



**ECONOMIES' HORIZONS**  
**Економічні горизонти**

DOI: [doi.org/10.31499/2616-5236](https://doi.org/10.31499/2616-5236)  
Homepage: <http://eh.udpu.edu.ua>



ISSN  
2522-9273  
(print)  
2616-5236  
(online)

UDC: 004.738.5:338.48-6:658.8

DOI: [10.31499/2616-5236.3\(28\).2024.317199](https://doi.org/10.31499/2616-5236.3(28).2024.317199)

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**THE IMPORTANCE OF MODERN INFORMATION TECHNOLOGIES IN  
THE RESEARCH OF THE MARKETING ENVIRONMENT OF  
HOSPITALITY INDUSTRY ENTERPRISES**  
**ЗНАЧЕННЯ СУЧАСНИХ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ В  
ДОСЛІДЖЕННІ МАРКЕТИНГОВОГО СЕРЕДОВИЩА  
ПІДПРИЄМСТВ ІНДУСТРІЇ ГОСТИННОСТІ**

***Анотація:** У статті аналізуються сучасні інформаційні технології (ІТ) в дослідженні маркетингового середовища у сфері гостинності. Вони забезпечують підприємства інструментами для підвищення ефективності, персоналізації та адаптивності. Використання цифрових платформ, таких як соціальні медіа, CRM-системи, мобільні додатки, аналітика великих даних та штучний інтелект, сприяє створенню цільових кампаній, аналізу поведінки споживачів і вдосконаленню послуг. Інтегровані системи автоматизують бронювання, адаптують пропозиції до потреб клієнтів, а алгоритми даних прогнозують ринкові тенденції. Незважаючи на виклики, ІТ підвищують конкурентоспроможність підприємств.*

***Abstract:** The article examines the role of modern information technologies (IT) in the study of the hospitality marketing environment, which provide enterprises with innovative tools to increase efficiency, personalization and adaptability to dynamic market changes. Digital platforms such as social media, CRM systems, mobile applications, big data analytics and artificial intelligence are becoming an integral part of marketing strategies. They contribute to the creation of targeted advertising campaigns, analysis of consumer behavior, forecasting their needs and improving services, offering customers individualized services.*

*Integrated reservation systems automate management processes, allowing enterprises to adapt offers to specific customer needs. For example, the use of CRM*

systems helps to collect and analyze data about customers, determine their preferences, interaction history and other important aspects that increase the accuracy of personalization. Mobile applications contribute to the convenience of communication between the enterprise and the customer, providing the opportunity to make a reservation, receive information or special offers in a few clicks.

Social media plays a key role in building long-term customer relationships and brand loyalty. Social media monitoring tools allow you to quickly respond to customer feedback, identify trends in consumer behavior, and evaluate the effectiveness of marketing campaigns. Big data analytics allows you to not only analyze current trends, but also predict future changes in the market, which helps businesses quickly adjust strategies.

Artificial intelligence automates many processes, including chatbots that provide 24/7 customer support, analyze their requests, and provide recommendations. Such technologies significantly improve the quality of service and customer satisfaction. Data analysis algorithms, in turn, ensure the accuracy of market research, contribute to the development of innovative offers, and allow you to identify hidden business opportunities.

At the same time, the integration of IT into the hospitality industry is accompanied by certain challenges, including high costs for implementing and maintaining systems, as well as cyber risks associated with data security. However, the effective use of information technology allows hospitality businesses not only to adapt to modern market requirements, but also to increase their competitiveness, create new service standards, and strengthen customer trust.

**Keywords** information technology, hospitality industry, hospitality industry enterprises, marketing environment, marketing research, digital systems in the hospitality industry, digital tools in the hospitality industry

**Ключові слова:** інформаційні технології, індустрія гостинності, підприємства індустрії гостинності, маркетингове середовище, маркетингове дослідження, цифрові системи в індустрії гостинності, цифрові інструменти в індустрії гостинності

### **Statement of the problem.**

Modern information technologies (IT) are fundamentally changing approaches to marketing management in the hospitality industry, providing enterprises with powerful tools for market analysis, service personalization and increased competitiveness. However, the integration of IT into marketing strategies is not without challenges. Despite the wide possibilities of using digital technologies, many enterprises face the problems of choosing,

implementing and optimizing tools that would provide not only data collection and analysis, but also a real increase in the efficiency of their marketing activities.

