

## EFFECTIVENESS OF CLOUD TECHNOLOGIES IN SOCIAL MEDIA MARKETING AND ITS IMPACT ON CUSTOMER BUYING BEHAVIOUR IN CHENNAI CITY

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### **Abstract:**

*The purpose of this research is to investigate the efficacy of cloud technologies in social media marketing and to investigate the impact that these technologies have on the purchasing behavior of customers in the city of Chennai. Specifically, the city of Chennai will serve as the focal point of the investigation. The researcher uses a method that is all-encompassing and incorporates primary and secondary data from a broad variety of sources in order to shed light on the dynamic intersection of consumer behavior and technological innovation. In order to fulfill the requirements of the study method, the sample size is comprised of a total of 189 individuals, which includes both customers and enterprises. The findings, which were obtained through a thorough investigation, demonstrate that cloud technologies are, in fact, effective across a variety of aspects of social media marketing, and that these technologies have a positive influence on the purchasing behavior of customers. These findings were acquired by the use of rigorous examination. In order to arrive at these conclusions, extensive examination was performed. This study not only provides businesses and marketers in Chennai with valuable information, but it also highlights the relevance of utilizing cloud technologies in order to improve their social media campaigns and, as a result, influence the decisions that consumers make regarding their procurement of goods and services.*

**Keywords:** *Cloud technologies; social media marketing; customer buying behavior; Cloud marketing.*

### **Introduction:**

As a consequence of the broad adoption of cloud computing in the present day, there has been a substantial transformative change in the landscape of social media marketing. The manner in which businesses interact with the audience that they would like to target has been altered as a consequence of this movement in attitudes. Organizations are now able to utilize solutions that are scalable and adaptable for the administration of vast amounts of data, the expansion of cooperation, and the optimization of resource utilization as a result of the phenomenon of cloud computing, which has experienced remarkable development and popularity. As a consequence of this paradigm change in the architecture of technology, there are particularly important ramifications for marketing tactics concerning social media. In addition to this, it provides businesses with

access to a platform that is not only dynamic but also agile, which offers them the ability to initiate and manage their campaigns in an effective manner. An increasing number of businesses are moving their operations to the cloud, which means that the confluence of cloud computing and social media marketing is becoming an increasingly crucial component of corporate operations. In order to enhance marketing efforts, it is feasible to hold discussions in real time, to deliver content that is tailored to the person, and to merge data in a seamless manner. This is made possible by synergy of this kind.

The capacity of cloud computing to function across geographical boundaries is one of the most significant elements that is contributing to the proliferation of cloud computing in the field of social media marketing. This trend is expected to continue to grow in popularity. Businesses are able to engage with a diverse selection of clients from all over the world because to the global platform that these technologies provide. It is now feasible to communicate information in a seamless manner because to the proliferation of social media tools and platforms that are hosted on the cloud. This has, in turn, led to the development of real-time engagement and collaboration between businesses and the customers they serve. Access to the marketing tools that are currently available has reached a more democratic level as a result of the cost-effectiveness and scalability that are inherent in cloud offerings. As a result of this evolution, it is now possible for even small and medium-sized businesses to make advantage of the strengths that sophisticated analytics and targeted advertising have to offer. Consequently, the amount of competition in the market has increased as a consequence of this democratization, which has, in turn, prompted creative thinking. Businesses are formulating social media strategies that are not just data-driven but also strategic in order to separate themselves from their competitors. According to this, this is the reason why this is taking place.

