

## Effect Of E-Word of Mouth on Brand Equity and Intention to Purchase: A Study on Green Products in The Retail Sector

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### Abstract

In the race of sustainable development of the society, the marketers are forced to offer products with green attributes and environmentally friendly. But the sales of green products are not as much good as it should be because of high cost and lack of people trust. The e-word of mouth has direct effect on the consumer trust and so on the brand equity. The purpose of the current paper is to investigate the impact of e- word of mouth on the dimensions of brand equity- Brand Awareness., Brand Loyalty, Brand Perceived Quality and Brand Associations for the green products in the retail sector. Further, the study examined the impact of these determinants of brand equity on intention to purchase green products. The data has been collected through 383 customers and the conceptual model has been analysed using AMOS. The findings of the study proved that there is significant impact of positive e-word of mouth on overall brand equity and there is not any significant impact of negative e-word of mouth on brand equity of green products in the retail sector of India. The implications of the study provide the better understanding of the effect of E-word of mouth on each of the dimension of brand equity in retail industry regarding green products.

**Keywords:** brand, loyalty, word of mouth, equity, retail

### INTRODUCTION

The green marketing concept which has currently become popular guides marketers and produce to pay their obligation towards the environment (Banyte et al., 2010). On one hand green marketing practices enable the marketers to establish faith and gratification by building a constructive image and develop the brand equity (Martínez, 2015). Like other products, brand equity is also crucial for green products (Deniz & Onder, 2017). David Aaker delineated brand equity as: “A set of assets and liabilities linked to a brand, its name and symbol that adds to or subtracts from the value provided by a product or service to a firm and/or to that firm’s customers.” It is witnessed in past literature that the basis of marketing effects is consumers’ knowledge. Therefore, consumers’ knowledge about a brand makes marketers respond in new

dimensions to adopt the measures for the marketing of the brand.

In order to increase the brand equity of the products the greenness must be linked in different ways communication channels through e-word of mouth. It has become important for the retailers to identify and highlight the green credentials of their products (Delafrooz & Goli, 2015) in order to progress the brand equity.

Brand equity of green product tends to be low due to high cost (Diryana et al., 2017) and less attractiveness of the products (Diryana & Kurniawan, 2015). “The Brand Equity refers to the additional value that a consumer attaches with the brand that is unique from all the other brands available in the market” (Feldwick, 1996). In other words, Brand awareness, perceived quality, and associations

can enhance the brand loyalty and enforce the customers to buy the product.

Word-of-mouth is identified as one of the five major forces on social media that keep the consumer engaged (Kim and Ko, 2010) which enhances consumer experience and in turn influence the brand equity (Ebrahim, 2020). The e- word of mouth has a considerable influence on customer's choice in selecting products and services (Severi et al., 2014). E-word of mouth (eWOM) can be defined as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004, p.39).

Brand equity is the only answer to the problem of less sales faced by the marketers in the retail sector, that could be raised with increase in consumer trust which could be influenced with the word of mouth on social broadcasting channels. The effective e-word of mouth has an effect on brand equity and brand acceptance of the product using the different antecedents of e- word of mouth suggested in the study (Sijoria et al., 2019). The acceptance of e-WOM proved to have positive influence on brand equity of starred hotels (Ruan et al., 2020) as well as the purchase intention for the goods. Thus, in the current study the attempt has been made to analyse the effect of positive and negative word of mouth on the brand awareness, brand loyalty, brand perceived quality and brand associations; which results in the overall brand equity of green products. Further, the study also examined the effect of these determinants on intention to purchase green products by the consumers.

## REVIEW OF LITERATURE

In the past study the inter-relationships have been studied among the brand equity determinants and the brand equity in many fields, in the domain of social media (Severi et al., 2014)(Sijoria et al., 2019). The crucial role of E-WOM in establishing brands are discussed by any researchers in other domains such as (Sepasmoqadam&Abdoli, 2016) in the banking sector, (Fitriani et al., 2021) in the context of political brands, and (Farzin et al., 2021) in the fast-food restaurants. But there is dearth of studies in the retail sector for the green products.

