Exploring the New Trend in the Advertising Industry—Data-Driven Personalized Advertising

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1. INTRODUCTION

In the digital era, with the continuous advancement of technology and the explosive growth of data, data-driven personalized advertising has emerged as a significant new trend in the advertising industry. Personalized advertising goes beyond simply delivering ad content to a broad audience. Instead, it utilizes big data and analytics techniques to provide customized advertising experiences based on each consumer's interests, preferences, and behaviours.

With the continuous evolution of consumer behaviour, traditional advertising models have become increasingly inflexible and inefficient. In addition, consumers have become accustomed to personalized services and customized experiences and expect advertisements to be more relevant to their needs and interests. Data-driven personalized advertising can meet this demand by providing more targeted and personalized ad content, increasing the appeal and effectiveness of advertisements, and improving conversion rates and returns on investment.

To better comprehend data-driven personalized advertising, this paper will comprehensively evaluate this trend using a SWOT analysis, revealing its potential and challenges. Furthermore, through case studies, it will explore the impact of the data-driven personalized advertising trend on the advertising industry and society. Finally, through an in-depth analysis of this emerging trend, we aim better to understand the evolution and innovation within the advertising industry.

2. DATA-DRIVEN PERSONALIZED ADVERTISING

2.1 Origin and Current Status

Data-driven personalized advertising is an advertising strategy based on consumer data and technology, aiming to deliver personalized ad content and experiences to specific audiences, thereby enhancing advertising effectiveness and user engagement (Lee & Cho, 2020). Its origin can be traced back to the emergence of digital media and the internet, along with the rapid development of big data technology (Lee & Cho, 2020).

With the proliferation of digital media and the increasing number of advertising channels, advertisers have realized that more than traditional mass advertising models are needed to meet consumers' growing demands for personalization and diversity. In addition, the accumulation of data and technological advancements have enabled advertisers to collect and analyze vast amounts of consumer data, including individual preferences, behavioural patterns, and purchasing preferences. These data are the foundation for implementing personalized advertising (Li, 2019).

Today, data-driven personalized advertising has emerged as a significant trend and practice in the advertising industry (Lee & Cho, 2020). Advertisers can leverage data analytics tools and algorithms to customize ad content and distribution methods based on consumer characteristics and behavioural patterns (Grigorios et al., 2022). With ongoing technological advancements and evolving consumer demands, data-driven personalized advertising will continue to evolve and innovate, becoming a crucial strategy in future advertising and marketing (Lee & Cho, 2020).

2.2 Main Features

Data-driven personalized advertising is an advertising strategy that leverages consumer data and analytics technology to provide tailored ad experiences based on individual interests, preferences, and behaviours. It encompasses several vital features.

2.2.1 Consumer Targeting and Segmentation

Data-driven personalized advertising enables precise targeting and segmentation by conducting an in-depth analysis of consumer data. As a result, advertisers gain insights into their target audience's characteristics, preferences, and purchasing behaviour, allowing them to deliver ad messages precisely to the interested consumer segments (Segijn & van Ooijen, 2022).

2.2.2 Personalized Content and Creativity

Data-driven personalized advertising emphasizes providing individualized ad content and creativity to each individual. By leveraging user data, advertisers can customize ad messages based on consumer interests and preferences, making them more appealing and relevant (Abdel Monem, 2021).

2.2.3 Real-time and Dynamic Delivery

Data-driven personalized advertising has the capability for real-time and dynamic delivery. By utilizing real-time data and intelligent algorithms, ads can be delivered instantly based on users' real-time behaviour and contextual environment, enhancing the effectiveness and conversion rates of the advertisements (Li, 2019).

2.3 SWOT Analysis

SWOT analysis is a commonly used strategic management tool to evaluate a project's strengths, weaknesses, opportunities, and threats, providing insights for developing practical strategic plans. A SWOT analysis can provide a comprehensive assessment of data-driven personalized advertising, enabling a better understanding of its potential and limitations and guiding effective strategies. The following are the SWOT analysis results conducted for data-driven personalized advertising.

2.3.1 Strengths

Personalized advertising can leverage consumer interests, preferences, and behaviours to achieve precise targeting, thereby enhancing the relevance and effectiveness of advertisements (Abdel Monem, 2021).

Personalized advertising provides customized ad experiences, enhancing user engagement and satisfaction and fostering brand affinity (Segijn & van Ooijen, 2022).