When this environment is taken into consideration, it is clear that cloud technologies have a discernible impact on the purchasing behavior of customers. The confluence of cloud computing and social media platforms has the effect of amplifying the impact of online interactions on the decision-making processes of consumers. This is as a result of the fact that customers are more likely to connect with businesses online. Customers have the ability to participate in real-time conversations with businesses with the use of cloud-based social media platforms. These platforms are so simple to access and deliver rapid replies. As a consequence of this, the users enjoy the opportunity to cultivate a feeling of community and connection with one another. This makes it more probable that customers will be impacted by these interactions, which will ultimately result in a shift in their opinions, preferences, and ultimately their decisions about purchases. The utilization of cloud computing by businesses is aimed at delivering material that is not only engaging but also tailored. The mutually beneficial relationship between cloud technologies and social media marketing not only reshapes the contours of modern commerce, but it also highlights the necessity for businesses to strategically navigate this ever-changing landscape in order to maintain their competitiveness and relevance in a market that is becoming increasingly digitalized. This is because cloud technologies and social media marketing are increasingly intertwined. For

this reason, they are doing this in order to ensure that they remain successful and relevant in the market.

### **Statement of the Problem:**

In the area of social media marketing, the growing incorporation of cloud technology creates a complex environment that has repercussions for both consumers and enterprises involved. Because of the evolving interaction, there are crucial considerations regarding the success of these activities in influencing the purchasing behavior of customers. This is because enterprises are increasingly leveraging the cloud for marketing strategies that are both dynamic and scalable. In order to appreciate the subtle influence that cloud-based social media campaigns have on the decision-making processes of consumers, it is necessary to take into consideration a number of elements, including real-time interaction, tailored content distribution, and the democratization of advanced marketing tools. A focused examination of the challenges and opportunities that arise from the symbiotic relationship between cloud technologies and social media marketing is essential for businesses as they navigate this complex intersection. This examination is necessary to inform strategic decision-making and ensure competitiveness in the digital marketplace.

### **Scope of the Study:**

The purpose of this research is to get a full understanding of the role that cloud technologies play in social media marketing and the influence that these technologies have on the purchasing decisions of customers. The purpose of this research is to shed light on the primary elements that have an impact on the efficiency of cloud-based marketing strategies and consumer decision-making processes. This will be accomplished by diving into the dynamic interaction that exists between these two components. An in-depth investigation of real-time interaction, tailored content distribution, and the democratization of advanced marketing tools made possible by cloud technology are all included in the scope of this project. Through this examination, the study aims to provide actionable insights that can be used to inform strategic decision-making for businesses that are navigating the evolving landscape of digital marketing. Additionally, the study hopes to foster a nuanced understanding of the challenges and opportunities that are inherent in the symbiotic relationship between the cloud and social media.

### **Objectives of the study:**

1. To investigate the correlation between the integration of cloud technologies and the effectiveness of social media marketing strategies employed by businesses.
2. To assess the extent to which customer buying behavior is influenced by social media marketing initiatives facilitated through cloud technologies.

### **Literature Review:**

1. **Singh, P., Dwivedi, Y. K., Kahlon, K. S., Sawhney, R. S., Alalwan, A. A., & Rana, N. P. (2020)** Modern government depends more and more on public opinion to make decisions about policies. The important role of social media in this is highlighted. This review of the literature looks at how cloud-based e-governance is changing and how it can be combined with social media analytics to make it easier for the public to participate with and watch government policies. The study looks at how the Indian government implemented the Goods and Services

Tax (GST) and finds positive results. This shows that cloud computing and social media analytics can be used together to make policy changes quickly. Notably, the study uses a new method called location-based analysis to make policy decisions that are based on how people are reacting in real time. The results show that technology, especially the combination of cloud computing and social media, has had a big effect on bridging the gap in how lawmakers and the public see things. This creates a more efficient and adaptable framework for improving policy.

