

ISSN 2786-5940
e-ISSN 2786-5959

Vinnytsia National Technical University

INNOVATION AND SUSTAINABILITY

Scientific Journal

Founded in 2021
Frequency: Quarterly

Volume 6, No. 2



Vinnytsia – 2026

ISSN 2786-5940
e-ISSN 2786-5959

Вінницький національний технічний університет

INNOVATION AND SUSTAINABILITY

Науковий журнал

Рік заснування: 2021
Періодичність випуску: 4 рази на рік

Том 6, № 2



Вінниця – 2026

Founder and publisher:
Vinnytsia National Technical University

Year of foundation: 2021

*Recommended for printing and distribution
via the Internet by the Academic Council
Vinnytsia National Technical University
(Minutes No. 15 of June 26, 2026)*

State Registration:
Media identifier R30-01505.
Decision of the National Council of Television
and Radio Broadcasting of Ukraine No. 1234,
Minutes No. 25 dated 31.10.2023

**The journal is included in category “B”
of the List of scientific professional publications of Ukraine.**
Specialties: 0311 Economics; 0413 Management and administration;
0414 Marketing and advertising
(Order of the Ministry of Education and Science of Ukraine No. 928 of 11.06.2026).

Cluster: Economic Transformation, Business and Administration

**The journal is presented in the following
international scientometric databases, repositories and scientific systems:**
Google Scholar; Vernadsky National Library of Ukraine; Crossref; UCSB Library;
Dimensions; Worldcat; Litmaps; University of Oslo Library; Ulrichsweb Global Serials Directory;
University of Hull Library; DOAJ; RePec (Research Papers in Economics); erih+;
Open Ukrainian Citation Index (OUCI)

Editorial office address:
Vinnytsia National Technical University
21021, 95 Khmelnytske Shose Str., Vinnytsia, Ukraine
E-mail: info@inns.vn.ua
<https://inns.com.ua/en>

Засновник і видавець:

Вінницький національний технічний університет

Рік заснування: 2021

*Рекомендовано до друку та поширення
через мережу Інтернет Вченою радою
Вінницького національного технічного університету
(протокол № 15 від 26 червня 2026 р.)*

Державна реєстрація:

Ідентифікатор медіа R30-01505.

Рішення Національної ради України
з питань телебачення і радіомовлення № 1234,
протокол № 25 від 31 жовтня 2023 року

Журнал входить до категорії «Б» Переліку наукових фахових видань України

Спеціальності: C1 Економіка; D3 Менеджмент; D5 Маркетинг
(Наказ Міністерства освіти і науки України № 928 від 11.06.2026).

Кластер: Економічні перетворення, бізнес та адміністрування

Журнал представлено в таких міжнародних

наукометричних базах даних, репозитаріях та пошукових системах:

Google Академія; Національна бібліотека України імені В.І. Вернадського; Crossref;
UCSB Library; Dimensions; Worldcat; Litmaps; University of Oslo Library;
University of Hull Library; Ulrichsweb Global Serials Directory; DOAJ;
RePec (Research Papers in Economics), erih+; Open Ukrainian Citation Index (OUCI)

Адреса редакції:

Вінницький національний технічний університет
21021, вул. Хмельницьке шосе, 95, м. Вінниця, Україна
E-mail: info@inns.vn.ua
<https://inns.vn.ua/uk>

Editorial Board

Editor-in-Chief:

Iryna Yepifanova	Doctor of Economic Sciences, Professor, Vice Rector for Scientific Work, Vinnytsia National Technical University, Ukraine
-------------------------	---

Deputy Editor-in-Chief:

Nataliia Havlovska	Doctor of Economic Sciences, Professor, Khmelnytskyi National University, Ukraine
---------------------------	---

National Members of the Editorial Board:

Viacheslav Dzhedzhula	Doctor of Economic Sciences, Professor, Vinnytsia National Technical University, Ukraine
Viktoriia Baidala	Doctor of Economic Sciences, Professor, National University of Life and Environmental Sciences of Ukraine, Ukraine
Ilona Dumanska	Doctor of Economic Sciences, Professor, Khmelnytskyi National University, Ukraine
Svitlana Yermak	Doctor of Economic Sciences, Professor, Odesa Polytechnic National University, Ukraine
Yurii Kravchuk	PhD in Economic Sciences, Associate Professor, Khmelnytskyi National University, Ukraine
Kateryna Kraus	PhD in Economic Sciences, Associate Professor, The Bohdan Khmelnytsky National University of Cherkasy, Ukraine
Volodymyr Kozlovskyi	PhD in Economic Sciences, Professor, Vinnytsia National Technical University, Ukraine
Oksana Musiiivska	Candidate of Economic Sciences, Associate Professor, Institute of Economics and Management, Lviv Polytechnic National University, Ukraine

International Members of the Editorial Board:

Viktoriia Viktorovna Hurochkina	Doctor of Economic Sciences, Professor, Uniwersytet Zielonogórski, Poland
Kingstone Nyakurukwa	PhD in the specialty Finance, Senior Lecturer, University of the Witwatersrand, Johannesburg, South Africa
Mosab Tabash	PhD in the specialty Finance and Banking, Full Professor, Al Ain University, Al Ain, United Arab Emirates
Michele Meoli	PhD in the specialty Economics and Management of Innovation, Associate Professor, Università degli Studi di Bergamo, Bergamo, Italy
Enkeleda Lulaj	PhD in the specialty Finance and Accounting, Associate Professor Dr., University "Haxhi Zeka", Peja, Kosovo
Mohammad Irfan	PhD in the specialty Finance and Technology, Full Professor, Chandigarh University, India
Edib Smolo	PhD in the specialty Islamic Finance, Associate Professor, Effat University, Saudi Arabia
Nenavath Sreenu	PhD in the specialty Management Studies, Associate Professor, Maulana Azad National Institute of Technology, India
Xiangfeng Chen	PhD in the specialty Management Science & Engineering, Professor, School of Management Fudan University, China
Ahmed Imran Hunjra	PhD in the specialty Finance, Associate Professor, IPAG Business School, France
Douglas Cumming	PhD in the specialty Economics & Finance, Professor, Stevens Institute of Technology, United States

Редакційна колегія

Головний редактор:

Ірина Єпіфанова | Доктор економічних наук, професор, проректор з наукової роботи, Вінницький національний технічний університет, Україна

Заступник головного редактора:

Наталія Гавловська | Доктор економічних наук, професор, Хмельницький національний університет, Україна

Національні члени редколегії:

В'ячеслав Джеджула | Доктор економічних наук, професор, Вінницький національний технічний університет, Україна

Вікторія Байдала | Доктор економічних наук, професор, Національний університет біоресурсів і природокористування України, Україна

Ілона Думанська | Доктор економічних наук, професор, Національний університет біоресурсів і природокористування України, Україна

Світлана Єрмак | Доктор економічних наук, професор, Національний університет «Одеська політехніка», Україна

Юрій Кравчик | Кандидат економічних наук, доцент, Хмельницький національний університет, Україна

Катерина Краус | Кандидат економічних наук, доцент, Черкаський національний університет імені Богдана Хмельницького, Україна

Володимир Козловський | Кандидат технічних наук, професор, Вінницький національний технічний університет, Україна

Оксана Мусійовська | Кандидат економічних наук, доцент, Інститут економіки і менеджменту Національного університету «Львівська політехніка», Україна

Міжнародні члени редколегії:

Вікторія Гурочкіна | Доктор економічних наук, професор, Зеленогурський університет, Польща

Кінгстон Някуруква | Доктор економічних наук, старший викладач, Університет Вітватерсранда, Йоганнесбург, Південна Африка

Мосаб Табаш | Доктор економічних наук та банківської справи, професор, Університет Аль-Айн, Аль-Айн, Об'єднані Арабські Емірати

Мішель Меолі | Доктор економічних наук та управління інноваціями, доцент, Університет Бергамо, Бергамо, Італія

Енкеледа Лулай | Доктор економічних наук та бухгалтерського обліку, доцент, Університет «Naxhi Zeka», Педжа, Косово

Мохаммад Ірфан | Доктор економічних наук, професор, Університет Чандігарх, Індія

Едіт Смоло | Доктор економічних наук за спеціальністю «Ісламські фінанси», доцент, Університет Еффат, Саудівська Аравія

Ненват Сріну | Доктор наук з менеджменту, доцент, Національний технологічний інститут імені Маулани Азада, Індія

Сянфен Чен | Доктор наук з управління та інженерії, професор, Школа менеджменту Фуданьського університету, Китай

Ахмед Імран Хунджра | Доктор економічних наук, доцент, Бізнес-школа IPAG, Франція

Дуглас Каммінг | Кандидат наук за спеціальністю «Економіка та фінанси», професор, Технологічний інститут Стівенса, США

Contents / Зміст

H. Kukel, A. Kraievska, L. Filatova

Transformation of current trends in the development of marketing communications
in the system of interaction between consumers and enterprises
in the infrastructure of the contemporary market..... 8

Г. Кукель, А. Краєвська, Л. Філатова

Трансформація актуальних трендів розвитку
маркетингових комунікацій у системі взаємодії споживачів
та підприємства в інфраструктурі сучасного ринку 8

F. Masunga

The development of small and medium enterprises in Tanzania:
The role of entrepreneurial skills 23

Ф. Масунга

Розвиток малих та середніх підприємств у Танзанії:
роль підприємницьких навичок..... 23

O. Degtiareva, T. Kuklinova, V. Slatvinska, V. Hura, O. Zadereiko

Risk-oriented product management of AI-based solutions in the energy sector..... 34

О. Дегтярьова, Т. Куклінова, В. Слатвінська, В. Гура, О. Задерейко

Ризик-орієнтоване управління продуктовими AI-рішеннями в енергетичній галузі 34

O. Adler

The use of Open Data for strategic planning of machine-building enterprises
in the context of innovative and sustainable development 46

