



Commercial Advertising Algorithms and guiding Algerian consumer behavior through Social Media -Study on a sample of TikTok users in Algeria-

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Abstract:

This study aims to learn about the role played by commercial advertising algorithms, which are one of the main means used by companies to communicate with potential customers in guiding Algerian consumer behavior by repeatedly highlighting some information and marginalizing others, which in turn hampers the consumer's media know-how process and directs its consumer behavior towards a particular angle, In this study, we relied on the sample-style survey curriculum in an attempt to describe and analyze the phenomenon by distributing a questionnaire to more than 200 TikTok users.

We have reached a series of findings, the most important of which is that algorithms play a significant role in influencing the consumer decision of the studied sample, The results also confirmed that algorithms unfairly guide consumers' electronic commercials and thus control bias in the spread of such advertisements And algorithms depend on

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some of the principles of mental effectiveness and to satisfy the desires of consumers, making it easier for them to interact and be influenced by these ads spread in TikTok.

Keywords: algorithms; commercial advertising; consumer behavior ; Algerian consumer ; TikTok

1. INTRODUCTION :

Advertising practices have undergone significant transformations with the advancement of technology throughout history. Technological advancements have led to the redefinition of advertising concepts and the adaptation of their implementation methods, thereby expanding the boundaries of the conceptual field and giving rise to new subfields.

With the integration of the Internet into our daily lives, advertising practices have experienced profound changes. The emergence of online advertising has introduced novel challenges and opportunities, leading to the establishment of a distinct domain known as digital advertising. Consequently, advertisements have evolved into interactive forms, allowing users to engage directly with the content.

Presently, the landscape of digital advertising is witnessing a revolutionary shift, with a notable emphasis on leveraging modern technologies such as artificial intelligence and big data analysis. The advent of technological revolutions like "Web n.0," encompassing developments like Web 2.0 and Web 3.0, has facilitated the accumulation of vast amounts of data and provided sophisticated analytical tools for precise targeting and optimization of advertisements.

Artificial intelligence and big data analysis have enhanced the efficacy and precision of advertising algorithms, enabling the analysis of extensive consumer behavior data. This includes interactions with previous advertisements, browsing history, past purchases, social media engagements, and other relevant consumer data. By identifying patterns and trends in consumer behavior, advertisers can tailor targeted advertisements to align with consumers' interests and preferences effectively.

Through targeted advertising, advertisers can strategically position their products or services to resonate with consumers' preferences, ultimately enhancing engagement and conversion rates.

The rapid advancements in technology and the increasing focus on big data present novel opportunities within the realm of advertising. This emerging phenomenon represents a significant paradigm shift, signifying more than just the adoption of a new technology or tool-it denotes a fundamental change in our understanding and application of advertising. This transformative form of advertising is commonly called

computational advertising (CA), characterized by its reliance on extensive data analysis and utilization, facilitated by enhanced computational capabilities, mathematical models, and algorithms. (Huh & Malthouse, 2020)

While algorithms have undoubtedly revolutionized advertising, they have also played a role in indirectly and subconsciously influencing consumer behavior. However, this form of implicit guidance may raise concerns regarding privacy protection and its potential impact on consumer autonomy. Consumers may express apprehension about the use of their data without their explicit consent and how targeted advertising could sway their decisions without their awareness. There may also be fears surrounding manipulating consumer behavior to promote products or behaviors that individuals may not necessarily endorse.

Despite these concerns, it's essential to recognize that the Algerian consumer is not exempt from the influence of commercial advertising algorithms. In today's interconnected world, characterized by advanced technology, social media platforms, and the ubiquitous presence of the internet, individuals in Algeria, like their counterparts worldwide, are exposed to similar information, content, and products. This underscores the notion that the world has effectively become a "global village," where technology serves as a conduit for connecting individuals and facilitating the exchange of information, culture, and goods across geographical boundaries. Consequently, Algerian consumers can be subject to similar influences from commercial advertising algorithms as consumers elsewhere.

