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## Priority Areas for the Development and Implementation of Alternative Digital Marketing Instruments

**Abstract. Introduction.** In the context of dynamic convergence of the physical and digital worlds, presence of an incredible amount of information about an individual consumer, critical perception of traditional forms of advertising by society, increased efficiency of data processing and communication, traditional marketing has evolved into a completely new model of digital marketing.

**Purpose**. The principal purpose of this paper is to analyse the basis of the concept of digital marketing and the conditions of its formation; to highlight the features of innovative methods and instruments of digital marketing; to consider its characteristics and to assess effectiveness in the current economic environment.

**Results.** The author developed a definition for digital marketing and highlighted the key advantages of applying digital channels in corporate strategies. A series of alternative instruments for modern digital marketing was analysed: artificial intelligence, machine learning, chatbot, video marketing, augmented reality and influencer marketing. The main characteristics of these instruments were defined, and a critical assessment of their effectiveness was provided based on the comprehensive analysis and data comparison.

**Conclusions.** The modern consumers have full control over the internet media and the content they interact with, which strongly reduces or even eliminates the effectiveness of traditional marketing instruments. As a result, marketing specialists are forced to work in complex and changing circumstances. Today, the principal mean of communication between consumers and brands is digital technology, which has fundamentally changed the context and methods of conducting marketing processes. Digital channels proved to be multifunctional, versatile, practical and efficient. For that reason, companies are relying on digital channels for marketing communications to a greater extent. It justifies the fact why investment in research and development of new digital marketing instruments is constantly growing.

*Keywords*: marketing; marketing channels; digital marketing; digital technologies; target audience; promotion; personalised content.

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**Загладько В. О.**, студент першого курсу магістерської спеціальності факультету Міжнародної Економіки і Менеджменту Київського Національного Економічного Університету імені В. Гетьмана, Київ, Україна.

### Пріоритетні напрями розвитку і застосування альтернативних інструментів діджитал-маркетингу

Анотація. У контексті динамічної конвергенції фізичного і цифрового світів, наявності неймовірного обсягу інформації про окремого споживача, критичного сприйняття соціумом традиційних форм реклами, підвищення ефективності обробки даних і комунікації, традиційний маркетинг еволюціонував в абсолютно нову, цифрову форму. Під впливом вищеперерахованих факторів відбулися оновлення та трансформація маркетингових каналів. Ці процеси створили умови для інтенсивного розвитку діджитал-маркетингу та розширення сфер його застосування.

Сьогодні основним засобом комунікації між споживачами та брендами є цифрові технології, які кардинально змінили контекст і методи проведення маркетингових процесів. Цифрові канали є багатофункціональними, універсальними, практичними і ефективними. З цієї причини компанії все більшою мірою покладаються на цифрові канали для маркетингових комунікацій. Це пояснює постійне збільшення інвестицій в дослідження і розробку цифрових маркетингових інструментів.

Попри велику кількість досліджень, теоретичні аспекти інструментарію діджитал-маркетингу розроблено недостатньо. Саме тому основною метою статті є дослідження концепції цифрового маркетингу та умов його формування, виокремлення особливостей інноваційних методів та інструментів цифрового маркетингу, аналіз особливостей і оцінка ефективності в сучасних економічних умовах.

У статті було розкрито зміст терміну цифрового маркетингу. Обґрунтовано ключові прерогативи застосування цифрових каналів корпоративних стратегіях з просування продукції. Розглянуто основні стратегії, традиційні канали та методи діджитал-маркетингу. Досліджено пріоритетні напрями розвитку і застосування альтернативних інструментів сучасного діджитал-маркетингу, детально розглянуто наступні: штучний інтелект, машинне навчання, чатбот, відеомаркетинг, технології доповненої реальності й маркетинг впливу. Визначено основні характеристики заданих інструментів і надано критичну оцінку їхньої ефективності на основі аналізу та порівняння даних.

*Ключові слова*: маркетинг; маркетингові канали; цифровий маркетинг; цифрові технології; цільова аудиторія; просування; персоналізований контент.

Formulation of the problem. In today's fast-changing world, millions of events occur every day, transforming our perception of reality, behaviour and problem-solving approaches. Socio-political factors, development of society, emergence of new markets and their intensive growth, increasing extents of information and technological progress are forcing businesses to adapt to modern trends. The latter factor should be highlighted separately, as digitalisation plays a significant role in every aspect of an individual's life - from how he or she spends time to how manages money. This is supported by everincreasing statistics: as of October 2019, 4.5 billion people or 58% of the world's total population are active internet users [1]. In Ukraine, as of January 2019, 71% of the population has access to the web [2], while in Europe, the average number is 89% [3]. The internet penetration level is even greater among modern teenagers - mass consumers of the next generation. All of these data demonstrate the importance of both the global and Ukrainian markets, which are constantly creating new opportunities for modern business.

