



Swami Vivekananda Advanced Journal for Research and Studies

Online Copy of Document Available on: www.svajrs.com

ISSN:2584-105X

Pg. 12 - 21



Review Manipulation in E-Commerce: A Data-Driven Shield Against Consumer Deception

EARIKA CHIB

PH.D. RESEARCH SCHOLAR (LAW)

DEPARTMENT OF LAW, UNIVERSITY OF JAMMU

earikachib3202@gmail.com

Accepted: 08/07/2025

Published: 11/07/2025

Abstract

In the highly digitalized consumer market around the world, e-commerce review manipulation is a serious problem that erodes the legitimacy of online markets, distorts fair competition, and jeopardizes customer trust. Online reviews have a significant impact on judgements about what to buy, but the proliferation of phony and manipulated evaluations frequently produced by bots, paid reviewers, and incentive schemes has resulted in widespread consumer deception. The strategies employed in review fraud, the effects on consumer behavior, the legal and regulatory environment along with the role of technology in addressing the issue are all worth examining to understand the dynamics of this issue. Review manipulation causes customers to make poorly informed purchasing decisions by taking advantage of psychological biases including special proof, confirmation bias, and herd mentality. The unfair advantage that fraudulent companies have includes moral rivals that depend on real client feedback. Consumer losses are only one of the economic ramifications, as internet reviews lose credibility. The survival of digital markets depends on preserving consumer trust. This requires platforms must implement more robust fraud detection technologies, improve seller verification procedures, and set up clear review authentication procedures. There are many flaws in the present consumer protection legislation, and enforcement is still uneven and complicated by jurisdiction. To address these issues globally, more sanctions, platform accountability measures, and international regulatory collaboration are necessary. Modern fraud techniques like deepfake testimonials, AI-generated fake reviews, and unreported influencer marketing approaches require legal frameworks to change as per the emerging needs. Identification of the review fraud is considerably difficult as clever fraudsters are always changing their tactics. Also, many jurisdictional enforcement difficulties, technology constraints, review suppression issues are consistently arising. It clearly demands that combating review manipulation in e-commerce necessitates a comprehensive strategy covering consumer education, technology advancement, legislative changes, and economic justice. Restoring confidence and integrity in e-commerce would need increased openness in online markets, blockchain based review authentication with cross-border regulatory collaboration.

Keywords: *Consumer, e-commerce, regulatory, review fraud*

INTRODUCTION TO ROLE OF ONLINE REVIEWS IN E-COMMERCE

Consumers have benefited greatly from the exponential growth of e-commerce, but it has also led to dishonest activities like manipulating and fabricating reviews. This necessitates investigating the extent of review fraud, the strategies employed by vendors and outside organizations, and the psychological effects on customers. Using a data-driven strategy, it is critical to talk about the most recent methods in blockchain, AI, and machine learning that can detect and stop false reviews. In order to strengthen consumer protection against dishonest activities, policy proposals and regulatory actions must also be examined. In order to offer useful insights into the scope and consequences of the problem, real-world case studies of significant review fraud instances must also be presented.¹ It is necessary to talk about proactive consumer education and policy enforcement tactics in addition to detecting systems. Online reviews are a key component of customer decision-making in the digital economy. More than 90% of buyers, according to studies, check internet reviews before making a purchase. These evaluations lessen the anxiety that comes with online purchase by offering insights into the performance, quality, and dependability of the products. But when reviews become more significant, their veracity is called into doubt, which makes falsified reviews more common. The proliferation of e-commerce sites like Amazon, eBay, and Alibaba has led to a rise in fake review techniques. Fake reviews are frequently written to raise sales, deceive customers, and improve product ratings. Malicious rivals may write unfavorable evaluations to damage a rival's reputation. Both customers and respectable companies suffer financial losses as a result of this dishonest activity.² A data-driven strategy that makes use of blockchain, artificial intelligence (AI), and sentiment analysis is crucial to thwarting review manipulation. Businesses may preserve the integrity of e-commerce platforms and safeguard customer trust by doing large-scale analysis of review authenticity.³ The Federal Trade Commission (FTC) penalized skincare company Sunday Riley in 2019 for encouraging staff members to post digital product

evaluations on Sephora. This instance brought to light the increasing frequency of fraudulent reviews and the need for more stringent enforcement measures.⁴

OBJECTIVES OF THE RESEARCH

The main objectives of this research are mentioned as under:

1. To examine the procedures and effects of review manipulation on consumer trust.
2. To identify measures for identifying and controlling review fraud.
3. To determine better ways to increase consumer knowledge and defense for consumer protection.

RESEARCH QUESTIONS

1. How does review manipulation impact consumer trust and purchasing decision in e-commerce?
2. What are the most effective strategies and technologies for detecting and preventing review fraud?
3. How can consumer awareness and protection against deceptive reviews be improved?

