

## Sustainable Marketing and Consumers' E-Word of Mouth the Mediating Role of Brand Trust and Loyalty

**Ibrahim W. Abd Alrzaq (1)**

Master's student, Faculty of Business  
Administration, Jinan University, Tripoli, Lebanon.

[10212840@students.jinan.edu.lb](mailto:10212840@students.jinan.edu.lb)

<https://orcid.org/0009-0000-0110-3237>

**Mazen Massoud (2)**

Asst. Prof. Dr., Faculty of Business Administration,  
Jinan University, Tripoli, Lebanon.

[mazen.masoud@jinan.edu.lb](mailto:mazen.masoud@jinan.edu.lb)

<https://orcid.org/0000-0002-9018-0687>

### Abstract:

Customers' trust in sustainable marketing shapes the organization's reputation and loyalty. Loyal customers use electronic Word of mouth to share their satisfying experiences. However, Greenwashing is a significant problem in e-commerce. Promoting fraudulent practices on social media platforms undermines the validity of sustainable marketing strategies, decreasing consumer trust and loyalty while accelerating E-WOM development. This paper aims to study the impact of sustainable marketing and consumers' electronic Word of mouth. It assessed the role of brand trust and loyalty as mediating variables. A data collection phase was conducted through an online questionnaire survey. 495 questionnaires were analyzed. This study developed and validated a measurement scale based on the Churchill (1979) paradigm. Both confirmatory and exploratory factor analyses (EFA and CFA) were used. The findings showed that effective predictors of customer electronic word-of-mouth include sustainable marketing, brand trust, and brand loyalty (p-value of 0.00–0.05). All hypotheses were supported. According to the SEM fit indices and beta coefficient, the correlation between sustainable marketing and consumers' E-WOM is mediated by brand trust and loyalty.

**Keywords: (Sustainable Marketing, Brand Trust, Brand Loyalty, Electronic Word of Mouth).**

### التسويق المستدام والتسويق الإلكتروني للمستهلكين الدور الوسيط للثقة والولاء للعلامة التجارية

مازن مسعود (١)

أ.م.د، كلية إدارة الأعمال، جامعة الجنان، طرابلس، لبنان

[mazen.masoud@jinan.edu.lb](mailto:mazen.masoud@jinan.edu.lb)

<https://orcid.org/0000-0002-9018-0687>

ابراهيم وليد عبد الرزاق (٢)

طالب ماجستير، كلية إدارة الأعمال، جامعة الجنان، طرابلس، لبنان

[10212840@students.jinan.edu.lb](mailto:10212840@students.jinan.edu.lb)

<https://orcid.org/0009-0000-0110-3237>

### المخلص:

تشكل ثقة العملاء في التسويق المستدام سمعة المنظمة وولائها. يستخدم العملاء المخلصون الكلمات الإلكترونية الشفوية لمشاركة تجاربهم المرضية. ومع ذلك، فإن Greenwashing مشكلة كبيرة في التجارة الإلكترونية. يؤدي الترويج للممارسات الاحتمالية على منصات التواصل الاجتماعي إلى تقويض صلاحية استراتيجيات التسويق المستدامة، مما يقلل من ثقة المستهلك وولائه مع تسريع انتشار الكلام الشفهي الإلكتروني. تهدف هذه الورقة إلى دراسة تأثير التسويق المستدام والكلام الشفهي الإلكتروني للمستهلكين. قيمت دور ثقة العلامة التجارية والولاء كمتغيرات وسيطة. تم إجراء مرحلة جمع البيانات من خلال استبيان عبر الإنترنت. تم تحليل ٤٩٥ استبانة. طورت هذه الدراسة مقياساً للتحقق من صحته بناءً على نموذج تشرشل (١٩٧٩). تم استخدام كل من تحليلات العوامل المؤكدة والاستكشافية (EFA و CFA). أظهرت النتائج أن المتنبئين الفعالين للكلمات الشفوية الإلكترونية للعملاء تشمل التسويق المستدام، وثقة العلامة التجارية، والولاء للعلامة التجارية (القيمة الاحتمالية من ٠.٠٠٠-٠.٠٠٥). تم دعم جميع الفرضيات. وفقاً لمؤشرات التوافق في التسويق عبر محرك البحث ومعامل بيتا، فإن الارتباط بين التسويق المستدام و E-WOM للمستهلكين يتم توسطه من خلال ثقة العلامة التجارية والولاء.

**الكلمات الرئيسية:** (التسويق المستدام، الثقة بالعلامة التجارية، الولاء للعلامة التجارية، التسويق الإلكتروني للمستهلكين).

## 1. Introduction

The Internet of Things (IoT) has introduced a variety of consumer behaviors, namely in terms of information and experience exchange concerning numerous brands (Miskiewicz, 2020). The growth of websites, blogs, and discussion forums has developed into potent information channels (Lim et al., 2023). The latter has raised awareness of sustainable marketing. Therefore, social media have changed information gathering, data processing, and decision-making (Hazaea et al., 2022). Before the arrival of Web 2.0, consumers used to rely on recommendations from their friends and family before products purchase transactions. The web has changed consumer behaviors, notably regarding purchasing procedures and consumption patterns (Lim et al., 2023). Consumers have moved from the traditional form of information search to recommendations online through digital or electronic word-of-mouth.

Marketers are focusing on promoting sustainable marketing practices on social media. Chygryn et al. (2021) and Popa et al. (2022) emphasized critical motivational factors for marketers to promote sustainable marketing on social media. First, these practices enhance customer loyalty due to their apparent credibility. Second, sustainable marketing helps businesses reduce environmental impact by promoting eco-friendly products and services (Kumar and Alok, 2020). Third, it allows companies to build a positive reputation and brand image by demonstrating their commitment to Sustainability. Fourth, it helps businesses attract and retain environmentally conscious customers (Bhardwaj et al., 2020).

However, greenwashing is a significant problem facing e-commerce. Vila-Lopez and Küster-Boluda, (2021); Haba, Bredillet and Dastane (2023) have verified that the promotion of fake practices on social media platforms is reducing the credibility of sustainable marketing practices and therefore leading to a decreased consumers trust. Besides, (Pendse, Nerlekar and Darda, 2023) concluded that defective products spread harmful online recommendations. Therefore, several variables intervene in the relationship between sustainable marketing and electronic Word of mouth, including the website's reliability, ease of use, and perceived trust in reassuring consumers about their choice. In other words, online comments and recommendations are influential information sources for decision-making based on sustainable marketing strategies. However, the credibility of sustainable marketing messages is questioned (Lim et al., 2023).

