

# The Impact Of Digitalization On Consumer Behavior Towards Sustainable Food Packaging

Abdelhamid Nechad<sup>1\*</sup>, Mohammed Khalfat<sup>2</sup>

<sup>1\*</sup>Professor, ESCA School of Management- Casablanca, Morocco

<sup>2</sup>Phd Student, ENCGT - Abdelmalek Essaadi University, Morocco

\*Corresponding Author: Abdelhamid Nechad

\* Professor, ESCA School of Management- Casablanca, Morocco

---

## Abstract

The digitalization of consumer behavior has emerged as a pivotal area in understanding the adoption of sustainable practices, particularly in the domain of eco-friendly food packaging. This working paper investigates the impact of digital tools and platforms on consumer perceptions, attitudes, and behaviors toward sustainable food packaging. Using a quantitative approach, we administered a structured questionnaire to gather data on consumer preferences, barriers, and motivators for adopting eco-friendly packaging solutions. The findings reveal key insights into the drivers of consumer decisions, such as digital communication, environmental awareness, and packaging attributes like material composition and recyclability. Furthermore, the study highlights gaps between consumer intentions and actions, emphasizing the role of targeted digital strategies in bridging this divide. These results contribute to advancing theoretical frameworks on sustainable consumer behavior while offering actionable recommendations for practitioners aiming to enhance the adoption of environmentally conscious packaging. The research underscores the critical need for collaboration between stakeholders to optimize digital engagement strategies and promote sustainable consumption.

**Keywords:** Digitalization, Consumer Behavior, Sustainable Packaging, Eco-Friendly Practices, Sustainability

---

## INTRODUCTION

The global shift toward sustainable consumption has highlighted the critical role of eco-friendly food packaging in mitigating environmental challenges. However, despite growing consumer awareness and the proliferation of digital tools aimed at influencing purchasing behavior, a significant gap remains between stated intentions and actual practices. This working paper examines how digitalization can bridge this divide by enhancing consumer engagement with sustainable packaging solutions, a domain that remains underexplored in academic literature. Sustainable packaging, or Eco-friendly packaging, defined as packaging that minimizes environmental impact through recyclability, biodegradability, and resource-efficient production, has gained considerable attention in recent years. Yet, in a few cases where environmental packaging has been an issue, the studies indicate that functional packaging characteristics influence consumers' purchasing decisions, whereas environmental characteristics do not seem to have any practical importance. Rokka, J., & Uusitalo, L. (2008). This inconsistency underscores the need for targeted strategies that effectively communicate the environmental benefits of sustainable packaging while addressing perceived barriers. Ginsberg and Bloom (2004) claim that there is not any single marketing tool that would be appropriate for all firms. Rather, strategies should be different based on different markets and the degree of consumer concern on the environment. Rahbar, E., & Abdul Wahid, N. (2011). Digitalization offers a unique opportunity to influence consumer perceptions and behaviors by leveraging tailored communication, real-time engagement, and data insights. Previous research has identified the potential of advertising in enhancing the visibility of sustainability labels and fostering trust through transparency: *Eco-labels are one way that advertisers attempt "to provide relevant, accurate, and meaningful information to allow purchasers to incorporate human health and environmental considerations as part of the routine purchasing decision"* (Case 2004, p. 32) Atkinson, L., & Rosenthal, S. (2014). However, many factors influence the consumers decision to purchase food in environmentally friendly packaging like consumer attitudes, visual designs, knowledge about the environmental effects of packaging... Popovic, I., Bossink, B. A. G., & Van Der Sijde, P. C. (2019).

This paper addresses the gaps between digitalization and consumers' behaviors towards sustainable packaging by analyzing consumer behavior through the lens of digitalization, focusing on the motivations, barriers, and perceptions surrounding sustainable food packaging. While developing its strategy, a business should therefore determine how to market and position itself, its brands and its products from the perspective of sustainability. Lewis, H., & Stanley, H. (2012). The findings contribute to bridging the literature's theoretical and practical gaps by proposing actionable insights.