О. Адлер

Використання Open Data для стратегічного планування підприємств
машинобудування в умовах інноваційного та сталого розвитку 46

R. Bertino Baabereyir, A. Sheitu, B. Edmund

The impact of energy-efficient architecture as a driver
of economic innovation and fiscal resilience in Ghana 61

Р. Бертіно Баабереїр, А. Шейту, Б. Едмунд

Вплив енергоефективної архітектури як рушія
економічних інновацій та фінансової стійкості в Гані 61

A. Okhrushchak

The role of digital transformation in the formation and development
of intellectual capital in telecommunications companies 74

А. Охрущак

Роль цифрової трансформації у формуванні та розвитку
інтелектуального капіталу телекомунікаційних підприємств..... 74

I. Yepifanova, T. Nechyporenko

The agility approach as an accelerator for developing
an organisation's dynamic resilience in ecosystem-based innovation management 89

І. Єпіфанова, Т. Нечипоренко

Agility-підхід як акселератор розвитку динамічної стійкості підприємства
в екосистемному управлінні інноваціями..... 89

V. Dzhedzhula

Agriculture and construction in the new security normality –
effects of mutual bioeconomic reconstruction: A review of Nina Petrukha's monograph..... 100

В. Джеджула

Сільське господарство та будівництво в новій безпековій нормальності –
впливи взаємної біоекономічної реконструкції: рецензія на монографію Ніни Петрухи..... 100

Transformation of current trends in the development of marketing communications in the system of interaction between consumers and enterprises in the infrastructure of the contemporary market

Halyna Kukel*

PhD in Economics, Associate Professor
Vinnytsia National Technical University
21021, 95 Khmelnytske Shose Str., Vinnytsia, Ukraine
<https://orcid.org/0000-0001-7699-5997>

Alla Kraievska

PhD in Economics, Associate Professor
Vinnytsia National Technical University
21021, 95 Khmelnytske Shose Str., Vinnytsia, Ukraine
<https://orcid.org/0000-0003-2812-6986>

Lyubov Filatova

PhD in Economics, Senior Lecturer
Vinnytsia National Technical University
21021, 95 Khmelnytske Shose Str., Vinnytsia, Ukraine
<https://orcid.org/0000-0001-7713-307X>

Abstract. Changes in the market structure and globalisation challenges necessitate the study of transformations in the field of marketing communications. The purpose of the study was to analyse the development of a contemporary marketing communications system, which is especially important in the context of increasing complexity of interaction between companies and various counterparties. This dynamic was compounded by shorter product life cycles, rapid changes in consumer preferences, and a decline in the effectiveness of conventional advertising methods. The paper focused on the method of epistemological analysis, which allowed establishing that marketing communications, being an organic component of the marketing complex, serve as a universal mechanism for influencing target audiences. Based on the analysis of statistical data, key trends in the development of marketing communications in the contemporary market were identified. The factors influencing the transformation of marketing communications tools were studied and ordered using the method of structural analysis of causal relationships. The results of the analysis helped to identify the stages of transformation of marketing communications tools within the levels of constructive changes: the level of emergence of new tools that co-exist with existing ones based on the principle of addition; the level of integration based on the unification, convergence, and interpenetration of various tools; the level of hybridisation of tools based on their multiplicity. It was established that these tools provide an opportunity to use the advantages of contemporary communication technologies and introduce innovative approaches. In addition, hybrid tools have contributed to improving the quality of interaction, and providing a higher level of mobility and adaptability of communication. The practical significance was to determine contemporary marketing communications, which is possible due to the emergence of the latest means of communication, which were integrated into interactive technologies, which helped not only to quickly obtain the necessary information,

Suggested Citation:

Kukel, H., Kraievska, A., & Filatova, L. (2026). Transformation of current trends in the development of marketing communications in the system of interaction between consumers and enterprises in the infrastructure of the contemporary market. *Innovation and Sustainability*, 6(2), 8-22. doi: 10.31649/vis/2.2026.08.

*Corresponding author (galskuk@gmail.com)



but also to analyse it, and compare it with other sources. The combination of conventional and innovative marketing communication tools ensured the company's effective operation in the market and helped attract new customers

Keywords: factors of influence; market environment; innovative marketing tools; hybrid tools; product promotion; advertising; target audience

Introduction

The rapid development of technologies and limited perception of digital information by consumers determine the need to create effective marketing impact formats. Despite the traditional emphasis on economic and statistical data, the transformation of communication tools also covers technological, psychological and informational aspects. In a dynamic market environment, the key factor of competitiveness is the introduction of current trends, in particular, the personalisation of interaction with customers. The use of the latest data collection technologies allows businesses to provide an individual approach and offer relevant solutions.

Leading Ukrainian researchers, studying the transformation of marketing communications in the context of digitalisation, pay special attention to the individualised approach as a tool for competitiveness. The study by S. Kovalchuk (2025) emphasised that personalisation is a key factor in creating a unique customer experience and keeping the audience in an environment of uncertainty, and analyses the transition from mass to personalised marketing and the use of digital channels for targeted impact on the consumer. N. Savytska (2022) considered the development of responsible communication and communication of personalised value to the client in conditions of war and global challenges. Research confirmed that communication has finally transformed from linear information to a complex interactive process, where personalisation was the foundation of trust and commercial success. Another notable trend is the integration of artificial intelligence (AI) into marketing. AI allows analysing large amounts of information, optimising advertising campaigns, and even predicting audience behaviour. This significantly improves the quality of customer interaction. Y. Makartseva & I. Lysenko (2025) considered the automation of marketing processes through conceptual approaches of artificial intelligence: substantiated the role of AI as a strategic tool for marketing automation, which ensured systematic growth of business competitiveness through hyperpersonalisation, predictive analytics, and optimisation of routine processes.

No less important is content marketing. High-quality, most useful and trusting content becomes the basis for building long-term relationships with the audience. Simultaneously, the focus is on video materials, live broadcasts, and exciting stories that attract attention and evoke emotions. Turkish researchers B. Mansour & M. Basal (2024) proved that successful digital content marketing not only increases sales, but also directly affects the development of ethical and environmentally responsible consumer behaviour, which is critical for sustainable business development. This is how the importance of environmental friendliness in marketing communications increases. Consumers are

increasingly favouring brands that support sustainable values and demonstrate responsibility to society. When discussing trends, the dominance of social media cannot be ignored. Platforms are constantly evolving, offering new formats, and users are looking for authenticity and direct communication with brands. All this confirms the importance of a flexible approach to building marketing strategies. Tracking trends and applying them effectively allows businesses not only to adapt to changes, but also to stay ahead of their competitors. In their joint study, Z. Solodukha & S. Leonova (2025) examined the use of digital tools, specifically the Google Ads and Meta (Facebook/Instagram) platforms, for promoting marketing agencies, analysing their effectiveness and differences, thereby enabling agencies to position themselves more effectively and attract clients.

Thus, marketing communications remain a constantly evolving tool that gives businesses the opportunity not only to interact with their audience, but also to build long-term relationships, adapting approaches to the requirements of a dynamic market. Marketing communications in reality is not just a tool, but an integral part of the success of any company. There are several ways to analyse communication concepts. The technocratic approach focuses on the technical aspects and means of transmitting corporate messages in accordance with approach by A. Toffler (2022). However, this approach does not consider the motivation and opinions of the audience as recipients of information, which creates a problem that requires further research. The interaction approach treats the process of forming communications as the result of interaction, which implies a conscious and equal dialogue between the consumer of information and its producer. Representatives of this approach were P. Guddemi (2020) and C. Cooley (2024), who emphasised the importance of information exchange based on the active participation of both sides of the communication process. However, since the approach was based on subjective feedback and interpretation, there were no clear quantitative metrics for evaluating the effectiveness of communication.

As part of the psychological approach, researchers in the field of communication focus on the process of interaction between people, which includes the exchange of information, perception, and emotional aspects of relationships. One of the leading contemporary sociologists, M. Castells (2023), who specialises in information society theory, draws on the latest advances in neuroscience, particularly in the field of emotional intelligence research, in the concept of "communication power". This allows effectively applying methods such as framing, priming, cascade activation, and other techniques for influencing the audience –

viewers, listeners, or readers. However, the issues related to determining the areas of transformational changes in the marketing communications toolkit on an interdisciplinary basis and their substantiation at a qualitatively new level are still insufficiently investigated. This refers not only to individual markets or industries, as is often practised now, but also about the level of globalised information space formed through cross-border contacts and actions.

The implementation of the main goal requires a theoretical understanding of the evolution of the role of communications in the marketing complex. The development of marketing concepts from the classic 4P model to the contemporary Marketing 5.0 has transformed the role of communications in the marketing complex. Initially, communication was just a tool that informed consumers about the product, but over time it has become an important component of the product itself, especially in the service sector. The expansion to 7P highlighted the importance of integrating communication at every point of contact with the customer, breaking the linear logic of traditional advertising. Contemporary trends caused by digitalisation, the development of social media and changing consumer behaviour have turned communication into a dialogical, personalised and axiological element that forms brand values and competitive advantages. These factors caused changes in marketing communications, giving them new characteristics: integration into all elements of the complex, two-way, personalisation due to AI and Big Data, adaptation to the context of interaction, and the ability to convey brand values. The interaction of communication and consumer experience is combined in innovative Phygital environments and Live Shopping, which determines the current state and future research of the global media market. Thus, the purpose of the study was to provide theoretical substantiation and comprehensive analysis of transformation processes in the marketing communications system, which are caused by digitalisation of the market environment and the need to build multi-level interaction with consumers in the global information space.

