

## Research Article

# THE IMPACT OF AI-DRIVEN FEATURES ON CUSTOMER SATISFACTION ON TIKTOK IN VIETNAM: EXPLORING THE MODERATING EFFECT OF PRIVACY CONCERNS

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### ABSTRACT

In the context of rapidly advancing technologies, this study delves into the intricate dynamics of AI-driven features, focusing on the balance between AI features and privacy concerns on TikTok in Vietnam. Grounded in Social Support Theory, the research develops a comprehensive framework to examine the impact of AI-driven features on customer satisfaction and experience, with privacy concerns as a moderating variable. Using a positivist research paradigm, cross-sectional data were collected from 348 TikTok users in Vietnam through an online survey employing purposive-convenience sampling. Structural Equation Modeling (SEM) was applied to analyze the relationships among AI driven features, customer experience, and satisfaction. Results highlight the pivotal role of personalized algorithms in enhancing user satisfaction, while privacy concerns exert a nuanced but statistically insignificant moderating influence. Findings underscore the need to strike a balance between AI-driven features and privacy to foster trust and satisfaction in AI-powered platforms. The study concludes with implications for businesses and platform developers, suggesting further research to address contextual and methodological limitations for a deeper understanding of factors in AI-driven environments.

**Keywords:** privacy concerns, AI-driven features, TikTok, customer satisfaction, Vietnam.

### INTRODUCTION

#### Background:

Marketing and its associated activities have continually seasoned themselves to use new technologies to better engage in markets. The practices of marketing and all other organizational processes have been drastically transformed with the advent of the digital era (Caesarius and Hohenthal, 2022). One of the greatest changes is the availability of enormous volumes of data in digital form (Varian, 2014; Caesarius and Hohenthal, 2022). The information technology has to a large extent come in handy in the searching and processing of this data and even enhancing its contribution towards making choices. Millions of algorithms today are capable of processing and analyzing enormous volumes of data, extracting information from it, and making practical decisions. This process evolution contributes to increased efficiency in performing operations, simplification of business processes and integration of a scope of data which is beyond human scale.

AI, which stands for artificial intelligence, is the core of this new revolution. It is the attribute of machines to carry out high-level functions including speaking, thinking, and problem-solving just like humans (Christian *et al.*, 2023; Sujata *et al.*, 2019; Syam and Sharma, 2018; Libai *et al.*, 2020). The ultimate goal of an AI is to develop agents that can learn on their own, their own, and even 'think' without a human being present. Even advanced AI would not be required to control any part of the decision-making, which is representative of true intelligence (Sujata *et al.*, 2019).

The advancement of artificial intelligence (AI) in today's world is indeed a revolutionizing event. In the words of Overgoor *et al.*, (2019) computers which are integrated with artificial intelligence can perform

high level tasks like problem solving, planning, and even learning that emulates human brain. Further achievements, as pointed out by Kumar *et al.*, (2019), artificial intelligence has not only introduced changes to the traditional tools for performance management in organizations (Crittenden *et al.*, 2019; Wen *et al.*, 2022) but has brought into existence intelligent robots that have features of various types of cognition including the capability of self-learning, cognitive effort through automated processes, and self-programming.

TikTok is a popular platform and utilizes AI in its operations, content and interactions with the audience (Lynch, 2024). TikTok has become the most downloaded mobile app across the globe in 2022, within a short duration after its establishment. Published by ByteDance, TikTok is now considered one of the giants in the social media arena, attracting audiences with its original content produced by users (Anjelita *et al.*, 2023). The algorithm acts as a recommendation system that recommends content based on users viewing figures of the For You Page (Lynch, 2024; Gabor, 2023; Anjelita *et al.*, 2023). The content is tailored targeting the audience which is effective as it keeps on changing in accordance to what the user wants (Anjelita *et al.*, 2023).

#### Research Problem:

There are some empirical studies that suggest that social media enabled by artificial intelligence technologies broadens customer satisfaction through elevating general satisfaction with the user (Chaouali *et al.*, 2016). Research has consistently demonstrated that active social media engagement positively influences satisfaction levels (Yang and DeHart, 2016). Potdar *et al.*, (2018) highlight AI's role in optimizing product searches and purchasing decisions, making it a critical driver of digital transformation and consumer behavior (Danckwerts and Kenning, 2019). While there are advantages to AI-driven features on TikTok, it also brings significant privacy issues to light. According to Rajaobelina *et al.*, (2021), the gathering and application of personal data to customize content can diminish user trust if people are concerned about the misuse of their data. Privacy

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concerns may prevent users from sharing information, which can reduce the effectiveness of AI-driven features (Ameen *et al.*, 2022). The research indicates that privacy concerns are a persistent barrier to the adoption of AI (Kim *et al.*, 2022; Rese *et al.*, 2020). Individuals with greater privacy concerns tend to be less willing to interact with personalized content (Bansal *et al.*, 2015; Zarouali *et al.*, 2017). It presents a different viewpoint, indicating that privacy concerns might not have a substantial effect on the connection between AI-driven chatbots and user trust (Li *et al.*, 2023). This study aims to explore if privacy concerns influence the link between customer satisfaction and customer experience on TikTok, especially regarding AI-driven features.

### Objectives of the Study:

This study examines the relationship between customer satisfaction, customer experience, AI-driven features, and privacy concerns in the context of TikTok. This study investigates if customer experience acts as a mediator between Satisfaction and AI-driven features on TikTok. The research also examines how privacy concerns may influence this framework. Data will be gathered from TikTok users who have engaged with AI-driven features, offering important insights into the elements influencing customer satisfaction in a social media context enhanced by AI. The findings seek to assist TikTok and similar platforms in improving their strategies and applications to enhance customer satisfaction, which may influence customer purchase intentions.

