The Impact of Green Marketing on the Purchasing Behaviour of Students in Ghana

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Abstract: Purpose: This paper sought to investigate the level of awareness of green marketing among Ghanaian students and to examine how the knowledge of green marketing affects the choices students make when buying consumables. Design/Methodology /Approach: Likert scale questionnaires were used to solicit responses from students, first on their knowledge of green marketing and subsequently on how this knowledge affected their purchase decisions. Findings: Although there is the evidence of an understanding of green marketing among students, this knowledge rarely impacted their purchase decisions. Originality & Value: Paper contributes to how the knowledge of green marketing contributes to the purchase decisions of students in Ghana and sheds light on how industry players should use green marketing knowledge in the promotion of their products. Application: This paper can help improve on industry and national policies on manufacturing. Policy makers can use this information to help formulate policies for sustainable development in Africa.

Keywords: Green marketing, Ghana, Environment

INTRODUCTION

The Green Rep Organisation (GRO), - a non-governmental organisation, set up to promulgate the benefits of green marketing in Ghana classifies Ghana as a highly polluted country with much degraded environment, though low in industrial activities. The main industrial activities in Ghana are mining, agriculture and manufacturing. All of these contribute towards atmospheric pollution, emitting gaseous pollutants and deposits of solid waste into the environment. These pollutants have effect on human health, physical material, the ecosystem, and climate. Most of the destruction caused to the environment is through human activities. In the developed economies, pressure from social and legal publics forces firms to formulate and adopt environmentally-friendly strategies and practices in the production of goods; however the president of the Green Rep Organisation (GRO) at the launch of the organisation in November 2011, intimated that results from an exploratory research the group conducted indicated that the concept of Green Marketing is relatively new in Ghana. The research further revealed that majority of the participants who were mainly marketing practitioners and journalists had no or limited knowledge of the concept of green marketing. Johri and Sahassakmontri (1998), however posit that the green marketing of products and services is an important development in the context of emerging economies (such as Ghana's). There has been a significant increase in green marketing activities in many countries, and these activities according to Cohen (1973), have had important influence on increasing consumer knowledge and in shifting consumers towards the purchasing of green products. This positive change in consumers' behaviour towards environmental related products, according to Alwitt and Pitts (1996), can be seen due to increased level of environmental awareness since 1970. Consumers who worry about the environment indicate concerns through different behaviours like checking the products which they are going to purchase to ensure they are buying ethically (Suchard and Polansky, 1991). Although research by Penn Schoen Berland indicates that worldwide consumer appetite for green products has increased in the past year, and that perceived consumer value of green products in developing countries such as Brazil, India and China actually is higher than in Europe and the United States, this perception may not be the case in Ghana. It therefore behoves on marketers to emphasize the ecological knowledge in their organizations, their products and their advertising in order to achieve the goal of changing the consumer purchasing behaviour (Mendleson, 1994).

In Ghana, the *Green Is Easy Foundation* – (a non-governmental organisation), has taken upon itself that uncharted task of educating pupils and students in first and second cycle institutions on the effects of our actions and inactions on the environment. In the ever-growing population of tertiary students, a few of them (especially business students) get a first time exposure to the concept of green marketing as part of deliberations on societal marketing. Studying the impact of this knowledge on the purchasing behaviour of students will have beneficial consequences for students, the environment, and the nation as a whole.

LITERATURE REVIEW

Definitions of Green marketing

Stantin and Futrell (1987) define green or environmental marketing as actions intended to replace current needs and wants with minimal harmful impact on the environment. The American Marketing Association views green marketing as the marketing of products that are presumed to be environmentally safe. From our perspective, green marketing can be defined as the act of creating sustainable development by selling green products that have minimal effect on both living and non-living things in the environment.

Evolution of Green Marketing

Lee (2008) indicates that there are three stages of green marketing. The first stage of green marketing emerged since the 1908's, when the green marketing notion was newly initiated in industry (Peattie and Crane, 2005). Green marketing from the perspective of Wong et al (1996) went into its second stage in the 1990's, when specific backlash was experienced by marketers. Progressively, marketers apprehended that consumers concern and their positive attitude towards the environment and green products did not translate into purchasing behaviour (Schrum et al, 1995). Since 2000, green marketing has developed into a third stage. In this stage green marketing has gone through new momentum with implementation of more advanced technology, stricter regulation and enhancement of global environmental awareness. According to Hartmann and Ibanez (2006) green marketing generally focuses on the efficiency of cognitive persuasion strategies, and believe that consumers' high involvement in environmental issues is as a result of an effect of growing environmental knowledge.

Green Marketing Tools

Ginberg and Bloom (2004) claim that there is not any single marketing tool that will be appropriate for all firms. Rather, strategies should be different based on different markets and the degree of consumer concern on the environment. In this study, three green marketing tools are considered as enhancement to a consumer's knowledge about environmental friendly product. These tools include eco-brand, eco-label and environmental advertisement.

