

**GREEN MARKETING AND COMPETITIVE ADVANTAGE IN THE  
NIGERIAN TELECOMMUNICATIONS INDUSTRY IN ASABA**

**BY**

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**BEING A DISSERTATION SUBMITTED TO THE DEPARTMENT OF  
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MASTER IN SCIENCE (M.Sc.) DEGREE IN MARKETING**

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**JUNE, 2017**

## **DECLARATION**

I hereby declare that this dissertation is a product of my original ideas and has not been previously submitted either in part or in full to any institution for the award of any certificate or degree.

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## **CERTIFICATION**

It is hereby certified that this dissertation which was written and submitted by Unukpo, Alex Ogheneochuko (PG/14/15/230214) of the Department of Business Administration and Marketing, Faculty of Management Science, Delta State University, is accepted in partial fulfillment of the requirements for the award of Masters (M.Sc.) degree in Marketing.

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## **DEDICATION**

This research is dedicated to God Almighty for His love and grace, for His unending faithfulness, protection, provision, guidance and infinite mercy.

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## ABSTRACT

*Environmental concerns among customers are increasing as a result, using targeted marketing technique seems vital for effective marketing of green products. Green Marketing are all activities structured to generate and support any exchanges intended to satisfy consumer needs or wants, such that the satisfaction of these needs and wants arises, with low detrimental impact on the physical environment. The broad objective of the study is to examine the effect of green marketing on competitive advantage. The study made use of a sample of 226 employees from selected telecommunications firms in Asaba Delta State. Survey research design was adopted, and the statistical instrument used comprised simple percentage, and as well as analysis. Findings showed that products with environmental characteristics have the highest positive effect on competitive advantage. This implies that green products are produced via green technology and cause no environmental hazards. The implication of this finding is that when products are produced through green technology it will help to prevent environmental hazard this help firms to achieve competitive advantage. It was concluded that corporate social responsibility is the commitment of firms to contribute to sustainable economic development by cooperating with the employees, local community and society at large to improve their lives in areas that are good for business and for development. The study therefore recommends that companies should use green marketing as competitive tools by educating the consumers, letting them know what they are doing in order to protect the environment and clearly explaining environmental benefits they tend to achieve.*

## TABLE OF CONTENTS

Title page	i
Declaration	ii
Certification	iii
Dedication	iv
Acknowledgements	v
Abstract	vi
Table of content	vii
 List of Tables	 ix
List of Figure	x

## CHAPTER ONE

### INTRODUCTION

1.1	Background to the Study	1
1.2	Statement of the Problem	4
1.3	Research Questions	6
1.4	Objective of the Study	7
1.5	Research Hypotheses	7
1.6	Significance of the Study	8
1.7	Scope of the Study	8
1.8	Limitations of the Study	9
1.9	Definition of Terms	10

## CHAPTER TWO

### REVIEW OF LITERATURE

2.1	Introduction	11
2.2	Conceptual Framework	11
2.2.1	Concepts of Green Marketing	11
2.2.2	Historical Background	12
2.2.3	Golden Rules of Green Marketing	14
2.2.4	Challenges in Green Marketing	15
2.2.5	Green Products and its characteristics	17
2.2.6	The Five Factors of Green Marketing	19
2.2.7	Conceptual framework	21
2.2.8	Corporate Social Responsibility (CSR)	22
2.2.8.1	Corporate Social Responsibility and Competitive Advantage	24
2.2.9	Product Packaging Initiative	25
2.2.10.	Socially Responsible Packaging	26
2.2.11	Environmental Friendly Product	28
2.2.12	Competitive Advantage	29
2.2.13	Environmental Strategic Options	31
2.3	Theoretical framework	32
2.3.1	Theory of Enlightenment Self-Interest in Business	32

2.3.2.	Environmental Stewardship	33
2.3.3	Business and Green Marketing	33
2.4	Empirical Review	34
2.5	Summary	38
<b>CHAPTER THREE</b>		
<b>RESEARCH METHODOLOGY</b>		
3.1	Introduction	40
3.2	Research Design	40
3.3	Population of the Study	41
3.4	Sample Size	42
3.5	Sampling Method	42
3.6	The Research Instrument	43
3.6.1	Validity of the Research Instrument	43
3.6.2	Reliability of the Research Instrument	44
3.7	Method of Data Collection	45
3.8	Data Analysis Techniques	45
3.9	The Statistical Model	45
<b>CHAPTER FOUR</b>		
<b>RESULTS AND DISCUSSION</b>		
4.1	Introduction	47
4.2	Presentation of Data	47
4.3	Analysis of Other Data.	50
4.4	Test of Hypothesis	56
4.5	Discussion of Results	58
4.5.1:	Products with Environmental Characteristics and Competitive Advantage.	58
4.5.2	Product Packaging Initiative and Competitive Advantage	58
4.5.3	Green Marketing through Environmental Friendly Product and Competitive Advantage.	59
4.5.4	Green Marketing through Corporate Social Responsibility and Competitive Advantage.	60
<b>CHAPTER FIVE</b>		
<b>SUMMARY, CUNCLUSIONS AND RECOMMENDATIONS</b>		
5.1	Summary	61
5.2	Conclusions	62
5.3	Recommendations	63
5.4	Contributions to Knowledge	64
5.5	Suggestion for Further Studies	65
	References	66
	Appendix A	71
	Appendix B	75

## LIST OF TABLES

Table 3.1:	Showing the population spread of staff and customers of MTN, GLO, Airtel and Etisalat	41
3.2	Showing the population spread of staff and customers.	41
Table 3.3	Reliability coefficients of study constructs	44
Table 4.1	Analysis from the field survey	47
Table 4.2:	Analysis of Respondents Profile	48
Table: 4.3	Products with Environmental Characteristics and Competitive Advantage	50
Table: 4.4	Biodegradable Packaging and Competitive Advantage	51
Table4.5	Environmentally Friendly Product and Competitive Advantage	52
Table 4.6:	Green Marketing through Corporate Social Responsibility and Competitive Advantage	53
Table 4.7	Model Summary	54
Table 4.8	Fitness of the Model	54
Table 4.9:	Regression Analysis of green marketing and competitive advantage	55

## **LIST OF FIGURE**

Fig. 2.1: 5Cs (factors) of Green Marketing	19
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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.2 Background to the Study**

There is increasing awareness among marketers and all types of consumers all over the globe on the need to protect the environment. As today's consumers become more conscious of the natural environment most business are beginning to modify their thoughts, behaviour and focus, towards addressing the concerns of consumers on environmental aspects in their marketing process for their survival in the turbulent market. Environmental concerns among customers are increasing, however all green customers are not equally green and do not tend to purchase green product. As a result, using targeted marketing techniques seems important for effective marketing of green products. This means that all green customers can not be targeted by a single marketing initiative; rather they should be divided into sections with similar features.

Then proper green marketing strategy should be employed proportional to distinct needs and features of each part. Green marketing is inevitable for any type of company .As understanding grows about the impact of human activity on the earth's ecosystems, customers concern about the environment and its connection to health and safety will intensify. At the same time, human kind's passion for consumption will persist. The challenge for companies will be to devise business operations and products that are friendly to the environment while also meeting the needs of consumers. Hence, this concern led to the emergence of Green Marketing (Hollensen, 2011). It incorporates a large range of

activities, consisting of changes to the production process, packaging changes, product modification, as well as modifying advertising.

Over the last years, environmentalism has occurred to be an important business movement due to rising issues connected to depletion of the ozone layer, acid rains, and degradation of the land and many more pressing environmental issues (Dhiraj, 2014). Peattie, (2001) stated that the evolution of green marketing has three phases. First phase was known as “Ecological” green marketing, and during this period all marketing activities were focused on how to aid environment problems and provide solutions for environmental problems. Second phase was “Environmental” green marketing and the concern shifted on clear technology that consisted of structuring innovative new products, which take care of pollution and waste issues. Third phase was “sustainable” green marketing came into recognition in the late 1990s and early 2000.

Hollensen (2011), argued that because ecological grass-root campaigns are gaining widespread recognition and support, and global media networks such as CNN are continuing to report on environmental issues and disasters. Today’s consumers are becoming more environmentally conscious. Though still a minority, there is a sizeable and ever-increasing segment of the population that bases much of their consumption decision on their perceptions of how a product will influence the environment and themselves. As a consequence, Murthy (2007) posit that many companies are beginning to realize that they are part of the larger community and therefore must behave in an environmentally responsible fashion. Additionally, Biswas, (2008) stressed that it has been a new fashion for the marketers to be greener for gaining competitive advantage over the competitors in the turbulent market.

Though, consumer attitude in term of improper disposal of product wastes also increase environmental degradation, but the adoption of green marketing by business enterprises could play a major role in decreasing product wastes (Kassey, 2001). In business, the terms “green product” and “environmental product” are used generally to explain those products that strive to improve the physical environment by conserving resources and decreasing the use of toxic agents’ pollution and waste. So, green marketing connotes the holistic marketing concept wherein the production, marketing, consumption and disposal of products that happen in a way that is less harmful to the environment. A brief look on the history and present situation of the Nigerian Telecommunication Industry will be used further to introduce this study. According to Andrey (2011), the month of August 2001 represents a milestone in the history of telecommunication in Nigeria. Prior to that date, which marks the commencement of GSM mobile telephone services, and the pursuant of liberalization of industry, the state-owned NITEL was a monopoly that did everything possible to stifle growth and development on the sector. In 40 years of operation, the utility was only able to account for approximately 450,000 telephone lines, nearly all of them fixed landlines, servicing a population that is the largest in Africa, estimated at 120 million people. It was one of the lowest connectivity raters in the world. The potentials of the market had long been recognized by investors as huge and only begging to be tapped despite glaring deficiencies in backbone infrastructure.

South Africa’s MTN and Zimbabwe’s Econet (now Airtel) were first to enter into the industry, recording what was regarded as the fastest take-off in the history of GSM operation. At that point MTN and Econet operated a virtual duopoly and tacitly collaborated in what was largely regarded as exploitive regime of product offerings and call rates. Not

faced with an alternative, Nigerians continued to subscribe overwhelmingly, even as they groaned under the weight of high call rates and inflexible product packages. This was the scenario when Glo Mobile arrives as the only indigenous, non-government operator. Glo Mobile caused a huge stir in the sector by introducing per second billing denied by other networks. From that period up till 2011, many telecom operators have entered into the industry, with Etisalat being one of the biggest who entered the industry in September 2008. This has improved competition among the many network providers in the country. The need for green marketing is on the rise due to challenges like depletion of ozone umbrella, Global warming and the need for the healthy survival (Chan, 2004).

Most of the previous research work on green marketing has been conducted almost exclusively in the Nigerian context and there has been little attempt to examine the Nigerian telecommunications industry. This shows that green marketing is still in its infancy and more studies should be done to discover its potential fully. The components of green marketing such as products with environmental characteristics, biodegradable packaging, environmentally friendly products and corporate social responsibility were tested on competitive advantage. The major purpose of the study is to examine the impact of green marketing on competitive advantage in the Nigerian Telecommunications industry.

#### **1.4 Statement of the Problem**

Green marketing is still in its infancy and a lot of studies are needed to explore it. Most of the studies on Green marketing are conducted in developed countries, but such studies remain clearly missing in the context of emerging economies like Nigeria. It is this gap that this study is set to fill. In recent time of globalisation, it has become an issue to keep customers in fold and even keep our physical environment safe that is the biggest need of

our time. The old fashion is no longer sufficient and it is time to think innovative. We need to rescale our values to a pattern that acknowledge the corporation of mankind and earth.

With human wants increasing daily, resources are decreasing. Hence, it has become compulsory for companies across the globe to use resources efficiently and not to destroy them under any circumstances. Worldwide surveys showed that consumers globally are changing their behaviour towards products and services. Green marketing is almost certain as the market for socially responsible products is rising greatly. In today's business world environmental challenges plays a key role in marketing.