2. **Chanda, R. C., Vafaei-Zadeh, A., Hanifah, H., & Ramayah, T. (2023)** Utilizing the extended theory of planned behavior, this study looks into what makes individual users want to use cloud computer services. The study uses a method called "purposive sampling" to get 339 data points, and it uses both SmartPLS for variance-based structural equation modeling and fuzzy-set qualitative comparative analysis (fsQCA). The findings show that attitudes toward cloud computing, subjective standards, perceived behavioral control, perceived security, cost-effectiveness, and performance expectations all have a good effect on people's plans to adopt. The fsQCA gives us more information about how complicated connections between antecedents work. This is helpful for lawmakers, cyber entrepreneurs, and cloud service providers who want to promote cloud computing services, especially in developing countries. The study adds to the body of research on cloud computing adoption by showing how well the suggested theory framework works at finding key factors and highlighting how PLS-SEM and fsQCA work together to get a full picture of adoption intention factors.
3. **Skafi, M., Yunis, M. M., & Zekri, A. (2020)** The increasing use of cloud computing by businesses in order to enhance the scalability, efficiency, and dependability of their information technology systems has resulted in the transformation of commercial information systems. This change is having less of an impact on small and medium-sized enterprises (SMEs), particularly in Lebanon. To investigate the use of cloud computing services by Lebanon's small and medium-sized enterprises (SMEs), the technology-organization-environment (TOE) paradigm and contextual theory are utilized. A total of 139 respondents were used to verify the model through the use of confirmatory factor analysis and logistic regression in SPSS. A favorable influence on adoption is demonstrated by the findings, which indicate that technological (complexity and security) and organizational (top management support and prior IT expertise) factors are responsible for this. The absence of government initiatives and inadequate infrastructure both act as barriers to adoption. The findings highlight the importance of doing more research and assist clarify the complicated factors that influence the adoption of cloud computing by small and medium-sized enterprises (SMEs).
4. **Tiwari, S., Bharadwaj, S., & Joshi, S. (2021)** End-customer banking has converged during the past decade due to Core Banking, Online Banking, Mobile Banking, and Wallets Information technology has changed banks' business strategy to focus client satisfaction. Cloud technology has helped provide new channels, shorten time-to-market for new services, meet consumer expectations, and comply with regulations at lower cost. Cloud solutions scale and cost-effectively adapt to new technologies. Cloud computing and AI effect operational and

service benefits in Confirmatory Factor Analysis. The research stresses the need of bank collaboration on cloud infrastructure and service and distribution models that balance organizational stability, cost effectiveness, and flexible pay-as-you-go. Cloud computing should be implemented for low-risk tasks like customer experience and content management. Banking cloud services will include on-premise and cloud-based systems deployed in private, hybrid, and public clouds. Private clouds will become popular, providing banks full cloud infrastructure control. This literature review examines strategic aspects and evolving models in banking cloud computing adoption, aiding business planning and decision-making.

### Data analysis and Interpretation

**Table 1 Showing Demographic Profile of the Respondents**

	<b>Variables</b>	<b>Freq.</b>	<b>Valid Percent</b>	<b>Cumm. Percent</b>
<b>Age</b>	Less than 20	25	13.23	13.23
	20-30	65	34.39	47.62
	31-40	50	26.46	74.07
	Above 40	49	25.93	100.00
	Total	189		
<b>Gender</b>	Male	90	47.62	47.62
	Female	99	52.38	100.00
	Total	189		
<b>Annual Family Income</b>	Less than Rs. 2,00,000	40	21.16	21.16
	Rs. 2,00,001 - Rs. 5,00,000	65	34.39	55.56
	Rs. 5,00,001 - Rs. 10,00,000	50	26.46	82.01
	Above Rs. 10,00,000	34	17.99	100.00
	Total	189		

Table 1 presents the demographic profile of the respondents, providing a comprehensive overview of their age distribution, gender composition, and annual family income. Regarding age, the majority of respondents fall within the age group of 20-30, constituting 34.39% of the sample, followed by those in the 31-40 age range at 26.46%. A smaller percentage of respondents are below 20 years (13.23%) and above 40 years (25.93%). In terms of gender, the sample is nearly evenly split between male and female respondents, accounting for 47.62% and 52.38%, respectively. The analysis of annual family income reveals that a significant portion of respondents (34.39%) falls

within the Rs. 2,00,001 - Rs. 5,00,000 income range, followed by those with income less than Rs. 2,00,000 (21.16%), Rs. 5,00,001 - Rs. 10,00,000 (26.46%), and above Rs. 10,00,000 (17.99%). This demographic breakdown provides valuable insights into the composition of the respondent population, laying the foundation for a nuanced understanding of their perspectives in subsequent analyses or research studies.

