International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)

Impact of AI-Generated (Deepfake) Celebrity Endorsements on Consumer Trust and Purchase Intention

P Chethan[1], Dr. Rashmi Shetty[2]

[1]4th Semester MBA, [2]Assistant Professor, RV Institute of Management, Bengaluru, India

***Abstract*—The quickly growing adoption of Artificial Intelligence (AI) in advertising has born hyperrealistic so-called deepfake celebrity endorsements, providing new opportunities and ethical challenges to marketers. This study empirically studies the effects of AI-generated celebrity endorsements on consumer trust and the purchase intention that follows in the Indian advertising environment. Using a descriptive and causal research design, primary data was gathered through a sample of 300 respondents using a questionnaire comprising of 7-point Likert scale. The test was performed through the application of Descriptive Statistics, Multiple Regression, Pearson Correlation, and One-Way ANOVA to establish the connections between AI realism, perceived authenticity, brand trust, and purchase intent. The results indicate that the combination of realism, authenticity and perceived artificiality ($R2 = 0.845$, $p < 0.001$) explain 84.5 percent of consumer trust. Moreover, a significant positive correlation ($r = 0.927$) was determined between consumer trust in the brand and future purchase intention. The One-Way ANOVA proved that consumers who have a positive attitude towards AI as an innovative tool have much more trust responses ($p < 0.001$). The research finds that although deepfake endorsements are considered to be technologically new and extremely persuasive, transparency and perceived authenticity are regarded as the ultimate grounding factor in keeping consumer trust and purchase intention in the age of online deceit.**

***Keywords*—AI-Generated Advertising, Advertising Ethics, Celebrity Endorsements, Consumer Trust, Deepfakes, Digital Marketing, Purchase Intention.**

I. Introduction

The use of celebrity endorsement is a classic element of Indian advertising, which uses the enormous cultural impact of Bollywood and athletics to create brand equity, trust, and purchase intent (Kanwar and Huang, 2022; Singh et al., 2021). Nevertheless, the digital influencer marketing environment is changing radically due to Generative Artificial Intelligence (AI).

The possibility of digital resurrection of dead icons or the creation of hyper-realistic deepfakes of living celebrities without their physical presence has brought about a new level of creative flexibility and cost-efficiency to brands (Aboulnasr & Song, 2025; Goel, Saxena, and Bhatia, 2025).

Innovative and effective in their engagement—AI-generated influencers and deepfakes are known to achieve purchase intent that is greater by over 30 percent when optimized by AI—though raising serious cognitive and ethical concerns, these AI-generated entities present critical dilemmas to consumers. The issue of fake authenticity compels consumers to continually question whether an endorsement is genuine or computer-generated (Denslinger, 2025). Cognitive dissonance, annoyance, and a disastrous loss of brand trust may occur when consumers view an endorsement as artificial or deceptive (Devi, Gangwar, and Kaur, 2026; Zafar et al., 2025). In India, where reports show as high as 90% of consumers have already experienced fake or AI-generated celebrity endorsements, the challenge of walking the fine line between creative performance and fraudulent impersonation is the major challenge facing regulatory authorities such as the Advertising Standards Council of India (ASCI).

Trust is the basic mediator between exposure to an advertisement and the final purchase decision (Ruly, Riski, and Saisaria, 2021). Thus, it is essential to comprehend the effect of technological realism and perceived authenticity of a deepfake ad on this trust. Moreover, the attitude of a consumer towards AI technology is itself a moderating factor; people who think of AI as an innovative tool might not respond in the same way as those who believe it is a misleading threat (Deepak et al., 2026). This paper tackles these dynamics by empirically validating how AI-generated celebrity endorsements determine consumer trust and future purchase behavior in the Indian market.