Though report has shown that there are outstanding success stories of companies that have made vital progress in not only complying with the standards but also surpassing them whenever they can, they have not used this concern about the environment as a marketing instrument to achieve a sustainable competitive advantage. Thus, a lot of customers may not know that they are very environmentally committed firms. Furthermore, one challenge with green marketing is the difficulty consumers have in understanding the environmental benefits of products, leading to many accusations of "green washing" where products are not nearly as green and environmentally profitable as their marketing might suggest.

The market for mobile telecommunication is very big and it is the main economic driver in several countries including Nigeria. However, this technology of advanced telecommunication system is not without some disadvantages and one of the key demerits is that of environmental and health hazards of its radiation. In this modern era, the highest polluting elements in the earth's environment are the proliferation of electromagnetic radiation.

The synergistic hazard effect of high voltage cable and telecom-masts evicted close to each other due to improper sitting can easily be imagined. Although power lines produce majority electric and magnetic field (EMF) which are non-ionizing radiation but often carry many transient which are in the radio-frequency (RF) part of the spectrum this may result in impacts similar to ionizing radiation. Therefore, the issue of telecommunication radiation should not be left unaddressed.

It has been proven that radiation from the masts could pose serious health challenge as a result of geotaxis impact which could cause DNA mutation and harm to chromosomes. If this danger exists, then there is need for greater collaboration between the Nigeria communications commission (NCC) and the telecommunication firms towards reducing the environmental effects of the masts and to ensure that they do not cause danger to lives.

### **1.5 Research Questions**

This study is guided by the following research questions:

- i. What are the effects of product with environmental characteristics on competitive advantage?
- ii. What is the impact of biodegradable packages on competitive advantage
- iii. To what extent does environmentally friendly product affect competitive advantage?
- iv. What are the effects of green marketing through CSR on competitive advantage?

#### **1.4 Objective of the Study**

The broad objective of the study is to examine the effect of green marketing on competitive advantage. Other specific objectives are to:

- i. Determine the influence of product with environmental characteristic on competitive advantage.
- ii. To determine the impact of biodegradable packages on competitive advantage.
- iii. Find out the effect of environmentally friendly product on competitive advantage.
- iv. To ascertain the effect of green marketing through corporate socially responsibility on competitive advantage.

#### **1.5 Research Hypotheses**

This study is anchored on the following hypotheses:

HO<sub>1</sub>: There is no significant relationship between products with environmental characteristics and competitive advantage.

HO<sub>2</sub>: There is no significant relationship between Biodegradable packages on competitive advantage.

HO<sub>3</sub>: Green marketing through environmental friendly product has no significant relationship with competitive advantage.

HO<sub>4</sub>: Green marketing through corporate social responsibility has no significant relationship with competitive advantage.

### **1.6 Significance of the Study**

The result of this study will be of great relevance to executives of firms in the telecommunication industry, who are looking for ways to gain an edge over rival firms and sustain their firm's competitive in the industry. This is because the telecommunication industry constitutes the central focus of this study considering the recent trend of still competition within the industry.

This study's academic importance hinges on the fact that it will provide a relevant contribution to the advancement of existing knowledge and literatures of green marketing, because it is still in its infancy and has not been thoroughly examined specifically in developing nations like Nigeria. Hence, it will serve as a good reference material for any individual or person who wishes to research further in this area of study.

Furthermore, based on the fact that environmental challenges such as the implications of global warming, climate change, harmful effect of pollutants etc now affects all businesses and people, the study will also be beneficial to all employers and employees who are interested in letting sound environmental practices be their guide in business dealing. The list also extends to governments who are making regulatory framework to sustain the environment.

### **1.10 Scope of the Study**

The study is carried out within Asaba metropolis, Oshimili South Local Government Area of Delta State, Nigeria. The study focuses not only on the telecommunications industry with their customize phones as product in Nigeria generally but only cover the four major operators of the industry, which are: Mobile Telecommunication Network (MTN) Nigeria

Plc, Globacom Limited, Airtel and Etisalat Nigeria Plc within Asaba, Delta State. The sampling objects used in the study are employees and customers that make use of the customize phones of the four major players in the telecom industry (MTN, Glo, Airtel and Etisalat). It was presumed that these groups of people could provide more informed response to the questions contained in the questionnaire relating to the title of study. The dimensions of green marketing in sustainable competitive advantage in the Nigerian telecommunications industry.

The highlighted indicator of the dependent variable includes competitive advantage, enhancing quality of life for stakeholders, organizational competitiveness and marketing performance, which would make for easy measurement of the dimension of green marketing.

#### **1.11 Limitations of the Study**

This study is limited by some factors which may hinder the researcher from covering wide area among these factors are:

The paucity of research practices often results to a few available research materials for further research. Green marketing is a new concept which is still need more research work to be done and as such much previous literatures and research materials required for this work is limited.

Many firms tend to dislike activities that appear to be probing them. As a result, they develop special liking for secrecy and tend to avoid researchers. Most times they refuse to give out information for meaningful researcher. While filling the questionnaire, personnel biases of the respondents might affect the responses.

Some people misconstrue the researcher as government tax agents, gathering information to be used for assessing respondents for tax purposes or for other reasons that may not be in their interests.

### **1.12 Definition of Terms**

The following major terms used in this research work are defined for clarity.

**Green Marketing:** It consist of developing and promoting products and services that satisfy consumers want and need for quality, performance, affordable pricing and convenience without bringing a harmful effect on the environment.

**Green Products:** Products that have less of an influence on the environment or less harmful to consumer's health. They might typically, be formed from recycled components, be produced on more energy conservative way or be supplied to the market with less packaging (or all three).

**Green Wash:** Presenting a product or service as green when it is not.

**Green Consumer:** A consumer who is careful to buy things that have been produced in a way that protects the physical environment. The typical green consumer will only buy things that are environmentally friendly (i.e., Biodegradable, recyclable or otherwise).

**Competitive Advantage:** Aggregation of indicators that sets a business firm apart from its competitors and gives it a distinctive position in the market superior to its competitive

**Sustainable Competitive Advantage:** A firm's ability to build long lasting strategies to sustain its competitiveness in the market place. It also involves its ability to insulate the firm as much as possible from the actions of rivals and other aggressive competitive development

**Innovation:** Successful commercial implementation or exploitation of a new idea or invention

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.3 Introduction**

This chapter is concerned with review of related literature. It is a systematic appraisal of previous studies and documents containing information about the problem under study. This chapter provided the theoretical framework, the background and the problem discussion of the area of this study, leading down to the specific research questions.

#### **2.4 Conceptual Review**

##### **2.4.1 Concepts of Green Marketing**

There is existence of changing social, environmental and retail views attached to this term. Anderson *et al* (1991) posit that “Green Marketing” or “Natural branding” among other things, is a concept that is based upon the notion that being environmentally friendly might be part of the successful marketing strategy of a product, service or anything. Green marketing is a broad concept, one that can be applied to consumer products, industrial products and even services. For instance, around the world there are resorts that are beginning to promote themselves as “eco-tourist” facilities i.e. facilities that “specialize” in experiencing nature or operating in a fashion that reduces their environmental effect.

Pride and Ferrel (2008) opined that Green Marketing also alternatively known as environmental marketing and sustainable marketing refers to a company’s efforts at structuring, pricing, promoting and distributing products that will not harm the environment. Polonsky (1994) view Green Marketing as all activities structured to generate and facilitate any exchanges intended to satisfy consumer needs, such that the satisfaction of these needs

occurs, with low harmful effect on the physical environment. Biswas (2008) in his perception, defined green marketing as a holistic marketing concept wherein the production, marketing, consumption and disposal of products happen in a fashion that is less harmful to the environment with increasing awareness about the consequences of non-biodegradable solid waste, global warming, harmful impact of pollutants, etc. Coddington, (1993) defined green marketing as the business activities that considers customers health with regards to preserving and conserving the physical environment. According to American Marketing Association (AMA) view green marketing as the marketing of products that are seen to be environmentally safe.

It involves a broad range of activities, consisting of modifications of the production process, packaging changes, product modification, as well as changing advertising. Therefore, it ensures that the interest of the company and all its customers are protected, as voluntary exchange will not take place unless both the customer and marketer mutually benefit. The definition above also consists of the protection of the physical environment, by attempting to minimize the detrimental effect this exchange has on the environment.

### **2.2.2 Historical Background**

It could be argued that green, environmental or ecological marketing movement began with the advent of chemical agriculture in the early 20<sup>th</sup> century (Nilsson, 2002). At that time, all agriculture was “organic” because there was no other way. Almost as soon as “super-phosphates” and Ammonium began to be used, there were some who wanted to do things the archaic fashion, without purchased input and machines. The term was coined on

the 1940s, though it wasn't until the "Back to the Land" movement of the 1970s that there were first inklings of a "natural foods" market.

The first natural food stores that sprang up in the 1970s, sold not only then loosely defined organic produce but also, a small supply of "old fashioned" products for the home and yard. For instance, they might sell cleanser but only Bon Ami. There was no national distributing chain of natural or organic products, so they were all local, by default. Such stores tended to be seen in large cities or college towns. For nearly 30 years, such stores operated with a small but loyal base of people with allergies, foodies, hippies, students and other supposedly fringe elements. They saved packaging and money by allowing customers to fill their own containers. Shoppers were encouraged to save a bag by bringing their own. It was until the mid 1990s that such stores really began popping up all over the nation. By staying in business all those decades until it became fashionable to be "green", they showed that there was a small but devoted group who would be able to pay a little more and put up with a little difficulty to shop where they could be sure that the products offered were in line with a shared set of ideals. Additionally, it was in the late 1980s and early 90s that surveyors of other products began to realize there was a market for goods that utilized recycled materials didn't use chemicals such as bleach or pesticides.

Due to the fact that environmental issues were receiving a great deal of discussion in business area particularly in marketing, the American Marketing Association (AMA) held the first workshop on "Ecological Marketing" in 1975. The proceeding of this workshop resulted in one of the first books on green marketing entitled "Ecological Marketing" (Henion and Kinnear, 1976a). Since that time a number of other books on the topic have been published (Charter, 1992; Coddington, 1993; Othman, 1993). The AMA workshop

made attempt to bring together academics, practitioners, and public policy makers to investigate marketing effect on the physical environment. At this workshop ecological marketing was viewed as “the study of the positive and negative perspectives of energy depletion, marketing activities on pollution and non energy resource depletion” (Henion and Kinnear, 1976b, 1).

As we progress into the second decade of the 21<sup>st</sup> century, more products are being repackaged as environmentally friendly. Even more than that, new companies are starting their businesses with environment in mind. Also, larger companies now realize that to capture new market segment today and tomorrow, they need to deliver a product that is superior in some way to its conventional counterpart instead of depending on the good intentions of others. Consequently, a sizeable portion of the population will go out of their way to avoid supported companies that pollute the environment conclusively. The idea is that companies should let sound environmental practices be their product or service – one that is willing to pay a premium to let help them do the right thing.

### **2.2.3 Golden Rules of Green Marketing**

To take advantage of Green Marketing opportunities, companies must heed to the rules of green marketing, Mishra and Sharma (2010):

- a. **Know Your Customer:** Companies must make sure that the customer is aware of and concerned about the challenges that their product attempts to address.
- b. **Educating your Customers:** Isn't just a matter of letting customers know you are doing whatever you are doing to protect the environment, but also an issue of letting them know why it matters.

- c. **Be Genuine and Transparent:** Means that (a) you are actually doing what you claim to be doing in your green marketing campaign and (b) the rest of your business policies are consistent with whatever you are doing that is environmentally friendly,
- d. **Reassure the Buyer:** Customers must be made to see that the product performs the job it's supposed to do – They won't overlook product quality in the name of the environment.
- e. **Consider your Pricing:** If you are charging a premium for your product and many environmentally preferable products cost more due to economies of scale and use of greater-quality ingredients make sure that customers can afford the premium and feel it's worth it.
- f. **Giving your Customers an Opportunity to Participate:** it connotes personalizing the advantages of your environmentally friendly actions, normally via letting the customer to be directly involved in positive environmental action.
- g. **Thus Leading Brands should recognize that customers expectations have changed:**  
It is not enough for a company to green its products, consumers expect the products that they purchase pocket friendly and also to help minimize the environmental impact in their own lives too.