Building upon the aforementioned context, this study delved into comprehending the influence of commercial advertising algorithms on Algerian consumer behavior by examining a subset of users from Algeria's TikTok application. The primary objective of the study is to gain insights into how advertising algorithms shape consumer preferences and decisions within the Algiers market.

The selection of the TikTok app as the focal point of the study is deliberate and strategic. Its burgeoning popularity and extensive reach among young people and users in Algeria make it an ideal platform for investigating the impact of advertising algorithms on consumer behavior. TikTok serves as a compelling case study to unravel the dynamics of how advertising algorithms operate and influence consumer actions within the Algerian market context.

Through an in-depth analysis of user interactions, content consumption patterns, and engagement with advertisements on the TikTok platform, this study seeks to uncover the nuanced ways in which advertising algorithms mold consumer perceptions, preferences, and choices. By focusing on TikTok, the research aims to provide valuable insights into the mechanisms through which advertising algorithms operate and their implications for consumer behavior in Algeria's evolving market landscape.

2. Commercial Advertising Algorithms and Social Media Platforms: An Integrated Model for Guiding Consumer Behavior"

Customization stands as a fundamental element within modern algorithmic frameworks. Numerous facets of our day-to-day existence, including our shopping habits, the articles we consume, and the music we engage with, are progressively shaped by algorithmic recommendations tailored to align with our interests. This tailored approach empowers algorithms to categorize and interact with individuals based on the digital manifestation of their preferences, intricately intertwining our affinities with those of others. Present discussions center around topics such as big data utilization, privacy concerns, as well as commercial and political targeting strategies. (Kotras, 2020)

This functionality serves as the foundation for the operation of social media platforms, categorized as "virtual hosting providers." These platforms not only store user-provided information but also share it with the public upon user request. They encompass digital platforms such as Google, Facebook, X, Instagram, YouTube, LinkedIn, Snapchat, Tinder, and TikTok. According to the OECD, these platforms leverage information and communication technologies (ICT) to facilitate user interactions, gather and utilize data from these interactions, and contribute to network effects. They play a pivotal role in fostering innovation and shaping digital economies and societies. Therefore, "digital platforms are digital services that enable interactions among two or more distinct and autonomous groups of users, whether businesses or individuals, through online services." (OECD, 2019)

While various entities capitalize on user data, digital platforms possess unparalleled access to a vast amount of information. This data can be leveraged in diverse ways, including the customization of products and services, particularly through advertising. Within the realm of digital platforms, subcategories such as social media platforms exist. The European Commission's investigation into social media marketing practices indicates that online social media providers meet specific criteria. These criteria include the ability to access, disseminate, and share information, playing a crucial role in the "social" aspect of platform operation and functioning, as well as identifiable business practices. This classification encompasses social media platforms, media networks, and content-sharing websites. Therefore, online social platforms are defined as platforms that facilitate and promote the exchange of user-generated content and various types of content among individuals through social interaction. (Quinelato, 2024)

Social media users play dual roles as both content creators and content consumers. While targeted campaigns aim at these users, online browsing and activities enable the collection and processing of personal data, facilitating personalization through algorithms. This technology has undergone significant enhancements to reach a broader

audience and optimize advertising campaign costs, while also increasing click-through rates to achieve a return on investment (ROI). The utilization of user-collected data has transformed advertising from mass-oriented tools to personalized ones. (Quinelato, 2024)

The evolution and modernization of advertising, facilitated by Commercial Algorithms (CA), have been driven by several key characteristics and features. CA aims to enhance the efficiency and effectiveness of advertising resources through the utilization of data-driven approaches and advanced analytics. This entails targeting the appropriate audience with precision, timing, and placement, thereby maximizing the response to advertising efforts.

At its core, CA relies on the analysis of consumer data to identify target audiences based on their expected economic value, such as their likelihood to click on ads or complete purchases. This data-driven approach allows for personalized advertising content tailored to individual preferences, thereby increasing engagement and relevance.

