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Impact of Green Marketing Strategy on Business Performance-Mediating Role of Corporate Image in Construction Industry of Kenya

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Abstract

This article aimed to determine the impact of green marketing strategy on business performance through the mediating role of the corporate image, particularly in the case of the construction industry of Kenya. For this purpose, top management employees from the construction industry of Kenya were contacted and sent a link to the questionnaire (created on Google Forms) to nearly 1000 respondents through social media platforms. A total of 513 appropriate and duly filled questionnaires were received. The study used confirmatory factors Analysis (CFA) in a partial least square structural equation model (PLS-SEM). The study's findings have suggested that green marketing strategy and corporate image have a positive and significant impact on business performance and that corporate image also plays a positive and significant role in mediating the effect of green marketing strategy on business performance. Therefore, it is recommended for the construction companies of Kenya to use environmentally friendly products and materials to stimulate the customers' purchase intention and improve corporate and business performance. Meanwhile, further study is suggested over the African region to generalize the findings.

Keywords

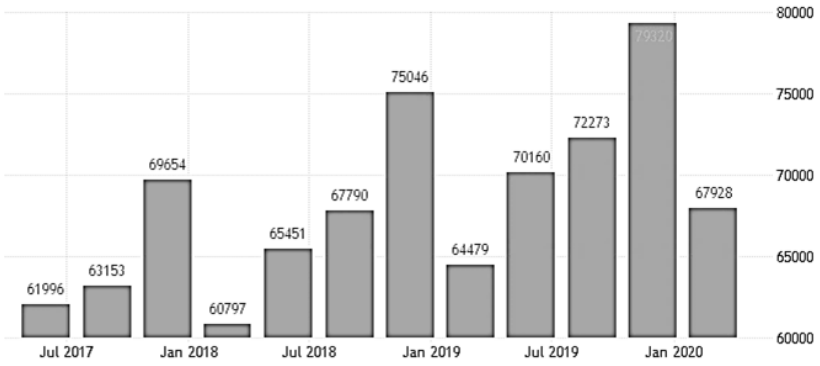
Green Marketing Strategy, Business Performance, Construction Industry, Kenya

1. Introduction

With the advancement in technology and rapid globalization, it can be found that firms have adopted a green marketing strategy for rendering safe, reusable, and eco-friendly products to customers. A green marketing strategy is an organization's commitment to the environment by using recyclable, reusable products which can be decomposed easily (Kotler, 2011). Firms also invest in using products with better "green" packaging methods where less or no plastic is used and is not harmful to the external environment. Green marketing was initiated after global environmental concerns increased and the concept of global warming emerged (Wu & Lin, 2016). Green marketing can be examined from different dimensions, such as the packaging of products, transportation, distribution chains, and manufacturing (Hart, 1995).

The current research article aims to determine the impact of green marketing strategy on business performance through the mediating role of the corporate image, particularly in the case of the Construction industry of Kenya. Infrastructure Development is considered the focal point of Kenya's 2030 vision. In 2015, the construction sector of Kenya contributed $3 billion to the Kenyan economy. Around 148,000 individuals are employed in this sector, managed by large multinational companies or mid-sized enterprises (Veitch, 2017). However, one of the identified flaws was the lack of governance and a system for managing the infrastructure and building policies. Various unregistered contractors are openly dealing with the locals.

The major infrastructure projects that are under process in East Africa are in Kenya. 11 out of 43 major constructions are underway alone in Kenya. Some of the prominent names of megaprojects are the Nairobi Railway project (US$3.8 billion), Tatu City project (US$2.1 billion), Lamu Ports Berth Project (US$1 billion), and Lake Turkana Wind Project (US$900 billion) (PR Newswire, 2017).



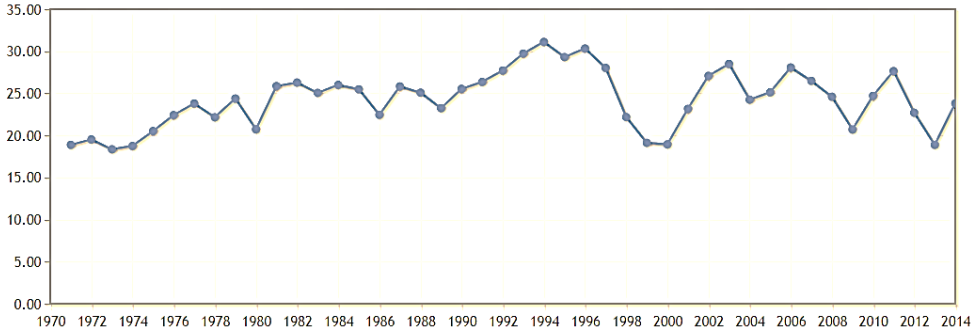
Source: Trading Economics (2020)

Figure 1: GDP from the construction industry of Kenya

Figure 1 shows the GDP from the construction sector of Kenya from 2017 to Jan 2020. It is evident from Figure 1 that it decreased to 67928 million KES in 2020 (first quarter) from 79320 million KES in 2019 (fourth quarter) (Trading Economics, 2020). There can be various reasons for this decreased amount, and the most evident

is the lack of budget, funds, and construction materials. Though Kenya has been developing and growing, it still faces tremendous difficulties in allocating the right budget and having funds to meet its needs.

