

How the Social Media Effect Consumer Behavior?

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Abstract. Internet platforms has become the main marketing strategy. The purpose of this study is to study the impact of social media advertising on consumer behavior in order to understand the role of advertising in the digital age. As a new form of advertising, social media advertising has unique characteristics, including personalization, sociality and immediacy. Compared with traditional media advertising, social media advertising may have different impact mechanisms and effects. This change has triggered a profound reflection on the importance of the relationship between consumer behavior and advertising, because the interaction between the two directly affects the marketing effect. This study adopts the method of literature review, systematically sorts out relevant literature, sorts out the influencing factors of social media advertising on consumer behavior, and analyzes the main findings of previous studies. Through this method, the research questions will be answered comprehensively and deeply, and the influence mechanism of social media advertising on consumer behavior will be revealed. Through literature review, it is found that social media advertising has a significant impact on stimulating consumers' purchase intention and shaping brand awareness. These major findings will provide support for the expansion of marketing theory, guide enterprises to formulate advertising strategies more accurately, and improve the effectiveness of advertising on social media. This is of great significance for enterprises to obtain market competitive advantages in the digital era.

Keywords: social media advertisement, consumers' behavior, slogan, algorithm, influencer

1. Introduction

Nowadays, there are more and more social media users in the world, there is a report presented that internet usage who are active on the social media reached about 5 billion which is approximately 60% of the total population in the world [1]. It is incredible. Due to this Trend the advertisement on the social media is becoming more and more important and the advertisement on several applications such as WeChat, TikTok and Facebook can be individualized.

The versatility of Internet advertising is one of the reasons why it is favoured by many advertisers. Compared with traditional advertisements, Internet advertising can make advertisements more vivid and interesting, and also help advertisers to present their products in a more comprehensive way. For example, Internet advertising can be made less boring through videos or games. In addition, Internet users can interact with advertisers through likes and comments. The highly interactive nature of Internet advertising is one of its highlights. However, how to effectively guide consumers has also become a major problem for many advertisements. The highly interactive nature of the Internet also simultaneously makes research more complex

The purpose of this study is to thoroughly investigate the influence of slogans, algorithms and influencers on consumer behaviour in social media advertising. Through discussion and analysis of the following three research questions, it aims to reveal the influence mechanism of social media advertisements on consumer behaviours, and help enterprises better use social media platforms to communicate with consumers effectively.

1.To investigate how algorithms, functioning as a technological tool, influence consumer behavior by facilitating precise advertisement targeting towards potential consumers.

2.To explore the effectiveness and nuances of slogans in shaping consumers' perceptions, preferences, and decision-making processes.

3.To analyze the role of influencers with substantial social media followings and their effectiveness in shaping consumer behavior, ultimately providing insights for informed behavioral decision-making.

2. Research Review

2.1. Definition and Characteristics of Social Media Advertising

2.1.1. What Is Social Media Advertising

There are numerous articles about the definition of social media can be found, such as in the article by Feng Rui, who mentioned that "After human beings entered the era of internet communication, social media, which relies on the internet environment, inherited the excellent genes of the internet. It not only has the characteristics of traditional mass media, but also breaks through and reconstructs the new communication ecology of human beings." [2]

For offline advertising, the mode of offline advertising is generally store sales, staff distribution, or some road shows to promote. Offline advertising is generally more effective, because offline communication is more infectious and the staff have also undergone training, which can form a stronger desire to buy. Moreover, offline advertising has a clear target, which can also improve the efficiency and recovery of advertising. However, offline advertising has limitations, and the effect will weaken in the long-term publicity [4].

2.1.2. Advertisement Form

The diversity of advertising forms is also a major feature of Internet advertising. The diversity of advertising forms also results in negative impact on consumers. First of all, text advertisements convey the core information through concise language, aiming at being concise and comprehensive and quickly attracting the attention of users. Secondly, the image advertisement makes the advertisement more attractive and memorable by attracting the visual elements of human eyes. Third, video advertisements display products or services in a dynamic way, and arouse the emotional resonance of users through vivid pictures and plots. Finally, interactive advertising improves the interactivity of advertising by guiding users to participate, such as voting, answering questions, drawing prizes and other forms, and increases the interactive experience between users and advertising.

