

Kulik Anna

PhD in Economics, Associate Professor,
Head of the Department of Management, Public Administration and Marketing
Kyiv University of Market Relations

Smyrnova Iryna

Doctor of Pedagogical Sciences, Professor
Danube Institute of National University «Odesa Maritime Academy»

Haidarzhy Anzhela

PhD in Pedagogical Sciences, Associate Professor,
Associate Professor of the Department of Management in the Transportation Sector,
Assistant Director of Teaching and Methodological Work
Danube Institute of National University «Odesa Maritime Academy»

Кулік А.В.

кандидат економічних наук, доцент,
завідувачка кафедри менеджменту, публічного адміністрування та маркетингу
Київський університет ринкових відносин

Смирнова І.М.

доктор педагогічних наук, професор
Дунайський інститут Національного університету «Одеська морська академія»

Гайдаржи А.І.

кандидат педагогічних наук,
старший викладач кафедри управління в транспортній галузі,
заступник директора з навчально-методичної роботи
Дунайський інститут Національного університету «Одеська морська академія»

EFFECTIVENESS OF PERSONALIZED ADVERTISING IN DIGITAL MARKETING

ЕФЕКТИВНІСТЬ ПЕРСОНАЛІЗАЦІЇ РЕКЛАМИ В ДІДЖИТАЛ МАРКЕТИНГУ

In today's business landscape, the effectiveness of marketing activities that companies employ to promote their products and services through the Internet and other digital channels is a key factor in achieving success. In particular, there is a current trend towards not only increasing sales volumes but also building long-term relationships with customers. Given the identified relevance, this research aims to determine the practical aspects of personalized advertising effectiveness in digital marketing. Within the scope of this research, it is emphasized that for any business entity, not the process of personalized advertising in digital marketing itself is crucial, but rather its effectiveness. The research has demonstrated that the effectiveness of personalized advertising in digital marketing is achieved when individual advertising campaigns successfully attain their predetermined objectives. In other words, it's a measure of how effectively personalized ads influence user behavior online in terms of click-through rates, conversion rates, average order value, and so on.

Keywords: sales volumes, digital activities, creating a competitive advantage, conversion, brand image.

Ефективність діджитал маркетингу стала основоположним фактором успіху сучасного бізнесу. Персоналізація, еволюціонувавши з простої тактики до складної стратегії, дозволяє не лише збільшувати продажі, а й формувати міцні, довгострокові відносини з клієнтами. Сучасний діджитал маркетинг прагне створити індивідуалізований досвід для кожного клієнта, адаптуючи всі взаємодії – від першого контакту до обслуговування – під його унікальні потреби та вподобання. Зважаючи на таку актуальність, дослідження спрямоване на вивчення практичних аспектів ефективності персоналізованої реклами в цифровому маркетингу. Дослідження підкреслює, що для будь-якого бізнесу важливішим за сам процес персоналізації реклами в діджитал маркетингу є конкретні результати. За змістом дослідження доведено, що ефективність персоналізації вважається досягнутою тоді, коли індивідуальні рекламні кампанії успішно виконують поставлені завдання. Дослідження показало, що досягнення ефективною персоналізації реклами в діджитал маркетингу можливе за умови систематичного збору та аналізу даних про клієнтів, використання відповідних інструментів для персоналізації, створення індивідуальних рекламних пропозицій та їх постійного тестування та оптимізації. Для досягнення ефективною персоналізації реклами в цифровому маркетингу необхідно об'єднати вищезазначені ключові аспекти в єдину систему персоналізації, яка базуватиметься на якісних даних, інформа-

тивних алгоритмах, різноманітних каналах взаємодії зі споживачем та постійному аналізі та оптимізації. Дослідження свідчить про те, що персоналізація реклами в діджитал маркетингу здатна досягти нових висот завдяки переходу на режим реального часу (в якому дії, які відбуваються з користувачем, аналізуються та обробляються системою миттєво). Зокрема, відкриваються нові можливості для розробки алгоритмів, які дозволять реалізувати показ реклами в реальному часі, адаптованої до контексту пошуку або контенту, а також для створення геотаргетованих пропозицій та надсилання повідомлень у найбільш релевантний момент. Це вже зараз дозволяє надавати користувачеві максимально релевантний контент, пропозиції чи рекламні оголошення в той момент, коли він їх потребує.

