

## **Research Article**

## ADOPTION AND IMPLEMENTATION OF GREEN MARKETING STRATEGIES IN EGYPT'S EMERGING MARKET

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## Abstract

The study analyses the changing dynamics of sustainability and marketing strategies in Egypt's developing market, investigating the transformational capacity where environment in light of increasing worldwide environmental awareness. The study utilizes the mixed-method research approach and combines with the theoretical frameworks like diffusion of theory and Value-belief norm. The literature study highlights the importance of green marketing in promoting goods and services that are ecologically sustainable. The study explores the adoption of eco-friendly marketing strategies through large companies, revealing a positive correlation between green marketing methods and customer environmental consciousness, emphasizing the needs for improved regulatory frameworks and industry standards. The study suggests that while Corporate Social Responsibility programs positively impact companies of Egypt reputation and performance, there is no significant correlation in this context. The study suggests that through enhancing legislation, providing consumer education, implementation new CSR activities, fostering industry cooperation and adjusting green marketing strategies to promote sustainability and environmental responsibility.

Keywords: Green Marketing Strategies, Environmental Awareness, Regulatory Environment, Consumer Behavior, Corporate Social Responsibility.

## INTRODUCTION

Green marketing is a strategic approach promoting environmentally friendly products and practices, crucial in Egypt's developing country efforts to address environmental issues, enhance sustainability, and meet growing eco-friendly needs (Akhter et al., 2023). The significance of green marketing strategies for Egypt's new potential market lies in the following reasons. Firstly, and mainly, there is enhanced consumer knowledge and in newer directions of purchases they call for environmentally protect ways and sustainable (Nozari et al., 2021). This leads to the fact that a firm must create new opportunities like this and its competitors, or relinquish its market share. Secondly, the country of Egypt has to face the problems of pollution, resources depletion, and climate change, which demands from companies to collaborate and joint efforts to reduce the level of influence. A green marketing strategy will lay the foundation for being environmentally friendly through the awareness of conservation and a society that is more nature driven (Nekmahmud and Fekete-Farkas, 2020). Adoption and implementation of green marketing adopted in the Egyptian emerging market can play an essential role in the so that of the environment and economy (Shehata and Montash, 2020). Through maybe the environmental aspect, such strategies of targeted designs, the carbon emissions can be reduced, the resources conservation, the waste generation can be minimized, and the wasteful consumption can be sustainable (Guan et al., 2023). Additionally, they can be a source of the message, teach about environmental aspects, and stimulate citizens and entrepreneurship to act correctly. From the economic aspect, green marketing can open businesses to new markets and consequentially improve brand image, which will get the attention of environmentally conscious customer, and also stimulate the innovation of products and production processes.

Egypt's businesses are embracing the eco-revolution, advocating for sustainability, and reshaping the emerging market landscape. This reflects the worldwide trend towards increased environmental consciousness (Gills and Morgan, 2022). Businesses worldwide are recognizing the importance of eco-friendly principles, with strategy mapping and balanced scorecards being crucial for controlling green entrepreneurial supply chains in developing countries like Egypt (Adel, 2021). The integration of green practices in marketing and human resource management can foster the promotion of environmentally friendly goods and services, thereby promoting organizational sustainability (Kumar, 2020). The study aims to analyze green marketing strategies in Egypt's emerging market, identifying trends and challenges, and evaluating their effectiveness. It analyses consumer attitudes, regulatory frameworks in guiding businesses of Egypt towards sustainable approaches.

## LITERATURE REVIEW

#### **Theoretical Framework**

**Diffusion of Innovations Theory:** Diffusion of innovation theory explores that how new ideas and innovations spread within the society. However, applying it to the green marketing in Egypt that has involved in understanding the factors that has influenced the adoption of environmentally friendly products and practices among consumers and businesses (Sahin, 2006).

# Current Environmental Challenges in Egypt's Emerging Market

Egypt's growing economy faces environmental issues such as pollution and waste management. Industrialization and urbanization contribute to air and water pollution, while improper waste disposal and limited recycling infrastructure worsen the situation (Elbasiouny *et al.*, 2020). Water scarcity and preservation are key problems, with the Nile River being the primary source (Luo *et al.*, 2020). Climate change and

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population growth further exacerbate these issues. To address sustainable water management, Egypt should prioritize water saving activities, investment in irrigation technology, and alternative water sources development (El Bedawy, 2014). Egypt faces climate change consequences like sea level rise and heat waves, while climate migrants may find safety within its borders (Salah et al., 2023). To adapt, Egypt must invest in climate-proof infrastructure and promote sustainable agriculture practices, addressing water shortages and coastal areas(El Dallal, 2020). Egypt faces climate change consequences like sea level rise and heat waves, while climate migrants may find safety within its borders (Scheffran, 2020). To adapt, Egypt must invest in climate-proof infrastructure and promote sustainable agriculture practices, addressing water shortages and coastal areas.