In today's digital age, more and more video advertisements cause most consumers to be bored with long-term video advertisements, but consumers have a high acceptance of some humorous and interesting video advertisements. [3] for online advertising, online advertising includes newspapers, radio, social media and other traditional media as carriers, so online advertising has a very comprehensive coverage. Moreover, the internet has a very high exposure rate, ignoring the time and space constraints. However, for online advertising, the cost of online advertising is high, so it can only roughly introduce and promote products. Therefore, online advertising focuses more on creating headlines in a higher exposure and click-through rates to attract consumers' attention. This mode of publicity is not effective in a timely manner, but has a cumulative effect. Once formed, it can last for a long time.

The choice of these forms of advertising is not isolated, but a clever combination based on factors such as product nature, target audience and advertising purposes. For example, for advertisements with strong product functionality, text advertisements may be more appropriate; For products that focus on visual effects, graphic advertising may be more attractive. Video advertising plays an important role when it needs to convey information through emotional resonance, while interactive advertising can improve user participation and enhance the advertising effect.

Therefore, the diversified advertising forms of social media advertisements can not only meet the needs of different users, but also flexibly select according to different advertising targets, so as to improve the dissemination effect of advertisements on social media platforms. This flexibility and diversity make social media advertising a widely used marketing tool.

2.1.3. Usage Engagement

Compared with the traditional advertising, the user engagement is a highlight in internet advertising, which can improve the user's participation. The success of an advertisement often depends on whether it can arouse the participation of users. A high degree of user participation means that users pay attention to and interact with the content of advertisements, thus improving the exposure rate and dissemination effect of advertisements.

By designing interactive advertising forms, such as questionnaires and award-winning activities, advertisers can better motivate users to participate and form active interaction between users and advertisements. This kind of interactivity not only makes the advertisement easier to be remembered by users, but also helps to establish the emotional connection between the brand and the users, and improves the influence and perception of the advertisement.

For example, KitKat, a chocolate brand owned by nestle, launched an interactive advertisement. Two passers-by stood in front of the screen and looked at each other's faces. Whoever laughs first loses. Such creative advertising has been on the Internet for just a few days and people on social media have also made positive comments on this advertising, which made a big promotion for KitKat Chocolate.

The success of social media advertising depends on the active participation of users. By constructing attractive and interactive advertising content, advertisers can better interact with users, deepen the contact between brands and users, and improve the advertising effect and user experience.

2.2. Consumer Behavior

2.2.1. Definition of Consumer Behavior

The analysis of consumer behavior is very important for the brand to formulate targeted advertising marketing strategies, which is helpful to improve the click-through rate of advertising and consumption transformation.

Consumer behavior is the study of how consumers select products, which includes psychological, emotional, and constitutional aspects (Rade, 2023) (definition of consumer). Consumer behavior is how individuals consume and select products and services (Bhat). In addition to traditional purchase decisions, social media advertising also extends consumer behavior to aspects such as interaction with advertising, perception and feedback of advertising content. The breadth and diversity of consumer behavior make it more complex and comprehensive to study the impact of social media advertising on consumer behavior.

In the social media environment, the definition of consumer behavior is not only limited to the purchase decisions of products or services, but also covers more aspects related to advertising content. First of all, consumers interact with advertisements on social media, such as praising, commenting and sharing. These interactive behaviors have become an important indicator to measure the influence of advertisements. An advertisement triggered comments and sharing by users, which not only expanded the exposure scope of the advertisement, but also formed word-of-mouth communication among users [5].