Analysis of recent research and publications. The effect of the implementation of digital technologies into corporate marketing strategies has been covered by many Ukrainian scientists. In particular, V. Ruban, A. Sokhatska, A. Lehkyi, M. Oklander and D. latsiuk analyse principal elements, structure and features of digital marketing, while A. Fedorchenko, E. Postykina, I. Ponomarenko and M. Matviiv primarily focus on practical examples of the use of digital channels within the marketing strategies of enterprises. In the vast majority of articles, digital marketing is considered only from a theoretical point of view. Besides that, there is a lack of Ukrainian and world statistical data analysis.

Among foreign authors, a critical analysis of digital marketing and its impact on modern marketing strategies was conducted by F. Ferrier, D. Verna, S. Yogesh, N. Sharaha and D. Shiva Rupan. The main trends in digital marketing were studied by A. Rosario, R. Cruz and S. Murthy. However, leading areas of development of innovative digital marketing instruments and methods are either not considered at all or require more detailed study.

**Formulation of research objectives**. The key objective of this article is to study the features of innovative methods and instruments of digital marketing, highlight their characteristics and assess their effectiveness in current economic environment.

**Presentation of the main results and their justification.** 1. The definition, key objectives and preconditions of digital marketing. The decline in efficiency of traditional methods for attracting attention and changes in consumers' behaviour are the key factors that have led to the emergence of innovative approaches to marketing and communications. Along with them, an important determinant of such changes has also been a prevalence of smart devices, which increased the number of daily interactions between users and gadgets, providing an access to detailed information about their habits and preferences. As a result, marketing channels have been transformed, allowing digital marketing to develop and expand its scope of application.

Benefit	Description		
Agility	Digital channels ensure almost instant distribution of information, reducing the lag between advertising and the response of potential customers.		
Simple result measuring process	When using traditional advertising, its performance is very difficult to evaluate, sometimes almost impossible. Digital Marketing allows you to measure, collect and analyse marketing information (conversion rate, bounce rate, number of visitors to the website, etc.) and edit i accordingly at any given time.		
An abundancy of information about the target audience/customers	Search engines, browsers, websites, applications and social networks gather data about users and enable advertisers to better understand their audience and their needs.		
Flexibility and deep customization of digital media content	Using a wide range of instruments, companies can cooperate with each customer individually, using an exclusive approach. Such ads consider all customer wishes, offering only creative and relevant advertising.		
High level of engagement	As brands reach their target audience through social media, emails or messages, they are able to involve the audience in active discussions through live broadcasts, discussions or surveys.		
Acessability	Implementation of digital marketing instruments is a relatively affordable process, although the ratios of efficiency are much higher in comparison to traditional forms. Moreover, there is a wide range of different promotion services, differing in the complexity of settings, pricing policy, etc.		

Table 1 – The description list of the main benefits of digital marketing mechanisms

Source: created by the author

Despite a large number of studies, the theoretical aspects of digital marketing have not been developed sufficiently. At the same time, any field of research is theoretically dependent on a clear understanding of the essence of a determined concept.

It is worth noting that digital marketing is generally considered to be originated from internet marketing. That is why it is crucial to differentiate these two concepts. Unlike internet marketing, digital marketing allows companies to reach their target audience even outside the network by using the diversity of its channels.

In this article, digital marketing is defined as a set of actions to promote a product or service by taking advantage of digital technologies to research and communicate the target market in both virtual and real environments.

The main objective of digital marketing is to develop strategies for promoting the company and its products

through digital channels. This process involves specific media planning, brand building, active presence in social networks, content creation that attracts large number of people, etc. [4].

Digital marketing has an extensive amount of advantages (Table 1), allowing businesses to engage target audiences more efficiently at the right time, thereby steadily increasing the number of new customers and their loyalty to the brand.

2. The current state of digital marketing development and its traditional instruments. It was the speed and efficiency that created the conditions for intensive development of this market. A study conducted by eMarketer (Figure 1) states that the budget for digital marketing campaigns reached half of the total advertising spending in 2019.