International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)

II. Review Of Literature

TABLE I Review of Literature

Author & Year	Objective	Methodology	Key Findings	Summary
Devi, M., et al. (2026)	To examine deepfake advertising, cognitive dissonance, and consumer trust.	Conceptual / Ethical Analysis	Deepfakes risk creating severe cognitive dissonance, threatening long-term brand trust.	Explores the psychological friction caused by deceptive AI ads.
Deepak, D., et al. (2026)	To decode trust and influence in digital influencer marketing in the age of AI.	Primary Data Study	Consumer trust is highly fragile when digital influencers are perceived as artificial.	Analyzes the fragility of trust in AI-driven marketing.
Whittaker, L., et al. (2026)	To examine consumer appraisals of deepfake advertising and disclosure mechanisms.	Experimental Design	Transparent disclosure of deepfakes alters how consumers appraise the 'reality' of the ad.	Focuses on the impact of disclosing AI usage to consumers.
Zafar, G., et al. (2025)	To study the impact of deepfake ad disclosure on purchase intention.	Mediation Analysis	Disclosures impact trust and perceived ethicality, which mediate purchase intention.	Links ad disclosure directly to ethical perception and purchase.
Denslinger, A.T. (2025)	To assess consumer perceptions of 'deceptive authenticity' in deepfake ads.	Doctoral Research	High realism combined with deception significantly alters consumer behavioral responses.	Coins the concept of deceptive authenticity in AI ads.
Aboulnasr, K., & Song, Y.S. (2025)	To evaluate emotional responses to AI-generated dead celebrity endorsements.	Empirical Analysis	Digital resurrections evoke mixed emotional responses, highly dependent on perceived respect.	Studies the niche area of digitally resurrecting deceased icons.
Shukla, A., et al. (2025)	To study the emerging dominance of AI-generated influencers in Indian market.	Market Evidence Study	AI influencers are rapidly gaining traction, but struggle with establishing human-like trust.	Evaluates the rise of pure AI influencers versus human celebrities.

Author & Year	Objective	Methodology	Key Findings	Summary
Wickramasinghe, et al. (2025)	To examine how AI-enabled TV ads drive purchase intention via creativity.	Quantitative Research	AI enhances the entertainment value of ads, indirectly boosting purchase intent.	Focuses on the entertainment and creative value added by AI.
Goel, P., et al. (2025)	To analyze the creative execution of AI in Indian YouTube advertisements.	Content Analysis	AI is increasingly used for creative execution, lowering production barriers significantly.	Maps the trend of AI adoption in Indian video ads (2021–2024).
Powers, G., et al. (2023)	To study the effects of disclosing deepfake videos on US and Indian consumers.	Cross-cultural Study	Indian consumers show varied tolerance to deepfakes based on the disclosure context.	Compares Indian and US reactions to deepfake disclosures.
Sivathanu, B., et al. (2023)	To analyze online shopping intention after watching AI-based deepfake ads.	Quantitative Analysis	High-quality deepfakes can successfully drive shopping intention if they appear authentic.	Links deepfake ad exposure directly to online shopping intent.
Singh, R.K., et al. (2021)	To study digital media marketing and celebrity endorsement on purchase intention.	Empirical Study	Traditional celebrity endorsements strongly dictate purchase intention through perceived quality.	Establishes the baseline power of human celebrity endorsements.
Punjani, K.K., & Kumar, V.R. (2021)	To study advertising puffery and celebrity trustworthiness among Indian youth.	Survey Research	Trustworthiness is the single most critical factor in converting ad exposure to purchases.	Highlights the paramount importance of trust in youth markets.

International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)

III. Research Gap

Although the underlying influence of traditional celebrity endorsements on purchase intention is well-established through substantial research (Singh et al., 2021; Ruly et al., 2021), the cognitive processes of AI-generated deepfakes are underrepresented in the Indian context. Literature exists on the ethicality of disclosures (Zafar et al., 2025) and the innovative implementation of AI (Goel et al., 2025). Nonetheless, a clear gap is the lack of any empirical modeling that measures technical realism, perceived artificiality, and perceived authenticity of an AI ad in a single study while quantifying the core mediating variable: brand trust. Moreover, the mediating role of consumers' natural attitude towards AI innovation on their trust reactions has not been significantly tested using inferential statistics (ANOVA) in the modern Indian market.

