

EFFECTIVENESS OF CLOUD TECHNOLOGIES IN DIGITAL MARKETING

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Abstract: *Cloud technology is a vital part in the modern marketing mix, it is unavoidable when compared to other modern marketing tools, because everything became online, so the need for the acquirement of new technology is needed, in digital marketing the use of cloud technology is varied from the use of other sectors, because marketing is connected with every online presence of consumer, the data collected from the consumers based on their online user activity, marketers segregate the data needed to them according to their marketing objectives, with the help of cloud technologies, cloud is a online virtual server which allows user to store, retrieve and use data whenever they want from anywhere remotely, this is the most important factor which helps marketers. This paper studies about how the cloud technologies impacted the trend of digital marketing, researcher used secondary data collected from previously published journal, theses, websites, blogs etc., author conclude that digital marketing been effectively used and the level of customer satisfaction is high when marketers uses cloud technologies at various levels of customer's buying decision making.*

Keywords: *Cloud Technologies, Digital marketing, Big Data, Online Marketing*

Introduction: Cloud marketing refers to an organization's digital marketing operations that entail the use of various web-based platforms. Social media, websites, applications, emails, and other online channels are used in cloud computing marketing. When you see adverts from a certain firm on social media networks like Facebook, Instagram, or Twitter, this is part of a cloud marketing plan. Simply simply, cloud marketing encompasses all of the approaches and techniques used by businesses to advertise their goods and services online. A cloud-based marketing platform, on the other hand, offers particular capabilities related to digital marketing or online advertising.

Businesses used to advertise on media channels such as television, radio, and print publications in the past. But, as worldwide internet use expanded dramatically, so did the need for online advertising. As a result, marketing strategies have developed throughout time, and current marketing necessitates addressing clients via digital media. Cloud technology marketing is an example of contemporary marketing. Companies all over the world have also moved their data (including marketing data) from local systems to the cloud in order to take advantage of current marketing data and analytics solutions. This enables them to execute more successful internet

marketing initiatives. Businesses, for example, may now use cloud marketing to track critical indicators such as website traffic, views, likes, and shares.

Benefits of Cloud Technology in Digital Marketing

1. Customer data collection via human surveys and analysis using traditional methodologies takes a significant amount of time and work. This is when cloud marketing comes in handy. The cloud provides limitless storage capacity, allowing businesses to quickly store a multitude of client information and access it from any location at any time.
2. This entails tailoring content, advertisements, and other features to customers' tastes and requirements. Marketing cloud platforms aid in the delivery of personalised user experiences by tracking preferences or trends and displaying comparable items based on consumers' purchase history and online history.
3. Companies can acquire massive amounts of client data, but it will be useless until it is analysed to yield valuable insights. Businesses and marketing firms who employ cloud computing have access to important cloud-based analytics tools in addition to lucrative client data. These sophisticated tools have tremendous processing power and consequently exceptional efficiency.
4. Cloud marketing provides on-demand capabilities as well as significant flexibility. Organizations may use cloud-based servers to scale up or down as their business expands. For example, when they begin to generate more data, firms might request that marketing cloud providers boost cloud storage or data analytics capacity.
5. Cloud computing in advertising saves firms money. Conventional marketing via television or newspapers is expensive. Cloud marketing via platforms, such as social media postings, on the other hand, is free. Even paid advertising using cloud marketing networks is less expensive than purchasing ad space on traditional marketing media platforms.
6. Another advantage of employing cloud-based solutions is that they enable employees to collaborate from any location. Workers may interact in real time by sharing files and accessing data remotely.
7. Cloud computing has improved data security for businesses and marketing firms. This is a significant benefit since consumer data is critical to marketing campaign success. Companies cannot afford to lose this data, and top marketing cloud solutions reduce the danger of data loss by storing your data on many servers.
8. Marketing automation is the automated administration of marketing and sales operations and campaigns across numerous channels. Businesses may use cloud-based marketing automation to automate time-consuming sales and marketing operations like lead qualifying. A marketing automation cloud plan also includes sending automated messages via SMS, email, and social media platforms.

Objectives of the study:

1. To find out the importance of cloud technologies in digital marketing
2. The analyse the effectiveness of cloud technologies in customer satisfaction.