Ключові слова: обсяги продажів, діджитал активності, створення конкурентної переваги, конверсія, імідж бренду.

Statement of the problem. In today's business landscape, the effectiveness of marketing activities that companies employ to promote their products and services through the Internet and other digital channels is a key factor in achieving success. Companies are now focusing not only on selling more stuff but also on building strong, lasting relationships with their customers. In this context, personalized advertising enables the achievement of both goals by offering users relevant products and services at the exact moment they are most likely to purchase them. Each user receives unique content tailored to their specific interests and needs. This creates a perception that the company cares about each customer individually. Primarily, personalized advertising attracts more attention than standard advertisements. Furthermore, users are more likely to click on such ads and spend more time on the website. Finally, when a user sees a product that interests them, they are more likely to make a purchase. Therefore, it is essential to examine the practical aspects of implementing personalized advertising in digital marketing and to define the specific characteristics of developing recommendations for building personalized advertising campaigns.

Analysis of recent research and publications. Various aspects of advertising effectiveness in digital marketing have been studied by Ukrainian researchers such as N. Avramenko, T. Arkhipova [1], O. Garmatyuk [2], O. Kovinko, I. Osavolyuk, A. Matsenko [3], and others. They unanimously emphasize the importance of personalized advertising, which is constantly evolving. The research conducted by M. Malchyk and I. Adasyuk [4], analyzing current trends in personalized advertising, is also valuable.

However, the rapid development of digital marketing and the variety of performance metrics make it difficult to unequivocally define the key aspects of personalized advertising effectiveness. Therefore, to achieve maximum results, further research and the development of a comprehensive approach to performance evaluation are required.

Formulation of the research task. This article aims to pinpoint the main aspects that influence the success of personalized ads in the digital landscape.

Summary of the main research material. Currently, it is not simply digital marketing that takes center stage in shaping demand and meeting consumer needs, but rather specific digital activities focused on personalized advertising. It is worth noting that the need for such digital activities arose quite a long time ago. Specifically, even in the last century, companies sent out catalogs with various offers, segmenting their audience based on demographic characteristics. Moreover, market vendors

have always strived to remember their regular customers and their preferences, offering them personalized recommendations [6].

However, personalization truly gained traction in the early 2000s with the advancement of digital technologies and reached its peak prominence due to increasing market competition and the heightened expectations of modern consumers.

Specifically, personalization has evolved from a simple tactic to a sophisticated strategy aimed not only at increasing sales but also at fostering long-term customer relationships.

Modern digital marketing seeks to create a personalized experience for each customer, tailoring all interactions – from initial contact to after-sales service – to their unique needs and preferences. Consequently, the phenomenon of personalized advertising in digital marketing, through its tools, shapes customer relationships along the following vectors [2; 4–5]:

1. Conversion rate optimization. Personalized offers that precisely match customer needs significantly increase the likelihood of a purchase.

2. Customer loyalty enhancement. When a customer feels understood and valued by a company, they are more likely to become a loyal customer and make repeat purchases.

3. Marketing cost optimization. Precise targeting ensures that every dollar spent on marketing is more efficient, allowing for optimized marketing budgets.

4. Brand image enhancement. Personalized advertising demonstrates a company's commitment to its customers and willingness to accommodate their needs, enhancing the brand's reputation.

5. Gaining a competitive edge. Companies that successfully implement personalization gain a significant competitive advantage in the marketplace.

6. Deep customer understanding. By analyzing customer behavior data, companies can gain valuable insights into customer needs and desires, enabling them to develop more effective products and services.

It is important to note that personalization vectors are interconnected. For instance, increasing customer loyalty (through personalized offers) can lead to higher average order values and purchase frequency.

Hence, it's undeniable that advertising personalization in digital marketing exerts a multifaceted influence on customer interactions. While these interactions vary, their common denominator is the effectiveness of personalization itself.

The nature of interaction and influence on customers of advertising personalization vectors in digital marketing

manifests itself according to the specifics detailed in Table 1.

It is clear that for a business entity, it is not the process of ad personalization itself that matters, but rather achieving its effectiveness, interpreted as a state where individual ad campaigns achieve their objectives. Ultimately, what matters is how effectively personalized ads influence online user behavior, as measured by metrics like click-through rates, conversion rates, and average order value.

