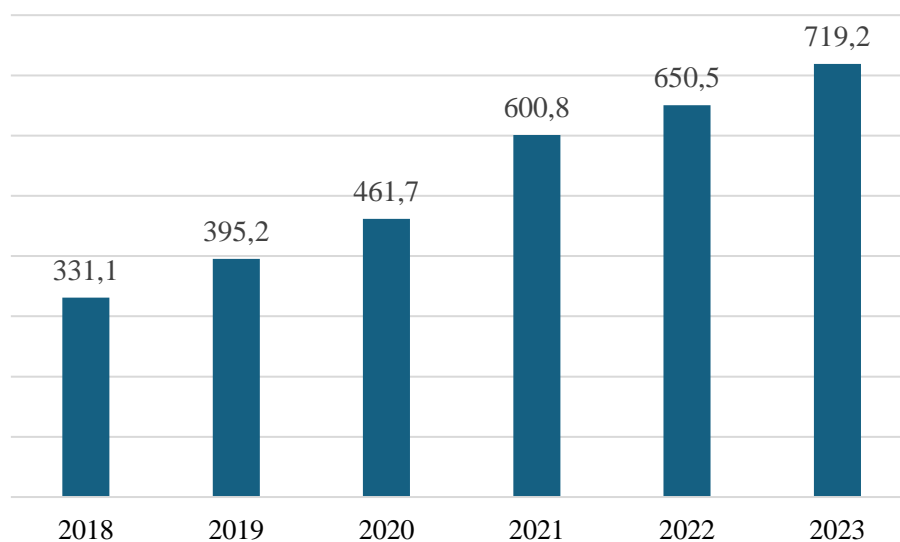
Fig. 1.7 Global digital advertising spend (in billions U.S. dollars)

Statista reports that the proportion of global advertising spend allocated to digital channels continues to increase. In 2023, digital advertising accounted for 70% of total ad expenditure, compared to 67.9% in 2022, illustrating its growing dominance in the advertising landscape (fig. 1.8).

These insights demonstrate the increasing integration of digital technologies into daily life, with mobile and social platforms playing a pivotal role in global connectivity and communication [18].
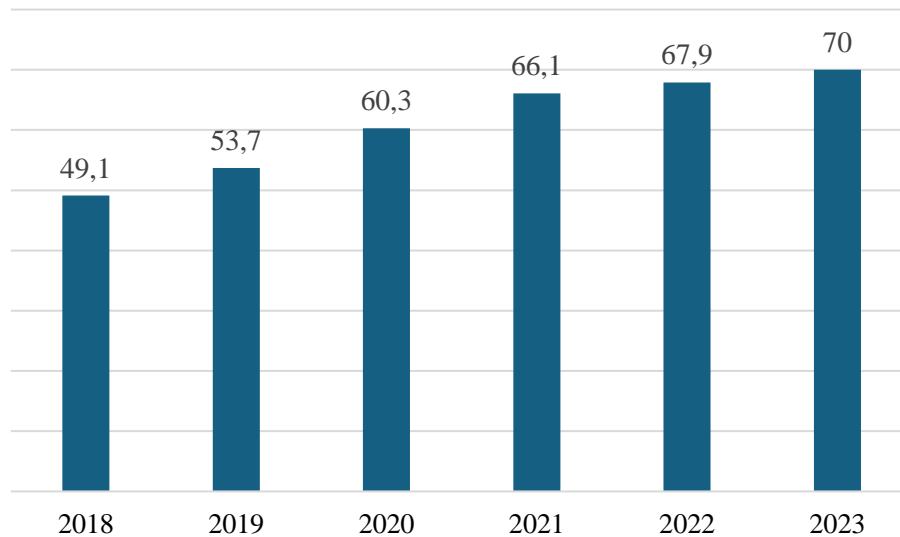
Fig. 1.8 Digital's share of global advertising spend, %

Hence, the "Digital 2024" report underscores the significant integration of digital technologies into daily life, showcasing the increasing adoption of the internet, mobile devices, and social media platforms worldwide. With over 5.55 billion internet users and 5 billion active social media users, digital platforms dominate global communication and entertainment. Trends reveal that mobile internet now accounts for over 60% of global web traffic, and social media platforms such as TikTok and Instagram continue to redefine user engagement and preferences. Additionally, the rapid growth in digital advertising spending highlights its pivotal role in contemporary marketing strategies, reflecting the digital sector's profound influence on global connectivity and economic dynamics.

1.3 Key directions of digital marketing in the pharmaceutical industry

The pharmaceutical sector is leveraging digital marketing to adapt to evolving consumer behavior, regulatory environments, and technological advancements [7, 10].

Key aspects of pharmaceutical marketing include:

- promotion of products and services — ensuring that campaigns align with local and international regulatory frameworks while emphasizing a product's benefits;

- stakeholder communication — building effective communication channels with HCPs, researchers, and patients to establish trust and enhance brand credibility;

- educational roles — informing medical professionals about new medications, usage guidelines, and risk-benefit profiles;

- public health advocacy — raising awareness about disease prevention, treatment options, and therapeutic advancements;

- economic and research support — driving innovation through research investments and stabilizing economic contributions in the pharmaceutical industry [16, 19].

Key strategies shaping digital marketing in this field include:

1. Content Marketing. Pharmaceutical companies are increasingly creating educational content, such as blog posts, videos, and infographics, to provide valuable insights about diseases, treatments, and wellness. This positions them as trusted sources of information, fostering patient trust and engagement [30].

2. SMM. Platforms like Facebook, LinkedIn, and Twitter are used to interact with patients and healthcare professionals in real-time. Through social media, companies disseminate updates, host Q&A sessions, and collect feedback, enhancing brand awareness and loyalty [5, 6, 8, 21].

3. SEO and paid advertising. Optimizing content for search engines ensures visibility when patients and professionals search for medical information. Additionally, pay-per-click campaigns and programmatic advertising target specific demographics, improving campaign efficiency and ROI [1, 2, 20].

4. Telemedicine and virtual events. Virtual consultations, webinars, and online conferences have become integral, enabling pharmaceutical companies to reach healthcare providers (HCPs) and patients without geographical constraints.

These platforms also facilitate the sharing of clinical updates and treatment insights [17, 27].

5.	Data-driven and ai-enhanced strategies. Advanced analytics and AI tools help companies personalize marketing campaigns and predict consumer behavior. AI-powered chatbots and machine learning algorithms streamline engagement and optimize outreach efforts [22].

6.	Patient-centric portals and applications. Applications and online platforms provide patients with tailored health information, reminders for medication adherence, and access to health monitoring tools. These innovations improve patient engagement and health outcomes [23].

7.	Regulatory challenges and compliance. Pharmaceutical companies must navigate stringent regulations when implementing digital strategies. Ensuring data privacy, accurate content, and adherence to local laws is critical for successful campaigns.

Summary

1.	Digital marketing has evolved significantly over decades, transitioning from basic banner advertisements and email campaigns in the 1990s to sophisticated, data-driven, and AI-enhanced strategies in recent years. This transformation has been driven by technological innovation, changing consumer behavior, and the rise of new platforms.

2.	The proliferation of social media and the dominance of mobile devices have redefined consumer engagement, enabling targeted advertising, influencer marketing, and geolocation-based strategies. Platforms like TikTok, Instagram, and YouTube have become central to digital marketing efforts.

3.	The adoption of big data and AI tools has allowed marketers to personalize campaigns and optimize performance. Tools such as predictive analytics, programmatic advertising, and marketing automation platforms have enhanced efficiency and customer experience.

4. Modern strategies emphasize consistency across digital and physical touchpoints, reflecting the omnichannel marketing paradigm. Simultaneously, increased regulatory oversight has placed ethical practices and data privacy at the forefront.

5. In the pharmaceutical industry, digital marketing strategies focus on educational content, stakeholder communication, and patient-centric tools. Trends like virtual events, telemedicine, and AI-driven personalization have further strengthened engagement and compliance in this heavily regulated sector.

PART 2

ANALYSIS OF THE PHARMACY CHAIN'S WEBSITE AS A CENTRAL DIGITAL MARKETING CHANNEL

2.1 Analysis of the structure and functionality of the pharmacy chain's website

Currently, electronic trade in medicines and other pharmacy products (e-commerce) is an important segment of the Ukrainian pharmaceutical market. According to Proxima Research International, e-commerce accounted for 16 % of the total retail consumption of medicines in 2024, which is a 5 % increase compared to 2022 (9 %). In some pharmacy chains, e-commerce of medicines reaches up to 30 % of total turnover [25].

Ordering medicines online is not only convenient for consumers but also cost-effective, as Ukraine has established services that enable consumers to compare prices across various pharmacies and choose the best offer.

In Ukraine, several online platforms (aggregator websites) make it easier for consumers to find the best prices and access a wide range of pharmacy products. Aggregator websites collect and consolidate information from various sources, allowing users to easily compare and choose the best offers. In the context of pharmaceutical services, aggregator websites help users compare prices for medications and other products across different pharmacies, check product availability, and find the best options for ordering or delivery. Examples of such websites in Ukraine include:

1.   Tabletki.ua — a platform that allows users to search for medicines, compare prices in different pharmacies, and find the best options nearby.

2.   Liki24.com — a platform that offers a convenient service for searching, comparing, and ordering medicines with delivery, often providing discounts from partner pharmacies.

3.   Apteka24.ua — a website that helps consumers compare pharmacy prices and order online for pickup or delivery.

4.   Medbrowse.com.ua — a website where users can check prices and availability of medications at various pharmacies across Ukraine.

In addition, consumers can use the pharmacy chain's website directly.

We investigated the structure and functionality of the website of "Podorozhnyk" pharmacy chain (podorozhnyk.ua), one of the largest pharmacy chains in Ukraine. The company provides health care to more than 18 million customers. During 25 years of operation, "Podorozhnyk" has made its way to the largest chain of pharmacies in Ukraine. Today, there are more than 2,000 pharmacies in large cities and small towns and villages of the country.

"Podorozhnyk" has a wide network of service points across the country and is known for its extensive range of pharmaceuticals, medical supplies, and cosmetics, as well as its high standard of pharmaceutical service. The pharmacy chain is actively expanding and implementing digital technologies and marketing strategies to meet customer needs and strengthen its market position.

The main page of the website of the "Podorozhnyk" pharmacy chain has the following sections corresponding to the main product categories of the pharmacy assortment:

- promotional offers;

- medicines;

- vitamins and supplements;

- means for sexual health;

- hygiene products;

- beauty and care;

- children's goods;

- medical goods (fig. 2.1).

An example of a promotional offer on the podorozhnyk.ua website is given in fig. 2.2.

The website of the "Podorozhnyk" pharmacy chain functions as an online pharmacy, serving as an information platform for finding a wide range of pharmaceuticals and medical products throughout cities in Ukraine.