## LITERATURE REVIEW

### AI-Driven Features:

Artificial intelligence (AI) refers to the capability of machines to undertake tasks that necessitate human-like intelligence, including creating, learning, analyzing critically, and engaging in creative problem-solving (Mogaji *et al.*, 2020; Yin and Qiu, 2021). Companies are greatly leveraging AI to be competitively relevant in their wholly adopted digital transformations by enhancing effectiveness and customer engagement respectively (Jang *et al.*, 2021). A significant difference between humans and AI is that while the former takes time to process information, makes good decisions only sometimes, and biases in decision-making are inherent, AIs process information at lightning speed, make more accurate decisions and work without inherent biases (Samara *et al.*, 2020).

Artificial intelligence-driven features are characterized by the utilization of complex algorithms and the learning capabilities of machines in order to personalize content, product recommendations, and even customer experiences in accordance with the preferences of individual users (Raji *et al.*, 2024). Such features are described to be employing AI in customizing experiences and recommendations based on data regarding user preferences and behaviors by Gujar, 2024. The researchers noted that AI-driven features are meant to synchronize products, services, and marketing approaches with a particular customer rather than enhance the experience as an aggregate one.

Based on this understanding, companies such as TikTok make increasing use of AI to gather and analyze information from many diverse data sources—ranging from tailored content and location-specific ads to social media interactions and recommendation systems—to develop large-scale datasets, or big data (Chen *et al.*, 2023; Yang *et al.*, 2020). Thus, this amalgamation empowers firms to better perfect the strategies of personalization as well as enhance the outcomes of marketing.

AI-driven features enhance user satisfaction on platforms such as TikTok by making the content and interaction more personal. In the case of content personalization, AI uses vast amounts of data regarding user behavior and interactions in the past to provide real-time relevant content according to individual preferences (Bhuiyan, 2024; Housman, 2024; Raji *et al.*, 2024). The distinguishing characteristic of TikTok's algorithm is that it focuses on users' interactions with content rather than just behavioral patterns; hence it accurately forecasts and recommends material that will be compatible with users' interests (Klug *et al.*, 2021; Koç, 2023).

Moreover, AI enhances the personalization of messages through the development of marketing messages that align with the needs, tastes, and behaviors of users, thus fostering engagement (Breuer *et al.*, 2021; Gujar, 2024). The messages are more relevant due to the click rates being increased by the analysis of demographic and personality profiling. Location-based advertising permits TikTok to adjust advertisements according to users' geographic locations, thereby delivering relevant and timely communication (Boeker and Urman, 2022; Andallo, 2023).

The recommender system of TikTok, the "For You" page is an example, relies on user actions and ratings to suggest content that facilitate a better overall experience for the user. The success of the system relies on recommendations' accuracy, serendipity, and seamless interaction which are also important components of positive user flow. By introducing elements of surprise to prevent users from becoming overly engaged and creating information "cocoon," TikTok masterfully balances engagement over time.

### Customer Experience (CE)

The concept of customer experience has emerged as a significant theme in recent years, attracting attention from industry practitioners as well as researchers who recognize its fundamental importance in the context of business success (Bilgihan *et al.*, 2016; Johnston and Kong, 2011). Providing outstanding customer experiences has come to be seen as essential for achieving any sort of competitive advantage (Pei *et al.*, 2020), and it is intimately connected with concepts such as loyalty, customer satisfaction, and expectations or phenomena (Johnston and Kong, 2011).

The conceptual foundations of customer experience lie in Abbott's (1955) claim that consumers pursue experiences that are meaningful rather than just seeking physical products. This notion was further developed by Pine and Gilmore (1998), who defined the customer experience as a sequence of memorable happenings that companies create. Schmitt *et al.*, (2015) increased the level of inclusiveness again, defining the concept to include all interactions that customers have with service providers.

According to Bansal (2016), customer experience comprises several interactions at various touch points, and personalization is crucial in generating favorable reactions from customers. The customer experience is influenced by several dimensions that are emotional, cognitive, social, and physical (Lemon and Verhoef, 2016; Verhoef *et al.*, 2009). In addition to that, Gentile *et al.*, (2007) listed 6 essential elements of the customer experience which include the cognitive, affective, sensorial, pragmatic, lifestyle aspects, and relational.

Moreover, Rose *et al.*, (2012) pointed out that online stimuli are instrumental in developing experiences since they affect not only the emotional responses but also the cognitive reactions of individuals. In conclusion, customer experience is a fundamentally subjective construct that varies from interactional occasions and forms part of the broader process that customers go through with a brand.

## Cognitive

Cognitive also plays a critical role in shaping customer experiences. These processes involve mental functions such as memory, perception, and problem-solving (APA, 2024). According to Gentile *et al.*, (2007), it explored cognitive through 2 main lenses, which are the confirmation or disconfirmation of expectations and achieving goals. Goal-directed behavior is central to cognition, as customers often engage with products or services to meet specific objectives (Bagozzi and Dholakia, 1999). Assessing whether these goals are met provides insight into the cognitive aspects of customer experience (Novak *et al.*, 2003). Furthermore, customer satisfaction is closely tied to the alignment—or misalignment—of their expectations and actual experiences (Homburg *et al.*, 2006; Gentile *et al.*, 2007).

