Developing and implementing digital marketing strategies of the future: toward improving product quality and competitiveness

Maryna Martynenko
DSc (Economics), Professor of the Department of Management, Logistics and Innovations, Simon Kuznets Kharkiv National University of Economics, Nauky Av., 9a, Kharkiv, Ukraine, 61166, maryna.martynenko@hneu.net, 0000-0002-4193-6716

Oksana Losheniuk
Ph.D.in Economics, Associate Professor, Chernivtsi Institute of Trade and Economics of Kyiv University of Trade and Economics, Tsenralna Square 7, Chernivtsi, Ukraine, 58002, iryna.losheniuk@gmail.com, 0000-0002-1678-4044

Hanna Demchenko
Philosophy Doctor of Economics, lecturer, Department of Management, Logistics and Economics, Faculty of Management and Marketing, Simon Kuznets Kharkiv National University of Economics, Nauky Av., 9-A, Kharkiv, Ukraine, 61166, kharkov.tpp@gmail.com, https://orcid.org/0000-0001-8550-8011

Nataliia Osypenko
PhD student of Department of Economics, Management and Administration, Kherson State University, str.27 University Street, Kherson, Ukraine, 73003, nataliosipenko19@gmail.com, https://orcid.org/0000-0002-7596-2883

Abstract: The development of tools and technologies of the fourth industrial revolution wave has a direct impact on almost the entire multifaceted space of human activity, and the marketing industry is no exception. The influence of digital tools on the marketing sphere is undeniable and shapes the modern paradigm of digital marketing. The analysis of the current digital technologies and tools state used by marketing organisations in their professional activities, as well as analytical forecasts of the likely development of digital marketing, create a relevant background for determining the development benchmarks of the marketing industry as a whole. In this study 500 specialised publications and scientific papers on digital marketing for the period 2018-2023 were analysed. The chosen papers were cited 20492 times and interpreted into 423 taxonomic units, which were combined into 15 clusters using 6416 connections. In order to correlate the results of the bibliometric analysis, a survey of the management of 50 marketing companies and agencies in Ukraine was additionally conducted with a focus on the impact of the results of specialised scientific works and digital marketing tools on the organisation of their target activities. It was found that the focused scientific research has little impact on the activities of marketing companies. However, companies

actively monitor scientometric indicators and make attempts to integrate scientific developments into the future of marketing. It has been found that modern digital marketing tools are focused on the Internet and social media, and future tools are aimed at studying emotional intelligence and consumer behavioural patterns. It is recommended to use a probable comprehensive strategy for the future of digital marketing that combines current and future tools in order to improve the quality and competitiveness of products. Further research in the field of digital marketing could focus on the study of new technologies and their impact on the strategies and practices of marketing organisations. Particular attention should be paid to the development of methods for analysing big data, artificial intelligence, and machine learning to optimise marketing campaigns and identify potential consumers. The scientific novelty of the current work stems from the focus on determining the impact of scientific research on the activities of marketing companies and sets the direction of the future of digital marketing based on the use of the latest technologies and developments. In addition, the study proposes a comprehensive marketing strategy that covers various measures aimed at improving the quality and competitiveness of products, taking into account the technological requirements of the modern world. The practical significance of the study lies in the fact that it can be used by the management of marketing companies to focus on the future development of their activities and formulate a strategy that covers important aspects of digital marketing.

The research can also be used in scientific studies that examine the relationship between scientific research and the field of marketing. In addition, the results of the study can serve as a basis for further research on digital marketing and its impact on entrepreneurship.

Keywords: digital marketing, quality improvement, product competitiveness, social networks, data analysis

Introduction

The analysis of the current state of digital tools development and their deep integration into the field of marketing allows making assumptions about the future impact of digital marketing on the economic sphere. It will be manifested in the following aspects: increased globalisation (digital marketing facilitates easy access to the global market, which allows companies to sell their goods and services internationally; as a result, small and medium-sized enterprises can compete with large players in the market).

Research Problem

The digital research is extremely relevant in the digital marketing paradigm. With the help of digital tools such as data analytics, machine learning, and artificial intelligence, companies can collect and analyse a huge amount of data about their consumers and their online behaviour. This allows companies understanding the needs and wants of their customers. Moreover they can develop products and services that meet their needs and expectations. As a result, digital tools can improve the quality and competitiveness of a company's products, allowing it to take a leading position in the market and increase its profits (Rizvanović, Zutshi, Grilo & Nodehi, 2023; Amiri, Kushwaha & Singh, 2023; Li, Shi, Wang & Xia, 2023). Currently, a significant number of studies and specialised publications create a non-systematic scientometric landscape on the impact of the digital marketing paradigm on multidisciplinary economic activity, so there is a problem in organising and identifying focus vectors of research in a particular area of the research frontier.

Research Focus

The digital marketing paradigm search helps companies understand how to use digital channels in order to capture the attention of consumers, to interact with them, and influence their online behaviour. This allows companies to create more effective and successful marketing campaigns that improve the quality and competitiveness of their products in the market. Given the identified problems with the unsystematic nature of the scientometric landscape related to the research in the field of digital marketing, relevant prerequisites are being formed for a focused study of the likelihood

of the impact of scientific research and modern technologies (particularly, digital tools in the digital marketing paradigm) on the organisation of professional activities of marketing companies (Nuseir, El Refae, Aljumah, Alshurideh, Urabi & Kurdi, 2023).

The study focuses on establishing the actual impact of research results and modern technologies (namely, digital marketing tools) on the development and formation of adaptive marketing strategies aimed at the quality and competitiveness of products improvement.

Research Aim and Research Questions

The subject of the study is the procedure for developing an adaptive digital marketing strategy to increase the competitiveness of products, based on the results of assessing the impact of scientific concepts on the overall development of the marketing industry and assessing the likely impact of digital tools on the further development of advertising and promotion.

Research Methodology

General Background

Given the significant scientometric landscape and the layering of research data of previous studies on the development of the digital marketing paradigm and its impact on the current multifaceted economic space and possible variations in future development, it is advisable to apply the leading methods of bibliometric analysis of leading scientometric resources such as *Scopus, Web of Science, Google Scholar,* etc.

In addition, in order to form a current view of the impact of scientific research and modern digital technologies on the marketing and advertising industry, a survey tool based on pre-designed focus questionnaires was used to survey the management of leading marketing and advertising companies and agencies in Ukraine.

Sample / Participants / Group

Examples of the application of similar methods in the focal part of the scientometric landscape have been used in studies (Amiri, Kushwaha & Singh, 2023; Li, Shi, Wang & Xia, 2023; Inan, 2023; Khare, Raghuwanshi, Verma & Shrivastava, 2023; Wasiq, Bashar, Akmal, Rabbani, Saifi, Nawaz & Nasef, 2023, etc.)

Instrument and Procedures

To analyse and evaluate the focal area of the scientometric landscape, the recognised bibliometric analysis tool *VOSviewer* was used, which has identified 500 relevant publications from the total flow of scientific papers in the current five-year range (2018-2023) of information search, the analysis of taxonomic bases allowed establishing the current state of research in the field of digital marketing and the likely vectors of future development of the field under study.

In order to empirically correlate the results of the scientometric analysis of the impact of the digital marketing paradigm on the industry as a whole, as well as to assess the likely impact of focused research on the organisation of professional marketing and advertising activities, an online survey was conducted for 50 specialised companies in Ukraine (Table 1, HAC*, IT rating UA, Ringostat) on the* impact of specialised research (Table 2) and digital marketing tools (Table 3) on the organisation of their professional activities.