## Green marketing strategies for sustainable business practices

Nekmahmud & Fekete-Farkas suggested that the green marketing promotes environmentally friendly products like refillable, ozone-friendly, nutritious food, and recyclable items, addressing consumer needs while protecting the environment and society (Nekmahmud and Fekete-Farkas, 2020). Mogaji explored that in Egypt, green marketing uses branding, packaging, and communication to attract and retain customers for environmentally-friendly products, aiming to achieve sustainability and maintain a strong brand identity (Mogaji et al., 2022). Abdelnaeim & El-Bassiouny on 351 Egyptian entrepreneurs found an inverse correlation between entrepreneurial cognitions and sustainability orientation. Nonentrepreneurs focused more on sustainability, while those with higher cognitive scripts had less. The research highlights the importance of sustainable entrepreneurship education and stakeholder involvement in emerging nations (Abdelnaeim and El-Bassiouny, 2021). I. J. Ismail stated that a global survey reveals that 67% of consumers are aware of environmental issues, and 54% actively consider sustainability factors in their purchasing decisions (Ismail et al., 2023b).Haq et al., (2021) emphasizes the importance of developing an effective environmentally-friendly product and marketing strategy for increased revenues and customer loyalty (Haq et al., 2021). EGYCOM combats poverty in Upper Egypt by focusing on the poorest villages in Assuit, Sohag, and Menya. They developed a point system to evaluate these villages, identifying palm trees as an unutilized resource. Innovation led to the creation of marketable products from palm midrib mats, participating in international exhibitions (El-Mously, 2018). The feasibility of introducing Education for Sustainable Development (ESD) in Egypt post-2011 youth revolution, finding a positive correlation between cultural resources and early childhood awareness, but no correlation with curriculum satisfaction (Ramzy and Wahieb, 2012). Egypt is taking environmental awareness campaigns as an instrument for encouraging to the public sustainable practices and safeguard the natural resources, as a preventive measure confront to the global warming problems (Sowers, 2013). Green Egypt program of Egyptian government appeared in 2014 with the idea of strict waste management practices, involving proper disposal of garbage and the implementation of sustainable waste management systems in public spaces, streets, and tourist destinations (Daoud et al., 2020).

## Adoption and implementation of green marketing strategies

Mitchell stated that SMEs are causing more environmental damage and generating more waste than major corporations

(Mitchell et al., 2020). However, Mady explored that the implementation of eco-innovation has proven advantageous for major corporations, enhancing value creation and offering a competitive edge (Mady et al., 2022). Khalil & Nimmanunta examines ESG data from 462 Asian companies from 2015-2019, finding that traditional innovation increases environmental impact, while green innovation improves financial performance, suggesting companies prioritize ecofriendly initiatives for improved innovation outcomes and stakeholder attraction (Khalil and Nimmanunta, 2023). The study explores Egypt's transport infrastructure, highlighting issues like congestion, insecurity, and accidents, emphasizing the need for sustainable, environmentally friendly urban transport systems through green pricing (Abdel Wahed Ahmed and Abd El Monem, 2020). Egypt is implementing green disposal strategies to manage construction and demolition waste effectively, addressing challenges such as overseeing routes, collection, transportation, identifying illegal dumps, and monitoring waste handling (Ismail et al., 2023a). Elakkad and Ismaeel has highlighted daylight performance in Egyptian office buildings, establishing a Unified Design Guideline using local regulations and green building rating systems, highlighting the need for performance-based guidelines. However, in Egypt green positioning strategy has also been adopted (Elakkad and Ismaeel, 2021).

## **Environmental Awareness among Customers**

Celebrity endorsement in green advertising significantly impacts millennials' intentions to engage in environmentally friendly practices. This research examines how celebrity endorsement influences Egyptian millennials' intentions to adopt sustainable behaviors in tourist areas (Kamel, 2020). The relation between environmentally sustainable practices (ESPs) and consumer behavioral intentions has largely passed over customer citizenship behavior, despite growing interest in this area (Abdou et al., 2022). Green manufacturing is a strategy that integrates traditional manufacturing methods with the green concept, significantly impacting the production and marketing of green products (Yin et al., 2021). Abbas and Hussien explores the influence of green supply chain management on the operational performance and competitive advantage of international quick-service restaurants in Egypt in which it has been found that there was a positive effect in a restaurant competitive advantage with green environment and in operational performance (Abbas and Hussien, 2021). The research analyses green marketing and the gap between customers' attitudes and purchasing behavior. It identifies three main themes included personal characteristics, green purchasing, and the green marketing mix. Factors influencing green consumer behavior include environmental concern, ecolabelling, prior experiences, and perceived utility. Barriers include limited environmental knowledge, high prices, perceived hazards, and trust issues (Sharma, 2021). Green buying behavior includes purchasing eco-friendly, recyclable, or biodegradable items, avoiding harmful products, and is measured by customers' readiness to purchase environmentally friendly goods (Zheng et al., 2020). The impact of environmentally sustainable practices (ESPs), green perceived value (GPV), and customer citizenship behavior (CCB) on CCB in five-star eco-friendly hotels in Egypt. Results show that ESPs significantly affect GPV and CCB, with GPV partially mediating the relationship. The findings suggest that environmentally sustainable hotel properties are rewarded by customers through CCBs, suggesting practical implications for managers to better manage their ESPs and achieve positive outcomes (Abdou et al., 2022).

 $H_1$ : There is a positive relationship between environmental awareness among customers with Implementation of Green Marketing Strategies.

## **Regulatory Environment**

Pan stated in the study that policymakers are increasingly focusing on green innovation, particularly environmental R&D, to minimize pollution and natural resource utilization. However, concerns about competition and environmental investment in industrial organizations persist (Pan *et al.*, 2023). Sustainability has become a business imperative for most companies, rather than a choice (Ghosh, 2019). Companies are implementing a green marketing strategy to cater to their target market without causing harm to the environment (Gelderman *et al.*, 2021). Green marketing strategies enhance brand image and commercial success by promoting environmentally friendly products and services through recyclable packaging, improved pollution control, and efficient energy use (Mukonza and Swarts, 2020).

