

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATS
MARKETING MANAGEMENT PROGRAM



**AN ASSESSMENT ON THE PRACTICE OF NEW PRODUCT
DEVELOPMENT: THE CASE OF KALITY FOOD S.C BISCUIT**

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF MASTER OF ART DEGREE IN MARKETING
MANAGEMENT**

BY:

ABRHAM ASHENAFI

DEC, 2017
SMU
ADDIS ABABA

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DEVELOPMENT: THE CASE OF KALITY FOOD S.C BISCUIT**

**A MASTERS THESIS SUBMITTED
TO MARKETING MANAGEMENT
PROGRAM OFFICE
SCHOOL OF GRADUATES STUDY
ST. MARY'S UNIVERSITY**

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APPROVED BY THE COMMITTEE OF EXAMINERS

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Approval

This is to approve that student, Abrham Ashenafi, has completed writing a master's thesis entitled "an assessment on the practice of new product development: the case of kaloty food S.C biscuit" with my advice and follow up. I also approve that his work is appropriate enough to be submitted as a partial fulfillment of the requirements for the Award of Master of Business Administration offered by the University.

Tesfaye Wolde (PhD)

Declaration

I, Abrham Ashenafi, declare that this study entitled “an assessment on the practice of new product development: the case of kaloty food S.C biscuit” is my own original work that has not been presented for a Master study in any other University and that all sources of materials used for the study have been duly acknowledged.

Abrham Ashenafi

Dedicated To

This Master's thesis dedicated for two peoples who I love more than myself, for my beloved mom **ROZA ASHENAFI** and my grandfather **ASHENAFI KELECHA** who died physically but now and forever will have life inside my heart .who really want to see me with this position. As I promised on your last day of life, finally I made it!!!!!!!

"Success can't bring happiness without those who loved to see your success" Abraham A.

R.I.P

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Abstract

This study is a new product-oriented thesis which is focused in developing a new product development process in the case of Kality Food S.C Biscuit. The objective of the thesis is to find and develop a framework which would clarify the entire product development and launch process and increase the success rate on the new product development of Kality food S.C biscuit.

The reviews of the literature, journals and data analysis are the foundation of the new product development model. Even if most products oriented researches conduct only by using a qualitative analysis, in the form of in-depth interviews but this thesis in addition to the qualitative data student researcher gather feedback from consumers of the company was also obtained quantitatively in the form of survey questionnaire so as to increase reliability of the finding. This thesis proposes elaborated guidelines which Kality food S.C could follow in its product development process. The new product development process was developed based on the Stage-Gate process, which is a reliable and successful method used in different successful product development cases. The Stage-Gate process was adopted according to the industry and company's strategy. Student researcher hopes that the final results and the suggested model of NPD could help the company to have a clear understanding of each stage in the product launching process and implement each of these stages in accordance with the type of the project or product development Strategy.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Monga and Anand (2003) product is central theme of the entire marketing process. Price, promotion, and place exist because of the product exists. No matter how hard the company tries to inject excellence in to the product. It is successful only when the users are satisfied to the fullest.

Based on Saxena (2002) a new product is any product which is perceived by the customer as being new. This could involve repositioning of offering the exits product at lower price, or making improvement in the existing product, or adding new product item to the existing product line, or for that matter, taking up a product line, which is totally new to the organization or new to the world. Firm can obtain new product in two ways. One through acquisition by buying the whole company, patent, or license to produce someone else's product the other is through new product development in the company own research and development department by new product improvement, product modification, and new brand that the firm develops through its own research and development efforts. (Kotler and Armstrong; 2006), as stated by (Donald and Russell; 2002) the development of new product typically occurs in stage. At each stage, the product evaluated to determine whether it makes sense to proceed to the next stage. Most product follow pattern such as idea generation, concept development, feasibility screening, concept testing, product development, product testing, market testing and commercialization.

The word Biscuit is derived from Latin word Biscoctum means twice baked. Biscuits are one of the low cost processed foods, which are most widely consumed. They, amongst many snack items, have certain advantages such as being cheaper than the conventional snack items, easy to use at home or even during travel, easily being available in massive variety of shops, size, taste, packs and appeals to all age groups. Apart from the good taste these are foods with substantial energy having whole some and nutritious quality which are available at reasonable price. They have good shelf lives at ambient temperatures. Besides being a very palatable vehicle of nutrition

and energy, these biscuits convey the goodness of flour, fat and sugar in most acceptable and economical terms (Sharma *et al.*, 2003).