Personalized advertising, based on data analysis, can assist marketers in making informed decisions and optimizing ad placements and resource allocation.

2.3.2 Weaknesses

Personalized advertising involves collecting and processing large amounts of personal data, raising privacy concerns among users and posing ethical and legal issues (Aiolfi et al., 2021).

Implementing data-driven personalized advertising requires advanced technology and significant investments, including data analysis tools, talent development, and technical infrastructure, which may present challenges.

2.3.3 Opportunities

With the increasing consumer demand for personalized experiences, data-driven personalized advertising has significant market potential in meeting consumers' needs for customized ad content and personalized experiences.

Advances in technologies such as artificial intelligence and big data analytics provide further opportunities for data-driven personalized advertising in precise targeting and personalized content generation.

2.3.4 Threats

User fatigue can threaten personalized advertising as users may become overwhelmed by excessive ad content, limiting the reach and effectiveness of personalized ads (Lee et al., 2016).
Evolving regulations, particularly those related to privacy protection, can pose challenges to advertisers' data collection and usage practices (Aiolfi et al., 2021).

Table 1: SWOT Analysis and Data-Driven Personalized Advertising

SWOT	Data-driven personalized advertising
Strengths	-Precise targeting - Enhanced customer experience - Data-driven decision-making
Weaknesses	- Privacy and data security - Requires robust technology and resources
Opportunities	- Growing demand for personalization - Technological advancements provide opportunities
Threats	- Ad fatigue - Legal and regulatory issues

3. PERSONALIZED ADVERTISING IN THE FOOD AND BEVERAGE INDUSTRY: A CASE STUDY OF LUCKIN COFFEE

Luckin Coffee, established in 2017, is a well-known coffee chain brand in China. As a young company, Luckin Coffee has effectively utilized data-driven personalized advertising strategies in its brand development. By profoundly analyzing consumer data, Luckin Coffee gains insights into its target audience's interests, preferences, and purchasing behaviours. As a result, it accurately delivers advertising messages to the interested consumer segments, attracting many young and urban consumers and successfully driving its brand growth, quickly emerging in the Chinese market.

Furthermore, Luckin Coffee meets modern consumers' demands for convenience and speed by providing convenient ordering and delivery services through its mobile application. Additionally, Luckin Coffee has established physical stores in major cities, offering consumers a comfortable and social coffee experience venue. In conclusion, Luckin Coffee has successfully fostered its brand development and gained the love of a large consumer base through its data-driven personalized advertising strategy and multi-channel sales approach. As a young and vibrant coffee chain brand, Luckin Coffee continuously performs remarkably in the Chinese market through its innovative marketing tactics and unique consumer experience.

This paper will explore how Luckin Coffee has achieved outstanding results by implementing data-driven personalized advertising strategies.

3.1 Implementation of Luckin Coffee's Personalized Advertising Strategy

Luckin Coffee has consistently adhered to the "digital marketing" principle and has built a Smart Platform. In the online realm, Luckin Coffee employs "digital technology, understanding user needs, creating popular products, and combining with coupon subsidies" to rapidly increase sales volume.

Firstly, Luckin Coffee utilizes the ordering system through the WeChat mini-program, which has accumulated many user preferences, purchase history, and behavioural data, providing data support for marketing. When consumers are near a Luckin Coffee store, based on the WeChat mini-program ordering system, Luckin Coffee can quickly provide them with more specific personalized experiences. For example, when users enter a Luckin Coffee store, they may receive a push notification reminding them of a free coffee or a discount offer. Such personalized promotional messages can stimulate consumers' interest and purchasing desire while increasing their motivation to visit the store. This precise targeting and personalized push can attract and retain consumers (Abdel Monem, 2021).

Additionally, Luckin Coffee leverages personalized content and creativity to attract consumers. They recommend relevant products and promotional activities based on consumer preferences and purchase history. For example, for consumers who prefer low-calorie beverages, Luckin Coffee would recommend low-sugar or sugar-free

options within the WeChat mini-program, accompanied by special offers. Using personalized content and creativity, Luckin Coffee achieves customized coffee experiences, enhances consumer satisfaction, and drives sales growth. Furthermore, this data-driven personalized advertising establishes an appealing brand image for Luckin Coffee and establishes a closer connection with consumers.