SIGNIFICANCE OF THE RESEARCH

The study of e-commerce review manipulation has profound implications for fraud detection, market equity, customer trust, and regulatory efficacy. Online reviews have a significant role in shaping consumer behavior in a variety of sectors, including digital services, retail, and hospitality. The spread of false and altered evaluations, however, compromises the credibility of e-commerce sites and results in monetary losses, consumer fraud, and unfair competition in the market. By examining fraudulent review strategies, their psychological and economic effects, and the efficacy of regulatory measures, the research seeks to improve consumer protection systems and guarantee openness in digital markets. By analyzing current consumer protection legislation and pinpointing areas for improvement, it also aids in the creation of new policies and legislative changes. By automating the detection of fraudulent review patterns, confirming customer identities, and guaranteeing the legitimacy of online reviews, the combination of artificial intelligence, machine learning, sentiment analysis, and blockchain technology holds the potential to completely transform fraud detection systems. To combat review manipulation globally, the study recommends multi-jurisdictional enforcement procedures, international collaboration, data-sharing programs, and stronger enforcement against review fraud.

¹Sarvjeet Kaur Chatrath, G.S. Batra, *et.al*, "Handling consumer vulnerability in e-commerce product images using machine learning"⁸ *Heliyon* e10743 (2022).

² Tao Chen, Premaratne Samaranayake, *et.al*, "The Impact of Online Reviews on Consumers' Purchasing Decisions: Evidence From an Eye-Tracking Study" 13 *Frontiers in Psychology* (2022).

³ Satish Kumar, Weng Marc Lim, *et.al*, "Artificial Intelligence and Blockchain Integration in Business: Trends from a Bibliometrics- Content Analysis" 25 *SPRINGER NATURE Link* 871-896 (2023).

⁴ Alaa Elassar, "Skin care brand Sunday Riley wrote fake Sephora reviews for almost two years, FTC says" *CNN US*, Oct. 23, 2019.

RESEARCH METHODOLOGY

This research employs a multi-method approach, combining qualitative inquiry and doctrinal legal analysis, to examine review manipulation in e-commerce. In order to address review fraud, the research evaluates current laws, rules, and regulatory policies. Stakeholder interviews, content analysis, and case studies will all be used in the qualitative research approaches to offer an in-depth viewpoint. In order to demonstrate various fraudulent strategies and regulatory reactions, real-world case studies will also help. Recurring trends in review manipulation tactics will be identified through thematic analysis of customer complaints, publicly accessible information of reviews, and corporate responses. Interviews of stakeholders will provide personal knowledge of the difficulties presented by fraudulent reviews. In order to enable users to recognize and steer clear of misleading reviews, strategies for raising consumer awareness and education will be put forth.

DEFINITION AND TYPES OF REVIEW MANIPULATION

Review manipulation refers to the deliberate alteration of online reviews to mislead consumers. The main types of review fraud include:

1. **Fake Positive Reviews:** Sellers pay individuals or bots to leave glowing feedback.
2. **Negative Review Bombing:** Competitors or disgruntled customers flood a product with bad reviews.
3. **Astroturfing:** Large-scale coordinated campaigns to create a false impression of authenticity.
4. **Incentivized Reviews:** Reviews written in exchange for free products or money

Review manipulation is the intentional falsification, distortion, or change of online reviews in order to deceive customers, sway their decisions to buy, and artificially improve or harm a product's reputation.⁵ This dishonest technique is pervasive on a number of e-commerce sites, such as TripAdvisor, Amazon, eBay, and Walmart, where customer reviews are very important in influencing purchasing decisions. Review manipulation erodes the legitimacy of online markets, takes advantage of customer trust, and produces an unfair competitive environment. Sellers looking to increase sales, rivals trying to undermine competing companies, and third-party organizations

making money off of manipulated review schemes are the main drivers of it. Consumers who manipulate reviews suffer more than just monetary losses and companies that depend on real input are also affected, and regulatory efforts to preserve market transparency are weakened.⁶ The complexity of manipulation techniques keeps improving, making identification and enforcement a constant issue, even though some regulatory agencies, like the Federal Trade Commission (FTC) and the UK's Competition and Markets Authority (CMA), have taken action to prevent review fraud. Fake good reviews, review bombing, incentivized feedback, and coordinated review farms are just a few of the ways that reviews can be manipulated, and each one poses different difficulties for customers, authorities, and online retailers. Fake positive reviews are one of the most common forms of review manipulation, when companies buy or create good evaluations to artificially raise product ratings. These evaluations, which are usually produced by bots, hired people, or dishonest marketing companies, typically contain generalized praise, overzealous excitement, or unrelated facts. Some businesses even go so far as to set up fake accounts in order to write several glowing evaluations, giving the impression that their goods are more well-liked and dependable than they actually are. This manipulation unjustly favors dishonest vendors over legitimate companies and misleads customers into purchasing inferior or deceptively presented goods.⁷ Even well-known companies use dishonest tactics to sway consumer opinion, as seen by the Sunday Riley Skincare case, in which staff members were told to post fake evaluations on Sephora's website. In order to damage a brand's reputation, people or rivals frequently use a technique known as 'negative review bombing,' which involves flooding a product page with fictitious bad reviews. This strategy is especially prevalent in sectors where companies mostly depend on internet reviews, such as electronics, gaming, and hotels. Negative review bombing can be planned by competitors, irate consumers, or activists who want to harm a brand's reputation. Sometimes companies use outside companies to write negative evaluations on rival products, which results in lost sales, eroded customer confidence, and irreversible harm to a company's

⁵ Aryan Dash & Debashish Halder, "Addressing Fake Online Reviews and Review Bombing: Legal Perspectives in India" *The Contemporary Law Forum*, Sept. 27, 2024.

⁶ Kurniawan Yunus Ariyono & Sukma Irdiana, *et.al.*, "Effect of online buying experience on customer loyalty" 1 *International Journal of Social Science* 549–552 (2022).