The total fuel combustion and carbon emissions from the construction sector of Kenya were analyzed in light of the data available at Index Mundi (2019). CO2 emissions in Kenya from construction and the manufacturing industry were 23.81 in 2014. However, the highest CO2 emission in the country was recorded as 31.12 in 1994.



Source: Index Mundi (2019)

Figure 2: CO2 emission in Kenya

Figure 2 above shows the trend of CO2 emissions in Kenya from 1970 to 2014. Based on the data of Index Mundi (2019), it is evident that Kenya has significantly reduced their CO2 emissions from 1992, but from 2014 onwards, the graph shows steady growth. The reasons for this could be increased industrialization and urbanization, due to which construction-based activities might have increased.

The following research paper aims to understand how a green marketing strategy can be effective and beneficial for enhancing business performance through the mediating role of corporate image. Many firms working in construction or any sector ensure that their corporate image is well-positioned in the minds of the consumers so that they can increase their sales. However, studies conducted in a similar domain revealed that apart from corporate image, many other factors account for this, such as the use of green material, brand communication, green packaging, and green pricing. Hence, this research article explores how green marketing can affect organizational performance through the mediating role of corporate image.

2. Literature Review

Green marketing is the promotion or the marketing of those products which are environmentally safe. Various activities are parts of green marketing, such as product changes, packaging changes, advertisement design, and message changes, and most importantly, promotional tactics are changed. Green marketing is also associated with environmental marketing or ecological marketing. Mishra & Sharma (2010) highlighted in their study that green products are mainly based on new

features such as natural ingredients, recycling of content, reusable or recyclable material, environmentally safe, and not tested on animals by animals any means (Shahlaee, 2014). Another widely accepted concept is the consumers' green purchase intention; on the one hand, where the firms make efforts to promote their green products, so on the other hand, the consumers also make choices of purchasing the green products.

Tracing back to the 1990s when consumers did not know about products and their significance and only purchased them to fulfilling their needs, now, consumers are aware of green products and willingly purchase such environmentally safe products. Consumers express their concern towards the environment and utilizing resources. Chen & Chang (2012) revealed in their study that green marketing efforts enhance the overall purchase intention of consumers. It is expected by the firms to build trust among consumers and improve their perceived value of green products in the market.

Many consumers also proposed that they find green advertisements more effective in terms of knowing about products and increasing awareness about them. The firms must ensure that they build consumer motivation to purchase green products. The business performance is largely affected by it because it affects its sales and performance once the consumers start purchasing green products. Hartmann & Ibáñez (2006) revealed in their study that consumers prefer to purchase those green products which have ecological packaging.

H1: There is a significant impact of green marketing strategy on business performance

Any performance assessment includes various factors such as quality, productivity, adaptability, profits, and returns obtained. Delaney & Huselid (1996) created two different performance segments: market performance and business performance. Scholars and researchers who conducted the study in a similar domain found that firms that render services influence the overall motivation level of employees, ultimately affecting the company. Marketing activities tend to positively impact business performance and financial or non-financial aspects (Azizi et al., 2009). The production and manufacturing procedures are associated with green technology and green marketing. Due to the increase in globalization and rapid industrialization, the need for innovation and environmentally safe products has also increased, pressuring companies to bring green innovation in their products to improve business performance. In this way, the firms can also compete in the competitive environment.

H2: There is a significant impact of corporate image on business performance

Another aspect of green marketing that will be reviewed in this article is the mediating relation between corporate image and business performance. The corporate image of any company is highly important, and it helps in positioning it in the minds of the consumer. Also, the corporate image has a direct impact on the business performance because consumers purchase products with a strong image in the market and are well-recognized too; therefore, sales of the company and their engagement with the consumers also increase accordingly.

Dangelico & Pujari (2010) enhance their corporate image through environmental protection strategies. It leads to improved resource utilization. Also, one of the major issues that Fraj-Andrés et al. (2009) highlighted is that firms that follow environmental policies and protections are not expected to pay any heavy fines imposed on them. Plastic use is a vital issue that has raised awareness among companies to bring replacement so that they can prevent themselves from ongoing protests against companies using plastic packaging. Using high-quality products and services can increase the loyalty and association of customers with the company. The quality of the products used also plays a major role in directing the customers towards green products and improving business performance (Wu and Lin, 2016). Therefore, the conceptual framework shown below highlights the relationship between green marketing, business performance, and the mediating role of corporate image, particularly in Kenya's construction industry which has been involved in CO2 emissions for many years.