 $H_2$ : There is a positive relation between regulatory environments with Implementation of Green Marketing Strategies.

## **Consumer Preferences and Purchasing Behavior**

In Egypt the study explores Generation Z, a tech-savvy, global citizen generation born after 1990, who will significantly influence global governance, operation, demand, and supply (Khalil et al., 2021). Green consumers demand eco-friendly, recyclable, and biodegradable products, while price remains a challenge. GM strategies can overcome this, as studies show quality and price don't negatively impact consumer decisions (García-Salirrosas and Rondon-Eusebio, 2022). Companies striving for a competitive edge often adopt green concepts due to increased consumer enthusiasm (Sewwandi and Dinesha, 2022). This study has observed the factors influencing Egyptian consumers' organic food purchase intention as the emerging companies in Egypt were focused in supplying food through green marketing strategies (Zayed et al., 2022). Green consumption is a responsible environmental behavior that minimizes and solves environmental threats, attracting attention from companies and consumers in recent years (Nguyen et al., 2019, Correia et al., 2023). The number of studies has found eco-friendly purchasing behaviors is increasing, with 58.3% based on data from five Asian countries included China, India, Malaysia, Pakistan, and Taiwan. However, research indicates that developing countries are shifting towards eco-friendly purchases over Western ones (Chen and Chai, 2010, Kortam and Mahrous, 2020).

 $H_3$ : There is a positive relationship between consumer preference and purchasing behavior with Implementation of Green Marketing Strategies.

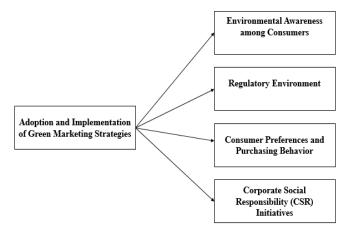
## **Corporate Social Responsibility Initiatives**

Green practices positively influence firms' image and performance, requiring management to invest in CSR activities and monitor them effectively for efficient resource utilization (Khan *et al.*, 2021). Customer sustainable consumption behavior impacts society's development, providing economic benefits and ensuring environmental sustainability. Green economy and strategy are crucial in the hotel system (Chung, 2020). Firms face the challenge of pricing green products, considering factors like procurement and marketing. Green products are more expensive than regular ones, prompting companies to implement CSR activities like scholarships, health camps, and financial support for small industries (Sana, 2020).

H<sub>4</sub>: There is a negative relationship between Corporate Social Responsibility Initiatives and with Implementation of Green Marketing Strategies.

## **CONCEPTUAL FRAMEWORK**

#### **Table 1. Conceptual Framework**



## METHODOLOGY

The research has observed mixed methodology approach through qualitative and quantitative analysis. In quantitative analysis survey has been gathered from 200 respondents. In quantitative analysis SPSS software has been used to conduct the analysis. However, regression analysis, correlation analysis and frequency analysis conducted in the research. Whereas, in qualitative analysis thematic analysis has been done based on the 4 interviews.

#### **Quantitative Analysis**

#### Frequency Analysis

Table 2. Frequency Analysis

Categories	Number of Participant	Mean
Age	200	2
Education	200	3.31
Employment Status	200	1
Green Marketing Strategies	200	4.906
Environmental Awareness	200	4.1013
Regulatory Environment	200	4.0863
Corporate Social Responsibility	200	4.09
Consumer Green Purchase Behavior	200	4.673

The mean value in age is 2.00 suggesting a relatively young or diverse age group. The mean education level of 3.31 indicating a moderate high educational background among the participants. Whereas, employment status with the mean value is 1.00 indicating a significant portion of participants that has been employed full-time. High mean value for the green marketing strategies (4.9060), environmental awareness (4.1013), regulatory environment (4.0863), Corporate social responsibility (4.0900) and consumer green purchase behavior (4.6730) suggesting a strong positive inclination and favorable perceptions among participants towards these aspects.

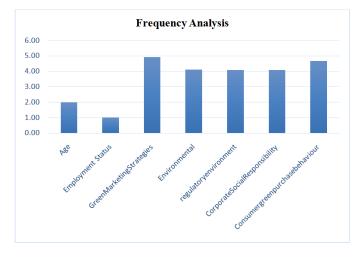


Figure 1. Frequency Graph

## **Regression Analysis**

Table 3. Model Summary

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.342ª	0.117	0.099	0.20902		

The regression model has a moderate correlation between predictor variables and outcome variables with an R value of 0.342, 11.7% of variance explained by independent variables. However, the model's complexity suggests a lower proportion of explained variability. The standard error of the estimate is 0.20902 including potential room for improvement.

Table 4. Anova

AN	NOVA					
Mo	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.132	4	0.283	6.478	$.000^{b}$
	Residual	8.519	195	0.044		
	Total	9.651	199			

The ANOVA table provides the variance within the regression model however, the sum of squares attributable to the model with a value of 1.132. The F-statistic with a p-value of .000, has shown statistically significant explanatory power.

