

Fake reviews in the hospitality industry

Jelena Tepavčević^{1,*}

¹*University of Novi Sad, Faculty of Science, Department of Geography, Tourism and Hotel Management;*
jelenat@dgt.uns.ac.rs

Abstract: Online reviews have become essential to an individual's everyday life. Interpersonal influences are extremely important in the hospitality and tourism industry due to the intangibility of products and services. Fake reviews are products of deviant customer behavior, which may be the source of review manipulation. The result can be illegal and violating behavior, harming organizations and other customers physically or psychologically. Hoteliers and restaurateurs have resorted to looking for fake reviews, all to achieve certain benefits. Computer scientists have proposed methods for identifying fake reviews, but they still exist: smart advertisers strive to disguise fake reviews by presenting them as genuine and thereby avoiding detection.

Keywords: Fake reviews; Hospitality industry; Review manipulation.

1. Introduction

Online reviews have become an essential part of an individual's everyday life. Both consumers and organizations know the importance of online reviews and their influence on product sales [1–3]. Interpersonal influences are extremely important in the hospitality and tourism industry due to the intangibility of products and services. These products and services can not be evaluated before consumption, which increases the importance of interpersonal influences [4]. Purchasing tourism and hospitality products is considered high-risk, so the evaluation of emotional risk by the reference group is an essential aspect of the decision-making process [4]. Tourism and hospitality services' perishability and seasonality increase the marketing stress level for service providers [5]. All these points to the importance of managing interpersonal influences to achieve a competitive advantage. It is important to note that the credibility of online reviews contributes to their influence. Firstly, these reviews are from real customers who share their thoughts on purchasing and consumption experiences. Secondly, online reviews are posted by consumers who do not expect compensation, making their reviews authentic and unbiased. However, reviews can be fake, such as when organizations pay some consumers to share positive reviews about their brands and negative reviews for competing organizations. Due to this, both the research community [6] and the e-commerce industry recognized fake reviews as a critical challenge [7,8]. Fake reviews were created or written without the author has used the good

or service being reviewed [9]. A human writer creates these reviews manually or automatically with a computer program. Fake reviews are products of deviant customer behavior, which may be the source of review manipulation. The result can be illegal and violating behavior, harming organizations and other customers physically or psychologically [10].

2. Fake reviews in the hospitality industry

To effectively reduce fake reviews, it is important to investigate their antecedents. When it comes to hotels, Mayzlin et al. [11] pointed out that compared to large hotel chains, small, independently owned hotels are more likely to manipulate online reviews. Comprehensibility, specificity, exaggeration, and negligence between authentic and fictitious reviews were also largely inconsistent across hotel price classes (luxury, mid-range, and budget) [12]. The same authors indicated a negative association of perceived exaggeration with the perceived authenticity of reviews [13]. In addition, Banerjee [14] further confirmed how perceived exaggeration could explain the perceived authenticity of reviews depending on the hotel's category and the reviews' polarity.

This trend has not bypassed restaurants¹ either. Many restaurants strive to achieve a better reputation by looking for fake positive reviews [15] because a better online reputation



leads to higher purchase potential [16], as well as higher profits [17]. The limited appearance of positive fake reviews can greatly affect an organization's online visibility and increase the likelihood of choosing that particular organization [18]. For that reason, restaurants may seek fake positive reviews to gain financial benefits [19]. Many

restaurants often solicit fake reviews by hiring online publishers [20] or giving discounts to customers [21], leading to an influx of fake reviews on eWOM (electronic word of mouth) platforms.

¹Figure downloaded from GioeleFazzeri, available at Pixabay. Please consider supporting this author by visiting the following link <https://pixabay.com/users/gioelefazzeri-16466931>

3. Conclusions

All the above indicates that hoteliers and restaurateurs have resorted to looking for fake reviews, all to achieve certain benefits. But the question is, are hospitality organizations more vulnerable to positive or negative reviews? Many researchers have tried to identify factors that indicate a fake review. A few studies, including those by Banerjee et al. [22], Cardoso et al. [23], and Hunt [24], concentrate on the textual content of online reviews, or more specifically, on their linguistic aspects, such as the proportion of nouns to verbs, the types of words that are used, or the characteristics of reviews that are written to deceive readers. However, some studies [25–27] prioritize identifying the behavioral and emotional traits of customers who post fake reviews. Computer scientists have proposed methods for identifying fake reviews [28,29], but fake reviews still exist: smart advertisers strive to disguise fake reviews by presenting them as genuine and thereby avoiding detection [19].