Materials and Methods

The methodological basis of this study was based on an integrated approach that combines general scientific and special methods of cognition for a comprehensive analysis of the evolution of marketing communications in the context of global digitalisation. The design of the study was structured in such a way as to provide a transition from theoretical understanding of concepts to empirical analysis of market indicators and forecasting future trends. At the initial stage of the research, the method of epistemological analysis was applied, which allowed considering marketing communications not just as a set of promotion tools, but as a complex, organic mechanism for influencing target audiences within the marketing complex. Within the framework of this method, a critical review of three fundamental scientific approaches was carried out: technocratic approach: analysis of technical means of transmitting

messages based on the studies by H. McLuhan (1962) and A. Toffler (2022). Interactive approach – the investigation of the dialogue between the producer and the consumer as equal participants – based on the papers by P. Guddemi (2020) and C. Cooley (2024). Psychological approach – the study of emotional aspects and neuroscience methods of influence (framing, cascade activation) – according to the concept of M. Castells (2023).

The methodological basis for interpreting empirical data in this section is the epistemological analysis applied at the initial stage of the study. Its theoretical result is a conceptual rethinking of the nature of marketing communications: they were considered not as a functional tool for promotion within the marketing complex, but as a system of constructing values that forms consumer experience and determines the behavioural responses of target audiences. The three scientific approaches – technocratic, interactive, and psychological – are not alternative theories, but successive stages in the evolution of the communicative paradigm, each of which is reflected in the corresponding segment of the contemporary media market: technocratic logic describes conventional media (TV, Print) that are steadily losing share; interactive – social media and content marketing with steady growth; psychological – GenAI Ads, Live Shopping, and Phygital practices as the most dynamic tools of the new generation. Thus, the statistics below are interpreted as empirical evidence for a deeper transformation: from a technical channel monologue – through a dialogue of equal actors – to interactive construction of a shared experience in real time.

At the second stage, the method of structural analysis of causal relationships was used to identify the factors that cause changes in the market infrastructure. This allowed classifying the factors of influence into six key groups: technological (automation drivers), socio-behavioural, economic, regulatory, globalisation, and concentration according to O. Yastremska (2025) and I. Ivanenko (2020). The focus was on analysing technology drivers such as artificial intelligence, machine learning, and Big Data that enable the transition from mass campaigns to hyper-personalised advertising trajectories. At the third stage, the empirical basis of the study was a statistical analysis of the dynamics of the global media market for the period 2020–2025, using forecast data for 2026. The sources were based on reports from leading analytical agencies: Statista (n.d.), Mordor Intelligence (n.d.), WPP Media (2024) and Dentsu (2025). The analysis of these data allowed investigating the dynamics of market volumes, the pace of changes in its key segments (Digital, TV, OOH, Print) and verifying the key stages of evolutionary transformation: from the pandemic leap to the era of algorithmic management.

In addition, by interpretive synthesis of diagnostic results and theoretical developments (Savvytska, 2022; Kotler *et al.*, 2024; Kovalchuk, 2025), a conceptual model of the “Dominance Triad” of the contemporary market was formed. This allowed developing practical recommendations for improving the efficiency of business processes

through the introduction of innovative and hybrid communication tools. The choice of key elements of the “Dominance Triad” (AI, Social Media, Retail Media) was based on the use of a three-level logical filter, through which all identified trends in the media market passed. The main criteria for determining these elements as determinants were: the criterion of scalability and market share, the criterion of synergy and interdependence, the criterion of transformational potential. Scalability and market share determined the inclusion in the Triad of only those segments that were able to accumulate a critical mass of capital. Artificial intelligence algorithms became the basis for 80% of digital spending, and Social Media and Retail Media collectively covered more than 70% of the global advertising budget.

Synergy and interdependence allowed selecting elements based on the principle of forming a closed ecosystem. The applied logic filter eliminated isolated trends, such as conventional radio or the press, due to the lack of direct integration connection with the AI technological basis and the inability to provide instant conversion to sales. The transformational potential became the basis for identifying tools that ensure the transition from a linear to a cyclic communication model. Unlike classical media, which perform only the function of informing, the selected components of the Triad simultaneously implement personalisation, emotional engagement, and direct transaction. Thus, stable but static channels (for example, conventional OOH Out-of-Home advertising) did not pass through the logical filter, since they did not meet the criterion of full algorithmisation and were not autonomous sales ecosystems. A three-step data analysis procedure (2020-2026) was used to quantify the choice of AI, Social Media, and Retail Media as key dominants. This helped to transform

the list of market trends into a conceptual model, where each element is confirmed by specific indicators of market capacity and cost dynamics. At the final stage, the method of comparative analysis was used to identify the stages of transformation of marketing communications tools within the levels of design changes: the level of addition, the level of integration, and the level of hybridisation. To illustrate these changes, the study analysed the use of digital tools, in particular, Google Ads and Meta platforms, and cases of Retail Media (Amazon, Walmart) and hybrid media (Programmatic DOOH, Shoppable TV).

Results and Discussion

In the context of global transformations, there is always a growing interest in trends and innovations in the field of marketing. And this is quite justified, because the analysis of innovations in digital marketing, technologies and platforms allows marketers to identify new opportunities. This not only helps to maintain the stability of the company, but also helps to stay ahead of the competition. That is why it is important to constantly monitor trends and innovations, especially in the context of digital marketing. Every year, the development of technology brings new tools for Internet marketing: some evolve, while others remain relevant for many years. Monitoring the capacity of the global media market aims to form a complete picture of the competitive environment and assess the level of capital concentration in the segments of contemporary communications. It was advisable to analyse the state of the global communication market, investigate the dynamics of its development for the period 2020-2025, considering the forecast data for 2026 and determine the key reasons for the changes that occurred (Table 1).

Table 1. Dynamics of the global media market development in 2020-2025

Tools of marketing communications	2020 billion USD	2021 billion USD	2021/2020, %	2022 billion USD	2022/2021, %	2023 billion USD	2023/2022, %	2024 billion USD	2024/2023, %	2025 billion USD	2025/2024, %	2026 billion USD	2026/2025, %
Digital advertising:	350.5	486.0	+38.7	567.5	+16.8	626.8	+10.5	721.2	+15.1	781.2	+8.3	860.5	+10.2
- Search ads	135.2	180.4	+33.4	212.1	+17.6	245.5	+15.7	315.4	+28.5	350.2	+11.0	390.8	+11.6
- Social media	102.5	148.6	+45.0	175.2	+17.9	198.4	+13.2	230.1	+16.0	255.4	+11.0	288.6	+13.0
- Retail Media	45.0	72.3	+60.7	98.4	+36.1	125.6	+27.6	154.2	+22.8	177.1	+14.8	210.5	+18.9
Television (Linear TV)	160.2	172.4	+7.6	168.3	-2.4	160.2	-4.8	158.4	-1.1	155.1	-2.1	152.4	-1.7
Out-of-home advertising (OOH)	30.5	34.2	+12.1	38.5	+12.6	42.1	+9.4	48.5	+15.2	52.0	+7.2	54.8	+5.4
Audio (Radio & Podcasts)	25.4	27.6	+8.7	28.1	+1.8	27.5	-2.1	26.8	-2.5	26.5	-1.1	26.2	-1.1
Print media	52.1	48.5	-6.9	45.2	-6.8	42.8	-5.3	46.5	+8.6	45.5	-2.2	42.3	-7.0
TOTAL	618.7	768.7	+24.2	847.6	+10.3	899.4	+6.1	1,001.4	+11.3	1,060.3	+5.9	1,136.2	+7.2

Source: compiled by the authors based on Statista (n.d.), Mordor Intelligence (n.d.)

Indicators and growth rates have a steady positive trend. In six years, the total market volume will almost double – from USD 618.7 billion in 2020, to the projected USD 1,136.2 billion until the end of 2026. According

to WPP Media (2024), the turning point was 2024, when the market first exceeded the psychological mark of USD 1 trillion. Achieving this result was made possible by the combined impact of large-scale sporting events, such as the

Olympic Games and Euro 2024, and the rapid introduction of AI tools in the field of advertising. The average annual growth rate has reached a stable level after a sharp one-time jump of 24.2% in 2021. In the following years, the market develops at a rate of 6-11% annually, showing steady and steady growth. According to the data provided in Table 1 (Statista, n.d.; Mordor Intelligence, n.d.) the global media market is in a state of deep structural transformation, characterised by the gradual displacement of conventional media by digital tools.

Analysis of the dynamics of Linear TV shows a stable recession of this channel with an average annual reduction in coverage at the level of 2%. If in 2020 the share of television advertising was about 26% of the market, then according to the forecast indicators by 2026 it differentiates to 13%. Even more rapid degradation was observed in the print media segment. Despite the short-term stabilisation in 2024, volumes were projected to fall further by 7% by 2026, which indicates the transition of print advertising to highly specialised niche segments (Mordor Intelligence, n.d.). The digital advertising market is developing unevenly, which has contributed to the growth of several key areas. According to Table 1 (Retail Media), there were highest growth rates – from an impressive 60.7% to a stable 18.9% annually. This dynamic indicates a change in the strategy of brands that are increasingly investing in platforms such as Amazon, Walmart or Glovo, reducing the chain to the final purchase (Statista, n.d.).

