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Department of Computer Engineering,

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ONLINE ADVERTISEMENT MANAGEMENT SYSTEM

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Abstract- The use of the internet and social media is quickly expanding in the current era. For companies to maintain their competitiveness, it is vital to have a digital presence. The use of social media is becoming increasingly popular among individuals in both developed and developing countries, and traditional advertising methods are no longer as efficient as they once were. Therefore, it is crucial to advertise on social media and work with social media influencers to promote your brand. Finding the suitable influencer and comprehending the appropriate approach to interact with them can be difficult.

The reason for creating an advertisement management system is to connect different brands and influencers and collaborate to come up with the best solutions for developing projects. The process

I. INTRODUCTION

Social media has become an essential component of individuals' lives in this digital era. The growing influence of marketing has resulted in brands increasingly utilizing social media influencers to advertise their goods and services. However, identifying appropriate influencers and efficiently managing marketing campaigns can be a demanding task for brands. This is where our advertisement management system comes in.

comprises of several steps, including identifying the usage scenario, creating a model for the field, and determining the structural design of the web application. The development stage is categorized into two key components, namely the front-end and back-end development. Additionally, the system's database design is discussed, with a focus on its schema.

Our ultimate goal is to create an online platform that offers a hassle-free and smooth experience for anyone interested in advertising their brand and collaborating with social media influencers.

Keywords: *Advertisement Management, Brands, Influencer, Social Media.*

Our MERN stack project is a portal that connects brands with influencers, making it easy for brands to find and collaborate with influencers who can promote their products and services to their followers. The platform allows influencers to create an account, which is approved by the site manager, and appear on the platform for brands to search and connect with. Brands can also create an account on the platform, search for influencers according to their needs, and send requests to influencers to connect.

The research article will record the creation, execution,

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and assessment of our advertising management system, covering the techniques utilized, the outcomes obtained, and the Techniques utilized, the outcomes obtained, and the implications of our research.

II. LITERATURE REVIEW:

Brand promotion on social media has become extremely prevalent in the last few years, with influencer marketing emerging as a preferred marketing tactic. According to a survey conducted by Influencer Marketing Hub, 93% of marketers utilize influencer marketing to advertise their products or services, with 65% of brands planning to expand their influencer marketing expenditure in the coming year (Influencer Marketing Hub, 2022). Nonetheless, identifying suitable influencers and successfully managing influencer campaigns can be a complicated endeavor for brands. Previous research has identified several challenges associated with influencer marketing. For example, a study by Econsultancy found that identifying the right influencers is the most significant challenge for brands (Econsultancy, 2019). Brands must consider several factors, such as the influencer's niche, target audience, engagement rates, and authenticity, when selecting influencers for their campaigns.

Additionally, managing influencer campaigns can be time-consuming and complex, requiring brands to coordinate with multiple influencers and track their performance. To address these challenges, several platforms have emerged that aim to simplify the influencer marketing process. For example, platforms like Upfluence and AspireIQ allow brands to search for influencers and manage their campaigns through a centralized platform. However, these platforms may be expensive, and their features may not be tailored to the specific needs of brands or influencers.

Our advertisement management system addresses these challenges by providing a cost-effective, tailored solution that connects brands with influencers and streamlines the process of managing

influencer campaigns. By allowing influencers to create accounts and be approved by site managers, the platform ensures that only qualified influencers are available for brands to search and connect with.

Brands can also easily manage their campaigns by giving consignments to influencers and making payments through the platform. In summary, influencer marketing is a popular marketing strategy that presents several challenges for brands. Previous research has identified the challenges associated with identifying the right influencers and managing influencer campaigns. While several platforms exist that aim to simplify the influencer marketing process, our advertisement management system provides a tailored, cost-effective, tailored solution that connects brands with influencers and streamlines the process of managing influencer campaigns. By allowing influencers to create accounts and be approved by site managers, the platform ensures that only qualified influencers are available for brands to search and connect with.

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III. METHODOLOGY:

To design and implement our advertisement management system, we followed a systematic approach that involved several phases, including requirements gathering, system design, implementation, and testing.

IV. REQUIREMENTS GATHERING:

We first gathered requirements by conducting

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interviews with potential users of the system, including brands and influencers. We also analyzed existing influencer marketing platforms and identified the features that were most important to users. Based on this analysis, we created a list of functional and non-functional requirements for the system.

V. SYSTEM DESIGN:

Using the gathered requirements, we designed the system architecture, including the database schema, backend API, and frontend interface. We utilized the MERN stack, which includes MongoDB, Express.js, React.js, and Node.js, to build the system. We also incorporated third-party APIs, including payment gateways and email services, to ensure the system's functionality.

VI. IMPLEMENTATION:

We implemented the system in several stages, starting with the backend API and database. We then developed the frontend interface using React.js, incorporating features such as user authentication, profile creation, search and filtering functionalities, and messaging capabilities. We also integrated payment and email services to enable seamless payment transactions and communication between users.

VII. TESTING:

Once the system was implemented, we conducted several rounds of testing to ensure that the system met the requirements and was free of errors. We utilized automated testing tools to test the system's functionality and manual testing to verify the system's usability and user experience. We also conducted user acceptance testing to gather feedback from users and incorporate their suggestions and feedback into the system.

In summary, we followed a systematic approach to design and implement our advertisement management system, involving requirements

gathering, system design, implementation, and testing. We utilized the MERN stack and third-party APIs to develop the system, incorporating features that were identified through requirements gathering.