#### **2.2.4 Challenges in Green Marketing**

##### **Need for Standardization**

It was discovered that only 5% of the marketing messages from “Green” campaigns are entirely true and there is a lack of standardization to validate these claims. There is no standardization presently in place to endorse a product as organic unless some regulatory

agencies takes part in providing the certifications, there will not be any provable means. A standard quality control board needs to be in place for such labeling and licensing.

### **New Concept**

The literate customers are getting more aware about the gains of green products. But it is still a new concept for the masses. Customers needs to be enlightened and made aware of the environmental challenges.

### **Patience and Perseverance**

The stakeholders and companies need to view the environment as a main long-term investment opportunity that marketers need to look at the long-term gains from this new green movement. It needs patience and it has not instant results. Since it is a new concept and idea, it will have its own acceptance period. Biswas, (2008) added that Green Products require renewable and recyclable material, which is costlier and not affordable by common man of developing countries. It requires a sophisticated technology and huge investment in R and D. For example, water treatment technology, which is too costly. Price is a significant factor whether consumers are ready to pay additional price for green products and services? Will green marketers take this fact into consideration while charging a premium price? Will this product be made available whenever and wherever it is demanded by the customers? Majority of customers are not aware of green products and their uses. Will promotional policies further make the product unaffordable? To answer these problems, some distinct marketing mix strategies need to be employed to challenge those obstacles for making green marketing project successful.

### **2.2.5 Green Products and its characteristics**

In time of globalization and acceleration population growth and technology organizations, and its influence on the environment and living organisms, and increasing environmental challenges and pollution and its negative effect on life, were to be taken seriously about solutions that help to resolve these negatives resulting from pollution. As a result of increased consumer awareness about the negative outcome of environmental companies to think about profit and non-profit, consisting of so-called green products.

Taking into consideration that firms are socio-economic entities, it can't be expected that they remain unresponsive to the "Environmental Awareness" that May direct consumer behaviors. Essentially marketing managers encounter with customers sensible to environmental issues. The old perception on how businesses are established with no other purpose but to make profit leaves its place rapidly to a new perception which defines firms as establishments that are sensible to social problems. Apart from manufacturing environmental-friendly products and selecting environmental-friendly markets, especially understanding environmentally friendly product is required to be integrated into the corporate culture. Consumers encounter with terms such as environment-friendly, ozone-friendly and recyclable products in green marketing. However, green marketing isn't limited to these terms but it is a much wider concept of marketing activity which can be applied to industrial goods, consumer goods and even to services (Erbaslar, 2010).

Products which are reusable, recyclable and biodegradable in nature are referred to as green products. It is produce with non toxic chemical, natural ingredients and containing recycled contents etc. Green products are originally produced under the approved chemical. They do not pollute the environment. That is why they are known as environmental friendly

(Mutharasu, 2014). According to Lee, (2009) green products are those products whose functions with the process of material retrieval, sales, utilization, production and waste treatment available for recycling, reduced pollution and energy saving. In the opinion of Chan, (2012) green product development addresses environmental issues through product design and innovation. Green products have also been seen as products that claim to offer an environmental benefit (TerraChoice, 2010). Examples of these products are building materials, consumer products, furnishings, electronics, washing machines, air conditioner, fridge, health care products, organic and green foods (Timon, 2009; Wikipedia, 2015).

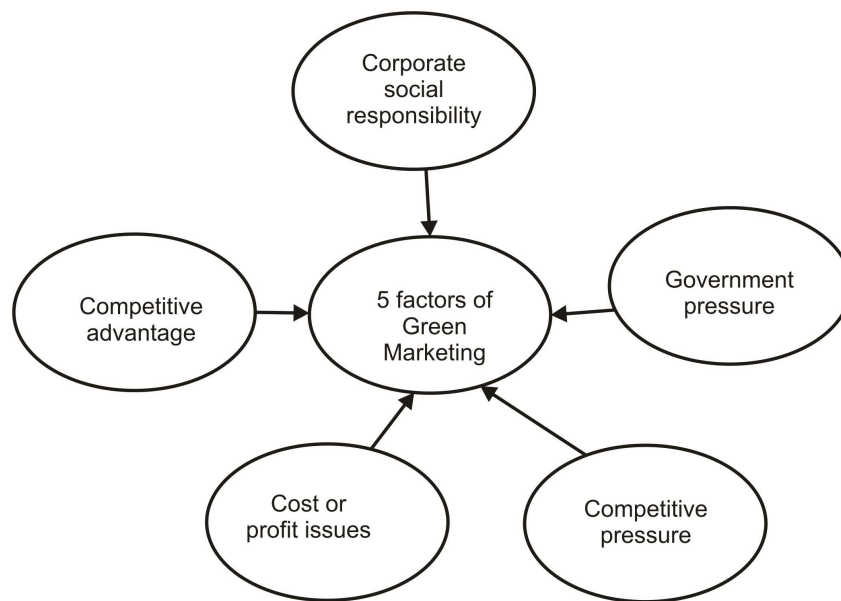
Durif (2010) stated that green products can be seen as environmental products or ecological products. Polonsky (2011) observed that green products are products with an alternative design such that less physical resources are needed during its life cycle. That is, products that are produced through green technology and caused no environmental hazards. According to Mishra and Sharma (2010) Green products are produced via green technology and cause no environmental hazards. Promotion of green technology and green products is important for conservation of natural resources and sustainable development. Green products are defined by the following measure:

- Products contents under approved chemical
- Products that do not pollute the environment.
- Products that will not be tested on animals.
- Products that are originally grown
- Products that are recyclable, reusable and biodegradable
- Products with natural ingredients
- Products containing recycled contents, non-toxic chemical

- Products that have eco-friendly packaging i.e., reusable, refillable containers etc.

### 2.2.6 The Five Factors of Green Marketing

In his study, Polonsky (1994), found out that many companies are venturing into green marketing because of some benefits and factors/forces which can be termed as “5Cs” of green marketing. These 5Cs are competitive advantage, corporate social responsibilities (CSR), government pressure, competitive pressure and cost or profit issues.



**Figure 2.1: 5Cs (Factors) of Green Marketing**

**Source: Biswas, N. (2008) Green Marketing: Preferences and Paths**

#### a. Competitive Advantage or Opportunities

As demand changes, many firm see these changes as an opportunity to exploit and have a competitive advantage over companies marketing non-environmentally responsible alternatives. Organizations view environmental marketing to be an opportunity that can be used to achieve its aim (Keller, 1987, Shearer, 1990).

**b. Corporate Social Responsibility (CSR)**

Firms believe they have a moral obligation to be more socially responsible (Davis, 1992). Accordingly Shearer, (1990) opined that this translates into companies that claims that they must achieve environmental aims as well as profit related objectives. This results in environmental challenges being integrated into the company's corporate culture. Companies in this situation can take two methods (a) they can use the fact that they are environmentally responsible as a marketing tool, or (b) they can become responsible without promoting this fact.

**c. Governmental Pressure**

Government agencies are forcing companies to become more responsible (NAAG 1990). As with all marketing associated activities, governments want to "Protect" consumers and society: this protection has vital green marketing consequences. Government regulations relating to environmental marketing are structured to protect customers in many ways.

- i. Reduce production of harmful goods or bye products
- ii. Modify consumer and industry's use and/or consumption of harmful good.
- iii. Ensure that all types of customers have the ability to examine the environmental composition of products. (Polonsky, 1994) asserted that one of the more recent publicized environmental regulations undertaken by governments has been the establishments of guidelines designed to "control" green marketing claims.

**d. Competitive Pressure**

Another main force in the environmental marketing area has been firms' desire to sustain their competitive position. Competitors' environmental activities pressure companies to change their environmental marketing activities (NAAG, 1990). In several cases

companies observe competitors promoting their environmental behaviours and attempt to imitate this behaviour. For example this competitive pressure has caused an entire industry to change and thus decrease its harmful environmental behaviour.

**e. Cost or Profit Issues**

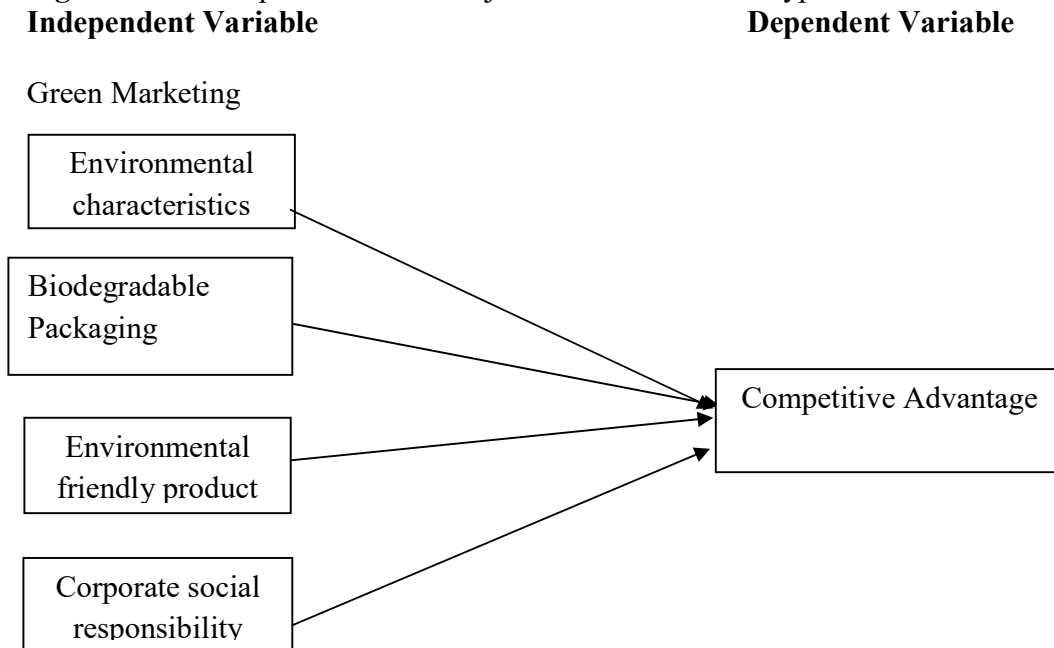
Cost factors related with reductions in material usage or waste disposal forces companies to modify their behaviour (Azzzone and Manzini, 1994). Discarding of environmentally harmful by-products, such as polychlorinated biphenyl (PCB) contaminated oil are becoming highly costly and in some cases difficult. Therefore, companies that can minimize harmful wastes may incur substantial cost savings. When attempting to reduce waste, companies are often forced to re-investigate their production processes. In these cases they often develop more effective production processes that not only limit waste, but decrease the need for some raw materials. Yurman, (1994) stated that one way in which cost or profit issues may affect firms' environmental marketing activities is that new industries, may be developed. This can occur in two ways:

- i. A firm develops a technology for reducing waste and sells it to other firms or
- ii. A waste recycling or removal industry develops.

**2.2.7 Conceptual Framework**

The researcher came out with a framework as stated below in figure 2.3, with the variables; environmental characteristics, product packaging initiative, environmental friendly product and corporate social responsibility.

**Figure 2.2:** Conceptual model of major variables and their hypothesized relationships.



**Source: Researcher's Model**

### 2.2.8 Corporate Social Responsibility (CSR)

Corporations around the globe are besieged with a new role, which is to meet the needs of the present generation without compromising the ability of the next generations to meet their own needs. Firms are being called upon to take responsibility for the ways their business activities affect societies and natural environment. They are also being asked to adopt sustainability ideology to the ways in which they carry out their business. Sustainability refers to an organization's activities, specifically considered as voluntary that exhibits the inclusion of social and environmental concerns in business activities and in interactions with stakeholders (Van Marrewijk and Verre, 2003).

According to Quinn, (2008) it is no longer acceptable for a firm to experience economic success in isolation from those agents influenced by its action. A company must now concentrate its attention on both increasing its bottom line and being a good corporate citizen. The quality of relationships that a company has with its member of staff and other

main stakeholders – such as governmental officials, investors, suppliers, public and customers, activities, and communities – is essential to its success, as it is ability to respond to competitive situations and corporate social responsibility (CSR). Corporate social responsibility (CSR) is a concept whereby firms consider the interest of the society by taking responsibility for the impact of their activities on employees, shareholders, communities, customers and the environment in all aspects of their operation.