⁷ Algorithms: How they can reduce competition and harm consumers, *Competitions & Market Authority*, GOV.UK, available at: <https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers>, Jan. 19, 2021 (last visited on July 1, 2025).

reputation.⁸ One prominent example of this was on TripAdvisor, when a modest bed and breakfast in Italy was able to influence its position by posting hundreds of fake positive ratings and orchestrating nasty assaults against rival places. Incentivized reviews are a more subdued but no less dishonest type of review manipulation, in which customers are rewarded with free goods, special offers, or cash for providing favorable ratings. Customers find it challenging to distinguish between sincere ideas and biased recommendations since many companies and influencers disregard the rules requiring incentivized reviews to be reported on particular platforms, including Amazon.⁹ Customers tend to exaggerate the advantages and ignore any drawbacks as a result of these evaluations distorted portrayal of product quality. To make matters worse, a lot of 'review clubs' and other third-party organizations focus on matching companies with people who are eager to submit paid reviews. The Fair-Trade Commission of Taiwan punished Samsung in a well-known case for astroturfing, a practice in which it hired students to write critical evaluations of rival companies while promoting its own goods. In an effort to create an illusion of popularity and authenticity, companies frequently utilize astroturfing in brand promotions, IT product debuts, and political campaigns. Astroturfing, in which businesses fabricate grassroots movements to build false buzz around a product or brand, is another advanced strategy.¹⁰ This extensive manipulation technique entails employing a number of people to publish reviews, participate on forums, and hold discussions that exaggerate the perception of broad customer happiness.

A significant force in review manipulation has also emerged called review farms, which are networks of automated bots or paid reviewers. In exchange for cash, hundreds or thousands of fake accounts post reviews as part of these schemes. Since many review farms use underground websites, private messaging groups, and social media platforms, it is challenging to monitor and control them.¹¹ Amazon's 2021 crackdown on a review fraud ring based in China,

which involved 200,000 fake reviews linked to a coordinated network of dishonest sellers and paid reviewers, is a notable example. Due to the quick adaptation of scammers, the issue still exists even after the e-commerce behemoth tried to delete these reviews. Review gating is another form of review manipulation in which businesses selectively request favorable reviews while stifling or discouraging unfavorable ones.¹²

In order to avoid potentially bad input from impacting total ratings, this method entails screening consumers depending on their experience. Happy customers are encouraged to write public evaluations, while unsatisfied ones are redirected to private customer support channels. This strategy distorts public image by increasing ratings and stifling critical perspectives, even if it is less obvious than blatant manipulated reviews. Fake positive reviews, negative review bombing, incentivized feedback, astroturfing, review farms, and review gating are just a few of the many dishonest ways that review manipulation manifests itself. These dishonest business methods provide dishonest companies unfair advantages, hinder market competition, and undermine customer confidence.¹³ The swift development of fraud strategies still presents difficulties, even with the efforts of regulatory agencies and e-commerce sites to address this problem.

PSYCHOLOGICAL AND FINANCIAL IMPACT OF FAKE REVIEWS IN CONSUMER DECEPTION

Consumers who are subjected to falsified reviews suffer psychologically and financially, which can result in cognitive biases, decision fatigue, stress, financial loss, and long-term harm to their trust in online buying. Due to lost sales, damage to their reputation, and legal repercussions, businesses incur financial losses. Developing practical solutions that safeguard customers and uphold the integrity of online markets requires an understanding of these effects. Since trust is the cornerstone of consumer decision-making, the psychological effects of fraudulent reviews on customers also include the deterioration of confidence in online marketplaces.¹⁴

Customers who often come across falsified reviews are suspicious and wonder if any reviews, whether favorable or unfavorable, can be relied upon. Their

⁸ Dearbail Jordan, "Skincare firm Sunday Riley avoids fine for staff's fake reviews" *BBC*, Oct 22, 2019.

⁹ Raffaele Filieri, Fulya Acikgoz, *et.al.*, "Is TripAdvisor still relevant? The influence of review credibility, review usefulness, and ease of use on consumers' continuance intention" 33 *International Journal of Contemporary Hospitality Management* (2020).

¹⁰ "Samsung fined in Taiwan for 'dirty tricks' campaign against smartphone rival HTC", *The Guardian*, Oct. 24, 2013.

¹¹ "Amazon Review Scam", available at: <https://news.ycombinator.com/item?id=25038734> (2020) (last visited on July 1, 2025).

¹² Frank Chen, "Amazon's war on fake reviews hits Chinese vendors", *ASIA TIMES* (June 23, 2021).

¹³ Elaine Kamarck & Darrell M. West, "Lies that Kill- A citizens guide to misinformation" *Nomos e Library* (2024).