Moreover, Luckin Coffee engages with consumers through real-time and dynamic ad placements, providing personalized advertising experiences. They utilize mobile applications and social media platforms to display relevant ad content at specific times and contexts. For instance, during hot summer weather, when a consumer opens the Luckin Coffee mobile app, they might receive a message saying, "Beat the summer heat with a refreshing iced coffee! Special offer today. Click to order now and enjoy a discounted price!" These ads capture consumers' attention and stimulate them to visit Luckin Coffee stores to purchase iced coffee.

3.2 The Impact of Luckin Coffee's Implementation of Personalized Advertising Strategy

Luckin Coffee has achieved significant success by implementing its personalized advertising strategy. By utilizing the ordering method of the WeChat Mini Program, they have successfully accumulated a large amount of user data, providing a solid foundation of data support for their marketing activities. Furthermore, through personalized content and creativity, Luckin Coffee can accurately recommend relevant products and promotional activities to consumers, catering to their individual needs and increasing their willingness to make purchases and overall satisfaction. According to Luckin Coffee's data released in the fourth quarter of 2022, the implementation of personalized recommendations and creative content has resulted in a 20% increase in conversion rates and a 15% increase in customer satisfaction (Source: Cailian Press).

In addition, through real-time and dynamic ad placements, Luckin Coffee has engaged with consumers, providing them with personalized advertising experiences. As a result, consumers feel the brand's attention and understanding towards them, strengthening their emotional connection with Luckin Coffee and encouraging them to visit Luckin Coffee stores, thereby increasing sales. On May 1, Luckin Coffee (OTC: LKNCY) announced its financial results for the first quarter 2023. The report revealed that for the quarter ending on March 31, 2023, Luckin Coffee achieved a total net revenue of 4.4367 billion Chinese Yuan, representing a year-over-year growth of 84.5% (source: based on Luckin Coffee's financial report).

Lastly, Luckin Coffee's digital marketing strategy has enabled it to understand user needs better, create popular products, and combine them with coupon subsidies, resulting in rapid growth in sales. This data-driven personalized advertising establishes Luckin Coffee's attractive brand image and strengthens its connection with consumers. In addition, through personalized push notifications and customized coffee experiences, Luckin Coffee has increased consumer satisfaction and enhanced brand loyalty. The implementation of this series of marketing strategies has brought widespread recognition and sustained business growth for Luckin Coffee.

4. THE IMPACT OF DATA-DRIVEN PERSONALIZED ADVERTISING ON THE ADVERTISING INDUSTRY

4.1 Reshaping Advertising Strategies

Data-driven personalized advertising has had a broad and profound impact on the advertising industry, transforming how advertising strategies are developed and implemented (Segijn, 2019). As a result, data-driven personalized advertising has become an essential and integral part of the advertising industry, providing advertisers with more competitive and effective marketing strategies (Segijn, 2019).

4.1.1 More Precise and Targeted Advertising Strategies

Implementing personalized advertising enables more precise and targeted advertising strategies. By leveraging big data and analytics tools, advertisers can gain deep insights into the needs, preferences, and purchasing behaviour of their target consumers, allowing them to accurately target and attract their intended audience, thereby improving advertising effectiveness and conversion rates and bringing substantial business growth and competitive advantage to the enterprise (Abdel Monem, 2021). According to publicly available data from Luckin Coffee (2018), they successfully attracted many new customers and improved customer retention through personalized advertising strategies. The report states that Luckin Coffee achieved up to 90% precision marketing coverage through the analysis of user data. They could accurately understand users' taste preferences, consumption habits, and order

frequency and recommend relevant coffee products and promotional activities through personalized advertising. This personalized ad targeting not only increases user purchase conversion rates but also enhances user loyalty to the brand. This indicates that personalized advertising can help companies better understand their target consumers and improve advertising effectiveness and conversion rates through precise targeting and personalized messaging.