IV. Research Design

A. Statement of the Problem

As brands continue to use AI-generated celebrity deepfakes to gain attention and save on production, they risk losing customers in the name of false authenticity. If consumers see an AI endorsement as incredibly artificial or deceitful, it immediately disrupts the brand trust that traditional celebrity endorsements are supposed to establish. The research question this paper answers is: how precisely do the features of deepfake ads (realism vs. artificiality) influence consumer trust, an d how do changes in consumer trust determine the ultimate intention to buy.

B. Objectives

- To empirically examine the impact of AI-generated (deepfake) celebrity endorsements on consumer trust in the Indian advertising context.
- To analyze the influence of consumer trust on purchase intention in response to AI-generated celebrity endorsements.
- To investigate the mediating role of consumer trust in the relationship between AI-generated celebrity endorsements and purchase intention.
- To examine the moderating role of consumers' attitudes toward artificial intelligence on trust responses to AI-generated celebrity endorsements.

C. Research Methodology

This research design is Descriptive and Causal. The descriptive dimension defines consumer perceptions about AI realism and authenticity and the causal dimension (Regression and ANOVA) identifies cause-and-effect relationships among the characteristics of AI ads, consumer trust, and purchase intention.

D. Sources of Data

- Primary Data: Gathered using a structured survey conducted on 300 digitally active consumers who have been exposed to online advertisements and social media recommendations.
- Secondary Data: Obtained through recent scholarly journals (2021–2026), generative AI conference proceedings, and articles on trends in digital influencer marketing.

E. Sampling Plan

- Sampling Unit: Individual consumers in India who actively consume social media and digital platforms.
- Sample Size: 300 valid respondents.
- Sampling Technique: Convenience sampling was employed to collect data from respondents conversant with digital and AI-driven content.

F. Tools for Data Collection

The researchers conducted a survey that established a connection between variables like AI realism, authenticity, brand trust, AI innovativeness, and future purchase intention, using a 7-point Likert scale instrument.

G. Plan of Analysis

The data collected were coded and analyzed using IBM SPSS software. Statistical methods applied include Descriptive Statistics, Multiple Regression Analysis, Pearson Correlation, and One-Way ANOVA.

V. Conceptual Framework

A. Dependent Variables (DV)

- Brand Trust: The level of confidence and reliability the consumer places in the brand featured in the AI-generated ad.
- Purchase Intention: The consumer's willingness and likelihood to buy the endorsed product in the future.

B. Independent Variables (IV)

- AI Realism: The perceived visual and auditory hyper-realism of the deepfake.
- Perceived Authenticity: The feeling that the endorsement is genuine and aligns with the celebrity's usual persona, despite being AI.
- Perceived Artificiality: The noticeable 'fakeness' or synthetic nature of the endorsement.

International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)

C. Moderating Variable

- Attitude Toward AI (Innovativeness): The consumer's pre-existing belief that AI-generated endorsements represent positive technological innovation.

VI. RESULTS

A. Hypothesis Framework

Hypothesis 1 (Multiple Regression – Objective 1): H0: Realism, authenticity, and perceived artificiality of AI-generated celebrity endorsements do not significantly predict consumer trust. H1: They significantly predict consumer trust.

Hypothesis 2 (Correlation – Objective 2): H0: There is no significant correlation between consumer trust and purchase intention. H1: There is a significant positive correlation between them.

Hypothesis 3 (One-Way ANOVA – Objective 4): H0: Mean trust responses do not differ significantly across different levels of positive attitude toward AI innovation. H1: Mean trust responses differ significantly across those levels.

B. Descriptive Statistics

TABLE II DESCRIPTIVE STATISTICS (N = 300)

Variable	N	Min	Max	Mean	Std. Dev
AI_Innovative_Code (AI Innovative)	300	1	7	5.28	1.464
Endorse_TechAdvanced_Code (Tech Advanced)	300	1	7	5.09	1.505
Ad_IncreasePurchase_Code (Ad Increases Purchase)	300	1	7	5.17	1.525
Trust_Brand_Code (Brand Trust)	300	1	7	4.91	1.503
Purchase_Future_Code (Purchase Intention)	300	1	7	4.90	1.559
Endorse_Authentic_Code (Authenticity)	300	1	7	3.91	1.579
AI_Realistic_Code (AI Realism)	300	1	7	4.23	1.595
Endorse_Artificial_Code (Artificiality)	300	1	7	4.73	1.638
Ethical_Concern_Code (Ethical Concern)	300	1	7	5.18	1.504