	Table 5. Coefficient							
Co	efficients							
Mo	odel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	4.018	0.407		9.88	0		
	Regulatory Environment	-0.208	0.098	-0.158	-2.115	0.036		
	Consumer	0.15	0.05	0.23	2.974	0.003		
	behavior							
	Environmental Awareness	0.12	0.067	0.13	1.782	0.076		
	CSR	0.114	0.07	0.126	1.62	0.107		

Table 5 Coefficient

Consumer behavior has shown a coefficient of 0.150 with a standard error of 0.050, indicating a positive relationship and its significance level (p = 0.003). The coefficient for environmental awareness is 0.120 with the standard error of 0.067 although the positive relationship has implied a potential influence associated with the p-value of 0.076 falls slightly above the conventional threshold of 0.05. Whereas, CSR has a coefficient of 0.114 with the standard error of 0.070. The positive sign suggested a positive association but the p-value of 0.107 suggests that, similar to "Environmental awareness" the impact of Corporate Social Responsibility (CSR) on the dependent variable is not statistically significant at the conventional level.

## **Correlation Analysis**

Marketing strategy exhibits statistically significant positive correlation with the consumer behavior (r = .284, p = .000), environmental concerns (r = .198, p = .005), and CSR (r = .194, p = .006). These positive correlations imply that as marketing strategies align more closely with consumer behavior, environmental considerations and Corporate Social responsibility the likelihood of the successful marketing outcomes increases. The study has found that the interrelationships between regulatory factors, consumer behavior and CSR have positive correlations observed in consumer behavior and CSR, suggesting potential synergies or shared influences in the marketing strategy.

## **Qualitative Analysis**

## Environmental Awareness among Customers:

"I am environmentally conscious, actively seeking information on eco-friendly initiatives, following environmental news and adopting sustainable habits in my daily life in reducing waste and support for responsible businesses".

Correlations							
		Marketing strategy	regulatory	Consumer behavior	Environmental	CSR	
Marketing strategy	Pearson Correlation	1	-0.01	.284**	.198**	.194**	
	Sig. (2-tailed)		0.892	0	0.005	0.006	
Regulatory environment	Pearson Correlation	-0.01	1	.280**	.269**	.383**	
	Sig. (2-tailed)	0.892		0	0	0	
Consumer Behavior	Pearson Correlation	.284**	$.280^{**}$	1	.345**	.419**	
	Sig. (2-tailed)	0	0		0	0	
Environmental awareness	Pearson Correlation	.198**	.269**	.345**	1	.240**	
	Sig. (2-tailed)	0.005	0	0		0.001	
CSR	Pearson Correlation	.194**	.383**	.419**	.240**	1	
	Sig. (2-tailed)	0.006	0	0	0.001		
	N	200	200	200	200	200	

**Table 6. Correlation** 

The participant has explored that commitment towards environmental awareness is evident through involvement in eco-friendly programs, monitoring of environmental updates, and integrating sustainable practices in the daily routine. The conscientious enterprise and knowledge of environmentally friendly habits demonstrate the commitment towards sustainable future.

"Moderate environmental awareness, incorporating ecofriendly choices, but open to improvement. Open to learning and exploring ways to enhance contribution to conversation".

Participant has stated that a moderate level of environmental awareness and eco-friendly choices demonstrate a commitment to sustainable living. Also, there is a room for improvement and embracing personal growth in this area is crucial for a gradual transition towards sustainable lifestyle. This attitude contributes to a more ecologically way of living.

## "Environmental issues and sustainability practices is limited, But I am open to learning about individual actions and business practices to make more conscious choices".

It has been stated that openness towards learning about environmental issues and sustainability practices demonstrates a positive attitude towards increasing awareness and making conscious choices. This willingness to educate oneself is crucial for fostering a sustainable lifestyle and promoting personal growth, contributing to broader environmental challenges.

## **Regulatory Environment:**

"Enhancing the regulatory framework for sustainable practices necessitates strict enforcement of environmental laws, stronger penalties for non-compliance and regular audits and inspections to encourage businesses to prioritize sustainability".

Participant has stated that the regulatory framework for sustainable practices, emphasizing adherence towards environmental laws, stronger penalties for non-compliance, and regular audits and inspections. It aims to foster a culture of accountability and encourage conscious businesses to prioritize sustainability, promoting more environmentally conscious and responsible business landscape.

"Collaborative industry standards, involving government and business input, can improve sustainable practices regulatory frameworks through reflecting diverse challenges and encouraging collective commitment to sustainability".

Participant has explored that the collaborative industry standards involving government and business input, aim to improve sustainable practices through creating realistic and feasible regulations. However, this inclusive process fosters a collective commitment towards sustainability, recognizing the interconnectedness of environmental concerns and promoting an effective, adaptable regulatory environment across different industries.

"Investing in public awareness and education about sustainability is crucial for enhancing the regulatory framework, as informed consumers support businesses with strong environmental practices, creating market-driven incentives". Participant has found that by investing in public awareness and education about sustainability to enhance the regulatory framework. Although the role of informed consumers in driving market incentives for business, creating a symbiotic relationship where increased awareness drives demand for sustainable practices and arrange business with environmental goals.

## **Consumer Preferences and Purchasing Behavior:**

"The prioritized environmental values when purchasing new clothing, choosing a company known for sustainable and ethically produced products, thereby contributing to a more sustainable and ethical fashion industry".

It has been found that a company with a focus on sustainability is a conscious consumer choice based on their personal style preferences. Though it signifies a commitment in supporting businesses that has aligned with one's values in shaping marketing and also encouraging environmentally practices in the industries.

"The prioritized environmentally friendly home appliances, in energy efficient options with eco-friendly certifications, despite slightly higher upfront costs, to reduce energy consumption and carbon footprints".