¹⁴ Johannes Hagen & Amedeus Malisa, "Financial fraud and individual investment behavior" 203 *Journal of Economic Behavior & Organization* (2022).

image of whole platforms may be affected by this scepticism, which might go beyond specific items and lower interaction with e-commerce companies. By taking use of several cognitive biases, fake reviews persuade customers to base their judgements on misrepresented facts. Social proof, confirmation bias, and herd mentality (Bandwagon Effect) are psychological traits that are frequently taken advantage of. The Sunday Riley affair, in which staff members were instructed to post fictitious good reviews and detest critical ones in order to improve product rankings on Sephora's website, is a well-known example of the bandwagon effect in review fraud.¹⁵

Because customers sometimes find it difficult to distinguish between authentic and false reviews, decision fatigue and anxiety are frequent outcomes of the deluge of contradicting evaluations, which can cause stress and frustration. For instance, travelers said they were overwhelmed by the uncertainty of selecting lodging when websites such as Yelp and TripAdvisor came under fire for having fabricated restaurant and hotel ratings. Customers became anxious as a result of their inability to trust internet suggestions, which compelled them to look for alternate verification techniques like comparing several sources or depending on word-of-mouth referrals.¹⁶ The basic ease of online buying is contradicted by this extra work, which eventually discourages some customers from using e-commerce platforms at all. Consumers are at serious financial danger from fake reviews in e-commerce, which can cause market distortion, stress, manipulative decision-making, diminished trust, and financial losses. Consumer scepticism, cognitive biases, and anxiety related to navigating untrustworthy internet feedback are all clear indicators of the psychological effect.¹⁷ In terms of money, evaluations trick customers into buying sub-standard goods, signing up for wrong services, and buying from dishonest vendors, resulting in decreased trust in e-commerce sites and financial loss.

Examples like the Sunday Riley scam, Google's bad review campaign, and Amazon's false review controversy highlight how pervasive the issue is and how it has real-world repercussions. The integrity of digital marketplaces is at risk due to the continuation of review manipulation, which calls for more robust AI-driven fraud detection, more stringent regulatory enforcement, and more consumer awareness

campaigns to shield customers from deceit. Not just physical goods are susceptible to fake evaluations but digital goods and subscription-based services are also severely impacted. Customers may become locked into long-term financial obligations and be unable to get their money back if they sign up for fraudulent services based on fictitious favorable evaluations.¹⁸ For example- In a 2018 investigation found that a number of VPN firms were increasing their subscriber base by posting deviated favorable evaluations on tech websites, which resulted in financial losses and privacy violations. Fake reviews distort the competitive landscape, costing ethical firms sales and market share.¹⁹

Local companies suffered financial losses as a result of fewer reservations and sales as well as long-term harm to their reputations as a result of Google's 2019 crackdown on bogus negative reviews. Fake reviews have an economic influence that goes beyond only businesses and individual customers as they also affect market pricing. Because fraudulent vendors have an unfair edge, legitimate sellers are compelled to invest more in marketing and promotional tactics, which raises the cost of products for customers. The operational expenses of fraud detection, legal lawsuits, and AI monitoring systems incurred by platforms that try to stop fraudulent reviews are frequently transferred to users in the form of higher platform and service prices.²⁰ In summary, customers are at serious psychological and financial risk from fraudulent reviews, which can result in diminished trust, swayed judgement, anxiety, financial losses, and market distortion.

MECHANISMS AND TECHNOLOGIES TO DETECT FAKE REVIEWS

It takes a mix of technology tools, data analysis methods, and consumer-driven reporting procedures to identify fraudulent reviews on e-commerce platforms. Blockchain technologies, verified purchase tracking, geolocation monitoring, customer reporting, and AI-powered detection systems are common and readily available methods for identifying fraudulent reviews.

Artificial intelligence (AI)-powered detection systems examine reviews textual content using Natural Language Processing (NLP) algorithms to look for questionable trends. Unusual phrase patterns, repetitive phrasing in several reviews, and

¹⁵ ChuChua Cao, "The Impact of Fake Reviews of Online Goods on Consumers" 39 *BCP Business & Management* (2023).

¹⁶ "TripAdvisor removes 'reviews you can trust' slogan from its website", *Daily Mail*, Sept. 13, 2021.

¹⁷ "The Impact Of Fake Reviews On Consumers And Businesses" *Faster Capital* (last visited on July 1, 2025).

¹⁸ David Krause, "The Rise of Online Scams and Consumer Protections: A Comparative Analysis of the U.S. and Singapore" *ResearchGate* (2025).

¹⁹ "The consumer VPN industry is rife with deceptive advertising: US lawmakers" *ET Brand Equity* (July 18, 2022).

²⁰ Juan Maria Martinez Otero, "Fake Reviews on Online Platforms: Perspectives from the Us, UK and EU legislations," 1 *SPRINGER NATURE Link* (2021).

excessively promotional language may all be detected by NLP algorithms. Extreme positivity or negativity is detected by sentiment analysis algorithms. It may be a sign of manipulated reviews. Machine learning anomaly detection uses AI models to examine trends in review submission behavior, such as abrupt rating increases, repeated phrasing, and fast posting.²¹

Verified Buyer Badge, User Profile Analysis, IP Address and Geographic Tracking, Review Voting and Consumer Reporting Features, Time-Based and Frequency-Based Anomaly Detection, Blockchain for Review Transparency, and Manual and AI-Assisted Human Moderation are some of the mechanisms for verified purchases and user authentication. In order to identify reviews from consumers who have really bought the product as Verified Purchase and User Authentication Mechanisms are necessary filters. Fake accounts with generic usernames, no profile picture, or an abrupt increase in reviews are detected by User Profile Analysis. Clusters of fraudulent reviews coming from similar IP addresses can be found by using IP Address and Geographic Tracking, which tracks reviewers IP addresses to identify several reviews from the same network or area.²² While temporal-Based and Frequency-Based Anomaly Detection track the temporal patterns of reviews to identify fraud, Review Voting and Consumer Reporting Features let consumers upvote or downvote reviews according to their usefulness.²³ Credibility is increased by blockchain technology, which makes sure that reviews cannot be changed, removed, or manipulated by sellers or other parties.²⁴