Kality Food S.C, commonly known as Ceralia with reference to its long standing flagship brand, was established in 1930 E.C during the 5 year Italian occupation. As of 1935, it was run by the royal family. Like many companies, it was nationalized during the Derg regime. In October 1992, its form of business changed into a share company. The company was later up for a privatization auction and was acquired by Romel General Trading PLC in June 2010. The current parent company took over Kality Food S.C. as of July 2010. The company is located at a 15km distance from center at the main road to Debrezeit. The company mainly produces wheat flour, pasta, macaroni, different types of biscuits and bread.

The student researcher tried to investigate problems on new product (biscuit) development in Kality Food S.C. Therefore student researcher observes the gap between what the theory says and the practice of the company and finding possible solution.

1.2 Statement of the Problem

New product development (NPD), however, is connected with significant risk. In a good case situation, failure rates can arise one out of every three products, but often it is going up to 90 percent of new grocery products (Yelkur & Herbig, 1996). Stevens and Burley (1997), also illustrate the complexity of the task of creating a successful product for the global market. They argue that with every 3000 raw ideas that the company has, there will be 10 projects realized, only 2 will enter the market and finally only 1 will be a successful product for the company.

In today's market careful planning and a good product strategy are essential to help you succeeding in the market. Companies everywhere are competing more than ever to develop new and unique products or services and gain a higher position in the market. Companies develop a high number of new products every year. Most of these products fail to secure competitive advantages and end up being just another high cost for the company (Cooper; 2001).

Every product seems to go through a life cycle. It born, goes through several phases, and eventually dies as newer product comes along that better serve consumer need. This product life cycle present to major challenges. First, because of all products become decline a firm must be

good at developing new product to replace aging once and focus on the challenges of new product development. Second, the firm must be good at adapting its marketing strategy in the face of changing tastes, technology, and competition as product pass through life cycle stage or the challenge of product life cycle stage (Kotler and Armstrong, 2005).

New products are very essential for the corporate success. Innovation is a must if you want to continue competing in the market. However the new product development is one of the riskiest processes that require focus and high investments (Cooper; 2001) several studies have been done in the successful product launch cases, and success drivers have been discovered. Corporations are using a structured idea-to- launch process which helps them manage implementing these success drivers and reduce the risk of product launch fail (Cooper & Edgett 2012).

Moreover, Kotler and Armstrong (2006) mentioned that new products are the lifeblood of organization. However, new product is risky and many new products are failing. Every product passes through several life cycle stages and that each stage passes new challenges requires different marketing strategies and tactics. To create successful new product a company is required to understand consumer, market, competition and develop a product that deliver superior value to the consumer. It must carry out strong new product development process for finding and growing new product.

Some additional drawbacks by Kotler and Keller (2012) Shortage of important ideas in certain areas; there may be few ways left to improve some basic products. Fragmented markets; Companies must aim their new products at smaller market segments, which can mean lower sales and profits for each product. Social, economic, and governmental constraints; New products must satisfy consumer safety and environmental concerns. They must also be flexible if economic times are tough. Cost of development; a company typically must generate many ideas to find just one worthy of development and thus often faces high R&D, manufacturing, and marketing costs. Capital shortages; some companies with good ideas cannot raise the funds to research and launch them. Shorter required development time; Companies must learn to compress development time with new techniques, strategic partners, early concept tests, and advanced marketing planning. Poor launch timing; new products are sometimes launch after the category has already taken off or when there is still insufficient interest. Shorter product life cycles; rivals are quick to copy success. Organizational support; the new product may not mach

with the corporate culture or receives the financial or other support it needs (Kotler and Keller; 2012).

At Kality food S.C. it would be very beneficial to take the successful factors and organize in a structured product development and launch process which would reduce significantly the risk of a product launch fail. The new developed product process should include each step that should be taken when developing new products.