The website's medication search and ordering capabilities include:

- searching by categories and subcategories to enhance user navigation on the site;

- finding alternative products (analogs);

- notifying users about product availability in other pharmacies;

- informing users of availability at a lower price in other pharmacies;

- sorting products by price, form (e.g., tablet, syrup), dosage, release form, administration method, and prescription requirements.
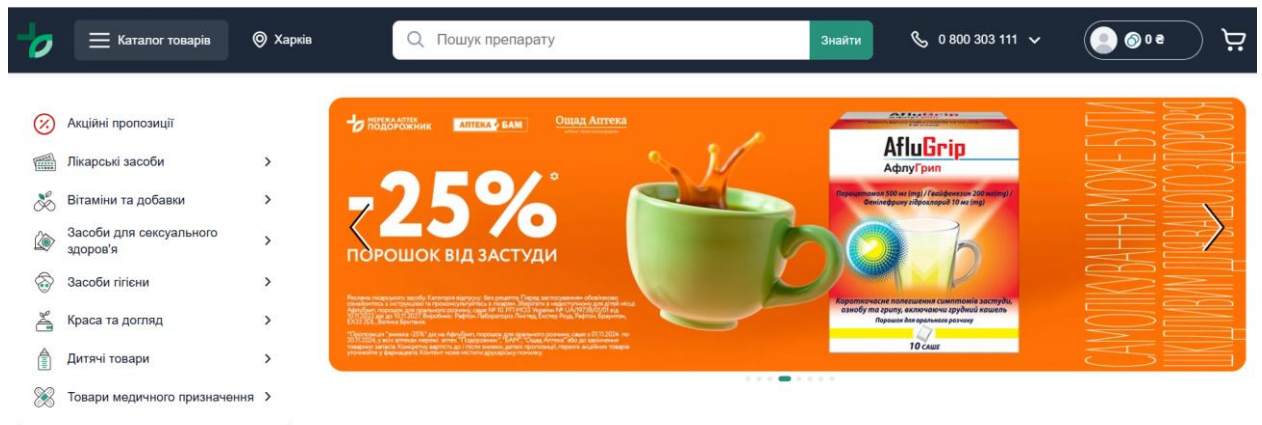

Fig. 2.1 Appearance of the main page of the podorozhnyk.ua website
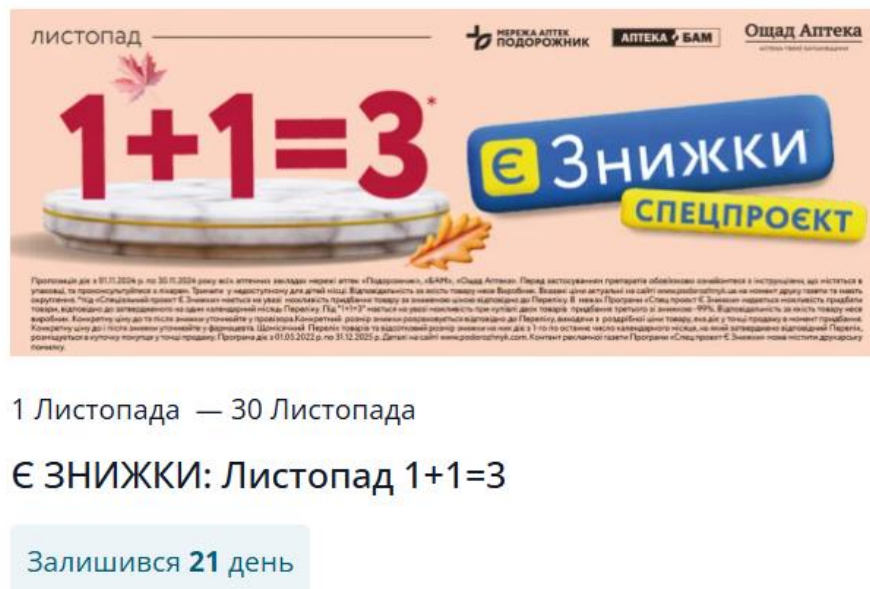
Fig. 2.2 An example of promotional offer on the podorozhnyk.ua website

When searching for a product, users can apply filters by price range, product origin (imported or domestic), administration method, prescription requirements,

primary packaging type, quantity per package, sterility, storage temperature, active ingredient, and more.

Available options for receiving ordered products include:

- pickup at a convenient pharmacy location;
- courier delivery;
- postal delivery.

The website employs intelligent product search, meaning that when searching for a medication or medical product with a typo in the name, the search engine will suggest autocorrections or display the closest match.

Upon registering on the site, users start accumulating bonus points with each purchase, which they can use to pay for future orders.

Users can also subscribe to email newsletters with information about discounts and special offers.

The website includes links to a free chat with an experienced pharmacist, as well as links to Viber and Telegram bots, and provides download links for the mobile app in the App Store and Google Play.

We investigated a step-by-step process of purchasing an item on the Podorozhnyk website (fig. 2.3):

1. Go to the Website. Open your web browser and navigate to podorozhnyk.ua.

2. Search for the Product. Use the search bar at the top of the homepage to type the name of the product or browse by categories, such as "Medicines," "Vitamins and Supplements," or "Hygiene Products." Filters can help refine your search by price, dosage, administration method, or origin (domestic or imported).

3. View Product Details. Once you find the desired product, click on it to view detailed information. Here, you'll find the product's description, ingredients, instructions for use, and any available pricing and availability details for nearby pharmacies.

Fig. 2.3 Stages of purchasing an item on the podorozhnyk.ua website

4.   Select Quantity and Add to Cart. Choose the required quantity and click the "Add to Cart" button. The cart icon at the top of the page will display the number of items added.

5.   Review Your Cart. Click on the cart icon to review your selected items. Verify the quantity, pricing, and total cost. You may also be able to apply a promo code if you have one.

6.   Proceed to Checkout. If everything looks correct, click "Proceed to Checkout." You may be prompted to log in or create an account if you're not already logged in.

7.   Choose Delivery or Pickup Option. Select your preferred option for receiving the order:

o   Pickup: Choose a pharmacy location near you.
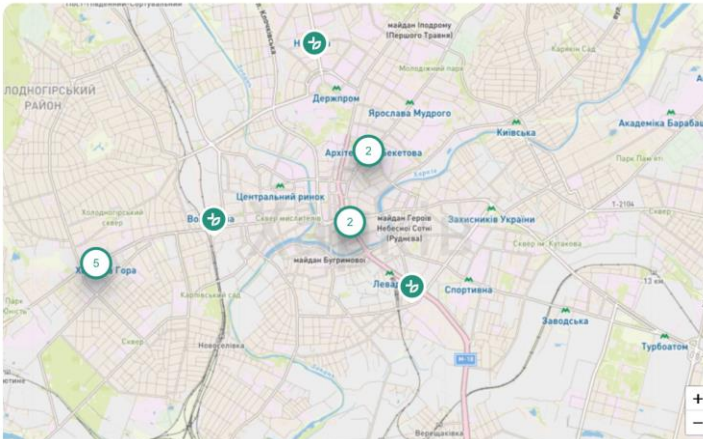
o   Courier Delivery: Provide an address for courier service.

o   Postal Delivery: Choose a postal option and provide the necessary delivery details.

8.   Enter Personal and Payment Details. Fill in your personal information, such as name, phone number, and delivery address if applicable. Choose your payment method (online payment or cash on delivery if available) and complete the payment process.

9.   Confirm the Order. Review the order summary to ensure all details are accurate, then confirm the order. You should receive a confirmation email or SMS with the order details and estimated delivery time.

10.   Track and Receive the Order. If tracking is available, you'll receive updates on the status of your order. For pickups, you'll be notified when the item is ready at the selected pharmacy.

In conclusion, e-commerce is becoming an essential segment of the Ukrainian pharmaceutical market, with significant growth in recent years. The "Podorozhnyk" pharmacy chain is a prime example, offering an extensive online platform for convenient access to medications and health products, with features that enhance user experience and choice. Through aggregator websites and direct access to

pharmacy sites, consumers can now easily compare prices, find alternatives, and select the best options for delivery or pickup, making healthcare more accessible and cost-effective.

2.2 Analysis of the effectiveness of the pharmacy chain website usage

Using the SimilarWeb analytics platform (https://www.similarweb.com), we obtained quantitative indicators that characterize the effectiveness of the pharmacy chain's website usage in September 2024.

It was found that, based on the number of visits, the website podorozhnyk.ua holds the 54,561st position in the global ranking, the 651st position in the country ranking, the 123rd position in the global pharmaceutical industry ranking, and the 9th position in the pharmaceutical industry ranking within Ukraine.

In September 2024, the total number of visits to the podorozhnyk.ua website was 854,078. During the same period, the website of the pharmacy chain "Apteka 911" (apteka911.ua) recorded the highest number of visits among Ukrainian pharmacy chains, with 3.960 million visits. For comparison, the website of the pharmacy chain "ANC" (anc.ua) received 1.969 million visits, while the website of the pharmacy chain "Apteka Dobroho Dnya" (add.ua) received 1.500 million visits (fig. 2.4).

In addition, medical online services (medical information platforms) operate in Ukraine, among them tabletki.ua, helsi.me, compendium.ua and others. Each of them has specific functions that place them into different subcategories:

1. Tabletki.ua is a medication price aggregator since it collects data from various pharmacies, allowing users to compare prices and availability of medications. It is a comprehensive online platform that allows users to search for medications across various pharmacies in Ukraine. It provides information on prices, availability, and even offers options for reserving or ordering medicines for in-store pickup.

2. Helsi.me is a digital healthcare platform focused on connecting patients with doctors and healthcare facilities in Ukraine. It allows users to book

appointments, view medical records, and receive telemedicine consultations, promoting accessible healthcare services.

1		tabletki.ua	40.30%
2		helsi.me	7.99%
3		apteka911.ua	6.89%
4		anc.ua	4.14%
5		compendium...	3.74%
6		doc.ua	3.28%
7		apteka.net.ua	2.68%
8		add.ua	2.47%
9		podorozhnyk....	2.19%
10		liki24.com	1.76%
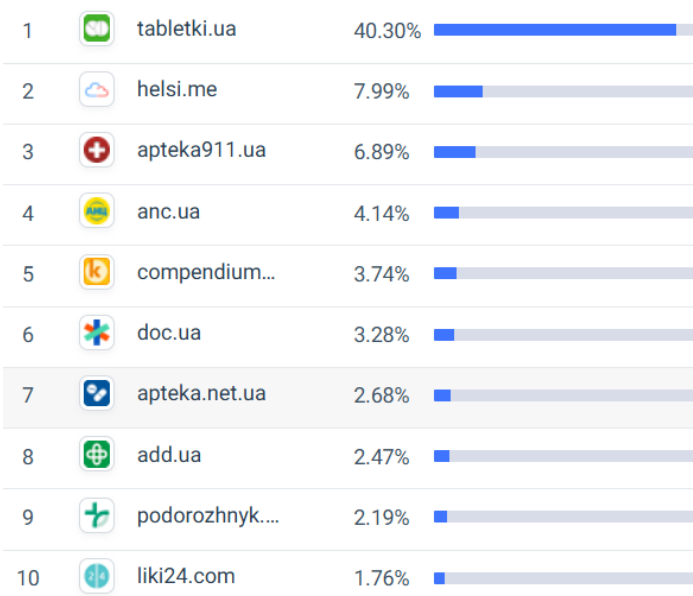
Fig. 2.4 The rank of the largest Ukrainian pharmacy online medical services by number of visits (September 2024)

3. Compendium.ua is an authoritative pharmaceutical reference guide focused on providing reliable information about medications. It offers detailed information on drug indications, dosages, contraindications, and side effects, making it a valuable resource for accurate medication information. It can be classified as an informational resource for medical professionals and patients.

It was found that 77.19 % of website visitors use a mobile device (smartphone or tablet), underscoring the importance and relevance of the website's mobile version (fig. 2.5).

Desktop   22.81%
Mobile Web   77.19%

Fig. 2.5 Device distribution among visits to the podorozhnyk.ua website

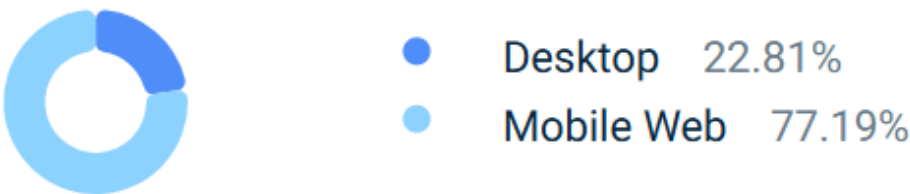The fact that 77.19 % of website visitors access the site via a mobile device (smartphone or tablet) highlights the critical importance of optimizing the website's mobile version. This high percentage suggests that users prioritize convenience and accessibility, often browsing on the go. Consequently, ensuring a fast, responsive, and user-friendly mobile interface is essential for enhancing the user experience, increasing engagement, and ultimately driving conversions. Additionally, a mobile-optimized site can improve search engine rankings, as search algorithms increasingly prioritize mobile-friendly pages.

We analyzed the following indicators to assess the effectiveness of the website usage:

- the number of visits to the website per month;
- the average time users spend on the website;
- the bounce rate;

the number of pages viewed per visit (table 2.1).

The website receives approximately 854 thousand visits per month. Large corporations or e-commerce websites with strong brand recognition, extensive marketing efforts, and a wide range of products or services may attract hundreds of thousands or even millions of monthly visits.

The average time spent on the website is 2 minutes and 48 seconds. This metric varies based on factors such as industry, content quality, website design, and user engagement. For smaller businesses or personal blogs, the average session duration might range from 1 to 3 minutes. Medium-sized businesses with engaging content and user-friendly design may experience an average of 2 to 4 minutes. Larger corporations or e-commerce sites with abundant content, interactive features, and extensive product or service offerings may see average session durations of 3 to 5 minutes or more.

