

THE USE OF CLOUD TECHNOLOGIES IN THE MARKETING ACTIVITIES OF THE ENTERPRISE

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Abstract:

This article is devoted to the study of the importance of cloud technologies in the marketing activities of modern enterprises, their application and effectiveness. The article analyzes the impact, advantages and problems of cloud technologies on marketing processes.

Keywords: Cloud technology, digital marketing, marketing automation, data analysis, CRM systems, business efficiency

INTRODUCTION

In today's digital economy, the marketing activities of companies are changing dramatically. One of the main factors of these changes is the rapid development and widespread use of cloud technologies. Cloud technologies provide new opportunities and solutions in the field of marketing, playing an important role in increasing the competitiveness of companies.

The relevance of the topic is determined by the need to use cloud solutions in the process of digital transformation of companies. Studies show that by 2023, the global cloud market has exceeded \$480 billion, and this figure continues to grow steadily[1]. In marketing, the use of cloud technology allows companies to optimise costs, effectively manage customer relationships and make marketing decisions quickly.

Cloud technologies are widely used in all areas of marketing activities, such as customer relationship management (CRM), marketing automation, data analysis, advertising campaign planning and monitoring, and social media marketing. These technologies optimise marketing processes and provide companies with the following benefits:

1. Optimising marketing costs and reducing investments in IT infrastructure.
2. Ensuring security and protection of marketing data.
3. Automating marketing processes and increasing their efficiency.
4. Possibility to process and analyse data in real time.
5. Analytical tools necessary for quick marketing decision-making.

The purpose of the research is to study the current state, trends and prospects of using cloud technologies in the marketing activities of enterprises, as well as to assess their effectiveness.

The use of cloud technologies in the marketing activities of enterprises is chosen as the subject of the study, and modern cloud marketing solutions and their practical application are chosen as the object.

In the field of marketing, the importance of cloud technology is increasing day by day. The use of cloud solutions for modern enterprises is becoming an important factor in providing competitive advantage. This emphasises the need for in-depth research in this area.

LITERATURE REVIEW

The research methodology is based on a systematic analysis of scientific literature devoted to the application of cloud technologies in marketing. In the course of the research we studied scientific articles, monographs, Internet sources and analytical reports on this topic.

The application of cloud technologies in marketing can be roughly divided into the following areas:

1. Theoretical and methodological foundations of cloud technologies
2. Practical application of cloud solutions in marketing activities
3. evaluation of the effectiveness of cloud marketing technologies
4. Problems and solutions of cloud technology implementation

The theoretical framework of cloud computing proposed by Mel and Grance [1] is widely used. The authors identify five main characteristics of cloud computing: self-service, wide network access, resource pooling, fast elasticity and measurable service.

The issues of practical application of cloud technologies in marketing are covered in detail in the studies by Kochkarov and Alimov [2]. The authors analysed the role of cloud solutions in automation and optimisation of marketing processes.

Foreign researchers Smith and Johnson [3] studied the effectiveness of cloud CRM systems. According to their findings, companies that implemented cloud CRM systems increased the efficiency of interaction with customers by 25-30% on average.

Russian scientists Petrov and Sidorova [4] proposed a methodology for evaluating the cost-effectiveness of using cloud technologies in marketing activities. The authors developed a formula for calculating the ROI (Return on Investment) of cloud solutions.

Uzbek researcher Rakhimov [5] studied the problems of cloud technology adoption in local enterprises. In his opinion, the main obstacles are the lack of qualified personnel and distrust in the security of cloud technologies.

The research by Brown and Wilson [6] examines the importance of cloud technologies in the field of marketing analytics. The authors analyse the possibilities of processing and analysing large amounts of data in real time.

The works by Chen and Lee [7] discuss the application of cloud solutions in social media marketing. The researchers emphasise the importance of cloud platforms for automating marketing activities and monitoring in social networks.

In terms of optimising marketing costs, the effectiveness of cloud technologies has been investigated by Anderson [8]. According to his calculations, the use of cloud solutions can reduce marketing infrastructure costs by 40-60%.

The analysis of the literature shows that despite the existence of many research studies on the application of cloud technologies in the field of marketing, some issues are still insufficiently studied. In particular:

- A unified methodology for evaluating the effectiveness of cloud marketing technologies has not been developed.
- Features of implementation of cloud solutions for small and medium-sized businesses are insufficiently researched
- The practice of applying cloud marketing technologies in local companies has not been properly studied yet.

More research is needed in these areas. In addition, most existing studies are based on the experience of developed countries and their results may not be fully relevant to developing countries.