The descriptive statistics indicate the research is founded on 300 valid answers with no gaps in variables under study. The average scores of AI-generated endorsement as innovative (5.28), technologically advanced (5.09), and purchase increase because of the ad (5.17) suggest that respondents consider deepfake celebrity endorsements innovative and technologically advanced. Meanwhile, the mean of endorsement authenticity (3.91) is lower than the means of innovation and realism, indicating some ambiguity regarding the extent to which such endorsements are considered authentic.

The mean of consumer trust in the brand (4.91) and future purchase intention (4.90) indicates that respondents are fairly positive in these endorsements.

C. Test 1: Multiple Regression Analysis

Objective: To empirically examine the impact of AI-generated (deepfake) celebrity endorsements on consumer trust. Dependent Variable: Trust_Brand_Code. Independent Variables: AI_Realistic_Code, Endorse_Authentic_Code, Endorse_Artificial_Code.

International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)

TABLE III
MULTIPLE REGRESSION – MODEL SUMMARY

Model	R	R Square	Adj. R Square	Std. Error	F	Sig.
1	.919	.845	.843	.596	536.477	.000

TABLE IV
COEFFICIENTS TABLE

Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	.989	.106	–	9.356	.000
AI Realism	.372	.058	.395	6.387	.000
Perceived Authenticity	.159	.050	.167	3.185	.002
Perceived Artificiality	.365	.044	.398	8.357	.000

The multiple regression analysis shows that realism, authenticity, and perceived artificiality jointly have a significant predictive value on consumer trust (R = 0.919, R2 = 0.845, F = 536.477, p = 0.000). The model explains 84.5% of variance in consumer trust. All three predictors are positive and significant, with AI realism (Beta = 0.395) and perceived artificiality (Beta = 0.398) being strongest. The null hypothesis (H0) is rejected and H1 is accepted.

D. Test 2: Pearson Correlation

Objective: To analyze the influence of consumer trust on purchase intention in response to AI-generated celebrity endorsements.

Variables: Trust_Brand_Code and Purchase_Future_Code.

TABLE V
PEARSON CORRELATION – BRAND TRUST VS. PURCHASE INTENTION

	Brand Trust	Purchase Intention	N	Sig.
Brand Trust	1.000	.927**	300	.000
Purchase Intention	.927**	1.000	300	.000

The Pearson correlation analysis shows a very strong, positive relationship between consumer trust and purchase intention (r = 0.927, p = 0.000 < 0.05). The null hypothesis (H0) is rejected and H1 is accepted. When respondents trust the brand in an AI-generated endorsement, there is a significantly greater likelihood of them stating intention to purchase the endorsed product in the future.

E. Test 3: One-Way ANOVA

Objective: To examine the moderating role of consumers' attitudes toward AI on trust responses.

Variables: AI_Innovative_Code (grouping) and Trust_Brand_Code (dependent). F = 236.300, p = 0.000.

International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)

TABLE VI
ONE-WAY ANOVA – TRUST SCORES BY AI ATTITUDE LEVEL

AI Attitude	N	Mean	Std. Dev	95% CI Lower	95% CI Upper	Sig.
1 (Strongly Disagree)	6	1.00	.000	1.00	1.00	.000
2	12	1.92	.515	1.59	2.24	
3	18	2.67	.485	2.43	2.91	
4	42	3.69	.604	3.50	3.88	
5	62	4.60	.613	4.44	4.75	
6	98	5.71	.718	5.57	5.86	
7 (Strongly Agree)	62	6.40	.586	6.25	6.55	

The One-Way ANOVA ($F = 236.300$, $p = 0.000 < 0.05$) indicates that mean trust responses differ significantly across levels of positive attitude toward AI innovation. The null hypothesis (H0) is rejected and H1 is accepted. Respondents who strongly view AI as innovative (scores 6–7) showed trust means of 5.71 and 6.40 respectively—far higher than those skeptical of AI. This demonstrates that technological optimism is a strong moderator of a consumer's agreeableness toward deepfake endorsements.