The results of research on the influence of sustainable marketing on consumers' electronic Word of mouth are controversial. A study by García-Salirrosas and Rondon-Eusebio (2022) reveals that consumers consult online platforms, but most do not trust these platforms due to a lack of credibility. Therefore, introducing brand trust is an effective strategy to optimize brand loyalty and consumers' E-WOM (Pourfakhimi, Duncan and Coetzee, 2020). Therefore, to maximize the benefits of E-WOM, it is crucial to understand how consumers use and perceive E-WOM messages (Ismagilova et al., 2021). Indeed, for Bharej (2022); Abbas et al. (2020), negative word of mouth is considered more credible and influences consumer behavior. While for Irfan et al. (2019); Donthu et al. (2021), positive electronic Word of mouth would have more influence than negative e-WOM. These contradictions in the literature can be explained by integrating mediating variables, such as brand trust and brand loyalty (Kusawat and Teerakapibal, 2022; Hersetyawati et al., 2021).

This academic work aims to understand the antecedents of e-WOM (electronic Word of Mouth) and its influence on purchase and recommendation intentions. This investigation aims to study the impact of sustainable marketing, brand and consumers' electronic Word of mouth. This research assesses the role of brand trust and loyalty as mediating variables. Specifically, the study aims to answer several questions, such as:

- What are the critical antecedents affecting consumer Word of mouth online?
- To what extent does sustainable marketing influence consumers' Word of mouth on social media?
- What is the influence of brand trust and brand loyalty on consumers' electronic Word of mouth?
- Do these variables mediate the relationship between sustainable marketing and electronic Word of mouth?

The first section is dedicated to research guidelines and the literature review. The introduction emphasized the research problem, objectives and questions. The literature review defines sustainable marketing, brand trust, brand loyalty and consumers' electronic word-of-mouth peculiarities. This literature review explores the hypotheses formulation and the research model. In the second, the research methodology is explained. This section analyses the characteristics of the pre-test and the sample and describes the test of the measurement scales. It is dedicated to empirically validating the research model by verifying research hypotheses and testing the integrative model by structural equation modeling. This academic work end with the main limitations and future research directions.

### Literature review

Organizations strive to forge stronger bonds with consumers in a world of hyper-consumption and heightened competition. It is completed by focusing on the promotion of sustainable marketing and customers centric relationship strategies (Bharej, 2022; Abbas et al., 2020). The latter are improving customer loyalty and retention. A loyal consumer is five times less expensive for an organization than acquiring a prospective customer. Due to these benefits, organizations plan effectively to create the most effective loyalty programs. Marketers have realized that without the retention of loyal customers, a marketing strategy in the digital age is bound to fail (Santos et al., 2022).

According to Granheim et al. (2020); Sharmin et al. (2021), social media is generally perceived as more credible than traditional media. Social media platforms' participatory and interactive nature allows direct communication between online sellers and consumers. However, brand trust and loyalty are rated only moderately. Loyal customers have an honest opinion of a brand, increasing the likelihood of repurchasing intentions (Purnomo, Herman and Asitah, 2021; García-Salirrosas and Rondon-Eusebio, 2022). It is, therefore, essential to build and enrich the relationship between sustainable marketing and customers' electronic Word of mouth through the perception of trust (Ferreira da Silva and Moro, 2021) and loyalty.

#### 1.1.1. Sustainable Marketing

Sustainable marketing promotes environmentally friendly products and services. Sustainable marketing focuses on the environment (Lee and Kwon, 2022). Three sustainable marketing strategies are adopted by organizations to promote eco-friendly products and services (Aman and Papp-Váry, 2022). These strategies include:

Table 1. Sustainable Marketing Strategies

Strategies	Description	Authors
<b>1. Product design</b>	Product design is an essential aspect of sustainable marketing. Organizations design environmentally friendly products. These products are made from recycled materials or products that are biodegradable.	(Wandosell et al., 2021; Varese, Cesarani and Wojnarowska, 2023)
<b>2. Packaging</b>	Packaging is another important aspect of sustainable marketing. Businesses can use eco-friendly packaging materials like recycled paper or biodegradable plastics.	(Wandosell et al., 2021; Karunarathne, 2021)
<b>3. Marketing communications</b>	Marketing communications play a crucial role in sustainable marketing. Businesses can communicate their commitment to Sustainability through advertising, public relations, and social media campaigns.	(Varese, Cesarani and Wojnarowska, 2023)

Measuring the effectiveness of sustainable marketing is challenging (Hazaea et al., 2022). The first challenge is related to the difficulty in measuring the impact of sustainable marketing campaigns. Sustainable products and services are more expensive than their non-sustainable counterparts (Viloria, 2022). Price factors constitute a crucial problem by making sustainable products less accessible to some consumers. However, there are three essential metrics for

organizations to track their progress in sustainable development. First the Carbon footprint. Organizations can track their carbon footprint to measure environmental impact (Wibowo et al., 2021). Second, consumer feedback provides valuable insights into the effectiveness of sustainable marketing campaigns (Pimonenko et al., 2021). Third, sales data can be used to track the impact of sustainable marketing campaigns on consumers' Word of mouth and monitor the organization's performance.

### **1.1.2. Brand Trust**

Trust is the new pillar of branding, and building trust leads to mutual respect and values with prospects (Górska-Warsewicz et al., 2021). Trust is a crucial element in the mind of the Internet user before making a purchase. Prakoesw, Hidayah and Dewi (2022); Domingos (2022) added that consumers' emotional attachment to a brand is the most influential facet of brand trust. Offering a high-quality product at an affordable price is a critical factor in building trust (Narayanan and Singh, 2023). Customers' emotional bond with brands may endure even after the transaction if they purchase a product. Customers with a good experience with customer service, dependable products, and aligning personal and brand values are prospective to brand trust (Hanaysha, 2022).

### **1.1.3. Brand Loyalty**

Brand loyalty is a multidimensional concept grounded on three components: cognitive, affective, and conative components (Górska-Warsewicz and Kulykovets, 2020). Maintaining a personal and unique relationship with consumers is the art of loyalty. The goal is to make consumers feel intensely loyal to the brand. The actions and strategies used to forge enduring customer bonds are collectively called customer loyalty (Ruiz-Real, Uribe-Toril and Gázquez-Abad, 2020). Brand loyalty is a requirement for organizational success for numerous motives. Loyal customers promote positive Word of mouth (Muruganatham and Priyadharshini, 2017). These buyers will pay a higher price or accept minor inconveniences (like longer shipping times). Brand loyalty increases customers' lifetime and enhances their value (Górska-Warsewicz, 2022). Shoppers can even pass on their brand preferences from generation to generation.