The lack of clear methodological approaches to integrating IT into marketing activities creates risks of underutilizing the potential of digital tools. This is especially true for enterprises operating in a dynamic hospitality environment, where the speed of changes in market conditions

and consumer behavior are critical success factors.

In addition, the implementation of innovative technologies requires enterprises to make significant investments in staff training, infrastructure modernization and adaptation of existing business processes. Many companies face difficulties in using analytical tools such as Big Data, CRM systems or artificial intelligence due to lack of knowledge, experience or financial resources.

Another problem is that, despite the availability of digital platforms, most companies do not have sufficient flexibility to respond quickly to changing market conditions or customer expectations. For example, personalizing marketing campaigns, developing effective loyalty programs and using social media remain challenges for many industry players.

Thus, it is relevant to study the role of modern information technologies in improving the marketing strategies of hospitality industry companies. Special attention should be paid to studying the effectiveness of using digital tools in various aspects of marketing activities, such as market analysis, trend forecasting, customer relationship management, business process automation and offer personalization.

This will allow the development of scientifically based recommendations for hospitality industry enterprises aimed at maximizing the benefits of using digital technologies and increasing their competitiveness in the context of rapid digitalization of the market.

**Analysis of recent research and publications.** There are a number of works by researchers who have studied the importance of information technologies for the marketing activities of enterprises, including N. Karpenko, M. Ivannikova [1], O. Vytvytska, S. Suvorova [2], O. Bogashko [3, 4], E. Pakhucha, O. Afanasyeva, G. Kulish [5] Yu. Yeremenok [6] and others. The role and importance of information technologies in the hospitality industry are highlighted in the works of such researchers as L. Neschadym, S. Tymchuk [7], V. Grosul, N. Balatska [8], V. Boyko, D. Lizon [9], B. Shevchuk, I. Nesterchuk [10], M. Barvinok [11] and others.

Despite the significant scientific achievements of researchers who have studied the role of information technologies in the marketing activities of enterprises, modern challenges and dynamic changes in the global environment require a deeper study of the importance of modern information technologies in the study of the marketing environment. In the context of the hospitality industry, which depends on a rapid response to changes in consumer behavior, the development of digital technologies opens up new opportunities for market analysis, personalization of services and the formation of competitive advantages. This creates an urgent need to study modern approaches to the use of technologies, such as big data, artificial intelligence, automated analytical systems, CRM platforms and mobile applications, which can not only increase the effectiveness of marketing research, but also ensure strategic adaptation to changing market

conditions. Given modern global trends, in particular digitalization, personalization of services and increased competition, the issue of integrating modern information technologies into the processes of studying the marketing environment of enterprises in the hospitality industry is of particular importance. There are still open questions related to assessing the effectiveness of using innovative technologies to analyze the external environment, develop management strategies, and improve customer experience. Therefore, there is a need for a comprehensive study of the role of modern information technologies in the formation of effective marketing solutions, which will allow hospitality industry enterprises to adapt to the requirements of a modern digital society.

**The purpose of the article** is to investigate the importance of modern information technologies in the study of the marketing environment of hospitality industry enterprises, as well as to determine their role in increasing competitiveness and adapting to the modern challenges of the digital society.

To achieve the specified goal, the study provides for the solution of the **following tasks**:

— study of information technologies, such as big data, artificial intelligence, automated analytical systems, CRM platforms, etc., in the context of their impact on the research of the marketing environment;

— study of the capabilities of modern information technologies for personalization of services and formation of customer-oriented strategies;

— study of the advantages and disadvantages of modern information technologies for the research of the marketing environment of the hospitality industry

— identification of ways to integrate information technologies into the marketing management process in order to increase the competitiveness of hospitality industry enterprises.