4.1.2 Diversification and Integration of Advertising Channels

Personalized advertising has driven channel diversification and integration. With consumers' multi-channel behaviour, advertisers must implement personalized advertising across different platforms and media. This requires the advertising industry to integrate various channels, including social media, mobile applications, television, and outdoor advertising, to deliver personalized ad messages (Nowak & Phelps, 1994). By showcasing personalized ads on multiple channels, advertisers can reach a wider audience and increase the exposure and reach of their advertisements (Huang et al., 2016). Consumer interactions across different platforms and media provide rich data and insights, which advertisers can integrate through cross-channel delivery and integration to develop more comprehensive and accurate consumer profiles, enabling more precise ad targeting and personalized messaging (Huang et al., 2016). For example, Netflix, a globally renowned online streaming platform, leverages user data on movies and TV shows watched on the platform to understand users' preferences and interests. Through personalized ad delivery across multiple channels, Netflix recommends content that users may be interested in. For example, when users browse social media, they may come across personalized ads from Netflix, showcasing recommendations related to the movies or TV shows they have recently watched or similar content. This cross-channel personalized ad delivery helps increase user awareness of Netflix's content and encourages users to continue watching related content on the platform. By implementing personalized cross-channel advertising, Netflix can better interact with users, enhance user engagement and loyalty, and drive its business growth.

4.1.3 More Personalized and Unique Advertising Creativity

Implementing personalized advertising has placed new demands on advertising creativity. Advertising creative content needs to be closely related to the target audience, and advertisers need to consider how to establish emotional resonance and connection with the target audience through unique creative ideas and storytelling to evoke their emotions and leave a lasting impression. The innovation and creativity of the creative content have become essential elements in personalized advertising, allowing advertisers to stand out in the fierce competition (Kim & Han, 2014). For example, Nike is known for its personalized advertising, and their "Just Do It" campaign establishes emotional resonance with the target audience by inspiring and motivating individuals to achieve their goals and dreams. These ads creatively showcase different individuals' personal stories and achievements to inspire consumers to pursue their passions and objectives. This personalized advertising creativity helps Nike stand out in a highly competitive market, establish a unique brand image, and create a deep emotional connection with the target audience.

4.2 Changes in Targeting and Marketing Methods

Data-driven personalized advertising has led to more precise and personalized targeting and marketing methods. Firstly, personalized advertising allows for finer segmentation and individualization of target audiences (Kotler, 2018). Through data analysis and consumer insights, advertisers can further segment the target market into smaller groups to cater to their unique needs and preferences. This finer segmentation and individualized targeting help improve the relevance and acceptance of advertisements (Nasir et al., 2021). By delivering customized advertising messages to specific consumer segments, advertisers can better meet consumers' needs and interests, establish stronger emotional connections, and increase consumer engagement and loyalty.

Secondly, personalized advertising has driven refined marketing methods. Advertisers can customize personalized marketing strategies and recommendations based on consumers' preferences and purchase histories to enhance interaction and communication with consumers. For example, advertisers can provide content relevant to consumers' personalized needs based on their interests and preferences to capture their attention and establish stronger emotional connections. Furthermore, by collecting and analyzing consumer behavioural data and preference information, advertisers can target specific audience segments with their advertisements, achieving more precise marketing through targeted placements (Huang & Rust, 2021). For instance, when a consumer searches for travel information on social media, they may see advertisements related to relevant travel destinations on their page.

4.3 Opportunities and Challenges

Data-driven personalized advertising has brought new opportunities to the advertising industry but also comes with challenges. In terms of opportunities, personalized advertising can better meet consumer needs, enhance advertising effectiveness, and improve sales conversion rates. Advertisers can build stronger brand relationships with consumers, increasing loyalty and word-of-mouth impact. Additionally, personalized advertising has introduced innovative business models and new sources of revenue to the advertising industry. For instance, the development of personalized advertising provides advertisers with more precise data insights and advertising delivery channels, further enhancing the effectiveness and benefits of advertisements.

However, personalized advertising also faces several challenges. For example, privacy and data security are significant concerns that must be balanced with protecting consumer privacy rights in personalized advertising (Saura et al., 2021). Additionally, implementing personalized advertising requires additional technological and human resources, including data analysts, artificial intelligence algorithms, and customized advertising platforms (Yim et al., 2019).

In summary, data-driven personalized advertising has profoundly impacted the advertising industry. It has reshaped advertising strategies and targeting methods, providing more precise and targeted advertising communication. As a result, it has brought new opportunities for advertisers and marketers. However, it also poses challenges such as privacy protection and the need for technological support (Segijn et al., 2021). In the future, with further technological advancements and evolving consumer demands, data-driven personalized advertising will continue to play a crucial role in the advertising industry.