### **1.1.4. Consumers' E-Word of Mouth (E-WOM)**

Electronic Word-of-mouth marketing is a free form of advertising triggered by customer experiences and usually goes beyond their expectations (Ahmad Tajuddin et al., 2020). The traditional form of Word of mouth encourages consumer-to-consumer and consumer-to-marketer communications. Word-of-mouth marketing is free advertising triggered by the customers' experience, which usually exceeds their expectations (Nuseir, 2019).

With the advent of the Internet and social media, researchers have focused on electronic word-of-mouth (E-WOM) forms. The electronic form is defined by Polanco-Diges and Debasa (2020) as any positive or negative statement made by an actual customer about a product, service, or organization on the web and social media. E-WOM embraces all informal communication using Internet technology (Diaz, 2023). Electronic word-of-mouth generates information, but the impact of this information online varies from person to person (García-Salirrosas and Rondon-Eusebio, 2022).

Researchers have tried to explain the process of information adoption to understand the impact of sustainable marketing, brand trust, loyalty and consumers' electronic Word of mouth. The developed models were based on the theory of consumer rationality. The theory of rationality presents consumer preferences in decision-making and their final behavior toward the brand. In other words, this theory postulates that information processing capacities are limited. The level of trust and loyalty toward the brand and the adopted marketing strategies explains this.

### **Sustainable Marketing and Consumers' E-Word of Mouth**

Xin et al. (2023); Xia and Chae (2021) verified that electronic Word of mouth (eWOM) improved information sharing and opinions through social media and online reviews due to sustainable marketing. Odoom et al. (2020) confirmed that sustainable marketing is crucial in

creating positive E-WOM. Sustainable marketing communicates the added value of a product or service while educating consumers seeking to adopt a new way of life and consumption. Sustainable marketing emphasizes long-term importance, client focus, cutting-edge techniques, and a goal beyond financial gain. Kumar and Alok (2020) concluded that organizations promoting eco-friendly products and services are more likely to attract environmentally conscious consumers. These customers are more likely to share their positive experiences with others through eWOM, which can help to build a positive reputation for the business. Hence, the first research hypothesis is deduced from the work of (Lim et al., 2023); (Hazaea et al., 2022); (vila-Lopez and Küster-Boluda, 2021).

H1: sustainable marketing influences consumers' e-word of mouth positively.

#### **1.1.5. Sustainable Marketing and Brand Trust**

Sustainable marketing development is increasingly changing consumers' behaviors and consumption habits. Huo et al. (2022) verified that organizations use various sustainable marketing techniques to enhance brand trust. These techniques are incorporated into the CSR corporate social responsibility. Organizations donate a share of income to environmentally friendly causes, use packaging made of eco-friendly materials, and develop products supporting sustainable consumption. The first criterion for leveraging trust is the adequacy of the brand's products and services with the promises made in its advertising. Trust is reinforced by a strong expectation of transparency (Akoglu and Özbek, 2022). However, the negative impacts of brands on health and the environment are at the top of the reasons for distrust of brands. A mistrust can cost brands dearly; consumers are ready to boycott the brand, and most consumers are willing to publish a negative word of mouth (Suhan et al., 2022). Hence, organizations are integrating sustainable marketing secure brand trust. Hereafter, the second research hypothesis is deduced from the work of (Maharani Azis, 2021); (Nosi et al., 2022).

H2: sustainable marketing influences brand trust positively.

#### **1.1.6. Sustainable Marketing and Brand Loyalty**

Technology is at the heart of sustainability initiatives and can dramatically increase value. Strong sustainability governance is essential for long-term credibility and customer loyalty. CSR actions benefit companies' attractiveness, profitability and credibility (Kumar and Alok, 2020; Bhardwaj et al., 2020). These factors increase consumer satisfaction and loyalty. Consumers perceive organizations with more responsible business practices due to sustainable marketing as trustworthy. Higher quality products and consumer satisfaction promote brand loyalty.

Hereafter, the third research hypothesis is deduced from the work of (Mancuso et al., 2021; Tian and Kamran, 2021).

H3: sustainable marketing influences brand loyalty positively.

#### **1.1.7. Brand Trust and E-WOM**

Brand trust in online social media influence word-of-mouth (WOM) and electronic word-of-mouth (E-WOM) (Diaz, 2023; Polanco-Diges and Debasa, 2020). In an online context, consumers can judge the validity of information by checking if the arguments are logical and make sense. Consumers' level of trust affects the quality of the statements in e-WOM. Xin et al. (2023), Xia and Chae (2021), Odoom et al. (2020) concluded that delivering a satisfying experience that improves a customer's life enhances their trust. Brand trust is a significant factor in recommending positive Word of mouth over social media. Building long-term brand loyalty benefit from structuring long-term brand trust at all points in the sales funnel. Consequently, the fourth research hypothesis is deduced from the work of (Odoom et al., 2020, Maharani Azis, 2021; Nosi et al., 2022).

H4: brand trust influences electronic Word of mouth positively.

### 1.1.8. Brand loyalty and E-WOM

Positive E-WOM is leveraged due to brand loyalty, while negative E-WOM leads to a brand preference change (Suartina et al., 2022). E-WOM and brand loyalty change by reinforcing this association or causing a behavior change. Loyalty strongly influences consumers' word-of-mouth. Consumer loyalty affects the diffusion of positive electronic word-of-mouth (Muruganantham and Priyadharshini, 2017b). The extent to which users perceive the benefit of using E-WOM information contributes to the perceived usefulness of E-WOM information. Positive E-WOM increases trust and reinforces brand loyalty. At the same time, negative E-WOM can lead to a change in brand preference and a decrease in loyalty. Overall, E-WOM is significantly influenced by perceived brand trust and loyalty. Consequently, the fifth research hypothesis is deduced from the work of (Haziri, Chovancová and Aliu, 2018; Górska-Warsewicz, 2022).

H5: brand loyalty influences consumers' electronic Word of mouth positively.