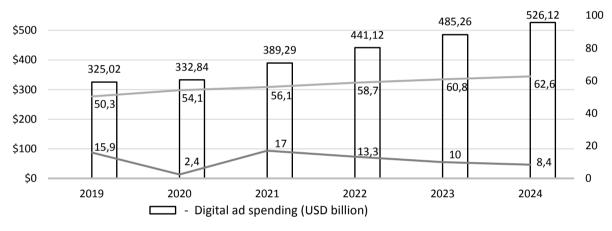


Figure 1 – Digital Ad Spending Worldwide Forecasts (2019-2024)

## Source: [5]

As shown on Figure 1, the spending on digital marketing in 2020 exceeded 332 billion USD. Despite a rather significant decline in growth, experts predict that the market will grow by around 10% annually. In Ukraine, at the end of 2019, total digital advertising spending amounted to an impressive 14 516 million UAH, overtaking TV advertising (11 526 million UAH), outdoor advertising (4 240 million UAH) and press advertising (1 850 million UAH) [6].

Although the transition to digital advertising is rapid, traditional channels are not left out. On the contrary, business is trying to use an effective combination of both traditional and digital advertising methods (Figure 2). The Smart Insights conducted a study which confirms that the vast majority of businesses managed to combine traditional and digital marketing into a single system successfully.

Currently, the most popular methods of digital marketing include contextual advertising (Google

AdWords, Facebook Ads, etc.); content marketing, mobile marketing; viral marketing; email marketing; RTB (realtime bidding); SMM (social media marketing); SMO (social media optimization); SEO (search engines optimization) and SEM (search engine marketing) [8]. According to a study by Ascend2, the most effective channels considered to be: content marketing, SEO and the email marketing [9].

As of 2019, the largest platform for digital ads was provided by Google, which controls 31.1% of the total market or 103 billion USD. The second and third places were taken by Facebook and Alibaba Group (67 and 29 billion USD respectively) [10]. It can be concluded, that in today's world, digital channels have confidently taken a leading position among the main carriers of communication messages, backed up by almost instantaneous distribution of information, multifunctionality and efficiency.

Actively trying to integrate the two. The company is 36% making solid progress in integrating digital and traditional marketing Limited integration. The company uses digital marketing, 25% but it isn't well-integrated into overall strategy Fully-integrated. Digital marketing is integrated within 15% the wider marketing plan but company is not optimizing Not integrated. Company uses digital marketing only on 13% special occasions Optimizing. Full integration and processes are reviewed 6% for optimization Not applicable. The company solely use digital media and 4% communications.

Figure 2 – The results of a survey regarding the integration processes of traditional and digital channels

#### Source: [7]

3. Alternative digital marketing instruments and trends in their development. Technologies are developing rapidly, changing the existing digital marketing practices. Increased competition is driving businesses to invest more in research and development of the technologies, which would provide competitive advantages. In this paper, the most mature, promising and innovative instruments of digital marketing have been considered. These instruments already maintain a significant place in promotion strategies of modern businesses.

o Artificial intelligence and machine learning.

Artificial intelligence technology (AI) is one of the most frequent topics in marketing discussions. Mainly, AI is considered a technology that seeks to imitate human intelligence and thinking. Artificial intelligence covers a wide range of different technologies and is used in a large number of scenarios (Figure 3).

One of the most basic tasks for AI is to enhance the personalisation of content or advertisements. With the help of machine learning, systems can analyse thousands of data elements for highly accurate assessments focused on consumer behaviour. For example, information collected from POS terminals or transactions tracked from an online shop, both provide information about the types of products that are most frequently purchased or viewed by a specific group of customers. Hence it builds a productive interaction with the target audience through properly configured recommendations and unique offers. Personalisation is essential in today's world, as 59% of customers admit that this can influence their decisions when buying a product [11].

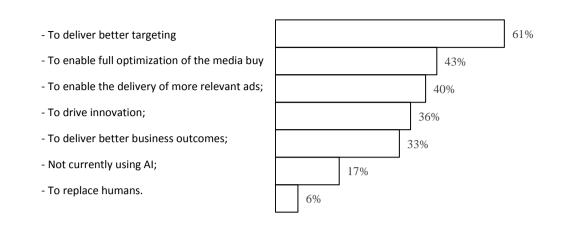
Artificial intelligence technologies identify the key characteristics of customers with the highest conversion

rates (gender, age, location, etc.), allowing companies to place advertising in a most effective way. For their part, analytical systems monitor each interaction, evaluating the actions and feelings that were provoked by a certain ad. In this way, companies become more familiar with the most common reactions of the audience and trace how their needs are changing over time.