The development of CA lies at the intersection of three primary domains: advertising, marketing, and computer science/information technology/management information systems. This convergence has spurred collaboration among scientists and professionals in fields such as computer science, machine learning/artificial intelligence, optimization, and marketing/management science. Their collective efforts have led to the emergence of new methodologies and technologies that have revolutionized advertising practices. (Huh & Malthouse, 2020)

In summary, the integration of data-driven strategies, advanced analytics, and interdisciplinary collaboration has transformed the landscape of advertising, enabling advertisers to target audiences more effectively and achieve greater success in their marketing campaigns

For instance, the adoption of second-price auctions, where the highest bidder pays the price of the second-highest bid, has brought about significant changes in the way advertising inventory is traded within media platforms. Moreover, recommendation systems have evolved to incorporate advanced technology and algorithms, aiding customers in discovering relevant content by matching their preferences with those of other users. These recommendation systems have become integral to social media platforms, facilitating the recommendation of ad-supported content to users. (Huh & Malthouse, 2020)

As we look to the future, further advancements in advertising solutions are anticipated to address emerging challenges. Machine learning and predictive analytics play a crucial role in forecasting customers' future behaviors, enabling advertisers to identify and deploy more effective advertising strategies. Additionally, computer-

brokered environments emphasize the importance of randomized controlled testing to assess the impact of advertising and make necessary adjustments to advertising campaigns. While these applications have been steadily growing since the 1990s, the increasing influence of artificial intelligence is now becoming more pronounced in the advertising domain. (Li, 2019)

Using AI-enabled tools, marketers can analyze extensive datasets of customer information to extract valuable insights and develop targeted advertising strategies. AI technology can discern patterns and trends in consumer behavior, empowering marketers to craft tailored messages and deliver personalized experiences to their target demographic. For instance, Netflix harnesses AI algorithms to suggest customized content based on individual user preferences and viewing habits. By harnessing AI for targeted advertising campaigns, marketers can substantially enhance campaign effectiveness and boost engagement and conversion rates. (Capital, 2024)

AI is used to study the psychology of advertisement in several ways. One of the most critical ways AI is used is to analyze large amounts of data to identify patterns and insights into consumer behavior. AI-powered tools like AdCreative.ai can use machine learning algorithms to analyze consumer behavior, preferences, and demographic data to identify which psychological tactics are most effective in advertising.

For example, AdCreative.ai can analyze successful ads and identify commonalities in how they're structured, the words they use, the images they feature, and the emotions they evoke. By understanding these patterns, AdCreative.ai can generate new ad variations that are more likely to be effective and help advertisers optimize their ad campaigns for maximum impact.

AI can also be used to study the psychology of advertising by analyzing social media data. Social media platforms provide a wealth of data on consumer behavior and preferences, including which ads people interact with, which products they purchase, and which influencers they follow. AI-powered tools like AdCreative.ai can analyze this data to provide advertisers with insights into creating more effective ads that resonate with their target audience. (Gok, 2023)

AI is transforming the field of advertising in several ways. Here are some examples of how AI is impacting the psychology of advertising:

1. Personalization - With the help of AI, advertisers can create personalized ads that cater to individual preferences and needs. AdCreative.ai can analyze data on a customer's browsing history, location, and social media activity to create personalized ads that are more likely to resonate with them.

2. Predictive Analytics - AI can help advertisers predict consumer behavior based on historical data and trends. AdCreative.ai can analyze data on consumer behavior to help advertisers understand which psychological tactics are most likely to be effective in their ads.

3. Optimization - AI can help advertisers optimize their ads for maximum impact. AdCreative.ai can generate new ad variations based on the data it collects and provide advertisers with insights into the most effective ads.