This obligation is seen to go beyond the statutory requirement to comply with legislation and sees firms voluntarily taking extra steps to boost the quality of life for employees and their families as well as for the local community and society at large (Margo and Walsh, 2003). According to Orlitzky *et al* (2003), there is no generally accepted definition of corporate social responsibility (CSR). Selected views by CSR companies and actors include:

- Corporate social responsibility is the ongoing commitment by firms to behave ethically and contribute to economic development while enhancing the quality of life of the employees as well as of the local community and society at large (World Business Council for Sustainable Development).
- Corporate social responsibility is the commitment of firms to contribute to sustainable economic development by working with the local community, employees, their families, and society at large to boost their lives in ways that are good for business and for development (International Finance Corporation).
- Corporate social responsibility is a concept where firms integrate social and environmental focus in their business activities and in their interaction with their stakeholders on a voluntary basis (European Commission).

- Corporate social responsibility is about ensuring that organizations manage their businesses to make a positive effect on society and the environment whilst increasing value for shareholders (Institute of Chartered Accountants in England and Wales).

#### **2.2.8.1 Corporate Social Responsibility and Competitive Advantage**

Ever since corporate social responsibility (CSR) reports first emerged in the late 1980s alongside a firm's annual financial reports, company's environmental considerations have manifested in different (some may say 'nebulous') commitment, promises and proclamations. Some half-hearted, some gracefully fulfilled. Such actions have range from recycling waste in industrial processes to a company exclusively using recycled paper; from a firm's increased efficiency in the utilization of energy and materials, to enhance logistics management for reducing transportation emissions; and, even from transforming plastic waste into pencils, to donating employees' used eyeglasses to a program called Vision Aid Overseas.

Consumer and corporate environmental consciousness has constantly elevated in recent years. Related events, news and proposed legislation seem to occur and change at warp speed. More apparent causes and effects of global climate change, depleting fisheries, deforestation, and the current energy and impending water crises have all caused people to reassess what they put in their cupboards, dish waters, and gas tanks, along with what they do with such things once they are been used.

Because of this intensified environmental awareness, it has become highly significant how a company's deals with such global challenges, or, one might argue, it may be even more crucial how a firm is viewed in approaching such issues. In this manner, CSR environmental behaviour and "cleantech" investments have become essential to a

company's core operations, regardless of the sector in which the company operates. That is, companies are not only sensing the rising accountability demands of shareholders, the public, and governmental bodies, but also the opportunities involved in a "green product" market estimated at US\$209 billion.

Along the years, a lot of corporate executives achieved new found headaches attempting to navigate via the ever-shifting green landscape. Sometimes, it would seem as if all good deeds went punished, or, at best, unrecognized, and all "regular" activities were hyper-scrutinized. Yet, nearly all will tell you that such experiences were tremendous leaving opportunities and that it is quite important for companies to stay active, involved and persist in the green marketplace. Unlike the first environmental movements of the 1970s and 1980s, this green marketing movement is a core business paradigm that is here to stay. And, as executives are quickly learning, businesses not only need patience, but also much guidance along the way.

### **2.2.9 Product Packaging Initiative**

According to Pride and Ferrel (2008) packaging involves the development of a container and a graphic design for a product. Stanton (2002) defined packaging as the general group of activities in product planning that involves designing and manufacturing the wrapper for a product. A package refers to physical container, label and inserts. A package can be a vital part of a product, making it more versatile, safer, and easier to use.

Due to this Product Packaging Initiative (PPI) the telecom industries (Globacom, MTN, Airtel and Etisalat) came up with product repackaging initiative, according to Vasanthakumar and Bratt (1993) suggested that since inputs, manufacturing processes

distribution, uses and disposal method are decided during the design and packaging stages, company venturing out with a green marketing program must start with a green design. They present source reduction pollution and waste management strategies to cut down pollution and also present a method to compare green design alternatives which can provide designers with guidance to select superior designs and packages that can protect the environment from pollution.

Telecom industry has to come up with new recharge card printing to address the environmental pollution by changing from strong carbon papers to a light soft paper and from plastic Sim containers that takes a long time to decompose to a paper Sim packs for easy disposal to avoid pollution of the environment which consider concurrent rather than sequential product development approach and concluded with tips for top management to improve green design in their organization.

Although a large number of retail shops and firms in the telecommunication industry are practicing green marketing and Eco-labelling schemes. Eco-labeling schemes offer its approval to environmentally less harmful products.

#### **2.2.10 Socially Responsible Packaging**

According to Perreault *et al* (2010) customers benefit from many of the advances that have been made in packaging. However, packaging is an area where managers face issue of social responsibility, including concerns about the role of packaging in pollution, global warming and resource use. There have been several times when a crisis has brought attention to the environmental impact of packaging. For example, when scientist revealed that chemicals used in spray cans (for hairspray, deodorant, and other products) were

damaging the earth's atmosphere, firms scrambled to find alternatives. However, it turns out that what we view as "normal" is actually a bigger problem. For years plastic seemed to be the perfect packaging material because it is clean, light, and durable; now the consequence is that discarded plastic is everywhere and lasts forever. Even colorful package graphics are troublesome. The ink to print them often has toxins that later creep into the soil and water. Firms should try to give consumers what they want, but in applying that logic to packaging many people have been short-sighted. And both managers and consumers have often acted as if there was nothing an individual could do to reduce environment problems. Now that attitude is changing.

Many firms are taking steps to preserve the environment. For instance, McDonalds modified its plastic packaging with waxed paper owing to increasing customers' concern about plastics and their ill impacts. Coca-cola, Tata group of companies, HLL, Colgate Palmolive, Jindal Vijanagar Steel etc. have invested higher sums of money in different recycling activities, as well as having changed their packaging to reduce its environmental influence. The benefits of recycling now seem obvious. However, consumers often don't know if a particular product and package is an eco-friendly choice. Some firms are beginning to provide such information. Tesco, the largest retail chain in Britain, pasts a "carbon rating" on all 70,000 products it carries. These ratings remind consumers that what they buy impacts global warming with ratings displayed at the point of purchase, producers have an incentive to improve, clearly, and producers are trying to appeal to green consumers in a variety of ways. For example, canon created its generation green brand of printers' cartridges that can be recycled and that came in a biodegradable package.

Efforts like these also highlight challenges. Some critics think that the environmental claims that firms makes will be misleading or confusing if they are not standardized and regulated. It's hard to know, for example, how the environmental impact of generation green print cartridges compares to competitors products. Despite such difficulties, more effort to protect the environment is needed of course; some things are already regulated by law. These laws challenge managers to rethink channels of distribution, which are usually set up to distribute products, not return empty packages.

#### **2.2.11 Environmental Friendly Product**

Sachdev (2011) asserted that beginning in the 1970s, a significant amount of research has been conducted on consumer behaviour for environmentally friendly products. Many components were found to drive consumer behaviour for environmentally friendly products. The grouping of social and regulatory concerns for the environment have lead to an increasing numbers of firms to consider green issues as a key source of strategic change. For decades, there have been warnings about the issues of excessive natural resource consumption, climate change and ever-increasing waste generation. Consumers, businesses are significant users of natural resources – water, energy, fuel, agricultural resources, forest and marine resources.

In a similar vein, Biswas (2008) added that most of the consumers, both individual and industrial, are becoming more alarmed about environment – friendly products and feel environment friendly products are safe and secure to use. Now is the era of recyclable, non toxic and environment friendly products. This has become the new mantra for firms to satisfy the needs of customers and earn better profits. Many components have found that green products are a company's product development mainstream, there are many aspects

that need to be discussed urgently (Dangelico and Pujari, 2010; Baumann *et al.*, 2002). Specifically, these products are sold online and the environment is the starting point of marketing (Rapp *et al.*, 2009; Ijomah *et al.*, 2007). Environmentally sustainable products can be broken down, and their production process does not produce gas and toxic substances (Chen *et al.*, 2010).

They also minimize waste materials, it can be used as a source of energy and they can prevent pollution (Sharma and Henriques, 2005); moreover, they are preferred in mass consumer product trends (Dangelico and Pujari, 2010). Dangelico and Pujari, (2010) conducted interviews and administered copies of questionnaire targeted at online customers in Taiwan via vendors such as Leezen, Homemaker Union, Orange Mart, and Yogi House International. These product categories can be divided into toilet, kitchen and personal cleaning products (such as natural toothpaste, bitter tea powder and natural detergents), cleaning agents with lotion, and portable dishes. These products are made with natural materials; they are sold to the public on the Internet, and each company has access to consumers through its brand. This study used environmentally sustainable products to examine customers' perceived risk of information security and privacy when they purchase products via the Internet.

#### **2.2.12 Competitive Advantage**

Ogbor and Olannye (2011) opined that competitive advantage is the aggregation of components that sets a business firm apart from its competitors and gives it a distinct position in the market superior to its competitors. A company can compete successfully when it has a competitive advantage. A company has a competitive advantage when it has an edge over rival companies in acquiring customers and defending against competitive

moves from rivals. The key to business success is to create a unique competitive advantage: one that creates value for the consumers and is difficult for competitors to duplicate.

According to Mishra and Sharma (2010), a main force in the environmental marketing area has been firms' desire to sustain their competitive position. In many cases companies observe competitive promising their environmental behaviours and attempts to emulate this behaviour. In some instances, this competitive pressure has caused an entire industry to change and thus decrease its harmful environmental behaviour. For example, when one tuna manufacturer stopped using driftnets, the others followed suit. Another example is when Xerox introduced a few years ago "Revive 100% recycled paper" in an attempt to address the introduction of recycled photo copier paper by other manufacturers.

A sustainable competitive advantage is about how a firm builds long lasting strategies to sustain its competitiveness in the marketplace (Ogbor and Olannye, 2011), it is also about the firm's ability to insulate the firm as much as possible from the actions of rivals and other threatening competitive development. According to Hatten and Hatten (1997), to be sustainable, a company's competitive advantage must pass through two important tests: durability and imitability.

Durability of a sustainable competitive advantage is the rate at which a company's underlying resources and capabilities become obsolete. New technology can make a company's competitive advantage obsolete or irrelevant, while imitability is the rate at which a company's underlying resources and capabilities can be duplicated by others. A company's competitive advantage can be easily be imitated to the degree that it is (a) transparent (b) transferable (c) replicable

- a. Transparency is the speed with which other companies can understand the relationships of resources and capabilities assisting a successful company's strategy.
- b. Transferability is the ability of competitors to gather the resources and capabilities important to aid a competitive challenge.
- c. Replicability is the ability of competitors to use duplicated resources and capabilities to imitate the other company's success.

Biswas (2008) suggested that a firm with green marketing approach possess a sustainable competitive advantage when its value-creating processes and position have not been duplicated by other firms. Sustainable competitive advantage results, according to the resource-based view theory, in the creation of above-normal rents in the long run. The primary factors of competitive advantage are innovation, reputation and relationship that can be achieved through going greener. Products with environmental attributes will have competitive edge over other products with non-environmentally responsible alternatives.

#### **2.2.13 Environmental Strategic Options**

For firms with environmental products, informing their customers about the effect of their products and manufacturing processes becomes a vital issue. Hollensen (2011) opined that there are four strategic options available for firms with environmental concerns. The choice of strategic environmental posture will depend on how an organization wants to create value for its green customers and how change oriented its approach is.

		Value creation approach	
		<i>Benefit enhancement for customers</i>	<i>Cost reduction</i>
Change orientation	Proactive	Green product innovation (major modification)	Pollution prevention Beyond compliance
	Accommodative	Green product Differentiation (minor modification)	Pollution prevention compliance

Figure 2.3: Types of environmental strategic posture

Source :Hollensens (2011) *Global Marketing: A Decision – oriented Approach 5<sup>th</sup> Edition*, Edinburgh: Pearson Education Ltd.