**The object of the study** is the application of modern information technologies in the marketing activities of hospitality industry enterprises.

**The subject of the study** is the peculiarities of the use of information technologies to study the marketing environment of hospitality industry enterprises in the context of modern global challenges.

**Presentation of the main research material.** Modern information technology (IT) has fundamentally changed the way hospitality marketing is managed, providing businesses with tools to increase efficiency, accuracy and personalization. The Internet and social media have become the main platforms for promoting brands, attracting and interacting with customers. By using digital channels, businesses can develop targeted marketing campaigns, analyze consumer behavior and improve their services in accordance with guest expectations.

IT also simplifies the booking and sales processes, which is an important element of a marketing strategy. Integrated reservation systems allow businesses to automate offer management, update prices in real time and analyze demand for services. Thanks to technologies such as CRM systems, businesses are able to

effectively manage customer databases, developing personalized offers that contribute to the formation of customer loyalty.

In addition, mobile technologies and “smart” technologies in hotel rooms expand the possibilities of marketing strategies. Mobile applications allow businesses to communicate with customers directly, providing up-to-date information about promotions, discounts and special offers. Innovative technologies, such as artificial intelligence and chatbots, ensure constant contact with customers, improving the quality of service and maintaining a positive brand image. All this allows hospitality industry enterprises not only to compete effectively, but also to set new standards in the field of marketing.

Today, in the conditions of rapid development of digital technologies, marketing research is an integral part of the strategic management of hospitality industry enterprises. The use of innovative approaches allows obtaining more accurate research results that contribute to the adoption of effective management decisions at hospitality industry enterprises. In particular, the analysis of the external marketing environment using digital tools makes it possible to study the impact of macro- and microenvironmental factors

on their activities. This allows for a deeper understanding of market conditions, the behavior of customers, competitors and partners, which is the basis for developing effective strategies.

At the stage of conducting marketing research, hospitality industry enterprises can apply innovative methods of data collection, analysis and processing. Modern digital technologies are used to study the macro environment, in particular big data, artificial intelligence and automated analytics systems. These tools allow you to obtain maximum information about external factors that affect the activities of enterprises, such as economic trends, regulatory changes, socio-cultural preferences, etc.

In addition to collecting information, an important stage is its analysis and use for strategic decision-making. Hospitality industry enterprises can adapt their marketing strategies to changes in the global environment, ensuring competitiveness and sustainable development. Digital technologies also contribute to the prediction of consumer behavior and market trends, which helps to create unique offers and maintain a high level of customer service (Table 1).

*Table 1 – Digital systems for obtaining information about the external marketing environment in the hospitality industry*

Digital Tools	Application in the Hospitality Industry	Results	Significance for Developing Marketing Strategies in the Hospitality Industry
<b>Booking Systems (CRS, GDS)</b>	Collecting data on clients, popular booking dates, and guest preferences.	Automation of the booking process, improvement of personalized offers, analysis of demand seasonality.	Development of targeted advertising campaigns based on the analysis of popular periods and client needs.

*Continuation of table 1*

<b>Big Data Analytics</b>	Analyzing customer behavior, reviews, and financial indicators of the enterprise.	Trend forecasting, optimization of services and pricing strategies.	Identification of effective promotion channels, development of strategies for various market segments.
<b>Social Media and Online Surveys</b>	Gathering guest feedback, studying market moods and trends through social networks.	Brand image improvement, development of targeted marketing campaigns.	Audience engagement through social media, creation of relevant content for target groups.
<b>Mobile Applications</b>	Collecting data on client preferences during app use for booking or accessing services.	Development of personalized services, improved convenience for clients.	Enhancing client loyalty through personalized offers and user-friendly functionality.
<b>CRM Systems</b>	Managing customer information, including booking history, requests, and loyalty data.	Customer support, loyalty program development, improvement of customer experience.	Development of loyalty programs, building long-term relationships with clients.
<b>Internet of Things (IoT)</b>	Collecting data on room usage (temperature, lighting, energy consumption) via smart devices.	Increased energy efficiency, improved guest comfort.	Utilizing data to create an eco-friendly image and optimize costs.
<b>Artificial Intelligence (AI) and Chatbots</b>	Real-time interaction with clients, automated query collection.	Reduced response time, improved service quality, data collection for analyzing customer needs.	Automation of communications, increased customer satisfaction, and precision in marketing decisions.