### LITERATURE REVIEW

The global shift toward sustainable packaging has been the focus of numerous studies, highlighting its potential to mitigate environmental damage and align with the principles of a circular economy. This section explores previous research on consumer behavior, the role of digitalization, and existing gaps in understanding the adoption of eco-friendly food packaging.

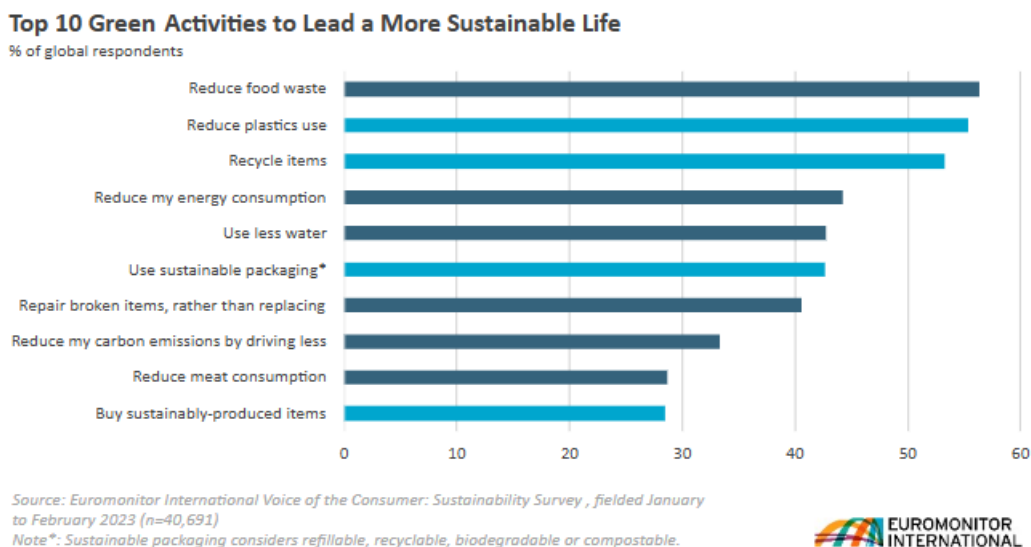
### CONSUMER BEHAVIOR AND SUSTAINABLE PACKAGING

The increasing demand for sustainable packaging solutions stems from heightened consumer awareness of environmental issues. "studies show that consumers have a high preference for ethical or 'green' products, but the consistency between consumer attitudes and behavioral measures is rather low." Rokka, J., & Uusitalo, L. (2008). However, preferences do not always translate into actual purchasing behavior due to factors such as affordability and cross-cultural differences. Popovic, I., Bossink, B. A. G., & Van Der Sijde, P. C. (2019).

Furthermore, "Past work has demonstrated that seals and certification labels are well received by consumers. One of the earliest studies (Parkinson 1975) to look at consumer perceptions of seals of approval found that, compared to other sources of product information (friends, salespersons, and advertisements), third-party seals, such as the Good Housekeeping Seal, were ranked highest on dimensions of expertise and impartiality and second only to friends on perceived trustworthiness." Atkinson, L., & Rosenthal, S. (2014). Despite this, the complexity and lack of standardization of eco-labels often result in consumer confusion, limiting their effectiveness.

### DIGITALIZATION AS A CATALYST FOR CHANGE

Digital tools have revolutionized how consumers access and interpret information on sustainability. Online platforms enable brands to communicate their environmental commitments, bridging the gap between consumer awareness and action. For instance, brands could engage with consumers directly, whether that is to use consumers to help specify packaging, or to communicate to consumers the ways packaging can play a role in sustainability as Verghese et al. (2015) suggest. Nguyen, A. T., Parker, L., Brennan, L., & Lockrey, S. (2020).