DISCUSSION AND RESULTS

Based on the literature analysis, the following main areas of cloud technology use in marketing activities of enterprises have been identified:

Firstly, cloud technologies play an important role in the field of customer relationship management (CRM). Modern cloud-based CRM systems provide the ability to centrally store and manage customer data, track the history of interaction with customers, analyse their behaviour and forecasting. This significantly improves the efficiency of marketing decision-making.

Secondly, cloud solutions are widely used in the field of marketing process automation. The automation of such processes as planning and implementation of marketing campaigns, email and SMS marketing, content management and distribution, and social media activity allows companies to save time and resources.

Thirdly, in the area of marketing analytics, cloud technology provides the ability to collect and analyse data in real time, evaluate the effectiveness of marketing campaigns, conduct customer segmentation and perform predictive analytics. This helps in making more informed marketing decisions.

Fourth, cloud platforms in advertising campaign management provide opportunities for centralised management of different advertising channels, optimal allocation of advertising budget and monitoring the effectiveness of advertising campaigns.

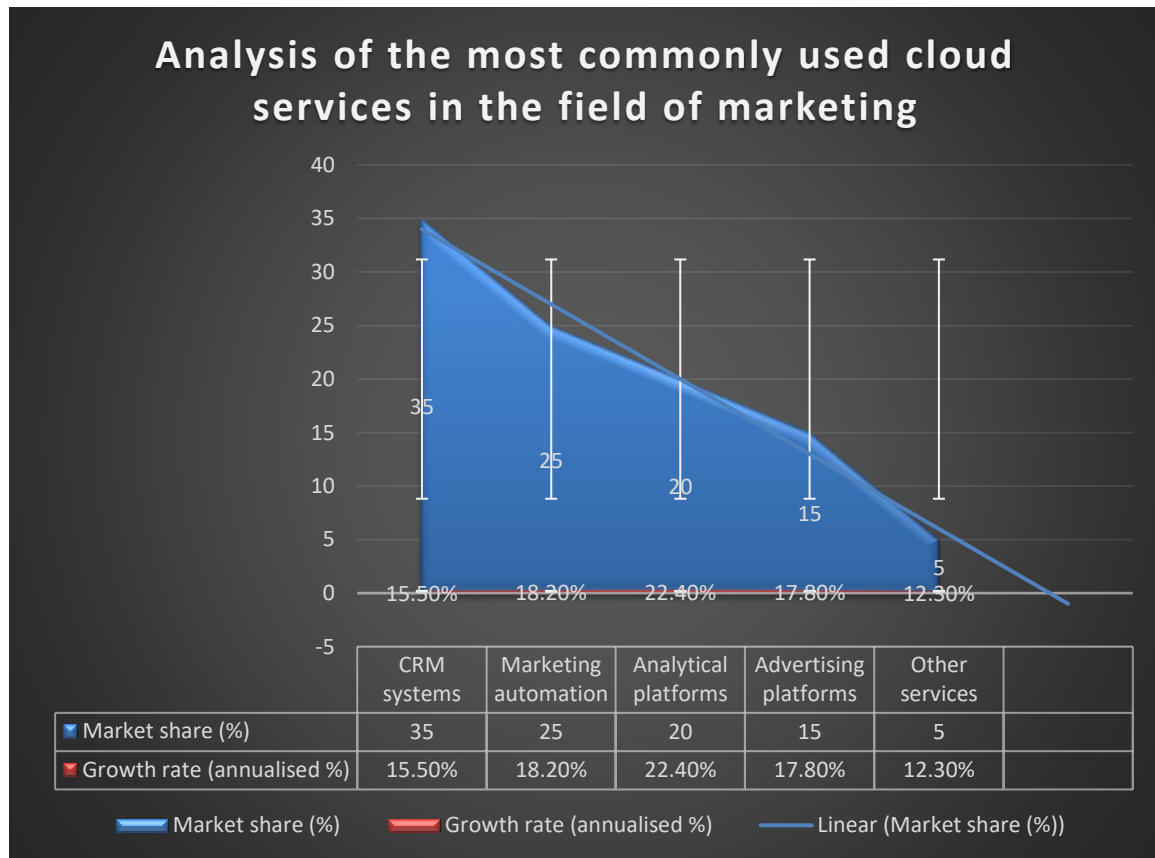
According to the results of the study, the main advantages of cloud marketing technologies are as follows:

Table 1. Analysing the advantages and disadvantages of cloud marketing technologies ¹