Participant has explored that the preference of eco-friendly home appliances reflects a commitment towards sustainable lifestyle valuing long term environmental impact over initial costs. Considering the environmental values, contributing towards climate change and promoting sustainable practices.

"I switched to a hybrid card for reduced emission and improved fuel efficiency, aligning with my environmental values and promoting cleaner transportation alternatives".

Participant has suggested that the shift towards a hybrid car explores a conscious alignment with personal choices with environmental values in addressing climate concerns and contributing towards sustainable future. It also signifies a broader shift towards cleaner transportation alternatives, highlighting the importance of individual choices in promoting environmental stewardship.

## Corporate Social Responsibility Initiatives:

"The Egyptian cotton Company's commitment towards sustainable agriculture, including water reduction, organic farming, and fair labor practices has boosted consumer preference for Egyptian cotton products".

Participant has suggested that the Egyptian Cotton Company commitment to sustainable agriculture practices including water reduction, organic farming, and fair labor has boosted consumer preference for Egyptian cotton products. This has aligned with the global environment concerns and promotes ethical business practices, attracting buyer who value products reflecting their values.

"Solarize Egypt, a forward-thinking company where I am working there as they promotes energy solutions for residential and commercial use, in contributing to Egypt's transition towards cleaner energy and sustainable development". Participant has explored about the Solarize Egypt, a company promoting energy solutions for residential and commercial use is actively participating in Egypt's towards cleaner energy and sustainable development. It aligns with the global efforts in reducing dependence on traditional energy sources and mitigate environmental impact fostering sustainable practices and diversifying Egypt's mix.

"Green tech solutions innovative waste recycling initiatives in Egypt demonstrate their commitment towards environmental sustainability, fostering increased support for their products and services".

Participant has stated that the Green Tech Solutions in Egypt is a leader in waste recycling, implementing innovative technologies to minimize industrial processes' environmental impact. This proactive approach is expected to gain increased support as consumers and businesses recognize the importance of sustainable practices. This positive response signifies a growing demand for environmentally responsible products and services.

"Nile Eco-Tours a company focusing on eco-friendly tourism practices in Egypt, promotes local conversation and community development projects, demonstrating a responsible approach to travel and sustainability".

Participant has stated that the Nile Eco – tours in Egypt is a leading eco-friendly tourism company that promotes local conservation and community development projects. This approach minimizes the ecological impact of tourism, benefiting the environment and local communities. Nile Eco-tours arranges global awareness of travel's impact on ecosystems and local cultures, enhancing travel experiences and contributing towards a sustainable tourism industry.

## DISCUSSION

The study has found a young, educated and full-time workforce with a strong positive attitude towards green marketing strategies, environmental awareness and consumer green purchase behavior. The regression analysis shows a moderate correlation among predictor variables and resulted variables, with consumer behavior showing the highest significance. The analysis emphasizes the importance of aligning marketing strategies with consumer behavior, environmental concerns, and corporate social responsibility, providing insights for businesses in the Egyptian market. Green marketing refers to the responsible and efficient use of resources, preservation of the environment, minimization of negative impacts on people and nature, fulfillment of environmental requirements, conscientious provision of services, and rational consumption and proper disposal of goods (Krotenko, 2023). The study has found that in Egypt emerging companies are indulged in the implantation of green marketing strategies including environmental awareness, regulatory environment, and consumer preference and purchasing behavior except corporate social responsibility as they need to focus more on corporate social responsibility. Most Egyptian companies have adopted and implemented the modern method of establishing and communicating environmental goals (EGs) to assess their sustainability performance (Helfaya et al., 2023). Companies must possess environmental skills and effectively utilize them to gain ecoadvantages through proactive environmental actions to

maintain their competitive edge (Mady et al., 2023). Green marketing strategies are utilized by companies to raise consumer awareness and demonstrate their commitment to environmental issues, primarily embraced by industrialized nations (Hasan et al., 2019, Le, 2022). Companies are attracting environmentally conscious customers, resolving misunderstandings, and transforming their marketing approach from conventional to a comprehensive brand plan (Verleve et al., 2023). Nile-Eco Tours, a significant economic force in Egypt's tourism sector, has implemented green marketing strategies but lacks corporate social responsibility (El-tahhan, 2024).In Egypt adopted green firms are adapting to environmental concerns, focusing on sustainable services to maintain a competitive edge and minimize negative environmental impact (Agag and Colmekcioglu, 2020). Businesses are adopting green practices based on moral motivations, fostering innovation and sustainable development, while instrumental motivations, driven by personal gain and self-interest, encourage waste reduction and cost reduction (Yousaf et al., 2021). Environmental regulation significantly impacts corporate innovation behavior, affecting the development of new technologies, goods, and systems (Shao et al., 2020). Egyptians are increasing their environmental consciousness, adopting sustainable lifestyles and supporting trusted companies (Khalil et al., 2021). Government raises ethical practices, leading to eco-friendly products from Egyptian companies like Egyptian Cotton Company, Solarize Egypt, Green Tech Solutions, and Nile Eco-Tours (El-Morsy). Corporate social responsibility (CSR) disclosure is a growing issue in corporate transparency, allowing managers to highlight their companies' economic and social contributions. Decisionmakers' choices and values significantly influence CSR disclosure (Abdelfattah and Aboud, 2020). Green marketing strategies, which focus on creating eco-friendly products and services, are used by businesses to improve their corporate image and business performance. A study using South Africa's Woolworths and Pick n Pay found that these strategies positively impact corporate image and performance. The study recommends that enterprises adopt green marketing strategies to maintain a competitive edge in the retail sector (Mukonza and Swarts, 2020).