From the figure above, if a firm is more oriented to cost reduction than to benefit enhancement for customers, pollution prevention strategies (option 3 and 4) would probably be chosen in preference to the development of green products. Whereas, a firm that is more proactive tends to be more innovative than otherwise (option 1 and 3). Although going beyond compliance (i.e. doing more than required according to environmental legislation) is generally perceived as highly desirable.

## 2.3 Theoretical Review

### 2.3.1 Theory of Enlightenment Self-Interest in Business

Managers are responsible to shareholders, want the company to increase in value to get the best possible return on their investment. Advocates of enlightened self-interest believe that firms will improve in value if they can identify and respond to the needs of society. Enlightened self-interest increases firm value by securing and maintaining market share, acquiring and retaining a skilled workforce and ensuring that natural resources and

raw materials are available for the future. In corporate philanthropy-Enlightened self-interest can be the motivation for corporate philanthropy. Firms known for their charitable giving acquire a reputation for corporate social responsibility in the eyes of consumers. Firm donations of cash or resources are in form of corporate social responsibility. They encourage customers to form a positive view of the brand in such a way as traditional marketing campaigns. Companies can use charitable donations to swap public opinion in their favour.

### **2.3.2 Environmental Stewardship**

Enlightened self-interest motivates firms to reduce hazardous the impact of their activities on the environment. By taking part in voluntary environmental management programs, firms reduce the potential for enforcement action by regulations, which could be costly and damage their reputation. Customers prefer to give their business to firms with a positive track record of environmental management. This has an impact throughout the supply chain conducting business in an environmentally sustainable manner and a competitive advantage to enables the long-term future of the business as natural resources and raw materials will be conserved.

### **2.3.3 Business and Green Marketing**

Marketing means working in the market with the purpose of completing transactions that will satisfy the needs and desires of a customer, green marketing is currently not achieving potential for enhancing the quality of life of consumers, it seems that a lot of individual and industrial customers are more conscious about the environment and increasingly interested in its preservation.

The Toyota factory created “environmental technology”. Their perspective was shaped, not only by laws, but also the pressure to form a unified product line for examples to produce the next generation of cars as electric-combustion-hybrid. The results show that Toyota is now the leader in this segment of the market, and this section has grown significantly in recent years. The telecom industries (MTN) came up with environmental technology, MTN Yellow Box to generate electricity without harming the environment, with the help of solar system and (Airtel) came up with Airtel life lines to help the less privilege in the society as part of corporate social responsibility.

Companies should be aware of their responsibilities towards the physical environment and the society as a whole in the same way as towards clients, shareholders and employees, climate change, environmental challenges and social problems will challenge the leaders of future generation for taking efficient and comprehensive decision. In the process of taking these decision, the priority of business people should be based on the principal of protecting the environment rather than profitability of the business.

## **2.4 Empirical Review**

Going by what Laroche, Bergeron, and Barbaro-Forleo, (2001) has highlighted the strong purchase intention of environmental brands as they seek it through the ecological way. Customers reactions over the years with the robust environmental changes and this change is reflected in their shopping i.e. checking if the packaged items are in a recyclable material and giving more concern to purchasing environmental friendly products such as. CFC-free hairspray, paint, deodorants biodegradable etc. The marketers also respond to the behavioral change of the customers by creating the right eco-friendly quality of the product/brand and customers satisfaction.

D'Souza, Taghian, Lamb, and Peretiatkos, (2006) supported the idea of environmental friendly packaging by stating that packaging and its labeling is one vital way to assert the customers about the visibility about the eco-friendly product/brand. The process of discarding the packaging of the products, the materials/resources used and the expenditure associated with bulk packaging materials can be harmful for the environment. Hence, a recyclable material is a better alternative for packaging.

A study based on a sample of 26,500 European respondents conducted in April 2009 indicated that more than 80% of European citizens thought that a product's impact on the environment is a relevant element when deciding which products to buy (Flash Eurobarometer 256 – The Gallup Organisation, 2009). Since 1990, The Natural Marketing Institute (NMI), a leading business consultant and marketing research company has been doing research in segmenting green consumers. NMI grouped them into five categories. The “LOHAS” group (16%) focuses on progress in general and in particular, on environment and society issues and premium pricing does not have a major influence in their buying decision. The “Naturalites” group (25%) is attributed by an interest on the environment's protection, but primordially on health. This was the purpose why they buy many natural products for personal health and well-being. The “Conventionals” segment (23%) wants a cost effective way to take care of the issues that will sustain. The frequency that the “Drifters” (23%) make green purchasing is not that often, but when they do, it's for a socially acceptable image. The last group is the “Unconcerned” (14%) who makes purchases taking into account: the price, the value, convenience and the quality (Molyneaux, 2007).

Awakened by the severity of environmental deterioration, customers are gradually changing their attitude, behaviour and view in matters of consumption (Biswas and Roy,

2014). As a result, the green consumers are targeted by the companies. Cherian and Jacob (2012) examined the relationship between the consumer attitudes and green marketing. The study consists of a review of literature in the area of green marketing. The review concluded that majority of customers still lack 'green' knowledge and because of such low awareness towards green products firms are still not pushing towards producing more green products nor are they working hard on green packaging. Lack of communication was seen to be a major purpose for commercial failures of environmentally sustainable products majorly because communication is a major step in the development of a positive behaviour towards consumer's consumption patterns. A conceptual framework was developed to describe the gap between attitudes and behaviour as a social dilemma.

Orel and Zeren (2011) revealed that Turkish customers had a favourable attitude toward environmentally friendly products compared to customers in Poland who were less aware. However, the results indicate that both Polish and Turkish respondents are sceptical regarding the statement that the marketing system in their country operates more efficiently than those of other countries. The study showed that Turkish consumers who had favourable attitudes towards environmentally friendly products were taking actions against errant producers compared to the Polish consumers, providing evidence of a link between consumer attitudes and consumerism.

Schlegelmilch, Bohlen, and Diamantopoulos (1996) investigated the relationship between green purchasing decisions and awareness of environmental issues and have concluded that consumer awareness of environmental problem that affect the purchasing decisions; it may also be affected by other factors moderating it. However, in high social class, environmental information and environmental quality, and taking part in green

activities hypotheses were not supported (Keleş, 2007). The objective of this study, was the impact of environmental awareness, Green product features, green product prices, green product advertisement and Demographical features of consumers on purchasing behaviors of consumers, is to examine whether there is a significant relationship between them and if there is, to reveal direction and level of this relationship and hence to give advices to firms producing environment-friendly products.

Other studies either concentrated on green marketing strategy and the company's performance: the moderating role of environmental culture" (Fraj, Martí' nez, and Matute, 2011).The researcher conducted a study entitled "Strategies green marketing and corporate performance, The objective of this study was to examine the influence of marketing strategies, green and corporate performance, and in order to achieve this purpose, the researcher designed questionnaire; Distributed them to (361) of the industrial firms in the European Union, has the researcher on the descriptive analytical method for access to the results of the study, the study concluded that the adoption green marketing strategies lead to enhanced profitability of organizations through improved performance and reduce costs, the study indicated that the dimensions of organizational sentences are not connected positively to the prosperity of the company economically. However, green strategies have an influence on the company and to achieve excellence in performance and profitability, the study recommended the need to implement green strategies in industrial companies and to overcome the obstacles that riddled.

## **2.5. Summary**

From this study, I find out that many authors has put on different contribution to green marketing to address different areas, but there are still vacuum that are needed to be filled which is missing from the study. Therefore such areas that created a gap in the knowledge of green marketing in this study, that further researchers should endeavour to address, is in the field of new concept of green marketing, cost factor, attitude, appropriateness, Non-cooperation and avoiding green myopia. The study also, revealed that most author work fails to address the area of customers and strict rules of the state (legislative). Green design and packaging initiative is another area that is missing from the knowledge of this study that will help the Green Marketers and green consumers to understand the green product packaging initiative.

Also, the study indicated that most researchers have failed to address the area of environmental advertisement, the activities of environmental advertisement will help to increase public attention to environmental problems. While the area of consumer purchase behaviour on green marketing is conspicuously missing from most author contribution to knowledge and it is of great importance. The study revealed that most literature work could not portray the significance of the conceptual framework and on green marketing. Meanwhile, the study review could not show the conceptual framework how the diagrammatic variables of green marketing affect competitive advantage.

Also, from the study it could be noted that most authors were unable to address this area of significance that is missing from the schemes of things which is the Green Marketing SWOT Analysis. Firms that are engaging in green marketing must consider how to involve

its SWOT analysis environmental audit. Another area that is conspicuously missing in this study literature review that is of great impact to knowledge is the area of Green Marketing tools such as Eco-label, eco-brand and environmentally advertisement which will make great increase on the awareness of green marketing products. These green marketing tools will guide consumers into purchasing environmentally friendly products.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.4 Introduction**

Research methodology is a way to systematically resolve the research problem. It provides a guide or framework for collection of data. Graziano and Raulin, (2004), explained that since research involves a process of asking and answering questions that may lead to interplay between inductive and deductive thinking, the methods used in answering such questions can therefore depend on several factors. This chapter involves the various methods and techniques for conducting this research work. Some of the topics covered under this chapter include research design, population and sample size, sampling techniques, instrument for data collection, and techniques for data analysis.

#### **3.5 Research Design**

Research design according to Olannye, (2006) is the framework for carrying out a research. It can be seen as a detailed blueprint used to guide a study towards its objectives. The type of research design that was used in this work is the survey research design. As generally conceived, a survey research is one in which a group of items is studied by collecting and analyzing data from only a few items (sample) viewed to be representative of the entire group.

Survey research method was employed because it deals mainly with opinions and is widely used in management, or social sciences research, etc due to the complex relationship that exist between variables. It also ensures that the resultant sample sufficiently represents

the population. Thus, findings from this were expected to be generalized to the entire population.

### 3.6 Population of the Study

This relate to the geographical location covered by the study. The study covered the four major operators of the telecommunication Industry (MTN, Airtel, Glo and Etisalat) within Asaba, the capital city of Delta State. This refers to the target population of customers and staff using customize phones. The aggregate number of persons from which this study sample was drawn is estimated at 3000 people. This includes the management/ staff and customers of the selected companies. For the purpose of this study, the research population comprises of lower, middle and the senior management cadres of employees of the four major operators of the telecommunication Industry, and is presented in the table below:

**Table 3.1: Showing the population spread of staff and customers of MTN, GLO, Airtel and Etisalat**

	MTN	GLO	Airtel	Etisalat	Total
Senior	36	28	37	28	129
Middle	36	29	37	29	131
Lower	36	29	37	29	131
Customer	37	29	88	29	133
	145	115	149	115	524

Source: Statistical output of collected data, 2016.

### 3.2 showing the population spread of staff and customers.

SN	Major Operators	Number of Staff
1	(MTN) Nigeria Plc	145
2	Globacom Limited,	115
3	Airtel	149
4	Etisalat Nigeria Plc	115
Total	4	524

Source: Statistical output of collected data 2016.

### 3.4 Sample Size

The sample size of any research study refers to the representation of the population from which it is being drawn (Olannye, 2006). For the purpose of this research, the appropriate number of representation of the population for this study was determined using the Taro Yamen's sample size formula thus:

$$n = \frac{N}{1 + N (e)^2}$$

Where n = sample size sought

e = level of significance

N = population size

Working reveals the desired sample size thus:

The sample sought is:

$$n = \frac{524}{1 + 524(0.05)^2}$$

$$n = \frac{524}{1 + 524 (0.0025)}$$

$$n = \frac{524}{2.31} = 226$$

Therefore, the sample size that was used in this study constitutes 226 staffs.

### 3.5 Sampling Method

Sampling method is the scientific procedures of selecting those sampling units which would provide the required outcome or results. The researcher used probability sampling method of stratified sampling method to analyze the data collected in this research. The

strata in this research are position held by staff of major operators: management staff, senior staff and junior staff.

### **3.6 The Research Instrument**

The research instrument that was used in this study was a structured questionnaire which responds format was in the five point likert scale form whereby the respondents was asked to give answers ranging from strongly disagreed to strongly agreed. It is particularly suitable at measuring or obtaining evaluative response towards an object according to Agbonifoh and Yomere, (1999), requiring intense evaluation of his attitude stating how well he agrees or disagrees with a statement; hence its usage in this study.

