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INTERNATIONAL MARKETING IN THE CONTEXT OF VIRTUAL MOBILITY AS A CHALLENGE FOR UKRAINIAN COMPANIES

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The article carries out a comprehensive study of virtual mobility as a conceptual and practical basis for the implementation of international marketing of Ukrainian companies in the context of a full-scale war, digital transformation and destruction of the traditional economic infrastructure. It is determined that virtual mobility - as the ability of enterprises to carry out marketing, logistics and communication activities outside their geographical location through the use of digital technologies - has become a key factor in maintaining and scaling up business operations in a crisis. The article analyzes modern scientific approaches to revealing the essence of virtual mobility, digital marketing behavior and transnational communication in a globalized environment. It is substantiated that ensuring effective international marketing in the context of virtual mobility requires not only technical modernization, but also the adaptation of strategies to the cultural, behavioral and institutional contexts of target markets. On the basis of empirical data, statistical reports, industry research and cases of leading Ukrainian companies (in particular, Nova Poshta, Headway), the current practices of digital expansion to the EU and North American markets are characterized. The main challenges are highlighted: low level of fiber optic coverage, cultural heterogeneity of audiences, lack of trust in new players at the international level. The role of government initiatives (Diia. City) and external investments (IFC, EBRD) in supporting the digital environment is emphasized. Priority areas for further research are formulated, which include the development of effective models of virtual mobile marketing, indicators of the effectiveness of digital strategies and mechanisms of public-private cooperation in the field of Ukraine's digital economy.

МІЖНАРОДНИЙ МАРКЕТИНГ В УМОВАХ ВІРТУАЛЬНОЇ МОБІЛЬНОСТІ ЯК ВИКЛИК ДЛЯ УКРАЇНСЬКИХ КОМПАНІЙ

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Ключові слова:

віртуальна мобільність, міжнародний маркетинг, цифрова трансформація, цифрова інфраструктура, маркетингові стратегії, глобальний ринок.

У статті здійснено комплексне дослідження віртуальної мобільності як концептуальної та практичної основи реалізації міжнародного маркетингу українських компаній в умовах повномасштабної війни, цифрової трансформації та деструкції традиційної економічної інфраструктури. Визначено, що віртуальна мобільність – як здатність підприємств здійснювати маркетингову, логістичну та комунікаційну діяльність поза межами географічного розміщення завдяки використанню цифрових технологій – стала ключовим чинником збереження та масштабування бізнес-операцій у кризових умовах. Проаналізовано сучасні наукові підходи до розкриття сутності віртуальної мобільності, цифрової маркетингової поведінки та транснаціональної комунікації в умовах глобалізованого середовища. Обґрунтовано, що забезпечення ефективного міжнародного маркетингу за умов віртуальної мобільності вимагає не лише технічної модернізації, а й адаптації стратегій до культурного, поведінкового та інституційного контекстів цільових ринків.

На основі емпіричних даних, статистичних звітів, галузевих досліджень і кейсів провідних українських компаній (зокрема Nova Poshta, Headway) охарактеризовано поточні практики цифрової експансії на ринки ЄС і Північної Америки. Виокремлено основні виклики: низький рівень оптоволоконного покриття, культурна неоднорідність аудиторій, дефіцит довіри до нових гравців на міжнародному рівні. Акцентовано на ролі державних ініціатив (Diia.City) та зовнішніх інвестицій (IFC, EBRD) у підтримці цифрового середовища. Сформульовано пріоритетні напрями подальших досліджень, що передбачають розробку ефективних моделей віртуально мобільного маркетингу, індикаторів результативності цифрових стратегій та механізмів державно-приватної взаємодії в сфері цифрової економіки України.

Formulation of the problem

In today's context of global instability, digital transformation of the world economy and military aggression against Ukraine, the study of international marketing mechanisms in the context of virtual mobility is of particular relevance. Virtual mobility, as the ability of companies to carry out marketing and operational activities regardless of physical location through the use of digital technologies, has become not only a forced adaptive response to external crises, but also a new paradigm for strategic management of enterprises in the global environment.

The aggravation of the geopolitical situation after Russia's full-scale invasion of Ukraine in 2022 led to a profound transformation of the business models of Ukrainian companies, which were forced to reorient their marketing strategies to digital platforms and remote interaction with target markets. According to the Ukrainian Association of the Digital Economy, in 2021-2023 alone, the share of companies actively using digital marketing and remote customer service tools increased from 45% to 83%, which confirms the scale and depth of the changes. This process was accompanied by active support from the state (in particular through the Diia.City initiative), as well as intensive attraction of foreign capital to the telecommunications sector.