## Emotion

Emotions are subjective and differ between individuals; they are also influenced by social contagion (Kuuru *et al.*, 2020; Huang, 2001). Bagozzi *et al.*, (1999) define emotions as psychological responses that arise from cognitive evaluations of events and have a distinct subjective nature. Environments designed to elicit emotional responses may significantly enhance the overall customer experience (Tyrväinen *et al.*, 2020). Pullman and Gross (2004) emphasized that creating experiences necessitates the development of emotional connections through the careful organization of both tangible and intangible elements. Companies and influencers should understand the wants and needs of their customers and post content that triggers this aspect to purposefully elicit emotions in order to increase customer satisfaction and to sell what they want.

## Social Elements

According to Verhoef *et al.*, (2009), the social elements have a significant influence on the experiences delivered to customers. Among the social factors that are taken into consideration are the interactions that customers have with employees, their wider social networks, and other customers. There is a significant amount of research that focuses on interactions between companies and their customers (Tsiros and Parasuraman, 2006). However, interactions between customers can be as significant (Martin, 1996). Additionally, online interactions, including reviews and comments, act as a modern form of word-of-mouth (WOM) communication, further shaping customer perceptions.

## Proposed Research Model

### H1: AI-driven features positively influence customer experience in the context of TikTok

Customer experience refers to the overall perception a customer develops about a brand or product through various interactions, which can lead to either positive or negative outcomes depending on the quality of those interactions (Samara *et al.*, 2020; Yang, 2016). This perception is influenced by both direct and indirect engagements with the company, where factors like seamless transactions and user-friendly online platforms significantly enhance customer satisfaction (Mogaji *et al.*, 2020; Yang *et al.*, 2020). In general, customer satisfaction arises when individuals feel content with the products or services they receive (Sharma & Singh, 2016).

As human interactions with technology have evolved, so too has the focus of research on the adoption of such technologies, particularly among older adults (Baabduallah, 2018; Satti *et al.*, 2020). AI can create customer experiences that are not only intended to be personalized but also engage the customers through various dimensions such as cognitive rationality and emotionality, along with

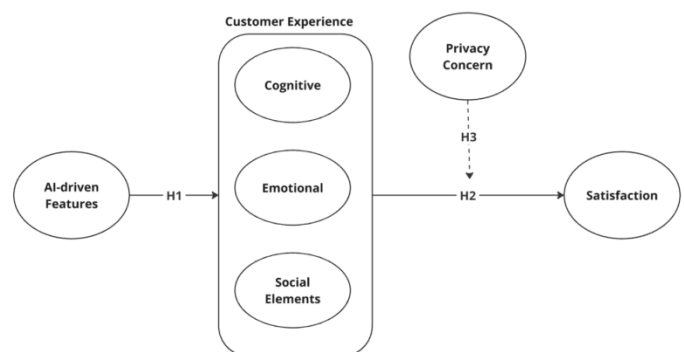
social aspects (Borges *et al.*, 2021). Four key factors—Cognitive Emotions Physical Social—are pertinent in shaping interactions with AI systems (Rozzell *et al.*, 2014). Research shows that positive memorable experiences are significantly related to customer satisfaction levels and that AI technology enhances confidence as well as satisfaction levels simultaneously.

### H2: The adoption of AI-driven features positively influences satisfaction through the mediation of customer experience

TikTok employs AI-driven features to customize experiences for users and subsequently boost their engagement through the analysis of individual data. While this thus fosters user interaction, it also has the potential to undermine confidence in case privacy protections are deemed insufficient (Rajabelina *et al.*, 2021). Concerns regarding privacy are most acute on social media platforms where users fear that their personal information may be misused or divulged without authorization (Ameen *et al.*, 2022). Research shows that people tend to feel more comfortable with using AI-powered features, such as chatbots or personalized recommendations, as long as these do not involve any access to sensitive information (Nordheim *et al.*, 2019). On the other hand, overloading with non-transparent data collection per se can erode confidence which subsequently leads to a decrease in user engagement.

Privacy concerns play a pivotal role in shaping how users interact with AI-driven features on platforms like TikTok. Research indicates that individuals with heightened privacy concerns are less likely to share personal data and tend to exhibit lower trust in AI systems emphasizing that privacy concerns can moderate the relationship between AI features and user trust. However, recent findings by Li *et al.*, (2023) challenge this perspective, suggesting that privacy concerns do not always diminish the trust-building capacity of AI tools, such as chatbots. These results imply that the influence of privacy concerns may vary depending on the context and type of AI feature.

### H3: Privacy concerns moderate the link between customer experience and satisfaction. The greater the level of privacy, the more negative the impact on customer experience and satisfaction



## METHODOLOGY

### Research Design

Selecting the design of a research study is very important as it determines the general strategy and direction of the research. This study adopts a quantitative methodology to collect and analyze numerical data in order to investigate the relationships and interactions between variables. The approach works especially well for identifying relationships among variables and for testing a priori concepts and hypotheses. Since the study aims at probing into the

links of AI-driven characteristics, customer experience, privacy concerns, and satisfaction as research objectives, which need quantified data to examine this, a quantitative approach aligns well with the research questions and ensures the results can help in testing proposed hypotheses.

**Research Method and Sample Size**

To align with the statistical requirements of the quantitative research approach, the survey method combined with questionnaire distribution was employed for primary data collection. Questionnaires are particularly effective for generating numerical data representations and are widely recognized for their efficiency in collecting data within limited timeframes. The survey was designed using Google Forms and distributed to the target audience through various social media platforms such as Facebook, ensuring accessibility and ease of participation.

