

**ST. MARY'S UNIVERSITY  
FACULTY OF BUSINESS  
DEPARTMENT OF MARKETING MANAGEMENT**

**AN ASSESSMENT OF NEW PLASTIC PACKAGING  
PRACTICE WITH RESPECT TO EAST AFRICA  
BOTTLING COMPANY**

**BY  
TIGIST HAILU**

**JUNE 2014  
SMU  
ADDIS ABABA**

**AN ASSESSMENT OF NEW PLASTIC PACKAGING  
PRACTICE WITH RESPECT TO EAST AFRICA  
BOTTLING COMPANY**

**A SENIOR ESSAY SUBMITTED TO THE  
DEPARTMENT OF MARKETING MANGMENT  
BUSINESS FACULTY**

**ST'MARY UNIVERSITY**

**IN A PRACTICAL FULFILLMENT OF THE  
REQUIREMENT FOR DEGREE**

**BY**

**TIGIST HAILU**

**JUNE 2014**

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# Chapter One

## Introduction

### 1.1 Background of the Study

Package design is one of the most important aspects of product strategy. It is estimated that about 70 percent of all supermarket purchase decisions of prepackaged goods are made at the point of purchase Schoolman's and Robben, ( 1997); Rettie and Brewer, (2000). As a result, the package itself is the only marketing communication the consumer may receive while evaluating the product. Schoolmen and Robben, (1997). The importance of product design is crucial to the success of a product by ensuring the product gains consumer notice, communicates information, provides sensory stimulation, and Provide lasting effects of the product to the consumer (Bloch, 1995).

A unique package design is one way a new product can stand out from familiar packages offered by the competition (Berkowitz, 1987). Product or package form can also create the initial impression which generates inferences regarding product attributes Berkowitz, (1987). The literature in this area emphasizes the importance of package design as part of the total product but little attention has been paid to the impact of the consumer's experience with the package on the evaluation of the product itself. Researchers have suggested that valuable insights can be gained from exploring a consumer's evaluation after a direct experience with the package instead of merely looking at a picture of a sample of the package itself Moody and Robben, (2002) ; Hoch and Deighton, (1989). The purpose of this study is to explore the reaction of consumers to a new package design through differing levels of experience.



Coca Cola SABCO Established in Ethiopia during the 1950s became the majority shareholder of the East African Bottling Share Company (EABSC). Operating two sites at Dire Dawa and Addis Ababa. Previously it offers 3 different tests of drinks those are Coco-cola, Fanta, Sprite with glass bottle packages. Now the company adding, coca-light, tonic and Pineapple to its range of products with glass bottle packages.

Currently employing 1,500 people on the two sites The Company tries to implement environmentally suitable packages to its customers but still there is a huge gap since the company deal with a wide range of products and having two types of packages: glass and plastic bottle packages. In terms of water and alternative energy, the new waste treatment plants, which are now running at both sites are an effort to the company to protect the environment. The two by-products are also makes an effort to generate 100 percent clear water and organic fertilizer.

Until 2013 the company was employing bottle packages for all its products and by September 2013 East African bottling in Ethiopia started to offer its products by plastic packages. These plastic packages are lunched in the market by 500 ml and 1.5 lt. The old bottle package with 300 ml is still on the market. The new packaging decision of the company in relation with environmental protection, health factor, market wise, how to dispose the plastic bottle and recycling gaps are the focus of this research and will be dealt with .

## **1.2. Statement of the Problem**

**Packaging** is the technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging also refers to the process of design, evaluation, and production of packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale, and end use. Packaging contains, protects, preserves, transports, informs, and sells. Dileepkumar M. (2007). Role of packaging in marketing product and origination. Since September 2013 East African

Bottling introduce plastic bottle packages of 500 ml and 1.5 ml by promotion name “Sheresher” and “Keberchacha” respectively. This research would like asses the new packaging practice of east Africa bottling company and to fill the gap between the impact of this new plastic bottle package in relation to environmental pollution ,safety materials health for individuals consumers and community health when it is manufactured, transported, consumed, dispose and recycled throughout its packaging life cycle.

In addition, this research also would like address whether the new plastic package fulfills the basic requirements of packaging, its cost, in relation to the meet the demand of the market.

### **1.3. Basic Research Question**

The research attempts to get answers for the following research questions

- What is the attribution of the new plastic packaging practice in east Africa bottling company towards environmental protection?
- What is the detriment of the new packaging practice in relation to the distribution of the product to customers in a health matter?
- Assess the benefit of new plastic package when it is compared to old glass bottle in relation safety and handling?
- How the company disposes and recycles the new plastic bottle for reuse and its cost aspect?

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

#### **1.4.1 General Objective**

The General objective of the study is to make an assessment on new packaging practice with respect to East Africa Bottling Company.

### **1.4.2. Specific Objective**

The following are the Specific Objectives of the study that will be addressed:

1. To identify the new packaging practice in east Africa bottling company towards environmental protection.
2. To assess the safety of handling and health way of distribution of the product to the consumers and the community at large.
3. To examine the marketing effect of new plastic bottles actually fulfill good packaging decision. To fill the gap between the need of the customers for the new package in relation with preference of consumers and cost.
4. To assess how the company dispose and recycles the new plastic bottle for reuse and its cost wise

### **1.5. Significant of the Study**

This study will have an important role by providing information about environment effect and cost of the new package and the feedbacks of customers on the new plastic bottle package decision in the case of east Africa bottling. The significant of this research will contribute to the company to solve problems in improving the customer relationship practice. This paper helps other researcher to use as the base of in conducting further research in this area. And finally the study It has also significance for the student researcher to implement and analyze theoretical applications in real world.

And the indirect significance of the study for the company will know the gap so it will help to address fast and right service customers service delivery for the company will maximize efforts and minimize cost.

## **1.6. Delimitation of the Study**

The study was focused on the assessment on new packaging practice with respect to East Africa Bottling Company. In addition the study focused on the Head Office which is Location in Addis Ababa around Mexico area. Furthermore the study is covered the period from 2012-2013.

## **1.7 limitation of the Study**

The main problem will face as a limitation in writing these research papers are:-

- Shortage up of time and money to gather the data.
- Dalliance of returning questionnaires.
- Shortage of secondary source of data.
- No voluntary body from the company side to facilitate the study.
- Making information secret by the company side.
- Lack of time and willingness of individuals to give the necessary information.
- 150 Questioners were distributed to sample and 135 respondents were returned

## **1.8. Research Design and Methodology**

### **1.8.1. Research Design**

In order to assess the packaging practice with respect to East Africa 'Bottling Company the student researcher was using descriptive research method. This is because it helps to describe the problem/trends of packaging practice in the case company.

### **1.8.2. Population and Sampling Technique**

The population of the study comprised of the Company's the Marking Manager, two senior employees and customers of the product .Since sample frame is not available, non probability sampling technique was used. From non probability convenience (Accidental) sampling was used. In order to determine the sampling size the student researcher used the model provided by the author Malhotra, (2006:339), the total number of 150 was taken as a reliable sample size.