Search advertising remains an important component of advertising budgets and is steadily growing by 11-15% annually. This is facilitated by the integration of generative artificial intelligence into search algorithms (Mordor Intelligence, n.d.). According to Statista (n.d.) out-of-home advertising (OOH) has demonstrated high adaptability. Despite a major downturn in 2020, the industry has recovered rapidly and is growing by 5-15% annually. A key role in this is played by digital out-of-home advertising (DOOH), which, due to the use of digital screens and purchasing programmes, provides greater efficiency and flexibility. Dynamic analysis of growth rates allowed identifying the “leading” market segments by calculating average annual indicators. The applied logical filter eliminated areas with growth below the average market level (6-11%), but verified Retail Media (growth to 60.7% in 2021 and stable 18.9% in 2026) and Social Media (11-13% annually) as key drivers of expansion. Market concentration analysis based on Statista data (n.d.) and WARC (n.d.) set the level of capital accumulation in segments. The defining criterion for inclusion

in the “Triad” was the ability of the media channel to control a significant market share, which is confirmed by the concentration of more than 70% of advertising spending in the Alphabet, Meta, and Amazon ecosystems. A correlation analysis of technological impact has confirmed the role of artificial intelligence through the proportion of algorithmic (Programmatic) advertising within the digital advertising landscape. The forecast figure of 85% by 2026 served as empirical evidence that AI acts as a fundamental technological basis (“Vector A”) for the entire contemporary media market. The study of trends in the development of the global advertising market for the period 2020-2026 demonstrated a significant transformation in the field of marketing communications. The market not only recovered from the effects of the pandemic, but also underwent drastic changes, moving from the concept of “digital support” to a full-fledged “digital-first” model.

Analysing structural changes in the media market and the redistribution of Statista influence (n.d.), key trends can be identified: Rapid expansion of digital channels (+19.1%) demonstrates the fastest growth in the history of the media market. Digital platforms have largely supplanted television and the press, and the Digital segment itself is undergoing a transformation from classic banner ads to integrated ecosystems. The growth of Retail Media’s advertising power, according to Dentsu (2025), is turning marketplaces into one of the key market players. If in 2020 advertising within marketplaces was more of an additional tool (7.3%), then by 2026 it will become one of the three leading advertising forces, almost equal in impact to television. The crisis of traditional television (-12.5%) and a significant reduction in its market share indicate that this media channel has lost its status as the main tool for reaching the audience. Advertising budgets were actively moving to Connected TV (smart TVs) and social video platforms such as TikTok or YouTube, which are ranked in the Digital segment in this analysis. The stability of out-of-home advertising (OOH) allows this channel to maintain its share at the level of (~5%). The advantage of out-of-home advertising is that it organically complements mobile screens in real space, and does not compete with them. Conventional media such as television, radio, and the press are finally becoming additional tools for working with niche audiences or specific regional markets. Summary Table 2 illustrates the redistribution of global advertising budgets from conventional media to top three algorithmic ecosystems (2021-2026), reflecting their share in digital spending and the level of capital concentration.

Table 2. Structure of capital allocation
of global advertising budgets between key ecosystems 2021-2026

Ecosystem (technology leader)	2021 % / billion USD	2022 % / billion USD	2023 % / billion USD	2024 % / billion USD	2025 % / billion USD	2026 % / billion USD	Role in the capital structure
Alphabet (Google)	22.1 % 147.6	22.8% 165.8	23.5% 189.4	24.0% 216.7	24.5% 243.1	25.0% 325.0	Dominance in search and AI algorithms
Meta (FB/Insta/ WhatsApp)	18.5% 123.6	16.4% 119.2	17.9% 144.3	19% 171.6	19.8% 196.4	20.0% 260.0	Monopoly on social capital and attention

Continued Table 2

Ecosystem (technology leader)	2021 % / billion USD	2022 % / billion USD	2023 % / billion USD	2024 % / billion USD	2025 % / billion USD	2026 % / billion USD	Role in the capital structure
Amazon (Retail Media)	8.2% 54.8	10.4% 75.6	11.2% 90.3	11.5% 103.8	11.8% 117.1	13.0% 169.0	Conversion to transactions and First-party data
Concentration coefficient (CR ₃)	48.8% 326.0	49.6% 360.6	52.6% 424.0	54.5% 492.1	56.1% 556.6	58.0% 754.0	Level of market oligopolisation
Herfindahl- Hirschmann Index (HHI)	897.9	896.9	1,005.9	1,069.2	1,131.5	1,194.0	Moderate but increasing concentration
Other players (Microsoft, TikTok, Apple)	51.2% 342.0	50.4% 366.4	47.4% 382.0	45.5% 410.9	43.9% 435.6	42.0% 546.0	Fragmented segment of niche platforms
TOTAL (BigTech + Others)	100% 668.0	100% 727.0	100% 806.0	100% 903.0	100% 992.2	100% 1,300.0	Global Digital market

Source: compiled by the authors based on Statista (n.d.), WARC (n.d.)

The described dynamics of share redistribution between channels is only an external manifestation of a deep transformation of the ownership structure and control in the media market. To move from a descriptive analysis of market trends to a fundamental scientific assessment of the dominance of individual subjects, the study uses tools for quantitative analysis of capital concentration. Based on retrospective data from Statista (n.d.) and Dentsu's forecasts (2025), it is clear that this is not just a diversification of channels, but a critical consolidation of financial resources within a limited circle of global technology ecosystems. The methodological basis for verifying this dominance was the concentration coefficient (CR₃) and the Herfindahl-Hirschmann Index (HHI). The concentration ratio of the three firms, calculated as the arithmetic sum of the market shares of the three largest ecosystems (Alphabet, Meta, Amazon), shows a steady trend towards oligopolisation of the market. The combined share of these players in 2025-2026 reaches critical values: from 56.1% (USD 556.6 billion) in 2025 to the projected 58.0% (USD 754 billion) in 2026. An increase of 9.2 percentage points compared to 2021 (48.8%) mathematically confirmed that "top-3" absorbs more than half of the world's advertising capital, forming a market with a rigid oligopolistic structure. The analysis of the Herfindahl-Hirschmann Index (HHI) records a qualitative transition of the media market from the category of "low-concentrated" to "moderately concentrated". An increase in the index from 897.9 in 2021 to 1,194.0 in 2026 indicates overcoming the critical mark of 1,000 units in 2023, which, according to international anti-monopoly standards, signals the stabilisation of the oligopoly. The most significant contribution to the dynamics of HHI is provided by the expansion of Amazon, whose market share increased almost 1.6 times (from 8.2% to 13.0%). Since the index equation gives more mathematical weight to players with a higher share, strengthening the positions of the third participant in the top-3 is a key factor in the system stabilisation of the oligopolous model.

This transformation of market logic leads to the emergence of the phenomenon of "algorithmic rent", where ad-

vertisers are forced to pay not only for contact with the audience, but also for the right to priority bypass artificial intelligence filters. In these circumstances, First-party data ownership and the ability to adapt advertising content to the dynamic requirements of Big Tech software code become the only levers of influence on the effectiveness of communication. As a result, the strategic advantage in the 2026 market is shifting from creative agencies to technology integrators that can ensure seamless brand integration into the closed ecosystems of top-3. In addition, the displacement of independent players to the periphery of the media space (up to 42.0% of the market) radically narrows the field for experimental and niche strategies, as the algorithmic standards of Google, Meta, and Amazon establish unified rules of the game for the entire industry. Any market entity that does not comply with the technical protocols of the dominants actually becomes "invisible" to the consumer, regardless of the quality of its product or the ideological content of advertising. This completes the development of a "managed attention" model, where the boundaries of consumer experience are determined not by demand, but by the bandwidth and commercial priorities of three key algorithms. As a result of research by Dentsu (2025) and Statista (n.d.), by 2026, the advertising landscape will be transformed into a "Dominance Triad" format based on three defining segments. The first component is large-scale algorithmisation, according to which more than 80% of digital advertising costs will be carried out using artificial intelligence tools. The second area is associated with a steady increase in the popularity of social media, where the consumption of video content through Social Video and Connected TV provides double-digit growth rates (11-13%) against the background of a decrease in the share of conventional television. The third priority is the focus on efficiency, which is manifested in the dominance of the Retail Media segment, which provides direct conversion to sales and gradually displaces methods of mass audience reach. The conceptual model of transformation of the communication market is presented in Figure 1, which is based on the interdependence

between the technological basis (AI algorithms), the distribution environment (social media) and the final perfor-

mance (Retail Media), which together form a closed ecosystem of effective marketing interaction.

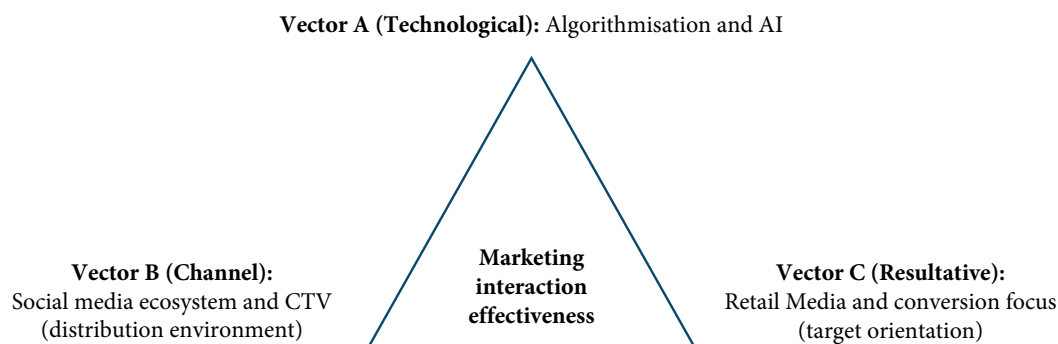


Figure 1. Conceptual model of the “Dominance Triad” of the advertising market

Source: compiled by the authors

The conceptual model is based on the synergy of three key dominants, where algorithmisation acts as a fundamental technological driver that ensures automation and accuracy of budget allocation. The relationship between algorithmisation and social media is implemented through video content personalisation mechanisms (TikTok, Reels, CTV), which allows transforming the emotional engagement of the audience into predictable reach.