For this research, Gen Z refers to individuals born between 1997 and 2012, while Millennials include those born between 1981 and 1996 (Dabija and Băbut, 2019). By concentrating on TikTok users aged 18 and older, the study aims to provide nuanced insights into the behaviors, perceptions, and attitudes of these groups regarding AI integration in social media platforms.

The sample size is a critical design element, as an inadequate number of samples to achieve sufficient power can lead to a high false-negative rate. According to Hair et al. and Mundfrom et al. (2014), the recommended sample size should be 10 times the quantity of items measured in the study (number of indicators × 10). Since this survey includes 30 measures, the recommended sample size is 300 respondents. Nevertheless, they further suggest that the study population should have a minimum of five times the number of measurement items, or  $N \geq 150$ . While practical, this approach also aligns with the statistical properties of the study. A sample size > 300 ensures robust and representative sampling—both of which are essential to garner confidence in the results. This strategy adheres to established guidance by selecting a sample size large enough to enable reliable and generalizable research findings.

**DATA ANALYSIS**

**Response Rate and Sample Profile**

The first section of this chapter focuses on the thorough assessment of participant involvement and contributions throughout the data-collecting phase. The research sent approximately 400 questionnaires, both paper and online, to the specified target audience. Out of them, 408 forms were submitted to the researcher, with 348 classified as useable and working, while 60 forms were excluded owing to incomplete data. The estimated response rate is 73%, indicating a significant degree of involvement within the research sample.

The sample for this study comprises 348 TikTok users, with an approximately balanced proportion of male and female respondents, accounting for 41.7% and 58.3%, respectively. This balance ensures that the study incorporates perspectives from both genders, offering a comprehensive understanding of their experiences.

For the second socio-demographic factor regarding age, the majority of respondents are within the 18-25 age group, representing 47.1% of the sample, followed by the 26-41 age group at 34.8%. This age distribution aligns with the target population, predominantly young adults, who are active users of TikTok and are likely to engage with its AI-powered features. The prevalence of young participants underscores the significance of tailoring AI-driven features to meet their preferences and expectations, further enhancing customer experience and satisfaction.

An analysis of the socio-demographic factor regarding employment status reveals that the majority of TikTok users in the sample are employed, with 31.6% working full-time and 37.1% part-time. This indicates that the sample largely comprises a working population, reflecting varying levels of disposable income and purchasing power. These factors could directly influence how users interact with and perceive TikTok's AI-powered features.

Similarly, the examination of monthly income distribution indicates that the majority of respondents earn between 5 to 9 million VND per month (37.1%), followed by those earning 10 to 14 million VND per month (29.6%). The third-largest group comprises respondents earning between 15 to 19 million VND per month (13.5%), while only a small proportion (4%) report incomes exceeding 30 million VND. This diverse income distribution highlights the varied economic backgrounds within the sample, which may shape their preferences and satisfaction levels when interacting with features on TikTok.

**Reliability Analysis Using Cronbach's Alpha**

The reliability analysis results indicate that the reliability test for the four items in Artificial Intelligence produced a Cronbach's Alpha of 0.890, categorizing it within the acceptable range of 0.8 to 0.9. This suggests that the dataset exhibits "Good" internal reliability, adequate for subsequent analysis. Table 5 indicates that all items exhibited a Corrected Item-Total Correlation exceeding 0.3, thereby illustrating positive correlations among the items. No items exhibited a "Cronbach's Alpha if Item Deleted" value exceeding the overall Cronbach's Alpha of 0.890, suggesting that the removal of any item would considerably diminish the factor's reliability. Consequently, all measurement items for Artificial Intelligence demonstrate reliability and are suitable for analysis.

|     | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item Total Correlation | Cronbach's Alpha if Item Deleted |
|-----|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| AI1 | 11.36                      | 6.040                          | .698                             | .822                             |
| AI2 | 11.41                      | 5.706                          | .737                             | .806                             |
| AI3 | 11.41                      | 5.903                          | .715                             | .815                             |
| AI4 | 11.52                      | 5.899                          | .665                             | .836                             |

The reliability analysis results shown in indicate that the reliability test for the 9 items in Customer Experience in Cognitive produced a Cronbach's Alpha of 0.889, categorizing it within the "good" range of 0.8 to 0.9. Furthermore, table 7 indicates that all items exhibited a Corrected Item-Total Correlation exceeding 0.3, signifying positive correlations among the items. No items exhibited a "Cronbach's Alpha if Item Deleted" value exceeding the overall Cronbach's Alpha of 0.889, suggesting that the removal of any item would considerably diminish the factor's reliability. Consequently, all measurement items for Customer Experience in Cognitive demonstrate reliability and are suitable for analysis

|      | <b>Item Deleted</b> | <b>if Item Deleted</b> | <b>ItemTotal Correlation</b> | <b>Deleted</b> |
|------|---------------------|------------------------|------------------------------|----------------|
| CON1 | 30.71               | 30.852                 | .661                         | .876           |
| CON2 | 30.97               | 29.331                 | .698                         | .872           |
| CON3 | 30.85               | 29.457                 | .764                         | .867           |
| CON4 | 30.81               | 30.133                 | .656                         | .876           |
| CON5 | 30.88               | 29.550                 | .761                         | .867           |
| CON6 | 30.79               | 30.456                 | .656                         | .876           |
| CON7 | 30.85               | 30.823                 | .591                         | .881           |
| CON8 | 30.88               | 30.950                 | .603                         | .880           |
| CON9 | 30.94               | 32.077                 | .429                         | .895           |