As the company's currently practice seen in light with the abovementioned requirements some gaps observed, that is significant enough to conduct this study. The problems stated as follow, the company has failure on making research on consumers need and want before producing new product. In addition to these problems, the company also has a deficiency on Product differentiation related problems; some gaps like color of the product package, taste, crispiness, flavor, price, distribution are some of the problems that the student researcher found. The company has no officially documented new product development model they just use their experience but its more related with stage gate model and also no Research and Development department found in the company either does not fund enough budgets for Research and Development that accomplish by the marketing department, not use modern technology as well awareness creation problem about their new product before and after the product lunch to the market. Finally, only using internal source of idea generation that comes from the management is also big problem of the organization because they may loss potential and many good ideas from external source. From student researcher point of view the company's biscuit are not superior on the market by many reasons such as, ignored or misinterpreted market research; overestimates of market size; poor design, weak performance of sales persons; incorrect positioning, advertising, or price; packaging, insufficient distribution channel members; competitors who fight back hard; and inadequate payback for the products in market was expected.

The objective of this thesis is to encounter stage gate new product development model and use it to build up a new model that much Kality food S.C and process it, which would simplify the entire product development and launch process. The finalized aim of this thesis is to increase the success rate of Kality food s.c's new product. At the moment the company is not following any documented product development model. All new product development and launch process goes through the management experience and the new ideas are mainly deepened on the resource they

have. In other cases product development is based on existing products. A reliable existing product development process model is presented, analyzed and then modified according to the Kality food s.c's case.

1.3 Research Questions

Based on the above problem student researcher has been answered the following basic research questions.

1. How new product development process run in the company?
2. What are the major differences with stage gate NPD model?
3. To what extent Kality Food S.C new biscuits match with consumer preference?

By answering the above questions the student researcher is able to better understand the product development and launch process and utilize the gained information to create a customized new product development process for the company. The first question gives a better understanding of new product development process of Kality food s.c. After getting a better considerate of the product development process; the second question helps the student researcher to relate the stage-gate model and theories with the company current NPD process. The answer for the current NPD circumstances of the company comes from deep interviews conducted internally with those who participate in the NPD process of the company specifically with the marketing manager. Third question developed for consideration of the company's new biscuit consumers and consumer feedback about the product performance used for modifying current NPD process. The answer for question three comes from final consumer of the company biscuit by using questionnaire. As result, the final suggestions are not based only on the literature review and interview, but are also supported by end-users opinion, making the results valid and reliable.

1.4 Objective of the Study

1.4.1 General Objective

The overall objective of this study is to assess the practice of new product development process in case of Kality Food S.C. new biscuit.

1.4.2 Specific Objective

The specific objectives of this study are;

- To identify Kality food S.C new product development practice.
- Examine the major gap of the company's NPD process comparing with stage gate NPD model and modify stage gate model to fit the company.
- To investigate whether Kality Food S.C new products match with consumers' preference or not, and to come up with recommendation.

1.5 Abbreviations

- NPD; New Product Development
- R&D; Research and Development
- NPD team; New Product Development participants

1.6 Significance of the Study

In this research, the student researcher tried to show the gap between the company's new product development practice and what the theory says about new product development. This study conducted with the assurance that employee and management of Kality Food S.C will be aware about what they have to follow on their product development practice and by modify stage gate NPD model student researcher make the process easy and simple to understand for all NPD team and management of the company. Furthermore, this research will be a blue print for other student researchers who would like to study further on the title of new product development Process. Mostly this research is important for the student researcher to translate what I have learned in theory to practice.

1.7 Scope of the Study

This study was focused on an assessment on the practice of new product development in case of Kality Food S.C which produces Biscuit, Pasta, Bread, Macaroni, Even if the company utilized new product development practice on different products, In particular this study focused on new product development practice of the company biscuits. Even if the company doing it business with business consumers like; wholesalers, retailers and final consumers by using their own sales

shop, this thesis focused only on final consumers who buy the company biscuits for personal consumption. In addition, the company is doing its business all over the country, to include all those it requires much time and huge amount of finance, so that this study focused only on Addis Ababa region, head office of Kality Food S.C. that located at Akaki kality sub city. Moreover, to make the study more manageable, to get current information, to make it reliable, and to update the researches that conducted by this title student researcher was limited the time from 2013-2017.