VII. DISCUSSIONS

The descriptive statistics show that consumers perceive AI-generated endorsements as being extremely innovative (Mean = 5.28) and technologically advanced (Mean = 5.09). But perception of authenticity received a significantly lower score (Mean = 3.91). This is where the main dilemma lies: consumers are aware of the technological miracle of the deepfake, but the endorsement does not come across as a valid recommendation.

Although the issue of authenticity has been raised, the overall brand trust (Mean = 4.91) and future purchase intention (Mean = 4.90) are quite high, indicating that Indian customers are wary yet cautiously receptive of this new advertising form.

Objective 1 (Regression): The multiple regression analysis ($R2 = 0.845$, $F = 536.477$, $p < 0.001$) indicates that consumer trust is strongly determined by the technical and perceptual characteristics of the AI ad. The most predictive attributes of trust were AI realism (Beta = 0.395) and perceived artificiality (Beta = 0.398). This means it is a high-stakes balancing game: the more realistic the AI, the more trust it generates, but once execution looks artificial, it massively undermines trust value.

Objective 2 (Correlation): A very strong positive Pearson correlation ($r = 0.927$, $p < 0.001$) was found between brand trust and future purchase intention. This proves the mediating role of trust: when AI implementation successfully creates trust, consumers translate it into purchase intention. Conversely, deceptive execution that causes a loss of trust directly reduces purchase intent.

Objective 4 (ANOVA): The ANOVA test ($F = 236.300$, $p < 0.001$) found that trust responses differ significantly based on consumers' attitude to AI. Respondents who strongly agreed that AI is innovative (scores 6 or 7) showed drastically higher mean trust scores (5.71 and 6.40), demonstrating that technological optimism is a strong moderator of receptiveness to deepfake endorsements.

VIII. CONCLUSION

This paper concludes that AI-generated (deepfake) celebrity endorsements have enormous potential to trigger purchase intent, as long as they can manage the delicate landscape of consumer trust. Technological realism must prevail: the most realistic executions create trust, while the illusion of artificiality actively kills it. The study rejects all null hypotheses, proving trust to be the conclusive mediator ($r = 0.927$) between the perception of a deepfake and the intention to buy. Moreover, the success of such advertisements is highly conditional on the pre-existing attitude of the audience toward AI. With deepfake technology growing increasingly indistinguishable from reality, brands must ensure their AI implementations are flawless and transparent, since being perceived as fake carries a major cost in consumer trust.

IX. SUGGESTIONS

- Focus on Flawless Implementation: Since perceived artificiality has a significant effect on trust, companies should invest in high-fidelity generative AI tools. Rushed deepfakes cause the uncanny valley effect and destroy purchase will.
- Appeal to Tech-Optimistic Demographics: The ANOVA findings confirm that consumers who consider AI innovative have far more confidence in these advertisements. Marketers should direct deepfake ad campaigns first to younger, tech-sensitive groups (Gen Z and Millennials) with greater underlying technological optimism.
- Adopt Open Disclosures: To address the lower scores in perceived authenticity (Mean = 3.91) and reduce ethical backlash, brands ought to add minor watermarks or labels identifying content as AI-generated. Openness creates lasting brand confidence far more than deceptive masquerading.
- Align AI Persona with Brand Values: Since the endorsement does not include the celebrity's physical presence, brands must ensure the AI portrayal exactly aligns with the celebrity's commonly known public image. Breaking character in an AI advertisement undermines the sense of genuineness, severing the connection to purchase intent.

X. FUTURE SCOPE

Further studies ought to consider longitudinal impacts to identify whether consumer distrust of deepfakes grows as technologies become more widespread. Comparative research within multiple product categories (e.g., healthcare vs. luxury fashion) might indicate different degrees of trust sensitivity. Lastly, exploring the effect of regulatory tags required by the ASCI would provide paramount information on the effect of formalized transparency on purchase intention.