### **1.8.3. Types of data Collected**

For the fulfillment of the study the student researcher was gather information from both primary and secondary sources. Primarily data was collected from both customers and Marketing Manager of the company while secondary data was collected from books, company documents and brochures.

### **1.8.4. Method of Data Collection**

The student research was collected primary data through questionnaire which contains both open ended and close ended questions for customers and interview was conducted with the marketing manager and who are working in packaging department .Secondary data was collected from recorded documents, internet, relevant books, and journals on line available information, policy and procedure of the east Africa bottling company.

### **1.8.5. Method of Data Analysis**

The data was collected through questionnaires and was analyzed through quantitative data analysis techniques specifically tally, tabulation, ratio, percentage. The data that was collected through interview and observations was narrated.

## **1.9. Organization of the Paper**

The Study was organized in four chapters. The first chapter deals with introduction part of the study which include: background of the study, statement of the problem, research questions, objective of the study, delimitation of the study, significance of the study, research design and methodology. The second chapter consists of review of related literature. The third chapter deals with data collection, organization, analysis and interpretation. The fourth chapter contains summary, conclusion and recommendation and finally, questionnaires & interview check are will be attached.

# Chapter Two

## Review of Related Literature

### 2.1. Introduction

Packaging today plays an important role in the quality of food products by providing protection from environmental, chemical, and physical challenges. This protection can be as simple as preventing breakage of the product to providing barriers to moisture, oxygen, carbon dioxide, and other gases as well as flavors and aromas. Packaging can block light to protect nutrients and colors in a product from deteriorating. In addition to providing passive protection, many packages today play an active role in the quality of a product by helping to maintain desired atmosphere around the product. Dileepkumar M. ,(2007) Role of packaging in marketing product and origination

As described by Lockhart (15), packaging materials have the three primary functions of providing protection, utility, and communication in three different environments. The environments are physical, atmospheric, and human. The goal is to optimize a package to provide for all three functions efficiently in all three environments. The development of food packaging has evolved as man's lifestyle has changed. For a very long period of time, people simply ate what they could gather in their immediate surroundings. As people shifted from a nomadic lifestyle to staying in a sheltered area, the need arose for containers to store food.. Grasses, wood, and bamboo were used to weave baskets. Some of the early materials that could be shaped into food containers were pottery, paper, and glass. The first evidence of pottery and glass being made was about 7000 B.C., yet industrialization of the process by the Egyptians was not seen until about 1500 B.C. (1). It is interesting to note that the primary materials used to make glass at that time, limestone, soda, sand, and silica, are the same materials that are used today, although many additives have been developed to color glass and give it varying properties. More details on early packaging materials can be found in A Brief History of

Packaging by Berger and Welt (1). As the Division of Agriculture and Food Chemistry celebrates its 100th anniversary in 2008, it is interesting to note that many of the significant developments in food packaging have occurred in the same period of time. This paper provides a review of some of the innovations that have occurred during that time. Dileepkumar, M. (2007). Role of packaging in marketing product and origination.

## 2.2. What Is Packaging

**Packaging** is the technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging also refers to the process of design, evaluation, and production of packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale, and end use. Packaging contains, protects, preserves, transports, informs, and sells. In many countries it fully integrated into government, business, and institutional, industrial, and personal use.

Packaging is now generally regarded as an essential component of our modern life style and the way business is organized. Packaging is the enclosing of a physical object, typically a product that will be offered for sale. It is the process of preparing items of equipment for transportation and storage and which embraces preservation, identification and packaging of products. Packing is recognized as an integral part of modern marketing operation, which embraces all phases of activities involved in the transfer of goods and services from the manufacturer to the consumer. Dileepkumar M. (2007). Role of packaging in marketing product and origination

Packaging is an important part of the branding process as it plays a role in communicating the image and identity of a company Kotler, (1990). Defines packaging as "all the activities of designing and producing the container for a product." Packaging can be defined as the wrapping material around a consumer item that serves to contain, identify, describe, protect, display, promote, and otherwise make the product marketable and keep it clean.

Packaging is the outer wrapping of a product. It is the intended purpose of the packaging to make a product readily sellable as well as to protect it against damage and prevent it from deterioration while storing. Furthermore the packaging is often the most relevant element of a trademark and conduces to advertising or communication. Dileepkumar M. (2007). Role of packaging in marketing product and origination.

## **2.3 Packaging History and Innovations**

Packaging has evolved from simply a container to hold food to something today that can play an active role in food quality. Many packages are still simply containers, but they have properties that have been developed to protect the food. These include barriers to oxygen, moisture, and flavors. Active packaging, or that which plays an active role in food quality, includes some microwave packaging as well as packaging that has absorbers built in to remove oxygen from the atmosphere surrounding the product or to provide antimicrobials to the surface of the food. Packaging has allowed access too many foods year-round that otherwise could not be preserved. It is interesting to note that some packages have actually allowed the creation of new categories in the supermarket. Examples include microwave popcorn and fresh-cut produce, which owe their existence to the unique packaging that has been developed.

KEYWORDS: Packaging; barrier; absorbers; antimicrobials. SARA, J.RISCH. (2009). American Chemical Society.

## **2.4. Early Developments in Packaging**

The Industrial Revolution brought the development of new manufacturing processes and new materials. Although initially many of them were not intended for food products, they became useful as food packaging materials. Metal cans were initially manufactured for snuff, for which they provided an excellent barrier to maintain the moisture of the product as well as providing protection for the flavor of the product. They later were used in the canning operation that was discovered by Nicholas Appert when he answered a challenge from French Emperor Napoleon Bonaparte to develop a



method to preserve food for his army. Appert used glass bottles with corks secured with wire as a closure to contain food while heating. The glass bottles were fragile and were soon replaced with metal cans, allowing products to be heat processed much more readily to extend their shelf life and prevent spoilage. Paperboard was first used to manufacture folding cartons in the early 1800s. Corrugated boxes that today are widely used as a shipping container to hold a number of smaller packages were developed in the 1850s. Plastics including cellulose nitrate, styrene, and vinyl chloride were SARA J. RISCH, (2009). Science Food Packaging History and Innovations.