## Conclusion

The research has offered useful perspectives on the developing convergence of sustainability and marketing strategies in Egypt's emerging business. The research has highlighted the growing significance of environmentally sustainable practices for companies. The study illuminates the dynamics that influence green marketing strategies through thorough analysis including theoretical framework, literature evaluation and mixed method methodology. The results have indicated there are beneficial relations between environmental consciousness, regulatory framework, consumer choices and corporate social responsibility efforts with the use of green marketing strategies. However, the associations are favorable specific factors such as the influence of corporate social responsibility programs did not achieve statistical significance.

## Recommendation

• Strengthening regulatory frameworks with strict enforcement and incentives for sustainability can further encourage businesses in Egypt to adopt and prioritize green practices.

- Businesses in Egypt should explore innovative CSR initiatives that align with their core values and resonate with environmentally consciousness consumers, potentially enhancing the effectiveness of green marketing.
- Emerging Egyptian companies need to enhance their corporate social responsibility (CSR) initiatives, focusing on sustainable practices, community development, ethical labor, and environmentally responsible operations. This aligns with global environmental and social expectations, enhances brand reputation, and promotes long-term sustainability.

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**Statement of Competing Interests:** The authors declare that they have no competing interests related to the research presented in this work.

## List of Abbreviations

AIMSGM - Adoption and Implementation of Green Marketing EEM - Egypt's Emerging Market GM - Green Marketing IM - Implementation EMS - Emerging Market Strategies

## REFERENCES

- Abbas, T. M. & hussien, F. M. 2021. The Effects Of Green Supply Chain Management Practices On Firm Performance: Empirical Evidence From Restaurants In Egypt. *Tourism And Hospitality Research*, 21, 358-373.
- Abdel Wahed Ahmed, M. M. & Abd El Monem, N. 2020. Sustainable And Green Transportation For Better Quality Of Life Case Study Greater Cairo–Egypt. *Hbrc Journal*, 16, 17-37.
- Abdelfattah, T. & Aboud, A. 2020. Tax Avoidance, Corporate Governance, And Corporate Social Responsibility: The Case Of The Egyptian Capital Market. *Journal Of International Accounting, Auditing And Taxation,* 38, 100304.
- Abdelnaeim, S. M. & El-Bassiouny, N. 2021. The Relationship Between Entrepreneurial Cognitions And Sustainability Orientation: The Case Of An Emerging Market. *Journal Of Entrepreneurship In Emerging Economies*, 13, 1033-1056.
- Abdou, A. H., Shehata, H. S., Mahmoud, H. M. E., Albakhit, A. I. & Almakhayitah, M. Y. 2022. The Effect Of Environmentally Sustainable Practices On Customer Citizenship Behavior In Eco-Friendly Hotels: Does The Green Perceived Value Matter? Sustainability, 14, 7167.
- Adel, H. M. 2021. Mapping And Assessing Green Entrepreneurial Performance: Evidence From A Vertically Integrated Organic Beverages Supply Chain. Journal Of Entrepreneurship And Innovation In Emerging Economies, 7, 78-98.
- Agag, G. & Colmekcioglu, N. 2020. Understanding Guests' Behavior To Visit Green Hotels: The Role Of Ethical Ideology And Religiosity. *International Journal Of Hospitality Management*, 91, 102679.
- Akhter, F., Hossain, M. R., Elrehail, H., Rehman, S. U. & Almansour, B. 2023. Environmental Disclosures And

Corporate Attributes, From The Lens Of Legitimacy Theory: A Longitudinal Analysis On A Developing Country. *European Journal Of Management And Business Economics*, 32, 342-369.

- Chen, T. B. & Chai, L. T. 2010. Attitude Towards The Environment And Green Products: Consumers' Perspective. *Management Science And Engineering*, 4, 27.
- Chung, K. C. 2020. Green Marketing Orientation: Achieving Sustainable Development In Green Hotel Management. *Journal Of Hospitality Marketing & Management*, 29, 722-738.
- Correia, E., Sousa, S., Viseu, C. & Larguinho, M. 2023. Analysing The Influence Of Green Marketing Communication In Consumers' Green Purchase Behaviour. International Journal Of Environmental Research And Public Health, 20, 1356.
- Daoud, A. O., Othman, A. A. E., Robinson, H. & Bayyati, A. 2020. An Investigation Into Solid Waste Problem In The Egyptian Construction Industry: A Mini-Review. *Waste Management & Research*, 38, 371-382.
- El-Morsy, M. A. H. A. The Role Of Fiscal And Monetary Policies In Facing Climate Change Risks (Egypt As A Case Study).
- El-Mously, H. 2018. Innovating Green Products As A Mean To Alleviate Poverty In Upper Egypt. *Ain Shams Engineering Journal*, 9, 2039-2056.
- El-Tahhan, E. A.-K. S. 2024. Environmental Awareness Of Employees As A Mediating Variable In The Relationship Between The Marketing Orientation Of Green Star Hotels And Sustainable Tourism In Egypt. Wseas Transactions On Business And Economics, 21, 248-265.
- El Bedawy, R. 2014. Water Resources Management: Alarming Crisis For Egypt. J. Mgmt. & Sustainability, 4, 108.
- El Dallal, N. 2020. Planning For A Changing Climate: Arm'd City Model: The Case Of The Mediterranean Northern Coast In Egypt, Technische Universitaet Berlin (Germany).
- Elakkad, N. & Ismaeel, W. S. 2021. Coupling Performance-Prescriptive Based Daylighting Principles For Office Buildings: Case Study From Egypt. *Ain Shams Engineering Journal*, 12, 3263-3273.
- Elbasiouny, H., Elbanna, B. A., Al-Najoli, E., Alsherief, A., Negm, S., Abou El-Nour, E., Nofal, A. & Sharabash, S. 2020. Agricultural Waste Management For Climate Change Mitigation: Some Implications To Egypt. *Waste Management In Mena Regions*, 149-169.
- García-Salirrosas, E. E. & Rondon-Eusebio, R. F. 2022. Green Marketing Practices Related To Key Variables Of Consumer Purchasing Behavior. *Sustainability*, 14, 8499.
- Gelderman, C. J., Schijns, J., Lambrechts, W. & Vijgen, S. 2021. Green Marketing As An Environmental Practice: The Impact On Green Satisfaction And Green Loyalty In A Business-To-Business Context. *Business Strategy And The Environment*, 30, 2061-2076.
- Ghosh, M. 2019. Determinants Of Green Procurement Implementation And Its Impact On Firm Performance. *Journal Of Manufacturing Technology Management*, 30, 462-482.
- Gills, B. & Morgan, J. 2022. Global Climate Emergency: After Cop24, Climate Science, Urgency, And The Threat To Humanity. *Economics And Climate Emergency*. Routledge.
- Guan, L., Li, W., Guo, C. & Huang, J. 2023. Environmental Strategy For Sustainable Development: Role Of Digital Transformation In China's Natural Resource Exploitation. *Resources Policy*, 87, 104304.