In this regard, the need for a scientific understanding of the phenomenon of virtual mobility in international marketing, in particular in times of war as a special macroeconomic and geostrategic environment, is becoming more relevant. The research covers a comprehensive study of the impact of digital infrastructure, cultural barriers, global competition, and the latest marketing technologies (including AI solutions) on the ability of Ukrainian businesses to integrate into the international economic space. Thus, there is a need for a deep interdisciplinary analysis of the mechanisms, challenges, and strategies of international marketing in the context of virtual mobility, which is of significant scientific and practical value in the process of post-war economic recovery of Ukraine, development of innovative entrepreneurship, and formation of the state's digital sovereignty.

Analysis of recent research and publications

The analysis of scientific sources shows that the problem of virtual mobility in the context of international marketing is being actively studied by both Ukrainian and foreign scientists, advisory organizations, and

professional associations. Thus, the work of I. Degtyareva highlights the theoretical foundations of virtual mobility of enterprises and outlines its importance in times of war as an adaptive mechanism for business functioning [1]. The reports of McKinsey & Company and the Ukrainian Digital Economy Association analyze the scale and trends of digital transformation in Central and Eastern Europe and Ukraine, which allows us to consider virtual mobility as a component of modern business models [2; 3]. The practical aspects of the implementation of the Diia.City digital ecosystem are covered in the materials of the Ministry of Digital Transformation and the Kyiv School of Economics, which emphasize the role of public policy in shaping the environment for IT companies and startups [4; 5]. Sources from Reuters, EBRD, and the World Bank Group provide analysis on the volume of foreign investment in Ukraine's telecommunications sector, which is critical to ensuring the technical basis for virtual mobility [6; 15; 16]. In the context of marketing adaptation in international markets, the works of H. Hollensen and D. Aaker, which substantiate the importance of cultural sensitivity and strategic positioning in the context of global competition [7; 9]. Also noteworthy is the statistical analytics of the Statista and Ookla platforms, which illustrates the dynamics of e-commerce development and the state of the communication infrastructure [8; 10]. Examples of the practical implementation of virtual mobility are demonstrated by the cases of Nova Poshta and Headway, which entered the EU and US markets thanks to digital strategies [11; 12]. Also important are data from Wikipedia sources on the Diia digital platform [13], OECD analytical reviews on the digital economy [14], the European Business Association's position on the effectiveness of international partnerships of Ukrainian companies [17], and marketing trends according to the HubSpot Research global report [18]. At the same time, the scientific discourse remains insufficiently developed in terms of the integration of virtual mobility into the international marketing system of Ukrainian companies in times of war, in particular: assessing the effectiveness of digital strategies for entering foreign markets, the role of state support in shaping competitive marketing models, and the prospects for sustainable development of virtual mobile business. These issues are the focus of this study.

Objectives of the article

The purpose of the article is to provide a scientific substantiation of the role of virtual mobility as a factor

of effective implementation of international marketing of Ukrainian companies in the context of war and digital transformation.

Presenting main material

The concept of «virtual mobility» in the context of international marketing refers to the ability of companies to conduct commercial and marketing operations, regardless of physical location, through the use of digital technologies and online communications. This phenomenon has become especially relevant during the COVID-19 pandemic, and later during the full-scale war in Ukraine in 2022. According to economist I. Degtyareva, virtual mobility has allowed companies to remain competitive in international markets and minimize the cost of logistics and physical infrastructure [1]. According to a McKinsey study, more than 75% of businesses in Central and Eastern Europe have begun to actively implement digital platforms, which has enabled them to maintain operations in an unstable environment [2].

Russia's full-scale invasion of Ukraine in February 2022 had a significant impact on the business environment and forced Ukrainian companies to radically change their business strategies. With limited physical access to traditional markets, Ukrainian businesses have stepped up their use of digital channels, such as online platforms, social media, video conferencing, and cloud technologies. According to a study by the Ukrainian Association of the Digital Economy, the share of Ukrainian companies actively using digital marketing and remote work increased from 45% in 2021 to 83% in 2023 [3]. This allowed not only to maintain the companies' operations but also to ensure their international expansion, especially to the EU.