(Carvalho et al., 2020) in his study discussed about the word of mouth created by the firm itself could result in more credibility in strengthening the brand equity. A theoretical model was given by the study to guide the future studies on the inter-relationships of E-word of mouth and brand equity after studying the usage of E-WOM as a brand strategy used by the higher education institutes to enhance brand equity. The e- word of mouth can be used as a tool of inbound marketing utilizing social media(Jansen et al., 2009), which in turn will surely impact the brand equity (Ebrahim, 2020). E-WOM is one of the effective social media characteristics which was found to had significant impact awareness and image of the brand(Seo et al., 2020) and proved that can be used as effective brand strategy in the airline social media. The brand equity can directly or indirectly influence the consumer brand experiences with the help of E-WOM(Farzin et al., 2021), that can even force the buyers to pay premium prices for the products as per the study conducted on fast food consumers. In contrast, the negative E-WOM has detrimental consequence on the consumer purchase intention and the overall brand equity of the product (Beneke et al., 2016) whereas the source credibility did not any role in enhancing brand equity. The E-WOM also contribute in the mediation effect among social media network and brand equity (Sagynbekova et al., 2021) in the education sector.

A study demonstrates that there is a significant relation among the observed variables and brand equity for green products in cosmetics (Diryana et al., 2017). Brand equity is also proved to be significantly affected by green brand image and green trust as corresponding mediating variables for Asian e-product users.(Bekk et al., 2016).

(Farjam & Hongyi, 2015) suggested in their study that brand equity could be redefined as the set of brands associated determinants in context of consumers. Brand equity is mostly attitudinal in nature comprising of beliefs, affect, attitude and image in the mind of the consumers. Keller (1993) proposes the description of customer-based brand equity as "the differential effect of brand knowledge on consumer response to the marketing of the brand". Consumer based brand equity dimension evaluate the awareness, attitudes,

relations and reliabilities of users associated with a specific brand (Keller and Lehman, 2006). Thus, the two important contexts that can elucidate brand equity in a suitable means are those of Aaker (1991) and Keller (1993). As suggested by Aaker (1991), brand equity is a multidimensional concept with first four core dimensions as brand awareness, perceived quality, brand associations and brand loyalty. Keller's (1993) concept emphasizes on brand knowledge with its two determinants that are brand awareness and brand image (Alam, 2015).

The E-WOM is the outcome of the internet penetration (Okazaki, 2009) facilitate communications through social media networks, which is of equal importance and responsible in generating brand equity (Hoeffler & Keller, 2002). Many researchers have studied the association between the social networks, E-WOM and brand equity. A study conducted on the viewers of CGV cinemas indicated that the e-content created by the company has direct and positive effects on such four determinants of brand equity (Tran et al., 2021) (Schivinski & Dabrowski, 2015). The empirical study has been conducted by (Hsiao et al., 2021) to find out the association among brand equity and purchase intention and found it significant. Brand equity has been played a mediating role between the electronic information available and the purchase intention (Chakraborty, 2019). A study investigated the effect of E-word of mouth on the brand equity of imported shoes and observed that the impact is much higher in case of high customer involvement in purchasing. (Corvinus University of

Budapest, Hungary et al., 2018) Thus for the green products, where the customer involvement (Ahmad & Zhang, 2020), the effect of positive and negative E-word of mouth is investigated in the current study to have any effect on brand equity.