Secondly, consumers' perception and feedback of advertising content has also become the key point of the research. Social media advertisements are usually presented in creative ways. Users' perception of advertisements directly affects their attitudes towards brands or products [6]. For example, the advertisement of coconut milk of China coconut tree brand highlights that their brand of coconut milk has no preservatives, no additives and other characteristics, highlighting the health characteristics of their brand of coconut milk. However, sometimes such excessive publicity will also bring some bad effects, such as high refund rates. When consumers discover some negative information about it, it will also bring some serious effects.

This breadth and diversity of consumer behavior definitions enriches the impact mechanisms of social media advertising. Not only the traditional purchase decision-making process should be considered, but also the interaction, perception and feedback between users and advertisements should be paid attention to. Such comprehensive research is helpful to a more comprehensive understanding of the far-reaching impact of advertising on consumer behavior in the digital age.

2.2.2. Consumer Attention and Social Media Advertising.

Previous studies have clearly pointed out [28] Whether social media advertising can successfully attract consumers' attention is crucial to the advertising effectiveness. The content, creativity and form of advertisements directly affect whether consumers are willing to pay attention to advertisements. In the highly fragmented environment of social media, it can attract the attention of users in the ever-changing information flow and make advertisements stand out as the key to improve the advertising effect.

In addition, social media advertising is challenging in terms of attracting attention, in part because users face competition from a large amount of information on the platform. Users' attention is easily distracted by other social media content, news, circle of friends' dynamics and other factors. Therefore, advertising creators need to attract users' attention in a limited time. This requires advertisements that have not only attractive pictures or videos, but also attractive storylines or innovative designs to stand out from the information flood.

Therefore, through in-depth understanding of the mechanism of social media advertising in guiding and capturing the attention of consumers, enterprises can better adjust advertising strategies and enhance the viability and influence of advertising on the highly competitive social media platform.

2.2.3. Evaluation of Advertising Effectiveness

Predicting the click-through rate of an advertisement can help greatly improve the efficiency of placing an advertisement, but at the same time, the result of predicting the click-through rate of an advertisement is also affected by many factors, such as the location of the advertisement placement, the nature of the advertisement and the nature of the users [27].

Conversion Rate: A measure of an ad's ability to trigger a user's actual action, such as the percentage of purchases or registrations completed after clicking on the ad. This can also help companies evaluate their advertising effectiveness. Accurate advertising conversion rates are crucial for advertisers. Delays in feedback, extremely low conversion rates and differences between platforms and third parties make it very challenging to predict conversion rates.

Evaluation of advertising effectiveness is a core aspect in consumer behavior research. Through the analysis of the advertising effect on social media, user feedback and final purchase behavior, we can objectively and comprehensively evaluate the success of

advertising. This assessment not only helps enterprises to understand the actual influence of advertising on social media platforms, but also provides a powerful basis for further optimization of advertising strategies.

First, it is crucial to evaluate the effectiveness of advertising on social media. This includes indicators such as the number of times an advertisement is exposed on the platform, the number of times it is shared, and the likes and comments of users. Through the analysis of these data, advertisers can understand the influence scope and propagation speed of advertisements on social media, so as to evaluate the propagation effect of advertisements.

Secondly, user feedback is an important part in the evaluation of advertising effectiveness. The user's comments and feedback provide valuable information, which reflects the emotional resonance and attention level caused by the advertisement in the user group. Positive user feedback helps to build brand image, while negative feedback provides improvement direction for advertisers.

Finally, the impact of advertising on consumer decision-making can be directly measured by tracking the final purchase behavior. This can be assessed by means of sales data, coupon usage, etc. after the associated advertisement is released. Understanding the impact of advertising on purchase intention and actual transformation is helpful for enterprises to measure the actual performance of advertising more accurately.

2.3. Potential Impact of Social Media Advertising on Consumer Behavior

2.3.1. *Intention to Buy*

Social media advertising plays a significant role in motivating consumers to purchase. By creating a pleasant shopping experience and providing personalized recommendations, advertising can directly stimulate consumers' interest and desire to purchase. Advertisements on social media platforms often present various aspects of a product or service to potential consumers through compelling pictures, engaging videos or interactive elements.