Eco-labelling

One significant green marketing tool is using eco-label on environmental friendly products. The environmental labels are increasingly being utilized by marketers to promote the identification of green products (D' Souza et al 2006). Sammer and Wustenhagen (2006) identify eco-label as an important tool to allocated asymmetry information between seller and buyers. This also states that labels are a signal to accomplish two main functions for consumers. These are Information functions that inform them about intangible product characteristics such as product quality and value function which provide a value in themselves (example prestige). According to D'Souza et al (2006) and Sammer and Wustenhagen (2006) many of the studies on eco-labels are looking for ways to make them effective in consumers purchase behaviour of environmental safe products. The crucial issue is recognizing the impact of eco-labels on consumers and their influences on environment and whether they consider eco-labels in their decision making. A study by Nik Abdul Rashid (2007) has shown that awareness of eco-label has positive effect between knowledge of green products and consumer's intentions to purchase. However, some other studies indicate that although the functions of labels are recognized by some consumers, this does not automatically lead them to green purchasing decision (Leire and Thidell, 2005).

Few studies have investigated the link between environmental labelling and a consumer's intention and behaviour to purchase environmentally-friendly products (D 'Souza, 2004, Nik Abdul, 2009, Whitson and Henry, 1996). For instance, according to a report by Parliamentary Office of Science and Technology (2004) in market with low consumer awareness about environmental issues, eco-labelling as a green marketing tool is ineffective. One reason for ineffectiveness is the lack of consumer trust of eco-label schemes (Schwartz and Miller, 1991). In this sense, investigators such as Bleda and Valente (2008) states that performance of eco-labelling schemes has shown the adverse effect in some situations whereas Kuhn(1999) illustrate that these situations will emerge by growth in the pollution from enlarging the market as a result of achieving greater market share through the manufacturing of environmentally friendly products. According to Nik Abdul Rashid (2009) eco-labels are attractive instruments used in informing consumers about environmental impact of their purchasing decisions. To help consumers identify products that are environmentally preferable than other similar products, eco-labelling schemes were initiated in order to promote environmental consumerism. From the various arguments, most firms in most countries especially the developed countries are adopting eco-labelling as a strategy to distinct them and communicate to their customers indicating quality of the products. It is therefore, high time, that companies in Ghana especially those dealing in tangibles use eco-labelling to communicate to their customers who are environmentally responsible that the company is more concerned about the environment. It should be emphasized that the first thing the customer looks before buying a product is read the label before purchasing.

From the various perspectives, it can be deduced that if companies are able to build a strong eco-brand in Ghana, the purchasing behaviour of consumers to switch to the purchasing of environmentally friendly products can be achieved as a result of the benefit of differentiation that comes along with eco-branding. In other words companies using eco-branding will differentiate their products from that of competitors.

Environmental Advertisement

In parallel with improving green movements worldwide and with increasing public attention to environmental problems, most organizations have chosen environmental advertisement through media or newspaper as green techniques for introducing their products to environmentally responsible consumers (Rahbar and Wahid, 2011). According to them, the objective of green advertisement is to influence consumer purchase behaviour by encouraging them to buy products that do not harm the environment and to direct their attention to the positive consequences of their purchase behaviour for themselves as well as the environment.

Davis (1994), state that environmental advertising by corporations usually contains three elements. Firstly, the advertisement begins with a statement of corporate concern for the environment. Secondly, they describe the way the entity has changed its procedure in order to demonstrate its concern and dedication into improving the environment. Thirdly the advertisement describes specific actions in which the corporation is involved and/or results for which corporations' takes

One of the factors contributing to the failure of applying environmental advertisements to enhance purchase behaviour is due to low credibility of green advertisements among consumers (Kilbourne, 1995). According to Davis (1993), the factor resulting to consumer's weak response to environmental advertising is not the consequence of consumer's unwillingness to take action and change their behaviour to purchase green products; rather consumers are unwilling to change their purchase behaviour given the manner in which "green" products have been promoted and advertised. One of its specific reasons is the lack of specifity in many environmental claims that may have resulted in consumers forming a negative view of green advertisement and advertised products. Therefore, this condition would unlikely lead to the purchase of environmental friendly products. From the various perspectives, embarking on green environmental advertising is the best medium of informing, educating and reinforcing the attitudes of consumers to switch to environmentally responsible. A typical example is the bottled water companies in Ghana who embark on environmental advertising but are not keeping the environment clean. This is evident from the packaging lying on most of the street of the country. They must therefore resort to using packaging that contains biodegradable agents. This will in turn put producers of their packaging under pressure to be environmentally responsible.

Consumer's Actual Purchase Behaviour

According to Rahbar and Wahid (2011) previous studies have focused on examining the factors affecting environmental purchasing behaviour for instance attitude, knowledge and value. According to Mendleson (1994) marketers should emphasize the ecological knowledge in their organizations, their products and their advertising in order to achieve the goal of changing the consumer purchasing behaviour. We agree with Mendleson that for a developing country like Ghana for consumers to understand the issue of green marketing, marketers should take it upon themselves to send across the knowledge of green marketing through advertising. This can only be achieved when companies in Ghana use it as a strategic tool in achieving their missions.