References

1. Cui, G.; Lui, H.K.; Guo, X. The effect of online consumer reviews on new product sales. *Int. J. Electron. Commer.* 2012, 17(1), 39–58.
2. Riquelme, I.P.; Román, S.; Iacobucci, D. Consumers' perceptions of online and offline retailer deception: A moderated mediation analysis. *J. Interact. Mark.*, 2016, 35(1), 16–26.
3. Saboo, A. R.; Kumar, V.; Ramani, G. Evaluating the impact of social media activities on human brand sales. *Int. J. Res. Mark.*, 2016, 33(3), 524–541.
4. Lewis, R.C; Chambers, R.E. *Marketing Leadership in Hospitality, Foundations and Practices*, 3rd ed. New York: Wiley, 2000; pp. 669.
5. Rao, C.P.; Singhapakdi, A. Marketing ethics: a comparison between services and other marketing professionals. *J. Serv. Mark.*, 1997, 11 (6), 409–426.
6. Feng, S.; Gogar, A.; Choi, Y. Distributional footprints of deceptive product reviews. In *Proceedings of 6th Internat. Conf. Weblogs Social Media*, Dublin, Ireland, 4–8 June 2012.
7. The consequences of fake fans, likes, and reviews on social networks. Available online: <https://www.gartner.com/doc/2091515/consequences-fake-fans-likes-reviews> (accessed on 18th November 2022).
8. Infographic: Hotel reviews, can we trust them? Available online: <http://www.olery.com/blog/infographic-hotel-reviews-can-we-trust-them/>. (accessed on 18th November 2022)
9. Lee, K.D.; Han, K.; Myaeng, S.H. Capturing word choice patterns with LDA for fake review detection in sentiment analysis. In *Proceedings of the 6th International Conference on Web Intelligence, Mining and Semantics*, 2016, pp. 1–7.
10. Sigala, M. How “bad” are you? Justification and normalization of online deviant customer behavior. In *Information and communication technologies in tourism*, Springer, Cham, 2017, pp. 607–622.
11. Mayzlin, D.; Dover, Y.; Chevalier, J. Promotional reviews: An empirical investigation of online review manipulation. *Am Econ Rev.* 2014, 104(8), 2421–2455.
12. Banerjee, S.; Chua, A. Y. Authentic versus fictitious online reviews: A textual analysis across luxury, budget, and mid-range hotels. *J. Inf. Sci.*, 2017, 43(1), 122–134.
13. Banerjee, S.; Chua, A.Y. Calling out fake online reviews through robust epistemic belief. *Inf. Manag.*, 2021, 58(3), 103445.
14. Banerjee, S. Exaggeration in fake vs. authentic online reviews for luxury and budget hotels. *Int J Inf Manage.*, 2022, 62, 102416.
15. Costa, A.; Guerreiro, J.; Moro, S.; Henriques, R. Unfolding the characteristics of incentivized online reviews. *J. Retail. Consum. Serv.*, 2019, 47, 272–281.

16. Petrescu, M.; O'Leary, K.; Goldring, D.; Mrad, S.B. Incentivized reviews: Promising the moon for a few stars. *J. Retail. Consum. Serv.*, 2018, 41, 288–295.
17. Dellarocas, C. Strategic manipulation of internet opinion forums: Implications for consumers and firms. *Manag. Sci.*, 2006, 52(10), 1577–1593.
18. Lappas, T.; Sabnis, G.; Valkanas, G. The impact of fake reviews on online visibility: A vulnerability assessment of the hotel industry. *Inf. Syst. Res.*, 2016, 27(4), 940–961.
19. Wu, Y.; Ngai, E. W.; Wu, P.; Wu, C. Fake online reviews: Literature review, synthesis, and directions for future research. *Decis. Support Syst.*, 2020, 132, 113280.
20. Zhuang, M.; Cui, G.; Peng, L. Manufactured opinions: The effect of manipulating online product reviews. *J. Bus. Res.*, 2018, 87, 24–35.
21. Thakur, R.; Hale, D.; Summey, J.H. What motivates consumers to partake in cyber shilling? *J. Mark. Theory Pract.*, 2018, 26(1–2), 181–195.
22. Banerjee, A.; Duflo E.; Glennerster, R.; Kinnan C. The miracle of microfinance? Evidence from a randomized evaluation. *Am. Econ. J.: Appl. Econ.*, 2015, 7(1), 22–53.
23. Cardoso, E.F.; Silva, R.M.; Almeida, T.A. Towards automatic filtering of fake reviews. *Neurocomputing*, 2018, 309, 106–116.
24. Hunt, K.M. Gaming the system: fake online reviews v. consumer law. *Comput. Law Secur. Rev.*, 2015, 31(1), 3–25.
25. Banerjee, S.; Chua, A.Y.K. Understanding the process of writing fake online reviews. In *Proceedings of Ninth International Conference on Digital Information Management (ICDIM 2014)*, Phitsanulok, Thailand, 29th September – 1st October 2014.
26. Li, Y.; Feng, X.; Zhang, S. Detecting Fake Reviews Utilizing Semantic and Emotion Model. In *Proceedings of 3rd International Conference on Information Science and Control Engineering (ICISCE)*, Beijing, China, 8–10 July 2016.
27. Li, N.; Du, S.; Zheng, H.; Xue, M.; Zhu, H. Fake reviews tell no tales? Dissecting click farming in content-generated social networks. *China Commun.*, 2018, 15(4), 98–109.
28. Adelani, D.I.; Mai, H.; Fang, F.; Nguyen, H.H.; Yamagishi, J.; Echizen. Generating sentiment-preserving fake online re-views using neural language models and their human-and machine-based detection. In: *Advanced Information Networking and Applications. AINA 2020*, Barolli, L., Amato, F., Moscato, F., Enokido, T., Takizawa, M. (eds). *Advances in Intelligent Systems and Computing*, vol 1151. Springer, Cham. pp. 1341–1354.
29. Kumar, N.; Venugopal, D.; Qiu, L.; Kumar, S. Detecting anomalous online reviewers: An unsupervised approach using mixture models. *J Manag Inf Syst*, 2019, 36(4), 1313–1346.