## GAPS AND DIVERGENCES IN RESEARCH

Despite progress in understanding consumer behavior toward sustainable packaging, significant gaps remain. One major issue is the **attitude-behavior gap**, where consumers express support for sustainability but fail to act accordingly. This gap often arises from a lack of familiarity with sustainable options and the perceived trade-offs between functionality and sustainability. *“The so-called ‘attitude-behaviour gap’ or ‘intention-behaviour gap’ is a well-known phenomenon in the field of sustainable consumer behaviour whereby many consumers’ positive attitude and noble intentions to act in a sustainable way are not translated into actual consumer behaviour”*. Ketelsen, M., Janssen, M., & Hamm, U. (2020).

Moreover, existing studies rarely address how digitalization can directly influence behavior. The integration of digital marketing can simplify consumer decision-making processes by providing real-time information on packaging sustainability and offering incentives for adopting eco-friendly behaviors. Digitalization also allows for tailored marketing strategies, which can target consumer segments with specific preferences, such as price-sensitive individuals or those highly motivated by environmental concerns. *“Over the past 20 years, marketing managers keenly seek to understand the green market; however, inadequate information on how to promote consumers’ green behavioral intentions is slowing the growth of green markets and becomes a barrier for firms when developing segments and communicating strategies for effective promotion of green products”*. Chekima, B., Chekima, S., Syed Khalid Wafa, S. A. W., Igau, O. @ A., & Sondoh, S. L. (2016).

## POSITIONING OF THE CURRENT RESEARCH

This study seeks to address these gaps by exploring the intersection of digitalization and consumer behavior toward sustainable packaging. By leveraging quantitative methods and examining real-world applications of digital ways, it contributes to the growing body of literature on bridging the gap between consumer attitudes and sustainable actions.

## METHODOLOGY

This study employs a quantitative approach using a structured questionnaire to collect data from participants. The questionnaire is designed to investigate the relationship between digitalization and consumer behavior toward sustainable food packaging, aligning with the objectives of this research. The survey is divided into multiple sections to comprehensively address demographic characteristics, the frequency and nature of digital tool usage, familiarity with sustainable packaging, exposure to digital campaigns, and purchasing behaviors.

The first section gathers demographic data, including gender, age, country of residence, education level, and average monthly income. These variables provide a baseline for understanding the profile of respondents and analyzing potential correlations between demographic factors and consumer behavior.

The second section explores the frequency of digital tool usage, particularly for grocery shopping, and redirects participants who do not use digital platforms to a specific section on awareness of sustainable packaging. This ensures a tailored data collection process, focusing on relevant consumer segments. Questions in this section also cover the types of digital channels used and the perceived ease of purchasing sustainable products through these tools, rated on a five-point Likert scale.

The third section addresses awareness and perceptions of sustainable food packaging. Participants are asked about their familiarity with sustainable materials, the importance they attribute to such packaging for environmental preservation, and their exposure to online campaigns promoting these products. Those unfamiliar with sustainable packaging are excluded from further questions, ensuring the validity of subsequent responses.

The fourth section evaluates the impact of digital campaigns on consumer behavior. Respondents are asked about their exposure to online advertisements highlighting sustainable packaging and the influence of such campaigns on their purchase decisions. Questions also explore which elements of digital campaigns—such as visuals, messages, or incentives—are most persuasive.

The fifth section focuses on purchasing behaviors and motivations. It examines the frequency of purchasing sustainably packaged products, the criteria influencing these decisions, and barriers preventing adoption. Participants identifying significant barriers are directed to a targeted set of questions designed to capture specific deterrents, such as cost, convenience, or availability.

To analyze the relationships between the frequency of digital platform usage, awareness of sustainable packaging, and the purchase of sustainable products, the Chi-square test was employed. However, due to low expected counts in some cells of the cross-tabulation tables, Fisher's exact test was applied as a complementary measure to enhance the robustness of the results.

This questionnaire-based methodology is particularly relevant for this study as it allows for the collection of diverse, structured data on consumer behavior and attitudes across various stages of the decision-making process. The design ensures logical flow and minimizes respondent fatigue by incorporating tailored skip logic.

**Anticipated Limitations:** While the structured nature of the questionnaire enables systematic data collection, it may limit the depth of responses compared to qualitative methods. Additionally, the reliance on self-reported data introduces the risk of social desirability bias, where participants may provide responses they perceive as socially acceptable rather than accurate. Finally, the use of a digital survey platform may inherently exclude less digitally engaged consumers, potentially skewing the sample toward digitally active individuals.