Source: created by the author based on [12].

Research of the external marketing microenvironment (suppliers, intermediaries, consumers, competitors and contact groups) by hospitality industry enterprises should be based on innovative approaches and technologies. Modern digital tools

allow for a much wider collection, analysis of data and effective use of them to obtain valuable insights, make strategic decisions and increase competitiveness in the dynamic hospitality environment (Table 2).

*Table 2 – Digital tools for obtaining information about the microenvironment of hospitality industry enterprises and their importance for personalizing services and forming customer-oriented strategies*

<b>Technologies</b>	<b>Tools</b>	<b>Information Obtained About the External Marketing Environment</b>	<b>Significance for Personalizing Services and Developing Customer-Oriented Strategies</b>
<b>Social Media Monitoring</b>	Looqme, Hootsuite, YouScan, etc.	Analysis of guest behavior, preferences, and needs; competitor strategy research; monitoring interactions with suppliers, partners, and intermediaries.	Formation of personalized offers based on guest behavior analysis, optimization of communications for different audience segments.
<b>Online Surveys and Focus Groups</b>	SendPulse, SurveySensum, Survicate, Typeform, Alchemer, Zonka Feedback, etc.	Collection of feedback and opinions from guests, partners, and competitors regarding services, service quality, and hospitality experiences.	Considering individual customer needs in the development of new services; improving service quality based on collected data.
<b>Mobile Apps and Online Platforms</b>	Booking, TripAdvisor, Airbnb, Hotels.com, Agoda, Google Travel, Google Apps (Maps, Reviews), etc.	Data collection on guest behavior, client preferences analysis, evaluation of partner platforms and intermediaries' effectiveness.	Development of personalized recommendations, improving user convenience.

## Continuation of table 3

<b>Interactive (Omnichannel) Platforms</b>	Messaggio Dashboard, chatbots, WhatsApp Business API, Viber Chatbot	Expanding client interaction, gathering feedback and inquiries, studying guest expectations and analyzing service satisfaction.	Providing quick access to services and consultations, personalizing client interaction through automated platforms.
<b>Virtual Reality Technologies</b>	VIDEO 360, VR tours, VR simulations, tools for virtual events	Creation of virtual tours for guests, analysis of their behavior and reactions to new service formats (e.g., virtual excursions or rooms).	Offering individual virtual tours and excursions, increasing customer engagement in the service selection process.
<b>Simulation Environment</b>	Business simulations, games, scenario planning tools	Conducting experimental studies on the impact of various marketing strategies and external factors on client and partner preferences.	Development of flexible strategies that consider client characteristics and their reactions to different service formats.
<b>Transaction and Expense Information</b>	MasterCard, Visa, Amadeus, Sabre, Worldpay	Analysis of guest spending on accommodation, dining, and additional services; studying competitors' pricing strategy effectiveness.	Optimization of pricing offers and development of service packages tailored to individual client needs.
<b>Machine Analysis Algorithms</b>	Excel, Power BI, Tableau, QlikView, Qlik Sense	Processing large datasets to identify trends in hospitality, customer behavior, and marketing campaign effectiveness.	Identifying key trends and customer preferences to personalize marketing messages and enhance service relevance.
<b>Deep Data Analysis Algorithms</b>	Python, R, Google BigQuery, Amazon Redshift	Discovering connections between clients, analyzing their preferences, creating personalized offers, and optimizing marketing strategies.	Development of detailed customer profiles, creation of individual offers, and improving segmentation accuracy.

Source: created by the author based on [13, 14, 15].