H3: Corporate Image has a positive and significant role in influencing the effect of green marketing strategy on business performance.

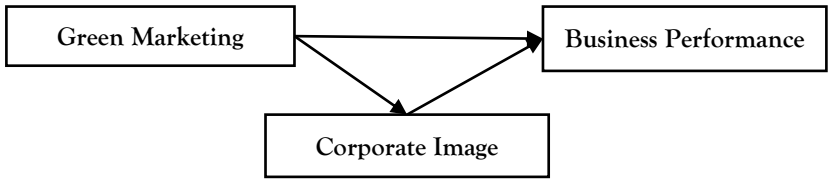


Figure 3: Conceptual Framework

3. Method

Concerning the sample size, it was found that 297 small, medium and large construction companies are actively operating in Kenya (Business List, 2020). Each company had, on average, 50-100 employees, which makes the study population equal to 14850 to 29700. To ensure the sample size truly represents the population of the study, the sample size of the study was determined through the sample size table established by Research Advisors (2006). The sample size table suggests that a paper with a population size between 25000 to 50000 and 95% confidence should have a sample size between 378 to 381. The true sample size of the study was within the said range, but due to the current pandemic situation in Kenya and around the world, it was nearly impossible to reach out to each employee easily. Therefore, to avoid any unethical, illegal practice and to ensure following social distancing parameters, a non-probability convenience sampling technique was adopted.

This technique gives flexibility in data collection, and to use this flexibility, we contacted the top management employees from the construction industry of Kenya and sent the questionnaire link (created on Google Forms) to nearly 1000 respondents with the expectation of less than 50% response rate. However, we received a total of 588 responses, but around 67 were not filled appropriately and could not be used in the analysis. Therefore, the total sample size of the study turned out to be 513. Furthermore, confirmatory factors Analysis (CFA) was used to

undertake empirical analysis using a partial least square structural equation model (PLS-SEM). Meanwhile, it has been discussed by Ramli et al. (2018) that the core reason behind using PLS-SEM is that it is a more effective and efficient method as compared to the conventional method of multiple regression based on the fact that PLS-SEM allows estimating relationships within the variables simultaneously and an effective method for checking to mediate and moderating relationship. However, regression analysis has been found to provide contradictory results for survey analysis, making regression less appropriate for the analysis of mediation relationships.

4. Results and Discussion

In PLS-SEM analysis, it was necessary to evaluate the reliability and validity of the instruments and each component of the construct. For this purpose, the following table provides outer loadings, Cronbach's alpha, composite reliability, and average variance extracted. The outer loading tells how each factor explains the variable's variance. Meanwhile, as per the Al-Maroof & Al-Emran (2018), factor loading should have a value greater than 0.7 to be considered for inclusion in the model, but it has also been discussed by Ismail et al. (2020) that a factor in rare cases when important must not be excluded from the model until and unless it is greater than 0.5. Similarly, Table 1 demonstrates the study's outer loadings; all factors have a value greater than 0.7 but one of the factors has a value less than 0.7. However, since no factor has a value less than 0.5, no factor has been excluded from the study.

Also, for the reliability of the instrument, Cronbach's alpha and composite reliability has been used, and as per scholarly work and practices by Janadari et al. (2016) and Anshel et al. (2010), a value of Cronbach's alpha should not be less than 0.7 and same for the composite reliability which is also interchangeably used for Cronbach's alpha. Meanwhile, the value of the Cronbach's alpha and Composite reliability is less than 0.7; hence, it suggests that the instruments used in the paper are reliable means consistently producing the same results multiple times. Furthermore, the average variance extracted (AVE) has been used to assess the validity or convergent validity, which requires the constructs to be measured for what they were designed to measure, which means if two of the constructs are related theoretically, then they should also be related (Alarcón et al., 2015). Jones et al. (2010) value of AVE greater than 0.5 indicates that the instrument is valid and follows convergent validity. Therefore, it is determined that the instruments used in the paper are reliable and valid.

Table 1: Factor Loadings, Reliability, and Validity

	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
BP1	0.888	0.918	0.942	0.803
BP2	0.921			
BP3	0.881			

BP4	0.895			
CI1	0.822	0.821	0.882	0.654
CI2	0.839			
CI3	0.887			
CI4	0.671			
GM1	0.823	0.886	0.921	0.744
GM2	0.872			
GM3	0.898			
GM4	0.856			

Furthermore, referring to the discriminant validity of the instruments, the discriminant validity refers to the distinctiveness of the instrument in measurement. The core concept of discriminant validity is that two constructs that should not be related are unrelated. It means two instruments that measure two different concepts and are theoretically different, and then they should not be related to each means each of the instruments should measure a different concept (Ab Hamid et al., 2017). To ensure discriminant validity, the Heterotrait-Monotrait ratio (HTMT) has been used, and in accordance with Franke & Sarstedt (2019), the HIMT ratio should be less than 0.9 to consider the presence of discriminant validity. Meanwhile, the HTMT ratio of all constructs is less than 0.9; hence, there is discriminant validity. See Table 2.