## DISCUSSION

### DIGITAL PLATFORM USAGE AND AWARENESS OF SUSTAINABLE FOOD PACKAGING

The findings indicate a significant relationship between the frequency of digital platform usage and consumer awareness of sustainable food packaging. As shown in **Table 1**, all 123 observations are valid, with no missing data, ensuring the reliability of the analysis. The cross-tabulation in **Table 2** reveals that 69 respondents (56.1%) are aware of sustainable food packaging, and among these, the majority (59 respondents) have a low frequency of digital platform usage, while 10 respondents have a high frequency. Conversely, a higher proportion of respondents with high platform usage are unaware of sustainable food packaging.

**Table 1: Summary of Observation Processing**

**Récapitulatif du traitement des observations**

	Observations					
	Valide		Manquante		Total	
	N	Pourcent	N	Pourcent	N	Pourcent
À quelle fréquence utilisez-vous les plateformes numériques pour *	123	100,0%	0	0,0%	123	100,0%
Connaissez-vous les emballages alimentaires durables	123	100,0%	0	0,0%	123	100,0%
À quelle fréquence utilisez-vous les plateformes numériques pour *	123	100,0%	0	0,0%	123	100,0%
Avez-vous déjà acheté un produit à emballage durable	123	100,0%	0	0,0%	123	100,0%

**Table 2: Cross-tabulation - Frequency of Digital Platform Usage vs Awareness of Sustainable Food Packaging**

**Tableau croisé**

Effectif		Connaissez-vous les emballages alimentaires durables		Total
		Non	Oui	
	Fréquence Elevée	17	10	27
	Fréquence Faible	37	59	96
Total		54	69	123

The Chi-square test results, presented in **Table 3**, confirm the statistical significance of this relationship ( $\chi^2 = 5.103$ , p-value = 0.024). Additionally, Fisher's exact test was applied due to the small expected counts in certain cells, further validating the observed relationship with a p-value of 0.021.

Table 3 : Chi-square Test Results

Tests du Khi-deux					
	Valeur	ddl	Signification asymptotique (bilatérale)	Signification exacte (bilatérale)	Signification exacte (unilatérale)
Khi-deux de Pearson	5,103 <sup>a</sup>	1	,024		
Correction pour la continuité <sup>b</sup>	4,160	1	,041		
Rapport de vraisemblance	5,089	1	,024		
Test exact de Fisher				,029	,021
Nombre d'observations valides	123				

a. 0 cellules (,0%) ont un effectif théorique inférieur à 5. L'effectif théorique minimum est de 11,85.  
b. Calculé uniquement pour un tableau 2x2

These findings suggest that digital tools serve as key enablers for raising awareness about eco-friendly practices, offering consumers accessible and engaging ways to learn about sustainability. The higher awareness rates among low-frequency platform users could indicate that alternative offline sources also contribute to sustainability education, or that highly frequent users may overlook specific sustainability content amidst the vast array of online information.

To ensure robustness, the application of Fisher’s exact test strengthens confidence in the results by addressing potential biases caused by low cell counts in the cross-tabulation.

**DIGITAL PLATFORM USAGE AND PURCHASE OF SUSTAINABLE PACKAGED PRODUCTS**

The findings indicate a significant relationship between the frequency of digital platform usage and the likelihood of purchasing sustainable packaged products. As shown in Table 4, 54 respondents reported purchasing sustainable packaged products, with the majority (48 respondents) having a low frequency of platform usage. Conversely, among those with high platform usage, 6 out of 27 respondents reported making such purchases.