Human moderators are used in both manual and AI-assisted human moderation to examine content that has been marked. They base their conclusions on context, review language, and user interaction. Facebook Marketplace eliminates fake product evaluations and deceptive ratings with a combination of AI and human monitoring. To sum up, e-

commerce companies fight fraudulent reviews by combining blockchain technology, geolocation monitoring, verified purchase tracking, AI-powered detection, and customer reporting. While user identification and confirmed purchase badges provide trustworthiness, machine learning algorithms spot questionable user behavior, unusual rating spikes, and linguistic trends. By reporting bogus material and upvoting or downvoting reviews, customers also actively participate.²⁵ New approaches to review transparency, such as blockchain, are being developed as technology advances to further improve review authenticity.

IMPACT OF REGULATORY AND POLICY FRAMEWORK ON VARIOUS ASPECTS OF REVIEW MANIPULATION

In order to safeguard customers, uphold fair competition, and guarantee transparency in online marketplaces, the legislative and legal framework pertaining to review manipulation in e-commerce is essential. To combat fraudulent reviews, governments, oversight organizations, and online retailers have put in place a number of legislative measures and enforcement strategies. These frameworks set standards for moral corporate conduct, penalize offenders, and discourage dishonest behavior. The purpose of regulations is to shield customers from false information that can sway their decisions to buy. Consumer impression is manipulated by fake reviews, which can result in losses and discontent.²⁶

A number of laws specifically forbid misleading commercial practices and fraudulent advertising in order to combat this. Commercial practices that deceive consumers, such as manipulated online reviews and false endorsements, are prohibited by the European Union Unfair Commercial Practices Directive (Directive 2005/29/EC), the Federal Trade Commission (FTC) Act (USA), Section 5 of the FTC Act, and the UK Consumer Protection from Unfair Trading Regulations (CPRs), 2008.²⁷ Clear legal repercussions for businesses, people, and platforms

²¹ "Leveraging Predictive Analytics for Fraud Detection and Prevention" Tookitaki, *available at* : <https://www.Tookitaki.com/compliance-hub/leveraging-predictive-analytics-for-fraud-detection-and-prevention> (last visited on July 1, 2025).

²² "Managing Reviews: Verified Reviews & the Verified Buyer Badge" STAMPED, *available at*: <https://stampedsuppo rt.stamped.io/hc/en-us/articles/9906379215643-Managing-Reviews-Verified-Reviews-the-Verified-Buyer-Badge> (last visited on July 1, 2025).

²³ Wenqian Liu, JingSha He *et.al.*, "A Method for the Detection of Fake Reviews Based on Temporal Features of Reviews and Comments" *IEEE Engineering Management Review* (2019).

²⁴ Rajesh Ramcharandiran, "Using Blockchain Technology To Improve Trust In eCommerce Reviews" *ResearchGate* (2018).

²⁵ "How Facebook uses artificial intelligence to moderate content," Facebook, *available at*: <https://www.facebook.com/help/1584908458516247> (last visited on July 1, 2025).

²⁶ YanYan Cao, Nabeel Mahdi Althabhai *et.al.*, "PROTECTING THE RIGHT TO KNOW IN ONLINE SHOPPING: CHALLENGES AND SOLUTIONS IN CHINA" 5 *Journal of Lifestyle & SDG'S Review* 1-24 (2025).

²⁷ "Protecting consumers from unfair trading practices Consultation Regulation Impact Statement The Treasury," *The Treasury Australian Government*, *available at*: <https://treasury.gov.au/sites/default/files/2023-08/c2023-430458-cris1.pdf> (2023).

engaged in review fraud are established by regulatory frameworks. Lawsuits, fines, and penalties operate as deterrents, making sure companies follow moral marketing guidelines. For instance, Sunday Riley Skincare was fined by the Federal Trade Commission in 2019 after it was found that staff members were using falsified information and review to increase product ratings on Sephora.²⁸

E-commerce platforms are also compelled by regulatory constraints to improve their own procedures for identifying and stopping fraudulent reviews. In accordance with regulatory requirements, several platforms now deploy AI-based screening, more stringent user verification, and transparency measures. Yelp's Consumer Alert Program, Google's Review Policy, and Amazon's Anti-Fake Review Policy are examples of platform-specific regulations. Enforcing laws against review manipulation requires international collaboration. Consumer protection organizations and governments work together to enforce laws, exchange intelligence, and standardize review authenticity procedures.²⁹ Cross-border enforcement of consumer protection rules inside the EU is made possible by international agreements and legislation such as the European Consumer Protection Cooperation (CPC) Regulation and the OECD Guidelines for Consumer Protection in E-Commerce (2016).³⁰ The evolving tactics of fraudsters, jurisdictional problems in prosecuting international fake review networks, and the lack of resources to monitor millions of reviews across platforms make it difficult to enforce regulations against review manipulation. Some suggested future measures include increased penalties for companies that use review manipulation tactics, public awareness campaigns to inform consumers about fake reviews, and stronger AI collaboration between governments and e-commerce companies.³¹ To sum up, regulatory

frameworks have been crucial in combating review manipulation, which has improved accountability, transparency, and consumer protection. Nevertheless, there are still issues with resource limitations, changing fraud strategies, and cross-border enforcement. Future developments in blockchain, artificial intelligence, and international collaboration will strengthen the battle against fraudulent reviews and guarantee a trustworthy and equitable online marketplace for customers.³²