Modern technologies open up new opportunities for studying the external marketing microenvironment in the hospitality industry. Thanks to digital tools, companies can analyze the behavior of customers, competitors and partners more deeply, which allows them to better understand market conditions and make informed strategic decisions.

Innovative approaches today allow for a deeper study and understanding of different groups of consumers, competitors and partners in the hospitality industry. This, in turn, contributes to a significant increase in the effectiveness of marketing research, helping hospitality companies better understand market conditions and use the information obtained to develop

strategies aimed at forming an effective marketing management system.

Social media monitoring is one of the most popular tools for analyzing the external marketing environment in the hospitality industry. This approach allows you to track key metrics such as word of mouth (WOM), share of conversation, net sentiment rate (NSR), engagement, audience reach, mention sources, and reviewer influence. Analyzing this data helps hospitality businesses better understand guest needs, adapt services, and improve customer engagement strategies. [12, 16].

Hospitality businesses can use a variety of platforms to conduct online surveys aimed at audience segmentation or guest loyalty assessment. These tools provide the

ability to flexibly adapt questions, assess service quality, receive feedback, and improve the customer experience. The variety of platforms allows you to choose the most suitable option depending on the budget and needs of the establishment, which provides a competitive advantage in a dynamic market environment [17].

The use of information technologies to study the marketing environment of hospitality industry enterprises has both advantages and disadvantages (Fig. 1). First of all, it is the accuracy and large volume of collected data, which allows enterprises to obtain detailed information about the behavior of customers, competitors and partners. The speed and efficiency of data processing contribute to prompt decision-making, and the personalization of services ensures better compliance of offers with customer needs. In addition, such technologies increase competitiveness, allowing enterprises to adapt to market changes, optimize costs and predict trends.

However, despite significant advantages, the use of these technologies also has its disadvantages. High initial costs for implementing innovative solutions can become a serious obstacle for small enterprises. The complexity of integrating new technologies into existing business processes requires significant resources and qualified personnel. Enterprises also become dependent on technologies, which can create problems in the event of technical failures or unstable Internet connection.

Particular attention should be paid to data privacy and security risks, as the use of information systems can expose businesses to cyberattacks. Problems with data accuracy or their rapid obsolescence can reduce the effectiveness of decisions made. Thus, the success of implementing information technologies in the hospitality sector depends on a balanced approach that takes into account both their advantages and potential disadvantages.

Innovative digital technology tools for analyzing the external marketing environment of hospitality enterprises today allow for a deeper study and understanding of various groups of consumers, competitors and partners in the hospitality sector. This, in turn, contributes to a significant increase in the effectiveness of marketing research, a better understanding of market conditions and helps hospitality enterprises use the information obtained to develop strategies aimed at forming an effective marketing management system.

Thus, the use of digital technologies in marketing research of hospitality enterprises significantly increases the accuracy of the analysis of micro- and macro-environments. Thanks to the widespread use of digital tools, such as social media monitoring, online surveys, mobile applications and analytical platforms, hospitality enterprises can quickly adapt their marketing strategies to changes in the external environment. This ensures increased management efficiency, improved interaction with customers and competitiveness in the market.