Table 4: Cross-tabulation - Frequency of Digital Platform Usage vs Purchase of Sustainable Packaged Products

Tableau croisé

Effectif		Avez-vous déjà acheté un produit à emballage durable			Total
			Non	Oui	
À quelle fréquence utilisez-vous les plateformes numériques pour	Fréquence Elevée	17	4	6	27
	Fréquence Faible	37	11	48	96
Total		54	15	54	123

The Chi-square test results, presented in Table 5, confirm the statistical significance of this relationship ( $\chi^2 = 6.761$ , p-value = 0.034). Furthermore, the likelihood ratio test and Fisher’s exact test corroborate these findings, with respective p-values of 0.028, underscoring the robustness of the observed association despite low expected counts in some cells.

Table 5: Chi-square Test Results for Frequency vs Purchase of Sustainable Packaged Products

Tests du Khi-deux

	Valeur	ddl	Signification asymptotique (bilatérale)
→ Khi-deux de Pearson	6,761 <sup>a</sup>	2	,034
Rapport de vraisemblance	7,123	2	,028
Nombre d'observations valides	123		

a. 1 cellules (16,7%) ont un effectif théorique inférieur à 5. L'effectif théorique minimum est de 3,29.

These results suggest that while digital platforms play a role in facilitating sustainable consumer behavior, the frequency of their usage alone may not fully determine purchasing habits. This could imply that other factors, such as the type of digital content consumed or the presence of targeted advertisements, significantly influence purchasing decisions. The discrepancy between low and high-frequency users in sustainable purchasing patterns highlights the need for further research to explore these dynamics.

Table 6: Summary of Digital Platform Usage, Awareness, and Purchase Decisions for Sustainable Packaged Products

Relation	Test	$\chi^2$	df	ppp-value	Fisher ppp-value
Frequency vs Awareness	Chi-Square	5,103	1	0,024	0,021
Frequency vs Purchase	Chi-Square	6,761	2	0,034	0,028

EXPOSURE TO ONLINE ADVERTISEMENTS AND PURCHASE OF SUSTAINABLE PACKAGED PRODUCTS

The findings reveal a strong relationship between exposure to online advertisements promoting sustainable packaging and the purchase of such products. As shown in Table 7, all 123 observations are valid, with no missing data, confirming the robustness of the dataset. Table 8 highlights that 37 respondents who reported seeing online advertisements have purchased sustainable packaged products, compared to only 5 respondents who have not been exposed to such advertisements.

Table 7: Summary of Observation Processing for Advertisement Exposure and Purchase

Récapitulatif du traitement des observations						
	Observations					
	Valide		Manquante		Total	
	N	Pourcent	N	Pourcent	N	Pourcent
→ Avez-vous déjà vu des publicités en ligne mettant en avant des produits à emballage durable ?	123	100,0%	0	0,0%	123	100,0%

**Table 8: Cross-tabulation - Exposure to Online Advertisements vs Purchase of Sustainable Packaged Products**

Effectif		Avez-vous déjà acheté un produit à emballage durable			Total
			Non	Oui	
Avez-vous déjà vu des publicités en ligne mettant en avant des produits durables	Non	54	0	0	54
	Oui	0	10	22	32
Total		54	15	54	123

The Chi-square test results, presented in **Table 9**, confirm the statistical significance of this relationship ( $\chi^2 = 128.656$ ,  $p\text{-value} = 0.000$ ). Both the likelihood ratio and Fisher's exact test further validate these results, reinforcing the conclusion that exposure to online advertisements significantly impacts purchasing decisions.

**Table 9: Chi-square Test Results for Advertisement Exposure vs Purchase of Sustainable Packaged Products**

**Tests du Khi-deux**

	Valeur	ddl	Signification asymptotique (bilatérale)
Khi-deux de Pearson	128,656 <sup>a</sup>	4	,000
Rapport de vraisemblance	171,879	4	,000
Nombre d'observations valides	123		

a. 2 cellules (22,2%) ont un effectif théorique inférieur à 5. L'effectif théorique minimum est de 3,90.

These results underscore the critical role of digital campaigns in promoting sustainable consumer behavior. Digital advertisements effectively bridge the gap between awareness and action by leveraging targeted messaging and visuals to engage consumers. However, the data also highlights an area for further exploration: why some exposed consumers remain unresponsive to these advertisements.