POTENTIAL CHALLENGES AND SUGGESTIVE MEASURES

Business incentives to manipulate reviews, inconsistent and ineffective law enforcement, sophisticated fraud tactics, consumer vulnerability and ignorance, and resource limitations in monitoring and enforcement are just a few of the many obstacles facing the fight against review manipulation in e-commerce. Advanced AI and machine learning models, blockchain verification systems, improved international collaboration, and cross-border legal frameworks are some suggested solutions. In order to identify irregularities, platforms should use multi-layered AI algorithms that examine reviewer behavior, writing trends, and past purchases.³³

The absence of uniform international rules leads to gaps that scammers take advantage of, while jurisdictional concerns in international e-commerce make enforcement challenging. Regulatory agencies like the FTC (USA), CMA (UK), and European Commission must work together to create international enforcement agreements and cross-border legislative frameworks in order to lessen these difficulties.³⁴ Marketplaces sometimes hesitant to take firm action against sellers who generate large profits, and businesses see deceptive reviews as a competitive tactic. Governments should implement reputation-based seller rating systems and impose stronger financial penalties on companies found to be manipulating reviews in order to deter unethical behavior. Customers frequently place complete faith in reviews, and those who are unaware of fraudulent ratings are especially vulnerable to fraud.³⁵ Programs for consumer education, transparency labelling, and

²⁸ Chloe Deng, "Sunday Riley escapes fines for posting fake reviews", Osborne Clarke (2019) *available at*: <https://marketinglaw.osborneclarke.com/advertising-regulation/sunday-riley-escapes-fines-posting-fake-reviews/> (last visited on July 1, 2025).

²⁹ George Nguyen, "How Google and Yelp handle fake reviews and policy violations", *available at*: <https://searchengineland.com/how-google-and-yelp-handle-fake-reviews-and-policy-violations-374071> (2021).

³⁰ Christine Riefa, "Cross-border enforcement of consumer law: Looking to the future", *University of Reading*, *available at*: https://unctad.org/system/files/information-document/ccpb_WG_e-commerce_cross-Border_Riefa_en.pdf (2022).

³¹ Amos Kipnetich, "A review of online scams and financial frauds in the digital age" 22(1) *GSC Advanced Research and Reviews*, 302-329 (2025).

³² Mohd Javaid, Abid Haleem *et.al.*, "A review of Blockchain Technology applications for financial services" 2(3) *Bench Council Transactions on Benchmarks, Standards and Evaluations* (2022).

³³ Ravikumar J S, Shivani Naik *et.al.*, "Issues Related to Fake Reviews and Deceptive Marketing Practices - An Analytical Study" 28(5) *Academy of Marketing Studies Journal* (2024).

³⁴ *Supra* note 30.

³⁵ Justin Malbon, "Taking Fake Online Consumer Reviews Seriously" 36(2) *Journal of Consumer Policy* (2013).

automatic crowdsourced review verification are some ways to solve issue. The enormous number of evaluations and the paucity of funds and resources for regulators are examples of resource limitations in monitoring and enforcement. Platforms should put in place AI-based review monitoring committees and user-driven reporting mechanisms to solve these issues.³⁶

Despite advancements in legislation and detection technologies, fraudsters continue to evolve, posing a constant challenge to both businesses and authorities. Better AI-driven fraud detection, international legal collaboration, raised consumer awareness, and harsher sanctions for violators are the keys to defeating review manipulation in the future.³⁷ Fairness and transparency in e-commerce markets may be ensured by better protecting the integrity of online evaluations through the integration of technology, legislation, and user engagement.

CONCLUSION

A developing issue that impacts customers, companies, and the integrity of online markets is review manipulation in e-commerce. The reputation of a company, consumer choices, and purchasing patterns are all greatly impacted by online reviews. However, extensive review manipulation has damaged customer confidence and skewed fair competition. Examples of this include false favorable recommendations, hostile negative assaults, or incentivized feedback. Consumers suffer financial losses and psychological deceit as a result of fraudulent merchants and third-party organizations taking advantage of weaknesses to produce fictitious ratings.

Prominent incidents such as the TripAdvisor hotel rating scam and the Sunday Riley false review controversy demonstrate how companies use dishonest tactics to increase sales, frequently at the price of customer confidence. Although the development of blockchain, artificial intelligence, and machine learning has created new opportunities for identifying and stopping fraudulent reviews, these detection methods have drawbacks of their own, including the incapacity to differentiate highly complex fake reviews from real ones. Legal tools to combat fraudulent reviews include the Federal Trade

Commission Act (USA),³⁸ the UK Consumer Protection Regulations,³⁹ and the European Union's Unfair Commercial Practices Directive.⁴⁰ However, enforcement of these laws is still difficult because of jurisdictional restrictions and the worldwide scope of e-commerce. To properly handle this issue, governments, e-commerce companies, and regulatory bodies must work together more closely. In order to evade detection systems, fraudsters are always changing their strategies, therefore platforms and regulators are always fighting to remain ahead. Due to a lack of effective cross-border enforcement, vendors in several countries are able to avoid responsibility. Because manipulative sellers account for a sizable portion of their revenue streams, several e-commerce companies are hesitant to take strong action against them. Strengthening AI algorithms for fraud detection, putting in place blockchain-based review authentication systems, imposing harsher penalties on dishonest sellers, and promoting consumer involvement in reporting suspicious reviews are some ways to improve consumer protection against fake reviews. In order to combat cross-border manipulated review networks, regulatory agencies must also strive for international collaboration.⁴¹ In order to prevent review manipulation and promote a more open, trustworthy, and moral online buying experience, a multifaceted strategy integrating technology innovation, regulatory action, company ethics, and consumer awareness is crucial.