Table 1

Ukrainian marketing companies and agencies, among which a survey was conducted on the impact of scientific research and digital marketing tools on the organisation of their professional activities (TOP 10 companies are given, data on other companies - VRK, IT rating UA, Ringostat)

Company name	Business profile	Location.	Link

Company name	Business profile	Location.	Link
Netpeak	Internet marketing	Odesa	https://netpeak.net/
Promodo	Internet marketing	Kyiv	https://www.promodo.ua/
AG.Marketing	Internet marketing	Lviv	https://ag.marketing/
WEDEX	Internet marketing	Kherson	https://wedex.com.ua/
Necessary People	Internet marketing	Kyiv	https://www.up-np.com/
Real Marketing Studio	Internet marketing	Ternopil	https://rm-studio.com.ua/
WORLD MEDIA UKRAINE	Internet marketing	Kyiv	https://wmu.biz.ua/
e-Client	Internet marketing	Ternopil	https://e-client.online/
Banda Agency	Internet marketing	Kyiv	https://banda.agency/
BBDO Ukraine	Internet marketing	Kyiv	https://ua.bbdo.ua/

Source: created by the author based on open-source data

Table 2

Survey questionnaire among the marketing companies' management and agencies in Ukraine (Table 1) on the impact of scientific research on the organisation of their professional activities

No. s/n	Question.
1	Do you use scientific research in the development and implementation of your marketing strategy?
2	Does your company ensure that the latest marketing research is constantly monitored and analysed?
3	Does your organisation implement the results of specialised scientific research in its marketing campaigns and projects?
4	Does your company use specific scientific methods and techniques to collect and analyse data about consumers, markets, and competitors?
5	Does your company have special departments or employees responsible for monitoring and implementing research results into marketing activities?
6	Does your company interact with academic institutions and scientists to conduct joint research or share knowledge in the field of marketing?
7	Does your company hold internal training events aimed at familiarising employees with the latest research in marketing?
8	Do you think that specialised scientific research helps you achieve competitive advantages and increase the effectiveness of marketing campaigns?
9	Does your company see the changes in the marketing industry as a result of the integration of specialised scientific research results as positive and do you expect further growth in the importance of scientific approaches in marketing?
10	Does your company plan to increase the role of scientific research in marketing activities in the future?

Source: created by the author

Table 3

Survey questionnaire among the marketing companies' management and agencies in Ukraine (Table 1) on the impact of digital marketing tools on the organisation of their professional activities

No. s/n	Question.
1	Does your organisation use social media in its professional activities and marketing campaigns?
2	Do you think your marketing strategies have changed with the development of digital marketing tools?

3	Does your company use marketing automation, machine learning, and artificial intelligence?
4	Does your company cooperate with influencers and bloggers?
5	Does your company use geo-targeting and location-based marketing?
6	Does your company use analytics and metrics to measure the effectiveness of its digital marketing campaigns?
7	Does your company use *Account-Based Marketing* (*ABM)* strategy tools?
8	Does your company use analytics to gain consumer insights and determine the effectiveness of digital marketing campaigns?
9	Does your company ensure user data protection and compliance with digital marketing rules and regulations?
10	Does your company plan to increase the role of digital marketing tools in its professional activities in the future?

Source: created by the author

The results of the surveys of 50 marketing companies and agencies in Ukraine (Table 2, Table 3) are averaged and median values are established, which are then correlated with the results of the bibliometric analysis of the selected focus area of the scientometric landscape.

Data Analysis

VOSviewer was used in order analyse 500 relevant publications on the study of the concept and paradigm of digital marketing in the current time frame (over the past 5 years). The involvement of a significant number of focal publications will allow establishing median industry indicators and provide it with indirectness and independence of conclusions.

By means of a survey of 50 marketing companies and agencies in Ukraine (Table 1), empirical data were obtained that will allow us to establish the compliance of the results of the scientometric analysis with the real situation in the field of implementation and development of the digital marketing concept.

Research Results

The scientometric background on the influences of the digital marketing concept and paradigm is established by the following accentuated publications selected from the focus scientific landscape.

The article (Nalbant & Aydin, 2023) is devoted to the study of the use of artificial intelligence and digital technologies in digital marketing and branding in the meta-universe. In the article, the authors analyse the impact of digital technologies and artificial intelligence on the development of digital marketing and branding in the meta-universe, being a new platform for interaction and communication on the Internet. The main conclusions of the article are as follows: the use of artificial intelligence and digital technologies can help improve the quality and efficiency of digital marketing and branding in the meta-universe; digital technologies can help increase the level of personalisation of advertising messages and increase the effectiveness of marketing campaigns; virtual assistants can become an important tool for ensuring the quality and efficiency of communication with customers in the meta-universe; data analysis can help understand the needs and wishes of customers.

The article (Alsukaini, Sumra, Khan & Awan, 2023) is devoted to the study of new trends in digital marketing that have emerged during the COVID-19 pandemic. The main conclusions of the article are: the COVID-19 pandemic has led to an increase in the use of digital marketing, as most people have switched to online communication and online shopping; the use of social media has become an important tool for advertisers and marketers during the pandemic, as it provides an opportunity to attract new customers and keep in touch with existing customers; video marketing has become very popular during the pandemic, as videos can be more effective in attracting attention and communicating with customers; content marketing has also become an important tool for brand

support and attracting new customers; other new trends such as geo-targeting, chatbots, and e-commerce platforms have also become very popular during the pandemic; digital marketing requires constant updating and adaptation to changes in demand and technological progress; the research results showed that advertisers and marketers should be ready to change and adapt to new trends in digital marketing that may appear in the future.

The article (Orazi, Ranjan & Cheng, 2023) is devoted to the study of the use of non-verbal emojis in digital marketing. The main conclusions of the article are: the use of non-verbal emojis in digital marketing can increase the effectiveness of advertising messages and attract consumers' attention; the effect of using non-verbal emojis depends on the type of emoji, their cultural connotations, and the context of use; research shows that positive emojis, such as smiles and hearts, can increase consumers' emotional response and their perception of the advertising message; however, the use of negative emojis, such as sadness or anger.

It is also worth mentioning the study (Ponzoa, Gómez, & Arilla, 2023) on the range of modern digital marketing tools (particularly, *SEO*, *SMM*, content marketing, *email marketing,* etc.) that are not fully utilised, as there is potential to improve the online presence of business associations and interaction with their members and customers. The main findings of the study (Gao, Siddik, Khawar Abbas, Hamayun, Masukujjaman & Alam, 2023) are that the adoption of e-commerce and digital marketing by small and medium-sized enterprises (SMEs) affects their financial and sustainability during the COVID-19 pandemic. The study shows that SMEs that have successfully adopted e-commerce and digital marketing have better financial and sustainability performance compared to those that have not. The main findings of the study (Biswas, Sanyal & Mukherjee, 2023) are the development and validation of an AI-based sales forecasting model for digital marketing. The study shows that a forecasting model developed on the basis of neural networks and a genetic algorithm allows accurately predicting sales and improving the efficiency of digital marketing. The main findings of the study (Munir, Kadir & Umar, 2023) are that the use of digital marketing and brand articulation abilities has a great impact on improving marketing capabilities. The study shows that enterprises that are able to effectively articulate their brand and use digital marketing tools have higher marketing capabilities than those that do not use these technologies. The main findings of the study (Dorokhova, Kuusik, Dimitrov, Pentus, Dorokhov & Petrova, 2023) are that the use of computer models in digital marketing budget planning can reduce costs and increase the effectiveness of campaigns. The study shows that the use of such models can help managers make more informed decisions about budget allocation between different digital marketing channels.