The bounce rate for the podorozhnyk.ua website is 62.02%. Bounce rate is a web analytics metric that indicates the percentage of visitors who leave the website after viewing only one page, without further interaction or navigation. A high bounce rate often suggests that visitors are either not finding the information they seek or

are not engaged with the content on the landing page. Contributing factors may include poor website design, irrelevant content, slow loading times, or unclear navigation.

Table 2.1

Indicators of the effectiveness of the website usage

Name of indicator	Meaning of the indicator	Value for podorozhnyk.ua
the number of visits to the website per month, million	The monthly number of website visits can vary significantly based on factors such as industry type, website content, marketing efforts, and overall online presence.	854,078
the average time users spend on the website	Spending too little time on the website may indicate that the content does not meet user needs or that customers are dissatisfied with the prices.	2 min 48 s
the bounce rate, %	The bounce rate is a metric in web analytics that measures the percentage of visitors who leave a website after viewing only one page, without any further interaction or navigation to other pages on the site.	62.02
the number of page views per visit	The number of pages a user views in a single visit can indicate successful website design, as well as the presence of engaging and useful content that aligns with visitors' interests.	4.39

Bounce rate is a valuable metric for website owners and marketers, as it provides insights into the effectiveness of a website's landing pages and user experience. A lower bounce rate generally reflects that visitors are more engaged

and interested in exploring the website further, whereas a higher bounce rate may point to areas for improvement in content relevance, usability, or overall user experience.

The structure of incoming traffic to the podorozhnyk.ua website is shown in fig. 2.6.
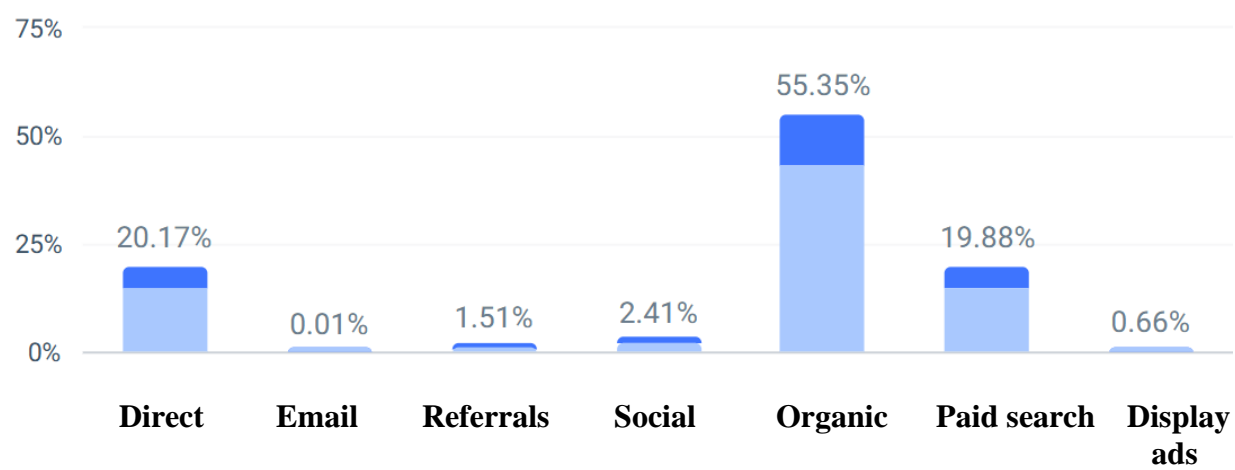
Fig. 2.6 The structure of incoming traffic to the podorozhnyk.ua website

We found that organic search accounts for 55.35% of the total traffic to podorozhnyk.ua. Organic traffic refers to visitors who arrive at a website through unpaid search engine results. These visitors find the site by entering relevant keywords into a search engine, such as Google, and clicking on the organic search results. The top organic search terms are shown in fig. 2.7.
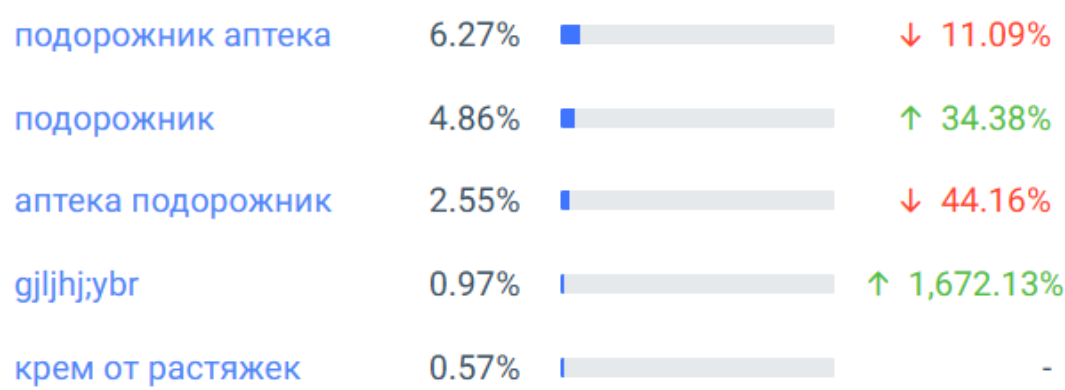

Fig. 2.7 Top organic search terms to the podorozhnyk.ua website

We found that direct traffic accounts for 20.17% of the total traffic to podorozhnyk.ua. Direct traffic refers to visitors who enter the website's URL directly into their browser or access the site through bookmarks, bypassing search engines and other referral sources.

Referral traffic makes up 1.51% of the total traffic to podorozhnyk.ua. Referral traffic comes from other websites that link to the target website. When users click on a link on another site and are directed to the target website, they are counted as referral traffic. This category can include links from social media platforms, blogs, news articles, directories, and other external sources. The top referring websites include ntp.msn.com, advego.com, crm.mediabrama.com, and revne1.tv (fig. 2.8).

Domain	Share	Change
ntp.msn.com	72.73%	↑ 35.54%
advego.com	18.18%	-
crm.mediabrama.com	4.55%	-
rivne1.tv	4.55%	-
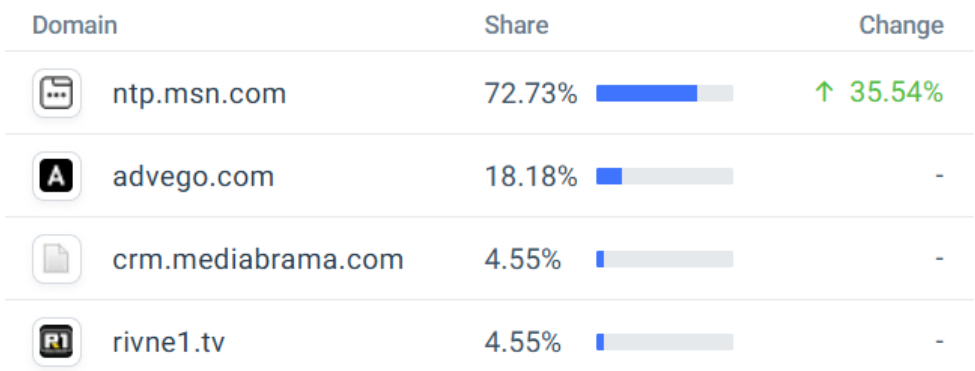
Fig. 2.8 Top referring websites to the podorozhnyk.ua

Top referring industries include programming and developer software, computers electronics and technology and TV movies and streaming (fig. 2.9).

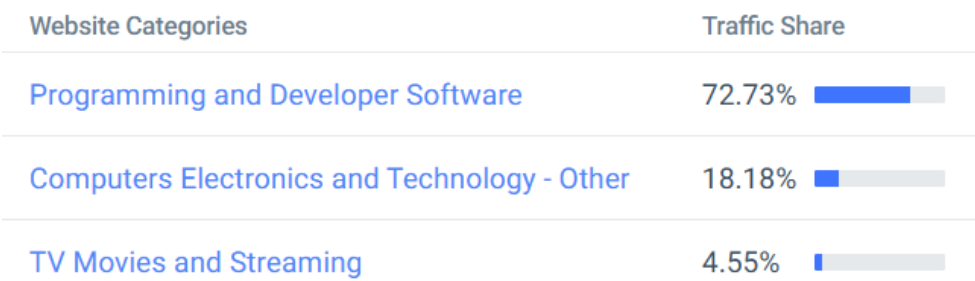| Website Categories	Traffic Share
Programming and Developer Software	72.73%
Computers Electronics and Technology - Other	18.18%
TV Movies and Streaming	4.55%

Fig. 2.9 Top referring industries to the podorozhnyk.ua website

The analysis shows that top link destinations from the pharmacy website include auth.ehealth.gov.ua, play.google.com, podorozhnyk.com, facebook.com, and tiktok.com (fig. 2.10).
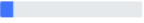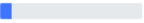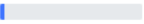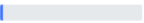
Domain	Share		Change
auth.ehealth.gov.ua	80.52%		↓ 55.10%
play.google.com	8.35%		-
podorozhnyk.com	7.02%		↓ 9.76%
facebook.com	1.78%		↓ 80.73%
tiktok.com	1.50%		-

Fig. 2.10 Top link destination from the podorozhnyk.ua website

This indicates a diverse range of user interests, from accessing electronic health records on the official eHealth platform to downloading relevant mobile apps from Google Play. Additionally, frequent redirects to social platforms like Facebook and TikTok suggest strong user engagement with the pharmacy's social media content, potentially helping to build brand presence and interact with a wider audience.

Top link destinations to the podorozhnyk.ua website are given on the fig. 2.11.
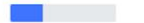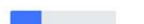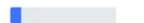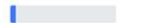
Domain	Share		Change
google.com	30.11%		↓ 24.81%
telegram.me	28.28%		↓ 80.72%
liqpay.ua	22.51%		↑ 132.10%
facebook.com	9.50%		↓ 100.00%
komarovskiy.info	4.36%		-

Fig. 2.11 Top link destinations to the podorozhnyk.ua website

Paid traffic accounts for 0.88% of the total traffic to podorozhnyk.ua. Paid traffic refers to visitors who arrive at a website through paid advertising campaigns, including pay-per-click (PPC) ads, display ads, social media ads, sponsored content, and other forms of paid promotion. The top paid search terms are shown in fig. 2.12.

аптека 911	3.35%		↓ 15.78%
911 аптека	0.95%		↓ 43.59%
fgntrf 911	0.17%		-
grid.upgrade	1.64%		↓ 100.00%
grid.upgrade	1.32%		↓ 29.27%
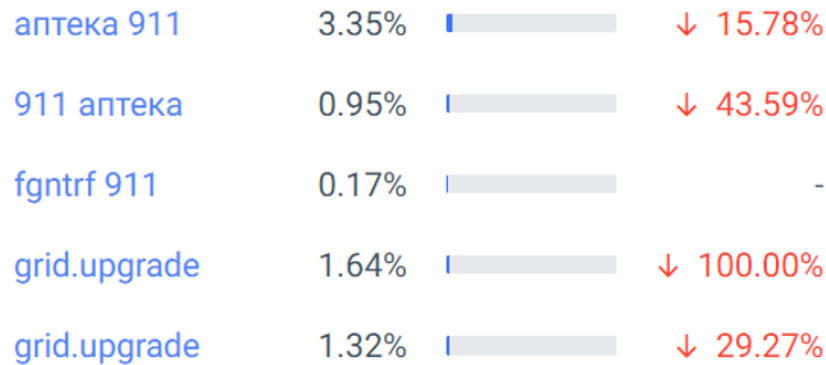
Fig. 2.12 Top paid search terms to the podorozhnyk.ua website

Social traffic accounts for 2.41% of the total traffic to podorozhnyk.ua, originating from social media platforms. When users click on links shared on social media channels, such as YouTube, Facebook, Instagram and others and land on the target website, they are counted as social traffic. The structure of social traffic is shown in fig. 2.13.
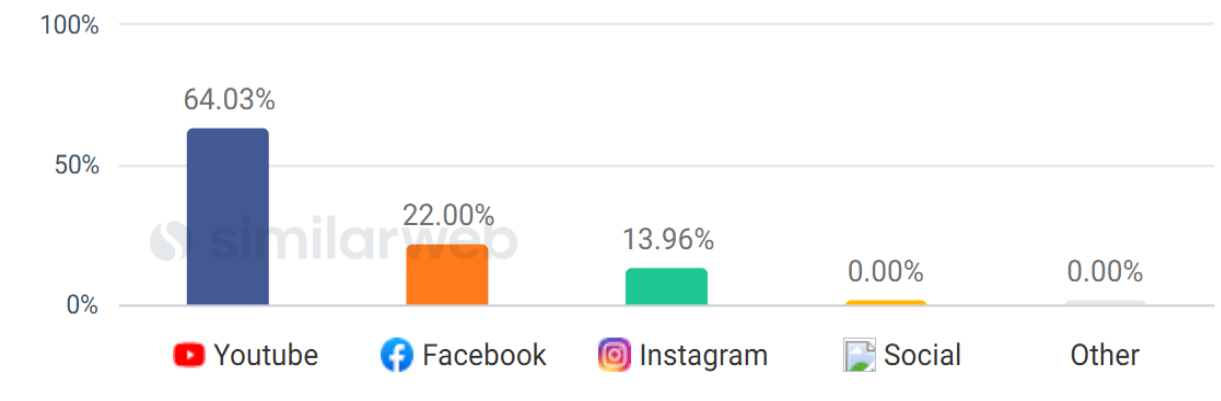
Fig. 2.13 The structure of the social traffic to the podorozhnyk.ua website

Based on the provided data, it can be concluded that YouTube is the leading social platform, generating a significant portion of traffic to the pharmacy chain's website — as much as 64.03%. This suggests a high popularity of video content

among users interested in medical and pharmacy products. This may be since video format allows for a detailed explanation of products, their uses, and benefits, as well as more effectively holding audience attention. Additionally, YouTube often features educational videos, product reviews, and tutorials, which users actively view and share.