REFERENCES

1. Alaa Elassar, "Skin care brand Sunday Riley wrote fake Sephora reviews for almost two years, FTC says" CNN US, Oct. 23, 2019.
2. Algorithms: How they can reduce competition and harm consumers, *Competitions & Market Authority*, GOV.UK, available at: <https://www.gov.uk/government/publication>

³⁸ The Federal Trade Commission Act, USA, available at: https://en.wikipedia.org/wiki/Federal_Trade_Commission_Act_of_1914 (last visited on July 1, 2025).

³⁹ Consumer Protection Laws and Regulations, United Kingdom 2025, available at: <https://iclg.com/practice-areas/consumer-protection-laws-and-regulations/united-kingdom> (last visited on July 1, 2025).

⁴⁰ "EU's Unfair Commercial Practices Directive (UCPD) and Empowering Consumers for the Green Transition Directive," Carbonfact, available at: <https://www.carbonfact.com/blog/policy/ucpd-fashion> (last visited on July 1, 2025).

⁴¹ Sujith Kumar Kupunarapu, "Harnessing AI for Enhanced Fraud Detection and Secure Transaction Systems in E-Commerce" 4(3) *EPH - International Journal of Science And Engineering* (2018).

³⁶ "Opportunities And Challenges Of New Technologies For Aml/Cft," *FATF* (2021), available at: <https://www.fatf-gafi.org/content/dam/fatf-gafi/guidance/Opportunities-Challenges-of-New-Technologies-for-AML-CFT.pdf> (last visited on July 1, 2025).

³⁷ Minhaz Uddin Akbar, Ibrahim, *et.al.*, "The Influence of Artificial Intelligence on Consumer Trust in E-Commerce: Opportunities and Ethical Challenges" 2(6) *European Journal of Theoretical and Applied Sciences* 250-259 (2024).

- ns/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers, Jan. 19, 2021 (last visited on July 1, 2025).
3. "Amazon Review Scam," available at: <https://news.ycombinator.com/item?id=25038734> (2020) (last visited on July 1, 2025).
4. Amos Kipnetich, "A review of online scams and financial frauds in the digital age" 22(1) *GSC Advanced Research and Reviews*, 302-329 (2025).
5. Aryan Dash & Debashish Haldar, "Addressing Fake Online Reviews and Review Bombing: Legal Perspectives in India" *The Contemporary Law Forum*, Sept. 27, 2024.
6. *Bench Council Transactions on Benchmarks, Standards and Evaluations* (2022).
7. CHALLENGES AND SOLUTIONS IN CHINA" 5 *Journal of Lifestyle & SDG'S Review* 1-24 (2025).
8. ChuChua Cao, "The Impact of Fake Reviews of Online Goods on Consumers" 39 *BCP Business & Management* (2023).
9. Chloe Deng, "Sunday Riley escapes fines for posting fake reviews", Osborne Clarke (2019) available at: <https://marketinglaw.osborneclarke.com/advertising-regulation/sunday-riley-escapes-fines-posting-fake-reviews/> (last visited on July 1, 2025).
10. Christine Riefa, "Cross-border enforcement of consumer law: Looking to the future", *University of Reading*, available at : https://unctad.org/system/files/information-document/ccpb_WG_e-commerce_cross-Border_Riefa_en.pdf (2022).
11. Consumer Protection Laws and Regulations, United Kingdom 2025, available at : <https://iclg.com/practice-areas/consumer-protection-laws-and-regulations/united-kingdom> (last visited on July 1, 2025).
12. David Krause, "The Rise of Online Scams and Consumer Protections: A Comparative Analysis of the U.S. and Singapore" *ResearchGate* (2025).
13. Dearbail Jordan, "Skincare firm Sunday Riley avoids fine for staff's fake reviews" BBC, Oct 22, 2019.
14. Elaine Kamarck & Darrell M. West, "Lies that Kill- A citizens guide to misinformation" *Nomos e Library* (2024).
15. "EU's Unfair Commercial Practices Directive (UCPD) and Empowering Consumers for the Green Transition Directive," Carbonfact, available at: <https://www.carbonfact.Com/blog/policy/ucpd-fashion> (last visited on July 1, 2025).
16. Frank Chen, "Amazon's war on fake reviews hits Chinese vendors", *ASIA TIMES* (June 23, 2021).
17. George Nguyen, "How Google and Yelp handle fake reviews and policy violations", available at : <https://searchengineland.com/how-google-and-yelp-handle-fake-reviews-and-policy-violations-374071> (2021).
18. "How Facebook uses artificial intelligence to moderate content," Facebook, available at: <https://www.facebook.com/help/1584908458516247> (last visited on July 1, 2025).
19. Justin Malbon, "Taking Fake Online Consumer Reviews Seriously" 36(2) *Journal of Consumer Policy* (2013).
20. Johannes Hagen & Amedeus Malisa, "Financial fraud and individual investment behavior" 203 *Journal of Economic Behavior & Organization* (2022).
21. Juan Maria Martinez Otero, "Fake Reviews on Online Platforms: Perspectives from the Us, UK and EU legislations," 1 *SPRINGERNATURE Link* (2021).
22. Kurniawan Yunus Ariyono & Sukma Irdiana, *et.al.*, "Effect of online buying experience on customer loyalty" 1 *International Journal of Social Science* 549-552 (2022).
23. "Leveraging Predictive Analytics for Fraud Detection and Prevention" Tookitaki , available at : <https://www.Tookitaki.com/compliance-hub/leveraging-predictive-analytics-for-fraud-detection-and-prevention> (last visited on July 1, 2025).
24. "Managing Reviews: Verified Reviews & the Verified Buyer Badge" STAMPED, available at: <https://stampedsupport.stamped.io/hc/en-us/articles/9906379215643-Managing-Reviews-Verified-Reviews-the-Verified-Buyer-Badge> (last visited on July 1, 2025).
25. Minhaz Uddin Akbar, Ibrahim, *et.al.*, "The Influence of Artificial Intelligence on Consumer Trust in E-Commerce: Opportunities and Ethical Challenges" 2(6) *European Journal of Theoretical and Applied Sciences* 250-259 (2024).
26. Mohd Javaid , Abid Haleem *et.al.*, "A review of Blockchain Technology applications for financial services" 2(3)
27. " Opportunities And Challenges Of New Technologies For Aml/Cft," *FATF* (2021), available at : <https://www.fatf-gafi.org/content/dam/fatf-gafi/guidance/Opportunities-Challenges-of-New-Technologies-for-AML-CFT.pdf> (last visited on July 1, 2025).
28. "Protecting consumers from unfair trading practices Consultation Regulation Impact