In recent years, digital marketing has become a key element of most businesses' advertising strategies. With the help of digital technologies such as social media, email, search engines, and analytical tools, businesses can increase their competitiveness and efficiency. Most studies confirm the importance of digital marketing for improving the quality and competitiveness of products, as well as its impact on various sectors of economic activity. However, with the development of digital technologies, new challenges, and opportunities arise that require continuous improvement and research of digital marketing strategies.

VOSviewer software allows conducting a substantive study of the relevant and up-to-date scientometric landscape regarding the current state of the digital marketing paradigm and the likely vectors of its further development.

The parameters of the metric for bibliometric analysis of the selected section of the scientometric landscape are given in Table 4.

Table 4

Metrics of bibliometric analysis of the scientometric landscape for digital marketing research in the current search horizon (2018-2023)

Parameter.	Meaning.
Query	Digital marketing from 2018 to 2023
Source	Scopus, Web of Science, Google Scholar
Papers	500,00
Citations	20492,00
Years	5,00
Cites_Year	4098.40
Cites_Paper	40.98
Cites_Author	10962.67
Papers_Author	264.69
Authors_Paper	17199,00
h_index	63,00
g_index	128,00
hc_index	76,00
hI_index	25.94
hI_norm	42,00
AWCR	8278.40
AW_index	90.99
AWCRpA	4535.51
e_index	99.78
hm_index	43.57
QueryDate	45011,69
Cites_Author_Year	2192.53
hI_annual	14824,00
h_coverage	68.0
g_coverage	81.0
star_count	146,00
year_first	2018,00
year_last	2023,00
ECC	20492,00
acc1	499,00
acc2	438,00
acc5	257,00
acc20	73,00
hA	37,00

Source: created by the author

The results of the query (Table 4) in the *Scopus*, *Web of Science,* and *Google Scholar* databases show that from 2018 to 2023, 500 scientific articles on digital marketing were identified, which received a total of 20492 citations. The average citation rate per year is 4098.40, and the citation rate per article is 40.98. The authors' impact assessment is represented by such indicators as *Cites_Author* (10962.67) and *Papers_Author* (264.69), which indicates a high citation rate of researchers in this field. The overall Hirsch index (*h-index) is* 63, and the *AWCR* (*Annual Weighted Citation Rate) is* 8278.40. The *g-index is* 128, and the *hI_index is* 25.94. The effectiveness of the study is assessed using the *AW_index* (*Annual Weighted Publication Impact Index),* which is 90.99. The number of stars (*star_count) is* 146. In addition, research shows that the *coverage of* these indicators for the *h* and *g* indices is 68% and 81%, respectively.

The results of the analysis of the selected focal area of the scientometric landscape (in relation to the query "digital marketing") are interpreted using the *VOSviewer* software into the corresponding taxonomic scheme - Figure 1. The graphic taxonomy representation of the results of the analysis of the focal publications for the last five years allows us to distinguish 423 taxonomic units that are combined into 15 clusters using 6416 connections.
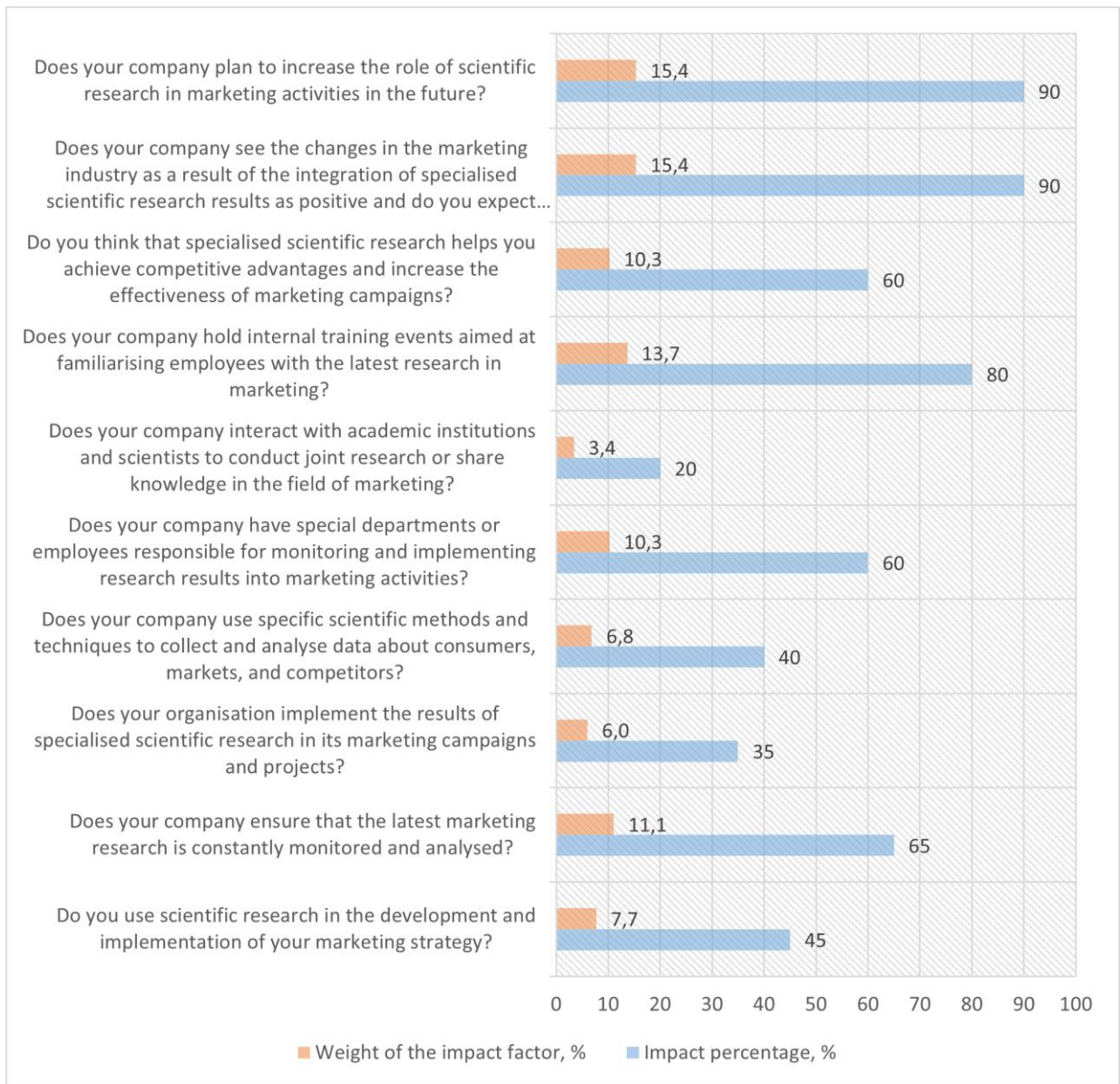
Figure 1
Taxonomical interpretation (scheme) of the scientometric landscape of the "digital marketing" areola