One of the key factors that ensured the rapid adaptation of Ukrainian companies to the conditions of virtual mobility was the government initiative Diia.City. Launched in 2022 by the Ministry of Digital Transformation of Ukraine, this legal ecosystem was created to promote the development of the IT sector and high-tech business. The initiative provides for a special legal regime with flexible forms of labor relations, tax benefits, and a simplified procedure for attracting foreign specialists. According to official data, as of December 2023, more than 760 companies have become Diia.City residents, including such well-known players as SoftServe, Genesis, Reface, and MacPaw, which indicates the high attractiveness and efficiency of this platform [4]. A study by the Kyiv School of Economics notes that Diia.City has reduced the fiscal burden and at the same time increased investment in the digital sector by 24% in 2022-2023 [5].

Another important factor in the digital transformation was the intensification of foreign investment in Ukraine's telecom infrastructure. In October 2024, the European Bank for Reconstruction and Development (EBRD), together with the International Finance Corporation (IFC), made the largest foreign direct investment since the beginning of the full-scale invasion - in the amount of USD 435 million - in a newly created telecommunications company formed as a result of the merger of mobile operators lifecell and Datagroup-Volia [6]. This step is aimed at strengthening

the country's digital resilience, expanding access to high-speed Internet, and improving cybersecurity. Such a large-scale project allows Ukrainian businesses to ensure uninterrupted access to digital international marketing tools, including e-commerce platforms, CRM systems, online conferences, market analytics, etc.

Despite the significant benefits that virtual mobility provides to Ukrainian companies in the international market, its implementation is accompanied by a number of systemic challenges that need to be addressed comprehensively. Among the main barriers are the problems of cultural adaptation, increased competition, and technical limitations in times of war.

Cultural adaptation is a critical element of effective international marketing. Companies expanding into foreign markets have to take into account the linguistic, religious, socio-psychological and value differences of the target audience. According to the research of H. Hollensen, the success of transnational marketing campaigns depends on the ability to adapt content to the local cultural context by 80%. In the case of Ukrainian brands such as Rozetka or Liki24, adapting to the cultural expectations of consumers in Poland, Germany, and Romania has become a prerequisite for maintaining customer loyalty. In addition, the use of template approaches to promotion leads to a decrease in the effectiveness of advertising - for example, campaigns that worked well in Ukraine showed 2.5 times lower conversion rates in Eastern European countries [7].

Competition in international markets is intensifying due to the extremely high density of companies that already have established positions and strong marketing budgets. According to the Statista analytical platform (2024), more than 890 thousand active companies operate in the e-commerce sector in the EU market alone, of which approximately 30% are multinationals [8]. In such circumstances, Ukrainian companies that have moved their operating offices abroad (e.g., Grammarly, Ajax Systems) are forced to compete for consumer attention in the face of information overload. As D. Aaker in Strategic Market Management, only brands with a clearly differentiated value proposition have a chance to maintain their positions in the digital environment [9].

The technical restrictions caused by the war directly affect the quality of digital services, including internet speed, uninterrupted access to digital platforms, and data storage security. According to a report by Ookla (Speedtest Global Index), in 2022-2023, Ukraine recorded massive drops in mobile Internet speeds 12 times due to shelling of critical infrastructure, including Ukrtelecom and Kyivstar facilities. This created difficulties for companies that depend on a stable connection to cloud-based CRM systems, video communications, or e-commerce platforms. Despite the launch of Starlink, the instability of electricity supply in some regions continues to be a risk factor [10].

Despite the numerous challenges posed by the war and forced digital transformation, a number of Ukrainian companies have not only maintained their stability but also achieved significant success in international markets through virtual mobility, innovative marketing approaches, and strategic adaptation. The most prominent examples,

such as Nova Poshta and Headway, illustrate how digital management models allow for integration into global markets even in times of war.

Nova Poshta, one of the largest logistics companies in Ukraine, has been actively implementing an international expansion strategy since the outbreak of full-scale war, focusing on the needs of the Ukrainian diaspora and cross-border e-commerce. Already in 2023, the company opened physical offices in Poland, Slovakia, Lithuania, the Czech Republic, Romania, Germany, France, Italy, Spain, and the United Kingdom. This allowed for door-to-door delivery within the European Union, minimizing dependence on national infrastructure. According to Forbes Ukraine, the volume of Nova Poshta's operations abroad grew by 61% during the year, which indicates an effective international marketing strategy based on multichannel communication, localized content, and a service approach to consumers [11]. Virtual tools for logistics management, tracking, and customer service have ensured a stable quality of service even under martial law in Ukraine.