Objectives of Research

The objectives of the research are to:

- To determine students' awareness of the concept of green marketing
- To asses how the knowledge of green marketing influence the purchase patterns of students

METHODOLOGY

The unit of analysis for this research is Central University College. This makes the research a case study. Central University students were selected because they are enlightened and sophisticated and therefore are likely to take environmental issues into consideration when making purchases. The sample size consisted of three Hundred and Eighty Four (384) respondents (students). The researchers adopted simple random sampling in selecting these respondents. The study was done in two phases

- Assessing the awareness level of students on green marketing
- Identifying the impact of green marketing on the purchasing behaviour of students

The research uses a cross sectional study design which employed both the qualitative and quantitative approach. Primary data for the research was collected mainly through the administration of scaled questionnaires to respondents (students). The researchers administered the questionnaires on both campuses of Central University College. To help them understand the questionnaires they were filling, a brief explanation of green marketing was given to respondents prior to filling the questionnaires.

Students generally know and understand the concept of green marketing. 16.1% of respondents reported that they had heard of the concept and understood it. Respondents also indicated that companies ought to include practices that protect the environment in their activities. Only 8.3% of respondents believed claims that products that are labelled 'green' are actually green. 22.4% of respondents however indicated that they took deliberate actions to seek green products in their purchases.

REGRESSION ANALYSIS

Descriptive Statistics

	Mean	Std. Deviation	N	
Green marketing affects my purchasing of Food	3.9062	1.71815	384	
Green marketing affects my purchasing of Electrical products	3.2604	1.89127	384	
Green marketing affects my purchasing of Petrol/gas	3.2734	1.87208	384	
Green marketing affects my purchasing of Mobil phones	3.3750	1.91053	384	
Green marketing affects my purchasing of Bottle water	3.8281	1.83856	384	
Green marketing affects my purchasing of Bottle drinks	3.8776	1.80892	384	

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758ª	.574	.568	1.12876

a. Predictors: (Constant), Green marketing affects my purchasing of Bottle drinks, Green marketing affects my purchasing of Mobil phones , Green marketing affects my purchasing of Electrical products, Green marketing affects my purchasing of Bottle water

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	649.015	5	129.803	101.878	.000ª
	Residual	481.610	378	1.274		
	Total	1130.625	383			

a. Predictors: (Constant), Green marketing affects my purchasing of Bottle drinks, Green marketing affects my purchasing of Mobil phones , Green marketing affects my purchasing of Electrical products, Green marketing affects my purchasing of Bottle water

Empirical model

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 F=0.929+0.172E +0.017P+0.077M+0.306W+0.239BD \\ (6.396)^{***}(3.604)^{***}(0.361) & (1.841)^{*}(5.7173)^{***}(3.962)^{***} \\ R^{2}=0.574 \text{ Adjusted } R^{2}=0.568 \text{ F ratio}=101.878^{***} \\ \textit{Numbers in brackets are t-statistics; *-significance at 10\%, **-significance at 5\% and ***-significance at 10\%, **-significance at 10\%, **-signific
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From the above results, it was observed that all the included independent variables in the model were significant except purchase of petrol/gas where respondents are indifferent about green marketing, possibly because awareness about bio-fuel may be low, or knowledge/availability of bio petrol and biogas limits their decision.

SUMMARY & CONCLUSION

b. Dependent Variable: Green marketing affects my purchasing of Food

It can be deduced that if companies are able to induce green marketing in promoting their products and services in Ghana, consumers will gradually understand and embrace the concept of green marketing. Our findings and analysis indicate that 40.4 percent of students were totally oblivious of the concept of green marketing, whereas 16.1% had good knowledge of the concept. From observation, people unconsciously engage in green marketing when purchasing products without expressly indicating that they are practising green marketing. This should challenge marketers to take up the mantle of educating consumers and the public on green issues.

Green marketing should be seen as one of the strategic tools that companies can use to gain competitive advantage in this dynamic business environment. The study also showed that the majority of respondents do not have any idea on the environmental impact of their purchases.

Government could also enact policies that will encourage companies to go green by giving tax exemptions and percentage on tax. Companies should be encouraged to take advantage of green marketing a strategic tool to gain a competitive edge in the ever dynamic business environment.

Due to the low level of awareness among students, government should liaise with NGO's, rotary clubs and schools to campaign on ecological issues. Tertiary institutions should reinforce green behaviour in students by embarking on practices in that highlight the importance of green marketing. For non-business students, green marketing could be made a mandatory part of the academic curriculum.

The Environmental Protection Agency of Ghana should also be empowered to carefully enforce and monitor ecological principles in firm operating in the country. This will create increased pressure and awareness in the business environment.

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