The questionnaire is divided into two sections (A and B) containing questions on respondents profile and another in closed ended questions pattern. The likert scale of point 5 is used for the closed ended questions. They are as follows:

- |   |   |                        |
|---|---|------------------------|
| 5 | = | Strongly Agree (SA)    |
| 4 | = | Agree (A)              |
| 3 | = | Undecided (U)          |
| 2 | = | Disagree (D)           |
| 1 | = | Strongly Disagree (SD) |

#### **3.6.1 Validity of the Research Instrument**

Agbonifoh and Yomere (1999) stated that the validity of an instrument is seen as the extent to which differences in scores on it reflects true different among individuals on the characteristics that we seek to measure. Content validity was used to test if the content of the questionnaire has really addressed what it is supposed to measure. Content validity has

been defined as “the extent to which elements of an assessment instrument are vital to and representative of the targeted construct for a particular assessment purpose” (Haynes, Richards and Kubany, 1995). To validate the instrument for data collection, the questionnaire was given to renowned experts from the department of Business Administration and Marketing, Delta State University, Asaba Campus. This was to establish the content validity of the instrument.

### 3.6.2 Reliability of the Research Instrument

For the reliability, which is seen as the degree to which a measuring instrument produces similar outcomes when repeated. Cronbach’s Alpha based text was used to text for the reliability coefficient. A reliability coefficient of 0.7 and above, are high and was acceptable while a reliability coefficient of 0.6 and below shows poor reliability (Sekaran, 2003).

**Table 3.3 Reliability coefficients of study constructs**

<b>Dimension of study constructs</b>	<b>Number of items</b>	<b>Number of cases</b>	<b>Cronbach’s Alpha coefficient</b>
Product With Environmental Characteristics	4	20	0.713
Biodegradable Packaging	4	20	0.811
Environmental Friendly Product	4	20	0.701
Corporate Social Responsibility	4	20	0.708

*Source: Analysis of field survey, 2016.*

From the above table, it can be observed that the reliability coefficients are above the 0.7 benchmark. Favorable reliable scores were obtained from all items in general. The estimation reported acceptable internal consistency, thus testifying high reproducibility.

### 3.7 Method of Data Collection

Data was collected through primary and secondary sources. Questionnaire administered to respondents is of the primary data source. The collection of data that was used for analytical purpose in this research was done by means of a self-administered structured questionnaire distributed to staff and retrieved thereafter by hand after given the respondents sufficient time to respond to the various questionnaires constructs in each of the sub-scales. The internet as well as the library constituted the secondary data collection medium. This includes journals, newspapers, magazines, textbooks, research findings reports etc.

### 3.10 Data Analysis Techniques

In this study, statistical techniques of data analysis were used. The list includes: descriptive statistics, frequency analysis and multiple regression analysis. Multiple regression analysis was used because it is good at determining the statistical relationship between two or more variables and to make predictions of one variable on the basis of the other according to Olannye (2006). They were employed using the statistical package for social science (SPSS) software version 23.

### 3.9 The Statistical Model

$$CA = F(PEC, PPI, EFP, CSR)$$

$$CA = \alpha_0 + \alpha_1 PEC + \alpha_2 PPI + \alpha_3 EFP + \alpha_4 CSR + \varepsilon$$

Where: CA=Competitive Advantage

PEC=Product with Environmental Characteristics,

PPI=Product Packaging Initiatives

EFP=Environmental Friendly Product

CSR=Corporate Social Responsibility

$\varepsilon$  = Error Term

$\beta_0$  = Intercept/ Constant

$\beta_1 - \beta_4$  = Coefficients

## **CHAPTER FOUR**

### **RESULTS AND DICUSSION**

#### **4.1 Introduction**

This chapter is concerned with the presentation and analysis of data and information collected through questionnaires administered in Asaba metropolis of Delta State. The data presented and analyzed in this study is categorized into three parts: the first is the descriptive analysis of the respondents profile with percentage weighting attached. The second is the regression analysis of the research questions and their respective variables. The third is the testing of hypothesis formulated for the study.

#### **4.2 Presentation of Data**

The analysis from the field survey is presented below in tabular form:

**Table 4.1 Analysis from the field survey**

Pattern focused	Number administered	Number returned	Number used	Percentage used
Employees	226	215	202	89.4%

Source: Distributed Questionnaire

Out of the 226 sets of questionnaire administered, 215 were returned, 13 were not properly filled, and 202 were useable. Therefore, the analysis in this chapter is based on the usable sample size of 202.

**Table 4.2: Analysis of Respondents Profile**

S/N	Variables	Frequency	Percentage (%)
1	Gender:		
	Male	99	49
	Female	103	51
	Total	202	100
2	Age Range:		
	18-25 years	45	22
	26-30 years	48	24
	31-40 years	54	27
	41-50	30	15
	51 and above	25	12
	Total	202	100
3	Marital Status:		
	Single	105	52
	Married	97	48
	Total	202	100
4	Educational Qualification:		
	Diploma	52	26
	Degree	103	51
	PG	47	23
	Total	202	100
5	Level of management:		
	Junior staff	108	54
	Senior staff	73	36
	Management staff	21	10
	total	202	100.

Source: Field Survey, 2016.

The above table reveals the background characteristics of the various respondents for analytical purposes representing 89.4% of the sample size. On the background profile of the respondents, the findings is represented and analyzed in approximation to total percentage as shown and discussed thus. The above table reveals the background characteristics of the various respondents. It indicated on the gender composition that 99 of the respondents representing 49% of the sample were males while 103 being 51% were females.

The age bracket of the respondents shows that 45 of the respondents being 22% were within the age bracket of 18-25 years; 48 of the respondents representing 24% falls within

the age bracket of 26-30 years of age; 54 of the respondents being 27% of the sample were 31-40 years of age. 30 of the respondents representing 15% falls within the age bracket of 41-50 years of age; and lastly 25 of the respondents being 12% of the sample were 51 years and above. The marital composition of the respondents indicated that; 105 of the sample respondents were single being 52%. While 97 other respondents being 48% were married. On the educational background of the sample, it was revealed that the telecom operators has a high level of those with tertiary background with 103 respondents representing 51% being degree holders; 52 respondents being 26% of the sample size were diploma holders of sort; while 47 other respondents being 23% were post graduate degree holders. The managerial profile composition of the respondents indicated that 108 making up 54% were junior staff; 73 being 36% were senior staff; while 21 representing 10% being in the managerial cadre level.

### 4.3 Analysis of Other Data.

**Research Question one:** influence of products characteristics on competitive advantage

**Table: 4.3 Products with Environmental Characteristics and Competitive Advantage**

	Statement	Scale				
		<b>SD 1</b>	<b>D 2</b>	<b>U 3</b>	<b>A 4</b>	<b>SA 5</b>
1.	Environmentally friendly products are safe and secure to use	2 (1)	6 (3)	17 (8.4)	54 (26.7)	123 (60.9)
2.	Products with environmental characteristics have a competitive edge over non-environmental responsible alternatives	- -	3 (1.5)	29 (14.4)	100 (49.5)	70 (34.7)
3.	Product modification ensures the products meet or exceed quality expectations of customers.	- -	2 (1)	46 (22.8)	66 (32.7)	88 (43.6)
4.	Consumers are willing to pay more for socially responsible products.	1 (0.5)	2 (1)	47 (23.3)	82 (40.6)	70 (34.7)

**Source: Field Survey 2016**

177(87.6%) of the respondents agree that environmentally friendly products are safe and secure to use, 17(8.4%) were undecided, while 8(4%) of the respondents disagree to the

above statement. A total of 170(84.2%) of the respondents agree that products with environmental characteristics have a competitive edge over non-environmental responsible alternatives, 3(1.5%) disagree, while 29(14.4%) of the respondents were undecided. To the statement product modification ensures the products meet or exceed quality expectations of customers. 154(76.3%) of the respondents agree, 46(22.8%) were undecided while a total of 2(1%) disagree. A total of 152(75.3%) of the respondents agree that consumers are willing to pay more for socially responsible products, 47(23.3) were undecided while 3(1.5%) disagree.

**Research Question Two:** impact of Biodegradable packaging on competitive advantage

**Table: 4.4 Biodegradable Packaging and Competitive Advantage**

	Statement	Scale				
		SD 1	D 2	U 3	A 4	SA 5
5.	Ethical behaviour by firms helps in achieving both environmental and profit related objectives.	1 (0.5)	5 (2.5)	19 (9.4)	45 (22.3)	132 (65.3)
6.	Beyond-statutory obligations improves consumers standard of living	- -	3 (1.5)	25 (12.4)	95 (47)	79 (39.1)
7.	Environmental responsible behaviour makes employees feel proud and responsible.	- -	2 (1)	44 (21.8)	60 (29.7)	96 (47.5)
8.	Good community relations result in integration of environmental issues into a firm's corporate culture.	1 (0.5)	2 (1)	45 (22.3)	77 (38.1)	77 (38.1)

**Source: Field Survey 2016**

A total of 177(87.6%) agree that ethical behaviour by firms helps in achieving both environmental and profit related objectives. A total of 19(9.4) were undecided, while 6(3%) disagree on the above statement. To the statement beyond-statutory obligations improves consumers standard of living, 174 (86.1%) agree. 3(1.5%) of the respondents disagree,, while 25(12.4%) of the respondents were undecided. 156(77.2%) of the respondents agree

that environmental responsible behaviour makes employees feel proud and responsible, 2(1%) disagree, while 44(21.8%) were undecided. 154(76.2%) of the respondents agree that good community relations result in integration of environmental issues into a firm's corporate culture. 45(22.3%) were undecided, while a total of 3(1.5%) disagree.

**Research Question Three:** the effect of environmentally friendly product on competitive advantage

**Table 4.5 Environmentally Friendly Product and Competitive Advantage**

	Statement	Scale				
		SD 1	D 2	U 3	A 4	SA 5
9.	Environmentally responsible packaging helps to reduce packaging waste	3 (1.5)	8 (4)	16 (7.9)	61 (30.2)	114 (49.4)
10.	Packaging modification clearly state environ-mental benefits.	- -	6 (3)	36 (17.8)	89 (44.1)	71 (35.1)
11.	Labeling requirements bound by law means consumers won't be taking advantage of.	- -	2 (1)	50 (24.8)	73 (36.1)	77 (38.1)
12.	Packaging reduction initiatives saves firms money.	6 (3)	- -	56 (27.7)	79 (39.1)	61 (30.2)

**Source:** Field survey, 2016

Total of 175 (79.6%) of the respondents agree that environmentally responsible packaging helps to reduce packaging waste, 11 (5.5%) disagree, while 16 (7.9%) of the respondents were undecided. 160(79.2%) of the respondents agree that packaging modification clearly state environ-mental benefits, 6(3%) disagree, 36(17.8%) of the respondents were undecided. When asked whether labeling requirements bound by law means consumers won't be taking advantage of, 150 (74.2%) of the respondents agree to it, 2 (1%) disagreed to it, 50(24.8%) of the respondents were undecided. A total of 140 (69.3%) of the respondents agreed that packaging reduction initiatives saves firms money, while 56 (27.7%) of the respondents were undecided.

**Research Question Four:** the effect of green marketing through corporate social responsibility on competitive advantage

**Table 4.6: Green Marketing through Corporate Social Responsibility and Competitive Advantage**

	Statement	Scale				
		SD 1	D 2	U 3	A 4	SA 5
13.	Selling products that are less detrimental to the environment assist firms in gaining market share.	1 (0.5)	4 (2.0)	16 (7.9)	53 (26.2)	128 (63.4)
14.	Innovative new products designed through clean technology take care of pollution and waste issues	- -	- -	26 (12.9)	103 (51)	73 (36.1)
15.	Energy-efficient products help reduce energy use and production cost.	- -	2 (1)	46 (22.8)	65 (32.2)	89 (44.1)
16.	Organic products enhance a firm's profitability growth rate.	1 (0.5)	2 (1)	45 (22.3)	83 (41.1)	71 (35.1)

**Source: Field Survey 2016**

A total of 181 (89.6%) of the respondents agree that selling products that are less detrimental to the environment assist firms in gaining market share, 16 (7.9%) were undecided, while a respondents totaling 5 (2.5%) disagreed. To the statement innovative new products designed through clean technology take care of pollution and waste issues, 176(87.1%) of the respondents agreed to the statement, 26(12.9%) of the respondents were undecided. 154(76.3%) of the respondents agreed that energy-efficient products help reduce energy use and production cost. 2(1%) disagreed, while 46(22.8%) of the respondents were undecided. 154(76.2%) agreed that organic products enhance a firm's profitability growth rate, 3(1.5%) of the respondents disagreed, while 45(22.3%) were undecided.