The reliability study findings indicate that the reliability test for the six items in Customer Experience in Emotions produced a Cronbach's Alpha of 0.880, categorizing it within the "good" range of 0.8 to 0.9. Furthermore, table 9 indicates that all items exhibited a Corrected Item-Total Correlation above 0.3, indicating positive relationships among them. No items had a "Cronbach's Alpha if Item Deleted" value above the overall Cronbach's Alpha of 0.880, indicating that the removal of any item would markedly diminish the factor's dependability. All measuring items for Customer Experience in Emotions domain are trustworthy and suitable for analysis.

|      | <b>Scale Mean if Item Deleted</b> | <b>Scale Variance if Item Deleted</b> | <b>Corrected ItemTotal Correlation</b> | <b>Cronbach's Alpha if Item Deleted</b> |
|------|-----------------------------------|---------------------------------------|--|---|
| EMO1 | 19.19                             | 12.686                                | .727                                   | .853                                    |
| EMO2 | 19.15                             | 12.502                                | .657                                   | .865                                    |
| EMO3 | 19.29                             | 12.764                                | .716                                   | .854                                    |
| EMO4 | 19.24                             | 12.818                                | .674                                   | .861                                    |
| EMO5 | 19.31                             | 12.986                                | .674                                   | .861                                    |
| EMO6 | 19.20                             | 12.901                                | .682                                   | .860                                    |

The reliability study findings indicate that the reliability test for the three items in Customer Experience in Social Elements produced a Cronbach's Alpha of 0.809, categorizing it within the "good" range of 0.8 to 0.9. Furthermore, Table 11 indicates that all items exhibited a Corrected Item-Total Correlation above 0.3, indicating positive relationships among them. No items had a "Cronbach's Alpha if Item Deleted" value above the overall Cronbach's Alpha of 0.809, indicating that the removal of any item would considerably diminish the factor's dependability. All measurement items for Customer Experience in Social Elements are credible and suitable for analysis.

|      | <b>Scale Mean if Item Deleted</b> | <b>Scale Variance if Item Deleted</b> | <b>Corrected ItemTotal Correlation</b> | <b>Cronbach's Alpha if Item Deleted</b> |
|------|-----------------------------------|---------------------------------------|--|---|
| SOC1 | 8.16                              | 2.066                                 | .688                                   | .713                                    |
| SOC2 | 8.02                              | 1.933                                 | .652                                   | .744                                    |
| SOC3 | 8.26                              | 1.894                                 | .640                                   | .759                                    |

The reliability study findings indicate that the reliability test for the four items in Satisfaction produced a Cronbach's Alpha of 0.890, categorizing it within the "good" range of 0.8 to 0.9. Furthermore, Table 13 indicates that all items exhibited a Corrected Item-Total Correlation above 0.3, indicating positive relationships among them. No items had a "Cronbach's Alpha if Item Deleted" value above the overall Cronbach's Alpha of 0.890, indicating that the removal of any item would markedly diminish the factor's dependability. All measurement items for Satisfaction demonstrate reliability and may be preserved for study.

|     | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item Total Correlation | Cronbach's Alpha if Item Deleted |
|-----|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| SA1 | 12.16                      | 5.701                          | .792                             | .845                             |
| SA2 | 12.18                      | 5.741                          | .764                             | .856                             |
| SA3 | 12.32                      | 5.850                          | .714                             | .875                             |
| SA4 | 12.08                      | 5.864                          | .763                             | .857                             |

### Exploratory Factor Analysis (EFA)

The KMO and Bartlett's Test table indicates that the initial round of Exploratory Factor Analysis produced a KMO value of 0.896. This value is classified within the Meritorious range as per Kaiser (1974), signifying its validity as a measure. Additionally, a notable correlation among the variables within the factor was identified, as evidenced by the Bartlett's Test of Sphericity value of 0.000, which falls below the established significance level of  $\alpha \leq 0.5$

|  |                    |          |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .896     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 5806.082 |
|  | df                 | 406      |
|  | Sig.               | .000     |

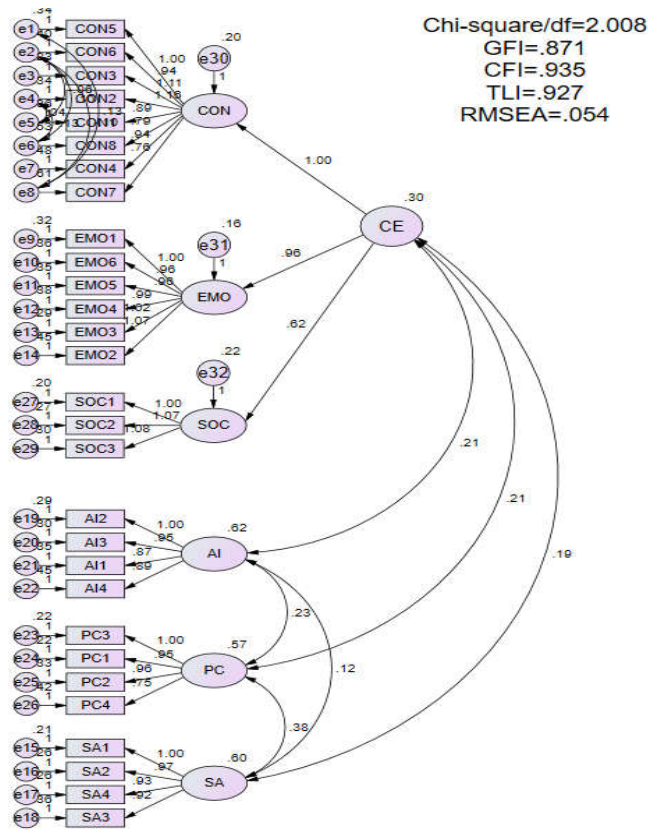
The results indicate the importance of all conceptualized items used to assess the model constructs in this study, as factor loadings exceed the 0.5 threshold. This finding corresponds with the results of the factor extraction analysis, which specified the number of extracted components. The initial component includes eight items (CON1 – CON8) designed to assess the Cognitive construct in Consumer Experience, demonstrating factor loadings between 0.576 and 0.897. The second component consists of six items (EMO1 – EMO5) that evaluate the model construct of Emotion in Consumer Experience, exhibiting factor loadings between 0.589 and 0.865. The following components, each aligned with a model construct, exhibit similar patterns of item significance and factor loadings. Consequently, the findings highlight the strength of the study's quantitative data, eliminating the need for further removal.