**COMPARISON WITH PREVIOUS STUDIES**

The findings of this study align with and expand on the existing literature exploring the intersection of digitalization, sustainable consumer behavior, and the promotion of eco-friendly products. By comparing the results with prior research, this section highlights areas of convergence and divergence, as well as the contributions of this study to the field.

**DIGITAL MARKETING AND AWARENESS OF SUSTAINABLE FOOD PACKAGING**

The observed relationship between frequent use of digital platforms and awareness of sustainable food packaging confirms the pivotal role of digitalization in consumer education. Previous studies have highlighted that marketing act as facilitators of knowledge dissemination, particularly for complex and evolving topics such as sustainability; "Therefore, it can be argued that in product development and marketing, environment-friendly packaging and labelling should be taken more seriously" Rokka, J., & Uusitalo, L. (2008). This study corroborates those findings by showing a significant association between digital marketing platform usage and sustainability awareness ( $p\text{-value} = 0.024$ ).

Moreover, as research indicates: "businesses could be better off if consumer-defined dimensions (packaging materials, manufacturing technology and market appeal) are considered in production and marketing practices of packaged food products". Nguyen, A. T., Parker, L., Brennan, L., & Lockrey, S. (2020). However, this study reveals

that awareness levels are not uniformly distributed among digital users, suggesting the need for more targeted content strategies.

### IMPACT OF DIGITAL CAMPAIGNS ON PURCHASING BEHAVIOR

The significant influence of digital advertisements on the purchase of sustainable packaged products aligns with findings from prior studies. "*When consumers do not trust the content of the marketing claims or suspect an advertising message of deception or "greenwashing," they are much less likely to purchase the product or adopt a favorable attitude toward it (Kangun, Carlson, and Grove 1991; Thøgersen 2002).*" Atkinson, L., & Rosenthal, S. (2014). Similarly, the results of this study demonstrate that exposure to online campaigns is strongly associated with purchasing behavior. While prior research has emphasized the role of credibility and message framing in successful sustainability campaigns, this study highlights an additional layer of complexity: the disparity in responsiveness among exposed consumers. Research suggests that perceived costs (affordability) may act as barriers to conversion, Popovic, I., Bossink, B. A. G., & Van Der Sijde, P. C. (2019). even when exposed to targeted advertisements.

### BRIDGING THE AWARENESS-ACTION GAP

The dual role of digital platforms, as both enablers of awareness and facilitators of action, is well-documented in the literature. However, this study extends the discourse by examining the continuum from awareness to purchase. Unlike studies that focus solely on either stage, this research integrates the two, offering a more holistic perspective on consumer behavior.

Additionally, this study identifies gaps in digital engagement strategies, particularly the underperformance of campaigns in converting less-engaged demographics. This echoes previous calls for more segmented and personalized approaches to address diverse consumer motivations and barriers.

### CONCLUSION

This study provides valuable insights into the interplay between digitalization and consumer behavior toward sustainable food packaging, highlighting both opportunities and challenges in leveraging digital tools for sustainable consumption. By examining the continuum from awareness to action, the findings underscore the critical role of digital platforms in raising awareness and driving purchasing decisions for eco-friendly packaged products.

Key results demonstrate that frequent use of digital platforms significantly enhances awareness of sustainable packaging, confirming the transformative potential of digital tools as vehicles for sustainability education. Furthermore, the strong influence of targeted digital campaigns on purchasing behavior emphasizes the strategic importance of well-crafted online advertisements in converting intentions into tangible actions. However, this study also reveals disparities in responsiveness, with some consumer groups remaining less influenced by digital content, pointing to the need for more personalized and inclusive engagement strategies.

The research bridges a critical gap in literature by integrating awareness and action into a single framework, offering a holistic perspective on the role of digitalization in sustainable consumer behavior. It also contributes to ongoing discussions about the importance of refining digital engagement strategies to address diverse consumer motivations and overcome barriers to adoption.