Discovered in the 1800s but were not used in any packaging until well into the 20th century. Some of the first uses were during World War II with commercialization for food Packaging occurring after the war. One part of a package that was patented in 1892 played a significant role in the development of the beverage industry. William Painter, the founder of what today is Crown Holdings, Inc., patented the crown cork. This was a metal cap that had a layer of cork inside that gave a good seal against the top of a glass 8090 J. Agric. Food Chem., Vol. 57, No. 18, (2009 ) Risch bottle. Prior to this invention, glass bottles could not be tightly sealed with a convenient closure and did not provide protection for the products inside the bottles. Products were susceptible to deterioration due to the ingress of oxygen. As plastics and other synthetic materials have been developed, they have replaced the cork to provide a more uniform and tighter seal. In one study, it was found that ingress of oxygen using traditional crown seals with various linear ranged from 0.58 to 1.2 UL per day. SARA J. RISCH (2009) Science Food Packaging History and Innovations by Design, East Lansing. Today, some of the liners in the crown have oxygen-absorbing ability built into them to remove residual oxygen from the headspace in the bottle to slow or eliminate oxidation of the contents of the bottle. Biscuits were the first products to be individually packaged and were first sold in the 1890s. They were produced by the National Biscuit Co. which had recently been formed by the merger of several baking companies. They felt that they needed something new to draw attention to the company and developed a biscuit which was

lighter and flakier than anything else on the market . Up until that time, biscuits had been packed in large barrels which sat open at the market. People would pick out as much product as they wanted and put it in a paper bag to take it home. This provided no protection for the quality of the product other than being a dust cover. The new product needed moisture protection to maintain the light, flaky texture, and an individual package was designed with an inner liner to provide that protection. While this may not seem significant today, it was a major step forward in preserving product quality by providing a barrier to moisture to keep the product crisp. This also provided protection from contamination during distribution. SARA, J., (2009). RISCH Science Food Packaging History and Innovations.

## **2.5. Active Packaging**

There are different types of active packaging. One type, referred to as a subsector, is used for microwave foods, including popcorn. The first bag of microwave popcorn was sold in 1971. The package was a simple paper bag. It was not until the package including a microwave subsector was introduced in the mid-1980s that the product became a large success. SARA J. RISCH, (2009). Science Food Packaging History and Innovations.

The package consists of two layers of paper with a metalized PET film (subsector) laminated between the layers of paper in a position so that it lies on the floor of the microwave oven. The metallized film is produced in the same way described earlier but with a thinner layer of metal that interacts with the microwave energy and heat to temperatures of higher (a thicker layer such as that used for packaging for overwrap would reflect microwave energy instead of absorbing it). The heat generated gives the energy needed to get the kernels to pop. Without the subsector, the product twill has a large number of unpeopled kernels. One initial patent for the popcorn bag was issued in 1988. In a later legal challenge, the patent was invalidated due in part to failure to site

all of the appropriate prior art in some communication with the patent office as the patent and its continuations were being prosecuted.

This technology is used for other microwave products including pizza, hand-held sandwiches, and French fries. For these products, it helps the surface to dry and enhances browning and crisping. In addition to the technical challenge of stabilizing the metallized film on a paper substrate, there was concern about the safety of the packaging materials. The package got to a higher temperature than was anticipated by any FDA regulations. The FDA was concerned about the possibility for migration from the package and the potential for components of the package to degrade during heating, creating low molecular weight unknown compounds that could also migrate into the food in the package. SARA J. RISCH, (2009). Science Food Packaging history and Innovations.

Some companies are exploring means of incorporating flavors into packaging to maintain the quality of the flavor and have it release at the time of consumption. One package has been developed by Lee Reedy. Flavors and nutritional supplements are sealed into the cap for a bottle. When the cap is twisted to open the bottle, a small plastic blade cuts the seal and releases the nutrients and flavor into the beverage. This preserves the quality and freshness of the flavors and supplements until the time of consumption. SARA J. RISCH, (2009). Science Food Packaging History and Innovations.

## **2.6. New Package Developments**

Another package that has created a new category in the supermarket is the film used for fresh-cut vegetables. The vegetables are still respiring so the film needs to be breathable to both carbon dioxide and oxygen while providing a barrier to moisture (3). Different vegetables respire at different rates, requiring films with different permeability's. This is just one type of controlled atmosphere packaging. There are many others where the atmosphere around the product is specifically changed to prolong the shelf life of the

food. Any time the atmosphere is modified or controlled, the appropriate packaging material must be used to maintain the desired atmosphere and not allow the gases to permeate through the package. The Tetra Pack Co. was founded in 1951 in Sweden. The main product of the company is a laminated packaging material that combines paperboard for rigidity, foil for a light and gas barrier, and plastic as both a barrier and sealant layer. The package is formed on a special machine that also fills the product into the formed package. SARA J. RISCH, (2009). Science Food Packaging History and Innovations.

The product can fill aseptically, resulting in a product with the shelf life of a canned product but much less heat stress. The package is used for some products in the United States but has found much greater acceptance in other countries. An entirely new way of presenting a product was introduced by Dean Foods in 1998. This was the first company to launch single serving containers with a screw cap. In addition to making milk a portable beverage, a significant advantage is that the HDPE bottle provides a light barrier to help prevent deterioration in the flavor of the milk. SARA J. RISCH, (2009). Science Food Packaging History and Innovations.

## **2.7. Role of Packaging in Brand Differentiation**

The aim of any commercial organization is to earn maximum profit on the money invested. There are many nuts and bolts that contribute to the success of business. A good product, brand image, customer service and always listening to what your customers want is very important. But one of the number one contributors to a successful brand differentiation is product packaging. It is the first impression that a company makes on the public. A good packaging is the representation of the brand image and prestige of an establishment. According to Philip Kotler, (1990). Protection, convenience and economy were the three important traditional purposes attached to a package. Packaging is a brand activity. A quality and creative packaging helps to identify the product from the competitor's product. The good packaging is collective

efforts of designer, the researcher, the technician, the advertising man, the marketing expert, the sales department and top management. The innovative packaging acts as indirect salesman for the product. It acts as advertising media for the product. The capability of packaging as an effective selling tool was proved to be effective in the case of cosmetic and liquor industries. Some functions of packaging are:

1. Packaging gives protection from various kinds of damage like moisture gain or loss, chemical change and damage by mechanical handling.
2. To identify the contents, the brand and the maker.
3. Good packaging products are convenient to use.
4. Makes overall good impression about the company's image.
5. Prestige of a product is maintained with help of proper packaging.
6. Packaging provides innovational opportunities for the manufacturer to exhibit their product compared to their competitors.
7. Packaging encourages the customers for repurchases.
8. Packaging provides opportunity and space for advertising. Virendra Ligade 2 Articles Joined: March 21, (2008).

Good packaging can act as media of advertising and influence the customers on their purchasing decision. *Virendra Ligad*, (2008).

## **2.8 Role of Packaging in Logistics**

- Unitization – modular packaging Handling – appropriate for automation?
- Security – can package be sealed to detect break-in
- Storability – cube efficiency
- Information – identification and tracking
- Protection – spoilage or damage. Virendra Ligade 2 Articles Joined: March 21, (2008)

## 2.9. Importance of Packaging: An Overview

- Some of the major significance of packaging can be detailed as follows:
- Can make a product more convenient to use or store, easier to identify or promote or to send out a message.
- Can make the important difference to a marketing strategy by meeting customers' needs better
- Packaging plays a key role in brand promotion and management. Packaging is of great importance in the final choice the consumer will make, because it directly involves convenience, appeal, information and branding.
- The paramount concern of packaging is the reachability of the product without any damage. No matter where and how the products are transported or shipped, they arrive at the customer's door in working condition without need of repair or adjustment.

Packaging is especially important in certain industry where future sales may be based largely on the quality, integrity and performance of a company's previous delivery.

Dileepkumar, M. (2007). Role of packaging in marketing product and origination.

