

Impact of Social Media Marketing Analytics on Consumer Purchase Intention in E-Commerce

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Peer Review Information	Abstract
Type: Article Received: 11 July 2026 Revised: 13 Aug2026 Accepted: 07 Sept 2026 Published: 06 Oct 2026	Social media has evolved from a promotional channel into a measurable source of consumer and campaign intelligence for e-commerce firms. This study examines the impact of social media marketing analytics on consumer purchase intention, with emphasis on personalized advertising, online reviews and ratings, influencer credibility, promotional offers, and customer engagement. A descriptive and analytical, quantitative and applied research design is used. Primary data were collected through a structured questionnaire from 120 respondents, mainly students and young professionals aged 18 to 30 years who regularly use social media and online shopping platforms. The study uses percentage analysis, mean-score analysis, ranking, and correlation-based interpretation on a five-point Likert scale. The supplied results show that online reviews and ratings have the highest mean score (4.25; Rank 1), followed by personalized advertisements (4.10; Rank 2), influencer credibility (3.95; Rank 3), promotional offers (3.88; Rank 4), and customer engagement (3.78; Rank 5). The findings indicate that social proof and relevant personalized communication are particularly important in shaping purchase intention. The paper concludes that analytics-driven social media marketing can support more informed targeting, campaign monitoring, and customer-engagement decisions when consumer data are used ethically and transparently. Keywords: Social Media Marketing Analytics; Consumer Purchase Intention; E-Commerce; Personalized Advertising; Online Reviews; Influencer Credibility; Customer Engagement

How to Cite This Article

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Introduction

Social media has become a central element of the digital customer journey in e-commerce. Consumers encounter product information, advertisements, reviews, influencer recommendations, promotional messages, and brand interactions across platforms before reaching a purchase decision. For firms, these interactions also generate measurable data. Reach, engagement, click-through activity, conversion behavior, audience characteristics, comments, reviews, and sentiment can be analyzed to understand how customers respond to marketing communication.

The managerial value of social media therefore extends beyond content distribution. Marketing analytics enables e-commerce firms to compare campaign performance, identify responsive customer segments, personalize messages, and monitor the relationship between communication activity and customer response. This is especially relevant in highly competitive online markets, where firms may spend substantially on digital promotion without knowing which marketing factors have the strongest influence on purchase intention.

Purchase intention in e-commerce is influenced by a combination of informational, relational, and promotional cues. Online reviews can provide social proof and reduce perceived purchase risk; personalized advertising can increase relevance; credible influencers may affect brand preference; promotional offers can accelerate decisions; and visible customer engagement can strengthen brand recall and trust. Analytics provides a mechanism for evaluating these factors rather than relying only on intuition.

Problem, Significance and Scope

The central problem addressed in this study is that social media investment does not automatically produce effective marketing outcomes. Without appropriate analytics, campaign activity can become costly, fragmented, and difficult to evaluate. The study therefore investigates how analytics-driven social media marketing activities influence consumer purchase intention and identifies the factors that appear most important for improving conversion-related decisions.

The study is significant for e-commerce marketers because data-driven decisions can improve audience targeting, message personalization, campaign monitoring, and resource allocation. Its scope is limited to purchase intention in e-commerce among young consumers, mainly students and young professionals who frequently use social media and online shopping applications. The analysis focuses specifically on personalized advertisements, influencer credibility, customer engagement, online reviews, and promotional offers.

Objectives, Research Questions and Hypotheses

The study has five objectives: to study the role of social media marketing analytics in e-commerce marketing; identify the major social media factors influencing consumer purchase intention; analyze the relationship between personalized advertising, engagement, reviews, influencer credibility, and purchase intention; understand how business analytics supports digital marketing decisions; and suggest strategies for improving social media marketing effectiveness in e-commerce.

The research questions examine how social media marketing analytics influences consumer purchase intention, which social media factor has the strongest influence, and how e-commerce companies can use business analytics to improve marketing performance. The hypotheses are retained as originally specified: H1 states that social media marketing analytics has a positive influence on consumer purchase intention in e-commerce, while H0 states that social media marketing analytics has no significant influence on consumer purchase intention in e-commerce.

Literature Review and Research Gap

Digital marketing literature positions social media as both a communication environment and a measurable customer-contact channel. Chaffey and Ellis-Chadwick (2019) provide a strategic framework for digital marketing in which customer interaction and performance measurement are closely linked, while Ryan (2020) emphasizes the importance of engaging audiences through digital channels. Within e-commerce, this perspective is relevant because the consumer can move rapidly from exposure and evaluation to transaction.

Consumer-behavior concepts also help explain why different social media signals may affect purchase intention. Solomon (2020) discusses the importance of social and psychological influences in buying behavior, while Kotler, Keller, and Chernev (2022) place customer value, communication, and market response within the wider marketing-management process. In the present study, online reviews and influencer recommendations function as forms of social information, while personalized advertising and promotional offers represent targeted marketing stimuli.