The second highest source of traffic is Facebook, generating 22.00% of total visits. As a platform more oriented toward text and graphic content, as well as interaction in groups and communities, it enables users to find information on new products, promotions, and special offers, and to discuss them. Facebook may also be particularly appealing to a middle-aged audience that tends to use this platform for information gathering and social interactions.

Instagram ranks third, accounting for 13.96% of traffic. This platform, centered around visual content such as photos and short videos, allows the pharmacy chain to showcase product lines and new arrivals, creating visual appeal for a younger, more active audience. Although Instagram generates fewer clicks compared to YouTube and Facebook, it effectively supports brand image and engages users through visually appealing posts and stories.

The significant margin between YouTube and the other social platforms may indicate that video content on YouTube more effectively captures and engages users, as well as a higher level of user engagement with the pharmacy chain on this specific platform.

Email traffic takes 0,01% among all pharmacy website visitors. It refers to visitors who click on links in emails sent by the website or by other entities such as newsletters, promotional emails, or email marketing campaigns.

Underestimating email traffic, even if it accounts for only 0.01% of the pharmacy website's visitors, can lead to missed opportunities for engaging valuable customers and building loyalty. Email campaigns have significant potential for personalization, allowing businesses to create tailored offers that meet individual user needs. Ignoring or underinvesting in this channel can result in missed sales opportunities and the inability to retain customers and strengthen their trust.

To maximize the effectiveness of email campaigns, it's important to:

- segment the audience — divide the contact list into segments based on interests, behavior, or purchase history to send the most relevant offers;

- personalize content — use the customer's name, individualized recommendations, and personalized discounts. Users are generally more likely to open and respond to emails that consider their personal needs;

- optimize timing and frequency — select the optimal time and frequency for sending emails to avoid overwhelming the audience but still stay connected. Emails that arrive at the right time have a higher chance of being opened and viewed;

- provide value in emails — ensure the content is useful and informative, such as health tips, reviews of new products, or reminders of promotions and discounts, rather than solely promotional messages. This can build loyalty and increase trust in the brand;

- analyze results and continuously improve — regularly track metrics like open rates, clicks, and conversions, and adjust the strategy based on the data. This analysis helps understand what elements work best and which areas need improvement.

Even a small percentage of visitors generated through email campaigns can lead to significant sales and help establish long-lasting customer relationships, which is essential for a sustainable marketing strategy.

Campaign traffic is traffic that comes from specific marketing campaigns tracked with unique URLs or parameters. This can include tracking links from offline advertising, QR codes, or specific online marketing initiatives. Display advertising takes 0,66% of the whole traffic to the website.

Conclusions to the part 2

1. In conclusion, e-commerce now makes up 16% of total retail consumption of medicines in Ukraine, with some pharmacy chains reaching 30% of

turnover through online sales. Online aggregator platforms such as Tabletki.ua, Liki24.com, Apteka24.ua, and Medbrowse.com.ua have significantly simplified price comparison and access to pharmaceutical products, allowing Ukrainian consumers to find the most cost-effective options quickly and easily.

2.   The Podorozhnyk pharmacy chain, one of the largest in Ukraine with over 2,000 locations, has developed a website (podorozhnyk.ua) to expand its customer service capabilities. The website allows users to search for medicines, compare prices, and view detailed product information, enhancing both accessibility and convenience for over 18 million customers.

3.   Various product filters help users refine their search, while options for delivery and pharmacy pickup make it easy to receive orders. Additional features include an intelligent search function, a bonus points system, and access to pharmacists through chat, Viber, and Telegram bots.

4.   According to SimilarWeb analytics, the Podorozhnyk website (podorozhnyk.ua) ranked 54,561st globally, 651st within Ukraine, and 9th in Ukraine's pharmaceutical industry by visit count in September 2024, with 854,078 total visits. For comparison, Apteka 911 led Ukrainian pharmacy sites with 3.96 million visits, while ANC and Apteka Dobroho Dnya recorded 1.969 million and 1.5 million visits, respectively. Other key platforms in Ukraine include Tabletki.ua, a medication price aggregator; Helsi.me, a digital health service connecting patients to doctors; and Compendium.ua, a medical reference guide.

5.   Notably, 77.19% of Podorozhnyk's visitors used mobile devices, highlighting the importance of mobile compatibility. The Podorozhnyk website receives around 854,000 visits per month, with users spending an average of 2 minutes and 48 seconds per session. The site's bounce rate stands at 62.02%, indicating that a majority of users leave after viewing a single page, which may suggest areas for improvement in user engagement and content relevance.

6.   Most of the traffic to the podorozhnyk.ua website comes from organic search, which accounts for 55.35%, indicating effective search engine optimization. Direct traffic contributes 20.17%, suggesting a strong base of repeat visitors who

access the website directly. Referral traffic is relatively low at 1.51%, with top referring sites including ntp.msn.com, advego.com, and crm.mediabrama.com. Additionally, the pharmacy website links frequently to external platforms like eHealth, Google Play, Facebook, and TikTok, reflecting diverse user engagement and an emphasis on social media and digital services.

7. Social media traffic to podorozhnyk.ua makes up 2.41% of the total, with YouTube leading at 64.03%, followed by Facebook at 22% and Instagram at 13.96%. This distribution highlights the strong impact of video content on user engagement, as YouTube's educational and review videos appear to effectively capture user interest in the pharmacy's offerings.

8. Email traffic to the Podorozhnyk website represents a modest 0.01% of total visitors, originating from newsletters, promotional emails, and other email marketing campaigns. Despite its small proportion, email traffic holds valuable potential for personalized engagement, allowing targeted offers and customer loyalty initiatives that can convert even a small audience into significant, recurring sales.

PART 3

THE USE OF DIGITAL CHANNELS IN THE INTEGRATED MARKETING COMMUNICATIONS STRATEGY OF THE PHARMACY CHAIN

3.1 Analysis of the use of chatbots and mobile applications of the pharmacy chain

The pharmacy chain "Podorozhnyk" utilize chatbots in Ukraine's most popular messaging platforms — Viber and Telegram. As of November 2024, the Telegram bot has approximately 173,000 monthly users, while the Viber bot boasts over 1 million subscribers.
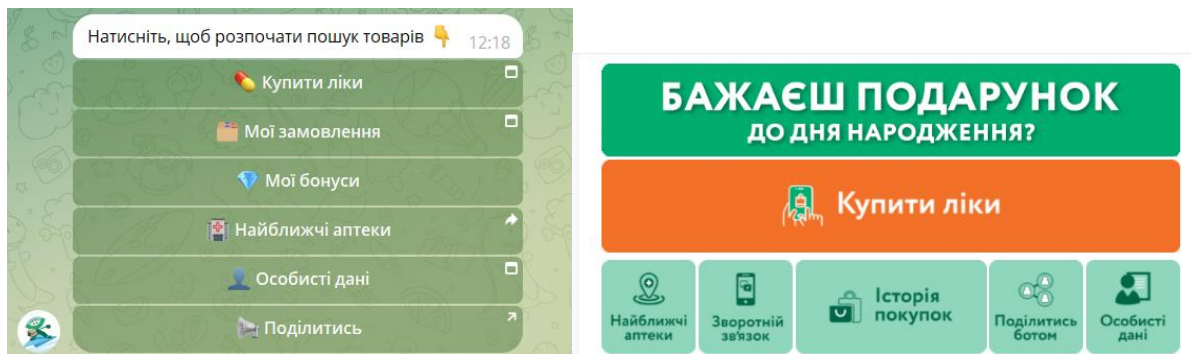
Fig. 3.1 The main screens of the "Podorozhnyk" pharmacy chain's Telegram and Viber bots

The "Podorozhnyk" pharmacy chain's chatbots offer similar functionality, including:

1.   Medicine Search in Pharmacies — users can type the name of a medication or medical product, and the bot will locate the product in nearby pharmacies, providing information on availability and purchase locations.

2.   Pharmacy Information — the bot provides addresses of the nearest "Podorozhnyk" pharmacies, their operating hours, and contact numbers. Using GPS, users can locate the closest pharmacy based on their current location.

3.   Promotions and discounts — the bot informs users about current discounts and special offers in the pharmacy network, helping users stay up-to-date on savings opportunities.
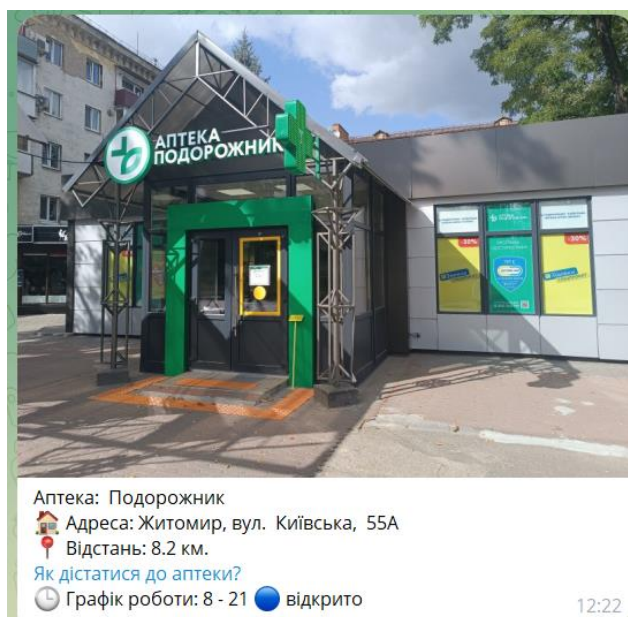
Fig. 3.2 Information about the nearest "Podorozhnyk" pharmacy in the Telegram bot
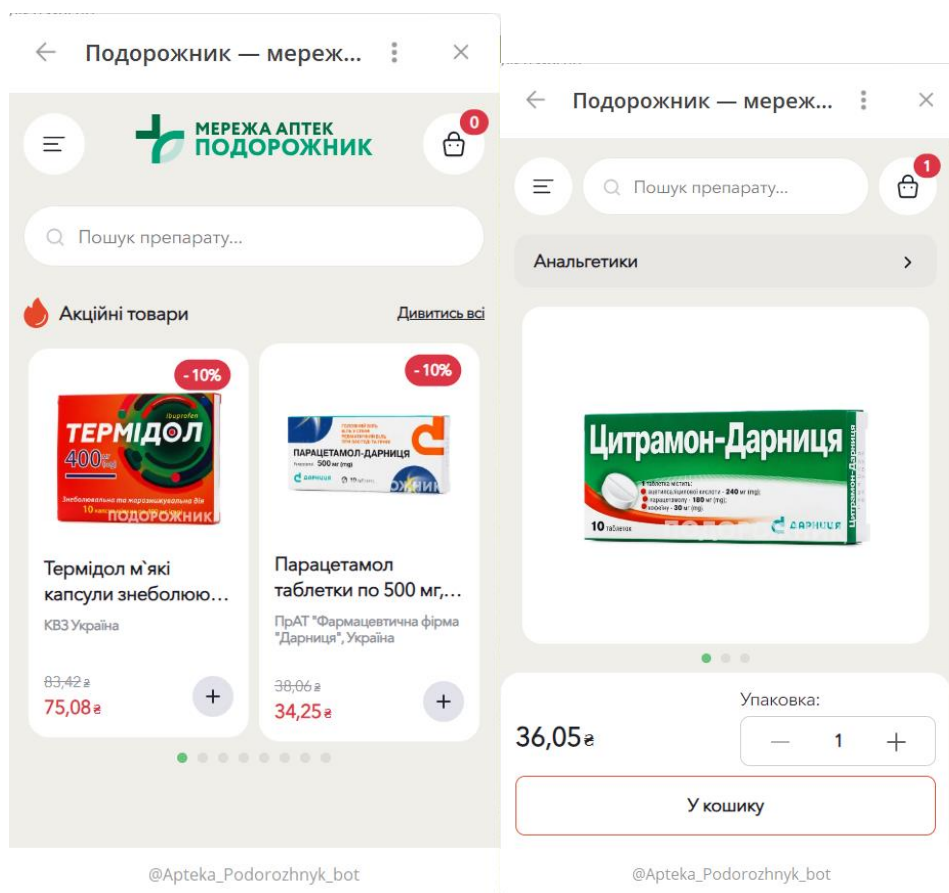
Fig. 3.3 The process of ordering a product via the Telegram bot

4. Online ordering — users can reserve or order medications for delivery or pickup, allowing them to secure products in advance and ensure availability (see fig. 3.3).