The level of trust and brand loyalty has always influenced consumer behavior. Building trust in brands is an essential part of a sustainable marketing strategy. Brand trust and brand loyalty are two crucial factors in consumer behavior. The relationship between brand trust, brand loyalty and consumers' electronic Word of mouth is bi-directional and interchangeable. Consequently, the sixth research hypothesis is deduced from the work of (Chygryn et al. 2021; Popa et al., 2022; Kumar and Alok, 2020).

H6: brand trust influence brand loyalty positively.

H7: brand trust and brand loyalty mediate the relationship between sustainable marketing and consumers' electronic Word of mouth.

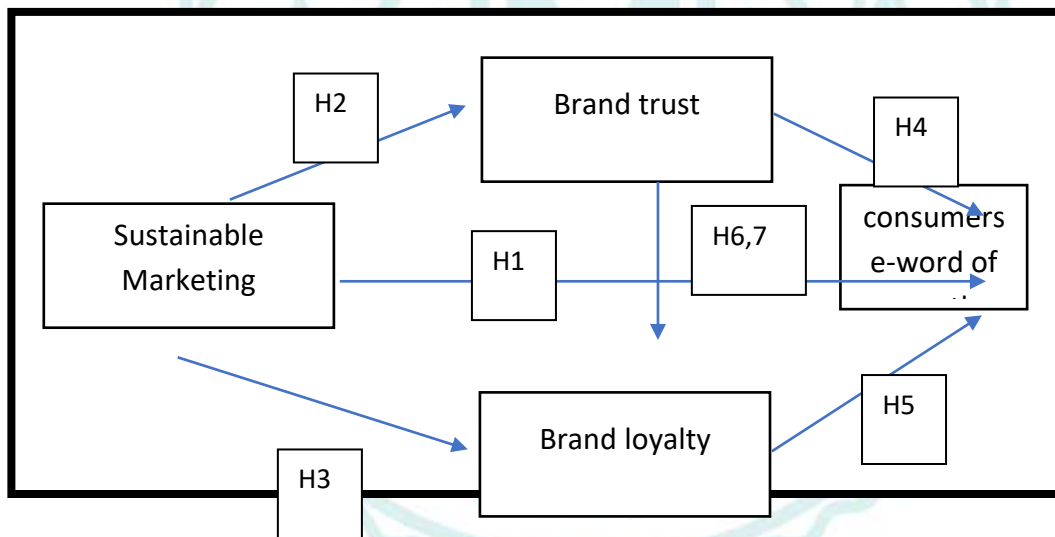


Figure 1. Conceptual Framework

## 2. Material and Methods

As this research aims to assess the influence of sustainable marketing on consumers' E-WOM, the questionnaire is the most appropriate method. The questionnaire as a quantitative survey tool is a data collection technique allowing us to analyze respondents' behaviors, opinions and even expectations. A data collection phase was conducted through an online questionnaire survey.

This research involved constructing and validating a measurement scale following the Churchill (1979) paradigm (Fatma, Rahman and Khan, 2016). The latter involves two main steps exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

The (EFA) is treated using the principal component analysis (PCA) method. The objective is to "identify the structure of a set of observed variables." It identifies limited dimensions representing the relationships between sustainable marketing, brand trust, and brand loyalty on

consumers' E-WOM. The goal is to refine and purify the measures of the proposed scale. The PCA is beneficial to overcome the phenomenon of multicollinearity between variables. The eigenvalue criterion was used to determine the number of factors to be retained. It predicts the number of factors that cumulate most of the variance explained by all the items. Thus, only axes whose eigenvalue is greater than or equal to 1 will be retained. Items whose commonalities are less than 0.4 and those that form a single factor were eliminated. The tendency of a variable to be factorable is evaluated using the Kaiser-Meyer-Olkin criterion ( $KMO > 0.6$ ; poor;  $KMO > 0.7$ : satisfactory); (eigenvalue  $\lambda$  greater than 1). The Bartlett sphericity test examines the hypothesis. When this index indicates a high value, the null hypothesis is rejected (the variables are not correlated within the studied population). A varimax rotation was preferred to obtain discriminant factor scores.

### 2.1. Exploratory Factor Analysis

The process of eliminating each item is iterative. Once the factor structure is determined, the reliability of the measurement instrument is estimated. This test is performed based on Cronbach's alpha coefficient ( $\alpha$ ) calculation, whose value varies between 0 and 1. To interpret the reliability coefficient value, an alpha more significant than 0.7 was considered satisfactory, knowing that the closer it is to the value 1, the more robust the estimation of the measure's reliability. This threshold that we arbitrarily set is justified by the recommendations of Nunnally (1978), which indicate that:

1.  $\alpha > 0.7$  is satisfactory in the case of preliminary research;
2.  $\alpha > 0.8$  is satisfactory in the case of fundamental research;
3.  $\alpha > 0.9$  is satisfactory in the case of applied research.

Table 2. Validity And Reliability of Variables

	Sustainable Marketing	Brand Trust	Brand Loyalty	Consumers E-WOM
KMO	0.885	0.878	0.802	0.867
alpha coefficient ( $\alpha$ )	0.776	0.728	0.810	0.801
Sig.	0.00	0.00	0.00	0.00
The preliminary number of items	6	6	6	6
Retained items	4	5	3	3

It is necessary to ensure the multivariate normality of the variables. This study verifies this condition since the skewness and kurtosis coefficients are satisfactory. This condition is acceptable when this Coefficient is equal to or less than 3.

Table 3. Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
				Statistic	Std. Error	Statistic	Std. Error
Sustainable Marketing	495	3.8343	.85520	-.887	.110	.056	.219
Brand Trust	495	3.7725	.85531	-.808	.110	.317	.219
Brand Loyalty	495	3.5972	.86931	-.636	.110	-.380	.219
Consumers E-WOM	495	3.8152	1.17268	-1.058	.110	.092	.219
Valid N (listwise)	495						

The values of the skewness and kurtosis were compared as two statistics with a value less than 3, representing the normal law value at the 5% threshold. The distribution of the data was uniform, as can be shown in Table 2.