5. THE IMPACT OF DATA-DRIVEN PERSONALIZED ADVERTISING ON SOCIETY

5.1 Influence on Consumer Behavior

In today's digital era, data-driven personalized advertising significantly impacts consumer behaviour. By leveraging big data and advanced analytics techniques, personalized advertising can better understand consumer needs, preferences, and behavioural patterns, enabling more precise ad targeting (Aiolfi et al., 2021). This personalized targeting and customized ad messaging capture consumers' interest and directly influence and guide their purchasing decisions (Aiolfi et al., 2021).

Firstly, data-driven personalized advertising can have a positive impact on consumer behaviour. By precise target segmentation and personalized ad content, advertisers can provide highly relevant information to consumers' needs and interests. Research has shown that personalized advertising increases consumers' attention and acceptance of ads and enhances their memory and cognitive processing of ad information (Lina & Ahluwalia, 2021). When consumers perceive a fit between the ad and their needs, they are more likely to respond positively by clicking on the ad links, making purchases, or engaging with the brand (Lina & Ahluwalia, 2021). This positive consumer behaviour can enhance the effectiveness of ads and increase sales conversion rates.

Secondly, personalized advertising also brings about changes and influences consumer behaviour. Through the delivery and push of personalized ads, advertisers can guide and influence consumers' purchase decisions and behaviour choices (Zhao et al., 2022). For example, when consumers browse a product on an e-commerce website, a personalized ad system can recommend related products or provide customized discounts based on consumers' purchase history and preferences. This personalized guidance can stimulate consumers' purchase desires and decisions. Additionally, personalized advertising can influence consumers' brand preferences and loyalty through social identification and fulfilling individualized needs (Tran et al., 2020). During the acceptance of personalized ads, consumers resonate with the brand image and values conveyed in the ads, thereby strengthening their identification and loyalty towards the brand, making them loyal consumers of the brand (Tran et al., 2020).

However, personalized advertising also presents potential issues regarding its impact on consumer behaviour. Firstly, excessive advertisements' personalization may threaten consumer privacy and data security. Personalized advertising requires collecting and analyzing vast consumer data, including personal information and browsing records. If these data are misused, it can lead to privacy breaches and infringements on individual rights. Secondly, the excessive push of personalized advertising may provoke consumer aversion and resistance. When consumers feel overwhelmed by the intrusive nature of advertisements, they may develop negative emotions towards the ads

and even take measures to block them, thereby diminishing the effectiveness and influence of the advertisements (Xu et al., 2011).

5.2 Impact on Information Transmission Efficiency

Information transmission efficiency is a crucial aspect of the societal impact of data-driven personalized advertising. By utilizing big data and analytics, personalized advertising can provide consumers with more precise and personalized ad information, thus enhancing the efficiency of information transmission.

Firstly, personalized advertising enables customized and targeted delivery of ad content, ensuring a high level of alignment between the ad and the interests and needs of the audience. A common issue with traditional advertising is the wide dissemination of ads to an audience with limited interest, resulting in poor information transmission effectiveness (Pavlou & Stewart, 2000). Personalized advertising, on the other hand, leverages in-depth knowledge of consumer interests, purchasing behaviour, and preferences to deliver tailored ad information to audiences with relevant interests, thereby increasing the relevance and attractiveness of the ads (Abdel Monem, 2021). This precise targeting minimizes ad waste by directing ad resources towards audiences genuinely interested in the content, thus enhancing information transmission efficiency.

Secondly, personalized advertising facilitates the rapid and accurate transmission of ad information to the target audience through multi-channel coverage and personalized dissemination methods. Technological advancements have made the diversification and integration of advertising channels more accessible. Personalized advertising platforms and intelligent algorithms can leverage various channels, such as social media, mobile applications, and online ad networks, to deliver ad information to the target audience (Nowak & Phelps, 2018). This multi-channel coverage not only expands the reach of advertising but also enables the selection of the most suitable communication channels based on audience usage habits and behavioural characteristics, thereby improving the accuracy and timeliness of information transmission (Nowak & Phelps, 2018). Through precise targeting and personalized dissemination methods, personalized advertising can better capture the target audience's attention, encourage interaction with the ads, and further propagate the ad information.

However, data-driven personalized advertising can also negatively impact information transmission efficiency. While pursuing precision, personalized advertising may lead users into information filtering and filter bubbles (Wottrich et al., 2017). Due to the algorithms of personalized advertising favouring the delivery of similar ad content based on user's interests and behaviours, users may be confined within limited information, missing out on diverse ad content that may be relevant but different from their preferences (Wottrich et al., 2017). This filtering effect can restrict the scope of information transmission and limit users' exposure to diverse perspectives and products. Therefore, striking a balance between personalization and diversity is crucial.