4. Speed - AI-powered tools like AdCreative.ai can generate ad variations in a matter of minutes, compared to the days or weeks it would take a human team. This speed can help advertisers respond to changes in consumer behavior more quickly. (Gok, 2023)

In a study conducted by **Shujuan Guo and Rongbing Zhai**, it was determined that implementing an enhanced marketing strategy utilizing algorithms and targeted advertising significantly contributed to a notable increase in the company's sales during June, July, and August. Specifically, the sample data from their research indicated a growth of over 9.8% in sales during these months, while the overall original sales witnessed a substantial surge of 18.6%. This underscores the pivotal role of employing precise marketing strategies grounded in aggregation algorithms, which facilitated the company's expanded reach and business development.

Drawing from the comprehensive analysis conducted by esteemed researchers and specialists, the study underscores the critical significance of meticulous marketing strategies anchored in aggregation algorithms. By scrutinizing the operational landscape of the e-commerce entity and scrutinizing and refining its successful precision marketing approach, the research elucidates the tangible impact of such strategies on the company's product sales. For instance, the analysis reveals that the initial sales figures for the company's products during the specified period were insufficient. However, following the implementation of strategic enhancements, there was an overall uplift of 18.6% in sales performance, exemplifying the efficacy of algorithm-driven marketing methodologies in driving business growth. (Guo & Zhai, 2022) and this study proves scientifically and confirms what has been theoretically previously rolled out of the advantages and benefits of improved commercials using artificial algorithms and cumulative

Despite the benefits that algorithms offer in the evolution of advertising and their utility in understanding consumer behavior, it is crucial to acknowledge their underlying mechanisms and their subconscious influence on consumer decision-making. Algorithms possess the capability to discern our preferences, needs, and purchasing capacity based on our interactions with the environment and online platforms. They can even discern aspects of our health and behavioral patterns, thereby exerting a subconscious control over our choices.

Algorithms operate by collecting and analyzing vast amounts of data, allowing them to curate personalized recommendations and advertisements tailored to our perceived preferences and interests. Through strategic placement and frequent exposure of products across multiple platforms, algorithms can subtly guide us toward certain purchasing decisions. They employ tactics such as comparative advertising to sway our preferences towards particular products or services.

Moreover, algorithms can manipulate our emotional states by curating content that either reinforces positive sentiments or alleviates negative ones. For instance, when detecting negative psychological trends in our online behavior, algorithms may choose to either amplify negative content or subtly introduce positive content to uplift our mood. By tracking our reactions and interactions, algorithms can further influence our emotional responses and steer us towards new preferences or away from previously favored choices.

In essence, algorithms possess the power to shape our consumer behavior and emotional states through targeted recommendations, strategic content placement, and subtle manipulation techniques. Understanding the mechanisms behind algorithmic influence is crucial for consumers to make informed decisions and mitigate potential biases or manipulative tactics employed by advertising algorithms. (العربية, 2023)

The evolution of algorithms poses significant risks to consumer behavior, particularly concerning the amplification of certain elements to users, which can lead to prolonged engagement within digital platforms. The abundance of stimuli and options, coupled with the strategic presentation of favored elements, may result in excessive time spent within digital environments, potentially leading to impulsive and unregulated purchasing decisions and financial losses.

Algorithmic discrimination exacerbates these risks by perpetuating what is known as "filter bubbles" or "echo chambers." Filter bubbles occur when algorithms automatically exclude information or opinions that diverge from the user's interests, thereby limiting visibility and reinforcing existing biases. Similarly, digital echo chambers enhance content that aligns with the user's pre-existing behaviors or opinions, further narrowing the diversity of perspectives and fostering a sense of confirmation bias.

