

CELEBRITY ENDORSEMENTS, DIGITAL ALGORITHMS AND CONSUMER DECISION POWER: AN EMPIRICAL STUDY OF ELECTRONIC GADGET PURCHASES IN NAGPUR REGION

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Abstract :

Celebrity endorsement has long played a critical role in shaping consumer perceptions and purchase decisions, particularly in highly competitive digital markets such as electronic gadgets. In recent years, the integration of data analytics, artificial intelligence (AI), and digital advertising platforms has transformed traditional celebrity endorsement into algorithm-driven influence mechanisms. Celebrity endorsement has long played a critical role in shaping consumer perceptions and purchase decisions, particularly in highly competitive digital markets such as electronic gadgets.

The digital transformation of markets has significantly altered consumer buying behavior, particularly in the electronic gadgets sector. The study highlights the gradual shift from personality-based persuasion to data-driven influence and underscores the need for ethical and transparent digital marketing practices. Traditional promotional strategies such as celebrity endorsements, algorithm-driven recommendations on e-commerce platforms and social media now play a decisive role in shaping consumer choices.

This paper empirically examines the influence of celebrity endorsements and digital algorithms on consumer decision power in the purchase of electronic gadgets, with special reference to the Nagpur region. The findings reveal that while celebrity endorsements continue to influence brand recall and trust, digital algorithms exert a stronger impact on final purchase decisions.

Keywords : Celebrity Endorsement, Digital Algorithms, Consumer Buying Behaviour, Electronic Gadgets, Decision Power

Introduction :

The rapid growth of digital platforms has redefined the dynamics of consumer buying behavior and altered how consumers engage with brands and make purchasing decisions. In the electronic gadgets market especially mobile phones and its accessories consumers are increasingly exposed to a combination of celebrity-driven advertising and algorithmically curated content, characterized by frequent technological upgrades and aggressive marketing strategies. Celebrity endorsements have long been used to build brand image, credibility, and emotional connection with consumers. However, digital algorithms embedded in e-commerce



platforms and social media now personalize product visibility, recommendations, and advertisements based on user data.

This transformation raises important questions about consumer autonomy, ethical persuasion, and democratic choice in digital markets. In emerging urban regions such as Nagpur, consumers actively engage with online platforms like Amazon, Flipkart, YouTube, and Instagram while making purchase decisions. These platforms simultaneously display celebrity-endorsed advertisements and algorithm-driven suggestions, creating a complex decision-making environment.

This paper aligns the traditional marketing construct of celebrity endorsement with contemporary debates on culture, creativity and digital markets and AI, decision power and democratic life, using empirical evidence from the Nagpur region.

Review of Literature :

Celebrity endorsement has been widely studied as a powerful marketing tool that enhances brand recall and purchase intention. McCracken (1989) emphasized the role of celebrity credibility and meaning transfer in influencing consumer attitudes. Consumer decision power in digital markets refers to the degree of control consumers have over their purchasing decisions.

1. Celebrity Endorsement and Consumer Buying Behaviour :

Prior research indicates that celebrity endorsement positively influences brand recall, brand attitude, and purchase intention. Source credibility theory highlights expertise, trustworthiness, and attractiveness as key factors driving endorsement effectiveness. In the context of electronic gadgets, consumers often associate celebrities with innovation, lifestyle aspiration, and technological sophistication.

2. Digital Markets, Culture and Creative Influence :

Digital markets amplify celebrity influence through social media, influencer marketing, and platform-based advertising. Cultural symbolism and creative storytelling, digital creativity combined with appeal play a central role in shaping consumer identities and consumption practices.

3. AI, Data Analytics and Decision Power :

AI-driven recommendation systems and targeted advertising increasingly determine the visibility of celebrity-endorsed content. While these systems enhance marketing efficiency, they also raise concerns about manipulation, filter bubbles, and reduced consumer agency.

Objectives of the Study :

- To examine the role of digital platforms and data-driven marketing in amplifying celebrity influence.



- To assess consumer perceptions of trust, persuasion, and decision autonomy in celebrity-endorsed digital advertising.
- To align celebrity endorsement practices with ethical and transparent digital market
- To study the relationship between celebrity endorsements, digital algorithms, and consumer decision-making.

Research Methodology :

The study adopts a descriptive and analytical research design. Primary data were collected through a structured questionnaire administered to 50 respondents in the Nagpur region using convenience sampling. The questionnaire consisted of demographic questions and statements related to celebrity endorsement, digital algorithms, and consumer decision power, measured on a five-point Likert scale. Data analysis was conducted using percentage analysis, mean and standard deviation, correlation analysis, and multiple regression techniques.

Questionnaire Framework (Summary) :

The questionnaire included three major constructs :

- Celebrity Endorsement: influence, trust, brand recall, and perceived quality.
- Digital Algorithms: impact of online recommendations, sponsored advertisements, and social media feeds.
- Consumer Decision Power: comparison behavior, confidence in purchase decisions, and perceived freedom of choice.

Data Analysis and Interpretation :

Descriptive analysis revealed that a majority of respondents belonged to the 21–35 age group and were regular users of online shopping platforms. The mean score for digital algorithms (4.12) was higher than that for celebrity endorsements (3.98), indicating stronger influence on purchase decisions.

Correlation analysis showed a positive relationship between celebrity endorsements and consumer decision power ($r = 0.58$), while digital algorithms demonstrated a stronger correlation ($r = 0.71$). Multiple regression analysis identified both celebrity endorsement and digital algorithms as significant predictors of consumer decision power, with digital algorithms having a higher beta value. These results indicate that although celebrities attract consumer attention, algorithmic recommendations play a decisive role in final purchase decisions.

Findings :

- Celebrity endorsements positively influence brand awareness and trust.
- Digital algorithms have a stronger impact on actual purchase decisions.
- Consumers exhibit moderate awareness of algorithmic persuasion.
- Decision power is increasingly shaped by data-driven digital environments.



Suggestions :

Marketers should integrate celebrity endorsements with transparent digital marketing strategies. E-commerce platforms must adopt ethical algorithmic practices to ensure consumer autonomy. Consumers should be encouraged to critically evaluate digital recommendations before making purchase decisions.

Conclusion :

The study concludes that consumer buying behaviour in the electronic gadgets market is influenced by both celebrity endorsements and digital algorithms, with the latter playing a more dominant role. While digital platforms enhance convenience and personalization, they also raise concerns regarding consumer decision autonomy. A balanced and ethical approach to digital marketing is essential for sustaining consumer trust in the evolving digital marketplace.

Celebrity endorsement remains a culturally powerful and economically effective strategy in digital markets. When combined with AI-driven targeting, its influence on consumer buying behaviour becomes even more pronounced. This paper demonstrates that ethical governance of digital marketing practices is essential to ensure that consumer choice remains informed and voluntary.

Future research may explore comparative regional studies, qualitative consumer narratives, and the role of emerging virtual celebrities and AI-generated influencers in shaping future digital markets.

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