Source: created by the author

A set of taxonomical units identified from the focus studies and relevant publications in the period 2018-2023 (500 articles) form an idea of the nature of the current state of digital marketing research, which, in fact, form the scientometric landscape: cluster 1 (58 taxonomical units) - a set of studies on the structure and application of digital marketing; cluster 2 (43 taxonomical units) - a set of studies on innovations in digital marketing; cluster 3 (38 taxonomical units) - a set of studies on the network application of digital marketing tools; cluster 4 (38 taxonomical units) - a set of studies on the ordering and systematisation of the results of digital marketing research; cluster 5 (34 taxonomical units) - a set of studies on the impact of digital marketing tools on the sphere of economy and commercialisation; cluster 6 (29 taxonomical units) - a set of studies on the digital transformation of the sphere of economy and finance and the role of digital marketing in the progress of multisectoral economic activity; cluster 7 (28 taxonomical units) - a set of studies on the internal organisation of marketing systems and the impact of relevant digital tools on it; cluster 8 (27 taxonomical units) - a set of studies 9 cluster (25 taxonomical units) - a set of studies assessing the future impact of digital marketing in the digital environment paradigm; 10 cluster (25 taxonomical units) - a set of studies on the development of technological and functional digital marketing tools, as well as its impact on various business structures; 11 cluster (20 taxonomical units) - a set of studies on the impact of global phenomena such as the pandemic and the digital era on the development of the marketing industry in general; Cluster 12 (18 taxonomical units) - a set of studies on the impact of social networks on digital marketing; Cluster 13 (15 taxonomical units) - a set of studies on the impact of digital marketing tools on the formation of recognizable brands and the overall branding strategy; Cluster 14 (14 taxonomical units) - a set of studies on the practical application of digital marketing tools; Cluster 15 (11 taxonomical units) - a set of studies on the impact of the digital marketing context on trade and the economy.

Each of the characterised clusters of the digital marketing data scientometric landscape has its own dynamics of development and is the basis for the development of the latest research vectors, which allows us to establish a chronotaxonomic analysis of biometric data (Table 4) - Figure 2.
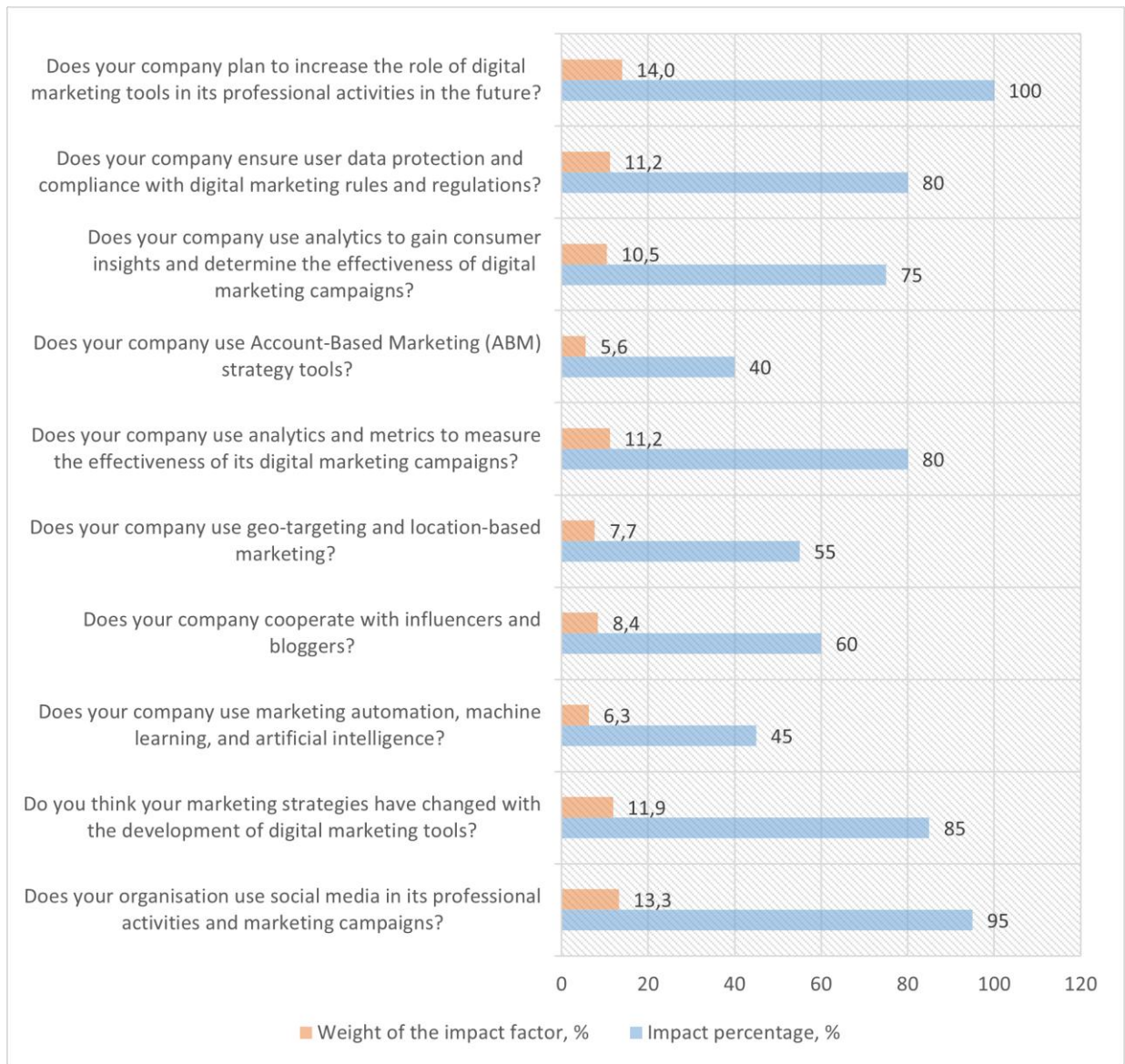
In accordance with the data shown in Figure 2, we will establish the relevant and trendy vectors for further research of the concept and paradigm of digital marketing: development of digital marketing tactics; assessment and analysis of the impact of social networks on the development of digital marketing; development of training programs for mastering digital marketing methods; conceptualization and formation of the basic principles of digital marketing; evaluation and analysis of the use of digital marketing tools in the process of branding goods and companies; research and formation of ideas about an appropriate and effective system for organizing and organizing digital marketing tools and methods; assessment of the impact of modern technologies such as blockchain, neural networks and AI on the digital marketing system.

Figure 2

Chronotaxonomic scheme of the results of bibliometric analysis of digital marketing data

Source: created by the author

The results of the bibliometric analysis (Figure 2) suggest that further research on digital marketing should focus on organising the existing relevance information array, tactics, and marketing strategies, studying and using the impact of social media, organising training, forming the basic principles and implementing digital marketing tools with the latest digital technologies and solutions.

The median data from the surveys of the management of leading Ukrainian marketing companies and agencies on the impact of specialised scientific research (Table 2) on the organisation of their professional activities are shown in Figure 3.

The median data from the surveys of the management of leading Ukrainian marketing companies and agencies on the impact of specialised digital marketing tools (Table 3) on the organisation of their professional activities are shown in Figure 4.

Figure 3
Median data from surveys of the management of leading Ukrainian marketing companies and agencies on the impact of specialized scientific research (Table 2) on the organization of their professional activities

Source: created by the author

Figure 4
Median data from surveys of the management of leading Ukrainian marketing companies and agencies on the impact of digital marketing tools (Table 3) on the organisation of their professional activities

Source: created by the author

According to the results (Figure 3, Figure 4) of the survey of the leading marketing management organisations in Ukraine, the following aspects have been identified:

– on the impact of specialised scientific research on the development of the marketing industry (Figure 3): a significant part of the surveyed companies still refrain from the practical implementation of the research results (which indicates a preference for proven and tested methods of forming marketing strategies), but most companies have staff responsible for monitoring scientific research in the field of marketing and advertising. The main point of this part of the survey is the fact that there is a commitment to scientific methods of forming and developing marketing strategies, as well as a greater willingness to integrate solutions based on a scientific approach (weight factor of influence - 15.4%) into their professional activities, which correlates with the results of the bibliometric analysis and confirms the relevant observations about the need to systematise, conceptualise and coordinate a certain layer of relevant research data in order to implement them in advertising and marketing processes;

– on the impact of digital marketing tools on the organisation of professional activities of marketing companies and agencies (Figure 4): almost all surveyed companies use modern digital marketing tools (social networks, influence of

influencers, geotargeting) in their professional activities, but the latest developments, such as marketing automation, the use of machine learning and AI, as well as a conceptually new marketing strategy *Account-Based Marketing* (*ABM) are* not yet widely used.

