

## Social Media Algorithms Influence Consumer Buying Behaviour: A Study of Instagram and Facebook

Jayashree S. Patil<sup>1</sup>, Tannu Gajbhiye<sup>2</sup>, Pragati Khobragade<sup>3</sup>, Renuka Bhope<sup>4</sup>, Shweta Birajdar<sup>5</sup>, Shraddha Bhakare<sup>6</sup>

<sup>123456</sup>MCA, MES IMCC, Pune, Maharashtra, India

<sup>1</sup>jsp.imcc@mespune.in, <sup>2</sup>gajbhiyetannu1123@gmail.com, <sup>3</sup>pragatikhobragade75@gmail.com, <sup>4</sup>bhoperenuka@gmail.com, <sup>5</sup>birajdarshweta123@gmail.com, <sup>6</sup>shraddhabhakare620@gmail.com

Peer Review Information	Abstract
<p><b>Type:</b> Article <b>Received:</b> 28 March 2026 <b>Revised:</b> 13 April 2026 <b>Accepted:</b> 19 May 2026 <b>Published:</b> 01 June 2026</p>	<p><b>Abstract</b></p> <p>This research study focuses on examining how social media algorithms function in influencing consumer buying behaviour, particularly on Instagram and Facebook. With the increasing use of customized content and targeted advertisements, these platforms significantly influence what users view and how they make purchase decisions. The study uses a mixed-method approach, including surveys and interviews, to analyse user awareness, emotional engagement, and key purchase triggers. The findings suggest that algorithm-driven personalization has a strong impact on consumer behaviour, especially through influencer content and repeated exposure to products. At the same time, some concerns related to data privacy and user tracking were also observed. Overall, the findings indicate that social media algorithms have a significant and measurable influence on consumer purchasing decisions.</p> <p><b>Keywords:</b> Social Media Algorithms, Consumer Buying Behaviour, Personalisation, Influencer Marketing, Data Privacy</p>

### How to Cite This Article

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## Introduction

Social media has progressed from a communication platform into a powerful marketing tool. Platforms like Instagram and Facebook utilize sophisticated algorithms to customize content for users based on their preferences, interactions and browsing behaviour. These algorithms decide the type of content users see, including advertisements, influencer posts and brand promotions. This personalised approach has significantly changed how consumers discover and purchase products. Understanding how these algorithms influence consumer behaviour is important for both marketers and users as it affects decision-making, trust and overall online experience.

## Literature Review

Social media algorithms are designed to increase and sustain user engagement by presenting content that matches and reflects individual interests. Instagram and Facebook use signals such as user activity, engagement history and relationships to prioritize content. According to Smith (2020) algorithmic targeting increases impulse buying behaviour with a significant rise in purchases influenced by Instagram content. This shows that personalised exposure plays a crucial role in shaping consumer decisions. Similarly, Johnson and Lee (2019) observed that Facebook users tend to trust products suggested by friends or influencers. This highlights the role of social influence in online purchasing behaviour. Ghosh (2021) emphasized that trust and familiarity built through repeated exposure to personalised advertisements can strongly influence consumer confidence and buying decisions.

### Research Gap

Most earlier studies emphasize on either consumer engagement or trust. However, there is insufficient research that combines:

1. Algorithm Awareness
2. Emotional Engagement
3. Actual Purchase Behaviour

This study attempts to address this gap by evaluating how social media impacts both purchasing decisions and user responses.

### Aim and Objectives

*Aim:* To investigate the influence of networking platforms on user shopping habits.

#### Objectives:

- To examine how Instagram and Facebook algorithms influence purchase decisions.
- To identify key factors such as personalisation, advertisements and influencers affecting consumer behaviour.
- To analyse user awareness and perception of algorithm driven content.
- To evaluate the relationship between algorithm exposure and impulse buying behaviour.

## Research Methodology

### Research Design

A mixed method approach was adopted by integrating both quantitative and qualitative research methods.

### Sample Size

- Total respondents: 102
- Age group: 18-45+ years
- Platforms used: Instagram and Facebook

### Data Collection Methods

- Online surveys (Google Forms)
- Semi-structured interviews • Self-reported social media activity

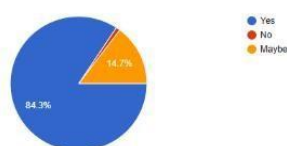
### Tools and Techniques

Data was examined using percentage analysis and visual representation methods such as pie charts and graph.