The profound impact of algorithmic discrimination underscores the importance of addressing these issues to safeguard consumer autonomy and promote informed decision-making. Regulatory measures and ethical considerations are essential to mitigate the risks associated with algorithmic manipulation and ensure a more balanced and diverse online experience for users. (العربية, 2023)

3. Study method:

This study is part of field quantitative descriptive studies, defining quantitative studies according to John Cresswell as: "It is a means of testing objective theories by studying the relationship between variables. These variables can be measured, in general, on tools, so that numbered data can be analyzed using statistical procedures. the final report shall be arranged and shall contain an introduction, ethics, theory, methods, and results and those who support this type of study have assumptions about the conclusive testing of theories, the building of protection against prejudice, the control of alternative interpretations, the ability to generalize and replicate results. (Creswell, 2014)

Based on the nature and type of your qualitative quantitative study, the appropriate methodology is the "Descriptive Survey Curriculum." This curriculum aims to gather, compile, statistically process, and schedule information for results, describing how electronic publicity has affected the consumer culture of Algerian youth. The Survey Curriculum is a widely recognized method for studying social phenomena, enabling the collection of data and information, and is commonly used in descriptive studies such as surveys.

It was used in this study to survey the impact of improved advertising through algorithms at TikTok on the consumer behavior of users of this app in Algeria.

As for the study community, which is defined as "the group of vocabulary that the researcher aims to study, and to disseminate the results of the study to all its vocabulary, it is difficult to reach, and therefore the focus is on the available society, from which it is accessible and the sample selection"(2000، الحميد)

Our study community has been identified as follows:

- Target Society: Algerian Consumers Using Social Media Sites
- Available society: Algerian consumers using TikTok

To accurately characterize the total society and represent it in percentages based on statistical criteria and the nature of the problem of Arsas and its data sources، (الحميد، 2000، the researcher must select a sample that is highly representative of the study population. This ensures the attainment of the study's objectives.

To achieve this, a random sample of 200 individuals who are TikTok users was identified. An electronic questionnaire was prepared and distributed to them by selecting them randomly and sending the questionnaire directly to their accounts. Through the responses received, the sample population was identified and classified.

The questionnaire form has been chosen as one of the fundamental research methods or tools for data collection. It involves presenting a set of questions to the participants in a methodically prepared format and compiling their responses. This method is utilized to gather diverse data about specific facts, insights, attitudes, or behaviors of individuals within the research sample and the broader study community regarding a particular research issue or topic. (المبلاوي، 2021)

In this study, the survey aims to gauge public opinion regarding improved advertising and algorithms and their influence on consumer behavior. The questionnaire is a widely used tool for this purpose. Before its implementation, a Pre-Trial Test was conducted to ensure the validity and quality of the questionnaire form.

The tribal test was conducted on a small sample of users of the TikTok site in Algeria representing the original sample. This sample was 10% of the total number of sample vocabulary (20) researched. This tribal test helped design a form in its final form, especially in developing choices to answer closed questions.

Honesty and Fortitude Test for Questionnaire Form:

-Validity: The validity of the questionnaire form has been confirmed through a process of expert review. The form was presented to several professors and expert arbitrators who assessed its value and face validity.

-Reliability: The stability and reliability of the questionnaire form were assessed through a test-retest procedure. The form was administered to 10% of the sample of researchers twice, with a gap of one to two weeks between administrations. The consistency between the responses from the first and second administrations was measured, resulting in a consistency rate of 88%. This high level of consistency indicates strong stability of the scale, making the form reliable for use in the study.

Statistical data processing for this research was conducted using the SPSS statistical program, a widely used tool in social and media studies. The following procedures were carried out:

-Calculation of frequency tables and percentages to summarize categorical data and provide insights into the distribution of responses among different categories.

-Calculation of the mean (average) and standard deviation for numerical data to measure central tendency and dispersion, respectively. This provides a summary of the data distribution and variability.

-Calculation of Pearson correlation coefficient to examine the statistical relationship between two variables. This helps in assessing the strength and direction of the relationship between variables.