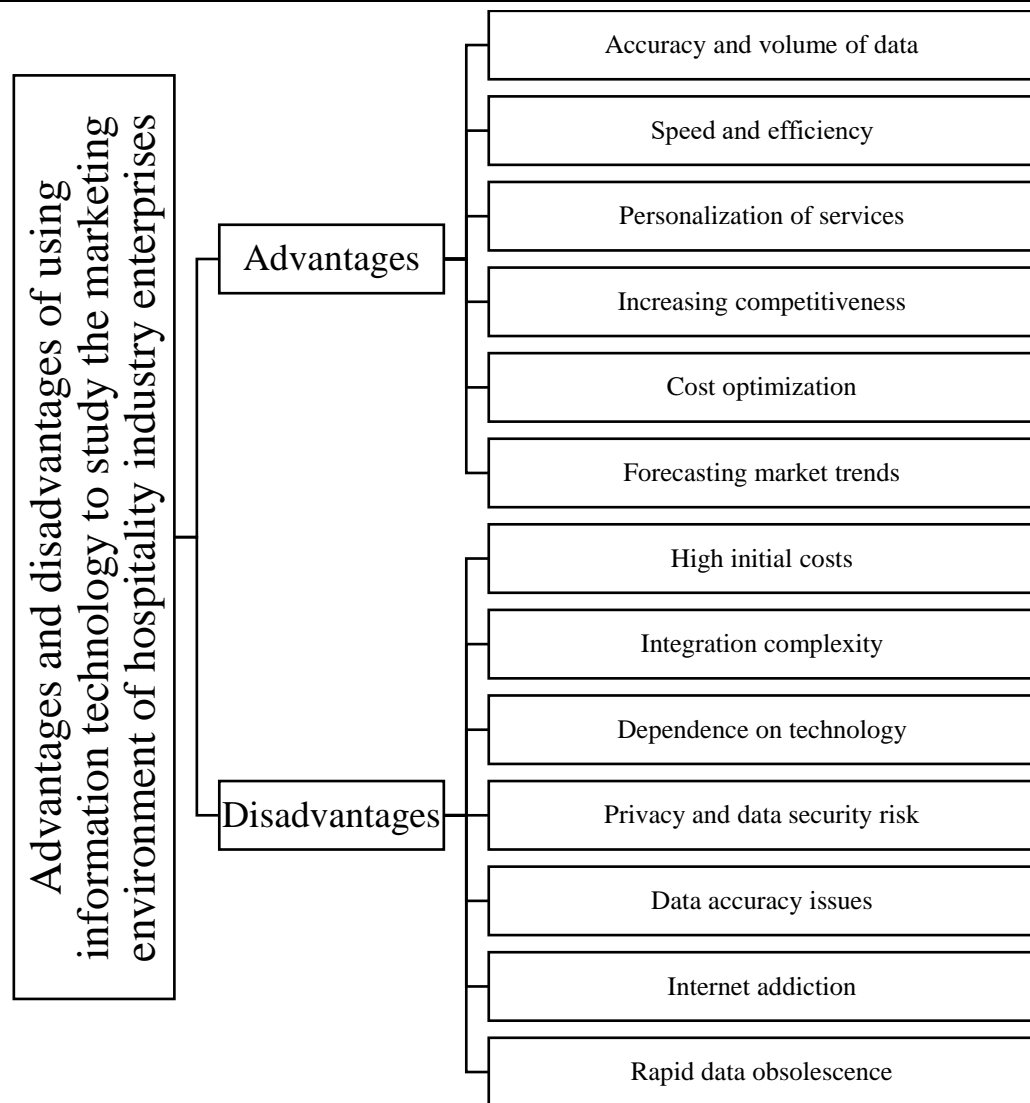


Figure 1 – Advantages and disadvantages of using information technology to study the marketing environment of hospitality industry enterprises

Source: created by the author based on his own research and [13, 14, 15].

The integration of information technologies into the marketing management process of hospitality companies is a key step towards increasing their competitiveness. First of all, it is necessary to use modern digital tools, such as social media monitoring, analytical platforms and machine learning algorithms, to collect and process data on the behavior of customers, competitors and partners. These technologies allow you to quickly respond to market changes, develop personalized offers and predict trends, which creates a competitive

advantage in the dynamic hospitality market.

In addition, an important direction is the implementation of virtual reality technologies and simulation environments to increase customer engagement and create innovative marketing strategies. Virtual tours, interactive presentations and scenario planning allow you to adapt offers to the needs of different customer segments, creating a unique experience and increasing competitiveness. Thanks to such integration, information technology becomes not only a data collection tool,

but also an important element of strategic management of the enterprise.

Therefore, the integration of information technology into the marketing management process is an important factor in increasing the competitiveness of enterprises in the hospitality industry. In modern realities, it is flexibility, personalization and technological adaptability that become the basis for success in the competitive hospitality market, opening up new opportunities for business development.

