

# TikTok and Instagram - which company can better use ai to build better brand awareness and notoriety

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## Abstract:

With the progress of scientific and technological advancement and the process of labor shortage in some areas, the application of artificial intelligence continues to expand, and low-cost labor such as assembly line workers is being replaced. In this case, social media affordance theory can help the reader better understand the article. Under the trend of artificial intelligence applications, major social media are also trying to increase brand popularity through AI to obtain more benefits. At present, scholars have made a lot of discussions on issues such as AI promoting marketing and content dissemination in social media. However, social media needs to further discuss to improve the brand promotion of the platform itself through ai. The Time theory Is used to explain it. This article aims to understand AI's ability and influence to create content, interact with the audience, and target the audiences. Based on the results of questionnaires and data analysis, this article tries to explore the methods and significance of social media using ai to enhance platform visibility.

**Keywords:** AI, social media, brand promotion

## 1. Introduction

With the process of modernization, AI has gradually entered the public's vision. "In recent years, a new generation of artificial intelligence has revolutionized various industries, making significant impacts in the modern world (Ribeiro & Reis, 2020).

Artificial intelligence has a broad impact and is an essential part of all modern technologies (Ribeiro&Reis, 2020). It has had an especially huge impact on the digital media industry. (Argan et al., 2022)For this topic, the researchers want to compare how two social media platforms that are relatively

similar and are quite popular leverage AI to create brand exposure and a better brand notoriety. They will aim to do so using three research question that all have strong relations to the Ai adaptation in brand notoriety.

In addition, the big data and personalized services behind AI can be used to promote diversified brands to different users in videos or photos, provide targeted intelligent push, and compare how two similar social media platforms use AI to implant personalized brands and provide effective exposure and traffic response for brand companies. It is well known that

social media companies are learning to leverage AI to increase their visibility, seeing its great potential (Henry, 2019). From the above conclusions, the researcher can draw a conclusion that supports our prediction - the research will examine the use of AI on TikTok and Instagram from all aspects, focusing on engagement, creativity, and authenticity. These findings will be explained by TIME (Interactive media effects theory), and some other conclusions will be studied by social media affordance theory.”

### **1.1 Research Question**

1. Why do Tiktok and Instagram use ai for publicity?
2. How to use ai for differentiated publicity on social media?
3. What's the difference between Tiktok and Instagram's ai brand promotion?

## **2. Literature Review**

### **2.1 The leveraging of AI to increase brand engagement.**

For a brand to gain visibility and awareness, it all needs to start with the company. The loyalty of users towards brand their interactions is extremely important for their notoriety as they need to be careful with their customers. According to Linda D. Hollebeek, Mark S. Glynn, and Roderick J. Brodie, engagement based of off ones motivation by virtue of ones interactive experience. This allows them to create brand loyalty, which is extremely important. For a brand to set apart from ether competitors, they need to create and maintain loyal customers (Khoirunnisa & Marlien, 2022). It is one of the main conditions a company must meet in order to be successful. Based of the theory of TIME (theory of interactive media effects), customers tend to be more loyal when they are given interactive media that they find enjoyment in. The level of interactivity and control is very important for companies. By giving these users functions which they have a great control over, they are more likely to like the platform because they can exert a large level of influence on what they can create and show. It creates a positive perception in the customers eyes, creating loyal customers as they have more options on what they can do and how much they control the final result.

This can be done in multiple ways, but one of the more popular ways to create loyal customers is personalization. These companies need to understand the customers to create content that is actually appreciated by the customers, especially if they want to stand out (Khoirunnisa & Marlien, 2022). According to Kashif Farhat, Sany Sanuri Mohd.

Mokhtar & Salniza Bt. Md. Salleh, there are multiple ways that these companies create brand engagement by increasing the brand experience. They can create a good brand experience by looking at it through 3 different aspects: sensory experience, intellectual experience, and behavioral experience. They can create this brand experience by creating content that each convey one of these experiences.

Sensory experiences could be campus tours, event highlights, or student testimonials. Intellectual experiences include research highlights, expert lectures, infographics, and engaging educational content. Behavioral experiences are like real life experiences, and some examples are on-line workshops, webinars, and interactive Q&A sessions. Another way of creating brand engagement is by fostering brand interactivity. This is when companies always engage with users, interacting with them by by responding to comments, messages, and feedback promptly. This makes the customer have a perception of the brand, being that the brand is helpful and worth their time.

### **2.2 AI's effect on authenticity and privacy**

Social media has created a rift in how people communicate and convey their ideas. It has reached unprecedented heights of influence, creating a place where people can still communicate even if it isn't in real life. Many companies such as google have been force to take into question changes that need to be made to the privacy of a persons information (Ismail & Latif, 2013). Privacy is becoming a huge issue, and companies are beginning to notice. The importance of privacy is that it is very important for companies as it is very helpful for the analysis of human behavior within social networks. Companies need to be very careful as they need to be able analyze the data while to not violating a users privacy. Companies need to also be very mindful of the fact that the common idea of privacy is important due to the fact that users don't know how the data analysis will be utilized. It isn't very realistic that users will believe that these all these companies are trustworthy (Kumar et al., 2015). Another hot topic is authenticity. As a result of the advent of social media, authenticity of a person or content has been taken into question. Authenticity is being honest about oneself, and being truthful when presenting themselves. This is very important for these platforms as whether what these companies have showed has come from them will become a huge question. If a company is truly being themselves and actually being honest about their motives will come into huge question (Wang & Skovira, 2017).