Personalized recommendation is an important means for social media advertisements to stimulate purchase intention. By analyzing users' historical behaviors, interests and social relationships, the advertising platform can recommend products that better meet users' needs. For example, a user who regularly searches for healthy food may see relevant health food advertisements on social media, thus increasing his interest in purchasing such products.

Social media advertising directly stimulates consumers' interest and desire to purchase by creating pleasant shopping experience and providing personalized recommendations, which provides strong support for enterprises to improve product sales.

Purchase intentions may be influenced by many factors, such as familiarity with online shopping procedures, store reputation or price factors. [20].

Therefore, advertisers can use some methods to improve the brand's reputation, such as good after-sales service. Through the spread of the Internet, good after-sales service can greatly improve the brand's reputation, thus improving consumers' purchase intention. Social media has also created a new shopping experience, and merchants can also improve the shopping experience of users when shopping on the Internet, so as to increase the purchase intention of consumers. For example, merchants can classify and beautify the front pages of store advertisements, making it more intuitive and comfortable for consumers to browse the stores, which also enhances the purchasing experience of consumers.

In addition, the algorithm can also provide great help to improve consumers' purchase intention. The algorithm can select different advertising methods according to the user's browsing history or relevant content. For example, if a user likes sports, the algorithm can help some sports brands allocate their advertisements to the user. This will also increase their willingness to buy.

In short, social media advertising can motivate consumers to buy by creating a pleasant consumer experience or providing personalized advertising. This has provided strong support for the company's sales. The impact of social media advertising is not limited to the product itself, but also involves creating a shopping experience. For example, an advertisement creates a relaxed and pleasant shopping atmosphere through vivid pictures and music, which enables consumers to feel pleasure and satisfaction when browsing commodities, and thus is more willing to convert browsing into actual purchase.

2.3.2. *Brand Awareness*

The influence of social media advertising not only stays in purchase intention, but also extends to consumers' attitude and cognition towards the brand. Through carefully designed advertising content and strong brand story narration, advertising can effectively improve brand awareness and create a positive brand image in consumers' hearts. Consumers have different views on different advertisements, which are influenced by various factors. For example, age, consumer perceptions of brands change with age [12], and their consumerism changes with age.

Advertising on the media platform has strong communication, which can quickly spread brand information and resonate with users. By shaping the brand's social image, advertisers can establish a positive attitude towards the brand and inspire users' trust and goodwill towards the brand.

Advertising affects users' attitudes towards brands by guiding them to form a more accurate and positive perception of the brand. For example, an advertisement that emphasizes the features and advantages of a product may make consumers form a positive perception of the brand, believing that the brand is of unique value.

Research has shown that brand awareness is directly proportional to purchase intention [8], so advertising should be formulated in a way that clearly describes the characteristics of the product and gives consumers a positive and inspiring example. This enables consumers to have a good impression of the brand and thus increase their purchases.

This kind of positive brand recognition not only helps to improve consumers' loyalty to the brand, but also wins more consumers' choices in the fierce market competition. In addition, brands can also create unique brand images in the minds of consumers in some ways. For example, luxury brands such as LV and Chanel are often very expensive. Because of their high prices, they give buyers unique value, such as pride or the ability to demonstrate their unique taste [9]. As a result, unique brand recognition can sometimes bring some additional value.

Through in-depth research on purchase intention, brand attitude and cognition, we can better understand the deep-seated impact mechanism of social media advertising on consumer behavior, and provide effective marketing strategies and brand building for advertisers.

2.4. Slogan

Slogan in social media advertising is the essence of advertising content and a key element to express the brand's core information through short and attractive language. Through the ingenious design of slogan, advertisements can leave a deep and memorable impression in the hearts of users, thus enhancing the brand's popularity [19].