Table 4. Component Matrix

		1 Sustainable Marketing	2 Brand Trust	3 Brand Loyalty	4 Consumers E- WOM	AVE/ Determin ant
Sustainable Marketing	SM1	0.820				60.1% 0.622
	SM3	0.790				
	SM4	0.740				
	SM5	0.650				
Brand Trust	BT2		0.795			62.1% 0.554
	BT3		0.755			
	BT4		0.690			
	BT5		0.685			
	BT6		0.560			
Brand Loyalty	BL3			0.750		54% 0.521
	BL5			0.740		
	BL4			0.680		
Consumers E-WOM	E- WOM 1				0.747	55% 0.522
	E- WOM 2				0.723	
	E- WOM 3				0.635	

Results of exploratory factor analysis on sustainable marketing as the independent variable show that the data is factorizable, as indicated by the Kaiser-Meyer-Olkin (KMO) test. The KMO value of 0.885 is satisfactory, and the variance explained by the first principal component is 60.1%, indicating that the construct of sustainable marketing is unidimensional. The quality of representation of the items for brand trust and loyalty is good, with communalities greater than 0.5. The Cronbach's alpha value ranges between 0.728, indicating excellent internal consistency of the measurement scale.

Exploratory factor analysis is used to evaluate the quality of the fit of the measurement model to the data. For this, three types of indicators must be considered. The norms for assessing these indicators as satisfactory are presented in the table. On the other hand, multivariate normality (simultaneous consideration of all variables of the same construct) must be verified using the method of structural equations.

#### The CFA Confirmatory Factor Analysis

The data was examined using the structural equation modeling (SEM) method, which essentially aims to reduce the likelihood of measurement mistakes for latent variables. Analysis of confirmatory factors is exceptionally significant. It seeks to validate the scale adjustment used to collect the data. A confirmatory study selects the model that best fits the data from several options. Indicators of fit are utilized to interpret the confirmatory factor analysis's results. The GFI, AGFI, and RMR possessed a value higher than the cut-off value of 0.90. RMSEA has a value lower than 0.05. and the determination coefficients associated with them ( $R^2 > .500$ ). Table 6 displays good fit indices (where RMSEA is close to 0.05 and GFI is more significant than 0.9).

Table 5. SEM Fitness Indices

Indices	Results	Thresholds	Outcome
CFI	0.978	Higher than 0.9	Excellent
NFI	0.976	Higher than 0.9	Excellent
IFI	0.977	Higher than 0.9	Excellent



TLI	0.955	Higher than 0.9	Excellent
RMR	0.04	Lower than 0.05	Excellent
RMSEA	0.01	Lower than 0.05	Excellent
GFI	0.999	Higher than 0.9	Excellent
AGFI	0.947	Higher than 0.9	Excellent
CMIN/DF	<b>1.33</b>	Lower than 3	Excellent

The model shows satisfactory results for indicators such as RMSEA and AGFI. It is necessary to ensure the quality of data adjustment to the model, as the indicators are sensitive to the sample size. The NFI is a type of fit index that shows the percentage improvement in the model's overall fit compared to an independent model. The general indicators are sufficient, according to the results of the SEM on the research model. CMIN/DF = 1.33, p = 0.000, GFI = 0.999 (>0.9), TLI = 0.955 (>0.9), CFI = 0.978 (>0.9), and RMSEA = 0.01 (<0.08). These indices verified the model's fitness.

Table 6. Regression Weights

			Estimate	S.E.	C.R.	$\beta$ Coefficient	P-value	Results
Sustainable Marketing	→	Brand Trust	.314	.042	7.443	0.772	0.00	Supported
Sustainable Marketing	→	Brand Loyalty	.101	.050	2.033	0.723	0.00	Supported
Brand Trust	→	Brand Loyalty	.100	.049	2.031	0.608	0.00	Supported
Brand Trust	→	Consumers E-WOM	.030	.059	2.513	0.548	0.00	Supported
Brand Loyalty	→	Consumers E-WOM	.443	.052	8.518	0.680	0.00	Supported
Sustainable Marketing	→	Consumers E-WOM	-.133	.059	2.252	0.678	0.00	Supported
Brand trust X Brand loyalty	→	Consumers E-WOM	0.215	0.22	6.554	0.548	0.00	Supported

It's critical to remember that the scaling of the effect's properties was made possible through structural modeling. Results from a structural equation model are shown in Figure (2).

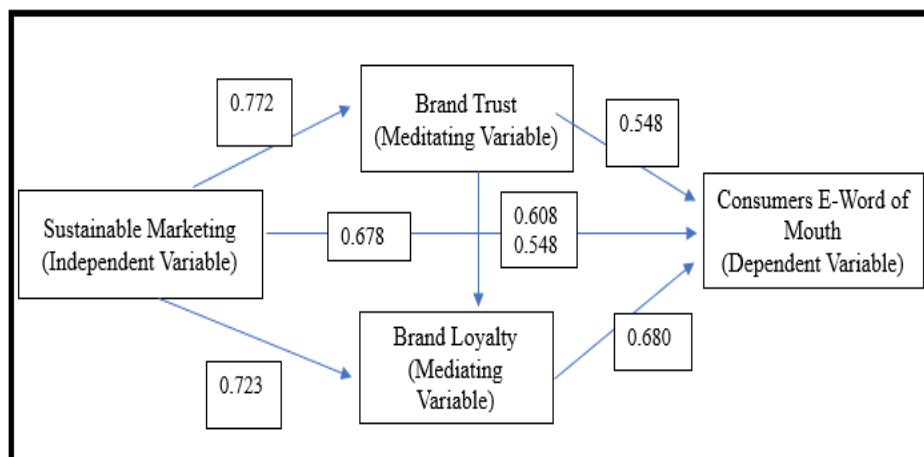


Figure 2. Structuring Equation Modelling using  $\beta$  Coefficient

The model and the hypotheses were tested using structural equation modeling (SEM). Hypothesis testing was done after proving the structural model's reliability. Regression testing was done using the data from the structural model. Table (8) demonstrates that sustainable marketing, brand trust and brand loyalty are effective predictors of customer electronic word-of-mouth (p-value of  $0.00 < 0.05$ ). All hypotheses were accepted. The SEM fit indices and the beta coefficient supported that brand trust and loyalty mediate the relationship between sustainable marketing and consumers' E-WOM. Besides, brand trust has a significant favorable influence on brand loyalty. This influence is emphasized by the causal pathway given by the model. The structural equations approach evaluated both the direct and indirect effects.

### 3. Discussion of Results

This article explored the influence of sustainable marketing on consumers' electronic Word of mouth through two critical variables, brand trust and brand loyalty. The outcome verified that sustainable marketing affects consumers' e-word of mouth positively. This influence confirms the study of (Lim et al., 2023; Hazaea et al., 2022; Vila-Lopez and Küster-Boluda, 2021). The SEM confirmed that brand trust influences brand loyalty positively, which affirms the results of the studies conducted by (Basrowi, Ali and Suyanto, 2022). The essential outcome is emphasized in the mediating role of brand trust and loyalty. This mediating influence is supported by the work of (Gawas et al. 2018; Górska-Warsewicz, 2022; Ruiz-Real, Uribe-Toril and Gázquez-Abad, 2020). Therefore, Brand trust and loyalty are equally essential to enhance consumers' electronic Word of mouth.