Table 2: Discriminant Validity (HTMT) Ratio

Heterotrait-Monotrait Ratio (HTMT)	**Business Performance**	**Corporate Image**
Business Performance		
Corporate Image	0.531	
Green Marketing	0.560	0.381

Table 3 demonstrates the coefficient of determinations of PLS simple and mediation models. The coefficient of determination has also been termed as R-Squared, which explains the extent to which the independent variables are explaining regress. Meanwhile, the R-Square of the simple PLS model for Business Performance is 0.354, which means 35.4% of business performance variance can be explained by corporate image and green marketing. Meanwhile, the second mediation model has an r-square of 0.117, which implies an 11.7% variance of the model could be used, explained by green marketing as the independent variable and corporate image as mediating variable. However, the remaining variance that could not be explained remains the model's residual and could only be explained by other factors.

Table 3: Predictive Relevance of the Model

	R Square
Business Performance	0.354
Corporate Image	0.117
Q-Square	0.28

Table 4 illustrates the coefficient estimations of two models, and it reveals that if there is one unit of change in the corporate image and green marketing, then business performance would change by 0.324 [P-Value 0.000] and 0.400 [P-Value 0.000], respectively. It shows a positive and significant effect of corporate image and green marketing on business performance in Kenya. Meanwhile, it is also evident that green marketing has a positive and significant effect on the corporate image of the construction company. In addition, the Q-square has a value above 0 which indicates that the model has predictive relevance and that values are well reconstructed.

Table 4: Estimation of Coefficients

Coefficients	Coefficient	T Statistics	P Values
Corporate Image -> Business Performance	0.324	6.440	0.000
Green Marketing -> Business Performance	0.400	8.838	0.000
Green Marketing -> Corporate Image	0.342	6.691	0.000
Green Marketing -> Corporate Image -> Business Performance	0.1109	4.154	0.000

Furthermore, referring to the mediation variable, it is evident that corporate image positively and significantly mediates the effect of green marketing on business performance as C=0.110 [P-value 0.00].

The aim and purpose of this paper were to determine the impact of green marketing on the business performance of the construction industry of Kenya and also determine the role of corporate image. The aim and purpose of the study have been successfully achieved and summarized in Table 5.

The first hypothesis of the paper is accepted that a green marketing strategy has a positive and significant effect on business performance. Similarly, it has been revealed by Chen and Chang (2012) that during 90's the sustainable products were lesser known to customers, but contemporary awareness increased after a series of events driven by climate change took place. Hence, customers are now willing to purchase environmentally friendly products; thus, their purchase decision is influenced by the sustainable nature of products. Hence, Hartmann & Ibáñez (2006) revealed in their study that the sustainability of products is the only reason by green marketing strategy can successfully influence consumers toward a company's products and services. Similarly, with respect to acceptance of the second hypothesis, literature also suggests that increased customer awareness regarding environmental issues, climate change, and their causes has directed customers towards sustainable products, which also creates a positive image of firms producing and using sustainable products. Hence, this improves the corporate image of these firms and influences their business performance. Hence, the last hypothesis is accepted that

corporate image plays a positive and significant role in mediating the impact of green marketing strategy on business performance.

Table 5: Hypotheses Table

Hypothesis	Results	Decision
H1: There is a significant impact of green marketing strategy on business performance	C=0.400 P=0.000	Accepted
H2: There is a significant impact of corporate image on business performance	C=0.324 P=0.000	Accepted
H3: Corporate Image has a positive and significant role in influencing the effect of green marketing strategy on business performance.	C=0.110 P=0.000	Accepted

5. Conclusion and Recommendations

The paper's findings suggest that green marketing strategy and corporate image have a positive and significant impact on business performance and that corporate image also plays a positive and significant role in mediating the effect of green marketing strategy on business performance. It implies that construction companies producing or utilizing green or environmentally sustainable products could positively influence business performance and enhance the company's corporate image in the market. Thus, this could also improve the business performance of the construction companies in Kenya. Therefore, it is recommended for the construction companies of Kenya that environmentally friendly products and materials should be utilized to stimulate the customers' purchase intention and improve corporate and business performance. However, this study only applies to Kenya, which is limited to one country; hence further study is suggested on the African countries to generalize the findings over the African region.

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