5.3 Impact on Economic Benefits

Data-driven personalized advertising has the potential to enhance advertising effectiveness and sales conversion rates, generating more significant economic benefits for businesses and society. Through precise target segmentation and personalized delivery, advertisers can increase click-through rates, conversion rates, and return on investment, resulting in improved business outcomes (Murillo-Zegarra et al., 2020).

Firstly, personalized advertising provides consumers with more attractive and relevant information by accurately capturing their needs and preferences during the advertising process (Murillo-Zegarra et al., 2020). This personalized targeting and delivery make it easier for consumers to resonate with the advertisements, increasing their attention and the likelihood of positive responses (Murillo-Zegarra et al., 2020). As a result, personalized advertising can significantly enhance click-through rates and interactions and subsequently attract more potential customers and business sales opportunities.

Secondly, personalized advertising offers long-term economic benefits. Through personalized advertising, advertisers can build stronger brand relationships with consumers, enhancing customer loyalty and word-of-mouth effects. When consumers identify and trust a particular brand, they are more likely to choose its products or services and recommend them to others (Zhai et al., 2022). This personalized experience and brand relationship establishment form a positive user reputation and brand image, leading to sustained competitive advantages and economic returns for businesses (Zhai et al., 2022).

It is important to note that while personalized advertising can enhance advertising effectiveness and sales conversion rates, it does not guarantee positive economic benefits in all cases. Implementing personalized advertising requires additional resources and technological support, including data analysts, personalized advertising platforms, and artificial intelligence algorithms. These additional costs may increase the marketing budget for advertisers and impose economic pressure on businesses. Although personalized advertising can improve click-through and purchase conversion rates, advertisers cannot guarantee that every personalized advertisement will achieve the desired economic returns. Changes in consumer behaviour and market conditions can lead to dangerous effects of personalized advertising, making it challenging for businesses to predict the return on advertising investment accurately. Therefore, while personalized advertising can bring economic benefits to businesses in certain situations, it has potential limitations and risks.

5.4 Impact on Social Norms

Data-driven personalized advertising has emerged as a new trend in the advertising industry, extensively affecting social norms. The advent of personalized advertising has sparked discussions on privacy rights, ethical concerns, and consumer behaviour.

Firstly, the impact of personalized advertising on social norms is evident in the context of privacy rights. Implementing data-driven personalized advertising relies on collecting and analyzing consumers' personal information. While personalized advertising can offer more precise and personalized advertising experiences, it has also raised concerns about consumer privacy. Research indicates that consumers have certain reservations and concerns about collecting and using their data, fearing potential misuse or breaches. This concern poses a significant challenge for advertisers and digital marketers, who must balance the relationship between personalized advertising and consumer privacy rights through transparency and data security measures (Kim & Huh, 2017).

Secondly, the impact of personalized advertising on social norms also involves the ethicality of advertising content. With the advancement of personalized advertising, advertisers can deliver information more accurately to their target audience. However, this has also raised ethical concerns. According to Turow et al. (2015), some personalized advertisements may exploit consumers' vulnerabilities and preferences, manipulating their behaviour. This has prompted discussions on ethical guidelines and standards in the advertising industry, urging advertisers and practitioners to pay greater attention to the ethicality and acceptability of advertising content.

Furthermore, personalized advertising also influences consumer behaviour, thereby affecting social norms. Through data analysis and personalized targeting, personalized advertising can precisely meet consumers' needs and preferences, stimulating their desire to purchase. This may lead to issues of excessive consumerism, subsequently negatively impacting personal finances and social sustainability (Liapis et al., 2018). According to the research by Kumar and Bezawada (2016), the precision and allure of personalized advertising may make consumers more susceptible to the inducement of consumer desires, resulting in excessive and impulsive purchase decisions. This raises considerations regarding ethical consumer behaviour and social norms, prompting advertisers and practitioners to emphasize consumer well-being and sustainable consumption in implementing personalized advertising.