Through testing, we ensured that the system met the requirements and was free of errors, and incorporated user feedback into the system.

VIII. RESULTS:

We have successfully designed and implemented the advertisement management system, which connects brands with influencers and streamlines the process of managing influencer campaigns. The system has several key features, including user authentication, profile creation, search and filtering functionalities, messaging capabilities, and payment transactions.

During testing, we found that the system met the functional and non-functional requirements and was free of errors. Users were able to easily create profiles, search for influencers, connect with them, and manage their campaigns through the platform. The payment and messaging functionalities also worked seamlessly, enabling users to make payments and communicate with each other efficiently.

In summary, the advertisement management system has been successfully designed and implemented, meeting functional and non-functional requirements and providing streamlined functionalities for users.

Through testing and user acceptance testing, we ensured that the system was free of errors and incorporated user feedback to improve the system's usability and user experience. The system has the potential to make a significant impact on the influencer marketing industry by providing a cost-effective and tailored solution for brands and influencers.

IX. DISCUSSION:

The advertisement management system has several potential benefits for brands and influencers alike, providing a streamlined and cost-effective solution for managing influencer campaigns. The system enables

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brands to find and connect with qualified influencers, negotiate terms and pricing, and manage influencer campaigns through a single platform. For influencers, the system provides access to a broader range of brands and campaigns, enabling them to expand their reach and monetize their social media presence.

One of the key advantages of the advertisement management system is its ability to provide a tailored and efficient approach to managing influencer campaigns. Brands can search for influencers based on specific criteria, such as demographics, location, interests, and engagement rate, ensuring that they find the best match for their campaign needs. The system also streamlines the payment process, providing a secure and efficient method for making payments to influencers. The system's messaging capabilities also provide a convenient method for communication between brands and influencers, enabling them to negotiate terms, discuss campaign details, and provide feedback. This can help to build stronger relationships between brands and influencers and ensure that campaigns are executed successfully.

During testing, we found that the system's functionalities were user-friendly and intuitive, with users able to easily navigate the platform and manage their campaigns efficiently. The system's interface was designed to be visually appealing and easy to use, incorporating features such as search and filtering functionalities, messaging capabilities, and payment options. One potential limitation of the system is its reliance on user-generated content and engagement, which can vary in quality and authenticity. Brands and influencers must work together to ensure that campaigns are executed in a manner that aligns with the brand's messaging and values, and that the influencer's content is authentic and resonates with their audience.

X. CONCLUSION:

In conclusion, the advertisement management system represents a significant innovation in the influencer marketing industry by providing a streamlined and cost-effective solution for managing influencer

campaigns. The system enables brands to find and connect with qualified influencers, negotiate terms and pricing, and manage campaigns through a single platform. For influencers, the system provides access to a broader range of brands and campaigns, enabling them to expand their reach and monetize their social media presence.

Through testing and user acceptance testing, we ensured that the system met functional and non-functional requirements, was free of errors, and provided a user-friendly and intuitive interface. User feedback was incorporated to enhance the system's capabilities and ensure that it meets the evolving needs of the influencer marketing industry.

The advertisement management system has the potential to make a significant impact on the influencer marketing industry by improving the efficiency and effectiveness of influencer campaigns. The system's functionalities enable brands and influencers to work together more efficiently and effectively, ensuring that campaigns are executed successfully and aligned with the brand's messaging and values.

Future research can help to further optimize the system's capabilities and ensure that it remains at the forefront of the evolving influencer marketing industry. As the industry continues to grow and evolve, the advertisement management system has the potential to play a critical role in helping brands and influencers connect and collaborate more effectively.

XI. REFERENCES:

- [1] Agrawal, N., & Singh, A. (2017). The impact of social media marketing on brand loyalty in Indian youth. *Journal of Indian Business Research*, 9(1), 27-43.
- [2] Goyal, A, Singh, T., & Kumar, A. (2019). Influencer marketing: A strategic approach to brand promotion in Indian fashion industry. *Journal of Business and Retail Management Research*, 13(3), 73-82.
- [3] Gupta, A., & Bhatnagar, N. (2019). Examining the



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effectiveness of influencer marketing on consumers in India. *Journal of Asia Business Studies*, 13(1), 59-74.

[4] Sindal, R., & Bisht, S. S. (2018). Impact of digital marketing on consumer buying behavior in the Indian apparel industry. *Asia Pacific Journal of Marketing and Logistics*, 30(S), 1096-1117.

[5] Kalia, P., & Khurana, R. (2019). Impact of social media marketing on consumer buying behaviour: A study with reference to Indian market. *International Journal of Marketing Studies*, 11(4), 119-132.

[6] Kumar, S., & Yadav, R. (2018). Role of digital marketing in Indian consumer goods sector. *Journal of Management Research*, 18(4), 254-267.

[7] Pandey, A., & Singh, R. (2019). Investigating the role of influencer marketing in Indian cosmetic industry. *Journal of Retailing and Consumer Services*, 49, 341-347.

[8] Prasad, A., & Devi, P. (2018). Impact of social media marketing on consumer behavior with respect to fashion products in Indian context. *Journal of Retailing and Consumer Services*, 40, 138-148.

[9] Sharma, A., & Tripathi, N. (2019). A study on the impact of digital marketing on customer engagement in Indian retail sector. *International Journal of Applied Business and Economic Research*, 17(9), 83-94.

[10] Singh, A., & Gupta, R. (2018). Impact of social media on consumer behavior in Indian context. *Journal of Management Research*, 18(3), 153-168.