- Statement The Treasury,” *The Treasury Australian Government*, available at: <https://treasury.gov.au/sites/default/files/2023-08/c2023-430458-cris1.pdf> (2023).
29. Ravikumar J S, Shivani Naik *et.al.*, “Issues Related to Fake Reviews and Deceptive Marketing Practices - An Analytical Study” 28(5) *Academy of Marketing Studies Journal* (2024).
 30. Raffaele Filieri, Fulya Acikgoz, *et.al.*, “Is TripAdvisor still relevant? The influence of review credibility, review usefulness, and ease of use on consumers’ continuance intention” 33 *International Journal of Contemporary Hospitality Management* (2020).
 31. Rajesh Ramcharandiran, “Using Blockchain Technology To Improve Trust In eCommerce Reviews” *ResearchGate* (2018).
 32. “Samsung fined in Taiwan for ‘dirty tricks’ campaign against smartphone rival HTC”, *The Guardian*, Oct. 24, 2013.
 33. Sarvjeet Kaur Chatrath, G.S. Batra, *et.al.*, “Handling consumer vulnerability in e-commerce product images using machine learning” 8 *Heliyon* e10743 (2022).
 34. Satish Kumar, Weng Marc Lim, *et.al.*, “Artificial Intelligence and Blockchain Integration in Business: Trends from a Bibliometrics- Content Analysis” 25 *SPRINGER NATURE Link* 871-896 (2023).
 35. Sujith Kumar Kupunarapu, “Harnessing AI for Enhanced Fraud Detection and Secure Transaction Systems in E-Commerce” 4(3) *EPH - International Journal of Science And Engineering* (2018).
 36. Tao Chen, Premaratne Samaranayake, *et.al.*, “The Impact of Online Reviews on Consumer s Purchasing Decisions: Evidence From an Eye-Tracking Study” 13 *Frontiers in Psychology* (2022).
 37. “The consumer VPN industry is rife with deceptive advertising: US lawmakers” *ET Brand Equity* (July 18, 2022).
 38. The Federal Trade Commission Act, USA , available at : https://en.wikipedia.org/wiki/Federal_Trade_Commission_Act_of_1914 (last visited on July 1, 2025).
 39. “The Impact Of Fake Reviews On Consumers And Businesses” *Faster Capital* (last visited on July 1, 2025).
 40. “TripAdvisor removes ‘reviews you can trust’ slogan from its website,” *Daily Mail*, Sept. 13, 2021.
 41. Wenqian Liu, JingSha He *et.al.*, “A Method for the Detection of Fake Reviews Based on Temporal Features of Reviews and Comments” *IEEE Engineering Management Review* (2019).
 42. YanYan Cao, Nabeel Mahdi Althabhai *et.al.*, “PROTECTING THE RIGHT TO KNOW IN ONLINE SHOPPING:CHALLENGES AND SOLUTIONS IN CHINA” 5 *Journal of Lifestyle & SDG’S Review* 1-24 (2025).

Disclaimer/Publisher’s Note: The views, findings, conclusions, and opinions expressed in articles published in this journal are exclusively those of the individual author(s) and contributor(s). The publisher and/or editorial team neither endorse nor necessarily share these viewpoints. The publisher and/or editors assume no responsibility or liability for any damage, harm, loss, or injury, whether personal or otherwise, that might occur from the use, interpretation, or reliance upon the information, methods, instructions, or products discussed in the journal’s content.