## 2.10. Packaging for Material Handling Efficiency

- **Package design** using standard configurations and order quantities facilitates efficiency
- **Cube out** of vehicle results in shipping “full” without reaching weight limit
- **Weigh out** of transport vehicle results in shipping air in space that can't be filled with product
- Cube and weight minimization are special challenges of mail order and e-commerce
- **Unitization** is the process of grouping cartons into unit loads

- **Communication** role is to identify package contents for all channel members. By Prof. Dileepkumar M. (2007). Role of packaging in marketing product and origination 1<sup>st</sup> edition page 2.

## 2.11. Types of Packaging

An important distinction is to be made here between two types of packaging

- o **Transport packing:** The product entering in to the trade need to be packed well enough to protect against loss damage during handling, transport and storage.
- o **Consumer Packing:** This packaging holds the required volume of the product for ultimate consumption and is more relevant in marketing. E.g.: beverages, tobacco etc. Dileepkumar, M.(2007). Role of packaging in marketing product and origination.

## 2.12. What Are the Benefits of Packaging?

The basic benefit of packaging is the protection of goods to be sold. It prevents damage during transport and storage from the elements, vibration and compression through a physical layer of protection. Packaging Protection is the encasement of products in packages, protective wrappings or other external covering that can provide protection, information, security and marketing benefits. Common packaging materials include boxes, Styrofoam peanuts, bubble wrap, plastic, bags, cloth and cartons.

### Information

- o Packaging can provide information to a consumer regarding the product contents. This information may be promotional, factual or mandated by consumer law. Laura Acevedo, (2013). What Are the Benefits of Packaging in Marketing.

## Containment

- Products that contain multiple items use packaging to keep all items contained prior to purchase. Product containment also allows a product to be sold in larger quantities.

## Size and Quantity

- Packaging can control the size and quantity of a product. Portion control helps control inventory, create product consistency and can help regulate prices.

## Marketing

- Packaging is the front line of marketing. Through design and marketing communications, packages can help sell a product and differentiate it from similar products. The packaging can also help promote product branding. Laura Acevedo, (2013). What Are the Benefits of Packaging in Marketing .

## Security

- Product security can be provided through packaging. Packing can make items tamper-resistant, can help reduce theft and can help prevent harm from dangerous products .Laura Acevedo, (2013). What Are the Benefits of Packaging in Marketing .

## **2.13. Functional Requirements**

### **1. Protection and preservation**

A basic function of package is to protect and preserve the contents during transit from the manufacturer to the ultimate consumer. It is the protection during transport and distribution; from climatic effects (heat and cold, moisture, vapour, drying atmospheres); from hazardous substances and contaminants; and from infestation. Protection is required against transportation hazards spillage, dirt, ingress and egress of



moisture, insect infection, contamination by foreign material, tampering pilferage etc. A package should preserve the contents in 'Factory Fresh' condition during the period of storage and transportation, ensuring protection from bacteriological attacks, chemical reaction etc. Eva Pongrácz, (1998). Dissertation submitted for the degree of Licentiate in Technology Tampere.

## **2. Containment**

Most products must be contained before they can be moved from one place to another. To function successfully, the package must contain the product. This containment function of packaging makes a huge contribution to protecting the environment. A better packaging help to maintain the quality of the product and reachability of the product in the consumer's hand without spillages It gives better image to the organization. Eva Pongrácz, (1998). Dissertation submitted for the degree of Licentiate in Technology Tampere.

## **3. Communication**

A major function of packaging is the communication of the product. A package must communicate what it sells. When international trade is involved and different languages are spoken, the use of unambiguous, readily understood symbols on the distribution package is essential. It is the interest further that to get appropriate communication to the consumer about the product, how to use it and other utility information. Packaging protects the interests of consumers. Information includes: quantity; price; inventory levels; lot number; distribution routes; size; elapsed time since packaging; color; and merchandising and premium data. The Environmental Effects of Packaging Eva Pongrácz, (1998).Dissertation submitted for the degree of Licentiate in Technology Tampere.

## 2.14. Effect Packaging

... the modern societies offer a wide range of services to the consumers, such as electricity, district heating, overall infrastructure, imported goods. All of these have a significant effect on the environment for exploiting natural resources. They are however, a part of modern life, and offer convenience. The balance between their environmental effects is not necessarily known. There is, however, a lot of criticism against packaging, for their environmental effects. The attention of consumers is turned especially towards packaging of everyday goods, such as food, and household detergents. Few appreciate the roles of packaging, and even less knows that packaging has positive environmental effects. Eva Pongracz, (2013). The environmental effect packaging.

“ The positive effects packaging’s are the safe delivery of the product to the consumer while preserving the designed and processed usage and/or aesthetic values of the produce .Eva Pongracz, (2-013). The environmental effect packaging.

Packaging also plays an important role in saving natural resources by preventing the product to be wasted and the invested material and physical labor getting lost. Since the value of the product generally far exceeds that of the package, the optimal product use, is more important than the optimal package use. While the package prevents the product to be contaminated, it also prevents the environment to be polluted by the product. To summarize, the packaging is an important tool of optimal resource use.

“ Apart from the protective function, packages have a very important intermediate role in the modern marketing. Being a link between production and consumption, the package carries a message from the producer to the consumer. The role of the shop keeper is taken by the packages, and clearly in the competition of the goods wins that one, what can use the most efficiently those seconds the consumer has to view them: Eva pongracz, (2013). The environmental effect packaging.

Packaging can be defined as set operations, which fulfill the function of creating sales units of the product. Packaging system, however, reaches beyond: includes also the delivery, use of the product, and finally the treatment of the waste package. Since packages are made exclusively for the product's sake, the packaging system is a part of the product's system.

“ The choice of a packaging system is a very complex decision, and is based on the following main factors-groups: protection of the product, available packaging technology, economics, marketing considerations, product's properties, environmental considerations, legal constraints. Historically, the effort to achieve higher protection was the strongest driving force in packaging development. Generally the package's properties are adjusted to the products, but sometimes the product's properties are modified in order to enable more practical packaging. The overall negative image of packages derives from their relatively high percentage in the household waste. This, however, indicates rather the level of consumption than over packaging. Packages are never made for themselves. Eva pongracz, (2013) .The environmental effect packaging.

The major basis of its existence is the delivery of the product to the consumer. Hence the packages can never be viewed separately neither from the product, nor from consumption. The rising amount of packages in the waste stream only indicates increasing consumption.

“ the image of individual packaging materials is especially diverse. Some materials, such as plastics have the most negative image, albeit of being lightweight and sturdy, thus giving the advantage of maximal service with minimal resource use. It is especially true for composites, which combine several materials for better protection, while using minimal amount of the individual materials. Plastics and composites are optimal packaging materials, and can therefore, be considered as environmentally preferable.

The judgment of environmental friendliness cannot be based solely on the type of packaging material. . Eva pongracz, (2013). The environmental effect packaging.

Paper uses a renewable source, thus can and will continue to be used widely for packaging purposes. On the other hand, recycling of paper requires fossil sources, because of transportation demand, and reprocessing. This questions the positive environmental impact of paper recycling.