5. Loyalty program — if a user is enrolled in the "Podorozhnyk" loyalty program, the bot provides information on accumulated points, personal discounts, and bonus conditions.

6. Order status updates — the bot notifies users about order status changes, such as when an order is ready for pickup or has arrived at a pharmacy for collection.
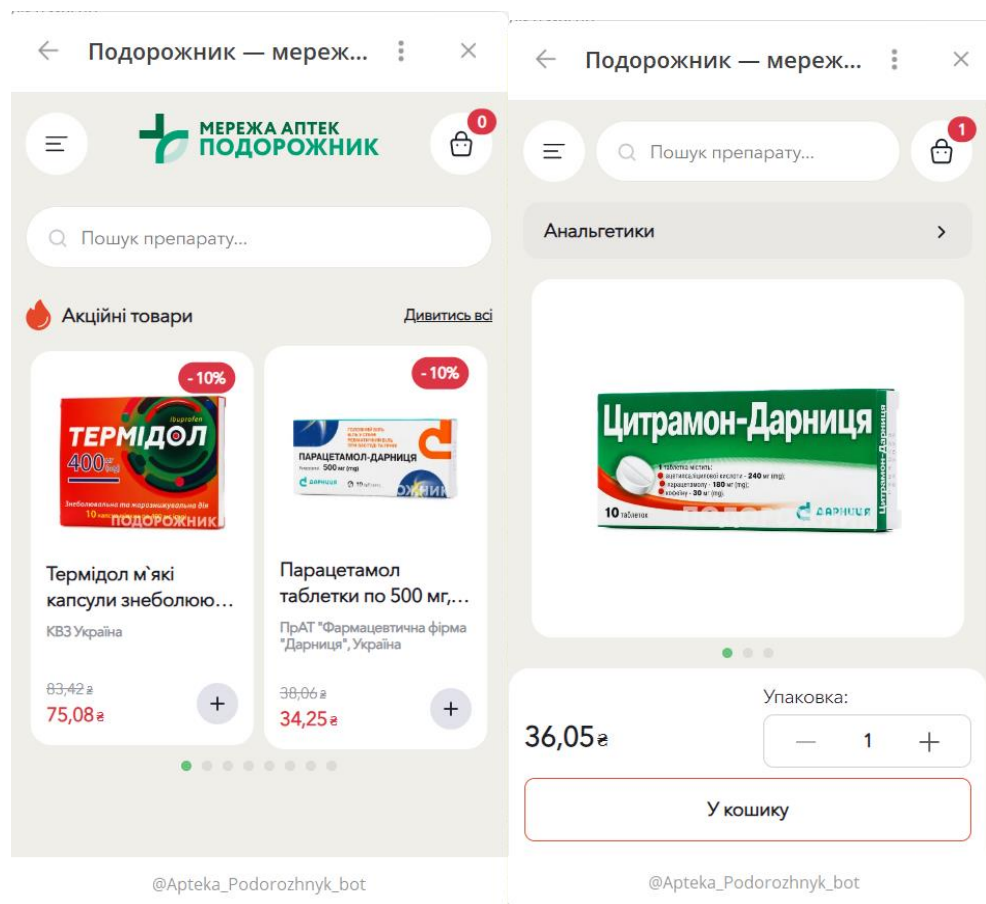
Fig. 3.3 The process of ordering a product via the Telegram bot

We've identified directions for enhancing the "Podorozhnyk" pharmacy chain's chatbots to increase usability, personalization, and provide a comprehensive service. Potential improvements include:

1. Consultations — the bot could provide basic consultations on medication usage, alternatives, or dosage recommendations by integrating with pharmacists or AI assistants.

2. Personalized Recommendations — the bot could suggest products based on previous purchases, such as reminders to purchase medications for chronic conditions that require regular intake.

3. Medication reminders — for medications that require regular dosing, the bot could offer to set reminders in Telegram or Viber, which could be especially helpful for elderly users or those managing multiple medications.

4. Prescription scanning — adding a feature to upload or scan prescriptions so that the bot can quickly find and reserve all necessary medications based on the prescription.

5. Real-time stock updates — integration with pharmacy databases to display current inventory and reservation availability in real time, crucial for high-demand or seasonal products.

6. Compatibility warnings — the bot could alert users to potential interactions between different medications or advise them to consult a physician when certain products should not be used together.

7. Product reviews and ratings — allowing users to leave reviews or rate purchased medications, helping others make informed decisions and assisting the pharmacy in improving its inventory.

8. Detailed order tracking — expanding the order tracking function by adding more detailed stages (e.g., order confirmed, being assembled, en route, etc.).

9. Payment via bot — implementing payment options directly in Telegram or Viber to streamline the purchase process, especially for delivery orders.

10. Online consultations with pharmacists or doctors — enabling users to contact a pharmacist or doctor for professional advice on medication selection, use, or substitutes directly in the chat.

11.   Dynamic promotions on selected categories — users can subscribe to certain product categories (e.g., vitamins or skincare), and the bot will automatically notify them about new promotions and discounts on these items.

12.   Medical information and tips — adding a section with useful medical articles, tips on disease prevention, and information on seasonal illnesses or essential medications, making the bot not only a purchasing tool but also a valuable knowledge source.

13.   Out-of-stock product requests — users can request unavailable medications, and the bot will notify them when the product is back in stock.

These enhancements will make the Telegram bot even more helpful for users, transforming it into a comprehensive service with numerous features for convenience and personalized service.
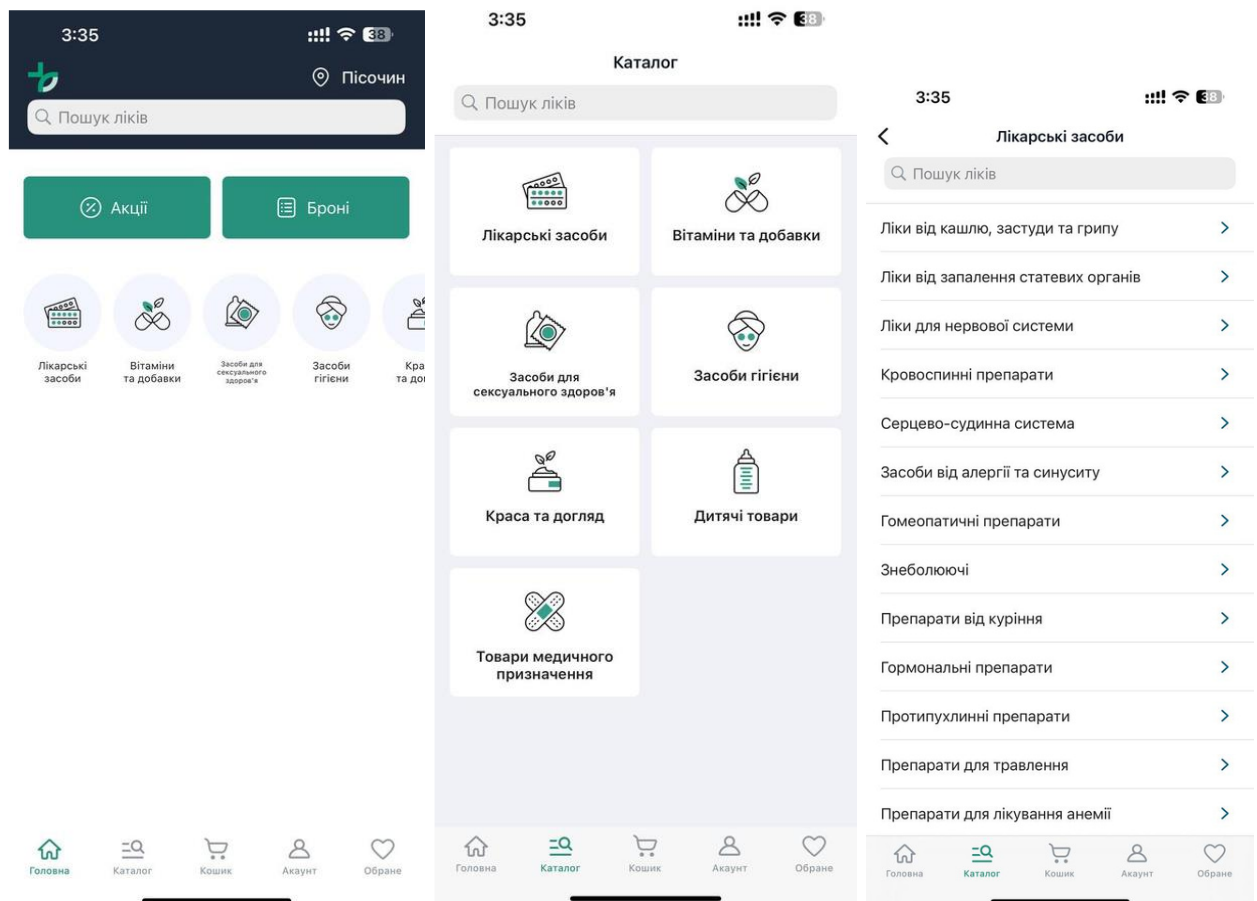
Fig. 3.4 Interface of the "Podorozhnyk" pharmacy chain's mobile application

The "Podorozhnyk" mobile applications allows users to conveniently purchase medications and medical products online and offers several useful features:

1.   Search and ordering — the app features "smart" search capabilities, recognizing various spellings of medication names and suggesting alternatives. Users can select and pay for orders online with a card and designate another person to collect the order.

2.   Bonuses and discounts — users can accumulate bonuses on purchases and use them for discounts on subsequent orders. Various promotions and discounts are also available to help users save.

3.   Emergency support — thanks to the "Unbreakable Pharmacy" function, users can find pharmacies that remain operational even during power outages and use them to charge devices.

4.   Support for the armed forces of Ukraine — a portion of proceeds from the purchase of certain items is donated to support the Armed Forces of Ukraine, making app usage a charitable endeavor.

5.   Integration with the website — the app syncs with users' accounts on the website, allowing them to complete an order in the app if they started the process on the website, and vice versa.

The "Podorozhnyk" mobile app is available for two main platforms:

1.   Android — downloadable from Google Play for Android smartphones and tablets (minimum requirement: Android 8.0). It includes all essential functions for product search, order placement, bonus management, and website synchronization.

2.   iOS — the Apple version (iPhone, iPad) is available in the App Store and supports the same functions as Android. Requirements for iOS are a minimum version of 13.0, so the app is compatible with both newer and some older iPhone and iPad models.

Both versions provide convenient account management, bonus accumulation, search for pharmacies that remain open during power outages, and quick access to promotions and discounts.

3.2 Modeling a digital marketing funnel for a pharmacy chain

We have developed several versions of marketing funnels for a pharmacy chain, using various digital channels. These funnels can be adapted for different purposes, such as attracting new customers, increasing loyalty, or encouraging repeat purchases.

Option 1. Funnel for attracting new customers and brand awareness.