These findings provide a foundation for actionable recommendations aimed at advancing the impact of digitalization on sustainable consumer behavior:

**1. For Brands and Companies:**

Brands could use digital campaigns that combine emotional appeal with clear, actionable sustainability information. Offering incentives, such as discounts for sustainable purchases, can further motivate hesitant consumers to adopt eco-friendly behaviors.

**2. For Researchers:**

Future research should focus on developing predictive models that identify which consumer segments are most responsive to digital sustainability campaigns. Such insights could enhance the targeting and effectiveness of digital marketing strategies.

**3. For Stakeholders:**

Stakeholders, including policymakers and industry leaders, could collaborate with digital platforms to promote public awareness campaigns about the environmental benefits of sustainable packaging. Implementing measures such as subsidies or tax breaks could further encourage businesses to invest in eco-friendly solutions.

**4. For Improving Inclusive Digital Campaigns:**

Digital campaigns must address the varying levels of digital literacy among consumers. Simplifying messages, incorporating multilingual content, and using culturally relevant visuals can significantly broaden engagement and ensure inclusivity.

Looking ahead, the findings of this study pave the way for further exploration into the nuanced dynamics of digital engagement, particularly in addressing underrepresented or disengaged demographics. Future research could focus on the intersection of emerging technologies, such as artificial intelligence and machine learning, to develop predictive models for optimizing digital campaigns and fostering long-term sustainable behavior. In an era of increasing environmental urgency, this study reaffirms the potential of digitalization as a powerful catalyst for global sustainability efforts.

**REFERENCES :**

1. Rokka, J., & Uusitalo, L. (2008). Preference for green packaging in consumer product choices – Do consumers care? *International Journal of Consumer Studies*, 32(5), 516-525. <https://doi.org/10.1111/j.1470-6431.2008.00710.x>
2. Rahbar, E., & Abdul Wahid, N. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business Strategy Series*, 12(2), 73-83. <https://doi.org/10.1108/17515631111114877>
3. Ginsberg, J. M., & Bloom, P. N. (2004). Choosing the right green marketing strategy. *MIT Sloan management review*, 46(1), 79-84.
4. Atkinson, L., & Rosenthal, S. (2014). Signaling the Green Sell : The Influence of Eco-Label Source, Argument Specificity, and Product Involvement on Consumer Trust. *Journal of Advertising*, 43(1), 33-45. <https://doi.org/10.1080/00913367.2013.834803>
5. Lewis, H., & Stanley, H. (2012). Marketing and Communicating Sustainability. In K. Verghese, H. Lewis, & L. Fitzpatrick (Éds.), *Packaging for Sustainability* (p. 107-153). Springer. [https://doi.org/10.1007/978-0-85729-988-8\\_3](https://doi.org/10.1007/978-0-85729-988-8_3)
6. Popovic, I., Bossink, B. A. G., & Van Der Sijde, P. C. (2019). Factors Influencing Consumers' Decision to Purchase Food in Environmentally Friendly Packaging : What Do We Know and Where Do We Go from Here? *Sustainability*, 11(24), 7197. <https://doi.org/10.3390/su11247197>
7. Nguyen, A. T., Parker, L., Brennan, L., & Lockrey, S. (2020). A consumer definition of eco-friendly packaging. *Journal of Cleaner Production*, 252, 119792. <https://doi.org/10.1016/j.jclepro.2019.119792>
8. Unwrapping Sustainable Packaging : Redesign for Circularity. (2024, mars 21). Euromonitor. <https://www.euromonitor.com/article/unwrapping-sustainable-packaging>
9. Ketelsen, M., Janssen, M., & Hamm, U. (2020). Consumers' response to environmentally-friendly food packaging—A systematic review. *Journal of Cleaner Production*, 254, 120123. <https://doi.org/10.1016/j.jclepro.2020.120123>
10. Chekima, B., Chekima, S., Syed Khalid Wafa, S. A. W., Igau, O. @ A., & Sondoh, S. L. (2016). Sustainable consumption : The effects of knowledge, cultural values, environmental advertising, and demographics. *International Journal of Sustainable Development & World Ecology*, 23(2), 210-220. <https://doi.org/10.1080/13504509.2015.1114043>