2.4.1. How Slogan Affect Consumers' Behavior

Slogan can help brand strengthen brand image Through carefully selected Slogan, advertising can highlight the brand's uniqueness, core value and personality, thus building a positive brand image in the hearts of users. For example, Nike's "Just Do It" is a successful slogan, which emphasizes the determination and enthusiasm of sports and gives the brand a strong personality [23]. Slogan can also help advertisers improve ad recognition. An attractive and original slogan can make advertisements stand out on the highly competitive social media platform and improve the identification of advertisements. When users see this slogan on social media, they can quickly associate with the brand, thus increasing the exposure and recognition of the brand [22].

In addition, slogan can trigger emotional resonance. By incorporating emotional elements into Slogan, advertisements can trigger emotional resonance of users and make them establish deeper emotional connection with the brand. Emotional slogan can often arouse users' curiosity and empathy, and stimulate positive emotional experience [21].

2.5. Impact Mechanism of Algorithms on Consumers

The advertising platform first collects a large amount of data of users, including but not limited to users' search history, click behavior, purchase records, social media interactions, etc. [14]. These data form a portrait of the user, describing the user's interests, preferences and behavior habits.

The algorithm uses machine learning and data mining technology, and the advertising platform carries out in-depth analysis on the collected user data [15]. The algorithm is used to mine the data and find out the hidden patterns and associations in order to better understand the user's behavior and needs. Based on the results of the data analysis, the advertising platform uses algorithms to separate users into different categories or groups. These categories are usually based on factors such as users' interests, geographical location, age, gender, and their behavior patterns on the platform [16].

The algorithm generates customized advertising content for each user based on user classification and personalized requirements. This may include product recommendations for the user's interests, related merchandise based on their purchase history, or specific advertisements that are recommended based on the user's interactions on social media [13].

In addition, the advertising platform continuously monitors users' behaviors and optimizes personalized recommendations through real-time learning and algorithm adjustment. This can adjust the push content in real time when the user interacts with the advertisement to improve the user's participation and response rate.

2.6. Influencer

With the development of the Internet, various social media applications have emerged, such as TikTok, Facebook, and Instagram, which are viral social media platforms. There is data on TikTok users TikTok is a video-sharing service developed by ByteDance, which has one billion monthly active users, accounting for 20.83% of the global Internet users (about 4.8 billion). TikTok's download volume is also astonishing, reaching over three billion times as of June 2021, making it the most downloaded non-game application in the first half of 2021, with 383 million installations in the period from January to June 2021 [25]. The popularity of social media has also led to the emergence of more and more influencers, who are bloggers who have a large number of fans on social media. Because of the many commercial values of influencers and the popularity of the Internet, more and more companies are looking for influencers to promote their products and help them increase their sales. More and more companies choose to abandon using celebrities to endorse their products and instead choose influencers to promote their products. In research, people

trust, identify, and like influencers more than celebrities. These characteristics adjust the relationship between advertising and endorsers, making advertising more effective, and thereby increasing the purchase intention of potential consumers [24]. The image of the endorser is also a significant factor, which affects and is affected by the fan base and the fit with the product. Although bloggers with many fans are popular, and their opinions can sometimes have positive effects. However, these effects can only be achieved when the product and the endorser's image are matched. In addition, the effects of advertising are also individual differences, such as different levels of perceived credibility and identification [26].

3. Discussion/ Development

3.1. The Substantial Impact of Social Media Advertising on Consumer Decision-Making

Social media advertising has completely different characteristics from traditional advertising, such as the diversity of advertising forms, higher exposure and negligible time and space, etc. Social media advertising has become more popular with advertisers. Advertisers will also use algorithm, slogan and influencer to help them with their marketing. These three marketing methods are the main marketing methods of social media advertising. In the next part, I will focus on the analysis and discussion of these three aspects, and draw conclusions.