**Conclusions.** The importance of modern information technologies in the marketing activities of hospitality enterprises cannot be overestimated, as they allow them to adapt to dynamic changes in consumer behavior and quickly respond to new market challenges. For example, machine learning technologies help enterprises predict demand for services, optimize costs, and create offers that best meet customer expectations. At the same time, the integration of blockchain technologies into marketing processes helps to increase transparency and brand trust, especially in the area of customer data management. Thus, the use of IT not only provides enterprises with tools for analysis and forecasting, but also creates long-term competitive

advantages in the context of digital transformation.

IT tools contribute to the automation of processes, reducing the human factor and the possibility of errors. In addition, thanks to the analysis of big data and the prediction of consumer behavior, enterprises can develop highly effective strategies aimed at increasing customer satisfaction and loyalty.

However, among the disadvantages, it is worth noting the high costs of implementing the latest technologies, the need for qualified personnel to work with analytical systems and the risk of leakage of confidential information. Also, dependence on technology can lead to complications in the event of technical failures or cyberattacks, which can negatively affect the image of the enterprise.

Thus, the successful use of information technologies in the marketing activities of enterprises in the hospitality industry requires an integrated approach that takes into account both the benefits and potential risks. The implementation of such technologies should be accompanied by strategic planning, staff training and constant monitoring of the effectiveness of the solutions used.

#### References

- Karpenko, N.V., Ivannikova, M.M. (2021). *Digital marketing technologies for small and medium enterprises*. *Ekonomichnyi visnyk NTUU "KPI"*, (18). URL: <http://dspace.puet.edu.ua/handle/123456789/10940>. [in Ukrainian].
- Vytvytska, O., Suvorova, S., Koriuhin, A. (2022). *Vplyv tsyfrovoho marketynhu na rozvytok pidpriemnytstva v umovakh viiny*. *Ekonomika ta suspilstvo*, (40). DOI: <https://doi.org/10.32782/2524-0072/2022-40-66>. [in Ukrainian].
- Bohashko, O.L. (2021). *Vykorystannia suchasnykh tsyfrovyykh tekhnolohii u marketynhu*. In *Voitovykh, S.Ya. (Ed.), Aktualni problemy marketynhovoho menezhmentu v umovakh innovatsiinoho rozvytku ekonomiky: Materialy VIII Mizhnarodnoi nauk.-prakt. konf. zdobuvachiv ta molodykh vchenykh* (pp. 309–311). Lutsk: IVV Lutskoho NTU. URL: <https://dspace.udpu.edu.ua/handle/123456789/13599> [in Ukrainian].