In turn, the integration of social media with the retail media segment closes the communication cycle, ensuring the transition from the development of interest to the direct act of purchase (direct conversion). Thus, the priority of efficiency becomes an integration factor that forces companies to abandon mass coverage strategies in favour of tools based on Big Data processing and provide a measurable contribution to enterprise revenue. The presented model demonstrates the transition from a linear to a cyclical marketing communication system, where each element enhances the other: AI optimises costs, social networks generate traffic, and Retail Media monetises it in real time. The classic concept of the 4P marketing complex in the study by W. Perreault *et al.* (2021) assigned communications (Promotion) the role of the fourth, functionally subordinate element. The logic was simple: first, a Product is created, a Price is set, a sales channel (Place) is formed, and only after that a message about the finished value is developed. Communication in this model was the final link in the unidirectional chain: producer – message – consumer. Its job is to inform and convince, but not to create value on its own. The first impulse to rethink this role came with the development of the service sector. The 7P model based on research by V. Zeithaml *et al.* (2023), expanded the complex at the expense of People, Process and Physical Evidence, effectively recognising that in services, communication is inseparable from the product itself – each point of contact with the consumer is both an act of providing a service and a communication act. This destroyed the linear logic of 4P: communication no longer “serves” the product – it is partly a product.

Digitalisation has eliminated information asymmetry. In the industrial age, the manufacturer controlled information about the product – advertising was a mechanism for transmitting it to the consumer, who did not have alternative sources of verification. The Internet has radically changed this balance: the consumer has access to reviews, comparisons, and independent reviews. Consequence: classic advertising as a “product message” has lost its credibility. Communication was forced to evolve from conveying facts to forming context and meanings around the brand. This is what reflects according to Statista (n.d.) statistical reduction of traditional media (television – from 26% to 13% of the market in 2020-2026) and growth of content marketing and influence marketing as tools for building trust. The consumer’s activation through social media has transformed them from a passive recipient of messages to an active participant in the communication process. Along with vertical communication “brand – consumer”, a horizontal “consumer – consumer” was formed. UGC, ratings, and social media recommendations have become an independent communication channel that the brand does not control, but cannot ignore. Therefore, marketing communications have acquired a new feature – decentralisation: the brand is no longer the only source of self-message. This explains the dominance of Social Media in the structure of digital spending (USD 255.4 billion in 2025) and the growth of Retail Media, where a trust signal is generated directly at the place of purchase (Statista, n.d.).

Changing consumer identification behaviour. Post-industrial society has formed a new consumer logic: the product has ceased to be just a utilitarian object and has become a marker of identity, belonging to the community and a carrier of values. The study by M. Castells (2023) in the context of the “power of communications” show that the contemporary consumer chooses a brand not by product characteristics, but by what picture of the world this brand conveys. This trend is particularly pronounced in Generations Z and Alpha: according to J. Rude (2026), they shape

consumer priorities through digital ecosystems, where values are communicated through experience, not messages. The consequence is that communications acquire axiology – the ability to translate and form a value system as a competitive advantage of the brand. The combined effect of these factors led to the acquisition of qualitatively new characteristics by marketing communications, which fundamentally distinguish them from the classic Promotion in the 4P model. System-forming – communications permeate all elements of the marketing complex: they form the perception of a product even before its consumption, justify the price position through the value narrative, and are themselves part of the distribution experience (Shoppable TV, Retail Media). In the concept of Marketing 5.0 (Kotler *et al.*, 2021), communications actually become the platform on which the entire marketing complex is implemented. Two-way and dialogicity – instead of a brand monologue, there is a constant, non-linear exchange between the brand and the consumer, where the line between the sender and recipient of the message is blurred. Personalisation – transition from mass campaigns to individual communication trajectories due to Big Data and generative AI. Contextuality – message adapts to the situation, behaviour, and location of the consumer (Programmatic DOOH, targeted advertising). Axiological – communications translate and construct a brand value system as a determining factor of choice for the contemporary consumer. Integration into experience – the communication act and consumer experience have merged: Live Shopping, AR practices, and Phygital

environments make the communication process itself an element of the product offering.

The evolution of marketing communications from the fourth element of 4P to the system-forming platform of the marketing complex is a natural reflection of deeper transformations: the disappearance of information asymmetry, consumer activation, and changes in the nature of consumer choice. It is this logic that explains why according to A. Nanji (2025), the concentration of more than 56% of advertising budgets in three technology ecosystems (Alphabet, Amazon, Meta) is not an anomaly, but a pattern: these platforms simultaneously provide all new features of communication – personalisation, contextuality, dialogicity, and integration into the consumer experience. Hybrid tools cover the entire path of the consumer (Full funnel) precisely because communication is no longer a separate phase of marketing – it is its continuous environment. The marketing communications market is a component of the economic system and develops in accordance with the basic laws of the market economy, meeting public demand for communication services. Considering the results of diagnostics of the global marketing communications market and summarising the research (Ivanenko, 2020; Kotler *et al.*, 2024; Yastremska, 2025), the factors that determine the vector of market development and determine the diversification of marketing communications tools can be divided into technological, social, economic, regulatory, globalisation, and concentration. Figure 2 illustrates a set of factors that determine the area of development and transformation of the tools of the contemporary marketing communications market.

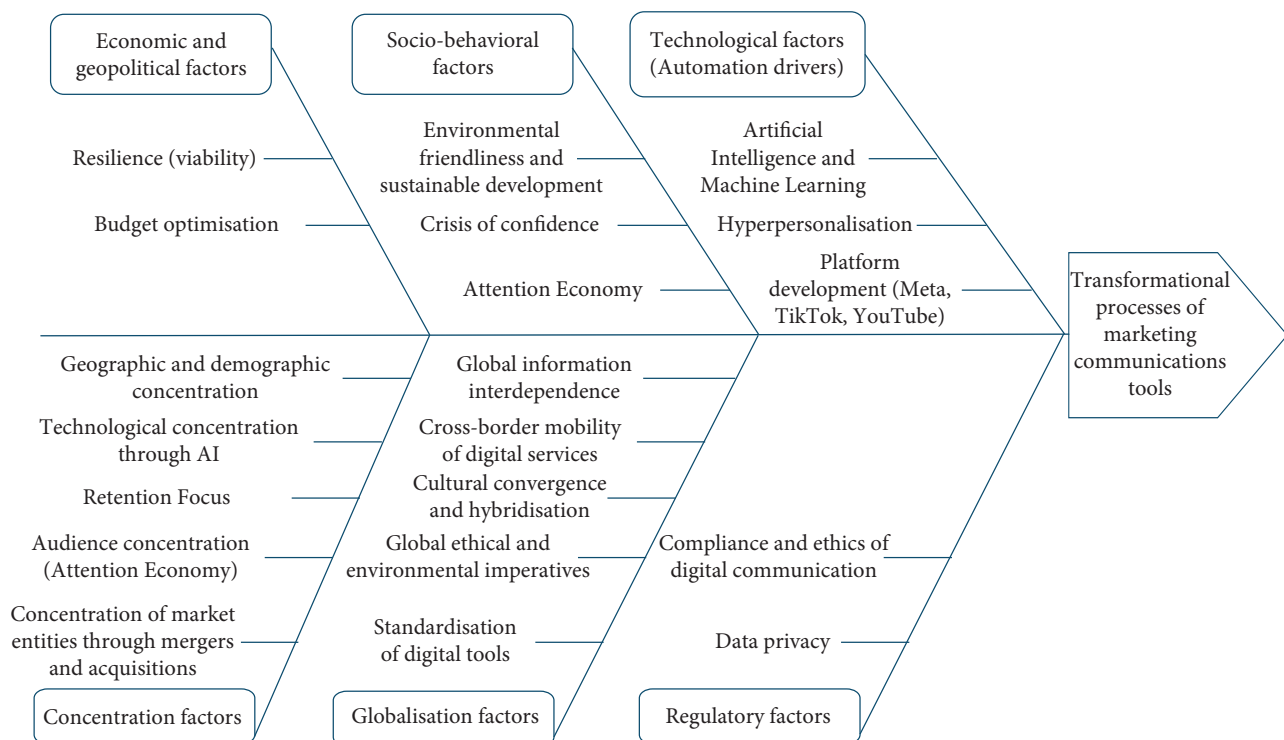


Figure 2. Generalisation of factors influencing the marketing communications market

Source: compiled by the authors

Thus, among the technological factors (automation drivers), it is necessary to note: artificial intelligence and machine learning (transition from static planning to dynamic content that adapts to the user in real time); hyperpersonalisation (the ability to process Big Data allows creating individual advertising trajectories instead of mass campaigns); development of Meta, TikTok, YouTube platforms (changing the algorithms for issuing content forces brands to switch from direct advertising to entertainment and information format (edutainment)). Socio-behavioural factors include: environmental friendliness and sustainable development (consumers in 2026 prefer brands whose communications convey the values of environmental preservation and ethics); a crisis of trust (the growing importance of the “human face” of business, which encourages the development of influence marketing and content marketing as tools for building long-term relationships); the economy of attention (reducing user concentration time is a trend of short videos that requires maximum brevity and visual saturation from communications).

Economic and geopolitical factors cover several key aspects. Resilience. For Ukraine, this aspect is critically important, given the need to adapt communication systems to the conditions of war, energy blackouts, and changes in the demographic composition of the audience. Methods of rapid and effective adaptation ensure the stability of functioning against the background of serious shocks. Optimisation of budgets. This includes switching to tools with an increased return on investment (ROI), such as targeted advertising, and automated sales systems. Automated sales funnels are digital platforms that independently guide the customer through all stages – from getting acquainted with the product to making a purchase. Such systems act as a stand-alone marketing mechanism, replacing the manual work of managers: instead of phone calls to each potential client, they automatically send personalised messages, show current offers, discounts or advertising depending on user behaviour.