**Table 4.7 Model Summary****Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 <sup>a</sup>	.791	.787	.9653

a. Predictors: (Constant), corporate social responsibility, environmental friendly product, biodegradable packages, product with environmental characteristics

**Source: Field Survey 2016.**

The table 4.7 indicated that change in competitive advantage which is brought about by the variables of green marketing by 79% (.787) as exhibited by the Adjusted R<sup>2</sup> value. This implies that the independent variables explain 79% of the variability of the dependent variable.

**Table 4.8 Fitness of the Model****ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	695.346	4	173.836	186.574	.000 <sup>b</sup>
	Residual	183.551	197	.932		
	Total	878.896	201			

a. Dependent Variable: competitive advantage

b. Predictors: (Constant), corporate social responsibility, environmental friendly product, biodegradable packages, product with environmental characteristics

**Source: Field Survey 2016**

The *F*-ratio in table 4.8 tests whether the overall regression model is a good fit for the data. The table indicated that green marketing statistically significantly predict competitive advantage,  $F(4, 197) = 186.574$ ,  $p < .0005$  (This indicates that the regression model is a good fit of the data).

**Table 4.9: Regression Analysis of green marketing and competitive advantage**

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-1.283	.739		-1.736	.084
	product with environmental characteristics	.530	.049	.527	10.868	.000
	Biodegradable packaging	.195	.043	.199	4.584	.000
	environmental friendly product	.067	.036	.066	1.871	.063
	corporate social responsibility	.266	.046	.254	5.746	.000

a. Dependent Variable: competitive advantage

Source: Field Survey 2016

Table 4.9 above showed the multiple regressions analysis result for green marketing and competitive advantage. The table showed that product with environmental characteristics which is the first sub variable has positive effect on competitive advantage ( $\beta = .527$ ,  $P < 0.01$ ). It showed that biodegradable packages which is the second variable has positive effect on competitive advantage ( $\beta = .199$ ,  $P < 0.01$ ). It was revealed that environmental friendly product which is the third variable has positive effect on competitive advantage ( $\beta = .066$ ,  $P < 0.01$ ). Similarly, it was also indicated that corporate social responsibility which is the last variable has positive effect on competitive advantage ( $\beta = .254$ ,  $P < 0.01$ ).

The general form of the equation to predict  $CA = \alpha_0 + \alpha_1 PEC + \alpha_2 BP + \alpha_3 EFP + \alpha_4 CSR + \varepsilon$

$$CA = -1.283 + (0.530 \times PEC) + (0.195 \times BP) + (0.067 \times EFP) + (0.266 \times CSR)$$

#### **4.4 Test of Hypotheses**

The regression analysis was employed as an analytical tool for testing the hypothesis formulated in chapter one.

##### **Decision Rule**

The null hypotheses will be accepted if the p-value (calculated value) is greater than ( $>$ ) the set level of significance (critical value) and reject the null hypotheses if it is less than ( $<$ ) the critical value (Mason *et al.*, 1999). In addition, Gujarati and porter, (2009) opined that the level of significant (p-value) of 0.05 and above is a condition for accepting the null hypothesis (HO). But if otherwise, that is p-value less than 0.05 is the condition for rejecting the null hypothesis (HO).

##### **Test of Hypothesis One**

**HO<sub>1</sub>:** There is no significant relationship between products with environmental characteristics and telecommunication firms' competitive advantage.

The level of significance that was calculated in table 4.9 is lesser than the established p-value ( $.000 < 0.05$ ), therefore the null hypothesis is rejected to accept the alternate which states that there is a significant relationship between products with environmental characteristics and telecommunication firms' competitive advantage.

### **Test of Hypothesis Two**

**HO<sub>2</sub>:** There is no significant relationship between biodegradable packages and competitive advantage

Table 4.9 shows that the calculated level of significance is less than the p-value of 0.05 (5%) i.e. ( $.000 < 0.05$ ) and this means that the level of confidence between the two factors is 100%. Similarly, the null hypothesis is rejected and alternate is accepted implying that there is a significant relationship between biodegradable packages and competitive advantage.

### **Test of Hypothesis Three:**

**HO<sub>3</sub>:** Environmentally friendly product has no significant relationship with competitive advantage.

From table 4.9 the critical level of significance is greater than the p-value established ( $0.063 > 0.05$ ), therefore the null hypothesis is accepted in order to reject the alternate. This implies that environmentally friendly product has no significant relationship with competitive advantage.

### **Test of Hypothesis Four**

**HO<sub>4</sub>:** green marketing through corporate social responsibility has no significant relationship with competitive advantage.

As shown in table 4.9 the p-value established is at 0.05 (5%) i.e. the level of significance which is the tolerable error in estimation is greater than the calculated critical level of significance ( $0.000 < 0.05$ ), the null hypothesis is rejected while the alternate is accepted implying that green marketing through corporate social responsibility has a significant relationship with competitive advantage.

## **4.5 Discussion of Results**

The table 4.7 indicated that change in competitive advantage which is brought about by the variables of green marketing by 79% (.787) as exhibited by the Adjusted  $R^2$  value. The  $F$ -ratio in table 4.8 tests indicated that green marketing statistically significantly predict competitive advantage,  $F(4, 197) = 186.574, p < .0005$ .

### **4.5.1: Products with Environmental Characteristics and Competitive Advantage.**

The empirical findings from the descriptive statistics on table 4.3 exhibited that majority of the respondents overwhelmingly responded positively to the various constructs in relationship to products with environmental characteristics and competitive advantage. Table 4.9 shows that the regression analysis result for products with environmental characteristics exhibited the highest positive effect on competitive advantage, giving the Beta value ( $\beta = .527, p < 0.01$ ). However, the result of the tested hypothesis indicates that there is a significant relationship between products with environmental characteristics and competitive advantage ( $0.000 < 0.05$ ). This is supported by Mishra and Sharma (2010) assertion that green products are produced through green technology and cause no environmental hazards. The implication of this finding is that when products are produced through green technology it will help to prevent environmental hazard this help firms to achieve competitive advantage.

### **4.5.2 Biodegradable Packages and Competitive Advantage**

The empirical findings from the descriptive statistics on table 4.4 exhibited that majority of the respondents overwhelmingly responded positively to the various constructs in relationship to biodegradable packages and competitive advantage. Table 4.9 shows that the regression analysis result for biodegradable packages exhibited a significant positive

effect on competitive advantage, giving the Beta value ( $\beta = .199$ ,  $p < 0.01$ ). However, the result of the tested hypothesis in table 4.9 indicates that there is a significant relationship between biodegradable packages and competitive advantage ( $0.000 < 0.05$ ). The above finding is in consonance with Perreault *et al* (2010) view that customers benefit from many of the advances that have been made in packaging. This is in agreement with Polonsky (1994) assertions that companies that can reduce harmful waste through responsible packaging of their product may gain substantial cost saving. However, packaging is an area where managers face issue of social responsibility, including concerns about the role of packaging in pollution, global warming and resource use.

#### **4.5.3 Environmentally Friendly Product and Competitive Advantage.**

The empirical findings from the descriptive statistics on table 4.5 exhibited that majority of the respondents overwhelmingly responded positively to the various constructs in relationship to environmentally friendly product and competitive advantage. Table 4.9 shows the regression analysis result for environmental friendly product, exhibited the least positive effect on competitive advantage, giving the Beta value ( $\beta = .066$ ,  $p < 0.05$ ). More so, the result of the tested hypothesis in table 4.9 indicates that green marketing through environmental friendly product has no significant relationship with competitive advantage ( $0.063 > 0.05$ ). The above finding contradict Biswas (2008) assertion that most of the consumers, both individual and industrial, are becoming more alarmed about environment friendly products and feel environment friendly products which are safe and secure to use.

#### **4.5.4 Green Marketing through Corporate Social Responsibility and Competitive Advantage.**

The empirical findings from the descriptive statistics on table 4.6 exhibited that majority of the respondents overwhelmingly responded positively to the various constructs in relationship to green marketing through corporate social responsibility and competitive advantage. The table 4.9 shows the regression analysis result for corporate social responsibility, exhibited positive effect on competitive advantage, giving the Beta value ( $\beta=254$ ,  $p<0.05$ ). More so, the result of the tested hypothesis in table 4.9 indicates that green marketing through corporate social responsibility has a significant relationship with competitive advantage. This finding aligned with Quinn (2008) view that it is no longer acceptable for a company to experience economic prosperity in isolation from those agents influenced by its action.

## **CHAPTER FIVE**

### **SUMMARY, CUNCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

Summary of finding, conclusions and recommendations made consequent on the findings from the analysis of data in chapter four. The findings of the study are presented thus:

Green products are produced with recycled contents and natural ingredients, non toxic chemical. Green products are originally grown and produced under the approved chemical. They do not pollute the environment that is why they are referred to as environmental friendly. Many companies are taking steps to preserve the environment and have invested high sums of money in different recycling activities, as well as having changed their packaging to reduce its environmental effect. The gains of recycling now seem obvious.

Packaging consists of the development of a container and a graphic design for a product. Packaging is the general group of activities in product planning that consists of designing and manufacturing the wrapper for a product. A package refers to physical container, label and inserts. A package can be a vital part of a product, making it more versatile, safer, and easier to use.

Environmentally sustainable products can be broken down, and their production process does not produce gas and toxic substances. They can minimize waste materials, it can be used as a source of energy and they prevent pollution. They are also good in mass consumer product trends. Many consumers, both individual and industrial, are becoming more alarmed about environment–friendly products and feel environment friendly products

are safe and secure to use. Now is the era of recyclable, non toxic and environment friendly products. This has become the novel mantra for firms to satisfy the needs of customers and earn better profits.

Corporate social responsibility occurs when organizations initiate actions that impact positively on its host community, its environment and the people generally. Corporate social responsibility is about ensuring that organizations manage their businesses to make a positive effect on the society and the environment whilst increasing value for shareholders. Corporate social responsibility is a concept where firms combine social and environmental focus in their business activities and in their interaction with their stakeholders on a voluntary basis.

## **5.2 Conclusions**

There is a growing market for sustainable and socially responsible products and services because customers feel it is safe and secure to use. Informing customers about the impact of products and production process on nature and environment is essential to retain consumers who are strongly concerned about the surrounding natural environment. Environmentally responsible packaging as a tangible dimension of green marketing in terms of providing container for products, play significant role in achieving competitive advantage. Most of the key telecom firms appear to place more emphasis on packaging initiatives that minimizes waste and pollution of the environment.

This is seen in the trend of packaging of recharge cards, sim packs, phone accessories which are highly biodegradable. Since inputs, production processes, distribution, uses and disposal method are decided during the design and packaging stages, company venturing out with a green marketing program must start with a green design. They present

source reduction pollution and waste management strategies to cut down pollution and also present a method to compare green design alternatives which can provide designers with guidance to select superior designs and packages that can protect the environment from pollution.

Environmental friendly product is a means of enhancing competitive advantage in companies by which potential consumers seem to view a green product as safe and base their buying decision accordingly. Many components were found to drive consumer behaviour for environmentally friendly products. The grouping of social and regulatory concerns for the environment have lead to an increasing numbers of firms to consider green issues as a key source of strategic change.

Corporate social responsibility is the commitment of firms to contribute to sustainable economic development by cooperating with their families, employees, the local community and society at large to enhance their lives in ways that are good for business and for development. The quality of relationships that a company has with its member of staffs and other key stakeholders—such as customers, investors, suppliers, public and governmental officials, activities, and communities—is essential to its success, as it is ability to respond to competitive situations and corporate social responsibility (CSR).