Achieving effective ad personalization in digital marketing is possible through the following key aspects:

1. Continuous collection and analysis of customer data according to the specifics outlined in Table 2.

Specifically, we process a variety of data sources, including comments on our website or social media about the product, brand, or advertising campaign, responses to

surveys where users are asked to share their opinions about a particular product or service, and interviews with target audience representatives, which allow us to understand their motivations, values, and needs.

Additionally, metrics such as time on site, page depth, and bounce rate are tracked. For instance, the average time a user spends on the site after clicking on an ad is monitored. If this time is low, it may indicate that the content on the site is not relevant to the user or that the website design is not user-friendly. The average number of pages a user visits per session is tracked. A high page depth indicates that the user is actively exploring the site and is interested in the offerings. The percentage of users who leave the site after viewing only one page is tracked. A high bounce rate may indicate that the ad is not relevant or that there are issues with the landing page design. Audience

Table 1

The nature of interaction and influence on customers of advertising personalization vectors in digital marketing

Vector interaction direction	Character of vectors interaction	Interplay of various factors influencing the customer	Combined effect of various factors influencing customer behavior
Hyperpersonalization	Personalized offers tailored to specific situations (e.g., abandoned cart, birthday)	Leveraging positive customer reviews to validate product or service quality. Crafting a unique customer experience throughout the entire customer journey. Utilizing new technologies to create unique personalized experiences. Building deep customer loyalty to create a strong barrier to competitive switching.	The effectiveness of ad personalization in digital marketing is measured using various metrics that allow to evaluate how well personalized ads influence online user behavior
Dynamic Pricing	Dynamic pricing based on customer actions		
Loyalty Programs	Personalized rewards and discounts for loyal customers.		
Emotional Connection	Crafting narratives that resonate with customers on a personal level		
Precision Targeting	Reaching the most precise audience to reduce irrelevant impressions		
Marketing Automation	Leveraging marketing platforms to automate routine tasks and boost efficiency		
Customer Profiling	Creating customer personas using data-driven insights		
Predictive Analytics	Employing predictive modeling to anticipate customer behavior		

Source: formulated by the author based on [1–2; 5]

Table 2

Directions and features of data collection and analysis for ad personalization in digital marketing

Data collection and analysis directions	Data collection and analysis features	Examples of conducting data collection and analysis
Qualitative data	Information that helps us understand WHY users act the way they do. Unlike quantitative data (numbers, figures), which answers the question "how many", qualitative data answers the questions "why" and "how"	User reviews, customer feedback, interviews, user observations
Quantitative data	Information expressed through numerical values that reflect objective indicators. In the context of ad personalization, they help us understand how users interact with our website, app, or advertising materials	Tracking metrics such as time on site, page depth, bounce rate
Audience segmentation	Information that enables the division of an audience into smaller groups (segments) based on specific criteria. This allows for the creation of more personalized advertising campaigns, as different segments have different needs and interests	Demographic segmentation, behavioral segmentation, psychographic segmentation.

Source: formulated by the author based on [2; 4; 6]

segmentation is continuously performed (demographic, behavioral, psychographic).

Specifically, we process a variety of data sources, including comments on our website or social media about the product, brand, or advertising campaign, responses to surveys where users are asked to share their opinions about a particular product or service, and interviews with target audience representatives, which allow us to understand their motivations, values, and needs.

These are essential systematic processes through which a business not only expands its user information database but also creates more relevant and effective personalized user profiles and targeted advertising campaigns. For example, the online store "Sporty Style" (which sells sportswear on Prom.ua) used quantitative data to divide its audience into the following segments: professional athletes (young people who engage in sports professionally, have a high-income level, and seek high-tech clothing), fitness enthusiasts (middle-aged people who work out 2-3 times a week and value comfort and affordability), and people with an active lifestyle (individuals of various ages who participate in different sports and appreciate stylish design and functionality) [2]. This allowed the business to develop advertising campaigns for each segment, with different offers, messages, and distribution channels [6]. For example, an advertising campaign highlighting the high-tech features and functionality of the product has been launched for professional athletes, and for fitness enthusiasts, a campaign emphasizing comfort and affordability is being run.