To achieve a right level of privacy and authenticity with their customers, a company can do many things. To con-

vince users that their level of privacy is directly considered towards them, companies can enforce strong policies and regulations. This can look like mandatory strong passwords, regular password changes, and restricted data sharing settings. The second way is by encouraging users to take it upon themselves. Companies can make sure that the privacy settings are accessible and user friendly, making the users feel more safe. Companies can also take technical measures to ensure that their platform is always safe. This can look like anti-virus, anti-malware software, intrusion detection Systems, and cryptographic Protocols(Kumar et al., 2015). To achieve authenticity, companies need to be able to as transparent as possible. They can achieve this by always keeping an honest self-presentation. This looks like telling users whether a piece of content posted was AI generated. They need to learn to make conscious choices that reflect who they really are as a company, and acting fake to gain more money (Wang&Skovira, 2017).

### 2.3 Ai adaption in the process of creation

Ai has helped social media companies in many ways, but one of the most important is content creation. Previously, experts helped to create to social media creatives, content that comes from the brand themselves. Ai has already surpassed humans in many tasks, and now people are beginning to wonder if Ai ca surpass humans in creative tasks(Park et al., 2024). Companies can first leverage Ai to better understand what their users want. Ai can do so in a variety of ways(Park et al., 2024). Ai can do real time monitoring, allowing it to continuously analyze sentiment data, and making it so that they can better change their marketing strategies to better target their users. This method fits more of Generations Z and Alpha, as they are more engrossed in the digital world. They can extend this analysis by further using machine learning algorithms to classify their data and identify hidden emotions. Ai can further process these emotions to help these companies understand the emotional reactions of users and add them to sentiment analysis models. AI is also better than humans at analyzing data(Park et al., 2024). This can be thought of from a few aspects: efficiency, accuracy, real-time monitoring, and complex analysis. Ai has many capabilities, and all of those point towards the conclusion that AI can allow them to better stay on trends and analyze data better and at a higher efficiency.

From our research, Ai can help better utilize and understand data. How can Ai actually help with creation? Ai can help with creation by helping with spreading a brand's notoriety through a variety of ways. The researchers will be analyzing it through the lens of adverstizing. In adverstizing,

it can be sectioned into three parts: image or video creation, copywriting, and content planning(Gao et al., 2023). By analyzing user preferences and data, companies ca leverage the Ai to create custom images and videos that are aimed at users preferences and trends in their data. This allows for a more engaging experience for the user and more personalized content. Ai has the capabilities to create scripts for advertisements, allowing companies to create ads at a much faster pace. The generative Ai itself can also create an advertisement that are made for individual users. If companies need help getting ideas, the Ai can analyze data, and identifying trends so the companies can produce more meaningful content(Gao et al., 2023).

Social media platforms have seen a huge transformation through the leveraging of AI, helping companies with multiple aspects. Companies are able to create tailored experiences that can boost user engagement and loyalty using interactive content that is based on data analysis. However, a major issue that arises is the pressing issue of authenticity of the website and the privacy of the users. It has always been a pressing issue, but with the adaptation of AI, it has become the forefront of concerns when it comes to AI. For companies to make sure they can still be favored by users, they need to obtain user trust through a variety of ways, like privacy requirements that can convey the message that the user information is utilized for the right reasons. For a company to be able effectively use AI, the three aspects of brand engagement, authenticity, and creation need to coexist.

## 3. Theoretical framework

### 3.1 AI in Social Media: A Theoretical Framework

The incorporation of AI into social media platforms has fundamentally transformed how users interact with digital content, making the TIME model an essential tool for analyzing these changes. This theoretical framework posits that the affordances of interactive media—specifically, the actions users can perform and the cues they receive—are pivotal in shaping their digital experiences. In the context of TikTok and Instagram, AI enhances these affordances by tailoring content to individual user preferences, thereby deepening engagement and influencing user behavior on a profound level.

AI-driven actions, such as personalized content delivery and automated responses, are integral to how users engage with these platforms. For instance, TikTok's algorithm curates a user's feed based on their interaction history, presenting content that is likely to resonate with them. This not only increases the likelihood of user interaction

but also ensures that the platform remains relevant and engaging to the user. Similarly, Instagram utilizes AI to optimize user interaction by suggesting posts and ads that align with the user's interests, thereby enhancing the sense of agency and satisfaction with the platform.

Cues, the other critical component of the TIME model, are also significantly influenced by AI. These cues include visual and textual elements that guide user perceptions and responses. On TikTok, AI enhances content appeal by adjusting visual effects, filters, and recommendations to suit user preferences, making the platform more attractive and engaging. Instagram, on the other hand, uses AI to refine its content presentation, ensuring that the imagery, typography, and overall aesthetic of the posts are aligned with what users find appealing, thus improving the platform's usability and credibility.