Regulatory factors cover a number of critical aspects. Special attention was paid to data privacy: strict rules for processing personal information (for example, the GDPR) force marketers to look for new communication methods that guarantee privacy protection. Simultaneously, the role of compliance and ethics in the digital space is growing. Increased control over the content of advertising is becoming a tool for combating disinformation, fakes and manipulative technologies, in particular deepfakes. This provides for the introduction of mandatory labelling of advertising materials, for example, in the content of bloggers, and identification of the use of artificial intelligence in creative processes. In addition, there are strict industry restrictions on advertising sensitive products and services, including gambling and pharmacy. The Ukrainian advertising legislation, updated in accordance with European standards, focuses on transparency of the sources of origin of advertising information as one of the key conditions for establishing audience trust.

These issues are particularly relevant in the context of digital transformation, as government regulators and large

commercial platforms such as Meta and Google are becoming less tolerant of using “grey” promotion methods. This forces businesses to refocus on transparent white-hat marketing strategies based solely on ethical practices. Therefore, the main area of development is the evolution from a transactional communication model (focused on the direct sale of a product or service) to an interactive model. The latter was aimed at creating a dialogue and shared values between the brand and the consumer. In this process, artificial intelligence technologies play the role of a tool for scaling interaction and improving its effectiveness. In 2026, globalisation factors were becoming a powerful engine for the transformation of marketing communications, blurring the boundaries between local and international markets. Thus, globalisation factors of influence contain several key aspects. Standardisation of digital tools. Due to the dominance of global platforms such as Meta, Google, TikTok, and Amazon, the methods of promoting content in the world were unified. Marketing agencies in Ukraine used the same targeting algorithms as companies in the United States or Europe, which creates the need for specialists to work according to common international standards.

Global ethical and environmental imperatives. The global focus on sustainability forces companies to adapt their communications to the requirements of the global community. Environmental responsibility in marketing is becoming a prerequisite for entering international platforms. Cultural convergence and hybridisation. The spread of global content contributes to the development of universal consumer habits, such as the popularity of short video formats, but simultaneously there is a growing need for globalisation – adapting global strategies to the local cultural context without losing authenticity. Cross-border mobility of digital services. Crises – economic, military, or environmental – instantly become part of the global information field. This obliges brands to respond quickly and clearly to such events in their strategies, showing a high level of social responsibility. Thus, it can be stated that globalisation is transforming marketing communications into a universal business language. Those who integrate innovative technological standards faster, while remaining true to universal values and adhering to ethical standards, will be able to win here.

Concentration factors in marketing communications as of 2025-2026 determine the conditions under which market resources and consumer attention are focused within a limited range of platforms and channels of interaction. According to the leading research presented in reports by G. Crossan *et al.* (2025) and WARC (n.d.), there are several main factors that determine this trend. The concentration of market participants through mergers and acquisitions becomes critical. Corporate mergers allow companies to centralise budget spending on marketing, which is especially important in the oversaturated advertising environment of 2026. In this context, the dominance of Google (Search), Meta (Facebook/Instagram) and Amazon, which are set to account for over 70% of global advertising spend in the period 2025-2026, according to A. Nanji (2025),

significantly restricts the choice of channels for businesses. This, in turn, forces organisations to adapt their strategies in accordance with the algorithms of major players in the digital market. The audience's attention economy dictates new rules of the game. According to WARC (2025), consumers prefer to consume content in the short video format, which is typical for the TikTok, Instagram Reels, and YouTube Shorts platforms. This forces brands to develop content with maximum information saturation in the first seconds of interaction with the audience.

It becomes a priority to focus on loyalty (Retention Focus). In the context of the growing cost of attracting new consumers (Customer Acquisition Cost) during 2025-2026, companies are reorienting to invest in retaining an existing audience, actively using CRM communication tools. The next factor is related to technological concentration through AI. Automation of content marketing through AI-based models and the dominance of programmatic advertising is becoming a key trend. In particular, according to data by A. Guttman (2025), programmatic advertising in 2026 will generate approximately 85% of the global digital advertising market's revenue, demonstrating the transition to algorithmic management. The last significant factor is the regional and demographic aspects of concentration. According to forecasts of J. Rude (2026), the Alpha generation will reach 24% of the world's population and actively integrate into digital ecosystems, including gaming platforms and meta-universes, which will shape their cultural and consumer priorities. The general conclusion for the business is that the combined influence of these factors leads to the development of the "winner gets everything" conditions. This means that brands that do not have sufficient resources to operate on leading platforms or do not use artificial intelligence and automation tools risk losing their competitiveness and visibility in the global and local information space.

A comprehensive analysis of the dynamics of the global media market and the determinants of the impact on the marketing communications system allows verifying the key stages of their evolutionary transformation in the context of digitalisation of the economic space. 2020-2021 (pandemic jump): Lockdowns caused a sharp transition of budgets to online. According to Oberlo (n.d.) in 2021 alone, total digital advertising spending increased by 30%. 2022-2023 (correction and stabilisation): the market has adapted to the new data privacy conditions. Social networks and search advertising have consolidated the status of the main channels. 2024-2025 (era of algorithms and AI): marketing has become hyper-personalised due to generative AI. The main drivers were video content (TikTok, Reels) and Retail

Media (advertising directly on marketplaces like Amazon). The transformational paradigm of the global media market in 2025-2026 is determined by four dominant vectors. High level of market concentration: development of an oligopolistic capital distribution structure, where according to A. Nanji (2025), more than 56% of global advertising budgets are accumulated in the ecosystems of technology leaders (Alphabet, Amazon, Meta), which determines the dependence of marketing strategies on the algorithmic standards of these platforms. Mobile-first dominant (mobile marketing): the final consolidation of the mobile segment as a priority communication channel (according to Statista (2026) more than 70% of total digital spending), which requires adapting content to the specifics of mobile consumption. Multimedia format transformation: the dominance of short-form video as the most relevant tool for converting and attracting an audience, reflecting changes in cognitive patterns of information perception.

The modern evolution of marketing tools is characterised by blurring the boundaries between traditional and digital channels, which leads to the emergence of hybrid media and autonomous intelligent systems (Emerging Tech). The first category includes converged solutions such as Programmatic DOOH, which transforms out-of-home advertising into an adaptive system based on real data (traffic, geo-positioning), and Shoppable TV (Connected TV), which provides direct integration of e-commerce into TV content, combining emotional reach with instant transaction. A special place is occupied by Phygital-practices where augmented reality (AR) technologies create additional value for a physical product through digital interactivity. In parallel with hybridisation, there is the emergence of a new generation of autonomous tools: Retail Media Networks (RMN), which function as closed ecosystems with unprecedented accuracy of consumer data; GenAI Content Engines, which implement the transition from mass targeting to algorithmic hyper-personalisation of creatives in real time; and Social Commerce (Live Shopping), where entertainment content is directly converted into the act of purchase. The synergy of these tools forms a new marketing communication architecture focused on the continuity of the customer experience and maximum automation of the decision-making process. Thus, based on the analysis of market dynamics in 2020-2026, the emergence and consolidation of new marketing tools can be distinguished. They emerged at the intersection of technology (AI, Big Data) and changing consumer behaviour. A special place is occupied by hybrid tools that blur the boundaries between the online and offline environment (Table 3).

Table 3. Comparative table of characteristics of new key tools

Tool	Type	Key advantage	Role in sales growth
Retail Media	Digital	Access to real transaction data	Lower part (Sale)
Programmatic DOOH	Hybrid	Flexibility and contextuality in offline mode	Upper part (Coverage)
Shoppable TV	Hybrid	Direct transition from view to receipt	Full funnel
GenAI Ads	Technological	Infinite variety of creatives	Middle part (Interest)

Source: compiled by the authors

The conclusion of the presented study on the transition to the “digital-first” model and the growth of the share of digital advertising from 56.6% in 2020 to the projected 75.7% of the market in 2026 was confirmed by a systematic review of M. Cioppi *et al.* (2023), which covered 117 articles and found that digital transformation changes marketing processes simultaneously in three dimensions: the expansion of ICT communication channels, the ability to interact with customers in real time, and the development of new relationships between producers and consumers. This study is methodologically close to the conducted research: both applied a review of scientific literature and an analysis of statistical trends. However, there is a significant difference: the above-mentioned review covered publications in 2014-2020 and captured the initial stage of the digital transition, while this study documented a qualitatively new stage – 2020-2026 – with the transition to algorithmic control and AI dominance, that is, it is a chronological continuation and deepening of this review. A similar position was occupied by V. Nesterenko *et al.* (2023), where the researchers recorded a decrease in the effectiveness of conventional mass marketing and the growth of personalised digital formats, which directly confirmed the identified statistical trend of reducing the share of television from 26% to 13% of the market. However, researchers focused mainly on the qualitative description of the phenomenon, while the conducted research verified it quantitatively through the analysis of the dynamics of the media market in 2020-2026 and offered a conceptual model (“Dominance Triad”) to explain the identified patterns.

The central thesis of the presented study on hyperpersonalisation as a key technological trend is consistent with the results of B.B. Gao *et al.* (2023), who systematised the role of AI in advertising in four areas: targeting, personalisation, content generation, and ad optimisation. The researchers proved that it is personalised recommendation systems that have become an indispensable tool for Internet platforms, which confirms the conclusion about the dominance of algorithmic purchases (more than 85% of digital advertising revenue in 2026 is programmatic). Simultaneously, the researchers focus on the technical aspect of AI advertising systems, while the outlined study considered algorithmisation in the broader context of the transformation of the marketing complex from 4P to Marketing 5.0, linking the technological trend with the change in the very nature of communication.