The specification of the outlined key aspect highlights the importance of ensuring high data quality, defined by its relevance, accuracy, and proper protection.

2. Selection of tools for ad personalization, including advertising management systems (which provide extensive capabilities for creating personalized ad campaigns), CRM systems (which allow for storing and analyzing customer interaction data), and analytics tools (which help track the effectiveness of advertising campaigns). The specification of the outlined key aspect emphasizes the importance of using informative algorithms, defined by their integration with machine learning, forecasting, and optimization.

3. Creating individual personalized offers according to the specifics outlined in Table 3.

Thus, creating such offers is possible through advertising content that directly addresses the interests, needs, and issues of the individual user. For example, a nighttime cosmetics store targeting young girls interested in

K-pop could create a blog article about Korean cosmetics, featuring detailed descriptions of new products and tips on makeup styles inspired by their favorite K-pop stars.

A fitness club targeting middle-aged men who want to lose weight could prepare a series of video tutorials featuring effective exercises for weight loss that can be done at home.

Creating personalized offers is possible through banners with dynamic adjustments and personalized recommendations [5–6]. For example, the dynamic adjustment option is set up for Prom.ua customers, so if a user previously viewed sportswear, they might see an advertisement for new models of sportswear from the same brand they were interested in during their next visit to the site.

Personalized recommendation options are used by most online streaming services [2]. For example, if a user frequently watches horror films, they may be recommended new releases in this genre or movies with similar themes.

In practice, this refers to the systematic process of developing advertising materials that precisely match the interests, needs, and behavior of a specific user [6]. Additionally, the specification of this key aspect also highlights the importance of achieving diversity in consumer interaction channels, defined by multilingualism and synchronization.

4. Testing and optimizing individual personalized advertising offers is achieved through sequential operations including A/B testing, multivariate testing, and ongoing optimization [6].

Specifically, within the framework of A/B testing, a business can compare different elements of advertising materials (such as headlines, images, and CTA buttons) to determine which ones perform better. For example, if there are two headline options for an advertising banner—"Sale! Discounts Up to 70%" and "New Collection! Limited Time Only" – two versions of the banner are created with these different headlines. These banners are then shown to different user groups. By analyzing the results, it is determined which headline led to a higher number of clicks.

In multivariate testing, a business can simultaneously test multiple variations of different elements of an advertisement. For example, if testing includes the headline, description, and image of an ad banner, several versions of each created element. These are then combined to generate different banner versions shown to various user groups to analyze the results.

Table 3

Directions and features of creating individual personalized advertising offers in digital marketing

Directions for ceating personalized offers	Features of creating personalized offers	Outcome of the personalized offer creation process
Relevant content	Content that directly addresses the interests, needs, and issues of a specific user or audience segment.	Creation of content that not only grabs attention but also elicits an emotional response and prompts action.
Dynamic creatives	Advertising materials that change in real time based on user data.	Development of highly personalized advertisements
Personalized recommendations	Product, service, or content offers tailored individually for each user based on their behavioral history and interests.	Offering users products or services that are likely to interest them.

Source: formulated by the author based on [2; 5–6]

The specification of this key aspect emphasizes the importance of regular analysis and optimization of advertising campaigns

Within the framework of continuous optimization, a business implements ongoing improvements to advertising campaigns based on collected data. This means that after conducting A/B and multivariate testing, the best-performing variations are adopted, and a new testing cycle begins. For example, after identifying the best-performing headline and image for an ad banner, testing begins on different variations of the landing page that the banner directs to.

In practice, the overall drive for effective ad personalization in digital marketing requires synthesizing the aforementioned key aspects within a unified real-time advertising personalization system, which focuses on data quality, informative algorithms, diversity of consumer interaction channels, and regular analysis and optimization. It will allow [5–6]:

- Displaying ads that are highly relevant to the context of the search query or the content the user is viewing.
- Providing personalized offers based on the user's geographical location.
- Sending messages at times when the user is most active

Conclusions. The research emphasizes that for any business entity, it is not just the process of ad personalization

in digital marketing that matters, but its effectiveness. Based on the research findings, the following conclusion is drawn:

1. The effectiveness of ad personalization in digital marketing is achieved when individual advertising campaigns meet their set objectives. In other words, it measures how effectively personalized advertisements influence user behavior online in terms of metrics such as click-through rates, conversion rates, and average order value, among others.