On the basis of the above past studies, the following statements are postulated:

**H1:** Positive E-WOM has significant effect on Brand Awareness.

**H2:** Positive E-WOM has significant effect on Brand Loyalty.

**H3:** Positive E-WOM has significant effect on Brand Perceived Quality.

**H4:** Positive E-WOM has significant effect on Brand Associations.

**H5:** Negative E-WOM has significant effect on Brand Awareness.

**H6:** Negative E-WOM has significant effect on Brand Loyalty.

**H7:** Negative E-WOM has significant effect on Brand Perceived Quality.

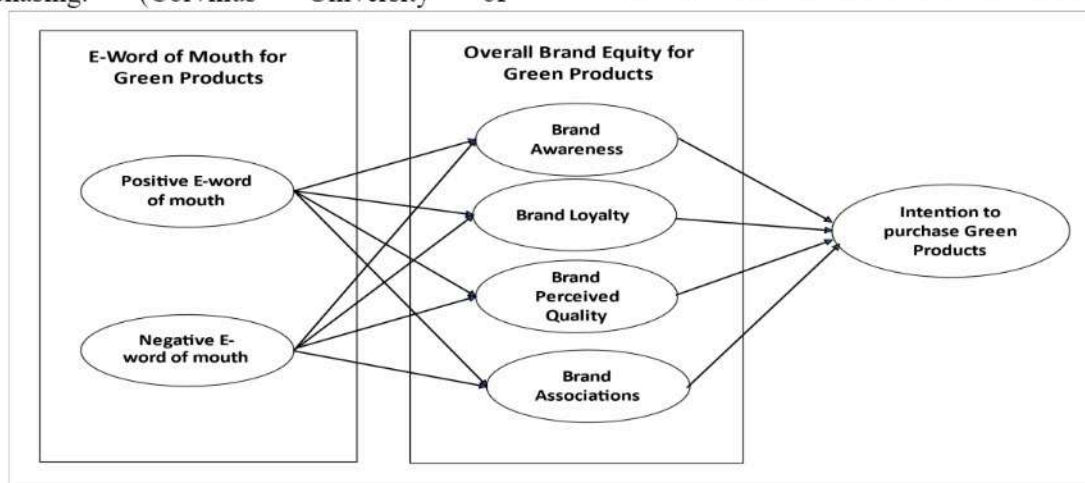
**H8:** Negative E-WOM has significant effect on Brand Associations.

**H9:** Brand Awareness has significant effect on Intention to purchase Green Products.

**H10:** Brand Loyalty has significant effect on Intention to purchase Green Products.

**H11:** Brand Perceived Quality has significant effect on Intention to purchase Green Products.

**H12:** Brand Associations has significant effect on Intention to purchase Green Products.



**Figure 1.** Conceptual Model

## METHOD

The responses of the 383 consumers are collected using a self-administered questionnaire on 7-point Likert scale. To understand the perception of the people regarding the impact of positive and negative e- word of mouth for green products on the brand equity, a conceptual model (shown in fig.1) has been designed taking brand awareness, brand loyalty, brand perceived quality and brand associations (Loureiro,

2013) as the four determinants of brand equity. The constructs taken in the model are adopted from the past studies.

The values for reliability and validity of the questionnaire are shown in table 1. The values for reliability statistic ( $\alpha$ ) greater than 0.89 for all the constructs. The convergent validity is proved with the help of composite reliability (greater than cut off value 0.80) and AVE (greater than cut off value 0.5).

**Table 1:** Reliability and Validity

Variable	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Positive E-Word of Mouth	.926	.94	.74
Negative E-Word of Mouth	.915	.90	.76
Brand Awareness	.896	.84	.79
Brand Loyalty	.914	.89	.77
Brand Perceived Quality	.923	.93	.71
Brand Associations	.910	.88	.73
Intention to Purchase Green Products	.877	.87	.72

The values of covariance matrix are shown in table 2 proved the divergent validity of the data.