In summary, the TIME model provides a comprehensive framework for understanding the role of AI in shaping user interactions on social media. By enhancing both actions and cues, AI not only facilitates a more personalized user experience but also plays a crucial role in how platforms like TikTok and Instagram maintain user engagement and foster brand loyalty. This theoretical perspective is invaluable for analyzing the complex interplay between technology and user behavior in the digital age.

To compare the two types of media that are Instagram and TikTok, it can be better understood in a larger section which is affordances, which will later be explained through specifically actions and cues. Looking at it through a broader scope,

## 4. Methodology

Based on the literature that has been sorted out in this paper, this article will use brand exposure and brand cognition as the refinement of the brand promotion of this article, and will use loyalty, questionnaire research and data analysis as the embodiment of Instagram and TikTok brand promotion effects.

The article makes the following assumptions associate with the issues that need to be studied: Instagram and TikTok, which social media can better improve brand promotion with AI. The data used by this essay comes from the questionnaire data collected by the team members. The purpose of this research method chosen by the group member is to randomly collect a large amount of data in a short time to support the writing of the paper. Compared with quantitative research methods, qualitative research methods are more structural. The three topics contained in the questionnaire provide strong support for the group's further research, such as open-ended questions, non-open-ended questions and likert scale questions. These three

forms of questioning are full of diversity, providing the interviewee with the opportunity to think alone and also bring rich data support to the group members. In addition, the group chooses to use the questionnaire because it is extensive, statistically convenient, low cost, and allow many interviewees to participate in. Combining with the two theories adopted in this article, the questionnaire raises a series of questions. If users think whether the use of artificial intelligence in video creation can attract more users, it corresponds to the cognition of the application of artificial intelligence in TIME theory. With this questionnaire, team members can explore users' ideas about the use of AI and find optimization countermeasures from it. Therefore, the group used the research form of questionnaire research to conduct research.

This research questionnaire consists of four parts, the first part is to understand the basic information of the interviewee; the second part is to combine TIME theory to carry out the thoughts of some respondents when using social media and contacting content about AI; the third part is using Social Media Affordance Theory to understand the interviewee's perspective on the practicality of AI; the last part is based on the previous questions and explores the interviewee's views on the future development of AI.

The questionnaire lasted for about two weeks and was mainly distributed in Shanghai, Guangdong Province and other regions. The respondents included a variety of occupations, age classes, income levels and education levels. The questionnaire is expected to be published to 100 people through online social platforms and distributed together to explore the conclusion.

## 5. Prediction

Future brand engagement will be predicated on interactive experiences that cultivate customer loyalty. Successful social media platform will distinguish themselves by integrating personalized, interactive media. The Theory of Interactive Media Effects (TIME) posits that customer loyalty will be enhanced by media enjoyment and control. Personalization will be paramount, with a focus on understanding customer preferences. TikTok and other social media also highlight that sensory, intellectual, and behavioral experiences will be crucial for brand engagement. Moreover, active brand interactivity can improve brand perception and loyalty. In addition, the evolution of social media communication needs increased authenticity and privacy measures. Growing privacy concerns will necessitate robust policies, including strong passwords, regular updates, and restricted data sharing. User-friendly privacy settings and advanced technical measures, like anti-virus software, will be vital. The The-



ory of Interactive Media Effects indicates that promoting authenticity and transparency through streamlined designs and credible proof will enhance user trust and platform security. From TikTok and Intergram, two similar types of social media platforms, TikTok can better interpret the interactive communication experience of AI between users and product brands. At the same time, its application ability of media itself TikTok also intelligently shows its use of AI intelligent push technology. In terms of programming, it not only has graphic functions but also can provide a variety of types of video playback modes. While Intergam has many similar features, it doesn't have the same kind of fun as TikTok's ability to "continuously punch in" with friends. That makes it a little less impressive.

AI will transform social media content creation, outperforming human capabilities in efficiency, accuracy, and real-time data analysis. AI is also going to facilitate personalized content creation in advertising by leveraging real-time sentiment monitoring and machine learning algorithms to understand and adapt to user preferences. In the future, this will particularly resonate with users.

## 6. Conclusion

To sum up, online service industries such as social media platforms are gradually being replaced by intelligent AI, and the use of artificial online services is being greatly reduced to ensure that the emergence of AI brings unlimited convenience to people's lives. AI helps social media platforms personalize push to users to improve brand exposure is one of the important developments in modern society towards the future era of technology, reducing the potential negative impact of AI to protect user privacy. In today's rapidly changing times, the combination of AI and social media platforms to create exclusive personalized intelligent services for customers and brands plays a very important role in the individual image of the platform itself. This research direction can play a very powerful role in promoting and exposing the brand image of social media platforms and advertising companies. In addition, according to the data, this study finds that even if tiktok and

Instagram are actively using ai technology, Instagram is more popular in terms of brand promotion and attraction.

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