1. **Awareness Stage**:

o Online and social media advertising. Launch targeted ads on social media platforms (Instagram, Facebook) with attractive offers (e.g., a discount on the first purchase).

o Contextual advertising. Use Google Ads to show ads for relevant keywords (e.g., "buy medicine online," "pharmacy with delivery").

2. **Interest Stage**:

o Landing page on the website. Direct traffic from ads to a landing page where users can learn about service benefits and current promotions.

o Viber and telegram bots. Set up auto-responders with helpful information about the service and discounts for those subscribing to the bot for the first time.

3. **Desire Stage**:

o Push notifications in mobile app. Reminders about new products, discounts, or personalized offers.

o Personalized recommendations. Based on user interests (e.g., if they searched for vitamins), specific product suggestions can be sent.

4. **Action Stage**:

o First purchase discount. Offer a discount on the first purchase through the app or website.

o Simple payment and convenient delivery. Streamline the payment and ordering process, and offer home delivery options.

5. **Retention Stage**:

o   Personalized offer mailings. Automated emails with recommendations based on users' previous orders.

o   Reminders for repeat purchases. For example, a reminder to replenish stock in the "Vitamins" section one month after the last purchase.

Option 2. Encouraging repeat purchases from existing customers

1.   **Interest Stage**:

o   Personalized recommendations in the app. Use previous purchase data to display relevant products in the app.

o   Updates in Viber and Telegram bots. Notifications about new promotions and discounts for regular customers.

2.   **Desire Stage**:

o   Loyalty program or accumulated points system. A loyalty program encouraging customers to earn points for each purchase, which can later be redeemed for discounts.

o   Special offers via email and mobile app. Segmented mailings with exclusive offers for subscribers only.

3.   **Action Stage**:

o   Easy repeat order process. Quick access to previously purchased products for reorder (add a "Buy Again" button on the website and in the app).

o   Discount coupons. Coupons for customers who haven't made purchases recently (e.g., in the past 2 months).

4.   **Loyalty Stage**:

o   Engagement through surveys. Conduct surveys in the bot and app about service quality and collect feedback to improve service.

o   Cashback and points for purchases. A bonus program where customers can use points on future orders.

Option 3. Increasing sales through the mobile app

1.   **Awareness Stage**:

o   App installation ads. Ads targeted at the audience, offering app installation for convenient ordering of medications.

o   Referral program. Discounts for inviting friends to increase the app user base.

2.   **Interest Stage**:

o   Welcome bonus for new app users. Upon first login, the user receives a welcome message with a bonus for the first purchase.

o   Integration with Viber and Telegram bots. Messages with an invitation to install the app for easier access to services.

3.   **Desire Stage**:

o   Discount notifications. Push notifications about discounts and personalized offers for users who have installed the app.

o   Mailings with helpful articles. Send users materials on health maintenance and the importance of timely medication intake to increase interest in purchases.

4.   **Action Stage**:

o   Special discounts for app orders. Direct incentives for making purchases through the app for convenience.

o   Optimized ordering process. Minimize steps in the ordering process for user convenience.

5.   **Retention and Loyalty Stage**:

o   Subscription system. For example, customers can subscribe to regular purchases of certain products.

o   Notifications about new app features. Regular updates on improvements and new features that make the app more convenient.

These funnels will help effectively attract new customers, maintain interest, and encourage repeat purchases. The main point is to regularly analyze the effectiveness of each stage and make improvements based on the obtained data.

Conclusions to the part 3

1.   The chatbot services of the "Podorozhnyk" pharmacy chain on Telegram and Viber provide convenient access to essential services such as medication search, pharmacy information, promotions, and online ordering. This allows users to quickly get the necessary information and place orders, significantly enhancing service convenience. With many subscribers in the chatbots (over 1 million on Viber and 173,000 on Telegram), the "Podorozhnyk" pharmacy chain builds effective communications with customers to promote sales, discounts, and new features in real time.

2.   The "Podorozhnyk" pharmacy chain's chatbots have substantial potential for further development, including options for personalization, consultations with pharmacists, medication reminders, and integration with the loyalty program. This will improve the user experience by providing a comprehensive service and a personalized approach.

3.   The mobile app for the "Podorozhnyk" pharmacy chain offers convenient access to a wide range of services, from medication search to bonus accumulation, and even supports users in critical situations through the "Unbreakable Pharmacy" function. Integration with the website and the ability to make charitable purchases make it not only a valuable tool for online ordering but also a platform for socially responsible actions.

1.   The developed marketing funnels allow the "Podorozhnyk" pharmacy chain to effectively use digital channels to attract new customers, increase loyalty among regular customers, and encourage repeat purchases. With a structured approach, each funnel targets specific stages of customer interaction, ensuring comprehensive coverage of their needs and enhancing the overall effectiveness of the marketing strategy.

CONCLUSIONS

1.   Digital marketing has evolved significantly over decades, transitioning from basic banner advertisements and email campaigns in the 1990s to sophisticated, data-driven, and AI-enhanced strategies in recent years. The proliferation of social media and the dominance of mobile devices have redefined consumer engagement, enabling targeted advertising, influencer marketing, and geolocation-based strategies. Platforms like TikTok, Instagram, and YouTube have become central to digital marketing efforts.

2.   The adoption of big data and AI tools has allowed marketers to personalize campaigns and optimize performance. Tools such as predictive analytics, programmatic advertising, and marketing automation platforms have enhanced efficiency and customer experience. Modern strategies emphasize consistency across digital and physical touchpoints, reflecting the omnichannel marketing paradigm.

3.   In the pharmaceutical industry, digital marketing strategies focus on educational content, stakeholder communication, and patient-centric tools. Trends like virtual events, telemedicine, and AI-driven personalization have further strengthened engagement and compliance in this heavily regulated sector. E-commerce now makes up 16% of total retail consumption of medicines in Ukraine, with some pharmacy chains reaching 30% of turnover through online sales. Online aggregator platforms have significantly simplified price comparison and access to pharmaceutical products.

4.   The Podorozhnyk pharmacy chain has developed a website to expand its customer service capabilities. The website allows users to search for medicines, compare prices, and view detailed product information, enhancing both accessibility and convenience for over 18 million customers. Various product filters help users refine their search, while options for delivery and pharmacy pickup make it easy to receive orders. Additional features include an intelligent search function, a bonus points system, and access to pharmacists through chat, Viber, and Telegram bots.

5.   According to SimilarWeb analytics, the Podorozhnyk website (podorozhnyk.ua) ranked 54,561st globally, 651st within Ukraine, and 9th in Ukraine's pharmaceutical industry by visit count in September 2024, with 854,078 total visits. 77.19% of Podorozhnyk's visitors used mobile devices, highlighting the importance of mobile compatibility. The Podorozhnyk website receives around 854,000 visits per month, with users spending an average of 2 minutes and 48 seconds per session. The site's bounce rate stands at 62.02%.

6.   Most of the traffic to the website comes from organic search, which accounts for 55.35%, indicating effective SEO. Direct traffic contributes 20.17%, suggesting a strong base of repeat visitors who access the website directly. Referral traffic is relatively low at 1.51%, with top referring sites including ntp.msn.com, advego.com, and crm.mediabrama.com. Social media traffic makes up 2.41% of the total, with YouTube leading at 64.03%, followed by Facebook at 22% and Instagram at 13.96%. Email traffic to the website represents a modest 0.01% of total visitors.

7.   With many subscribers in the chatbots, the "Podorozhnyk" pharmacy chain builds effective communications with customers to promote sales, discounts, and new features in real time. These chatbots have substantial potential for further development, including options for personalization, consultations with pharmacists, medication reminders, and integration with the loyalty program. The mobile application offers convenient access to a wide range of services. Integration with the website and the ability to make charitable purchases make it not only a valuable tool for online ordering but also a platform for socially responsible actions.

8.   We developed marketing funnels that allow the "Podorozhnyk" pharmacy chain to effectively use digital channels to attract new customers, increase loyalty among regular customers, and encourage repeat purchases. With a structured approach, each funnel targets specific stages of customer interaction, ensuring comprehensive coverage of their needs and enhancing the overall effectiveness of the marketing strategy.

REFERENCES

1. Васильченко В. С., Нагорна Ю. О. Дослідження засобів цифрового маркетингу аптечної мережі. *Youth Pharmacy Science* : матеріали IV Всеукр. наук.-практ. конф. з міжнар. участю, м. Харків, 6–7 груд. 2023 р. Харків : НФаУ, 2023. С. 499–501.

2. Матус Т. А. Банерна реклама як інструмент цифрового маркетингу аптечної мережі. *Youth Pharmacy Science :* матеріали III Всеукр. наук.-практ. конф. з міжнар. участю, м. Харків, 7–8 груд. 2022 р. Харків : НФаУ, 2022. С. 431.

3. Мушка Д., Бондаренко В. Сутність та еволюція digital-маркетингу. *Євроінтеграція України та економічна безпека держави :* зб. наук. пр. 2021. Вип. 1 (26). С. 201–207.

4. Окландер М. А., Романенко О. О. Специфічні відмінності цифрового маркетингу від інтернет-маркетингу. *Економічний вісник Національного технічного університету України «Київський політехнічний інститут».* 2015. № 12. С. 362–371.

5. Похилько С. В., Єременко А. Ю. Соціальні мережі як майданчик для створення та розвитку бізнес-проектів. *Вісник СумДУ : Серія «Економіка».* 2020. № 3. С. 130–139.

6. Сергієнко Т. В. Аналіз використання цифрових каналів в маркетингових комунікаціях аптечної мережі. *Youth Pharmacy Science :* матеріали IV Всеукр. наук.-практ. конф. з міжнар. участю, м. Харків, 6–7 груд. 2023 р. Харків : НФаУ, 2023. С. 516–518.

7. Субіна О. М. Використання інтернет-інструментів у фармацевтичному маркетингу. *Наукові розробки молоді на сучасному етапі :* тези доп. XVIII Всеукр. наук. конф. молодих вчених та студентів, м. Київ, 18-19 квіт. 2019 р. Київ : КНУТД, 2019. Т. 3. С. 350–351.

8. Сябро С. В., Пономаренко І. В. Особливості використання маркетингу соціальних мереж компаніями. *Домінанти соціально-*

економічного розвитку України в умовах інноваційного типу прогресу : збірник тез доп. ІІ Всеукр. наук.-практ. конф. здобувачів вищої освіти та молодих учених, м. Київ, 25 берез. 2021 р. / упор. О. В. Ольшанська. Київ : КНУТД, 2021. С. 37–38.

9. Хамініч С. Ю., Сокол П. М., Бабіч А. Д. Digital-маркетинг як сучасний засіб просування товарів та послуг. *Економіка та підприємництво*. 2019. № 6 (111). С. 45–50.

10. 2024 Pharma Marketing Trends: Embracing Digital Transformation and Patient-Centric Approach. URL : https://www.p360.com/zing/pharma-marketing-trends-2024 (Date of access: 15.09.2024).

11. 8 Biggest Trends in Healthcare Marketing in 2024. URL : https://viseven.com/healthcare-marketing-trends. (Date of access: 28.09.2024).

12. Balekari U., Nallaguntla L. Multichannel marketing (MCM) in pharmaceutical industry. *In. J. Pharm. Sc. B. Man.* 2015. Vol. 3. P. 15–23.

13. Beaulieu A., Hoybye M. Studying Mailing Lists: text, temporality, interaction and materiality at the intersection of email and the web. *Handbook of Emergent Technologies in Social Research*. Oxford : Oxford University Press, 2011. P. 257–274.

14. Best Pharmaceutical Advertising Examples. URL : https://www.healthyads.com/articles/best-pharmaceutical-advertising-examples (Date of access: 28.03.2024).

15. Bhatti S. COVID-19: Catalyzing digital transformation across pharmacy. *Centre for Health Solutions*. 2020. № 5. DOI : https://blogs.deloitte.co.uk/health/2020/06/catalysing-digital-transformation-across-pharmacy.html (Date of access: 05.10.2024).

16. Chaffey D., Ellis-Chadwick F., Johnston K., Mayer K. Digital Marketing-Strategy, Implementation and Practice. United Kingdom : 5th Revised edition, 2014. 698 p.

17. Chat-based telepharmacy in Denmark: design and early results / I. Ho et al. *Int J Pharm Pract.* 2015. Vol. 23 (1). P. 61–66.