V. Shankar *et al.* (2022) conducted a large-scale review of digital marketing communications in global marketplaces and found that the effectiveness of digital tools significantly depends on the degree of inter-channel data integration. This finding correlates with the concept of the “Dominance Triad” presented in the study: algorithmisation, social media, and retail media are complementary forces, not competing. The difference is that researchers were limited to the horizon until 2021, while this study covered 2022-2026 and recorded the emergence of fun-

damentally new hybrid formats – Shoppable TV and Programmatic DOOH – that were not considered before. T. Teepapal (2025) investigated the impact of AI personalisation on consumers’ perception of social media and found that value and trust are key mediators between personalised content and purchasing intentions. The study confirms the thesis about the axiological function of contemporary communications: consumers react not to product characteristics, but to the semantic context that forms the brand. Simultaneously, the researcher considered only the level of individual psychological dynamics, while the presented study offered a broader market perspective – explained why psychological mechanisms determine the concentration of 56% of budgets in three ecosystems.

The trend of dominance of short video content (TikTok, Reels, Shorts) and its double-digit growth rate (11-13% annually) revealed was confirmed by X. Shen & J. Wang (2024). The researchers found that the user’s personal identification with the content author through shared values is a key mediator between video perception and purchasing intentions, which empirically confirms in the study the theoretical thesis about the axiological function of contemporary marketing communications. P. Yin *et al.* (2024) examined consumer behaviour in social commerce video streams and found that atmospheric (emotion, social presence) and capital (quality and quantity of information) characteristics of the platform shape purchasing intentions through affective and rational ways simultaneously. This conclusion complements the proposed concept: hybrid tools (Live Shopping, Shoppable TV) are effective precisely because they affect both channels of decision-making – which is a practical confirmation of the psychological approach (M. Castells), declared in the methodology of the presented study.

W. Jiang & H.-L. Chen (2025) analysed the impact of short videos on consumer behaviour through the use and gratification theory and social presence theory, and found that digital dependence mediates the relationship between content value and purchasing intent. It is noteworthy that the researchers attribute the growth of dependence to algorithmic personalisation of TikTok, which directly confirms the conclusion that algorithmisation is the first and defining component of the “Dominance Triad”. Z. Huang *et al.* (2024) found that social presence in Live Shopping positively affects customer satisfaction and well-being and is a mediator between the stream’s atmosphere and repeat shopping intentions. This conclusion concretises the content of the concept of hybrid tools under study: Shoppable TV and Live Shopping are effective precisely because of the combination of emotional involvement with direct transaction, implementing a psychological approach in practice. In contrast to the above-mentioned study, which focuses on the individual well-being of the consumer, the outlined study considered Live Shopping as a systemic market phenomenon – a component of hybridisation of tools at the level of the global media market.

The concentration of more than 70% of global advertising budgets in three ecosystems (Alphabet, Amazon, Meta) was confirmed by data from WARC (2025), and O. Yastremska (2025), who investigated marketing tools as factors of adaptability of enterprises to crisis changes in the external environment. The researcher found that in conditions of instability, companies are reorienting to tools with increased ROI and direct conversion – which is a theoretical explanation for the rapid growth of Retail Media recorded in the study (starting from USD 45 billion in 2020, to USD 210.5 billion in 2026). The difference lies in the focus: the researcher analysed adaptation at the level of an individual enterprise, while the conducted study examined structural changes at the level of the global market. It is necessary to note the limitations of the concentration model, which was highlighted by G. Crossan *et al.* (2025) in the TMT Predictions report: over-reliance on tech giant ecosystems creates structural risks for small and medium-sized businesses. This aspect is an important caveat to the conclusions of this study: the “digital-first” strategy with a focus on leading platforms is optimal for large players, but for small and medium-sized businesses it is necessary to develop alternative communication strategies, which may become the subject of separate further research. Comparison of the results with the considered publications allows clearly determining the specific contribution of the presented study, and evaluating the opinions of other authors. Most of the analysed studies consider individual tools or market segments, while the conducted research suggests an integrated three-level transformation model (complement – integration – hybridisation) and a conceptual model of the “Dominance Triad” covering the market as a whole. Unlike the available reviews that describe “what” is happening, the outlined study, through epistemological analysis, explains “why” – linking market trends to the evolution of the communication paradigm from technocratic to psychological. None of the considered studies analysed the transformation in the chronological range of 2020–2026 in combination with forecast data, which makes the presented study more relevant from the point of view of practical application. A promising area is to investigate the specifics of these transformations for the Ukrainian market of marketing communications in wartime conditions as a special context of adaptation to global trends.

Conclusions

The analysis of the development of the global communication market for 2020–2026 indicates the final approval of the “digital-first” paradigm. Statistics show a doubling of the market volume (more than USD 1 trillion in 2024) against the background of a reduction in the share of conventional media from 26% to the projected 13% in 2026. The technological core of this transformation was artificial intelligence (AI) and machine learning (ML), which provided algorithmisation of 80% of digital advertising costs and the transition to dynamic hyperpersonalisation in real

time. The structural architecture of the modern market is defined by the “Dominance Triad”: algorithmisation, expansion of short video formats (TikTok, Reels) and rapid growth of Retail Media Networks (growth of up to 60% annually). Epistemological analysis revealed that marketing communications have gone from a subordinate element of 4P to a system-forming factor in the Marketing 5.0 concept. This evolution was caused by the elimination of information asymmetry, consumer activation, and changes in the identification behaviour of the Z and Alpha generations. In contrast to purely statistical descriptions, this study proves that the contemporary communicative paradigm is fundamentally different from the classical “Promotion” in such features as axiological (value), contextuality, and integration into the consumer experience.

For practical implementation, priority tools were identified: hybrid systems (Programmatic DOOH, Shoppable TV, AR technologies); intelligent nodes (GenAI Content Engines, Retail Media); social-centric formats (Live Shopping and short video). The oligopolistic nature of the market, where more than 56% of budgets are controlled by BigTech giants (Alphabet, Amazon, Meta), requires brands to switch to “white-hat” marketing strategies, transparency and radical resilience, which is especially critical for Ukrainian enterprises in wartime conditions. Prospects for further research are to explore the ethical limits of using neural networks in manipulative framing and analyse the risks of “cognitive isolation” of the consumer due to excessive algorithmic personalisation. An urgent task is to develop ethical protocols for using generative artificial intelligence (GenAI) to prevent a crisis of trust in the digital environment. Special attention should be paid to the study of emotional brand value in the “experience economy”, where conventional metrics (KPI) should be supplemented with neuromarketing tools to measure deep cognitive resonance. A separate research vector should be the development of adaptive resilience strategies for local markets, in particular Ukrainian ones, in the context of post-crisis recovery and global digital expansion. This will allow forming a methodological basis for building inclusive and value-oriented communication ecosystems that can withstand the turbulence of the globalised information space. Ultimately, the analysis of the convergence of marketing with the “Internet of Things” (IoT) and meta-universes is promising, which will require a qualitatively new epistemological understanding of the role of consumer virtual identity.

Acknowledgements

None.

Funding

None.

Conflict of Interest

None.