## Data Analysis and Result

### Algorithm Awareness

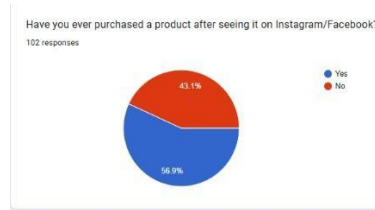
Do you believe Instagram/Facebook shows content based on your interests and past activity?  
102 responses



**Fig. 1:** Awareness of social media algorithms

The 84.3 % of respondents stated that they are conscious that social media algorithms influence the content they see. A significant percentage agreed that platforms like Instagram and Facebook predict their preferences based on their activity while 14.7% respondents were unaware and only about 1 % respondents disagreed.

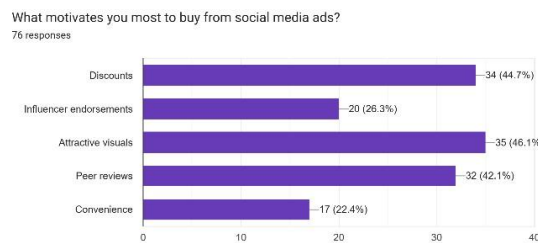
*Influence on Purchase Decisions*



**Fig. 2:** Purchase Behaviour Influenced by Social Media

56.9 % of respondents reported that they have bought products after encountering them on social media platforms. This highlights the strong impact of algorithm driven content on actual buying behaviour. The data clearly suggests that exposure to targeted content contributes significantly converting interest into purchases.

*Role of Influencers and Sponsored Content*



**Fig. 3:** Impact of Influencers and Sponsored Posts

The results show that influencer content and sponsored posts and discounts are among the most effective factors influencing consumer decisions. Many users trust recommendations from influencers and peers or are attracted to visually appealing advertisements.

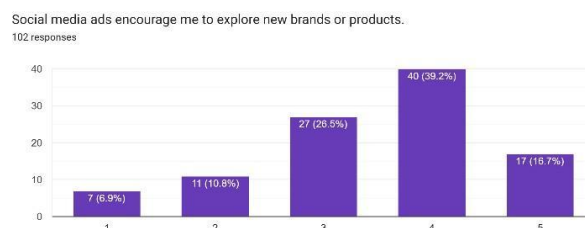
*Effect of Personalization*



**Fig. 4:** User Response to Personalised Advertisements

A large portion of respondents found personalised advertisements more relevant and engaging compared to general ads. This suggests that algorithms successfully tailor content according to user preferences. Personalisation increases user interest and improves the chances of product consideration and purchase.

*Emotional Engagement and Repeated Exposure*



**Fig. 5:** Emotional Influence of Social Media Content

The findings indicate that visually appealing content and repeated exposure to advertisements enhance trust and recognition seeing a product multiple times increases the likelihood of purchase. This demonstrates that emotional engagement and remarketing strategies play a key role in influencing consumer behaviour.

Overall, the graphical analysis shows that social media algorithms significantly influence consumer awareness, engagement and purchasing decisions through personalisation, influencer marketing and repeated exposure.

### Discussion

The findings suggest that social media algorithms play a vital role in influencing consumer behaviour by delivering highly personalized content. Elements like influencer marketing, visual appeal, and repeated exposure significantly impact purchasing decisions. The psychological effect of personalization fosters a feeling of connection between users and brands.

However, concerns related to data privacy and excessive tracking were also observed. While algorithms improve user experience and marketing effectiveness, they may negatively affect trust if not used transparently.

### Conclusion

The findings of this research indicate that social media algorithms greatly influence consumer buying behaviour. The findings show that 84.3% of respondents are aware of algorithmic influence, while 56.9% have made purchases after seeing products on social media. Additionally, more than 50% found personalized content relevant, and 56% reported that such content encourages them to explore new products.

These results highlight that personalization, influencer marketing, and repeated exposure strongly influence consumer decisions. Therefore, the research is valid, and the hypothesis is accepted. Despite concerns about data privacy, there is a clear need to adopt transparent and ethical practices.

### Recommendations

*For Marketers:*

- Focus on personalized and visually engaging content
- Collaborate with relatable influencers
- Use data responsibly to build trust

*For Consumers:*

- Be aware of algorithmic influence
- Make informed and conscious purchasing decisions

*For Platforms:*

- Improve transparency in content recommendations
- Ensure ethical use of user data

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