Based on the results of the survey of 50 specialised organisations and the analysis of relevant publications (Jadhav, Gaikwad & Bapat, 2023; Fatin, Ullah & Rahman, 2023; Adwan, Kokash, Adwan & Khattak, 2023), we will analyse the modern digital marketing tools already used by specialised organisations - Table 5.

Table 5

Analysis of the modern range of digital marketing tools

No. s/n	Name of the digital medium	Analysis of the mechanism of use
1	Search Engine Marketing (SEM)	SEM includes Search Engine Optimisation (SEO) and Pay-Per-Click (PPC) advertising campaigns aimed at increasing the visibility of a web resource in search engines such as Google, Bing, Yahoo, etc.
2	Content Marketing	Creating and distributing valuable, relevant, and consistent content to attract and retain target audiences, as well as drive consumer action to improve business performance.
3	Social media marketing (SMM)	Using social media platforms such as Facebook, Instagram, Twitter, LinkedIn, and others to promote products and engage the community. SMM includes the creation of organic content, advertising campaigns, and collaboration with influencers.
4	E-commerce Marketing (E-commerce Marketing)	Selling goods and services over the Internet using various online channels, such as websites, mobile applications, social media, marketplaces, and other platforms.
5	Email Marketing	Use email to promote products or services, communicate with potential and existing customers, maintain loyalty, and drive repeat sales.
6	Mobile App Marketing	Creating, optimising, and promoting mobile applications on various platforms such as Android and iOS. Mobile app marketing includes advertising campaigns aimed at increasing the number of installs, activating users, maintaining loyalty, and driving in-app purchases.
7	Video Marketing	The use of video to promote products and services, provide brand recognition, and support user engagement. Video marketing can include commercials, short videos for social media, webinars, presentations, and other types of video content.
8	Internet of Things Marketing	Use of IoT technologies to collect and analyse data about consumers, their behaviour, and interaction with products. This data can be used to develop personalized marketing campaigns, track the effectiveness of promotional activities, and improve the user experience.
9	Influencer Marketing	Collaboration with influencers and opinion leaders on social media who influence their audience and have an impact on their purchasing decisions. Influencer marketing includes the creation of joint content, product placements, and affiliate programs.
10	Analytics and Optimization	Collecting, tracking, and analysing data about users, their behaviour, and their interaction with products and advertising campaigns. Using analytics and optimisation, you can refine your marketing strategies, improve conversion rates, and ensure more efficient use of your budget.
11	Advertising technologies (Ad Tech)	The use of specialised tools and platforms to automate, manage and track advertising campaigns. The main advertising technologies include Ad Management Systems, Ad Exchanges, Demand-Side Platforms (DSPs), and programmatic buying.
12	Marketing Automation	The use of technology and platforms to automate routine marketing tasks and processes, including email, social media, analytics, and long-term customer follow-up. Marketing automation helps to increase marketing efficiency and focus on strategic tasks.
13	Omnichannel Marketing	Creating a community of users and providing services through various channels of communication and customer interaction, ensuring a unified user experience. Omni-channel marketing includes the integration of

No. s/n	Name of the digital medium	Analysis of the mechanism of use
		marketing campaigns across social media, email, mobile apps, websites, offline events, and other communication channels.
14	Contextual Advertising	The use of advertising materials displayed based on the context of the web page or the user's interests. Contextual advertising is aimed at displaying ads that are as relevant and interesting to the user as possible, which ensures a higher probability of conversion and customer acquisition.
15	Data-Driven Marketing	Focuses on collecting, analyzing, and using data about users, their behavior, and interaction with products or advertising materials. The data can be used to optimize marketing strategies, develop personalized campaigns, and increase the effectiveness of advertising activities.
16	Virtual reality (VR) and augmented reality (AR) in marketing	The use of virtual and augmented reality technologies to create immersive user experiences, demonstrates products, and engages customers. VR and AR can be used in advertising campaigns, presentations, and interactive applications.
17	Chatbots and artificial intelligence (AI) in marketing	Using chatbots and artificial intelligence to automate communication with customers, process requests, and provide personalised recommendations. Chatbots and AI can be used for customer support, sales promotion, and customer data analysis.
18	Account-Based Marketing (ABM)	It is a strategic approach to business marketing that is based on working with specific key customers or potential customers instead of addressing a broad audience. ABM involves the careful selection of key organisations, the development of personalised marketing campaigns aimed at the needs and interests of these organizations, and interaction with them at all stages of the sale. The goal of ABM is to increase the return on marketing spend, collaboration between marketing and sales teams, and customer satisfaction.
19	Interactive content	Interactive content is a form of digital marketing that actively engages users and stimulates their interaction with the brand. Such content can include videos with game elements, polls, infographics, online calculators, or virtual tours. Interactive content allows companies to collect more detailed information about consumer behaviour, answer their questions and needs, and increase audience engagement and loyalty.
20	Webinars and online events	Webinars and online events allow companies to provide training, product demonstrations, presentations, and other types of communication with their audience in real time over the Internet. They are becoming increasingly popular because they allow you to reach audiences from different countries and conveniently educate users about new product features, research, and market trends. It also allows you to collect feedback and interact with the audience during the event, gaining valuable insights to improve products and marketing strategies.

Source: created by the author based on the analysis of the results of the focus group survey and analysis of relevant publications

Based on the analytical data (Table 5), one can state that the current range of digital marketing tools is quite wide and has a significant variety of tools that can be used in the core activities of marketing organisations, however, not all of these technologies are currently used equally - some of them are at the initial stage of evolution and are moving to the tools of the future digital marketing. Modern digital marketing is currently focused on the use of the Internet and social media.

Based on the chronotaxonomic analysis of 500 relevant publications (Figure 2) and the identified trends in the implementation of the latest *Industry 4.*0 tools in the layout field, one makes an analytical assumption about the likely tools of the future digital marketing - Table 6.