“ the use of glass for packaging is a state-specific question. The raw material is in plentiful supply and there are no technical barriers to its reuse, or recycling. If there is a well working system of glass use in one country, changing of it may involve significant expenditures, as well as environmental impacts. In several countries, where transportation distances are high and other sources are also at hand, reusable glass was superseded from the market. In other countries, with smaller distances, and with a well working infrastructure, reuse is preferred, partially because there are no other solutions at hand. Eva pongracz, (2013). The environmental effect packaging.

The future trend of glass collection may be of mixed collection, with wider use of green glasses. This consequently would require change of traditions, and acceptance from the consumers' side.

“ the expansion of steel use in packaging is not probable. Its usage is restricted to a narrow horizon of goods, such as perishable food (fish, meat, vegetables, and fruits). Considering their light weighting, and the expansion of other packaging materials usage, the percentage rate of steel use will probably decrease.

“ It is not probable that the so called “big packs” would spread, they can be used just for such products, which have a long life, and are frequently in use. The danger of bigger packs is that the product loses its quality during the long storage, and finally will be

discarded, thus resulting higher wastage than what was saved with packaging material. Another problem is their higher weight, difficult handling and larger space requirement. There is also the danger that one will use car for delivery of big packs, and thus increase the environmental load by the product's consumption.

“ It can be expected that the amount of smaller portioned goods will grow, for the reason of urbanization, and rising percentage of one-person and small households. This way it will be avoided that the product not consumed will be wasted. It is preferred, since generally the products environmental effects are higher than the package's. (Eva pongracz the environmental effect packaging, February 1998 chapter 9).

The packaging development will follow the product development that leads towards concentrated products for the better resource use efficiency.

Reclamation of packaging wastes is an accepted way of reducing the packaging's environmental impacts. Reclamation, and in particular recycling, however, are also industrial activities, and have resource demand, and result emissions. Recycling can be an important way in achieving certain environmental goals, but it shall not be a goal by itself. From an ecological point of view and on the basis of the comparative analysis of feedstock recycling and energy recovery of waste plastic packaging, the following recovery processes are recommended: use as reducing agents in blast furnaces, thrombolysis to petrochemical products and fluidized-bed combustion. Mechanical recycling processes have ecological advantages over feedstock and energy recovery processes if virgin plastic is substituted in a ratio of 1:1. If considerably less than 1 kg of virgin plastic is substituted by 1 kg of waste plastic, mechanical recycling processes no longer have an advantage over feedstock recycling and energy recovery processes.

“ since for some countries excessive recycling is not affordable, the international regulation of recycling by fixed rates is not possible, and may be economically and even environmentally harmful.

“ Reduction of wastes requires the involvement of the public in both collective and individual levels. The introduced regulations need well-coordinated campaigns to inform the citizen of the goals, and their duties. The polluter pays principle, imposed by waste collection fees, seems to be an efficient way of arising the consumers’ environmental consciousness. Eva pongracz,(2013).The environmental effect packaging. “ at present, environmental labeling in most of the countries e.g. in Scandinavia, is not necessarily enough a marketing asset to justify the application and annual fees. The central aim of it is to help consumers to choose products that are less harmful to the environment. Eco-labeling can be a useful instrument to focus environmental concerns existing in a society. It is, however, crucial that consumers are aware of the existence of labeling, and have a trust in it. For assessing, or comparing different packaging systems, a full Life Cycle Assessment has to be used. Thorough studies show, that it takes considerable time, money and work to make even a proper life-cycle inventory for packaging systems. It is also evident that energy intensity should not be used as an aggregate measure for environmental quality. Assessed environmental quality depends strongly on how the system is assumed to be put together and operate. Topology and operational relations also have a decisive effect in the assessed environmental quality of the studied system.

“ A crucial problem of evaluation and interpretation of the inventory results is that they depend on social, and political preferences rather than on technical development. Also there are several parts of LCA that can significantly change the results of the study e.g. when defining the functional unit, and system boundaries. Another traditional problem is the allocation of multi input and/or output systems, and allocation of recycling when it is outside of the studied system. When whole packaging systems are assessed, and the results may affect the material flows in the society, it is not enough to assess only ecological consequences. An environmental assessment does not mean only ecological impact analysis. Packaging is strongly influenced by social, political

preferences, regulatory and economic effects. In addition, packaging is not only a product: a package, but a system, and the package itself cannot be separated from its content. Life-Cycle Assessment in turn is meant to assess products. It can thus be concluded that the method of Life Cycle assessment in its present form cannot give satisfactory results for over all analysis of packaging systems. " finally it can be asserted that even if packaging plays an immense role in achieving a sustained development, its most important actors are the consumers themselves. No regulation can be so effective as a well-informed, environmentally conscious, ethical public. Eva pongracz, (2013). The environmental effect.

## **2.15. The Environmental Impact of Packaging**

Choice of Packaging type is made on the basis of a series of trade-offs between many factors, particularly between the amount of packaging and likely product wastage. Manufacturers of goods look for a balance between:

- protecting their goods (the cost of damaged goods or the danger from spoilt foods is far worse for the environment than using a small amount of extra resources to make a stronger pack)
- protecting public health
- protecting the environment
- protecting themselves (by complying with legal demands on health and safety standards)
- protecting their business by keeping their products competitively priced
- providing what the consumer needs (easy opening packaging for the elderly, smaller portions for individuals who live alone, tamper evidence etc.)
- Providing information about the goods. Nicola, (2014) [packaging-and-sustainable-development/the-environmental-impact-of-packaging](#) .

## **Chapter Three**

### **Data Presentation, Analysis and Interpretation**

This part of the research paper deals with analysis, interpretation and presentation of the collected data through questionnaire' and interview. Questionnaires distributed to user of coca cola drinks out of 150 copies and out of all the questionnaire distributed 150(90%) are returned. interview was conducted with the company Market Manager and packaging related filled through the company.

The data which was gathered through closed ended questions was analyzed and presented in table and the data which was gathered through open ended questions and interviews was narrated to support the finding of quantities once.

As started in chapter one of this research paper sampling design of the research method to collect date from the selected target group which was divided in two parts. The first one is customer or user of the product which will be 150 peoples and the second one is interview to the manager of the company who are directly related to the packaging practice.

The subject of the study was consumer of the product based on the designed samples size (150) from the sampled population all respondents are selected without considering their sex or level of education based on the finding the 1<sup>st</sup> table would try to analysis the education and sex distribution of the enterprise based on the sample design.



### 3.1. Analysis of Respondents General table

**Table1. General Characteristics of Respondents**

Item	Question	Description	Number of respondent's	Percentage (%)
1	sex	Male	75	56%
		Female	60	44%
2	Education	Total	135	100%
		12 complete	20	14.8%
		Certificate	25	18.5%
		Diploma	20	14.8%
		1 <sup>st</sup> degree	50	37%
		Masters	20	14.8%
		Total	135	100%

According to the data indicated item 1 the total number of respondents are 135 people out of 150 questioners distributed which is 90 % response rate. the above table also indicates gender composition of respondents 75(56%) of them were male while 60(44%) of them were female based on the data indicated above the students research can inform that more than half of the respondent were found to be male.