4. RESULTS AND DISCUSSION:

Table 01 represents how TikTok's advertising algorithms work

Options	Mean	St deviation
I'm constantly getting commercials on TikTok	4.02	0.81
I like TikTok ads for their short-duration	3.36	0.88
Products offered in TikTok are included in my interests and needs	2.12	0.91
Audiovisual content of commercials increased my conviction of product acceptance	3.03	0.63
Continued exposure to TikTok commercials is exaggerated	3.98	0.64
TikTok advertising guarantees quality services and products	2.89	0.76
TikTok commercials are better than traditional media advertising	3.11	0.69
TikTok commercials are professional and attractive	2.92	0.72

The results of Table (01) show what the sample sees about the nature of the commercials in TikTok and the results indicate that the sample is constantly exposed to TikTok commercials with a mean of: 4.02 With a standard deviation equal to 0.81, they fully agree that this continuous exposure to declarations is exaggerated and this is confirmed by the mean of 3.89 and a standard deviation of 0.64, Participants also emphasized that advertisements posted on TikTok are better than advertisements in other media such as radio, television, etc. This is expressed by the mean of 3.11 and standard deviation of 0.69 The results also indicated that audiovisual and interactive content on tikTok increased the sample's conviction to accept the results with a mean of: 3.03 Standard deviation of 0.63, and there is doubt of acceptance or rejection of the option that commercial advertising on the TikTok site guarantees quality in services and products with a mean of 2.89 and standard deviation equal to 0.76, The respondents were also impartial and did not confirm their opinion regarding the professionalism of TikTok's advertising content, as confirmed by the mean of 2.92 and 0.72 standard deviation. s rights ", while participants rejected the option that TikTok allows them to be advertised for products that fall within their interests and needs.

Concerning the results of the study, we see it as logical. The TikTok website has become heavily dependent on broadcasting advertisements in various fields, especially commercial ones, to a large segment of the population. These ads are repeated continuously according to the sample. This is what we see on this site. TikTok is hard without ads coming from you every once in a while and after watching brief videos of this site. Nor can we forget the importance of advertising, especially for TikTok, which is a very important source of income for such sites. Manufacturers and advertising

agencies turn to it and shun it to publish their ads and ensure that their products and services reach a wide range of consumers. The short period in the contents of these announcements was not an obstacle to viewing them according to the sample answers they are attractive and professional because they adopt modern, innovative, and direct methods of showcasing commercial products, Add that they rely on sound, image, modern technologies, and artificial intelligence to disseminate advertising content media ", which is not available to traditional media such as television, radio, newspaper, magazines and other means of advertising.

Products presented by participants are not necessarily important and worthwhile and fall within the scope of their interests and needs. This is because some advertisements come to you in an automated and unannounced manner and on repeated occasions. TikTok also aims to publish advertisements without verifying the quality of the advertised product or the 1 advertising service provided. This is explained by the results obtained.

The findings derived from Table (01) shed light on the perceptions of the study participants concerning the characteristics of advertisements on TikTok. The results indicate a consistent exposure to TikTok commercials among the sample, with an average rating of 4.02 and a standard deviation of 0.81, suggesting a notable level of exposure. Moreover, participants firmly agree that this continuous exposure is exaggerated, as evidenced by an average score of 3.89 and a standard deviation of 0.64.

Furthermore, participants highlighted the superiority of TikTok advertisements on other media platforms such as radio and television, as evidenced by an average rating of 3.11 and a standard deviation of 0.69. The findings also indicate that the audiovisual and interactive content on TikTok enhances participants' inclination to accept the advertised products or services, with a mean of 3.03 and a standard deviation of 0.63.

However, there exists uncertainty regarding whether commercial advertising on TikTok guarantees quality in services and products, with a mean of 2.89 and a standard deviation of 0.76. Similarly, participants did not express a definitive opinion regarding the professionalism of TikTok's advertising content, with a mean of 2.92 and a standard deviation of 0.72.

In summary, the study findings suggest that TikTok heavily relies on commercial advertising to engage a broad audience. Despite participants' perceptions of exaggerated exposure to commercials, TikTok advertisements are perceived as superior to traditional media advertising. Nevertheless, doubts persist regarding the quality and professionalism of these advertisements, given TikTok's practice of publishing ads without thorough verification.