2. Achieving effectiveness in ad personalization in digital marketing is possible through the lens of key aspects such as continuous data collection and analysis about customers, selection of tools for ad personalization, creation of individual personalized offers, and testing and optimization of these personalized advertising offers.

3. The overall pursuit of ad personalization effectiveness in digital marketing requires synthesizing the aforementioned key aspects within a unified advertising personalization system, which focuses on data quality, the informativeness of algorithms, the diversity of consumer interaction channels, and regular analysis and optimization.

The obtained results create broad opportunities for further development of ad personalization in digital marketing, specifically for defining real-time ad personalization algorithms.

References:

1. Avramenko N., Arkhipova T. (2023) Internet-reklama yak instrument tsyfrovoho marketynhu pidpryyemstva [Internet advertising as a tool of digital marketing of the enterprise]. *Visnik Khmel'nietskogo natsional'nogo universiteta – Bulletin of the Khmelnytskyi National University*, vol. 3, pp. 63–67.
2. Harmatyuk O. (2023) Formuvannya stratehiyi rozvytku internet-reklamy farmatsevychnoyi produktsiyi [Formation of a strategy for the development of Internet advertising of pharmaceutical products]. *Ekonomika ta suspil'stvo – Economy and society*, vol. 53. Available at: <https://economyandsociety.in.ua/index.php/journal/article/view/2709> (accessed August 2, 2024).
3. Kovinko O., Osavolyuk I., Matsenko A. (2017) Analiz rozvytku internet-reklamy v Ukraini [Analysis of the development of Internet advertising in Ukraine]. *Molodoy uchenyy – Young Scientist*, vol. 12 (52), pp. 136–139.
4. Malchyk M. M., Adasiuk I. P. (2021) Reklama v Interneti: teoretychnyy analiz ta osoblyvosti [Advertising on the Internet: theoretical analysis and features]. *Journal of Lviv Polytechnic National University Series of Economics and Management Issues*, vol. 5 (1), pp. 75–85.
5. Pichyk K., Budniak A. (2019) Vplyv reklamy ta inshykh form komunikatsiyi na povedinku spozhyvachiv [Influence of advertising and other forms of communication on consumer behavior]. *Nauchnyye zapiski NAUKMA – Scientific Notes NAUKMA*, vol. 4 (1), pp. 83–87.
6. Yarmolyuk O., Borysenko O., Fisun Yu. (2022) Teoretyko-metodolohichni aspekty tarhetovanoi reklamy yak instrumentu kompleksnoho internet-marketynhu [Theoretical and methodological aspects of targeted advertising as a tool of integrated Internet marketing]. *Naukovyy visnyk Kherson'skoho derzhavnoho universytetu – Scientific Bulletin of Kherson State University*, vol. 46, pp. 23–29.

Список використаних джерел:

1. Авраменко Н., Архипова Т. Інтернет-реклама як інструмент цифрового маркетингу підприємства. *Вісник Хмельницького національного університету*. 2023. № 3. С. 63–67.
2. Гарматюк О. Формування стратегії розвитку інтернет-реклами фармацевтичної продукції. *Економіка та суспільство*. 2023. № 53. URL: <https://economyandsociety.in.ua/index.php/journal/article/view/2709>. (дата звернення: 02.08.2024).
3. Ковінько О., Осаволук І., Маценко А. Аналіз розвитку інтернет-реклами в Україні. *Молодий вчений*. 2017. № 12 (52). С. 136–139.
4. Мальчик М. М., Адасюк І. П. Реклама в Інтернеті: теоретичний аналіз та особливості. *Journal of Lviv Polytechnic National University Series of Economics and Management Issues*. 2021. № 5 (1). С. 75–85.
5. Піччик К., Будняк А. Вплив реклами та інших форм комунікації на поведінку споживачів. *Наукові записки НАУКМА*. 2019. № 4 (1). С. 83–87.
6. Ярмолюк О., Борисенко О., Фісун Ю. Теоретико-методологічні аспекти таргетованої реклами як інструменту комплексного інтернет-маркетингу. *Науковий вісник Херсонського державного університету*. 2022. № 46. С. 23–29.