Item 2 of above table 1 researcher finds out that first degree 50(37%) and certificate 25(18.5%). Master level education, Diploma and 12 Complete have 20(14.8%) of respondents.

### 3.2. Analysis of Major finding

**Table 2. Preference of Consumer, In Terms Of Material Evaluation Of Plastic Bottle And Packaging Design Survey And Reason For Choose**

Item	Question	Scale	No of respondent's	Percentage
1	Which type of package do you prefer	Glass bottle	52	38.5%
		Plastic bottle	83	61.5%
		Total	135	90%
2	evaluate the new plastic bottle of coca cola in terms of it package	Very attractive	39	28.8%
		Attractive	48	35.5%
		Natural	27	20%
		ugly	19	14%
		Very ugly	2	1.5%
		Total	135	100%
3	Why do you prefer the plastic bottle package	Easy to handle	87	64.4%
		Easy to store	15	11%
		Enough size	25	18.5%
		For it price	8	5.9%
		Total	135	100%

Based on the survey result 83(61.5%) of the consumer like the new plastic bottle and 52(38.5%) of the consumer prefer the glassed bottle. More than the half of respondents doesn't like the idea of changing the glass bottle to plastic bottle because they believe that it is not good to keep liquid things in a plastic jar. It might change its test that they notice with coca cola too. Sometimes the test changes, because of the transportation or the way they keep, they give a reason for this is that sun radiation makes this change.

And also the plastic bottles are environmental pollutants because user throws them anywhere nearby.

The student researcher finds out that the consumers find the packaging design of the new plastic bottle attractive 48(35.5%) and 39 (28.8%) find it Very attractive than the glassed bottled one. And also the finding shows that 87 (64.4%) of the consumer discover it easy to handle, 25 (18.5%) of the buyer like it for its quantity of bottling and 15(11%) of consumer find it easy to store.

**Table 3 Quantity of Packaging As Well As Comfort of Handling and Disposing Practice of the Material after Usage**

Item	Question	Scale	No of respondent's	Percentage
1	Which of the new plastic bottle do you use the most from the new package?	500ml	87	64.4%
		1.5lt	48	35.5%
		Total	135	100%
2	Do you think the new plastic bottle is easy to handle?	yes	115	85%
		No	20	14.8%
		Total	135	100%
3	Where do you dispose the plastic bottles after usage?	At dust been	50	37%
		Through it in the near place	85	63%
		Total	135	100%

As per the analysis of the questioner the 115 (85%) respondents find the new plastic bottle easy to handle, some of the respondents like the idea of the plastic bottle because it is very easy to handle and also they said “we can keep it in our home as long as we want if it the glassed bottle we have to return it back to the shop keepers “

And the student researcher get that 20(14.8%) not easy to handle. from the new plastic bottle of coca cola soft drink 87(64.4%) of the consumer want to buy the new plastic bottle with 500ml and 1.5lt plastic bottle 48(35.5%) find out preferable to drink.

Even though that the plastic bottle is consumable the researcher attain that 85(63%) environmental pollution material since the consumer dispose the plastic material near a place that they can find and that 50(37%) use the proper basket or dust been .

**Table 4 Consumer Uses of Plastic Bottle and Its Price**

Item	Question	Scale	No of respondent's	Percentage
1	How often do you use(consume) the plastic bottle soft drinks	Daily	31	23%
		Monthly	29	21.4%
		Once in a week	75	55%
		Total	135	100%
2	How do you think about the price of the new plastic bottled soft drink?	Fair	30	22%
		Cheap	35	26%
		Expensive	70	51.8%
		Total	135	100%

Based on item 1 of table 4 above which asked respondents to point out the frequency of usage of the product in plastic bottle 31(23%) of them said they use the product daily. 29(21.4%) of them indicated that they use it monthly and 75 (55%) of them bin pointed

that they use once in a week respectively. based on the data indicated above the student respectively can infer that most of the respondent use the product infrequently.

In item 2 the student researcher analysis that the price of the new plastic bottled soft drink have a fair price 30(22%) and Cheap 35(26%) but 70(51.8%) consumer respond that the price of the new plastic package is Expensive comparing to the old one.

**Table 5 Consumers' Product Differentiation Mechanism and Market Accessibility of the Product**

Item	Question	Scale	No of respondents	Percentage
1	What first caught your attention?	By color	44	33%.
		By it test	91	67%
		Total	135	100%
2	How Do you get the new plastic package in the market easily	Yes	107	79%
		No	28	20.7%
		I don't Know	-	-
		Total	135	100%

As we see from table 5 the student research want to identify that the attention of the respondents choose the product by it test is 91 (67%) and 44(33%) of the respondents choose the new package by its color. this shows that the respondents are not loyal for the test of the product.

In table 5 of item 2 the finding analysis shows the 107(79%) product is marketing convenience it as shows that there is no hesitation to which the product is usable by large number of people with the widest range of capabilities. This implies that the new plastic package is highly consumed by the consumers.

**Table 6 Rate of Packaging Design and Which Character Make Impact on Caught Customer Attention**

<b>Item</b>	<b>Question</b>	<b>Scale</b>	<b>No of Respondent's</b>	<b>Percentage</b>
1	How do you rate the design of this package?	Very good	67	49.6%
		Good	63	45.9%
		Bad	3	2.2%
		Very bad	2	1.5%
		Total	135	100%

In table 6 item 1 the student researches find that the consumers find out that the 67(49.6%) like design of the packaging is very good stylish, 63(45.9%) find it as a good package and only 3(2.2%), 2(1.5%) are find it bad and very bad respectively.

**Table 7. Consumer Observation of Defect and Expire Date On The Packaging**

Item	Question	Scale	No of Respondent's	Percentage
1	Do you see the expire date of the soft drink before you consume	Yes frequently	20	14.8%
		Yes always	22	16%
		No	73	54%
		Never	20	14.8%
		Total	135	100%
2	Have you ever observed any defect on the package of the plastic bottle?	Yes frequently	24	17.7%
		Yes sometimes	29	21.4%
		Yes one time	39	28.8%
		Never	43	31.8%
		Total	135	100%

public health management have observed that consumers are not patient enough to bother about inscriptions on goods they buy, especially the expiry dates on drug and food items. In table 7 item 1 analysis finding that the 73(54%) of the population are not aware of the expire date damage on their health or they are not concerned about it, only 20(14.8%) respondents give attention for Expire date.

A Defective package may leak and allow microorganisms to enter that may cause poisoning or other significant health problems. The deadly poisoning, botulism, is always a significant threat and a potential public health problem to consider when dealing with serious defective/damaged packages. In item 2 the student researcher wants to cover if the consumer gives attention for defect material of packaging 43(31.8%) of the buyers didn't notice whether it is a defect material from the respondents only 24 (17.7%) notice the defect material frequently.