- Bohashko, O.L. (2019). *Perspektyvy rozvytku internet-marketynhu v umovakh stanovlennia informatsiinoho suspilstva*. In Voitovych, S.Ya. (Ed.), *Marketynh v umovakh rozvytku tsyfrovyykh tekhnolohii: Materialy II Vseukrainskoi naukovo-praktychnoi internet-konferentsii* (pp. 17–19). Lutsk: IVV Lutskoho NTU. [in Ukrainian].
- Pakhucha, E.V., Afanasieva, O.P., Kulish, H.O. (2024). *Tsyfrovi tekhnolohii v marketynhovii diialnosti ahrarnykh pidpriemstv: napriam zabezpechennia stiikosti biznesu. Investytsii: praktyka ta dosvid*, (12), 155–161. URL: <https://repo.btu.kharkov.ua/handle/123456789/60157>. [in Ukrainian].
- Yeremenko, Yu.A. (2017). *Instrumentarii realizatsii marketynhovykh internettekhnolohii v biznesi. Modeli, systemy, merezhi v ekonomitsi, tekhnitsi, pryrodi i suspilstvi*, (3(23)), 41–50. [in Ukrainian].
- Neshchadym, L., Tymchuk, S. (2022). *Avtomatyzatsiia biznes-protsesiv pidpriemstv industrii hostynnosti yak chynnyk pidvyshchennia ekonomichnoi efektyvnosti. Ekonomika ta suspilstvo*, (36). DOI: <https://doi.org/10.32782/2524-0072/2022-36-38>. [in Ukrainian].
- Hrosul, V., Balatska, N. (2020). *Digital-marketynh yak diievyi instrument antykryzovoho rozvytku pidpriemstva restorannoho biznesu v period pandemii ta yii retsesii. Pidpriemnytstvo ta innovatsii*, (11–2), 7–12. DOI: <https://doi.org/10.37320/2415-3583/11.20>. [in Ukrainian].
- Boiko, V.O., Lizon, D.H. (2021). *Vykorystannia informatsiinykh tekhnolohii pry nadanni posluh u restorannomu biznesi*. In Varnavska, I. (Ed.), *Filosofski obrii sohodennia: Mizhnarodna naukovo-praktychna konferentsiia (18 lystopada 2021 r.)* (pp. 9–10). Kherson: HDAEU. [in Ukrainian].
- Shevchuk, B., Nesterchuk, I. (2020). *Analiz mozhlyvostei interaktyvnykh kart, stvorenykh na bazi HIS, dlia potreb turyzmu v Ukraini. Tavriiskyi naukovyi visnyk*, (3), 147–154. DOI: <https://doi.org/10.32851/2708-0366/2020.3.18>. [in Ukrainian].
- Barvinok, M.V. (2018). *Informatsiini tekhnolohii, yikh vplyv na rozvytok sfery posluh v turyzmi*. In *Suchasni problemy i perspektyvy ekonomichnoi dynamiky: materialy V Vseukrainskoi naukovo-praktychnoi internet-konferentsii molodykh uchenykh ta studentiv (Umanskyi Natsionalnyi Universytet, 31 zhovtnia – 1 lystopada 2018 r.)* (pp. 250–253). Uman: Vydavnychyi tsentr "Vizavi". URL: [https://dspace.udpu.edu.ua/bitstream/6789/8584/3/Econ\\_din.pdf#page=250](https://dspace.udpu.edu.ua/bitstream/6789/8584/3/Econ_din.pdf#page=250) (data zvernennia: 18.10.2024). [in Ukrainian].
- Hudz, Yu., Karpenko, V. (2023). *Pest-analiz v systemi marketynhovoho analizu ahrarnykh pidpriemstv. Ekonomichni nauky. Visnyk Khmelnytskoho natsionalnoho universytetu*, (3). DOI: <https://doi.org/10.31891/2307-5740-2023-318-3-40>. [in Ukrainian].
- Krykavskiy, Ye.V. (2014). *Marketynhovyi menedzhment: navchalnyi posibnyk*. Lviv, 380 s. [in Ukrainian].
- Shevchenko, A., Levkovska, T., Khaidarova, T. (2023). *Vplyv tsyfrovyykh tekhnolohii na rozvytok marketynhovykh doslidzhen. Naukovi innovatsii ta peredovi tekhnolohii*, (5(19)). [in Ukrainian].
- Bohdanov, V. (2023). *Etapy formuvannia marketynhovoi stratehii IT-pidpriemstv. Ekonomika ta suspilstvo*, (58). DOI: <https://doi.org/10.32782/2524-0072/2023-58-56>. [in Ukrainian].
- Barvinok, N.V., Barvinok, M.V. (2022). *Rol innovatsiinykh tekhnolohii marketynhu v turyzmi. In Biznes-analytika v upravlinni zovnishnoekonomichnoiu diialnistiu: materialy IX Mizhnarodnoi naukovo-praktychnoi konferentsii (Kyiv, 17 bereznia 2022 r.)* (pp. 68–73). Kyiv: Interservis. URL: <https://dspace.udpu.edu.ua/handle/123456789/14776>. [in Ukrainian].
- Ohliad krashchykh instrumentiv NPS-opytuvan u 2024 rotsi. URL: <https://sendpulse.ua/blog/nps-survey-tools>. [in Ukrainian].