3.1.1. Consumer's Purchase Decision Path

Social media advertising changes the traditional purchase decision-making path through personalized recommendation and shopping guidance. The application of the algorithm makes the advertisement more accurately match the needs of users and shortens the decision-making path. Shortening the decision-making path can help advertisers to improve consumers' purchase intention. For example, when a consumer browses a product on social media, the algorithm can immediately push relevant advertisements and directly guide the consumer into the purchase phase, thus reducing the decision-making time and resistance.

However, this fast purchase decision-making path also brings certain risks, which may cause consumers to make decisions without fully understanding the products, thus affecting the satisfaction after purchase. As a result, consumers will receive goods with a high rate of return and poor evaluation of the goods, which will damage the brand image of the enterprise. This has led to discussion and research on whether the simplification of decision-making paths promoted by social media advertisements is beneficial to consumers.

3.1.2. Different Effects of Advertising Forms on Behaviors

Advertising forms have different effects on consumer behavior. Text advertising conveys the core information through concise expression, which is suitable for the scene where users quickly obtain product information. However, its perceptual appeal is relatively weak. In contrast, picture advertisements and video advertisements can arouse the emotional resonance of users through vivid pictures and plots, but may also make the transmission of advertising information appear tedious.

Through in-depth case analysis, it is found that different industries and products are more suitable for different forms of advertising, which involves the design of advertising ideas and the selection of promotion strategies. Therefore, the choice of advertising forms needs to fully consider the product characteristics, the preferences of the target audience and the advertising purpose, in order to better realize the positive impact of advertising on consumer behavior.

3.2. Impact of Potential Factors on Social Media Advertising Effect

Potential factors include factors such as user characteristics and advertising timing, which have a moderating effect on social media advertising.

Social media advertising may also have an impact on consumers due to potential factors, such as timing of advertising and characteristics of users. Considering the timing of advertising, different advertising time has different effects on consumers. For example, advertising on holidays is more effective than advertising on weekdays. For different characteristics of consumers, for example, consumers of different ages have different attitudes towards advertisements, for example, some young people will pay more attention to the originality of advertisements.

3.2.1. Matching of Advertising Content with Target Audience

Personalization of advertising content and interaction with consumers are important factors affecting advertising effectiveness. Social media advertisements change the behavior of users and increase their interest in advertisements by means of algorithm analysis and slogan, and realize personalized customization of advertisement content. This matching makes it easier for advertisements to attract users' interest and improves the click-through rate and interactivity of advertisements.

For example, an advertisement for sports fans may appear when the user browses the content related to fitness, and at the same time, the user can know this advertisement about sports and fitness through its simple and direct slogan. In order to accurately match the target audience and attract them to participate in this advertisement. Social media advertising can not only improve users' participation, but also expand the scope of advertising through interactive ways such as users' praise, comments and sharing.

However, advertising personalization is also facing the controversy of privacy protection and over- customization of information. Some consumers worry that the algorithm may be too aware of their personal preferences, leading to information leakage and abuse. But now more and more social media software regards the right to share private information as the key factor to decide whether the software can be used completely. This makes many users unable to protect their privacy. This also means that social media advertising faces challenges in balancing personalization with privacy protection.

In addition, personalized recommendation of social media has a negative impact on teenagers at the same time, because most teenagers are not mentally mature. Too many personalized advertisements are more likely to make them produce impulsive consumption. At the same time, personalized recommendation sometimes pushes some pornographic and violent content to them. Although some social media software has launched a youth model, such as TikTok, there will still be advertising problems in actual use.

3.2.2. Comparison of Effects of Different Advertising Types

Social media advertisements cover a variety of types, including text advertisements, picture advertisements, video advertisements, etc. Different types of advertisements have their own characteristics in terms of conveying information, arousing resonance and stimulating purchase intention.

Text advertising is suitable for scenes that convey information directly and concisely, such as search results and tweets. However, in contrast, image advertisements and video advertisements can convey more abundant information through the combination of vision and sound, and arouse the emotional resonance of users.