**Table 2 Showing Correlation between Cloud Technologies and Social Media Marketing Effectiveness**

Variable	Mean	Standard Deviation	Correlation Coefficient	p-value
Cloud Integration Score	4.2	0.75	0.62	<0.001
Marketing Effectiveness	3.8	0.82		

Table 2 illustrates the correlation between Cloud Technologies and Social Media Marketing Effectiveness. The Cloud Integration Score, with a mean of 4.2 and a standard deviation of 0.75, exhibits a significant positive correlation coefficient of 0.62 with Marketing Effectiveness, implying a strong association between the integration of cloud technologies and the effectiveness of social media marketing strategies. The p-value, less than 0.001, further confirms the statistical significance of this correlation. The Marketing Effectiveness variable, with a mean of 3.8 and a standard deviation of 0.82, complements the Cloud Integration Score, suggesting that higher levels of cloud integration correspond to enhanced marketing effectiveness. This quantitative analysis provides empirical support for the positive impact of incorporating cloud technologies on the effectiveness of social media marketing initiatives, emphasizing the potential strategic advantage for businesses in optimizing their digital marketing practices through cloud integration.

**Table 3 Showing Impact of Social Media Marketing through Cloud Technologies on Customer Buying Behavior**

Variable	Mean	Standard Deviation	Correlation Coefficient	p-value
Social Media Marketing Impact	4.1	0.68	0.57	<0.001
Customer Buying Behavior Score	3.9	0.75		

Table 3 presents the Impact of Social Media Marketing through Cloud Technologies on Customer Buying Behavior. The Social Media Marketing Impact variable, with a mean of 4.1 and a standard deviation of 0.68, demonstrates a substantial positive correlation coefficient of 0.57 with the Customer Buying Behavior Score. This indicates a significant association between the impact of social media marketing through cloud technologies and customers' buying behavior. The p-value, less than 0.001, confirms the statistical significance of this correlation. The Customer Buying Behavior Score, with a mean of 3.9 and a standard deviation of 0.75, aligns with the positive correlation, suggesting that higher levels of social media marketing impact, facilitated by cloud technologies, correspond to favorable customer buying behavior. This empirical evidence

underscores the influential role of cloud-enabled social media marketing in shaping and influencing customer purchasing decisions, highlighting the strategic importance of integrating these technologies for businesses seeking to optimize their impact on consumer behavior.

### **Findings of the Study:**

1. Cloud technologies significantly enhance the effectiveness of social media marketing strategies.
2. There is a strong positive correlation between the integration of cloud technologies and marketing effectiveness.
3. Social media marketing impact, facilitated by cloud technologies, substantially influences favorable customer buying behavior.
4. Demographically, respondents exhibit diversity in age, gender, and annual family income.
5. The majority of respondents fall within the 20-30 age group.
6. Nearly an equal distribution of male and female respondents is observed.
7. Cloud integration scores, with a mean of 4.2, demonstrate a notable positive correlation of 0.62 with marketing effectiveness, emphasizing the strategic advantage of cloud technologies in optimizing digital marketing practices.
8. Social media marketing impact, with a mean of 4.1, shows a substantial positive correlation of 0.57 with customer buying behavior scores, indicating the influential role of cloud-enabled strategies in shaping favorable purchasing decisions.
9. Demographic analysis reveals a diverse respondent population, with the majority falling within the 20-30 age group, providing valuable insights into the composition of perspectives in subsequent analyses.
10. The nearly equal distribution of male (47.62%) and female (52.38%) respondents highlights a balanced gender representation in the study, contributing to a comprehensive understanding of varied perspectives.
11. A significant portion of respondents (34.39%) falls within the Rs. 2,00,001 - Rs. 5,00,000 annual family income range, suggesting a varied economic background that may influence their perceptions and behaviors in response to cloud-based marketing strategies.
12. Cloud-enabled social media strategies play a crucial role in shaping and influencing consumer purchasing decisions.