The AI also uses the data collected to optimise marketing strategies and produce predictive analytics. By searching, processing and modelling data, the AI is able to predict future results and make quick adjustments. In particular, the algorithm helps to anticipate the types of products that will potentially be relevant and to shape market conditions or pricing in future periods.

For the reason that most arrays of information are presented chaotically and unstructured, there is a need for its in-depth analysis. Thus, sorting information and searching for specific data is also a common application scenario for artificial intelligence. Modern systems are able to scan both internal and external sources: corporate websites, social networks, blogs, applications, news and the like. For instance, AI analyses and visualises unique trends, regularities or deviations and allows the decisionmaking process to be adjusted. Artificial Intelligence and machine learning systems are also used to create automated content: by applying the Natural Language Generation algorithm, the system can create a simple message or article without any human intervention.

As noted above, the AI technology is extremely versatile, which provides unlimited number of scenarios where it could be applied (Figure 3). The experts from Xaxis have examined the most common forms of AI uses among European advertising agencies.



### Figure 3 – Applications of artificial intelligence by marketing agencies in Europe

#### Source: [12]

As can be seen from the figure above, at the current stage of technology development, most often AI is used to set up targeting systems, to optimise the procurement processes for advertising channels and display relevant ads.

In our opinion, artificial intelligence is one of the most promising areas in the development of modern technology and has unlimited potential and capabilities. According to the Single Grain marketing agency, the artificial intelligence industry is expected to be able to generate \$14 trillion in revenues by 2035. An interesting fact is that today, companies which are using artificial intelligence are reporting a 40% increase in overall productivity [13].

Chatbot. At the current stage of evolution of marketing and branding, one of the most prominent success factors is high-quality and fast customer service. Studies show that 82% of customers expect an immediate response from customer service [14]. When there is need to build powerful relations with clients go, the use of chatbots has proven to be a rational alternative for business. A chatbot is a programme based on artificial intelligence that is capable of imitating and understanding human speech and interacting with users or other computer systems. A chatbot could be implemented in a smartphone application or company website. Advanced chatbots are very adaptable: the system is able to change the tactics of the communication according to the gender, age or type (new or regular) of the client. In case if a customer has already had a conversation with a bot, the system will apply a personalised approach and try to identify new information about preferences and suggest relevant product offers.

To sum up, chatbot is a promising, productive and relatively inexpensive technology. A chatbot is capable of automating resource-consuming tasks, delivering brand messages and emphasising the company's image without overburdening the client. Currently, the implementation of chatbot technology into the corporate strategy of the company is a common phenomenon. Based on IBM calculations, companies spend more than 1,3 trillion USD annually on processing customer requests. The use of chatbots could reduce these costs by 30% and will significantly speed up response time by fulfilling up to 80% of classic requests [15].

*Video marketing.* Video content is an integral part of the modern digital world. Video marketing is a universal tool, which is used for various purposes: increasing the conversion or sales, attracting attention, expending client confidence and attracting extra customers that do not perceive text posts.

A video can quickly and effectively illustrate products or services that are difficult to understand, as it is an absorbing, comfortable and easy to learn source of information. The data from the Wyzowl research shows that video is the most comfortable source for getting acquainted with brand products (Figure 4).

The video content gains popularity because of its accessibility and ubiquity: the most popular video hosting service YouTube has 2 billion active users as of 2019 [17]. Besides, it is the second most popular (after Google Search) search engine in the world. For this reason, global brands are actively engaging video marketing in their strategy and are claiming a direct increase in sales. It has been noted that if a video is placed on a brand's home page, the conversion rate increases to 80% [18]. Video content also has a positive impact on a company's SEO, as it significantly increases the time which is spent by user on the website, thereby raising the page in the system's ranking. If a website contains a video, the probability of its appearance in the top of the search results increases 53 times [19].

One of the most significant advantages of video marketing is the fact that videos give people a sense of interaction and connection with the brand. Our studies confirm that video content receives 12 times more reposts than its text or photo equivalents in total [20]. Furthermore, hardware and software for video creation tend to get cheaper steadily, 51% of specialists claim that video marketing is currently one of the most profitable marketing activities [21]. Video marketing is a creative and flexible concept, that is why there are many types of diverse content: microadvertising (6-10 seconds advertising integration); video tutorials; video with client comments; "behind the scenes" video; animated videos; live video stream; 360 spherical and VR video, etc.