18. Didital 2024: global overview report. URL: https://datareportal.com/reports/digital-2024-global-overview-report (Date of access: 05.05.2024).

19. Digital Marketing Trends in Pharmaceutical Industry. URL : https://nanodigital.agency/digital-marketing-trends-in-pharmaceutical-industry (Date of access: 28.03.2024).

20. Future of Pharma Industry Digital Marketing Trends. URL : https://doctormarketingmd.com/pharma/pharmaceutical-industry-digital-marketing-trends (Date of access: 18.09.2024).

21. Key Trends Driving Pharma Digital Marketing in 2024. URL : https://www.giosg.com/blog/pharma-digital-marketinghttps://www.giosg.com/blog/pharma-digital-marketing (Date of access: 28.03.2024).

22. Key Trends Driving Pharma Digital Marketing. URL : https://www.healthyads.com/articles/key-trends-driving-pharma-digital-marketing (Date of access: 21.09.2024).

23. Malinina N. G., Zhadko S. V., Fennane Ali. Digital marketing trends in pharmacy chains: enhancing customer engagement and education. *Менеджмент та маркетинг у складі сучасної економіки, науки, освіти, практики :* матеріали XI Міжнар. наук.-практ. дистанц. конф., м. Харків, 21 берез. 2024 р. Харків : НФаУ, 2024. С. 358–359.

24. Multichannel Marketing in Pharma Explained. URL : https://www.healthyads.com/articles/multichannel-marketing-in-pharma-explained. (Date of access: 28.03.2024).

25. Online pharmacy operations and distribution of medicines : Global Survey Report FIP Community Pharmacy Section. 2021. 28 p. URL : https://www.fip.org/file/5082 (Date of access: 05.10.2024).

26. Pharma and digital marketing: the new trend? URL : https://www.iqviamedicalsalescareers.com/nl/article/2018-6/pharma-and-digital-marketing-the-new-trend-81722117311 (Date of access: 28.03.2024).

27.   Rijcken C. Pharmaceutical care in digital revolution. Insights towards circular innovation. Amsterdam : Elsevier, 2019. 286 p.

28.   The Evolution of Digital Marketing in Pharma: Trends and Strategies. URL : https://platforce.io/digital-marketing-for-pharma-business (Date of access: 28.03.2024).

29.   What is Pharmaceutical Marketing? URL : https://www.healthyads.com/articles/what-is-pharmaceutical-marketing (Date of access: 28.03.2024).

30.   Zhadko S. V., Ushakov A. A., Taoukif M. A. Trends of digital transformation and its application in pharmaceutical marketing. Підготовка спеціалістів фармації в рамках концепції «Навчання протягом життя (Life long learning)»: наука, освіта, практика : матеріали III наук.-практ. інтернет-конф. з міжнар. участю, присвяч. 40-річчю заснування кафедри організації, економіки та управління фармацією, м. Харків, 23-24 жовт. 2024 р. Харків : НФаУ, 2024. С. 222–224.

APPENDICES

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ
ІНСТИТУТ ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ СПЕЦІАЛІСТІВ ФАРМАЦІЇ
КАФЕДРА ОРГАНІЗАЦІЇ, ЕКОНОМІКИ ТА УПРАВЛІННЯ ФАРМАЦІЄЮ

III Науково-практична інтернет-конференція з міжнародною участю

ПІДГОТОВКА СПЕЦІАЛІСТІВ ФАРМАЦІЇ В РАМКАХ КОНЦЕПЦІЇ «НАВЧАННЯ ПРОТЯГОМ ЖИТТЯ (LIFE LONG LEARNING)»: НАУКА, ОСВІТА, ПРАКТИКА

СЕРТИФІКАТ № 051

Даний сертифікат засвідчує, що

Taoukif Mohamed Amine

брав(ла) участь у круглому столі «Сучасні аспекти управління фармацевтичними організаціями» за програмою обсягом 6 годин / 0,2 кредити ЄКТС

Досягнуті результати навчання: демонструвати інноваційність та лідерство у професійній діяльності, результатом яких є підвищення мотивації та здатності до навчання та професійного розвитку; здійснювати адаптацію та модифікацію існуючих наукових підходів до конкретних ситуацій професійної діяльності.

В. о. ректора НФаУ,
доктор фармацевтичних наук, професор   Алла КОТВІЦЬКА

м. Харків, 23-24 жовтня 2024 р.

ПІДГОТОВКА СПЕЦІАЛІСТІВ ФАРМАЦІЇ В РАМКАХ КОНЦЕПЦІЇ «НАВЧАННЯ ПРОТЯГОМ ЖИТТЯ (LIFE LONG LEARNING)»: НАУКА, ОСВІТА, ПРАКТИКА

МАТЕРІАЛИ ІІІ НАУКОВО-ПРАКТИЧНОЇ ІНТЕРНЕТ-КОНФЕРЕНЦІЇ З МІЖНАРОДНОЮ УЧАСТЮ, ЯКА ПРИСВЯЧЕНА 40-РІЧЧЮ ЗАСНУВАННЯ КАФЕДРИ ОРГАНІЗАЦІЇ, ЕКОНОМІКИ ТА УПРАВЛІННЯ ФАРМАЦІЄЮ

(23-24 жовтня 2024 року, м. Харків)

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ
ІНСТИТУТ ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ СПЕЦІАЛІСТІВ ФАРМАЦІЇ
КАФЕДРА ОРГАНІЗАЦІЇ, ЕКОНОМІКИ ТА УПРАВЛІННЯ
ФАРМАЦІЄЮ

Серія «Наука»

ПІДГОТОВКА СПЕЦІАЛІСТІВ ФАРМАЦІЇ В РАМКАХ КОНЦЕПЦІЇ «НАВЧАННЯ ПРОТЯГОМ ЖИТТЯ (LIFE LONG LEARNING)»: НАУКА, ОСВІТА, ПРАКТИКА

МАТЕРІАЛИ

III Науково-практичної інтернет-конференція з міжнародною
участю, присвячену 40-річчю заснування кафедри
організації, економіки та управління фармацією

Пам'яті засновника кафедри, доктора фармацевтичних наук, професора,
заслуженого професора НФаУ,
заслуженого діяча науки і техніки України
ТОЛОЧКО ВАЛЕНТИНА МИХАЙЛОВИЧА

(23-24 жовтня 2024 року, м. Харків)

Реєстраційне посвідчення УкрІНЕТІ
№ 610 від 11 грудня 2023 р.

Харків
НФаУ
2024

TRENDS OF DIGITAL TRANSFORMATION AND ITS APPLICATION IN PHARMACEUTICAL MARKETING

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Introduction. In recent decades, the rapid development of digital technologies has significantly expanded the capabilities of pharmaceutical companies to interact with consumers, healthcare professionals, and other market participants. Digital transformation creates new communication channels and improves the efficiency of promoting pharmaceutical products through personalized solutions and innovative approaches.

Objective of the study. The purpose of this study is to assess the prospects and opportunities for promoting pharmaceutical products in the digital environment, as well as to analyze modern digital marketing tools aimed at achieving these goals.

Materials and methods. The study utilized data from marketing and consulting companies, as well as materials from seminars and training sessions on digital marketing, which provide a deeper understanding of current trends and best practices in online promotion.

Research results. According to the "Digital 2024" report, by the beginning of 2024, the number of internet users reached 5.35 billion, more than two-thirds of the world's population. The number of social media users reached 5.04 billion, or approximately 62.3% of the global population. Social platforms like Instagram, TikTok, and YouTube have become indispensable tools for reaching audiences. On average, users spend 2 hours and 23 minutes per day on social networks, interacting with brand content. TikTok leads in time spent, with users averaging 34 hours per

month. This drives companies to invest in content tailored to engage users through video and short formats, particularly popular among younger audiences.

Investment in influencer marketing grew by 17% in 2023, as consumers tend to trust recommendations from known personalities or experts in specific fields more than direct brand advertising. Influencers create content that appears authentic, thereby increasing audience engagement and loyalty.

In 2023, digital ad spending reached nearly $720 billion, with social media accounting for a significant portion of the budget. Social media ad spending increased by 9.3%, reaching $207 billion. Modern consumers are increasingly focused on ethical and social issues. Companies that can adapt their strategies to social trends, such as sustainability and inclusivity, gain more consumer support.

The use of AI technologies in marketing is rapidly growing, especially in the personalization of advertising campaigns and the analysis of user behavior. This allows companies to create more effective strategies for interacting with their audience, increasing the relevance of advertising and improving campaign results.

Digital transformation has become an essential element for pharmaceutical brands, particularly as the internet and social media become primary sources of information for patients and healthcare professionals. According to a McKinsey report, approximately 70% of patients seek health information online, making digital channels a key factor in educational efforts and drug promotion.

Pharmaceutical companies are leveraging digital technologies to create personalized content and improve client interaction. A report by Accenture states that 90% of pharmaceutical companies believe that digital innovations, such as artificial intelligence and big data, will significantly impact their marketing strategies. AI allows for audience segmentation, the development of targeted campaigns, and the improvement of drug promotion results.

The overall digital advertising market in healthcare shows steady growth. According to eMarketer, digital advertising spending in the U.S. healthcare sector increased by 15% in 2023, reaching $15.3 billion. Thanks to digital tools, pharmaceutical companies can interact more effectively with healthcare professionals. Sermo data shows that communication platforms for healthcare professionals allow pharmaceutical brands to distribute the latest research and receive feedback from doctors. The report indicates that 80% of doctors regularly use digital platforms to obtain information about new drugs and treatments.

Conclusion. Marketing and advertising continue to adapt to the new realities of the digital world, where social media and technology play a crucial role. Successful strategies increasingly depend on companies' ability to understand modern platforms, consumer trends, and technological innovations. Digital transformation not only expands the opportunities for pharmaceutical brands to engage with consumers but also enables them to use modern technologies to personalize content, improve the effectiveness of advertising campaigns, and optimize communication with healthcare professionals. Given the trends in healthcare, further adoption of digital tools is critical to maintaining competitiveness.

Наукове електронне видання

ПІДГОТОВКА СПЕЦІАЛІСТІВ ФАРМАЦІЇ В РАМКАХ КОНЦЕПЦІЇ

«НАВЧАННЯ ПРОТЯГОМ ЖИТТЯ

(LIFE LONG LEARNING)»: НАУКА, ОСВІТА, ПРАКТИКА

ЗБІРНИК НАУКОВИХ ПРАЦЬ ЗА МАТЕРІАЛАМИ
III НАУКОВО-ПРАКТИЧНОЇ ІНТЕРНЕТ-КОНФЕРЕНЦІЇ
З МІЖНАРОДНОЮ УЧАСТЮ

23-24 жовтня 2024 року

м. Харків

National University of Pharmacy

Faculty <u>for foreign citizens' education</u>
Department <u>of management, marketing and quality assurance in pharmacy</u>
Level of higher education <u>master</u>
Specialty <u>226 Pharmacy, industrial pharmacy</u>
Educational program <u>Pharmacy</u>

APPROVED
The Head of Department
of Management,
Marketing and Quality
Assurance in Pharmacy

_____

Volodymyr MALYI
"2" <u>of September</u> 2024

ASSIGNMENT
FOR QUALIFICATION WORK
OF AN APPLICANT FOR HIGHER EDUCATION

Mohamed Amine TAOUKIF

1. Topic of qualification work: «Analysis of digital transformation trends in pharmaceutical marketing», supervisor of qualification work: Svitlana ZHADKO**,** PhD, assoc. prof.

approved by order of NUPh from "6th" <u>of February 2024 № 34</u>

2. Deadline for submission of qualification work by the applicant for higher education: <u>October 2024.</u>

3. Outgoing data for qualification work: <u>scientific literature, reports of marketing research companies, website of the pharmacy chain, chat bots and mobile applications.</u>

4. Contents of the settlement and explanatory note (list of questions that need to be developed):
<u>to study and generalize the data of scientific literature regarding the evolution, current state and tools of digital marketing; to review key directions of digital marketing in the pharmaceutical industry; to analyze the structure and functionality of the pharmacy chain's website; to analyze the effectiveness of the pharmacy chain website usage; to analyze the use of chatbots and mobile applications of the pharmacy chain; to create a digital marketing funnel for a pharmacy chain.</u>