**Table 2:** Results of Divergent Validity

VARIABLE	PE-WOM	NE-WOM	BA	BL	BPQ	BAS	IPGP
PE-WOM	0.71						
NE-WOM	0.43	0.87					
BA	0.34	0.32	0.89				
BL	0.36	0.24	0.37	0.93			
BPQ	0.39	0.18	0.21	0.31	0.91		
BAS	0.41	0.19	0.13	0.12	0.11	0.86	
IPGP	0.51	0.22	0.19	0.14	0.13	0.10	0.84

*Source:* Authors calculations

## RESULTS AND DISCUSSION

*Demographic profile of the participants:* The sample is collected from the 383 customers of retail products. Out of the total participants 67 percent are males and rest of the 33 percent are females. In the sample under study, 31 percent participants are less than 30 years of age, 34 percent participants fall in the age group of 30-40 years and rest of the 35 percent participants are of age more than 40 years. Regarding the education background of the participants, 27 percent are of the education qualification of

matriculation/diploma, 48.7 percent are graduates and 25.3 percent are post-graduates. Among the 383 participants, 73 percent of them are the actual users of green products and rest of the 27 percent are the prospective customers of the green products.

*Goodness of fit of the model:* The values for the model fitness indicators are shown in table 3. The reported value of  $\chi^2/Df = 1.604$ , which is within the range of acceptable value between 1 to 3. The NFI is 0.955 which is greater than the recommended cut off i.e.,

greater than 0.90. The values of GFI and AGFI are also more than the recommended value of 0.952. The values of TLI and CFI are 0.818 and 0.848 which are near to 0.90. The values for PGFT and IFI are 0.721 and 0.981, which

are greater than 0.50 with p value significant at 5 percent level of significance. Also, the RMSEA is 0.041 which is less than the recommended 0.1.

**Table 3:** Model Fitness Indicators

Indicator	Reported value	Acceptable value
$\chi^2/Df$	1.604	Between 1-3
NFI	0.955	>.9
GFI	0.934	>.9
AGFI	0.952	>.9
TLI	0.818	>.9
CFI	0.848	>.9
PGFT	0.721	>.5
IFI	0.981	>.5
P	0.000	>.05
RMSEA	0.041	<.1

Source: Authors calculations

*Results of path coefficients:* The path coefficient for the path Positive E-WOM  $\square$  Brand Awareness is 0.13 with t-value 2.042 and p-value .041 (<0.05), thus the hypothesis H1 is supported. The path coefficient for the path Positive E-WOM  $\square$  Brand Loyalty is 0.12 with t-value 2.041 and p-value .043 (<0.05), thus the hypothesis H2 is supported. The path coefficient for the path Positive E-WOM  $\square$  Brand Perceived Quality is 0.25 with t-value 3.024 and p-value .0002 (<0.05), thus the hypothesis H3 is supported. The path coefficient for the path Positive E-WOM  $\square$  Brand Associations is 0.26 with t-value 3.023 and p-value .003 (<0.05), thus the hypothesis H4 is supported. The path

coefficient for the path- Negative E-WOM  $\square$  Brand Awareness is .07 with t-value 1.439 and p-value .042 (>0.005), thus H5 is not-supported. The path coefficient for the path- Negative E-WOM  $\square$  Brand Loyalty is .11 with t-value 1.032 and p-value .044 (>0.005), thus H6 is not-supported. The path coefficient for the path- Negative E-WOM  $\square$  Brand Perceived Quality is .02 with t-value 1.023 and p-value .051 (>0.005), thus H7 is not-supported. The path coefficient for the path- Negative E-WOM  $\square$  Brand Associations is .03 with t-value 1.022 and p-value .041 (>0.005), thus H8 is not-supported, presented in table 4. The conceptual model along with the path coefficients is also shown in fig. 2.