Headway is a Ukrainian EdTech startup founded in 2019 that demonstrates a successful combination of artificial intelligence technologies and international marketing. In 2024, the company implemented personalized AI models in communication and advertising strategies, which allowed automating more than 70% of marketing activities in the mobile app. As stated in the official Headway press release (March 2024), after integrating AI tools, the company recorded a 40% increase in the efficiency of advertising campaigns and a 35% increase in user engagement [12]. Particular attention was paid to the global promotion of the product in the US, UK, the Netherlands, and Canada. Headway was included in the list of Top 100 Most Innovative Learning Platforms by EdTech Digest and won the GESAwards in the Global EdTech Startup of the Year category.

Given the extraordinary challenges posed by the war, support for the digital transformation of Ukrainian business by the state and international partners has become a crucial factor in maintaining economic stability and competitiveness on a global scale. The systematic involvement of government agencies and external institutions has helped create an environment conducive to virtual business mobility and effective integration into the international digital market.

The Ukrainian government's support for digital initiatives was manifested primarily in the large-scale implementation of the Diia digital services ecosystem. The platform, administered by the Ministry of Digital Transformation, has integrated more than 70 public services online, including business registration, obtaining documents, changing the individual entrepreneur status, etc. As of the beginning of 2024, more than 19 million Ukrainians use the Diia application, which confirms the high digital adaptability of society and business [13]. The program also contributed to the popularization of the state course on digitalization, which directly influenced the formation of a favorable climate for virtual marketing. According to the OECD Digital Economy Outlook, Ukraine ranked 11th among European countries in terms

of the pace of e-Government services implementation [14].

Investments in telecommunications, in particular with the participation of international financial institutions, have become a critical source of support for Ukraine's digital infrastructure. In October 2024, the European Bank for Reconstruction and Development (EBRD), in partnership with the International Finance Corporation (IFC), made the largest foreign direct investment in Ukraine's digital sector since the beginning of the war - \$435 million in a newly created telecommunications company that combined the resources of lifecell and Datagroup-Volia. The funds will be used to modernize fiber-optic communication lines, deploy secure data centers, improve cyber resilience, and scale up mobile coverage in rural areas. According to the EBRD Telecommunications Sector Strategy 2024-2028 report, such an infrastructure base ensures the technological autonomy of small and medium-sized businesses, especially in the field of international e-commerce, IT services, and marketing [15].

Conclusions

Summarizing the results of the study, it should be noted that virtual mobility is emerging not only as a response to the extraordinary circumstances of war, but also as a strategic direction for transforming the international marketing of Ukrainian companies. Its effective implementation requires a comprehensive approach that includes the modernization of digital infrastructure, the development of foreign economic cooperation, and the adaptation of marketing strategies to the global digital environment.

First, investing in digital infrastructure is a key condition for ensuring a stable presence of Ukrainian businesses in international markets. According to the World Bank Group, only 52% of Ukraine's territory has reliable fiber optic coverage, and more than 40% of small and medium-sized businesses face regular problems with network access, which limits the use of modern digital marketing and analytics tools [16]. In this context, the tasks of increasing network capacity, implementing secure data centers, maintaining energy autonomy, and developing domestic production of telecommunications technologies remain a priority.

Secondly, an important prerequisite for the effective integration of virtual mobile business into the global economy is the formation of sustainable international partnerships. According to the European Business Association, more than 60% of Ukrainian companies that have integrated into global business chains have experienced an increase in exports, and strategic alliances have reduced the cost of product promotion and distribution [17]. Further research should focus on assessing models of technology transfer and marketing innovation within such partnerships.

Thirdly, a promising area is the improvement of marketing strategies, taking into account cultural specifics and the dynamics of consumer priorities in different markets. The HubSpot Research report shows that the use of localized advertising approaches increases the conversion rate by an average of 72%, which makes it necessary to develop tools for behavioral analytics, personalization, and multichannel promotion [18]. Methodologies for evaluating

the effectiveness of digital marketing interventions in the context of Ukrainian brands promoted during martial law require special attention.

Further research in this area should focus on formalizing models for integrating virtual mobility

into the long-term marketing strategy of enterprises, identifying indicators of its effectiveness in a multi-level crisis, and developing public policy tools to support digital exports and the innovative activity of small and medium-sized businesses.

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