**Table 8. Opportunity of Seeing At a Time of Production and Healthy Way of Packaging**

Item	Question	Scale	No of Respondent's	Percentage
1	Opportunity of seeing at a time of production	Yes	45	33.3%
		No	90	66.6%
		Total	135	100%
2	Healthy Way Of Packaging	Glassed bottle	78	57.7%
		Plastic bottle	33	24.4%
		I don't Know	24	17.7%
		Total	135	100%

As we see from the table 8 item 1 90(66.6%) of the consumers of the coca cola product don't have chance to see the product at a time of production only 45(33.3%) got the chance to see the new plastic of coca cola at the time of production.

In item 2 the respondent founds that the 78 (57.7%) Glass bottles is safe that why consumer *choose* the glassed bottle. In the research finding we can observe that 24(17.7%) of the sampled population has no idea about the health advantage of the glassed and the plastic bottled packaging.



**Table 9. Storage Place of the Plastic Bottles and Market Place That the Buyers Choose**

Item	Question	Scale	No of respondent's	Percentage
1	Storage place of the plastic bottles	refrigerator	100	74%
		dining table	-	
		Any other place	35	25.9%
		Total	135	100%
2	Market place that the buyers choose	Shops	90	66.6%
		Supermarket	25	18.5%
		Grocery	20	14.8%
		Total	135	100%

The survey result indicates that more than half of the consumers of Coca-Cola want to drink it from the refrigerator. As a research finding stated that after you drink cold Coca-Cola, the liver converts all the sugar into fat. Blood pressure rises, because the liver disposes more sugar into the bloodstream, which gets blocked, thereby preventing tiredness and might cause a death. But, as we can comprehend, 100(74%) percent of the people are not aware of these things.

In item 2, the researcher finds that 90(66.6%) consumers choose to consume from shops, only 25(18.5%) of the respondents choose to buy from supermarkets, and 20(14.8%) buy from grocery.

### **3.3. Interview Analysis from the Marketing Team of Coca Cola Company**

As per the Market Intimacy Manager of Coca Cola Sabco Ethiopia the Marketing plan of the new plastic bottling achieve the consumer satisfaction as planned as he stated on our interview the consumers are very Much satisfied correspondingly the plan for the dispose of plastic bottle to protect the environment pollution is done as one of a green project which is implemented all over Coca-Cola Family which talks about protecting the environment to the next generation. And as per that plan they are putting in place to work on recycling process and to re-use the materials to other finish products (e.g. in South Africa the use this recycling process to use different Jewelry's, vase for flowers and like so the income will be to support Kids in orphanage or to in power woman in there society) there are on process of implementing those things. As we know that the new package has price difference when we compare to the old glass bottle the company is using other plan to penetrate the market with this price differences. The pane is not to cannibalize the RGB (Returnable Glass Bottle) it do have its own channel or market segment for this package. The plan is to be successful on these channels.

And also plastic bottle will be safe in time of transportation for health of consumers they are use the modern way of shrinking wrapper technology considering this challenge and our palatalization system is simple and safer during transportation. Regarding Health of our consumers we give a training to our sales force and our distributes how to use product handling and how to implement in the market First in First out strategies implement in the market and closely to follow up on the Best Before Date on the product each time when they make market visit and distribution.

## Chapter Four

### Summary, Conclusions, and Recommendation

#### 4.1. Summary of the Major Findings

As per the finding of this research the majority 75(56%) of the users of coco cola soft drink are male and 60(54%) are female. When we look at status of the respondent preference of glassed bottle material 52(38.5%) but 83(61.4%) of our respondents chose plastic bottle it is because 115(85%) of respondents find it very easy to handle only 20(14.8%) of the respondents find the new plastic bottle uncomfortable to handle.

To see the frequency of usage of the plastic bottle the daily user of the soft drink cover 31(21.4%) of the respondents the rest 29(16%), 75(56%) use monthly and weekly respectively as the researcher finding shows 30(22%) of the customers gates the new plastic bottle price fair only 70(51.8%) of the respondents find it expensive.

From the summery of the finding the researcher fined the 85(63%) Of the plastic bottle is disposed on the improper place by users only 50(37%) of the consumers throw the plastic in proper place for this the research finds that the plastic bottle is not environment friendly product.

As the health wise the finding suggested that the 78(57.7%) of the respondents choose the glass bottle because they are aware of the sensitivity of the plastic material to the radiation of the sun if there is a problem on un improper way of transportation system and also if the shop keepers don't keep it in the proper place that why the choose the glassed bottle than the plastic one.

## 4.2. Conclusions

A unique package design is one way a new product can stand out from familiar packages offered by the competition. Product or package form can also create the initial impression which generates inferences regarding product attributes. The literature in this area emphasizes the importance of package design as part of the total product but little attention has been paid to the impact of the consumer's experience with the package on the evaluation of the product itself.

Packaging play an important role in customer's expectation and also it can change buyers choose from on product to another. The purpose of this study is to assess the reaction of consumers to a new package design through differing levels of experience With Respect To East Africa Bottling Company; this study takes a specific case study in order to examine its contribution improving the new packaging design towards environmental protection, in relation to the health, benefit of new plastic package when it is compared to old glass bottle in relative safety and handling, the company disposes and recycles the new plastic bottle for reuse and its cost aspect, the finding suggests that the new packaging practice system has led to a negative outcome in the area of environmental pollution wise and in the area of using the plastic bottle for health.

- ❖ The survey result towards environment protection indicate that the consumer awareness is low about environment protection .As we Know plastic material takes more year to dispose than glass or paper bags It means it is easy to be environment polluted. Based on the finding the consumer through the plastic bottle through the nearest place that they gate, than finding a dust been and put the used material for disposal. As we see from our finding the plastic bottle is easy to handle but the consumer's don't have the courage to take it dust been.

- ❖ Based on the finding of health related study of the packaging practice tells as that most of the user choose the glassed bottle because that they are aware of the plastic bottle not good for health.as we see the plastic bottle need more care in transportation of the product at the time of distribution because the radiation of the sun can easily penetrate the plastic bottle and change the order or the taste of the product that will Cause a permanent damage of health. As also from the finding we can see that the consumers of this product are not concerned about the health damage the using Expired product will Cause to their health and also they don't give attention for defect material.
- ❖ The analysis correlated to safety of handling the plastic bottle comparing to the old glass bottle packaging specifies that the plastic bottle is easy to handle. As the researchers point of view greatest number of the respondents choose the plastic bottle because of its accessibility to carry it every ware. In benefit wise the consumer will be beneficiary to buy the plastic bottle because it is easy to handle and also you don't have to return it or pay Extra money as collateral (The money that the shop keeper will handle it until you return the glassed bottle after usage) and also they don't have to return it after used plastic bottle (as we now the plastic bottle is used and through).
- ❖ New package has price difference when we compare to the old glass bottle the company is using other plan to penetrate the market with this price differences and from the finding we can conclude that the price seems expensive for consumption it means that the consumer want to buy the plastic bottle but the price is unaffordable.

### 4.3. Recommendation

Based on the survey conducted by the student researcher and the findings gathered the following recommendations are forwarded.