**Table 4** Path Coefficients

Hypothesis	Path	Path Coefficient	t-value	Significance Level	Result
H1	Positive E-WOM $\square$ Brand Awareness	.13	2.042	.041	Supported
H2	Positive E-WOM $\square$ Brand Loyalty	.12	2.041	.043	Supported
H3	Positive E-WOM $\square$ Brand Perceived Quality	.25	3.024	.002	Supported
H4	Positive E-WOM $\square$ Brand Associations	.26	3.023	.003	Supported
H5	Negative E-WOM $\square$ Brand Awareness	.07	1.439	.042	Not-Supported
H6	Negative E-WOM $\square$ Brand Loyalty	.11	1.032	.044	Not-Supported
H7	Negative E-WOM $\square$ Brand Perceived Quality	.02	1.023	.051	Not-Supported

H8	Negative E-WOM → Brand Associations	.03	1.022	.041	Not-Supported
H9	Brand Awareness → Intention to Purchase Green Products	.37	3.56	.00	Supported
H10	Brand Loyalty → Intention to Purchase Green Products	.35	3.89	.00	Supported
H11	Brand Perceived Quality → Intention to Purchase Green Products	.38	3.77	.00	Supported
H12	Brand Associations → Intention to Purchase Green Products	.30	3.90	.00	Supported

Source: Authors calculations

Further, the findings of the study proved that the path coefficient for the path Brand Awareness → Intention to Purchase Green Products is 0.37 with t-value 3.56 and p-value (0.00), thus H9 is supported. The path coefficient Brand Loyalty → Intention to Purchase Green Products is .35, with t-value as 3.89 and p-value as 0.00, thus H10 is

supported. The path coefficient Brand Perceived Quality → Intention to Purchase Green Products is .38, with t-value as 3.77 and p-value as 0.00, thus H11 is supported. Also, the path coefficient Brand Associations → Intention to Purchase Green Products is .30, with t-value as 3.90 and p-value as 0.00, thus H12 is supported.

