An Study on Celebrity Endorsement to Increase Nutraceutical Heath Products Sales Using Machine Learning

Alok Kumar

Research Scholar, GITAM School of Business Hyderabad, GITAM (Deemed to be University), Rudraram, Telangana, India

P. Pinakapani

Professor & Supervisor, GITAM School of Business Hyderabad, GITAM (Deemed to be University), Rudraram, Telangana, India

Abstract:

The nutraceutical industry has seen significant growth in recent years, driven by increasing consumer awareness of health and wellness. To further boost sales, companies are exploring innovative marketing strategies, including celebrity endorsements. This study investigates the impact of celebrity endorsements on the sales of nutraceutical health products using machine learning techniques. Leveraging a comprehensive dataset that includes sales figures, social media metrics, celebrity popularity indices, and consumer demographic information, we develop predictive models to quantify the effect of celebrity endorsements on product sales. Various machine learning algorithms, such as linear regression, decision trees, and neural networks, are employed to identify patterns and correlations. Additionally, the study explores the optimal selection of celebrities for endorsements using clustering techniques to segment celebrities based on their influence and alignment with brand values. This segmentation helps in making strategic decisions for future marketing campaigns. Overall, this research provides actionable insights for nutraceutical companies to enhance their marketing strategies through data-driven decision-making. By leveraging machine learning, companies can better understand consumer behavior, optimize celebrity endorsements, and ultimately drive higher sales of nutraceutical health products.

Keywords:

Nutraceutical Industry, Celebrity Endorsement, Sales Enhancement, Machine Learning, utilization, Marketing Strategies, Consumer Demographics.