5. List of graphic material (with exact indication of the required drawings):
<u>Table – 1, figures – 25</u> _____

6. Consultants of chapters of qualification work

Chapters	Name, SURNAME, position of consultant	Signature, date	
		assignment was issued	assignment was received
1	Svitlana ZHADKO, assistant professor of department of management, marketing and quality assurance in pharmacy	02.09.2024	02.09.2024
2	Svitlana ZHADKO, assistant professor of department of management, marketing and quality assurance in pharmacy	16.09.2024	16.09.2024
3	Svitlana ZHADKO, assistant professor of department of management, marketing and quality assurance in pharmacy	07.10.2024	07.10.2024

7. Date of issue of the assignment: «02» September 2024

CALENDAR PLAN

№ з/п	Name of stages of qualification work	Deadline for the stages of qualification work	Notes
1	Collection and generalization of data from the scientific literature in the areas of qualification work (part 1)	September 2024	**Done**
2	Analysis of the pharmacy chain's website as a central digital marketing channel (part 2)	October 2024	**Done**
3	The use of digital channels in the integrated marketing communications strategy of the pharmacy chain (part 3)	October 2024	**Done**
4	Writing and design of a qualification work	November 2024	**Done**
5	Approbation of a qualification work	November 2024	**Done**
6	Submission of a qualification work to the EC of NUPh	November 2024	**Done**

An applicant of higher education   _____ Mohamed Amine TAOUKIF

Supervisor of qualification work   _____ Svitlana ZHADKO

ВИТЯГ З НАКАЗУ № 34
По Національному фармацевтичному університету
від 06 лютого 2024 року

1. Затвердити теми кваліфікаційних робіт здобувачам вищої освіти 5-го курсу 2 циклу Фм20*(4,10д) 2024-2025 навчального року, ступінь вищої освіти «магістр», галузь знань 22 Охорона здоров'я, спеціальність 226 – Фармація, промислова фармація, освітньо-професійна програма – Фармація, денна форма здобуття освіти (термін навчання 4 роки 10 місяців). Мова навчання англійська

№ з/п	Прізвище, ім'я здобувача вищої освіти	Тема кваліфікаційної роботи		Посада, прізвище та ініціали керівника	Рецензент кваліфікаційної роботи
• по кафедрі менеджменту, маркетингу та забезпечення якості у фармації					
11	Таукіф Мохамед Амін	Аналіз тенденцій цифрової трансформації в фармацевтичному маркетингу	Analysis of digital transformation trends in pharmaceutical marketing	доц. Жадько С.В.	доц. Міщенко В.І.

Ректор

Вірно. Секретар

ВИСНОВОК

експертної комісії про проведену експертизу
щодо академічного плагіату у кваліфікаційній роботі

здобувача вищої освіти

«25» листопада 2024 р. № 329746815

Проаналізувавши кваліфікаційну роботу здобувача вищої освіти Таукіф Мохамед Амін, Фм20*(4,10д)-англ-02, спеціальності 226 Фармація, промислова фармація, освітньої програми «Фармація» навчання на тему: «Аналіз тенденцій цифрової трансформації в фармацевтичному маркетингу / Analysis of digital transformation trends in pharmaceutical marketing», експертна комісія дійшла висновку, що робота, представлена до Екзаменаційної комісії для захисту, виконана самостійно і не містить елементів академічного плагіату (компіляції).

Голова комісії,
проректор ЗВО з НПР,
професор   Інна ВЛАДИМИРОВА

REVIEW
of scientific supervisor for the qualification work of the master's level of higher education of the specialty 226 Pharmacy, industrial pharmacy
Mohamed Amine TAOUKIF
on the topic: «Analysis of digital transformation trends in pharmaceutical marketing»

Relevance of the topic. The topic is highly relevant in the modern era, as digital technologies increasingly reshape consumer behavior and marketing strategies. For a pharmacy chain, understanding these trends can enhance customer engagement, optimize operational efficiency, and drive competitive advantage. By analyzing these changes, the pharmacy network can adopt innovative solutions such as personalized marketing and e-commerce integration, ensuring its success in a rapidly evolving market.

Practical value of conclusions, recommendations and their validity. The results of the study are of great importance for specialists in digital marketing of pharmacy chains to build marketing strategies.

Assessment of work. Mohamed Amine TAOUKIF conducted significant research work and successfully coped with it, showed the ability to analyze and summarize the data of literary sources, to work independently. The results of research are properly interpreted and illustrated in tables and figures. In performing the qualification works, the higher education seeker showed creativity, purposefulness, independence, perseverance.

General conclusion and recommendations on admission to defend. Qualification work of the 5th year student of higher education of the group Phm19*(4.10)eng-02 Mohamed Amine TAOUKIF on the topic «Analysis of digital transformation trends in pharmaceutical marketing» is a completed research study, which in terms of relevance, scientific novelty, theoretical and practical significance meets the requirements for qualification works, and can be submitted to the EC of NUPh.

Scientific supervisor _____ Svitlana ZHADKO

«3» of October 2024

REVIEW

for qualification work of the master's level of higher education, specialty 226 Pharmacy, industrial pharmacy

Mohamed Amine TAOUKIF

on the topic: «Analysis of digital transformation trends in pharmaceutical marketing»

Relevance of the topic. The topic is particularly relevant, as digital innovations are transforming how businesses engage with consumers and approach marketing. For a pharmacy chain, understanding these trends is essential to enhancing customer satisfaction, boosting operational performance, and maintaining a competitive edge. This analysis enables the adoption of advanced strategies, such as personalized digital campaigns and online sales platforms, ensuring long-term growth and adaptation to market changes.

Theoretical level of work. The author summarized data from the scientific literature on the transformation of digital marketing over the past few decades, urrent state in the global adoption of digital technologies and digital advertising, and key directions of digital marketing in the pharmaceutical industry.

Author's suggestions on the research topic. The author analyzed the structure and functionality of the pharmacy chain's website; analyzed the effectiveness of the pharmacy chain website usage; analyzed the use of chatbots and mobile applications of the pharmacy chain and created a digital marketing funnel for a pharmacy chain.

Practical value of conclusions, recommendations and their validity. The results of the qualification work are of great importance for specialists in digital marketing of pharmacy chains to marketing strategies.

Disadvantages of work. As a remark, it should be noted that some of the results of the literature review, which are presented in the first section, need stylistic refinement. In general, these comments do not reduce the scientific and practical value of qualifying work.

General conclusion and assessment of the work. The qualification work of Mohamed Amine TAOUKIF on the topic « Analysis of digital transformation trends in pharmaceutical marketing» is a science-based analytical study that has theoretical and practical significance. Qualification work meets the requirements for qualification work and can be submitted to the EC of the National University of Pharmacy.

Reviewer _____ assoc. prof. Victoria MISCHENKO
«14» of October 2024

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ
ВИТЯГ З ПРОТОКОЛУ № 6
25 листопада 2024 року
м. Харків
засідання кафедри менеджменту, маркетингу
та забезпечення якості в фармації
Голова: завідувач кафедри ММЗЯФ, доктор фарм. наук, професор Малий В. В.
Секретар: доцент ЗВО, канд. фарм. наук, доц. Жадько С.В.
ПРИСУТНІ: зав. кафедри ММЗЯФ, доктор фарм. наук, проф. Малий В.В., професор ЗВО, докт. фарм. наук, проф. Пестун І.В., професор ЗВО, докт. фарм. наук, проф. проф. Літвінова О.В., професор ЗВО, докт. фарм. наук, проф. проф. Коваленко С.М., професор ЗВО, докт. фарм. наук, проф. Крутських Т.В., професор ЗВО, докт. фарм. наук, проф. проф. Посилкіна О.В., доцент ЗВО, канд. фарм. наук, доц. Бабічева Г.С., доцент ЗВО, канд. фарм. наук, доц. Бондарєва І.В., канд. екон. наук, доц. Гладкова О.В., канд. екон. наук, доц. Глєбова Н.В., канд. екон. наук, доц. Деренська Я.М., доцент ЗВО, канд. фарм. наук, доц. Жадько С.В., канд. фарм. наук, доц. Зборовська Т.В., канд. юрид. наук, доц. Коляда Т.А., канд. екон. наук, доц. Ковальова В.І., канд. фарм. наук, доц. доц. Лісна А.Г., доцент ЗВО, канд. фарм. наук, доц. Малініна Н.Г., доцент ЗВО, канд. фарм. наук, доц. Рогуля О.Ю., асистент, канд. фарм. наук Шуванова О.В., здобувачі вищої освіти факультету з підготовки іноземних громадян

ПОРЯДОК ДЕННИЙ: Про допуск здобувачів вищої освіти випускного курсу факультету з підготовки іноземних громадян спеціальності 226 Фармація, промислова фармація, освітньої програми Фармація до захисту кваліфікаційних робіт в Екзаменаційній комісії НФаУ.

СЛУХАЛИ: Про допуск здобувача вищої освіти випускного курсу факультету з підготовки іноземних громадян спеціальності 226 Фармація, промислова фармація, освітньої програми Фармація групи Фм19*(4,10д)англ-02 Мохамед Амін ТАУКІФ до захисту кваліфікаційної роботи в Екзаменаційній комісії НФаУ. Кваліфікаційна робота на тему «Аналіз тенденцій цифрової трансформації в фармацевтичному маркетингу».

ВИСТУПИЛИ: В обговоренні кваліфікаційної роботи взяли участь докт. фарм. наук, проф. Пестун І.В., канд. фарм. наук, доц. Бондарєва І.В., канд. фарм. наук, доц. Рогуля О.Ю. Керівник кваліфікаційної роботи: доцент ЗВО кафедри ММЗЯФ, канд. фарм. наук, доц. Жадько С.В.

УХВАЛИЛИ: Допустити здобувача вищої освіти Мохамед Амін ТАУКІФ до захисту кваліфікаційної роботи на тему «Аналіз тенденцій цифрової трансформації в фармацевтичному маркетингу» в Екзаменаційній комісії НФаУ.

Зав. каф. ММЗЯФ, доктор фарм. наук,
професор   Володимир МАЛИЙ

Секретар
канд. фарм. наук, доцент   Світлана ЖАДЬКО

НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ

ПОДАННЯ

ГОЛОВІ ЕКЗАМЕНАЦІЙНОЇ КОМІСІЇ

ЩОДО ЗАХИСТУ КВАЛІФІКАЦІЙНОЇ РОБОТИ

Направляється здобувач вищої освіти Мохамед Амін ТАУКІФ до захисту кваліфікаційної роботи

за галуззю знань 22 Охорона здоров'я

спеціальністю 226 Фармація, промислова фармація

освітньою програмою Фармація

на тему: «Аналіз тенденцій цифрової трансформації в фармацевтичному маркетингу».

Кваліфікаційна робота і рецензія додаються.

Декан факультету _____ / Світлана КАЛАЙЧЕВА /

Висновок керівника кваліфікаційної роботи

Здобувачка вищої освіти Мохамед Амін ТАУКІФ виконав на кафедрі менеджменту, маркетингу та забезпечення якості у фармації НФаУ кваліфікаційну роботу, яка присвячена аналізу тенденцій цифрової трансформації у фармацевтичному маркетингу.

У першому розділі роботи описано еволюційний розвиток та поточні тенденції цифрового маркетингу, ключові напрями цифрового маркетингу у фармацевтичній галузі. У другому розділі проаналізовано структуру, функціональні можливості та ефективність використання вебсайту аптечної мережі. У третьому досліджено використання цифрових каналів у маркетинговій стратегії аптечної мережі.

У цілому подана до захисту кваліфікаційна робота Мохамед Амін ТАУКІФ на тему «Аналіз тенденцій цифрової трансформації в фармацевтичному маркетингу» відповідає вимогам, що висуваються до кваліфікаційних робіт, оцінюється позитивно і може бути рекомендована для захисту в Екзаменаційній комісії НФаУ.

Керівник кваліфікаційної роботи

_____   Світлана ЖАДЬКО

«03» жовтня 2024 р.

Висновок кафедри про кваліфікаційну роботу

Кваліфікаційну роботу розглянуто. Здобувач вищої освіти Мохамед Амін ТАУКІФ допускається до захисту даної кваліфікаційної роботи в Екзаменаційній комісії.

Завідувач кафедри
Менеджменту, маркетингу
та забезпечення якості у фармації

_____   Володимир МАЛИЙ

«25» листопада 2024 р.

Qualification work was defended

of Examination commission on

«28» of November 2024

with the grade _____

Head of the State Examination commission,

DPharmSc, Professor

_____ / Oleh SHPYCHAK /