- Haq, F., Adnan, A. & Ali, A. 2021. Influence Of Green Marketing Practice On Consumer Buying Behavior: Moderating Persuasion Of Environmental Awareness. *Journal Of Managerial Sciences*, 15.
- Hasan, M. M., Nekmahmud, M., Yajuan, L. & Patwary, M. A. 2019. Green Business Value Chain: A Systematic Review. Sustainable Production And Consumption, 20, 326-339.
- Helfaya, A., Aboud, A. & Amin, E. 2023. An Examination Of Corporate Environmental Goals Disclosure, Sustainability Performance And Firm Value–An Egyptian Evidence. *Journal Of International Accounting, Auditing And Taxation*, 52, 100561.
- Ismail, E. R., El-Mahdy, G. M., Ibrahim, A. H. & Daoud, A. O. 2023a. Analysis Of Factors Affecting Construction And Demolition Waste Safe Disposal In Egypt. *Alexandria Engineering Journal*, 70, 515-523.
- Ismail, I. J., Amani, D. & Changalima, I. A. 2023b. Strategic Green Marketing Orientation And Environmental Sustainability In Sub-Saharan Africa: Does Green Absorptive Capacity Moderate? Evidence From Tanzania. *Heliyon*, 9.
- Kamel, N. 2020. Examining The Mediating Role Of Celebrity Endorsement In Green Advertisements To Improve The Intention Of Egyptian Millennials Towards Environmental Behaviours In Tourist Destinations. *Tourism & Management Studies*, 16, 7-21.
- Khalil, M. A. & Nimmanunta, K. 2023. Conventional Versus Green Investments: Advancing Innovation For Better Financial And Environmental Prospects. *Journal Of Sustainable Finance & Investment*, 13, 1153-1180.
- Khalil, S., Ismail, A. & Ghalwash, S. 2021. The Rise Of Sustainable Consumerism: Evidence From The Egyptian Generation Z. Sustainability, 13, 13804.
- Khan, S. A. R., Yu, Z. & Umar, M. 2021. How Environmental Awareness And Corporate Social Responsibility Practices Benefit The Enterprise? An Empirical Study In The Context Of Emerging Economy. *Management Of Environmental Quality: An International Journal*, 32, 863-885.
- Kortam, W. & Mahrous, A. A. 2020. Sustainable Marketing: A Marketing Revolution Or A Research Fad. Archives Of Business Research, 8, 172-181.
- Krotenko, T. Y. 2023. "Green" Marketing As A Tool For Innovative Management. Вестник Московского Государственного Областного Университета. Серия: Экономика, 61-70.
- Kumar, V. 2020. Withdrawn: Organizational Sustainability And Green Business Practices–The Way Forward. Elsevier.
- Le, T. T. 2022. How Do Corporate Social Responsibility And Green Innovation Transform Corporate Green Strategy Into Sustainable Firm Performance? *Journal Of Cleaner Production*, 362, 132228.
- Luo, P., Sun, Y., Wang, S., Wang, S., Lyu, J., Zhou, M., Nakagami, K., Takara, K. & Nover, D. 2020. Historical Assessment And Future Sustainability Challenges Of Egyptian Water Resources Management. *Journal Of Cleaner Production*, 263, 121154.
- Mady, K., Abdul Halim, M. A. S., Omar, K., Abdelkareem, R. S. & Battour, M. 2022. Institutional Pressure And Eco-Innovation: The Mediating Role Of Green Absorptive Capacity And Strategically Environmental Orientation Among Manufacturing Smes In Egypt. Cogent Business & Management, 9, 2064259.
- Mady, K., Battour, M., Aboelmaged, M. & Abdelkareem, R. S. 2023. Linking Internal Environmental Capabilities To

Sustainable Competitive Advantage In Manufacturing Smes: The Mediating Role Of Eco-Innovation. *Journal Of Cleaner Production*, 417, 137928.