Table 6

Analytical expectations regarding the nature of future digital marketing tools and technologies

No. s/n	Name of the digital medium	Analysis of the mechanism of use
1	Increasing the integration	Using artificial intelligence (AI) to analyse data, predict consumer

No. s/n	Name of the digital medium	Analysis of the mechanism of use
	of artificial intelligence	behaviour, and automate various marketing processes.
2	Increase the integration of augmented reality (AR) and virtual reality (VR) tools	The use of AR and VR to create immersive experiences for users, enabling virtual product reviews, interactive training, etc.
3	Increase the integration of voice assistants and chatbots	Use voice assistants and chatbots to communicate with customers, answer questions, and automate marketing processes.
4	Blockchain technologies	The use of blockchain technologies to ensure transparency, security, and automation of marketing operations, such as control over advertising campaigns and content monetisation.
5	Increase the integration of Internet of Things (IoT) tools	Use IoT technologies to collect data from various devices and systems for better analysis of consumer behaviour and marketing planning.
6	Increase the integration of Big Data and data analysis tools	Use of big data and data analytics to deeply understand consumer behaviour, identify trends, and predict future market development.
7	Hyper localised marketing	Use of geolocation and other local data to target advertising and other marketing messages to specific geographic regions or consumers.
8	5G integration	The introduction of 5G technologies, which will provide faster and more stable Internet, allowing marketers to create more advanced and interactive advertising campaigns and provide excellent user experience.
9	Machine learning (ML) and neural networks	Application of machine learning and neural networks to optimise marketing campaigns, audience segmentation, and process automation.
10	Quantum computers	Using the potential of quantum computers to analyse large amounts of data, predict trends, and optimise marketing strategies.
11	Biometric technologies	Use of biometric technologies, such as facial or fingerprint recognition, to improve security and personalise marketing campaigns.
12	Social media using VR/AR	Developing social media that incorporate VR/AR technologies to create new interactive and engaging marketing campaigns.
13	Micro-moments	Create marketing strategies that capitalise on micro-moments when users are looking for answers, information, or recommendations on their devices.
14	Data privacy and ethics	Ensure transparency and compliance with data ethics principles when using digital marketing
15	Emotional intelligence in marketing	Use of emotional intelligence to analyse and understand the emotions of the audience, which allows you to create more personal and effective marketing campaigns.
16	Self-learning technologies	Use of technologies that allow systems to learn from their mistakes and improve which will optimise marketing processes and improve campaign performance.
17	Omnichannel marketing	The development of technologies that allow companies to integrate different communication channels and marketing platforms to provide a consistent and integrated user experience.
18	Video marketing using 360-degree video	Creating engaging and interactive videos that allow users to explore products and services from different angles, providing a deeper immersion in the content.
19	Smart contracts	Implementation of smart contracts based on blockchain technology to automate advertising transactions, ensure transparency and compliance with the terms of the contract between the parties.
20	Gamification of marketing	Use gamification to create engaging and effective marketing campaigns that encourage users to become more involved and interact with the brand.

Source: created by the author on the basis of chronotaxonomic analysis of 500 relevant publications

Based on the analytical findings (Table 6), one believes that in the future, the main directions of digital marketing development are likely to focus on the following aspects:

1. Integration of artificial intelligence and machine learning: This will allow companies analysing large amounts of data, predict trends, and optimising marketing campaigns based on learning from previous experience.

2. Personalised marketing: The development of technologies to create more individualised and personalised marketing campaigns that take into account the interests, preferences, and behaviour of consumers.

3. Omnichannel and omni-channel marketing: Integration of various communication channels and platforms to provide a consistent and integrated experience for users across all brand touchpoints.

4. Expanding video marketing opportunities: Use new video formats such as 360-degree video, virtual reality, and augmented reality to create more immersive and interactive marketing campaigns.

5. Gamification of marketing: The use of game elements to create motivating and effective marketing campaigns that stimulate active participation and interaction between users and the brand.

6. Blockchain and smart contracts: Implementation of blockchain technologies to automate advertising transactions, ensure transparency and compliance with the terms of the contract between the parties.

7. Application of emotional analysis: The use of technology to analyse users' emotions and reactions to various marketing campaigns, helping marketers to better understand consumers and customise their strategies according to their emotional state.

8. Attention to social responsibility: The future of digital marketing will emphasise socially responsible practices, environmental sustainability, and ethical considerations in commercial activities.

9. Use of chatbots and voice assistants: Use chatbots and voice assistants to automate customer service, provide information about products and services, and engage users in marketing campaigns.

10. Continued development of mobile marketing: Increase the share of mobile marketing and optimise content for various mobile devices to provide users with the best possible brand experience.

These directions of digital marketing development in the future indicate that companies will actively implement the latest technologies and innovations to increase the effectiveness of their marketing strategies and meet the changing needs and requirements of consumers. Among the means of future digital marketing, it is worth noting the significant emphasis of technology development on the study of the impact of emotions and the personalisation of advertising and marketing strategies.

Taking into account the results of a survey of 50 specialised companies, which allowed us to establish the current state of use of digital marketing technologies and the impact of the results of specialised scientific works on the industry under study and the results of a time-based analysis of the prospective development of future digital marketing tools, we will form a probable and adaptive future marketing strategy and stages of its implementation in order to improve the quality and competitiveness of products.

A future digital marketing strategy to improve product quality and competitiveness involves systematic planning and use of current and future digital marketing tools. This strategy can be presented as follows:

1. Identification of the target audience: Identification and analysis of the main customer segments to which products are offered in order to develop effective marketing campaigns aimed at meeting their needs and requirements.

2. Implementation of an omnichannel marketing strategy: Developing integrated marketing campaigns that include various channels and platforms (social media, search engines, emails, contextual advertising, etc.), ensuring brand consistency and optimal user experience.

3. The use of consumer data to personalise marketing activities: The use of analytics, big data, artificial intelligence, and machine learning to analyse consumer behaviour, needs, and preferences to create personalized marketing campaigns.

4. Using the latest technologies to create interactive content: Developing videos, animations, infographics, virtual and augmented reality to engage users and increase their interest in products.

5. Application of emotional analysis to improve the effectiveness of marketing campaigns: The use of psychological and social research to better understand the emotional needs of consumers and develop marketing strategies that address those needs.

6. Expanding mobile marketing: Adapting marketing materials for mobile devices, including creating responsive website designs and mobile applications that make it easier for users to access products and services.

7. Use of blockchain technologies and cryptocurrencies: The use of blockchain technologies to ensure security and transparency of business processes, as well as the possibility of using cryptocurrencies to ensure fast and secure payments.

8. Development of environmental marketing: Promoting products and brands through the lens of environmental responsibility, focusing on sustainable production practices and reducing negative environmental impact.

9. Collaboration with influencers and opinion leaders: Partnering with influencers to promote products and build brand credibility.

10. Focus on globalization and localisation: Adapting marketing strategies to global trends and local market specifics to achieve greater effectiveness of marketing campaigns in different markets.

Taking the above areas into account when developing a digital marketing strategy will help improve the quality and competitiveness of products. This strategy should be flexible and adaptable to market changes and new technologies. The following steps are recommended for implementing the strategy:

1. Market analysis: Study the competition, analyse the strengths and weaknesses of your own product, and identify market opportunities and potential threats.

2. Setting marketing goals: Setting specific, measurable, attainable, relevant, and time-bound goals that reflect the desired outcomes of marketing efforts.

3. Development of marketing tactics: Selecting the most effective digital marketing tools to achieve your goals, taking into account current and future trends.

4. Development of a marketing budget: Calculate the costs of implementing marketing campaigns ensure optimal resource allocation and control costs.

5. Monitoring and evaluation of results: Tracking the performance of marketing activities, analysing the results, adjusting marketing campaigns as needed, and learning from the experience to improve marketing efforts in the future.

Successful implementation of this digital marketing strategy will not only improve the quality and competitiveness of products, but also enhance interaction with the target audience, improve user experience, and increase the likelihood of brand choice in the market. Leveraging new technologies, supporting innovations, and constantly monitoring changes in digital marketing will help a company

stay at the forefront of the market and adapt to its requirements. Thus, a digital marketing strategy to improve product quality and competitiveness should take into account current and future trends in digital marketing. It should be thorough, integrated, and focused on the needs of the target audience. Successful implementation of such a strategy will increase the company's competitiveness, improve brand reputation, and ensure stable business development in the long run.

Discussion

The results of the study correlate with relevant and significant scientific works, which confirm the correctness of the aspects, factors, emphases, and analytical conclusions regarding the established clustering of the studied vectors (which is comparable to the findings of Kyaw, Tepsongkroh, Thongkamkaew & Sasha, 2023).