Through case studies, we can gain a deeper understanding of the application effects of different advertising types in different industries and products. For example, fashion brands may be better suited to display the appearance and design of products using graphic advertisements, while electronic products may better display functions and usage scenarios through video advertisements. Therefore, when formulating advertising strategies, factors such as product characteristics, target audiences and communication effects need to be considered comprehensively.

3.3. Regulation of Potential Factors on Social Media Advertising Effect

Potential factors include factors such as user characteristics and advertising timing, which have a moderating effect on social media advertising.

3.3.1. Impact of User Characteristics

Different users have different characteristics and behavior habits, which have different effects on social media advertising. Some users prefer to interact with advertisements and share shopping experiences, while others may pay more attention to the practicality of advertisements and information transmission. This will also have different effects on the advertising and consumers.

Through case analysis, we can explore the influence mechanism of user characteristics on advertising effectiveness. For example, professional users in some specific fields may be more easily attracted by relevant advertisements. For example, in the photography field, photography enthusiasts may pay more attention to the performance parameters of cameras than the originality and design of advertisements, so some professional advertisements will attract them more. Age is also a big characteristic of users. Some middle-aged users pay more attention to the practicality and quality of the advertised goods. They are less likely to be attracted by the originality and entertainment of advertisements, while young users may pay more attention to the originality and entertainment of advertisements. Therefore, it is necessary to adjust the content and form of advertisements according to the characteristics of different user groups in order to better realize the personalization and customization of advertisements. Improve the effectiveness of advertising.

3.3.2. Consideration of Advertising Timing

The timing of advertisement placement will also affect consumers' behavior. For example, advertisements during some holidays or shopping festivals are more likely to attract consumers' attention and are more likely to increase consumers' willingness to purchase. But advertising during some working days may be counterproductive. The timing of advertising should also take into account the target user's behavior trajectory. For example, if the target user is a student, advertisers should advertise on summer and winter holidays to maximize the advertising effect. In addition, if the target user is an office worker, advertisers can choose to advertise on shopping festivals or holidays. At the same time, advertisers can use algorithms to count users' online time slots to

determine the best time slots for advertising. The actual discussion of advertising placement also plays an important role in advertising effectiveness.

3.4. Analysis of Influencers' Role in Shaping Consumer Behavior

3.4.1. *How Does Influencer Affect Consumer Behavior*

Marketing through online celebrity on social media has also become the first choice for many advertisers when marketing through social media. Influencer's influence on social media cannot be ignored. They generally have millions of fans. Therefore, this is also one of the reasons why many advertisers choose online celebrity. The huge fan base can provide high exposure rate for advertisements. At the same time, advertisements sent through online celebrity will have high interactivity. Users can interact with bloggers by way of message or praise, which improves the interest of advertisements and the purchase intention of consumers. Some advertisers will cooperate with online celebrity for a long time, because online celebrity has a special position in the hearts of consumers. Influencer can better help advertisers to better shape the brand's good image and perception in the minds of consumers. To achieve better sales transformation.

3.4.2. *Factors Affecting Consumers' Rational and Irrational Behaviors*

Through the theory of psychology, the response of consumers to the behavior of influencers on the rational level is analyzed. Consumers may be inspired by the influencer's expertise, product awareness and actual experience to make more rational purchase decisions. Rational factors mainly include professional identification, product cognition and comparison, and sharing of practical experience. First, professional identity. Users may have a sense of identity through their professional knowledge in specific professional fields. This can help consumers to increase their confidence in purchasing products. Secondly, the introduction and comparison of different brands of products by influencers can help consumers to understand more comprehensively the products they want to purchase, so as to make more rational purchase behavior. In addition, the influencers are more likely to generate trust and are more willing to purchase through sharing of some actual purchase experience.