Sustainable marketing is becoming crucial for e-commerce. By implementing sustainable marketing strategies, businesses can build brand reputation, attract new customers, and reduce costs. Additionally, sustainable marketing can play a crucial role in creating positive E-WOM by promoting socially responsible and environmentally sustainable products or services. Although there are obstacles and restrictions to sustainable marketing, the future is promising for E-commerce, which makes Sustainability a key component of their corporate strategy. Customers tend to purchase sustainable brand items and recommend them to others if these organizations continue to earn their trust and loyalty through effective sustainable marketing promotions and advertising. Prospective consumers may trust a sustainable brand if a friend or influential person recommends it. Product reviews are another way consumers can spread the Word about a brand by discussing their wants, desires, and experiences. Customers can browse product reviews to find out what other customers think of brands to satisfy their anticipation and expectations.

### 4. Conclusion

This academic work aimed to assess the influence of sustainable marketing, brand trust and brand loyalty on consumers' electronic Word of mouth, respectively. This study relied on an online questionnaire to test the hypotheses. The EFA summarized the scale, while the SEM supported the model fitness. Therefore, consumers are predicted to be increasingly attentive to brands' Sustainability and expect organizations to act and communicate on sustainable concerns. Consumers are increasingly concerned about the environmental and health impact of purchased products. Brands should commit to sustainable development and share about it. Stakeholders should be involved in promoting Sustainability, from product/service design to marketing strategies. E-commerce (online sellers) should apply sustainable marketing techniques while performing the following actions:

- Carry out a sustainability assessment: organizations should conduct a sustainability audit to evaluate their present environmental effect and pinpoint possibilities for development.

- Create a strategy for Sustainability: a sustainability plan describing an organization's goals and objectives for minimizing its environmental impact should be developed and incorporated into its CSR corporate social responsibility.
- Embrace Sustainability in the organizational portfolio: all facets of the executive portfolio, including product design, packaging, marketing communications, and operations, should incorporate Sustainability. These facets build consumer trust in online brands.

Organizations must optimize consumer satisfaction by offering quality products to achieve loyalty. Organizations should focus on product customization to increase their affection for the brand. In terms of marketing, marketers must use loyalty measurement tools to assess the satisfaction of customers. Marketers should adopt customer relationship management CRM tools to manage better customer flow and better respond to their concerns. Then set up multi-channel and experiential marketing that places the customer at the center of the debates.

Word of mouth spreads like a wave. It is, therefore, a great free advertising lever and digital communication tool for your company if it is positive. This wave is viral on the Internet and can become a buzz. It, therefore, represents a source of reputation and a great marketing tool for the organization. Word-of-mouth advertising is the key to low-cost, high-paying lead generation in a world that is now more digitally and socially connected than ever. If marketers capitalize on this strategy, they ensure the business's long-term success while effectively eclipsing competition.

From a managerial point of view, E-WOM messages represent a source of information for consumers to learn about a new product. This information collected at a lower cost strengthens the reputation and image of a new brand. Through electronic Word of mouth, companies minimize expenses compared to a traditional marketing campaign. This type of online communication allows companies to better understand their customers and their opinions on their offer to make improvements. Work remains to be done to understand better the phenomenon of perceived credibility in the context of the anonymity of the sender of an eWOM message. Companies wishing to respond must consider that they are addressing involved, innovative, susceptible, and knowledgeable consumers. These receivers evaluate the credibility, trust, and usefulness of these messages to make their choice. eWOM has become a significant issue for marketing in recent years and is a communication strategy more frequently used by companies. However, discrepancies are increasingly assertive in denouncing the limits of this strategy. Current research focuses on the manipulative behaviors of some companies. These behaviors lead to a certain skepticism of positive messages about a product or brand. Instead of investing time and money in writing "fake reviews," it is preferable to analyze consumer reviews to improve their offer and the relationship with the customer.

## 5. Further Work

To conclude this academic work, limitations and ideas for future avenues are exposed. First, the sample of 495 respondents ensured the questionnaire's validity and reliability; however, this sample did not represent the representativeness criteria of the entire online shoppers as the targeted population. A second limitation is the selection bias. A selection bias results from a sample not representative of the population. The latter limited results generalize the study. In this case, this sample is indeed a convenience sample and the distribution was only done online, which is already a selection criterion. Future research should ensure representativeness by following a type of probabilistic sampling. Therefore, the results of this work are to be taken with caution, and future studies with a more representative sample would be interesting to validate, clarify or invalidate results.

To deepen the research, subsequent studies could be carried out based on larger sample size and with better representativeness. In addition, it could be interesting to use multiple linear regression techniques to understand better the respective impacts of perceptions of sustainable marketing tools on consumer attitudes. Furthermore, it would be interesting to conduct a qualitative study on a smaller sample to determine and deepen the factors that lead specific socio-demographic categories of people to be more sensitive to the various tools of sustainable

marketing. Companies could reach their target audience more directly by defining the key factors that make these people more susceptible to societal communications, responsible labels, and sustainable merchandising. Further studies could also identify the most appropriate way to educate a particular type of person about sustainable development, and not just for marketing or sales purposes. Further research could help determine effective means of communication and how to make "green" ads more impactful for consumers. Ideally, an official body should have a mandatory validation process for marketing and awareness campaigns.