In conclusion, data-driven personalized advertising significantly affects social norms, encompassing positive aspects and cultural and ethical challenges. To ensure that the impact of personalized advertising on society manifests in positive ways, the advertising industry needs to take proactive measures to strengthen self-regulation and oversight, ensuring the development of personalized advertising aligns with the long-term interests of society (Breidbach & Maglio, 2020).

6. CONCLUSION

This paper has delved into a comprehensive exploration and analysis of data-driven personalized advertising, understanding its origins and current state and providing a comprehensive summary of its key features. The strengths, weaknesses, opportunities, and threats of data-driven personalized advertising have been thoroughly evaluated using the SWOT analysis method. Furthermore, an extensive analysis of the impact of data-driven personalized advertising on the advertising industry and society has been conducted. Several significant conclusions have been drawn throughout this process, which hold vital significance for a profound understanding of the development trends and potential implications of data-driven personalized advertising.

Firstly, data-driven personalized advertising holds significant advantages in the advertising industry. Using data analysis and personalized targeting, advertisers can precisely identify their target audience and deliver more appealing and relevant ad content. This personalized targeting and delivery make it easier for consumers to resonate with the advertisements, increasing their attention and the likelihood of positive responses. Consumers perceive the ads as tailored to their needs rather than generic mass promotions, which helps differentiate brands and capture consumer attention in a highly competitive advertising market. Moreover, personalized advertising can improve ad click-through rates, conversion rates, and return on investment, leading to better business outcomes. By analyzing user behaviour and preference data, advertisers gain precise insights into consumer needs and purchase intentions, enabling them to deliver targeted advertisements. As a result, consumers are more likely to encounter relevant and valuable ad information while browsing websites or using mobile applications, increasing the possibility of engagement with the ads. Therefore, personalized advertising contributes to higher ad click-through rates and brings businesses more potential customers and sales opportunities. In addition to commercial benefits, personalized advertising also positively affects brand building and customer relationships. Through personalized advertising, advertisers can establish stronger brand connections with consumers. By understanding consumers' interests, preferences, and purchasing behaviours, advertisers can provide more targeted product recommendations and suggestions, enhancing consumer trust and loyalty towards the brand. Consumers feel the brand cares about their needs and are more inclined to choose its products or services. Furthermore, personalized advertising can facilitate word-of-mouth marketing. When consumers perceive the attention and care provided by personalized advertising, they are more likely to share their purchase experiences and recommend the brand to their friends and family. Such word-of-mouth promotion is significant in shaping the brand image and market expansion.

However, it is also essential to recognize the drawbacks and threats of data-driven personalized advertising. Firstly, implementing personalized advertising requires additional resources and technical support, including data analysts, personalized advertising platforms, and artificial intelligence algorithms. These extra costs may increase the marketing budget for advertisers and pressure businesses' financial performance. In particular, small and medium-sized enterprises may need more funds and technological capabilities to engage in personalized advertising, limiting their ability to participate and benefit from this trend. Additionally, the effectiveness of personalized advertising is influenced by changes in consumer behaviour and market dynamics, making it challenging for businesses to predict the return on advertising investment accurately. Consumer needs and preferences are dynamic, and over time, they may experience ad fatigue with specific ad formats, leading to decreased attention and appeal. Furthermore, market competition can impact the effectiveness of personalized advertising. When multiple competitors adopt personalized advertising strategies, the uniqueness and innovativeness of ads may be challenged, thereby affecting their effectiveness and returns. At the same time, implementing personalized advertising has raised ethical and privacy concerns. Consumers have concerns about collecting and using their data, demanding higher standards for protecting their privacy rights. This poses a significant challenge for advertisers and digital marketers. Advertisers must ensure the legal, transparent, and secure handling and storage of user data and comply with relevant privacy regulations. The misuse and leakage of personal data can negatively impact consumer trust, thereby affecting the feasibility and acceptability of personalized advertising.

In conclusion, data-driven personalized advertising is a new trend in the advertising industry, with wide-ranging implications for the industry and societal norms. Data-driven personalized advertising has significant advantages in the advertising industry, including precise targeting, compelling ad content, and enhancing brand relationships. However, it also faces disadvantages and threats, such as cost investments, challenges in predicting effectiveness, and ethical and privacy concerns. These challenges can be overcome by strengthening data security and privacy protection, improving personalized advertising strategies, and engaging effectively with consumers. With the advancement of technology and societal changes, data-driven personalized advertising will continue to play a crucial role in the advertising industry, providing businesses with more opportunities and success.

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