### Confirmatory Factor Analysis (CFA)

Following the exploratory factor analysis (EFA), the measurement model's adequacy and integrity were assessed through confirmatory factor analysis (CFA), which involved three stages: evaluating goodness of fit, convergent validity, and discriminate validity of the measurement model (Cheung *et al.*, 2023; Sujati and Akhyar, 2020; Garcia-Cueto, Alvaro, and Miranda, 1998). The fitness indicators were examined to assess the compatibility of the constructed measurement model with the quantitative data (Nizar *et al.*, 2019). The path diagram of the measurement model, analyzed via CFA using AMOS Graphic statistical software version 26, is presented in the following figure.

|                         |    | CR    | AVE   | SA       | AI       | PC       | CE    |
|-------------------------|----|-------|-------|----------|----------|----------|-------|
| Satisfaction            | SA | 0.891 | 0.671 | 0.819    |          |          |       |
| Artificial Intelligence | AI | 0.859 | 0.605 | 0.202*** | 0.778    |          |       |
| Privacy Concern         | PC | 0.865 | 0.618 | 0.639*** | 0.382*** | 0.786    |       |
| Consumer Experience     | CE | 0.764 | 0.523 | 0.455*** | 0.492*** | 0.514*** | 0.723 |

Tests of Research Hypotheses Using Structural Equation



Modeling (SEM)

| Research Hypotheses | Conclusion         |
|---------------------|--------------------|
| H1                  | <i>Supported</i>   |
| H2                  | <i>Supported</i>   |
| H2a                 | <i>Supported</i>   |
| H3                  | <i>Unsupported</i> |

CONCLUSION

This study examines the impact of AI-driven features on customer satisfaction, with a focus on TikTok users in Ho Chi Minh City aged 18 to 41. The research objectives outlined in Chapter 1 include, firstly, investigating how AI-driven features (such as content personalization, location-based ads, and recommender systems) influence customers' overall experience and satisfaction on TikTok; secondly, based on data analysis, the study aims to identify which AI-driven features have the greatest and least effect on customer satisfaction; thirdly, explore the mediating role of customer experience in the relationship between AI-driven features and satisfaction; and last but not least, examine the moderating role of privacy concerns in this relationship. Finally, the study aims to provide valuable insights and recommendations for TikTok and other platforms in optimizing AI features to enhance user satisfaction and manage privacy concerns effectively.

After analyzing the collected data, it was found that the independent variable Artificial Intelligence showed a positive influence on the Customer Experience variable. Furthermore, the findings indicated a

positive correlation between Consumer Experience and Satisfaction, especially among young customers who have experienced Tiktok. The data analysis confirmed hypotheses H1 and H2. Although the moderating effect of privacy concerns on the relationship between Consumer Experience and Satisfaction needs to be further clarified, it has a moderating effect opposite to the hypothesis mentioned in the paper (H3). This is also a finding worth further investigation in future studies.

First, we discover that AI-driven features has a positively impact on customer experience in the context of TikTok. These features, such as personalized content recommendations, targeted advertisements, and interactive elements, enable businesses to deliver more relevant and engaging campaigns. Moreover, AI technology facilitates the transformation of traditional businesses into digital-first enterprises by driving social media traffic to online platforms and converting interactions into meaningful customer relationships (Zhou et al., 2018). Enhanced customer experiences resulting from these innovations contribute to increased user loyalty and sustained competitiveness in the digital landscape. This aligns with prior research highlighting the positive link between AI applications and consumer experience (Loureiro et al., 2017).

Second, the findings of this study suggest that customer experience plays a significant role in driving customer satisfaction, particularly in the context of AI-driven features on social media platforms like TikTok. AI-based technologies, such as chatbots and virtual assistants, contribute to creating seamless and engaging experiences, which positively influence customer satisfaction (Yang et al., 2020). Moreover, empirical evidence highlights that enhanced customer engagement on social media fosters satisfaction, reinforcing the importance of a positive customer experience in building stronger consumer relationships (Zhou et al., 2018; Mogaji et al., 2020). Additional, the results of this study contribute to the existing body of knowledge by examining the role of customer experience as a mediator in the relationship between AI features on TikTok and satisfaction among young Vietnamese users. While previous studies, such as Bilal et al., (2024), have emphasized the role of AI technology in enhancing customer satisfaction and loyalty, most of these studies focused on direct effects. In this study, the mediating role of customer experience is empirically tested to clarify how AI features, such as content personalization and recommendation systems, influence satisfaction through the experiences of young Vietnamese users. The results show that the mediating role of customer experience in the relationship between AI features and satisfaction is statistically significant. This suggests that simply adopting AI technology is not enough; The actual experience customers get when using these features will determine their satisfaction.