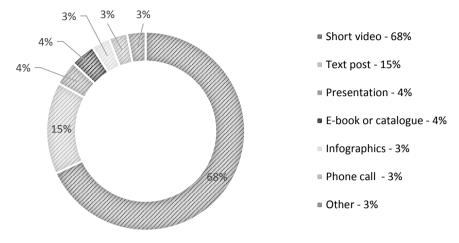


Figure 4 – Best sources to learn about a new product

## Source: [16]

At the current stage of video marketing development, one of the leading trends is a short video post called "Story". "Story" is a feature for publishing photos and videos lasting up to 15 seconds, with the ability to complement the content with text titles, stickers, polls, links, virtual masks/filters and the alike. A key feature of "Stories" is that they are only available for 24 hours after publication.

The main advantages of "Story" are the constant customer engagement; increase in traffic; availability of detailed information about the user base and a report on reach; instant client's feedback; almost no need for funding. It is noted that "Stories" are perceived much better than usual posts on the feed. After all, people tend to check social networks up to dozens of times a day because of the "temporality" of "Stories", as they are afraid of losing the opportunity to view them later and remain unaware of the latest events.

Streaming video is another global trend in digital marketing. Today, almost every popular social network allows its users to start a live video anywhere and anytime. Users find this format very attractive because it gives possibility for them to feel as informed and close to the brand as possible. Facebook research has shown that live video has an extremely high engagement, as viewers do not just view content, but participate in real-time discussions [22].

In summary, video content is an extremely profitable digital marketing channel, that provides high rates of engagement, allowing companies to reduce the overall cost and increase their return on investment. This explains the intensive growth of annual spending on a video marketing campaigns: as of 2019, companies had spent 45 billion USD. Moreover, video marketing budgets are projected to reach 61 billion USD as early as 2021 [23]. If the time spent by users on watching videos continues to grow, video marketing has the potential to become the most common digital marketing instrument.

Augmented reality. Augmented reality (AR) is a technology that enhances a real physical world with virtual objects through computer devices (smartphones/tablets) in real-time. The AR is developing at a high pace due to constant technology improvement: at present, the global market for augmented and virtual reality is estimated at almost \$19 billion [24], but by 2025 the market will have expanded tenfold to reach an impressive \$198 billion [25].

The main reason for the widespread use of augmented reality in marketing is the opportunity to expand the way customers connect with brand and product, as they do not simply view the content, but interact directly with it. Additionally, the technology makes it possible to create higher-level advertising integrations, making them stand out among the monotonous information. The technology also provides clients with a unique experience, as it blurs the line between online and offline environments.

By using AR, brands present themselves as innovative industry leaders: according to the 2016 survey, 40% of respondents are willing to pay more for a product that can be tested in augmented reality. This shows a direct causal link between using augmented reality and customer's brand perception. In addition, 61% of clients prefer to make purchases in online shops/applications that support augmented reality technology [26].

AR allows brands to build long-term relationships with their audience by constantly supplementing digital

content and boosting customer interest. Such approaches ensure increased demand and sales growth, as well as strengthening brand loyalty. The technology works perfectly with standard marketing communication instruments: advertising posters, leaflets, billboards, catalogues and stands.

According to our studies, 67% of experts intended to increase spending on advertising using augmented reality in 2020 [27]. Gartner claims that by the end of 2020, almost 100 million users have purchased goods using augmented reality [28]. In turn, The Drum reports that the implementation of AR technology makes the time spent in-app grow by 85 seconds, the engagement level increase by 20%, and the CTR (click-through rate) increase to 33%. All of these facts make augmented reality more efficient than any print, television or radio advertising [29].

To sum up our results, we would like to note that augmented reality is more than a trend. The technology has great potential in today's content and advertisingfilled world, as it is crucial for brands to have a universal tool that will help to attract customers' attention. This is why the most innovative companies are beginning to invest more and more in developing their strategies to use augmented reality.

Influencer marketing. Brand promotion conducted by a famous actor, model, athlete or any other public personality is a classic tool in the marketing business. In the era of YouTube and Instagram, the concept of a celebrity has diversified considerably: bloggers, social media stars, content creators (artists, musicians, photographers, videographers), journalists, industry experts, analysts, entrepreneurs, motivators and other kinds of opinion leaders.