References

- [1] Castells, M. (2023). The network society revisited. *American Behavioral Scientist*, 67(7), 940-946. doi: [10.1177/00027642221092803](https://doi.org/10.1177/00027642221092803).
- [2] Cioppi, M., Curina, I., Francioni, B., & Savelli, E. (2023). Digital transformation and marketing: A systematic and thematic literature review. *Italian Journal of Marketing*, 2, 207-288. doi: [10.1007/s43039-023-00067-2](https://doi.org/10.1007/s43039-023-00067-2).
- [3] Cooley, C. (2024). *Social organization: A study of the larger mind*. New-York: Nova Science Publishers.
- [4] Crossan, G., Bottke, T., Krishnamurthy, G., Bhattacharjee, D., & McDermott, J. (2025). *TMT predictions 2026: The AI gap narrows but persists*. Retrieved from <https://lnk.ua/JQ9Cl9yM>.
- [5] Dentsu. (2025). *Global ad spend set to surpass \$1 trillion for the first time in 2026 as the algorithmic era redefines growth*. Retrieved from <https://www.dentsu.com/news-releases/global-ad-spend-set-to-surpass-one-trillion-for-the-first-time-in-2026-as-the-algorithmic-era-redefines-growth>.
- [6] Gao, B., Wang, Y., Xie, H., Hu, Y., & Hu, Y. (2023). Artificial intelligence in advertising: Advancements, challenges, and ethical considerations in targeting, personalization, content creation, and ad optimization. *SAGE Open*, 13(4), 1-20. doi: [10.1177/21582440231210759](https://doi.org/10.1177/21582440231210759).
- [7] Guddemi, P. (2020). *Gregory Bateson on relational communication: From octopuses to nations*. Cham: Springer International Publishing.
- [8] Guttman, A. (2026). *Programmatic advertising worldwide – statistics & facts*. Retrieved from <https://lnk.ua/obkQYIOmY>.
- [9] Huang, Z., Hao, A., & Deng, J. (2024). How social presence influences consumer well-being in live video commerce: The mediating role of shopping enjoyment and the moderating role of familiarity. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(2), 725-742. doi: [10.3390/jtaer19020039](https://doi.org/10.3390/jtaer19020039).
- [10] Ivanenko, I. (2020). Analytical study of the marketing communications market in Ukraine for 2016-2020. *Economic Space*, 162, 96-102. doi: [10.32782/2224-6282/162-17](https://doi.org/10.32782/2224-6282/162-17).
- [11] Jiang, W., & Chen, H.-L. (2025). Can short videos work? The effects of use and gratification and social presence on purchase intention: Examining the mediating role of digital dependency. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(1), article number 5. doi: [10.3390/jtaer20010005](https://doi.org/10.3390/jtaer20010005).
- [12] Kotler, P., Kartajaya, H., & Setiawan, I. (2024). *Marketing 5.0 technology for humanity*. Kyiv: KM-Books.
- [13] Kovalchuk, S. (2025). Omnichannel as a current concept of doing business. *Herald of Lviv University of Trade and Economics. Economic Sciences*, 81, 21-26. doi: [10.32782/2522-1205-2025-81-03](https://doi.org/10.32782/2522-1205-2025-81-03).
- [14] Makartseva, Y., & Lysenko, I. (2025). Automation of marketing processes using AI: Conceptual approaches and empirical research. In *Theoretical and empirical scientific research: Concept and trends* (pp. 43-48). Oxford: Collection of scientific papers “ΛΟΓΟΣ”. doi: [10.36074/logos-07.03.2025.008](https://doi.org/10.36074/logos-07.03.2025.008).
- [15] Mansour, B., & Basal, M. (2024). The relationship between digital content marketing success and sustainable consumption behavior. *American Journal of Industrial and Business Management*, 14(4), 392-407. doi: [10.4236/ajibm.2024.144020](https://doi.org/10.4236/ajibm.2024.144020).
- [16] McLuhan, H. (1962). *The Gutenberg galaxy: The making of typographic man*. Toronto: University of Toronto Press.
- [17] Mordor Intelligence. (n.d.) *Online advertising market size & share analysis – growth trends and forecast (2026-2031)*. Retrieved from <https://www.mordorintelligence.com/industry-reports/online-advertising-market>.
- [18] Nanji, A. (2025). *The incredible scale of ad market dominance by Alphabet, Meta, Amazon*. Retrieved from <https://www.marketingprofs.com/charts/2025/53822/big-tech-ad-market-dominance-alphabet-meta-amazon-study-war>.
- [19] Nesterenko, V., Miskiewicz, R., & Abazov, R. (2023). Marketing communications in the era of digital transformation. *Virtual Economics*, 6(1), 57-70. doi: [10.34021/ve.2023.06.01\(4\)](https://doi.org/10.34021/ve.2023.06.01(4)).
- [20] Oberlo. (n.d.) *Digital ad spend (2017-2028)*. Retrieved from <https://www.oberlo.com/statistics/digital-ad-spend>.
- [21] Perreault, W., Cannon, J., & McCarthy, E.J. (2021). *Essentials of marketing*. Dubuque : McGraw-Hill Education.
- [22] Rude, J. (2026). *Chart of the month: The race for generation alpha consumers begins*. Retrieved from <https://www.euromonitor.com/article/chart-of-the-month-the-race-for-generation-alpha-consumers-begins>.
- [23] Savytska, N. (2022). *Resilient marketing as a prerequisite for business development*. In *Business, innovation, management: Problems and prospects* (pp. 240-241). Kyiv: Sikorsky Academic Press.
- [24] Shankar, V., Grewal, D., Sunder, S., Fossen, B., Peters, K., & Agarwal, A. (2022). Digital marketing communication in global marketplaces: A review of extant research, future directions, and potential approaches. *International Journal of Research in Marketing*, 39(2), 541-565. doi: [10.1016/j.ijresmar.2021.09.005](https://doi.org/10.1016/j.ijresmar.2021.09.005).
- [25] Shen, X., & Wang, J. (2024). How short video marketing influences purchase intention in social commerce: The role of users' persona perception, shared values, and individual-level factors. *Humanities and Social Sciences Communications*, 11, article number 290. doi: [10.1057/s41599-024-02808-w](https://doi.org/10.1057/s41599-024-02808-w).
- [26] Solodukha, Z., & Leonova, S. (2025). Digital tools for promoting marketing agencies in the advertising services market: A comparative analysis of Google Ads and Meta approaches. *The Actual Problems of Regional Economy Development*, 1(21), 288-296. doi: [10.15330/apred.1.21.288-296](https://doi.org/10.15330/apred.1.21.288-296).

- [27] Statista. (2026). *Mobile revenue share of the digital advertising market worldwide from 2019 to 2028*. Retrieved from <https://www.statista.com/forecasts/309712/mobile-share-digital-ad-spend-worldwide/>.
- [28] Statista. (n.d.). *Advertising – worldwide*. Retrieved from <https://www.statista.com/outlook/amo/advertising/worldwide#ad-spending>.
- [29] Teepapal, T. (2025). AI-driven personalization: Unraveling consumer perceptions in social media engagement. *Computers in Human Behavior*, 165, article number 108549. doi: 10.1016/j.chb.2024.108549.
- [30] Toffler, A. (2022). *Future shock*. London: Random House Publishing Group.
- [31] WARC. (2025). *Global ad trends: Podcast publishers expand into video*. Retrieved from <https://www.warc.com/content/feed/global-ad-trends-podcast-publishers-expand-into-video/10298>.
- [32] WARC. (n.d.). *Advertising grew 8.9% in 2025 – but three companies took most of the spoils*. Retrieved from <https://www.warc.com/content/feed/advertising-grew-89-in-2025--but-three-companies-took-most-of-the-spoils/en-GB/11199#:~:text=Global%20advertising%20spend%20is%20now%20on%20course,impact%20on%20global%20trade%20from%20trade%20tariffs>.
- [33] WPP Media. (2024). *This year next year 2024: Our global advertising forecast for 2024-2025*. Retrieved from <https://www.wppmedia.com/news/tyny-2025>.
- [34] Yastremska, O. (2025). Marketing tools as factors of strengthening the adaptability of enterprises to crisis changes in the external environment. *Scientific Notes of Lviv University of Business and Law*, 45, 416-426. doi: 10.5281/zenodo.16754872.
- [35] Yin, P., Cheng, X., Shen, J., & Zhang, N. (2024). Research on the Purchase intention of social commerce consumers in video streams: Dual pathways of affection and rationality. *Behavioral Sciences*, 14(9), article number 738. doi: 10.3390/bs14090738.
- [36] Zeithaml, V.A., Bitner, M.J., & Gremler, D.D. (2023). *Services marketing: Integrating customer focus across the firm* (8th ed). New York: McGraw-Hill Education.

Трансформація актуальних трендів розвитку маркетингових комунікацій у системі взаємодії споживачів та підприємства в інфраструктурі сучасного ринку

Галина Кукель

Кандидат економічних наук, доцент
Вінницький національний технічний університет
21021, вул. Хмельницьке шосе, 95, м. Вінниця, Україна
<https://orcid.org/0000-0001-7699-5997>

Алла Краєвська

Кандидат економічних наук, доцент
Вінницький національний технічний університет
21021, вул. Хмельницьке шосе, 95, м. Вінниця, Україна
<https://orcid.org/0000-0003-2812-6986>

Любов Філатова

Кандидат економічних наук, старший викладач
Вінницький національний технічний університет
21021, вул. Хмельницьке шосе, 95, м. Вінниця, Україна
<https://orcid.org/0000-0001-7713-307X>

Анотація. Зміни ринкової структури та глобалізаційні виклики зумовлюють необхідність дослідження трансформацій у сфері маркетингових комунікацій. Метою статті був аналіз становлення сучасної системи маркетингових комунікацій, що особливо актуально в умовах зростаючої складності взаємодії компаній із різноманітними контрагентами. Ця динаміка посилювалась скороченням життєвих циклів продукції, швидкими змінами у споживчих вподобаннях та зниженням ефективності традиційних рекламних методів. Стаття зосереджена на методі ґносеологічного аналізу, який дозволив встановити, що маркетингові комунікації, будучи органічною складовою маркетингового комплексу, слугують універсальним механізмом впливу на цільові аудиторії. На підставі аналізу статистичних даних визначено ключові тенденції розвитку маркетингових комунікацій на сучасному ринку. Досліджено та впорядковано фактори, що впливають на трансформацію інструментарію маркетингових комунікацій, із застосуванням методу структурного аналізу причинно-наслідкових зв'язків. Результати проведеного аналізу дозволили ідентифікувати етапи трансформації інструментів маркетингових комунікацій у межах рівнів конструктивних змін: рівень появи нових інструментів, які співіснують з існуючими на основі принципу доповнення; рівень інтеграції, що базується на об'єднанні, зближенні та взаємопроникненні різних інструментів; рівень гібридизації інструментів, яка ґрунтується на їх множинності. Встановлено, що ці інструменти забезпечують можливість використання переваг сучасних комунікаційних технологій і впровадження інноваційних підходів. Крім того, гібридні інструменти сприяли підвищенню якості взаємодії, а також забезпечують вищий рівень мобільності та адаптивності комунікацій. Практична цінність полягала у визначенні сучасних маркетингових комунікацій, що можливе завдяки появі новітніх засобів зв'язку, які інтегрувалися в інтерактивні технології, що дозволило не лише швидко отримати необхідну інформацію, а й проаналізувати її, порівнювати з іншими джерелами. Поєднання традиційних та інноваційних інструментів маркетингових комунікацій забезпечило ефективну діяльність підприємства на ринку та сприяло залученню нових клієнтів.

Ключові слова: фактори впливу; ринкове середовище; інноваційні маркетингові інструменти; гібридні інструменти; просування товарів; реклама; цільова аудиторія

INNOVATION AND SUSTAINABILITY
Scientific Journal

**Volume 6, No. 2,
2026**

Managing Editor:
O. Kushnir

Signed to the print 25.06.2026
Format 60*84/8
Conventional Printed Sheet 12.9
Circulation 100 copies

Vinnytsia National Technical University
21021, 95 Khmelnytske Shose Str., Vinnytsia, Ukraine
E-mail: info@inns.com.ua
<https://inns.com.ua/en>

INNOVATION AND SUSTAINABILITY
Науковий журнал

**Том 6, № 2,
2026**

Відповідальний редактор:
О. Кушнір

Підписано до друку 25.06.2026 р.
Формат 60*84/8
Умовн. друк. арк. 12,9
Наклад 100 примірників

Вінницький національний технічний університет
21021, вул. Хмельницьке шосе, 95, м. Вінниця, Україна
E-mail: info@inns.com.ua
<https://inns.com.ua/uk>