- ❖ The company has to give attention about the new plastic bottle related to environmental protection. As we can see from the finding, the consumer only focus on the availability of the product, the easy access of the bottle and the size of the bottle but they didn't consider the impact on the environment polluting . Since after using the product they threw it in the nearest dustbins and elsewhere in the roads.
  - Also the company should create awareness about environmental pollution on consumer mind through trainings, awareness creation program and advertisements.
  - And also the company should create a method to reuse the Package because preparing a dust been will be another cost for the company.
  
- ❖ The company has to give especial attention on health because it will hurt the consumers, particularly at the time of transportation the company should take care how it is transported. Since the sun's radiation can affect the product, so the delivery system should have created a protection mechanism of the product.
  
- ❖ The company should create awareness for the sellers to keep it in a safe place like in the refrigerators or a proper shelf which only care beverage materials so that it can protect from the sun. Since the consumers choose to drink the plastic bottle the company should make the glass bottle easier to handle, so that they can consume it without being a burden on plastic bottle.

- ❖ As the researcher findings the cost of the new plastic bottle is expensive. The company should give choice for the consumers' by producing the plastic bottle with 300ml so that the consumer can choose, it means that the consumer can make a choice between 300ml plastic bottle and 500ml plastic bottle with their affordable price.

In summary, the finding of the study indicates that the positive contribution of Coca-Cola Company to consumers choice by producing the new plastic bottle. However the company has to take the above maintained measurements for the protection of the environment, health of the consumers by designing a mechanism for recycle and protecting the safety of the product at the time of transportation and has to sale with the affordable price.

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# **Appendix**

**Appendix A**  
**St. Mary's University**  
**Faculty of Business**  
**Department of Marketing Management**

**Questionnaires to be filled by Customers of East Africa Bottling Company**

**Dear respondents:**

This questionnaire is prepared by a student researcher, prospective graduate of year 2014, in the field of Marketing Management for partial fulfillment of a senior essay. This questionnaire is prepared to make an assessment of New Plastic Packaging practice with respect to East Africa Bottling Company and to identify problem related to New Plastic Packaging practice of the company and give alternative course of action as a solution.

You are requested to fill this questionnaire and your response will have greater contribution for the company to improve its packaging practice. Your willingness and accurate feedback in answering the questions in the questionnaire will be helpful to accomplish the research. Therefore, please kindly extend your cooperation by frankly and honestly responding to the items contained in this questionnaire.

**Directions**

- Writing your name on the questionnaire isn't necessary.
- If the question has an alternative answer put  or  on the space provided beside your answer.
- If the question is related to your personal opinion write it shortly on the space provided.

## Part I - Background Information of Respondents

1. Gender            A. Female     B. Male
  
2. Educational Qualification  
A. 12 complete     B. Certificate     C. Diploma   
D. First Degree     E. Master

## Part II. Questions directly related to the study

1. How do you evaluate the new plastic bottle of coca cola in terms of it package?
  - a. Very Attractive
  - b. Attractive
  - c. Natural
  - d. Ugly
  - e. Very Ugly
  
2. Do you think the new plastic bottle is easy to handle?
  - a. Yes
  - b. No
  
3. Which of the new plastic bottle do you use the most from the new package?
  - a. 500 ml
  - b. 1.5 Ft
  
4. Where do you dispose the plastic bottles after usage?
  - a. At the dust bean
  - b. I will through it in the nears placed that I get
  
5. Which type of package do you prefer?
  - a. Glass bottled
  - b. Plastic bottled

6. If you answer for question number 5 is plastic bottle Why do you prefer the plastic bottle package

- a. Easy to handle
- b. Easy to store
- c. Enough Size
- d. For its price
- e. Any other reason .....

7. How often do you use ( consume ) the plastic bottle soft drinks

- a. Daily
- b. Once In A Week
- c. Monthly
- d. Any other, please, specify .....

8. How do you differentiate the new plastic bottle package from other competitors production

- a .By Color
- b .By It Test

9. How Do you get the new plastic package in the market easily

- a .Yes
- b .No
- c .I don't Know

10. How do you rate the design of this package?

- a. very good
- b. Good
- c. Natural
- d. Bad
- e. Very Bad

11. What first caught your attention?

- a. Graphics/ Image
- b. Color
- c. Product information

- d. Shape of the package
- e. Other pleas, specify .....

12. When do you store the plastic bottles before consumption?

- a. Refrigerator
- b. dining table
- c. Any other place

13. Where do you buy the soft drinks?

- a. Shops
- b. Supermarket
- c. Grocery
- d. Any other place .....

14. Which type of packaging do you think good for your health?

- a. Glass bottled
- b. Plastic bottled
- c. I don't Know

15. Have you ever observed any defect on the package of the plastic bottle

- a. Yes frequently
- b. Yes sometimes
- c. Yes one time
- d. Never

16. Do you see the expire date of the soft drink before you consume

- a. Yes frequently
- b. Yes Always
- C. No
- d. Never

17. How do you think about the price of the new plastic bottled soft drink?

- a. Cheap
- b. Fair
- c. Expensive

20. Have you ever get an opportunity to see the production of coca cola soft drink in the factory

a. yes

b. No

21. Do you support the idea of changing all glass bottle coca cola product in plastic bottled one? Why?

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22. Did you shift your buying from glass bottle one to plastic bottled one? Why?

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**Appendix B**  
**St. Mary's University**

**Faculty of Business**

**Department Of Marketing Management**

Dear Respondent,

This Questionnaire Is Prepared To Gather Partial Data For The Preparation Of Research Entitled "An Assessment Of New Plastic Packaging Practice With Respect To East Africa Bottling Company"

The Research Is Conducted In A Particle Fulfillment Of The Requirement Of BA Degree In Marketing Management. Your Response Will Be Used For Only And Only For Academic Purpose.

Thanks You Do You Think That the Marketing Plan of the New Plastic Bottling Achieve The Consumer Satisfaction As Planed?

1. Do You Think That The New Plastic Bottling Package Achieve The Consumers Satisfaction As You Planed? And How Do You Evaluate It?
2. What Is The Plan Of The Company The Plastic Bottle To Protect The Environmental Pollution?
3. As We Know That The New Package Has Price Difference When We Compare To The Old Glass Bottle. Do You Think That It Will Be Easy To Penetrate The Market With This Price Differences?
4. What Is The Plan Of The Marketing Team To Fulfill Good Packaging Practices?
5. What Measures Do You Undertake At The Time Of Transportation Of The Plastic Bottles To Protect The Health Of Consumer?

## **The Candidate's Declaration**

I undersigned, declare that this senior essay or project is my original work, prepared under the guidance of Mr. Yalew Gorfu. All source of material used for the manuscript have been duly acknowledge.

Name: Tigist Hailu

Signature: \_\_\_\_\_

Place of submission: \_\_\_\_\_

Date of Submission: \_\_\_\_\_

Advisor's Declaration:

This paper has been submitted for examination with my approval as the university advisor

Name: Ato Yalew Gorfu

Signature: \_\_\_\_\_

Date: \_\_\_\_\_