Similar indirect confirmations have been established for the identified current trend research vectors of the selected area of the scientometric landscape of the digital marketing paradigm, which correlate with the results of surveys of 50 specialised organisations that use digital marketing tools and technologies in their activities.

The concept of developing digital marketing tactics is to continuously improve methods and approaches to interacting with digital communication channels in order to increase the productivity and effectiveness of marketing campaigns. The main principles of digital marketing tactics development are the use of the latest technologies, data analysis, and careful study of the target audience to create personalised marketing strategies (which correlates with the findings of Denga & Rakshit, 2023).

Evaluating and analysing the impact of social media on digital marketing means researching various social media platforms and their impact on consumers, as well as developing strategies for using social media to achieve marketing goals. The main aspects of assessing the impact of social media on digital marketing are the analysis of user activity, their behavioural habits, and interaction with content, as well as the evaluation of the effectiveness of social media advertising campaigns (which correlates with the findings of Kiburu, Njiraini & Boso, 2023).

The development of digital marketing training programs involves the creation of courses and programs that include modern tools and practical tasks aimed to develop the necessary skills in digital marketing, including web analytics, SEO, the content marketing, the social media, and others (that correlates with the findings of Elhajjar, 2023).

Conceptualization and formation of the basic principles of digital marketing means creating a fundamental basis for the effective use of digital tools and methods in marketing activities. The basic principles of digital marketing include: target audience analysis, digital content development, social media use, search engine optimization, e-commerce, data analysis, and others (which correlates with the findings of Razzaq, Shao & Quach, 2023).

Evaluation and analysis of the use of digital marketing tools in the process of branding products and companies is to assess the effectiveness of using various digital marketing tools, such as social media, contextual advertising, email, websites, and others, to increase consumer attention and interest in the brand and increase its recognition and loyalty (which correlates with the findings of Bohara, Bisht, Suri, Panwar & Sharma, 2023).

The research and formation of ideas about an appropriate and effective system of organization and ordering of digital marketing tools and methods are aimed at finding the most optimal and effective strategies for using digital marketing tools, taking into account the specifics of the business and the characteristics of the target audience (which correlates with the findings of Lisnik & Majerník, 2023).

Assessing the impact of modern technologies on the digital marketing system includes analysing the possibilities of using block chain, neural networks, and AI to improve the efficiency and security of digital marketing processes, as well as taking into account the impact of these technologies on the behaviour and expectations of digital consumers (which correlates with the findings of Rathore, 2023).

However, the marketing strategy formed on the basis of analytical conclusions (out of 500 relevant publications) concerned with the use of digital marketing tools in order to improve the quality and competitiveness of products has qualitative differences from similar solutions proposed in studies (Kastulani & Septiana, 2023; Kim & Balachander, 2023; Taghavi, Janpors & Raeisi Ziarani, 2023), due to the fact that these scientific works and the corresponding results are based on a narrower profiled sample and cannot be interpreted as median and universal in advance, and do not explore future vectors of development of digital marketing tools.

Given the context provided above, future research in the field of digital marketing may be aimed at developing digital marketing tactics, studying the impact of social media on the development of digital marketing, developing training programs for mastering digital marketing methods, conceptualising and forming the basic principles of digital marketing, evaluating and analysing the use of digital marketing tools in the process of branding goods and companies, researching and forming ideas about the appropriate and effective system of organisation and emphasis of digital marketing.

Given that the results of this study are based on a wider sample and have a more general and universal focus, they can be considered quite reasonable and promising for practical application in order to improve the efficiency of digital marketing and product competitiveness.

Conclusions and Implications

Based on the results of the research, where bibliometric analysis of 500 relevant publications were used as well as a survey of the management of 50 specialised marketing organisations in Ukraine, the following aspects were established:

- The focused scientific research has a relatively minor impact on the organisation of marketing companies' activities, but most companies monitor the current and relevant scientometric landscape in order to identify opportunities for improving the technologies of their professional activities and seek to integrate scientific achievements into the field of future marketing. At the same time, almost all surveyed companies note the strong influence of modern digital marketing tools on the organisation of their activities and strive for even greater implementation of the latest technologies of the fourth wave of industrialization in their professional field;
- Modern digital marketing tools focus on the use of the Internet and social networks;
- The likely means of future digital marketing are focused on the study of emotional intelligence and behavioural patterns of potential consumers;
- The marketing strategy should use modern and future digital marketing tools that combine effective and proven techniques and scientifically based tools of the latest developments and technologies in order to improve the quality and competitiveness of products.

The future digital marketing strategy involves systematic planning and the use of current and future tools in order to improve the quality and competitiveness of products. The main areas of such a strategy include target audience identification, Omnichannel, personalisation, interactive content, emotional analysis, mobile marketing, block chain and cryptocurrency implementation, eco-marketing, collaboration with influencers and opinion leaders, and a focus on globalisation and localisation. This comprehensive and integrated strategy will help businesses remain competitive in the face of constant change and technological development.

The developed probable marketing strategy using current and future digital marketing tools to improve the quality and competitiveness of products is comprehensive and has a varied range of activities aimed at identifying the target audience, using digital marketing channels, monitoring demand and consumer feedback, using data able to improve the product, and analysing data to forecast and improve sales.

References

Adwan, A., Kokash, H., Adwan, R., & Khattak, A. (2023). Data analytics in digital marketing for tracking the effectiveness of campaigns and inform strategy. *International Journal of Data and Network Science*, *7*(2), 563-574. https://doi.org/10.5267/j.ijdns.2023.3.015.

Alsukaini, A. K. M., Sumra, K., Khan, R., & Awan, T. M. (2023). New trends in digital marketing emergence during pandemic times. *International Journal of Innovation Science*, *15*(1), 167-185. https://doi.org/10.1108/IJIS-08-2021-0139.

Amiri, A. M., Kushwaha, B. P., & Singh, R. (2023). Visualisation of global research trends and future research directions of digital marketing in small and medium enterprises using bibliometric analysis. *Journal of Small Business and Enterprise Development*, (ahead-of-print). https://doi.org/10.1108/JSBED-04-2022-0206.

Biswas, B., Sanyal, M. K., & Mukherjee, T. (2023). AI-Based Sales Forecasting Model for Digital Marketing. *International Journal of E-Business Research (IJEBR)*, *19*(1), 1-14. https://doi.org/10.4018/IJEBR.317888.

Bohara, S., Bisht, V., Suri, P., Panwar, D., & Sharma, J. (2023). Online marketing and brand awareness for HEI: A review and bibliometric analysis. *F1000Research*, *12*(76), 76. https://doi.org/10.12688/f1000research.127026.1.

Denga, E. M., & Rakshit, S. (2023). Digital Marketing and the Sustainable Performance of Small and Medium Enterprises. In *Advancing SMEs Toward E-Commerce Policies for Sustainability* (pp. 213-234). IGI Global. https://doi.org/10.4018/978-1-6684-5727-6.ch011.

Dorokhova, L., Kuusik, A., Dimitrov, R., Pentus, K., Dorokhov, O., & Petrova, M. (2023). Planning the digital marketing budget: computer modelling for decision making. *Access Journal*, *4*(2), 248-260. https://doi.org/10.46656/access.2023.4.2(7).

Elhajjar, S. (2023). The current and future state of the marketing management profession. *Journal of Marketing Theory and Practice*, 1-18. https://doi.org/10.1080/10696679.2023.2166535.