The analytics perspective is equally important. Davenport and Harris (2017) emphasize the competitive role of analytics in organizational decision-making, and Malhotra (2020) provides a methodological basis for structured marketing research and quantitative interpretation. Applied to social media, analytics can help firms segment audiences, evaluate campaign performance, monitor sentiment, and compare customer responses across marketing activities.

The research gap identified in the synopsis lies in the combined examination of social media marketing analytics and consumer purchase intention. Existing discussion often treats social media marketing, e-commerce, engagement, or consumer behavior as separate areas. There is therefore value in examining analytics-related factors such as personalization, reviews, influencer credibility, engagement, and promotional offers together within a young-consumer e-commerce context.

Research Methodology

Research Design and Data Sources

The study follows a descriptive and analytical research design and is quantitative and applied in nature. The descriptive component summarizes consumer responses toward selected social media marketing activities, while the analytical component compares the relative importance of the selected factors in relation to purchase intention. Primary data were collected through a structured questionnaire. Secondary information was drawn from books, research papers, websites, articles, and reports related to digital marketing, social media analytics, business analytics, and consumer behavior.

Sampling, Instrument and Analysis

Convenience sampling was used to select respondents who actively use social media and e-commerce platforms. The sample size is 120 respondents, mainly in the 18–30 age group and drawn from the student and young professional segment. The questionnaire contains demographic items and Likert-scale statements related to social media marketing, personalization, influencer credibility, reviews, engagement, and purchase intention.

The study uses percentage analysis, mean-score analysis, ranking, and correlation-based interpretation. Responses are interpreted on a five-point Likert scale ranging from strongly disagree to strongly agree. The source document does not report a correlation coefficient, test statistic, confidence interval, or p-value; accordingly, this journal version does not introduce any additional inferential statistics and retains the supplied descriptive interpretation.

Results and Analysis

Responses from the 120 participants were analyzed to compare the relative importance of five social-media-related factors associated with purchase intention. Table 1 reproduces the original mean scores, ranks, and interpretations without alteration.

Table 1. Mean Score of Factors Influencing Purchase Intention

Factor	Mean Score	Rank	Interpretation
Online reviews and ratings	4.25	1	Reviews create trust and reduce purchase risk.
Personalized advertisements	4.10	2	Relevant ads increase attention and interest.
Influencer credibility	3.95	3	Trusted influencers affect brand preference.
Promotional offers	3.88	4	Discounts encourage faster purchase decisions.
Customer engagement	3.78	5	Likes, comments, and interaction improve brand recall.

Online reviews and ratings record the highest mean score of 4.25 and therefore receive Rank 1. This result indicates that respondents place substantial importance on review-based social proof when evaluating online purchases. Personalized advertisements rank second with a mean score of 4.10, suggesting that relevance and alignment with individual interests can strengthen attention and purchase interest.

Influencer credibility records a mean score of 3.95 and Rank 3. The supplied interpretation indicates that trusted influencers can affect brand preference, but their influence remains below reviews and personalized advertising. Promotional offers rank fourth with a mean of 3.88, while customer engagement ranks fifth with 3.78. Although engagement is the lowest-ranked of the five factors, the score still indicates that likes, comments, interaction, and brand responses contribute to brand recall and customer trust.

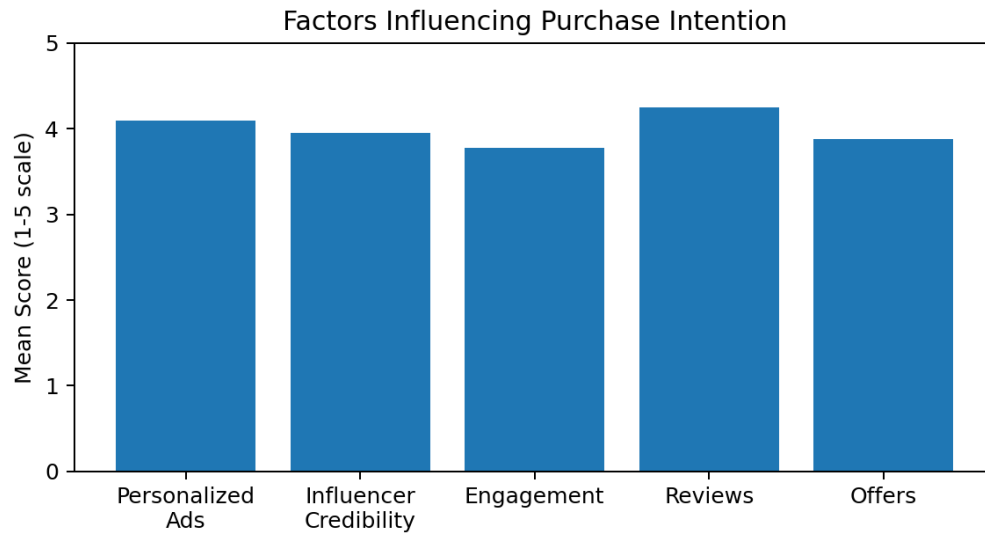


Fig. 1. Factors influencing purchase intention based on mean score analysis.