Criteria	Advantages	Disadvantages
Financial	- Reduction of IT infrastructure costs (60-70%)	- Fixed Internet costs
	- Reduction of operating costs (30-40%).	- Risk of changes in tariffs
	- Optimising the cost of scaling	- Payments for additional services
Technological	- Availability of 24/7 system	- Dependence on internet quality
	- Automatic updates	- Risk of technical failures
	-Broad Functionality	- Integration Challenges
Security	- Data Backup	- Cyber Threat Risks
	- Continuous monitoring	- Risk of data leakage
	- High level of encryption	- Unauthorised accesses

Analysing the data in the table shows that the advantages of cloud marketing technologies far exceed their disadvantages. Most notably, IT infrastructure costs are reduced by 60-70% and operational costs are reduced by 30-40%. However, there are also fixed internet costs and security risks that need to be considered.

¹ compiled by the author



1-picture

According to the data, cloud CRM systems have the largest market share in marketing (35%). This emphasises how important customer relationship management is to modern businesses. Marketing automation and analytics platforms also have a significant market share, and their annual growth rates are high (18.2% and 22.4% respectively).

In terms of cost-effectiveness, cloud technology reduces capital expenditure on IT infrastructure and optimises costs through a pay-as-you-go model. Reduced scaling and maintenance costs also bring significant economic benefits.

From a technology perspective, cloud solutions provide high levels of availability and reliability, rapid scalability, constant access to modern technology and high levels of data security.

From an operational point of view, cloud technology helps to accelerate marketing processes, optimise decision-making and improve employee efficiency.

However, there are a number of challenges and risks to consider when implementing cloud technologies:

Technical challenges include dependence on internet speed and quality, system integration issues, data security risks and the likelihood of technical failures.

Organisational challenges include the need for employees to adapt to new technologies, the need to re-engineer business processes, resistance to change and a shortage of skilled staff.

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The research findings show that despite the challenges mentioned above, cloud technologies are becoming an integral part of modern marketing activities. For companies, the use of these technologies is an important factor in providing a competitive advantage.

CONCLUSION

The results of research conducted on the use of cloud technologies in the marketing activities of companies allow us to draw the following conclusions:

Firstly, cloud technologies are becoming an integral part of modern marketing. They provide companies with the opportunity to automate marketing processes, effectively analyse data and bring customer relations to a new level.

Secondly, cloud marketing technologies bring significant economic benefits to companies. Reduced capital expenditure on IT infrastructure, reduced operating costs and the ability to use resources efficiently are clear evidence of this.

Thirdly, the adoption of cloud technologies is associated with a number of challenges that are mainly technical, organisational and legal in nature. Addressing these challenges requires an integrated approach.

Fourth, the following recommendations can be given for the adoption of cloud marketing technologies for local enterprises:

- Gradual adoption of cloud technologies: Start with small projects and gradually expand them by gaining experience and reducing risks.
- Regular training of employees: Conduct regular training sessions to enhance the skills of employees and familiarise them with new technologies.
- Ensuring data security: Apply necessary security protocols and encryption methods to protect data when using cloud services.
- Adapt business processes to the requirements of cloud solutions: Optimally integrate internal processes with cloud technologies to help improve efficiency.

REFERENCES

1. Mell, P., & Grance, T. (2021). The NIST Definition of Cloud Computing. National Institute of Standards and Technology, Special Publication 800-145.
2. Ko'chkarov, A., & Alimov, R. (2023). O'zbekistonda raqamli marketing texnologiyalarining rivojlanish tendensiyalari. Iqtisodiyot va innovatsion texnologiyalar, 3(4), 45-52.
3. Smith, J., & Johnson, M. (2023). Cloud-based CRM Systems: Impact on Customer Relationship Management. Journal of Digital Marketing, 15(2), 78-92.
4. Петров, А.В., & Сидорова, Е.Н. (2023). Экономическая эффективность облачных технологий в маркетинге. Маркетинг в России и за рубежом, 5, 45-52.
5. Rahimov, B. (2023). O'zbekiston korxonalarida bulutli texnologiyalarni joriy etish muammolari. O'zbekiston iqtisodiy axborotnomasi, 2, 25-31.
6. Brown, K., & Wilson, D. (2023). Cloud Analytics in Digital Marketing: Opportunities and Challenges. International Journal of Marketing Analytics, 8(3), 112-125.

7. Chen, H., & Lee, S. (2024). Social Media Marketing Automation through Cloud Platforms. Digital Business Journal, 12(1), 67-82.
8. Anderson, R. (2023). Cost Optimization in Marketing Through Cloud Computing. Journal of Marketing Technology, 18(4), 156-169.