REFERENCES

[1] Aboulnasr, K., & Song, Y. S. (2025). Emotional Responses to Digital Resurrections: Consumer Reactions to AI-Generated Dead Celebrity Endorsements. Journal of Consumer Behaviour, 24(6), 2823–2844.

[2] Chaddha, P., Agarwal, B., & Zareen, A. (2021). Investigating the Impact of Celebrity Endorsement on Consumers' Purchase Intention towards Online Travel Service Industry in India. Turkish Journal of Computer and Mathematics Education, 12(11), 6138–6147.

[3] Deepak, D., Saxena, R., Kumar, N., et al. (2026). Decoding Trust and Influence in the Age of AI. In Strategies, Dynamics, and Societal Impacts of Digital Influencer Marketing (pp. 31–62). IGI Global Scientific Publishing.

[4] Denslinger, A. T. (2025). Deceptive authenticity: Consumer perceptions of AI-generated deepfake advertising and the impact on consumer behavior (Doctoral dissertation, Capitol Technology University).

[5] Devi, M., Gangwar, V. P., & Kaur, A. (2026). Deepfake Advertising, Cognitive Dissonance, and the Future of Consumer Trust. In Neuromarketing in the Age of AI (pp. 485–514). IGI Global Scientific Publishing.

[6] Goel, P., Saxena, S., & Bhatia, C. (2025). Applications of AI in Creative Execution of Advertisements. Journal of Communication and Management, 4(03), 67–82.

[7] Kanwar, A., & Huang, Y. C. (2022). Indian females inclination towards cosmetic brands purchase intention influenced by celebrity endorsement. Review of Integrative Business and Economics Research, 11(3), 61–80.

[8] Powers, G., Johnson, J. P., & Killian, G. (2023). To tell or not to tell: The effects of disclosing deepfake video on US and Indian consumers' purchase intention. Journal of Interactive Advertising, 23(4), 339–355.

[9] Punjani, K. K., & Kumar, V. R. (2021). Impact of advertising puffery and celebrity trustworthiness on attitude and purchase intent. Journal of Advances in Management Research, 18(5), 738–757.

[10] Ruly, S. A., Riski, M. N. P., & Saisaria, M. I. C. (2021). The role of brand trust in mediating the correlation between the use of celebrity endorsers and online consumer purchase intentions. Russian Journal of Agricultural and Socio-Economic Sciences, 115(7), 131–137.

[11] Shukla, A., Malik, A., Meprathe, R., et al. (2025). Emerging Dominance of AI-Generated Influencers in Product Marketing: Evidence from Indian Market. In International Conference on AI Systems and Sustainable Technologies (pp. 269–279). Springer Nature Singapore.

[12] Singh, R. K., Kushwaha, B. P., Chadha, T., & Singh, V. A. (2021). Influence of digital media marketing and celebrity endorsement on consumer purchase intention. Journal of Content, Community & Communication, 14(7), 145–158.

[13] Sivathanu, B., Pillai, R., & Metri, B. (2023). Customers' online shopping intention by watching AI-based deepfake advertisements. International Journal of Retail & Distribution Management, 51(1), 124–145.

[14] Varshney, D., Nagrath, P., Vashishtha, S., & de Albuquerque, V. H. C. (Eds.). (2025). Generative Artificial Intelligence: Technology and Applications. CRC Press.

[15] Whittaker, L., Mulcahy, R., Russell-Bennett, R., Letheren, K., & Kietzmann, J. (2026). Examining Consumer Appraisals of Deepfake Advertising and Disclosure. Journal of Advertising Research, 66(1), 113–134.

[16] Wickramasinghe, W. W. W. M. N. C. M., Kumara, P. S., & Weerakkody, W. A. S. S. (2025). Driving Customer Purchase Intention through AI-Enabled TV Ads. South Asian Journal of Business Insights, 5(1).

[17] Zafar, G., Kasheer, M., Hameed, R. M., et al. (2025). Impact of deep-fake advertising disclosure on purchase intention. International Journal of Social Sciences Bulletin, 3(4), 578–603.

International Journal of Recent Development in Engineering and Technology
Website: www.ijrdet.com (ISSN 2347-6435 (Online) Volume 15, Issue 06, June 2026)