Figure 1 visually reinforces the ranking reported in Table 1. The pattern shows that respondents are more likely to report purchase interest when advertisements match their interests and when product reviews are positive. Influencer credibility shows a moderate-to-strong influence in the supplied interpretation, particularly when product information is perceived as honest. Engagement indicators such as comments, shares, and brand replies support trust, but they are not as influential as reviews and personalization in this dataset.

Findings and Discussion

The principal finding is that social media marketing analytics is positively associated with consumer purchase intention in the study. Online reviews and ratings emerge as the strongest factor, followed by personalized advertisements. This ordering is managerially meaningful because it suggests that purchase intention among the sampled young consumers is shaped strongly by both social validation and message relevance.

The role of reviews can be interpreted through uncertainty reduction. In e-commerce, customers cannot physically inspect many products before purchase, so ratings and prior customer experiences can function as decision cues. The high mean score for reviews indicates that monitoring review quality, sentiment, and recurring customer concerns should be an important component of social media and e-commerce analytics.

Personalized advertising also performs strongly. Analytics allows marketers to use behavioral and interest-related information to make communication more relevant. However, the value of personalization must be balanced with privacy and transparency. Excessive or poorly governed use of customer data can undermine trust even when personalization improves short-term relevance.

Influencer credibility ranks below reviews and personalized advertising but remains important for brand trust and preference. The study indicates that influencer marketing is more effective when the influencer is perceived as credible and authentic. For e-commerce firms, this implies that influencer selection should be evaluated using audience fit and sentiment rather than reach alone.

Promotional offers can accelerate buying decisions, particularly among young consumers, while engagement contributes to brand recall and trust. From a business analytics perspective, these factors should not be managed independently. Dashboards and campaign-monitoring systems can connect engagement, sentiment, audience segments, promotional response, and conversion-related indicators to provide a more complete view of marketing performance.

The source paper accepts H1 because the analyzed factors show a positive influence on purchase intention. This conclusion is retained. At the same time, because the supplied document does not provide the numerical correlation output or an inferential significance test, the present journal version does not claim a specific effect size or p-value beyond the evidence reported in the study.

Managerial Recommendations

The findings support a data-driven approach to social media marketing. E-commerce firms should use analytics dashboards to monitor engagement, conversion, and campaign performance; design personalized advertisements around customer interests and browsing behavior; and actively monitor online reviews and ratings because they are the highest-ranked factor in the study.

Companies should also collaborate with credible influencers whose audience and communication style align with the brand, apply sentiment analysis to comments and reviews, and target promotional offers to relevant customer segments rather than using uniform offers. Customer data should be handled ethically with appropriate privacy protection and transparency. These practices can help translate social media activity into more disciplined marketing decisions and support customer conversion and retention.

Conclusion, Limitations and Future Research

This study concludes that social media marketing analytics plays an important role in understanding consumer purchase intention in e-commerce. Among the five factors evaluated, online reviews and ratings receive the highest mean score, followed by personalized advertisements, influencer credibility, promotional offers, and customer engagement. The results therefore emphasize the importance of social proof, relevance, trust, promotional value, and interaction in analytics-driven digital marketing.

The study is subject to the limitations specified in the source document. The sample is limited to 120 respondents and focuses mainly on young consumers; convenience sampling may introduce bias; the analysis is restricted to e-commerce and social media marketing activities; actual company-level sales and campaign data were not available; and respondent opinions may change over time with platform trends and promotional conditions.

Future research can use larger and more geographically diverse samples, compare platforms such as Instagram, YouTube, Facebook, and LinkedIn, and incorporate company-level measures including click-through rate, conversion rate, customer lifetime value, and purchase history. Advanced approaches such as sentiment analysis, clustering, predictive modeling, and artificial-intelligence-based recommendation systems may also provide deeper insight into digital marketing performance.

References

1. Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation and practice*. Pearson.
2. Davenport, T. H., & Harris, J. G. (2017). *Competing on analytics: The new science of winning*. Harvard Business Review Press.
3. Kotler, P., Keller, K. L., & Chernev, A. (2022). *Marketing management*. Pearson.
4. Malhotra, N. K. (2020). *Marketing research: An applied orientation*. Pearson.
5. Ryan, D. (2020). *Understanding digital marketing: Marketing strategies for engaging the digital generation*. Kogan Page.
6. Solomon, M. R. (2020). *Consumer behavior: Buying, having, and being*. Pearson.