Research Methodology:

The researchers using secondary data which includes, previously published research articles, chapters, blogs, theses, government data, websites, journals, etc.,

Literature Review:

1. **Ivanov, M. (2019)** According to the author, the activity of contemporary trading platforms is targeted at the construction of the product range and its product range with the most favourable product qualities. These criteria have a direct influence on Internet marketing strategy and cost. The author introduced the notion of developing a digital marketing system based on market segmentation theory and practise, which takes into consideration a variety of elements such as geography, costs, time, and others. In marketing research, the emergence of commonalities in consumption and price in the Internet market is the unifying force. In this notion, the author used the method of analysing consumer efficiency, which is based on the use of rating estimations based on expert opinion ranking.
2. **Vatsa, M., Rastogi, S., Tiwari, A., & Jain, S. 2021**, Cloud computing is proven to be highly valuable linkages for organisations in today's digital marketing. Furthermore, the ability to retrieve saved data from anywhere makes it popular among businesses. The current research investigates cloud computing in the context of digital marketing. The article defines and links the terms cloud computing and digital marketing, as well as elaborates on the benefits of incorporating cloud computing into a digital marketing plan.
3. **Mourtzis, D. (2022)** Industry 4.0 increases the flexibility of manufacturing processes, ushering in the era of mass personalisation at scale. Ultimately, manufacturing organisations are under pressure to achieve specified goals of competitiveness and profitability owing to shorter product life cycles, greater diversity and complexity of production, and ageing workforces. Additionally, direct client design input will enable enterprises to develop more personalised items in less time and at a lower cost. Based on the core enabling technologies, Industry 4.0 offers new types of personalisation. Furthermore, these technologies provide real-time data interchange between the digital twin and the physical production system, allowing for the prediction of errors and malfunctions.
4. **James, L. (2021)**. Numerous cloud-based marketing tools are now extensively utilised, ranging from CRM systems to marketing automation solutions. Marketers may use these services to track campaigns and activity across mobile, social, and Digital platforms, as well as

consumer interactions. With the rise of Internet usage across devices, there are more opportunities to engage potential consumers in this modern day - but it is also more difficult to catch their attention. Consumers want items that are one-of-a-kind, organic, engaging, and individualised. Cloud technology may be used by marketers to develop new data-driven tactics and more personalised and focused marketing. These tools will very certainly be used in conjunction with one of the digital marketing components described below.

5. **Parwekar, P., & Gupta, G. (2020)** One of the burgeoning technologies is the internet of things, which will have an impact on a variety of application areas and fundamentally transform the strategies used by organisations and marketers. IoT incorporates smart devices like RFID, sensors, and actuators into millions of things, producing real-time, context-based data that must be retrieved and evaluated to develop contextually effective marketing strategies to reach customers at a never-before-seen scale. Cloud storage has a huge amount of data that may be utilised for marketing purposes. Digital marketing, among other businesses, will be significantly disrupted by cloud data and the prominence of IoT devices.
6. **Panfilova, E., Lukyanova, A., Pronkin, N., & Zatsarinnaya, E. (2021)** The experiment's findings, which were based on a study of how cloud solutions' implementation affects regional development levels, point to effects like the establishment of social and human capital, an improvement in a region's standard of living and social interaction, the growth of social constructivism, and the competitiveness of social capital. According to an analysis of the results, increasing digital literacy among the populace, creating new opportunities and platforms for social interaction, encouraging constructivism, and supplying the populace with practical services and open data for active participation in social, economic, and political life are all ways that cloud technologies can have positive social effects at the level of a territorial unit.
7. **Esteves, M., Piedade, M. B., & Pereira, A. (2018)** Social media marketing is now acknowledged as a potent tool for communicating with customers, promoting businesses, and building relationships. But, managing social media effectively takes time, and using the right methods is essential to the success of the company. The authors of the current study examined how Portuguese SMEs (Small and Medium-sized Businesses) are utilising social media for marketing. The outcome demonstrates that although these businesses are engaged in social media, they do not maintain a vibrant online presence. Lack of funding for a marketing division or a single employee solely responsible for social media is one factor in this.
8. **Sun, H.** In order to accomplish huge data processing and digital marketing, this study offered a database marketing systems architecture based on Hadoop cloud computing, using the Group database marketing system as an example. In brief, we create a cloud-based smart grid marketing architecture, rely on the current electrical network, employ cloud computing, and

Hadoop platform technology as the theoretical framework for a national smart grid development strategy. The procedure fully utilises the benefits of the cloud computing architecture, offers open server and client communication, background system administration, and unified and practical resource allocation. This experiment captures the fundamental essence of the smart grid marketing system, offers insightful theoretical support, and has direct application to the advancement of smart grid.

9. **Ciuffo, J. (2018)**. Assessing a marketing campaign's success enables a business to build on a win or change course if the message is ineffective. Customer engagement is a link between a business and a customer made possible through a variety of communication channels. Marketers are seeking for new methods to engage with a specific audience as businesses move away from conventional media formats like television commercials. Trade fairs are sizable physical gatherings that are frequently centred on a particular product or sector. The marketing team from Genesys will go to trade exhibitions that focus on contact centre or unified communications solutions. The field of digital marketing is expanding in scope and level of competition at an exponential rate.

Conclusion:

From the above literature reviews, the author conclude that the cloud technology created a positive impact towards the digital marketing, especially search engine optimization, and tailor made advertisement are the most predominant factor that influences of customer satisfaction. In a nutshell, the cloud technologies like web 3.0 and other new emerging technologies are much needed to acquire more new consumers and retain the existing consumers.

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