One of the fundamental factors in the effectiveness of this promotion method is the presence of a close bond between media personality and its audience. The followers have a great level of trust and respect for the views and beliefs of popular individuals. The audience is very active, as influencers are constantly working to attract it. A significant advantage of influencer marketing is the diversity of the choice of channels and possibilities to work with a very limited audience.

According to the Digital Marketing Institute, almost half of consumers rely on influencer's recommendations when making a purchasing decision: 60% of consumers are ready to buy a product that was advertised by a blogger when they see it in a shop [30]. Google research has shown that 60% of YouTube users trust the advice of their favorite internet bloggers more than traditional celebrities [31].

In terms of audience size, influencers can be divided into the following categories: nano- (1k-10k subscribers) micro- (10k-50k subscribers) medium- (50k-500k subscribers) macro- (500k-1 million subscribers) and mega- (over a million) [32]. An interesting fact is that brands of various sizes are increasingly collaborating with nano-influencers, which makes it possible to achieve maximum conversion at low cost. Despite significant coverage, cooperation with ultra-popular internet celebrities is expensive and often inefficient (Table 2).

Influencer tier	Nano	Micro	Medium (50k-	Macro (500k– 1m
	(1k-10k followers)	(10k-50k followers)	500k followers)	followers)
Publication type				
Instagram:				
- Post	100 \$	172 \$	507 \$	2 085 \$
- Video	114 \$	219 \$	775 \$	3 138 \$
- Story	43 \$	73 \$	210 \$	721 \$
YouTube:				
- Video	315 \$	908 \$	782 \$	3 857 \$
Facebook:				
- Post	31 \$	318 \$	243 \$	2 400 \$

Table 2 – Influencer rates worldwide, by social media platform and influencer tier (in USD) for 2019

Source: [33]

The data in Table 2 shows that the pricing policy is changing exponentially according to the size of the audience, the influencer tier and the type of publication. YouTube video publication is the most expensive type of content, as it is resource-intensive and could potentially reach larger audience.

Moreover, artificial intelligence is being used increasingly in the influencer marketing. Although the process of cooperation between business and influencers has been greatly facilitated by the appearance of various services and aggregators, Al is capable of automating the process at a higher level. The current state of influencer marketing is facing two main challenges: measuring the efficiency of a campaign and recruiting an influencer that will fit the campaign best [34]. These issues could be solved by applying artificial intelligence, which can give recommendations based on Image Recognition and Natural Language Processing technologies. For example, with the help of NLP, the computer processes millions of messages and, based on the analysed data, produces advices on the influencers who are most suitable for promoting a particular product or brand. It can also provide a forecast and full performance evaluation (with the level of engagement of each message and the number

of sales conversions). By identifying objects, places, people and signatures on the images, the technology analysis information about the place, time and conditions in which social network users mention a product or brand. In other words, it allows business to measure and monitor the effectiveness of cooperation with influencers, making the search process less resource-intensive and more accurate.

In 2019, Swedish entrepreneur Anders Ankarlid published a study in which he questioned the market for influencer marketing. According to anonymous surveys, 60% of bloggers said they were increasing their audience size with bot accounts. Out of these, 21% confirmed that they would continue to work with fake subscribers. The author also notes that by 2019, the market was estimated at 2 billion USD. However, due to the abundance of nonauthentic activity, it may be overvalued by 744 million USD (40% of the total market). Under these conditions, the real size of the market will be 956 million USD. Furthermore, these deceitful methods are often used by the most efficient influencers: nano, micro and medium tiers [35]. Although there is some ambiguity about the efficiency of influencer marketing, it remains a popular tool among global brands and increases investment attractiveness.

**Conclusion.** The modern consumers have full control over the internet media and the content they interact

with, all this strongly reduces or even eliminates the effectiveness of traditional marketing instruments [36]. As a result, marketing specialists are increasingly forced to work in complex and changing circumstances. Today, the principal means of communication between consumers and brands is digital technology, which has fundamentally changed the context and methods of conducting marketing processes. These transformations have led to the birth of digital marketing, which has outlined several new approaches for analysing the marketing environment and communicating with customers.

The multifunctionality, versatility, practicality and efficiency of digital channels have paved the way for digital marketing to become a leading carrier of communication messages. This explains the fact that the spending on this type of marketing reached half of total advertising campaign expenditure in 2019. The development of technology has led to increased global competition in all areas where marketing is no exception. That is why the investment in research and development of new digital marketing instruments is growing. In this article technologies like artificial intelligence; chatbots; video marketing; augmented reality and influencer marketing are considered to be the most mature and promising instruments of digital marketing.

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