On the other hand, the study also demonstrated that Privacy Concerns did not moderate its positive association with consumer experience and satisfaction. This is consistent with the results of Ayoub et al., (2024), ensuring that user security is one of the main precautions to consider, especially when using new systems, especially on Tiktok.

The study's findings shed light on the intricate dynamics between customer experience and satisfaction, particularly within the realm of TikTok's AI-powered features. These insights hold substantial value, advancing theoretical knowledge while offering practical strategies for enhancing social media marketing and fostering deeper customer engagement.

## REFERENCES

1. Ameen, N., Hosany, S., & Paul, J. (2022). The personalisation-privacy paradox: Consumer interaction with smart technologies and shopping mall loyalty. *Computers in Human Behavior*, 126, 106976.
2. Anjelita, M., Juniwati, J., Purmono, B. B., Pebrianti, W., & Saputra, P. (2023). How Does Personalization by Artificial Intelligence on TikTok Influence Purchase Intention?. *JurnalMantik*, 7(3), 2513-2523.
3. Bansal, G., Zahedi, F. M., & Gefen, D. (2015). The role of privacy assurance mechanisms in building trust and the moderating role of privacy concern. *European Journal of Information Systems*, 24(6), 624–644. doi:10.1057/ejis.2014.41
4. Bhuiyan, M. (2024) 'The Role of AI-Enhanced Personalization in Customer Experiences', *Journal of Computer Science and Technology Studies*. 6. 162-169.
5. Breuer, C., Boronczyk, F. and Rumpf, C. (2021) 'Message personalization and real-time adaptation as next innovations in sport sponsorship management? How run-of-play and team affiliation affect viewer response', *Journal of Business Research*, Volume 133, p 309-316
6. Caesarius, L. M., & Hohenthal, J. (2022). *Big Data Marketing: Context and Affordances*. The SAGE Handbook of Digital Marketing, 68.
7. Chaouali, W., Yahia, I.B., Souiden, N., 2016. The interplay of counter-conformity motivation, social influence, and trust in customers' intention to adopt internet banking services: the case of an emerging country. *J. Retailing Consum. Serv.* 28, 209–218.
8. Cheng, Y., Jiang, H., 2022. Customer–brand relationship in the era of artificial intelligence: understanding the role of chatbot marketing efforts. *J. Prod. Brand Manag.* 31 (2), 252–264.
9. Crittenden, A. B., Crittenden, V. L., & Crittenden, W. F. (2019). The digitalization triumvirate: How incumbents survive. *Business Horizons*, 62(2), 259-266.
10. Danckwerts, S., & Kenning, P. (2019). "It's MY Service, it's MY Music": The role of psychological ownership in music streaming consumption. *Psychology & Marketing*, 36(9), 803-816.
11. Gabor, J. (2023). The TikTok Algorithm Is Good, But Is It Too Good? Exploring the Responsibility of Artificial Intelligence Systems Reinforcing Harmful Ideas on Users. *Catholic University Journal of Law and Technology*, 32(1), 109-144.
12. Gujar, V. (2024). *New Age Marketing: AI Personalization Strategies In Digital World*. IARJSET International Advanced Research Journal in Science, Engineering and Technology, 11(3).
13. Homburg, C., Koschate, N., and Hoyer, W. D. (2006) 'The role of cognition and affect in the formation of customer satisfaction: a dynamic perspective', *Journal of Marketing*, 70(3), 21-31.
14. Housman, D. (2024) 'Why Personalized Content is the New Standard in Marketing', Proof.
15. Huang, M. H. (2001) 'The theory of emotions in marketing', *Journal of Business and Psychology*, 16, 239-247.
16. Johnston, R., and Kong, X. (2011) 'The customer experience: a road-map for improvement', *Managing Service Quality: An International Journal*, 21(1), 5-24.
17. Kalaiganam, K., T. Kushwaha, and K. Rajavi. (2018) 'How Does Web Personalization Create Value for Online Retailers? Lower Cash Flow Volatility or Enhanced Cash Flows', *Journal of Retailing* 94 (3):265–279.
18. Kang, H., and Lou, C. (2022) 'Ai Agency vs. human agency: Understanding human-AI interactions on TikTok and their implications for user engagement', *Journal of Computer-Mediated Communication*, 27(5).
19. Keiningham, T., Ball, J., Benoit, S., Bruce, H.L., Buoye, A., Dzenkovska, J., Nasr, L., Ou, Y.-C. and Zaki, M. (2017) 'The interplay of customer experience and commitment', *Journal of Services Marketing*, 31(2), 148-160.
20. Klug, D., Qin, Y., Evans, M., and Kaufman, G. (2021) 'Trick and please. A mixed-method study on user assumptions about the TikTok algorithm', *Proceedings of the 13th ACM Web Science Conference 2021* (pp. 84-92).
21. Koç, B. (2023) *The Role of User Interactions in Social Media on Recommendation Algorithms: Evaluation of TikTok's Personalization Practices From User's Perspective*. Master Thesis. Istanbul University.
22. Komiak, S. Y. X., and I. Benbasat. (2006) 'The Effects of Personalization and Familiarity on Trust and Adoption of Recommendation Agents', *MIS Quarterly* 30 (4): 941–960.
23. Kumar, V., Rajan, B., Venkatesan, R., and Lecinski, J. (2019) 'Understanding the role of artificial intelligence in personalized engagement marketing', *California Management Review*, 61(4), 135-155.
24. Kuuru, T. K., Litovuo, L., Aarikka-Stenroos, L., and Helander, N. (2020) Emotions in customer experience. *Society as an Interaction Space: A Systemic Approach*, 247-274.
25. Jang, M., Jung, Y., Kim, S., 2021. Investigating managers' understanding of chatbots in the Korean financial industry. *Comput. Hum. Behav.* 120, 106747 in press.
26. Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. *California management review*, 61(4), 135-155.
27. Libai, B., Bart, Y., Gensler, S., Hofacker, C. F., Kaplan, A., Kötterheinrich, K., & Kroll, E. B. (2020). Brave new world? On AI and the management of customer relationships. *Journal of Interactive Marketing*, 51(1), 44-56.
28. Lynch, M. (2024). The impact of AI on TikTok: How algorithmic AI is and will continue to impact user experience and content creation.
29. Mogaji, E., Balakrishnan, J., Nwoba, A. C., & Nguyen, N. P. (2021). Emerging-market consumers' interactions with banking chatbots. *Telematics and Informatics*, 65, 101711. doi:10.1016/j.tele.2021.101711
30. Novak, T. P., Hoffman, D. L., and Duhachek, A. (2003) 'The influence of goal-directed and experiential activities on online flow experiences', *Journal of Consumer Psychology*, 13(1-2), 3-16.
31. Pallant, J. (2020) *SPSS survival manual: a step by step guide to data analysis using IBM SPSS 7th ed.*, London: Open University Press, McGraw-Hill.
32. Pei, X. L., Guo, J. N., Wu, T. J., Zhou, W. X., and Yeh, S. P. (2020) 'Does the effect of customer experience on customer satisfaction create a sustainable competitive advantage? A comparative study of different shopping situations', *Sustainability*, 12(18), 7436.
33. Pine, B. J., and Gilmore, J. H. (1998) *Welcome to the experience economy*. Vol. 76, No. 4, pp. 97-105. Cambridge, MA, USA: Harvard Business Review Press.
34. Piotrowicz, W., and Cuthbertson, R. (2014) 'Introduction to the special issue information technology in retail: Toward omnichannel retailing', *International Journal of Electronic Commerce*, 18(4), 5-16.