Overall, the results underscore the significant role of advertising on TikTok and its influence on user perceptions. Additionally, they highlight areas of concern regarding the quality and professionalism of advertising practices on the platform.

Table 02 represents consumer behavior through TikTok advertising

Options	Mean	ST Deviation
TikTok ensures the arrival of commercial advertisements that only matter to you	3.87	0.66
TikTok makes it easy to get products featured in ads	3.55	0.69
I made at least one purchase of the products offered on TekTok	2.63	0.78
The products on offer constantly changed my conviction about the quality of the products	2.59	0.83
Repetition increased my conviction of the importance of acquiring a product on TikTok	2.88	0.81
TikTok ads are not transparent in displaying the same content to the public	4.02	0.62
Lack of privacy made me not entirely confident in commercials	4.12	0.74

The results of Table No. (02) On consumer behavior of the sample studied through commercials on TikTok "The study participants are very satisfied that the algorithms operated by TikTok do not have privacy and this has made them completely uncertain about the commercials to which they are exposed via this website, This was confirmed by mean of 4.12 and standard deviation of 0.74, and participants stressed that they were very agreed that TikTok commercials were not transparent in presenting the same content to consumers with a mean of 4.02 and standard deviation of 0.62. TikTok also ensures that commercials of interest to users reach a mean of: 3.87 a standard deviation is equal to 0.66. Acquisition of products through commercial advertising via TikTok is easy and simple. This is reflected in the mean of 3.55 and the standard deviation of 0.69. A moderate to small proportion of participants performed an indecent act at least once, with a mean: of 2.63 Duplication does not necessarily guarantee consumers' conviction of the importance of products offered on TikTok. These results came through a mean of 2.59 and a standard deviation of 0.83

And back to the results of the study and the readers of the figures and the statistics in it, we think it makes a lot of sense. The lack of privacy in social media in general and Tik Tok, in particular, has become the talk of many experts and content makers, The manifestations of lack of privacy are many points where content that reaches the public is subject to the work of algorithms and therefore not necessarily subject to users' needs and desires And this is what happens in the field of advertising that also knows the same way by subjecting it under the logic of algorithms which ensures that a large number of ads that are of interest to users arrive, TikTok in particular, like other social media sites, in no way guarantees the transparency and equal access of advertising content among users. as each user is exposed to a range of ads different from those to which another group of users is exposed, How TikTok works in ads continues to acquiesce to how algorithms send their contents to users in a continuous manner according to their interests It is also noticeable in TikTok that once you have seen one ad for two or more times, depending on the algorithms, it is within your area of concern and therefore the continuity of your exposure to this announcement for a significant period that may be anybody, weeks or even months.

We also note the simple, easy, and obvious way of obtaining products through a button press. The consumer determines the desired color, quantity, and other details of the product or consumer and often determines the timeliness and even the place of obtaining the product.

According to participants, despite the advantages of TikTok's positive characteristics as a means of advertising and promoting, their recognition of the quality of products remains highly questionable, as TikTok is a means of dissemination and not a means of measuring quality. That persistent and exaggerated exposure can sometimes persuade them of the quality of the goods provided, Sometimes by acquiescing to the contents, viewing, and possibly entering the subscribers' area of interest.

As for the procurement process, it is average by participants due to the consumer's concern about the quality of the products on the one hand and the lack of total confidence on the other, which is through interaction with advertising publications and reading feedback through comments that can prove the product bad and exaggerate its praise algorithms ", although the algorithms significantly work to send a significant set of public messages to target audiences to influence them and persuade them to buy the product.

Table 03 represents the statistical relation of consumer behavior with ad algorithms in TikTok

Variables		consumer behavior
commercial Advertising Algorithms	Pearson correlation	0.271
	Sig	0.02
	N	200

The Pearson correlation coefficient was used to study the relationship between TikTok's advertising algorithms and consumer behavior in the studied sample, and the results of the study showed that there was a statistically significant correlation between the two variables, at the P-Value = 0.02 correlation coefficient 0.271 = Pearson, where the relationship was somewhat moderate to weak.