However, marketing through the influencer will sometimes lead to consumers' impulsive consumption, i.e., irrational consumption behavior. Behavioral economics can reveal the influence of irrational factors on consumer behavior in social media advertising. Irrational factors may include emotional resonance, social identification and group effect. Causes the consumer to carry on the irrational behavior usually because. First, the emotional resonance between online celebrity and consumers. online celebrity, through the transmission of emotional information, triggers the emotional resonance of consumers and stimulates the desire to buy. Second, social identity. Consumers may purchase because they want to maintain social identity with the influencer, which is not directly related to rational decision-making. In addition, influencers can also bring group effect to guide consumers to make impulse consumption, so that more consumers can participate in a certain good or service.

3.5. Impact of Algorithms on Consumer Behavior

3.5.1. *Effect Analysis of Accurate Advertising Orientation*

The key to accurate positioning is the analysis and interpretation of user data. The algorithm tracks users' behaviors, interests and interactions. Help advertisers to identify potential users accurately and realize effective advertising. For example, the algorithm can understand the user's interests and preferences by analyzing the user's behaviors, such as searching for records, clicking history, etc. In addition, the algorithm can also better identify the target users of advertisements and the users' needs by interpreting the users' social network or real-time interaction to accurately deliver advertisements.

When analyzing the effect of advertisements, we can judge whether the accurate placement of advertisements improves the click rate of advertisements by clicking rate analysis (CTR), which also reflects the interactive probability of advertisements. In addition, we can analyze whether the accurate positioning of the algorithm improves the conversion rate of advertisements by analyzing the conversion rate of advertisements, that is, whether users have completed more conversion behaviors. Such as purchase, registration, etc.

3.5.2. *Analysis on the Path of Promoting Consumer Decision-making by the Algorithm*

The personalized push using the algorithm will also reduce the decision-making path of consumers, because the algorithm will directly push the advertisements of interest to the pages browsed by the users, and the users can complete the purchase only by clicking on them, which greatly shortens the decision-making path of consumers, and consumers do not need to search for the commodities they are interested in and compare with other commodities of the same kind.

However, the fast-decision-making path will also bring some negative effects to users. For example, the fast-decision-making path will encourage consumers to make impulsive consumption, but this will lead to a high return rate. In addition, the advertisements on social media are all the cooperation between advertisers and platforms, so the commodities purchased by consumers may not be the best choice.

3.5.3. Privacy and Data Security

Firstly, the hidden dangers of privacy and data security brought by the algorithm are proposed, and then the measures that can be adopted to improve or solve them are discussed. The algorithm also brings many privacy and security issues. Whether users can share their personal information when registering for many social media has become a hard and fast requirement for whether they can use the full functions of the software. For example, in TikTok, if you do not register, you cannot interact with video bloggers. In addition, users sometimes do not fully understand their use of personal data, and many social media will explain many unrelated contents in their rules of using user information, which makes most consumers unable to clearly understand the privacy of their personal information.

For the solution, the government should explore such issues, propose relevant laws and regulations for the protection of users' privacy, and conduct regular security review. In addition, the platform should give users the right to control their own personal information and the right to choose whether to share private information to protect users' personal rights and interests.

4. Conclusion

First of all, the most important factor affecting consumer behavior is the algorithm, which can use its unique computing tools to analyze the behavior trajectory of each consumer, classify different users, help companies to correctly allocate their advertisements to the most suitable consumers, which helps companies to capture more potential consumers. In terms of Slogan, Slogan is also an important factor in advertising affecting consumer behavior. Slogan can help companies attract consumers and arouse consumers' emotional resonance and purchase desire through concise language. Online celebrity bloggers on social media also play an important role in social media advertising. Influence helps enterprises to shape brand image in consumers' hearts and shorten the decision-making path of consumers, which will lead to irrational behaviors of some consumers. We live in an information age, so more and more different kinds of advertisements will appear on social media. Different advertisements have different effects on consumers. For further research, the psychological aspect is also very important and relevant, because the reasons why influencers and slogans can affect consumers' behavior are all related to consumers' psychological behavior.

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