35. Pullman, M. E., and Gross, M. A. (2004) 'Ability of experience design elements to elicit emotions and loyalty behaviors', *Decision Sciences*, 35(3), 551-578.
37. Overgoor, G., Chica, M., Rand, W., & Weishampel, A. (2019). Letting the computers take over: Using AI to solve marketing problems. *California Management Review*, 61(4), 156-185.
38. Potdar, V., Joshi, S., Harish, R., Baskerville, R., & Wongthongtham, P. (2018). A process model for identifying online customer engagement patterns on Facebook brand pages. *Information Technology & People*, 31(2), 595-614.
39. Rajaobelina, L., Prom Tep, S., Arcand, M., & Ricard, L. (2021). Creepiness: Its antecedents and impact on loyalty when interacting with a chatbot. *Psychology & Marketing*, 38(12), 2339-2356.
- Raji, M. A., Olodo, H. B., Oke, T. T., Addy, W. A., Ofodile, O. C., & Oyewole, A. T. (2024). E-commerce and consumer behavior: A review of AI-powered personalization and market trends. *GSC Advanced Research and Reviews*, 18(3), 066-077.
40. Rose, S., Clark, M., Samouel, P., and Hair, N. (2012) 'Online customer experience in e-retailing: an empirical model of antecedents and outcomes', *Journal of Retailing*, 88(2), 308-322.
41. Saunders, M., Lewis, P. and Thornhill, A. (2019) *Research methods for business students* 8th ed. Harlow: Pearson Education.
42. Schmitt, B., Brakus, J. J., and Zarantonello, L. (2015) 'From experiential psychology to consumer experience', *Journal of Consumer Psychology*, 25(1), 166-171.
43. Singh, C., Dash, M. K., Sahu, R., and Kumar, A. (2023) 'Artificial intelligence in customer retention: a bibliometric analysis and future research framework', *Kybernetes*.
44. Sodiya, E., Umoga, U., Atadoga, A. and Amoo, O. (2024) 'AI-driven personalization in web content delivery: A comparative study of user engagement in the USA and the UK', *World Journal of Advanced Research and Reviews*. 21.
45. Spaulding, T. J. (2010) 'How can virtual communities create value for business?' *Electronic Commerce Research and Applications*, 9(1), 38-49.
46. Samara, D., Magnisalis, I., Peristeras, V., 2020. Artificial intelligence and big data in tourism: a systematic literature review. *Journal of Hospitality and Tourism Technology* 11 (2), 343-367
47. Syam, N., and Sharma, A. (2018) 'Waiting for a sales renaissance in the fourth industrial revolution: Machine learning and artificial intelligence in sales research and practice', *Industrial Marketing Management*, 69, 135-146.
48. Sujata, J., Aniket, D., and Mahasingh, M. (2019) 'Artificial intelligence tools for enhancing customer experience', *International Journal of Recent Technology and Engineering*, 8(2), 700-706.
49. Varian, H. R. (2014). Big data: New tricks for econometrics. *Journal of economic perspectives*, 28(2), 3-28.
50. Wen, C. H., Cheng, C. C., & Shih, Y. C. (2022). Artificial intelligence technologies for more flexible recommendation in uniforms. *Data Technologies and Applications*, 56(4), 626-643
51. Yang, H.C., DeHart, J.L., 2016. Social media use and online political participation among college students during the US election 2012. *Social Media Society* 2 (1), 2056305115623802.

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