Reference is made to these figures and data that demonstrate the relationship between the independent variable and the dependent variable in the procurement decision-making process. social media ", where we have recently seen that there are a huge number of ads broadcasting on social media sites in general, In particular, TikTok's website, which may be estimated at hundreds or more advertising numbers, may affect in one way or another consumer behavior or even give new consumer behaviors through an attractive display of the products on offer.

The relationship appears to be relatively moderate to weak, as the process is rather recent in Algeria and the e-commerce experience has not taken up its time. This is amidst remarkable apprehension by users of websites and advertisers, as evidenced by the link of 0.271, and the relationship of the variables can be significantly higher if there are a range of conditions such as trust, technical means, and others.

Table 04 represents the impact of TikTok advertising algorithms on consumer behavior

Independent Variable	dependent Variable	Regression coefficient	Beta coefficient	Determination coefficient	T value	Sig
Commercial Advertising Algorithms	consumer behavior	0.609	0.298	0.091	5.548	0.01

The regression was used to study the impact of advertising algorithms on consumer decision-making in the sample studied in which the results indicated a statistically significant effect between the two variables at the indicative level of 0.01 = Value, The determination factor was = 0.01, which means that the impact ratio was 9.1%, and the rest is due to other variables. and the value of beta 0.609 = beta means

that the effect between TikTok's advertising algorithms and the sample's consumer behavior was positive.

About the study's findings, the effect, though present, was relatively weak, because electronic commercials and even electronic commerce did not take their right to consumption. Algerian citizens continue to rely on traditional methods of purchasing decisions, Such as going to normal places for the acquisition of products, the weakness of the electronic payment device poor delivery service, and the lack of confidence in some of the TikTok promoters have made the latter's impact on purchasing decision-making a difficult process to count.

The remainder of the percentage of 80.9% is due to other variables that are a direct or indirect cause of purchasing decision-making in the sample studied, including a personal sale, direct sale, quality of the commodity, physical presence during the decision-making process, and other variables affecting purchasing behavior.

5. CONCLUSION

Based on the findings presented in Tables 01 to 04 and the analysis conducted, the following conclusions can be drawn:

1. **Exposure to TikTok Advertisements:** The study indicates that participants are consistently exposed to TikTok advertisements, with a notable level of exposure reported. However, participants expressed a sentiment of exaggerated exposure, suggesting that the frequency of advertisements may be perceived as excessive by users.
2. **Perception of Advertisement Quality:** While participants generally perceive TikTok advertisements to be better than traditional media advertising, doubts persist regarding the quality and professionalism of these advertisements. Participants are uncertain whether TikTok commercials guarantee quality services and products, indicating a need for improved transparency and verification processes.

3. **Consumer Behavior and Algorithmic Influence:** The study reveals a significant correlation between TikTok's advertising algorithms and consumer behavior. Although the relationship is somewhat moderate to weak, it suggests that TikTok's algorithms play a role in influencing consumer behavior, particularly in the context of product acquisition and decision-making.
4. **Impact of Advertising Algorithms:** TikTok's advertising algorithms have a statistically significant impact on consumer behavior, albeit relatively weak. The findings indicate that these algorithms positively influence consumer behavior, particularly in terms of product acquisition. However, other factors such as traditional purchasing methods, electronic payment limitations, and trust issues with advertisers also influence purchasing decisions.

In summary, while TikTok advertisements play a significant role in engaging users and influencing consumer behavior, there are concerns regarding the transparency, quality, and perceived frequency of advertisements. Additionally, the impact of advertising algorithms on consumer behavior, while present, is influenced by various other factors. Thus, there is a need for platforms like TikTok to address these concerns and enhance transparency and quality assurance measures in their advertising practices.

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