- Mitchell, S., O'dowd, P. & Dimache, A. 2020. Manufacturing Smes Doing It For Themselves: Developing, Testing And Piloting An Online Sustainability And Eco-Innovation Toolkit For Smes. *International Journal Of Sustainable Engineering*, 13, 159-170.
- Mogaji, E., Adeola, O., Adisa, I., Hinson, R. E., Mukonza, C. & Kirgiz, A. C. 2022. Green Marketing In Emerging Economies: Communication And Brand Perspective: An Introduction. *Green Marketing In Emerging Economies: A Communications Perspective*, 1-16.
- Mukonza, C. & Swarts, I. 2020. The Influence Of Green Marketing Strategies On Business Performance And Corporate Image In The Retail Sector. *Business Strategy And The Environment*, 29, 838-845.
- Nekmahmud, M. & Fekete-Farkas, M. 2020. Why Not Green Marketing? Determinates Of Consumers' Intention To Green Purchase Decision In A New Developing Nation. *Sustainability*, 12, 7880.
- Nguyen, T. T. H., Yang, Z., Nguyen, N., Johnson, L. W. & Cao, T. K. 2019. Greenwash And Green Purchase Intention: The Mediating Role Of Green Skepticism. *Sustainability*, 11, 2653.
- Nozari, H., Szmelter-Jarosz, A. & Ghahremani-Nahr, J. 2021. The Ideas Of Sustainable And Green Marketing Based On The Internet Of Everything—The Case Of The Dairy Industry. *Future Internet*, 13, 266.
- Pan, W., Cao, H. & Liu, Y. 2023. "Green" Innovation, Privacy Regulation And Environmental Policy. *Renewable Energy*, 203, 245-254.
- Ramzy, O. & Wahieb, R. 2012. Branding The Green Education: Challenges Facing Implementation Of Education For Sustainable Development In Egypt. *Discourse And Communication For Sustainable Education*, 3, 83-99.
- Sahin, I. 2006. Detailed Review Of Rogers' Diffusion Of Innovations Theory And Educational Technology-Related Studies Based On Rogers' Theory. *Turkish Online Journal* Of Educational Technology-Tojet, 5, 14-23.
- Salah, N., Bakr, A. F. & Fathi, A. A. Climate Havens Of Egypt: Facing Extreme Weather Events. Let It Grow, Let Us Plan, Let It Grow. Nature-Based Solutions For Sustainable Resilient Smart Green And Blue Cities. Proceedings Of Real Corp 2023, 28th International Conference On Urban Development, Regional Planning And Information Society, 2023. Corp–Competence Center Of Urban And Regional Planning, 105-114.
- Sana, S. S. 2020. Price Competition Between Green And Non Green Products Under Corporate Social Responsible Firm. *Journal Of Retailing And Consumer Services*, 55, 102118.
- Scheffran, J. 2020. The Geopolitical Impact Of Climate Change In The Mediterranean Region: Climate Change As A Trigger Of Conflict And Migration. *Mediterranean Yearbook.*
- Sewwandi, J. & Dinesha, P. 2022. The Impact Of Green Marketing Tools On Green Product Purchase Behavior: The Moderation Effect Of Consumer Demographics. Asian Journal Of Marketing Management, 1.
- Shao, S., Hu, Z., Cao, J., Yang, L. & Guan, D. 2020. Environmental Regulation And Enterprise Innovation: A Review. Business Strategy And The Environment, 29, 1465-1478.

- Sharma, A. P. 2021. Consumers' Purchase Behaviour And Green Marketing: A Synthesis, Review And Agenda. *International Journal Of Consumer Studies*, 45, 1217-1238.
- Shehata, G. M. & Montash, M. A. 2020. Driving The Internet And E-Business Technologies To Generate A Competitive Advantage In Emerging Markets: Evidence From Egypt. *Information Technology & People*, 33, 389-423.
- Sowers, J. 2013. Environmental Politics In Egypt: Activists, Experts And The State, Routledge.
- Verleye, G., De Ruyck, A., Vermeulen, W. & Schoenaers, I. 2023. Credibility Of Green Advertising: Six Elements That Drive Credibility In Green Advertising. *Frontiers In Communication*, 8, 1056020.
- Yin, S., Zhang, N., Li, B. & Dong, H. 2021. Enhancing The Effectiveness Of Multi-Agent Cooperation For Green Manufacturing: Dynamic Co-Evolution Mechanism Of A

Green Technology Innovation System Based On The Innovation Value Chain. *Environmental Impact Assessment Review*, 86, 106475.

- Yousaf, Z., Radulescu, M., Sinisi, C. I., Serbanescu, L. & Paunescu, L. M. 2021. Harmonization Of Green Motives And Green Business Strategies Towards Sustainable Development Of Hospitality And Tourism Industry: Green Environmental Policies. *Sustainability*, 13, 6592.
- Zayed, M. F., Gaber, H. R. & El Essawi, N. 2022. Examining The Factors That Affect Consumers' Purchase Intention Of Organic Food Products In A Developing Country. *Sustainability*, 14, 5868.
- Zheng, G.-W., Siddik, A. B., Masukujjaman, M., Alam, S. S.
  & Akter, A. 2020. Perceived Environmental Responsibilities And Green Buying Behavior: The Mediating Effect Of Attitude. *Sustainability*, 13, 35.

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