## References

- Abbas, A. F. *et al.* (2020) 'Sbibliometric analysis of global research trends on electronic word of mouth using Scopus database', *Journal of Critical Reviews*. doi: 10.31838/jcr.07.16.49.
- Ahmad Tajuddin, U. N. R. *et al.* (2020) 'Electronic Word-of-Mouth (E-WOM), Brand Image and Consumer Purchase Intention on Healthcare Products', *Journal of Accounting Research, Organization and Economics*. doi: 10.24815/jaroe.v3i1.16823.
- Akoglu, H. E. and Özbek, O. (2022) 'The effect of brand experiences on brand loyalty through perceived quality and brand trust: a study on sports consumers', *Asia Pacific Journal of Marketing and Logistics*. doi: 10.1108/APJML-05-2021-0333.
- Aman, E. E. and Papp-Váry, Á. F. (2022) 'Digital Marketing as a Driver for Sustainable Tourism Development', *Multidiszciplináris kihívások, sokszínű válaszok*. doi: 10.33565/mksv.2022.02.01.
- Basrowi, B., Ali, J. H. and Suyanto, T. (2022) 'THE CUSTOMER LOYALTY RESEARCH TRENDS: BIBLIOMETRY ANALYSIS', *National Conference on Applied Business, Education, & Technology (NCABET)*. doi: 10.46306/ncabet.v2i1.60.
- Bhardwaj, A. K. *et al.* (2020) 'Research trends in green product for environment: A bibliometric perspective', *International Journal of Environmental Research and Public Health*. doi: 10.3390/ijerph17228469.
- Bharej, K. (2022) 'A Bibliometric Analysis on eWOM and Consumer Behavior', in *Springer Proceedings in Business and Economics*. doi: 10.1007/978-981-19-4892-3\_12.
- Chygryn, O. *et al.* (2021) 'Green competitiveness: The evolution of concept formation', in *E3S Web of Conferences*. doi: 10.1051/e3sconf/202123400004.
- Diaz, L. R. H. (2023) 'EVALUATION OF THE EFFECTS OF CONSUMER TRUST ON ELECTRONIC WORD-OF-MOUTH (E-WOM) IN E-COMMERCE STORES IN COLOMBIA', *Innovar*. doi: 10.15446/innovar.v33n87.105513.
- Domingos, M. (2022) 'Online consumer behaviour: How to create and maintain e-loyalty', in *The Future of E-Commerce*.
- Donthu, N. *et al.* (2021) 'Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis', *Journal of Business Research*. doi: 10.1016/j.jbusres.2021.07.015.
- Fatma, M., Rahman, Z. and Khan, I. (2016) 'Measuring consumer perception of CSR in tourism industry: Scale development and validation', *Journal of Hospitality and Tourism Management*. doi: 10.1016/j.jhtm.2016.03.002.
- Ferreira da Silva, C. and Moro, S. (2021) 'Blockchain technology as an enabler of consumer trust: A text mining literature analysis', *Telematics and Informatics*. doi: 10.1016/j.tele.2021.101593.
- García-Salirrosas, E. E. and Rondon-Eusebio, R. F. (2022) 'Green Marketing Practices Related to Key Variables of Consumer Purchasing Behavior', *Sustainability (Switzerland)*. doi: 10.3390/su14148499.
- Gawas, A. *et al.* (2018) 'The Role of Social Media Marketing In Customer Purchase Intent-A Methodological and Thematic Review', *Asian Journal of Management*. doi: 10.5958/2321-5763.2018.00119.1.
- Górska-Warsewicz, H. *et al.* (2021) 'Green brand equity—empirical experience from a systematic literature review', *Sustainability (Switzerland)*. doi: 10.3390/su132011130.
- Górska-Warsewicz, H. (2022) 'Consumer or Patient Determinants of Hospital Brand Equity—A Systematic Literature Review', *International Journal of Environmental Research and Public Health*. doi: 10.3390/ijerph19159026.
- Górska-Warsewicz, H. and Kulykovets, O. (2020) 'Hotel brand loyalty-a systematic literature review', *Sustainability (Switzerland)*. doi: 10.3390/SU12124810.
- Granheim, S. I. *et al.* (2020) 'Mapping the digital food environment: A scoping review protocol', *BMJ Open*. doi: 10.1136/bmjopen-2019-036241.
- Haba, H. F., Bredillet, C. and Dastane, O. (2023) 'Green consumer research: Trends and way forward based on bibliometric analysis', *Cleaner and Responsible Consumption*. doi: 10.1016/j.clrc.2022.100089.

- Hanaysha, J. R. (2022) 'Impact of social media marketing features on consumer's purchase decision in the fast-food industry: Brand trust as a mediator', *International Journal of Information Management Data Insights*. doi: 10.1016/j.jjime.2022.100102.
- Hazaea, S. A. *et al.* (2022) 'Green Purchasing: Past, Present and Future', *Sustainability (Switzerland)*. doi: 10.3390/su14095008.
- Haziri, F., Chovancová, M. and Aliu, F. (2018) 'THE CONSUMER DECISION-MAKING PROCESS WHICH FORM DOMESTIC BRAND LOYALTY: A LITERATURE REVIEW', in. doi: 10.7441/dokbat.2018.09.
- Hersetyawati, E. *et al.* (2021) 'Analysis of the influence of the negative electronic word of mouth and its effect on repurchase intention mediated by company mitigation responses', *WSEAS Transactions on Environment and Development*. doi: 10.37394/232015.2021.17.82.
- Huo, C. *et al.* (2022) 'Modeling the impact of corporate social responsibility on sustainable purchase intentions: insights into brand trust and brand loyalty', *Economic Research-Ekonomika Istrazivanja* . doi: 10.1080/1331677X.2021.2016465.
- Irfan, A. *et al.* (2019) 'The Influence of Social Media on Public Value: A Systematic Review of Past Decade', *Journal of Public Value and Administration Insights*. doi: 10.31580/jpvai.v2i1.481.
- Ismailova, E. *et al.* (2021) 'A meta-analysis of the factors affecting eWOM providing behaviour', *European Journal of Marketing*. doi: 10.1108/EJM-07-2018-0472.
- Karunaratne, T. (2021) 'The Heart of the Marketing: A Literature Review on Trending Marketing Strategies towards Sustainable Marketing; Premium Price strategy, Customer Ethnocentrism and Visual Merchandising', *SSRN Electronic Journal*. doi: 10.2139/ssrn.3955549.
- Kumar, R. R. and Alok, K. (2020) 'Adoption of electric vehicle: A literature review and prospects for sustainability', *Journal of Cleaner Production*. doi: 10.1016/j.jclepro.2019.119911.
- Kusawat, P. and Teerakapibal, S. (2022) 'Cross-cultural electronic word-of-mouth: a systematic literature review', *Spanish Journal of Marketing - ESIC*. doi: 10.1108/SJME-06-2021-0116.
- Lee, J. and Kwon, K. H. (2022) 'Sustainable and Safe Consumer Experience NFTs and Raffles in the Cosmetics Market after COVID-19', *Sustainability (Switzerland)*. doi: 10.3390/su142315718.
- Lim, W. M. *et al.* (2023) 'Evolution and trends in consumer behaviour: Insights from Journal of Consumer Behaviour', *Journal of Consumer Behaviour*. doi: 10.1002/cb.2118.
- Maharani Azis, T. (2021) 'Antecedents and Consequences of Brand Image and Customer Satisfaction on Smartphone Purchase Decisions', *Golden Ratio of Mapping Idea and Literature Format*. doi: 10.52970/grmilf.v1i2.132.
- Mancuso, I. *et al.* (2021) 'Understanding the purchasing behavior of consumers in response to sustainable marketing practices: An empirical analysis in the food domain', *Sustainability (Switzerland)*. doi: 10.3390/su13116169.
- Miskiewicz, R. (2020) 'Internet of Things in Marketing: Bibliometric Analysis. Marketing and Management of Innovations', *Marketing and Management of Innovations* .
- Muruganatham, G. and Priyadharshini, K. (2017a) 'Antecedents and consequences of private brand purchase: A systematic review and a conceptual framework', *International Journal of Retail and Distribution Management*. doi: 10.1108/IJRDM-02-2016-0025.
- Muruganatham, G. and Priyadharshini, K. (2017b) 'Antecedents and consequences of private brand purchase', *International Journal of Retail & Distribution Management*. doi: 10.1108/ijrdm-02-2016-0025.
- Narayanan, S. and Singh, G. A. (2023) 'Consumers' willingness to pay for corporate social responsibility: Theory and evidence', *International Journal of Consumer Studies*. doi: 10.1111/ijcs.12910.
- Nosi, C. *et al.* (2022) 'The influence of online and offline brand trust on consumer buying intention', *EuroMed Journal of Business*. doi: 10.1108/EMJB-01-2021-0002.
- Nuseir, M. T. (2019) 'The impact of electronic word of mouth (e-WOM) on the online purchase intention of consumers in the Islamic countries – a case of (UAE)', *Journal of Islamic Marketing*. doi: 10.1108/JIMA-03-2018-0059.
- Odoom, R. *et al.* (2020) 'Congruence of service positioning: Empirical evidence from Ghana', *Journal of Product and Brand Management*.
- Pendse, M. K., Nerlekar, V. S. and Darda, P. (2023) 'A comprehensive look at Greenwashing from 1996 to 2021: a bibliometric analysis', *Journal of Indian Business Research*. doi: 10.1108/JIBR-04-2022-0115.
- Pimonenko, T. *et al.* (2021) 'Green Financing for Carbon-Free Growth: Role of Banks Marketing