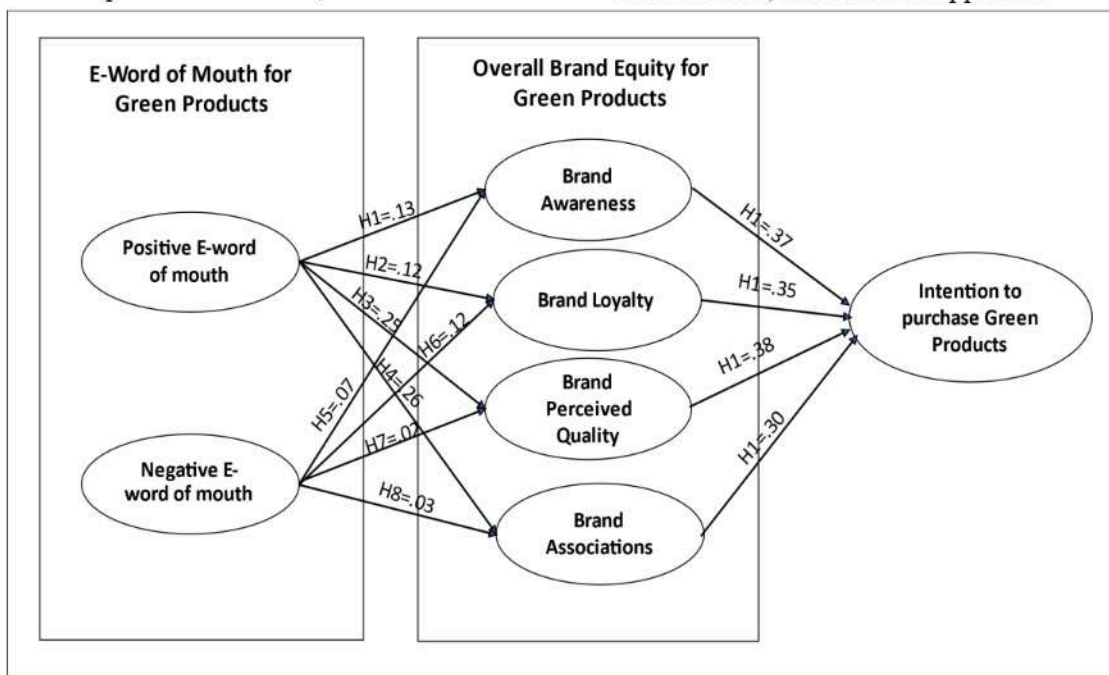


Figure 2: Conceptual Model with path coefficients

The results of path coefficients proved that there is significant impact of positive E-WOM on the four determinants of Brand Equity viz., Brand Awareness, Brand Loyalty, Brand Perceived Quality and Brand Associations. Also, there is not any significant impact of Negative E-WOM is not significant on these four determinants. Hence, it can be accentuated that the negative E-WOM has negative effect on brand equity whereas the

positive E-WOM has positive effect on brand equity. Further the results of the study proved that the four determinants of brand equity have positive and significant effect on Intention to purchase green products by the consumers.

**CONCLUSION**

The results of the study have proved that the positive e-word of mouth for the green products has significant impact on the four dimensions of brand equity and the negative e-

word of mouth do not have any significant effect on the four dimensions of brand equity. Thus, it can be concluded that the electronic word of mouth for the green products in the retail sector have an impact on the brand equity of the products. The results could help the marketers of green products that the brand equity of the green products can be established through brand awareness, brand associations, brand perceived quality and brand loyalty. Among, the four dimensions, brand perceived quality and the brand associations are the most crucial. Hence, the marketers should adopt such brand strategies that could contribute to enhance the perceived quality and associations in order to improve brand equity for the green products as well as to enhance the purchase intention of the consumers towards green products.

## REFERENCES

1. Banyte, J., Brazioniene, L., & Gadeikiene, A. (2010). Expression of green marketing developing the conception of corporate social responsibility. *Inžinerinė Ekonomika*, 21(5), 550–560.
2. Bekk, M., Spörrle, M., Hedjasie, R., & Kerschreiter, R. (2016). Greening the competitive advantage: Antecedents and consequences of green brand equity. *Quality & Quantity*, 50(4), 1727–1746. <https://doi.org/10.1007/s11135-015-0232-y>
3. Beneke, J., de Sousa, S., Mbuyu, M., & Wickham, B. (2016). The effect of negative online customer reviews on brand equity and purchase intention of consumer electronics in South Africa. *International Review of Retail, Distribution and Consumer Research*, 26(2), 171–201. <https://doi.org/10.1080/09593969.2015.1068828>
4. Carvalho, L., Brandão, A., & Pinto, L. H. (2020). Understanding the importance of eWOM on Higher Education Institutions' brand equity. *Journal of Marketing for Higher Education*, 1–19. <https://doi.org/10.1080/08841241.2020.1788196>
5. Chakraborty, U. (2019). The impact of source credible online reviews on purchase intention: The mediating roles of brand equity dimensions. *Journal of Research in Interactive Marketing*. <https://doi.org/10.1108/JRIM-06-2018-0080>
6. Delafrooz, N., & Goli, A. (2015). The factors affecting the green brand equity of electronic products: Green marketing. *Cogent Business and Management*, 2(1), undefined-undefined.
7. Deniz, A., & Onder, L. (2017). Determinants Of Brand Equity In Green Products: The Relationships Among Green Brand Image, Green Trust And Green Satisfaction. *International Journal of Arts Humanities and Social Sciences*, 2(1), undefined-undefined.
8. Diryana, I., & Kurniawan, G. I. (2015). Brand Equity of Green Products through Customer Trust and Customer Value. *Proceedings of the International Conference on Economics and Banking 2015*, 5, undefined-undefined. <https://doi.org/10.2991/iceb-15.2015.53>
9. Diryana, I., Yuyus, I., Sudarma, S., Sari, I. D., & Febrian, E. (2017). The Influence of Customer Value, Integrated Marketing Communication and Customer Trust on Brand Equity: A Study on Green Cosmetic Product in Bandung, Indonesia. *International Journal of Business and Applied Social Science*, 3(1), undefined-undefined.
10. Ebrahim, R. S. (2020). The Role of Trust in Understanding the Impact of Social Media Marketing on Brand Equity and Brand Loyalty. *Journal of Relationship Marketing*, 19(4), 287–308.
11. Farzin, M., Bagheri Abbassalikosh, A., Sadeghi, M., & Makvandi, R. (2021). The effect of sensory brand experience and brand equity on WTP a price premium in Iranian fast food restaurants: Mediating role of eWOM. *Journal of Foodservice Business Research*. <https://doi.org/10.1080/15378020.2021.2017212>