Fatin, T., Ullah, M., & Rahman, N. (2023). Balanced Scorecard as a Tool to Evaluate Digital Marketing Activities. In *Encyclopedia of Data Science and Machine Learning* (pp. 2368-2383). IGI Global. https://doi.org/10.4018/978-1-7998-9220-5.ch142.

Gao, J., Siddik, A. B., Khawar Abbas, S., Hamayun, M., Masukujjaman, M., & Alam, S. S. (2023). Impact of E-Commerce and Digital Marketing Adoption on the Financial and Sustainability Performance of MSMEs during the COVID-19 Pandemic: An Empirical Study. *Sustainability*, *15*(2), 1594. https://doi.org/10.3390/su15021594.

Gleim, M. R., McCullough, H., Sreen, N., & Pant, L. G. (2023). Is doing right all that matters in sustainability marketing? The role of fit in sustainable marketing strategies. *Journal of Retailing and Consumer Services*, *70*, 103124. https://doi.org/10.1016/j.jretconser.2022.103124.

İnan, Ü. S. E. (2023). Evaluation of digital marketing from a bibliometric analysis perspective: Received: 10th September 2022; Revised: 15th November 2022, 23rd December 2022, 28th December 2022; Accepted: 09th January 2023. *Socialis Series in Social Science*, *4*, 45-58. https://doi.org/10.20319/socv4.4558.

IT rating UA. IT rating of Ukraine (2023). https://it-rating.ua/reklamnoe-agentstvo.

Jadhav, G. G., Gaikwad, S. V., & Bapat, D. (2023). A systematic literature review: digital marketing and its impact on SMEs. *Journal of Indian Business Research*, *15*(1), 76-91. https://doi.org/10.1108/JIBR-05-2022-0129.

Kastulani, R. P., & Septiana, M. (2023, January). Consumer Satisfaction Analysis of Scarlett Whitening Products Through Brand Image, Price, Product Quality, and Digital Marketing Factors. In *Proceedings of the 4th International Conference on Applied Economics and Social Science, ICAESS 2022, 5 October 2022, Batam, Riau Islands, Indonesia: ICAESS 2022* (p. 48). European Alliance for Innovation. http://dx.doi.org/10.4108/eai.5-10-2022.2325847.

Khare, V. K., Raghuwanshi, S., Verma, P., & Shrivastava, A. (2023). A bibliometric analysis of the effectiveness of digital marketing on smes in the digital era. *Anvesak. UGC Care Group 1 Journal*, 53 (1), 107-117. https://www.researchgate.net/profile/Vikas-Khare-3/publication/367434887_A_BIBLIOMETRIC_ANALYSIS_OF_THE_EFFECTIVENESS_OF_DIGITAL_MARKETING_ON_SMES_IN_THE_DIGITAL_ERA/links/63d2587bd9fb5967c20805a2/A-BIBLIOMETRIC-ANALYSIS-OF-THE-EFFECTIVENESS-OF-DIGITAL-MARKETING-ON-SMES-IN-THE-DIGITAL-ERA.pdf.

Kiburu, L., Njiraini, N., & Boso, N. (2023). Social networks and consumer technology usage: A systematic literature review and future research directions. *Cogent Business & Management*, *10*(1), 2153487. https://doi.org/10.1080/23311975.2022.2153487.

Kim, A. J., & Balachander, S. (2023). Coordinating traditional media advertising and online advertising in brand marketing. *Production and Operations Management*. https://doi.org/10.1111/poms.13945.

Kyaw, K. S., Tepsongkroh, P., Thongkamkaew, C., & Sasha, F. (2023). Business Intelligent Framework Using Sentiment Analysis for Smart Digital Marketing in the E-Commerce Era. *Asia Social Issues*, *16*(3), e252965-e252965. https://doi.org/10.48048/asi.2023.252965.

Li, S., Shi, Y., Wang, L., & Xia, E. (2023). A Bibliometric Analysis of Brand Orientation Strategy in Digital Marketing: Determinants, Research Perspectives and Evolutions. *Sustainability*, *15*(2), 1486. https://doi.org/10.3390/su15021486.

Lisnik, A., & Majerník, M. (2023). Aspects of Strategic Management and Online Marketing. In *Developments in Information and Knowledge Management Systems for Business Applications: Volume 7* (pp. 49-80). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-25695-0_3.

Munir, A., Kadir, N., & Umar, F. (2023). The impact of digital marketing and brand articulating capability for enhancing marketing capability. *International Journal of Data and Network Science*, *7*(1), 65-72. https://doi.org/10.5267/j.ijdns.2022.12.005.

Nalbant, K. G., & Aydin, S. (2023). Development and Transformation in Digital Marketing and Branding with Artificial Intelligence and Digital Technologies Dynamics in the Metaverse Universe. *Journal of Metaverse*, *3*(1), 9-18. https://doi.org/10.57019/jmv.1148015.

Nuseir, M. T., El Refae, G. A., Aljumah, A., Alshurideh, M., Urabi, S., & Kurdi, B. A. (2023). Digital Marketing Strategies and the Impact on Customer Experience: A Systematic Review. *The Effect of Information Technology on Business and Marketing Intelligence Systems*, 21-44. https://doi.org/10.1007/978-3-031-12382-5_2.

Orazi, D. C., Ranjan, B., & Cheng, Y. (2023). Non-face emojis in digital marketing: Effects, contingencies, and strategic recommendations. *Journal of the Academy of Marketing Science*, 1-28. https://doi.org/10.1007/s11747-022-00917-z.

Ponzoa, J. M., Gómez, A., & Arilla, R. (2023). Business interest associations in the USA and Europe: evaluation of digital marketing techniques applied on their websites and social networks. *Journal of Enterprising Communities: People and Places in the Global Economy*, (ahead-of-print). https://doi.org/10.1108/JEC-10-2022-0164.

Rathore, B. (2023). Digital Transformation 4.0: Integration of Artificial Intelligence & Metaverse in Marketing. *Eduzone: International Peer Reviewed/Refereed Multidisciplinary Journal*, *12*(1), 42-48. https://www.eduzonejournal.com/index.php/eiprmj/article/view/248.

Razzaq, A., Shao, W., & Quach, S. (2023). Towards an understanding of meme marketing: conceptualisation and empirical evidence. *Journal of Marketing Management*, 1-32. https://doi.org/10.1080/0267257X.2022.2158906.

Ringostat Rating. Ringostat (2023). https://rating.ringostat.ua.

Rizvanović, B., Zutshi, A., Grilo, A., & Nodehi, T. (2023). Linking the potentials of extended digital marketing impact and start-up growth: Developing a macro-dynamic framework of start-up growth drivers supported by digital marketing. *Technological Forecasting and Social Change*, *186*, 122128. https://doi.org/10.1016/j.techfore.2022.122128.

Taghavi, S. M., Janpors, N., & Raeisi Ziarani, M. (2023). The Implementation of Innovative Management and Strategic Marketing for Export Performance: Mixed Methods Research. In *International Conference on Entrepreneurship, Business and Online Marketing*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4320403.

VOSviewer - Visualizing scientific landscapes (2023). Centre for Science and Technology Studies, Leiden University, The Netherlands. vosviewer.com.

Wasiq, M., Bashar, A., Akmal, S., Rabbani, M. R., Saifi, M. A., Nawaz, N., & Nasef, Y. T. (2023). Adoption and Applications of Blockchain Technology in Marketing: A Retrospective Overview and Bibliometric Analysis. *Sustainability*, *15*(4), 3279. https://doi.org/10.3390/su15043279.

VRK. All-Ukrainian Advertising Coalition (2023). https://vrk.org.ua/ranking.