### **Conclusion:**

The conclusion of this study, which were presented in conclusion, analyze the efficacy of cloud technologies in social media marketing and the impact that these technologies have on the purchasing behavior of customers in Chennai. The research is conducted utilizing a thorough methodology that incorporates both primary and secondary data from 189 persons, which includes commercial businesses and private customers. The results of this study indicate that cloud technologies are effective in a variety of facets of social media marketing, which in turn favorably influences the purchasing behavior of customers. In terms of age, gender, and yearly family income, the demographic profile of the respondents demonstrates a wide representation of the various demographic categories. A significant positive association between cloud integration and

the success of social media marketing is shown by the correlation study. Additionally, the analysis highlights a connection between the impact of social media marketing using cloud technologies and the purchasing behavior of your customers. These findings shed light on the crucial role that cloud-enabled social media initiatives have in influencing the decisions that businesses and consumers make. Taking everything into consideration, this study offers significant insights for companies in Chennai, highlighting the significance of utilizing cloud technology to improve social media campaigns and, as a result, impact the purchasing decisions of consumers.

### References:

1. Kaluger, O., & Kaluger, O. (2023, November 6). Cloud Technology: How it has changed the marketing landscape forever. Temok Hosting Blog. <https://www.temok.com/blog/cloud-marketing-landscape/#:~:text=This%20technology%20allows%20the%20business,marketers%20to%20access%20more%20customers.>
2. S, N. (2023, December 27). Analyzing Consumer Buying Behavior with AI in Marketing. Sprintzeal.com. <https://www.sprintzeal.com/blog/how-ai-has-impacted-consumer-buying-behaviour>
3. Randolph, K. (2023, March 15). Social Media for Cloud Computing Companies: 5 Tips to Drive sales. WebFX. <https://www.webfx.com/industries/tech/cloud-computing/social-media/>
4. Marketing Team. (2023, September 28). The importance of Cloud Computing for Customer Service. Doxee. <https://www.doxee.com/blog/technology/the-importance-of-cloud-computing-for-improving-customer-service-processes/>
5. Saini, R. (2023, November 2). Unleash the power of marketing cloud: boost your business to new heights - Growth-natives. Growth-natives. <https://growthnatives.com/blogs/marketing-cloud/unleash-the-power-of-marketing-cloud-boost-your-business-to-new-heights/>
6. Naik, K. (2023, October 5). How Cloud Computing is Transforming the Retail Sector. <https://www.einfochips.com/blog/how-cloud-computing-is-transforming-the-retail-sector/>
7. Raj, S. (2023, November 3). On-Premise vs. Cloud: What Should Brands Pick for Customer Engagement? MoEngage. <https://www.moengage.com/blog/on-premise-vs-cloud-what-should-brands-pick-for-customer-engagement/>
8. **Singh, P., Dwivedi, Y. K., Kahlon, K. S., Sawhney, R. S., Alalwan, A. A., & Rana, N. P. (2020).** Smart monitoring and controlling of government policies using social media and cloud computing. *Information Systems Frontiers*, 22, 315-337.
9. **Chanda, R. C., Vafaei-Zadeh, A., Hanifah, H., & Ramayah, T. (2023).** Investigating factors influencing individual user's intention to adopt cloud computing: a hybrid approach using PLS-SEM and fsQCA. *Kybernetes*.
10. **Skafi, M., Yunis, M. M., & Zekri, A. (2020).** Factors influencing SMEs' adoption of cloud computing services in Lebanon: An empirical analysis using TOE and contextual theory. *IEEE Access*, 8, 79169-79181.

11. **Tiwari, S., Bharadwaj, S., & Joshi, S. (2021).** A study of impact of cloud computing and artificial intelligence on banking services, profitability and operational benefits. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(6), 1617-1627.