12. Feldwick, P. (1996). What is Brand Equity Anyway, and how do you Measure it? *Market Research Society. Journal.*, 38(2), 1–17. <https://doi.org/10.1177/147078539603800201>
13. Fitriani, L., Munandar, J. M., & Sumarwan, U. (2021). Pilkada amidst a pandemic: The role of the electronic word of mouth in political brand and voting intention. *Jurnal Ilmu Sosial Dan Ilmu Politik*, 25(1), 32–47. <https://doi.org/10.22146/JSP.63986>
14. Hsiao, C. H., Tang, K. Y., & Su, Y. S. (2021). An Empirical Exploration of Sports Sponsorship: Activation of Experiential Marketing, Sponsorship Satisfaction, Brand Equity, and Purchase Intention. *Frontiers in Psychology*, 12, undefined-undefined. <https://doi.org/10.3389/fpsyg.2021.677137>
15. Jansen, B. J., Zhang, M., Sobel, K., & Chowdury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science and Technology*, 60(11), 2169–2188. <https://doi.org/10.1002/asi.21149>
16. Loureiro, S. M. C. (2013). The effect of perceived benefits, trust, quality, brand awareness/associations and brand loyalty on internet banking brand equity. *International Journal of Electronic Commerce Studies*, 2, 139–158. <https://doi.org/10.7903/ijecs.1000>
17. Martínez, P. (2015). Customer loyalty: Exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27(5), 896–917. <https://doi.org/10.1108/IJCHM-03-2014-0115>
18. Ruan, W.-Q., Zhang, S.-N., Liu, C.-H., & Li, Y.-Q. (2020). A new path for building hotel brand equity: The impacts of technological competence and service innovation implementation through perceived value and trust. *Journal of Hospitality Marketing and Management*, 29(8), 911–933. <https://doi.org/10.1080/19368623.2020.1738302>
19. Sagynbekova, S., Ince, E., Ogunmokun, O. A., Olaoke, R. O., & Ukeje, U. E. (2021). Social media communication and higher education brand equity: The mediating role of eWOM. *Journal of Public Affairs*, 21(1). <https://doi.org/10.1002/pa.2112>
20. Seo, E. J., Park, J.-W., & Choi, Y. J. (2020). The effect of social media usage characteristics on e-WOM, trust, and brand equity: Focusing on users of airline social media. *Sustainability (Switzerland)*, 12(4). <https://doi.org/10.3390/su12041691>
21. Sepasmoqadam, B., & Abdoli, R. (2016). Investigating the impact of electronic word of mouth advertising on promoting brand equity from consumers' perspective (a case study of Tabriz sepah bank). *IIOAB Journal*, 7, 6–12.
22. Severi, E., Ling, K. C., & Nasermoadeli, A. (2014). The Impacts of Electronic Word of Mouth on Brand Equity in the Context of Social Media. *International Journal of Business and Management*, 9(8), undefined-undefined. <https://doi.org/10.5539/ijbm.v9n8p84>
23. Sijoria, C., Mukherjee, S., & Datta, B. (2019). Impact of the antecedents of electronic word of mouth on consumer based brand equity: A study on the hotel industry. *Journal of Hospitality Marketing & Management*, 28(1), 1–27. <https://doi.org/10.1080/19368623.2018.1497564>