- Strategy', *Financial Markets, Institutions and Risks*. doi: 10.21272/fmir.5(3).71-78.2021.
- Polanco-Diges, L. and Debasa, F. (2020) 'The Use of Digital Marketing Strategies in the Sharing Economy: A Literature Review', *Journal of Spatial and Organizational Dynamics*.
- Popa, A. L. *et al.* (2022) 'Exploring Marketing Insights for Healthcare: Trends and Perspectives Based on Literature Investigation', *Sustainability (Switzerland)*. doi: 10.3390/su141710499.
- Pourfakhimi, S., Duncan, T. and Coetzee, W. J. L. (2020) 'Electronic word of mouth in tourism and hospitality consumer behaviour: state of the art', *Tourism Review*. doi: 10.1108/TR-01-2019-0019.
- Prakoew, C. R. S., Hidayah, N. and Dewi, A. (2022) 'A Scoping Review of Research on Brand Image, Marketing Mix, Patient Hospital Satisfaction, And Loyalty in Indonesia', *Res Militaris*.
- Purnomo, A., Herman, R. T. and Asitah, N. (2021) 'Green marketing publication: Bibliometric perspective mapping', in *Proceedings of the International Conference on Industrial Engineering and Operations Management*.
- Ruiz-Real, J. L., Uribe-Toril, J. and Gázquez-Abad, J. C. (2020) 'Destination branding: Opportunities and new challenges', *Journal of Destination Marketing and Management*. doi: 10.1016/j.jdmm.2020.100453.
- Santos, V. *et al.* (2022) 'Towards a framework for the global wine tourism system', *Journal of Organizational Change Management*. doi: 10.1108/JOCM-11-2020-0362.
- Sharmin, F. *et al.* (2021) 'Sustainable destination marketing ecosystem through smartphone-based social media: The consumers' acceptance perspective', *Sustainability (Switzerland)*. doi: 10.3390/su13042308.
- Suartina, I. W. *et al.* (2022) 'The role of brand love in mediating the effect of intensive distribution and social media promotion on brand loyalty and e-WOM', *International Journal of Data and Network Science*. doi: 10.5267/j.ijdns.2022.1.004.
- Suhan, M. *et al.* (2022) 'Exploring the sustainable effect of mediational role of brand commitment and brand trust on brand loyalty: an empirical study', *Economic Research-Ekonomika Istrazivanja* . doi: 10.1080/1331677X.2022.2048202.
- Tian, Y. and Kamran, Q. (2021) 'A review of antecedents and effects of loyalty on food retailers toward sustainability', *Sustainability (Switzerland)*. doi: 10.3390/su132313419.
- Varese, E., Cesarani, M. C. and Wojnarowska, M. (2023) 'Consumers' perception of suboptimal food: strategies to reduce food waste', *British Food Journal*. doi: 10.1108/BFJ-07-2021-0809.
- Vila-Lopez, N. and Küster-Boluda, I. (2021) 'A bibliometric analysis on packaging research: towards sustainable and healthy packages', *British Food Journal*. doi: 10.1108/BFJ-03-2020-0245.
- Viloria, R. (2022) 'Sustainable practices of selected publiclylisted higher educational institutions in ensuring good health and well-being', *Bedan Research Journal*. doi: 10.58870/berj.v7i1.35.
- Wandosell, G. *et al.* (2021) 'Green packaging from consumer and business perspectives', *Sustainability (Switzerland)*. doi: 10.3390/su13031356.
- Wibowo, A. *et al.* (2021) 'Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience', *Sustainability (Switzerland)*. doi: 10.3390/su13010189.
- Xia, Y. X. and Chae, S. W. (2021) 'Sustainable development of online group-buying websites: An integrated perspective of ecm and relationship marketing', *Sustainability (Switzerland)*. doi: 10.3390/su13042366.
- Xin, Y. *et al.* (2023) 'Identifying How E-Service Quality Affects Perceived Usefulness of Online Reviews in Post-COVID-19 Context: A Sustainable Food Consumption Behavior Paradigm', *Sustainability*. doi: 10.3390/su15021513.