### **5.3 Recommendations**

The telecommunication industry should see all the problems in our society as a business opportunity and try to find solution to it and in the process they will discover that the problems are just opportunity in disguise. Strategies and policies in relation to green products should be developed and implemented so as to guide and help the retailers and

customers towards a green change. Ecological packaging, life-cycle analysis should be incorporated in to the eco-design process to minimize eco-harm.

Companies should use green marketing as a competitive tool by educating the consumers, letting them know what they are doing in order to secure the environment and clearly explaining environmental benefits they tend to achieve. Finally, the local community should be well-informed on this obligation which firms in their environment owe them, and how to follow up their demand.

To protect people from radiations associated with the masts the GSM companies must cite them as far away as possible from homes, offices, schools, business premises, petrol stations and other public places.

#### **5.4 Contributions to Knowledge**

The following contributions to knowledge emerged from the study based on the findings and conclusions of this study.

- i. The study revealed that products with environmental characteristics have the highest positive effect on competitive advantage in the Nigerian telecommunications industry.
- ii. The study revealed that the need for green marketing is on the increase due to challenges like depletion of ozone layer, Global warming and the need for the healthy survival.
- iii. The study has established that firms can gain competitive advantage when they adopt products with environmental characteristics, new product

packaging initiative, green marketing through environmental friendly product, and green marketing through corporate social responsibility.

- iv. The study established an enhance model of green marketing through the four dimensions adopted in this research and their effect on competitive advantage.

### **5.5 Suggestion for Further Studies**

This study has a number of observed limitations that should be addressed in further research studies.

The domain of this research was limited to the telecommunications industry in Asaba, Delta State further study should include other industries. The research design which was adopted was the survey research design; hence, future researchers should adopt other research design to elicit a more non-biased response from respondents.

The sample size adopted was remarkably few (226) which comprised of employees of the selected telecom operators in Asaba, Delta State. Future research could increase the sample size so that a more valid conclusion can be reached.

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## **APPENDIX A**

### **QUESTIONNAIRE**

Department of business administration  
Marketing,  
Faculty of Management Sciences,  
Delta State University,  
Asaba Campus.  
January, 2017.

Dear Respondent,

#### **REQUEST FOR THE COMPLETION OF STRUCTURED QUESTIONNAIRE**

I am a post graduate student in the Department of Marketing, Delta State University, Asaba Campus. I am conducting a research on the topic: “the effect of Green Marketing on Competitive Advantage in the Nigerian Telecommunication Industry” in partial fulfillment for the award of Master of Science (M.Sc.) Degree in Marketing. The questionnaire is designed to elicit your opinion on how Green Marketing could assist in creating a sustainable competitive advantage. It will be appreciated if you will respond objectively to the set of questions contained in this structured questionnaire. This exercise is strictly for academic purpose and whatever may be your views will be treated with confidence.

Thanks for your time and assistance on this research.

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**Dr. P.A. Olannye**  
*(Supervisor)*

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**Unukpo Alex Ogheneochuko**  
*(Researcher)*

## SECTION A:

### Personal Information of Respondents

**Instruction:** Please tick (✓) the options you consider most appropriate.

1. Gender: Male [ ] Female [ ]
2. Age: 18-25 years [ ] 26-30 years [ ] 31-40 years [ ] 41-50 [ ] 51 and above [ ].
3. Marital Status: Single [ ] Married [ ] Separated [ ] Divorced [ ].
4. Educational Qualification: WAEC/GCE/NECO [ ] OND/ NCE [ ] HND/B.SC [ ] MBA [ ] Others [ ].
5. Status in Organization: Junior Staff [ ] Senior Staff [ ] Management [ ]

### Section B:

**Instruction:** The questions in this sub-section of the questionnaire are designed to elicit information about Green Marketing and its elements that have potentials for achieving competitive advantage.

Please answer by ticking (✓) in the number option.

SA = Strongly Agree 5

A = Agree 4

Undecided 3

D = Disagree 2

SD = Strongly Disagree 1

- a. What are the effects of product with environmental characteristics on competitive advantage?

S/N	Influencing Factor	Respondents Choice				
		SA	A	U	D	SD
		5	4	3	2	1
1.	Environmentally friendly products are safe and secure to use					
2.	Products with environmental characteristics have a competitive edge over non-environmental responsible alternatives					
3.	Product modification ensures the products meet or exceed quality expectations of customers.					
4.	Consumers are willing to pay more for socially responsible products.					

- b. What is the impact of biodegradable packages on competitive advantage?

S/N	Influencing Factor	Respondents Choice				
		SA	A	U	D	SD
		5	4	3	2	1
5.	Ethical behaviour by firms helps in achieving both environmental and profit related objectives.					
6.	Beyond-statutory obligations improves consumers standard of living.					
7.	Environmental responsible behaviour makes employees feel proud and responsible.					
8	Good community relations result in integration of environmental issues into a firm's corporate culture.					

c. To what extent does environmentally friendly product affect competitive advantage?

S/N	Influencing Factor	Respondents Choice				
		SA	A	U	D	SD
		5	4	3	2	1
9.	Environmentally responsible packaging helps to reduce packaging waste.					
10.	Packaging modification clearly state environmental benefits.					
11.	Labeling requirements bound by law means consumers won't be taking advantage of.					
12.	Packaging reduction initiatives saves firms money.					

d. What is the effect of green marketing through corporate social responsibility on competitive advantage?

S/N	Influencing Factor	Respondents Choice				
		SA	A	U	D	SD
		5	4	3	2	1
13.	Selling products that are less detrimental to the environment assist firms in gaining market share.					
14.	Innovative new products designed through clean technology take care of pollution and waste issues.					
15.	Energy-efficient products help reduce energy use and production cost.					
16.	Organic products enhance a firm's profit-ability growth rate.					

## APPENDIX B

FREQUENCIES VARIABLES=environmentalfriendlyproducts environmentalcharateristics  
productmodifications sociallyresponsibleproducts  
/ORDER=ANALYSIS.

### Frequencies

#### Notes

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#### Statistics

		environmentalfriendlyproducts	environmentalcharateristics	productmodifications	sociallyresponsibleproducts
N	Valid	202	202	202	202
	Missing	29	29	29	29

### Frequency Table

#### environmental friendly products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	2	.9	1.0	1.0
	2.0	6	2.6	3.0	4.0
	3.0	17	7.4	8.4	12.4
	4.0	54	23.4	26.7	39.1
	5.0	123	53.2	60.9	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

#### environmental characteristics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	3	1.3	1.5	1.5
	3.0	29	12.6	14.4	15.8
	4.0	100	43.3	49.5	65.3
	5.0	70	30.3	34.7	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

#### product modifications

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	2	.9	1.0	1.0
	3.0	46	19.9	22.8	23.8
	4.0	66	28.6	32.7	56.4
	5.0	88	38.1	43.6	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

**socially responsible products**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	.4	.5	.5
	2.0	2	.9	1.0	1.5
	3.0	47	20.3	23.3	24.8
	4.0	82	35.5	40.6	65.3
	5.0	70	30.3	34.7	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

FREQUENCIES VARIABLES=ethicalbehaviours beyongstatutoryobligations  
 environmentalresponsiblebehaviour commuinityrelations  
 /ORDER=ANALYSIS.

**Frequencies**

**Notes**

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	Cases Used	Statistics are based on all cases with valid data.
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Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03

### Statistics

		ethical behaviours	beyond statutory obligations	environmental responsible behaviour	community relations
N	Valid	202	202	202	202
	Missing	29	29	29	29

### Frequency Table

#### ethical behaviours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	.4	.5	.5
	2.0	5	2.2	2.5	3.0
	3.0	19	8.2	9.4	12.4
	4.0	45	19.5	22.3	34.7
	5.0	132	57.1	65.3	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

#### beyond statutory obligations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	3	1.3	1.5	1.5
	3.0	25	10.8	12.4	13.9
	4.0	95	41.1	47.0	60.9
	5.0	79	34.2	39.1	100.0
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Missing	System	29	12.6		
Total		231	100.0		

**environmental responsible behaviour**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	2	.9	1.0	1.0
	3.0	44	19.0	21.8	22.8
	4.0	60	26.0	29.7	52.5
	5.0	96	41.6	47.5	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

**community relations**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	.4	.5	.5
	2.0	2	.9	1.0	1.5
	3.0	45	19.5	22.3	23.8
	4.0	77	33.3	38.1	61.9
	5.0	77	33.3	38.1	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

FREQUENCIES VARIABLES=responsiblepackaging packagemodification  
labellingrequirement  
packagingreduction  
/ORDER=ANALYSIS.

### Frequencies

#### Notes

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	Cases Used	Statistics are based on all cases with valid data.
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#### Statistics

		responsible packaging	package modification	labelling requirement	packaging reduction
N	Valid	202	202	202	202
	Missing	29	29	29	29

### Frequency Table

#### responsible packaging

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	3	1.3	1.5	1.5
	2.0	8	3.5	4.0	5.4
	3.0	16	6.9	7.9	13.4
	4.0	61	26.4	30.2	43.6
	5.0	114	49.4	56.4	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

#### package modification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	6	2.6	3.0	3.0
	3.0	36	15.6	17.8	20.8
	4.0	89	38.5	44.1	64.9
	5.0	71	30.7	35.1	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

#### labelling requirement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	2	.9	1.0	1.0
	3.0	50	21.6	24.8	25.7
	4.0	73	31.6	36.1	61.9
	5.0	77	33.3	38.1	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

**packaging reduction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	6	2.6	3.0	3.0
	3.0	56	24.2	27.7	30.7
	4.0	79	34.2	39.1	69.8
	5.0	61	26.4	30.2	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

FREQUENCIES VARIABLES=lessdetrimental cleantechnology energyefficientproducts  
organicproduct  
/ORDER=ANALYSIS.

**Frequencies**

**Notes**

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**Statistics**

		less detrimental	clean technology	energy- efficient products	organic product
N	Valid	202	202	202	202
	Missing	29	29	29	29

**Frequency Table**

**less detrimental**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	.4	.5	.5
	2.0	4	1.7	2.0	2.5
	3.0	16	6.9	7.9	10.4
	4.0	53	22.9	26.2	36.6
	5.0	128	55.4	63.4	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

**clean technology**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	26	11.3	12.9	12.9
	4.0	103	44.6	51.0	63.9
	5.0	73	31.6	36.1	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

**energy-efficient products**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	2	.9	1.0	1.0
	3.0	46	19.9	22.8	23.8
	4.0	65	28.1	32.2	55.9
	5.0	89	38.5	44.1	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

**organic product**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	.4	.5	.5
	2.0	2	.9	1.0	1.5
	3.0	45	19.5	22.3	23.8
	4.0	83	35.9	41.1	64.9
	5.0	71	30.7	35.1	100.0
	Total	202	87.4	100.0	
Missing	System	29	12.6		
Total		231	100.0		

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/CRITERIA=PIN(.05) POUT(.10)
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## Regression

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[DataSet1]

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	corporate social responsibility, environmental friendly product, biodegradable packages, product with environmental characteristics <sup>b</sup>		Enter

a. Dependent Variable: competitive advantage

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 <sup>a</sup>	.791	.787	.9653

a. Predictors: (Constant), corporate social responsibility, environmental friendly product, biodegradable packages, product with environmental characteristics

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	695.346	4	173.836	186.574	.000 <sup>b</sup>
	Residual	183.551	197	.932		
	Total	878.896	201			

a. Dependent Variable: competitive advantage

b. Predictors: (Constant), corporate social responsibility, environmental friendly product, biodegradable packages, product with environmental characteristics

Coefficients <sup>a</sup>						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.283	.739		-1.736	.084
	product with environmental characteristics	.530	.049	.527	10.868	.000
	Biodegradable packages	.195	.043	.199	4.584	.000
	environmental friendly product	.067	.036	.066	1.871	.063
	corporate social responsibility	.266	.046	.254	5.746	.000

a. Dependent Variable: competitive advantage