1.8 Limitation of the Study

During the preparation of this thesis, the student researcher constrained by various restrictions among the limitations, some major one includes lack of finance and adequate time, some consumers were hesitant to fill the questionnaire and also the marketing manager and other participants of the thesis hide confidential information of the company that could bring up the thesis on high level. Because of the command post release by the government it was so hard time to get internet access to download articles, journals and other materials for the study.

1.9 Organization of the Study

The study is organized in five chapters. The first chapter includes background of the study, statement of the problems, research questions, Objectives of the study, significance of the study, delimitation of the study, abbreviations, limitation of the study and organization of the study. In the second chapter literature review is viewed. The third chapter deals with research design and methodology, the fourth chapter presents the analysis and interpretation of data. The fifth chapter includes summary, conclusion and recommended model with expressive recommendation and finally the bibliography and appendixes is attached with the research paper.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2. THEORETICAL FRAMEWORK

2.1 Overview Biscuit Production

Ingredients of Biscuits:

Selection of suitable ingredients is an important step in manufacturing the food products. It is, therefore, necessary to have proper idea regarding ingredients, their function and uses. Biscuit ingredients can be classified as binding or tenderizing materials, depending on their expected effect on the finished product. It includes flour, water, milk solid, egg white, cocoa powder, sugar, shortenings, leaving agents, emulsifier, starch and salt etc. (Patel *et al.*, 2003).

Flour:

Gluten is an essential component of bread and biscuit making processes and wheat is the contributor of the protein necessary for its formation it follow that a significant factor, which determines final product quality, comes from the wheat via the flour from the mill. The ability to form gluten is almost unique to wheat. The level and quality of the gluten forming proteins depend heavily on the variety, agricultural practices and environmental effects. The protein content of wheat flour varies according to the wheat that is used by the millers and any adjustment they may make in the mill. In general, the higher the gluten content in the wheat the higher the protein content of the flour produced from it. The higher the protein content of flour, the better is its ability to trap

Carbon dioxide gas and the larger can be the biscuit volume (Chamberlain, 1984).

Water:

Water hydrates the gluten protein during mixing, gelatinizes starch during baking and serves a solvent for solutes and dispersion medium for the other ingredients. The greater the quality of gluten, the greater is the absorption. The salts in water affect the properties of dough. Hard water containing magnesium and calcium ions may have ‘tightening effect’ and soft water a ‘loosening

effect' on dough. The nature of water used in dough is more likely to be of consequence in commercial biscuits production than in non-commercial biscuits making. Water, besides being component of every ingredient, is also directly added into the preparation of most of the products. In baking, water plays an important role in production by providing the necessary medium for the physical, chemical, biological and biochemical reaction that underlie the conversion of raw material in finished baked foods. In addition, it has decisive influence on the overall quality and palatability of the finished baked products. It leavens the products by converting itself into the vapors during baking. It also assists in the control of dough temperature (Patel *et al.*, 2003).

Water is added at the mixing stage to nearly all biscuit recipes. It functions as a catalyst because it is almost totally removed during the subsequent baking process. Water hydrates ingredients like flour and, if conditions are right during subsequent mixing, hydrated wheat protein changes into a viscose elastic material known as gluten. This is very important in determining the nature of the dough, how the dough behaves in the forming processes and ultimately the structure in the bakes biscuit. Water also allows the solution of some ingredients such as sugar and, in the case of chemicals, permits reactions to take place in the dough (Manley, 1998)

Fats:

The main function of fat is incorporation of air during creaming. When fat entraps the air in the form of minute cells and bubbles the volume increases. The ability of fat to absorb air during mixing is called its creaming quality. Good creaming incorporates about 270% of air when creamed with granulated sugar (Patel *et al.*, 2003).

Fat has numerous functions in cookies. Fat act as a stabilizer, when particles of fat are spread in the dough makes it more stable. Fat also contributes to the organo lactic qualities of cookies such as flavor and aroma. The added fat will surround the gluten network formed in the dough. This will aid in the lubrication of gluten during sheeting. As a result, the soft and more extensible dough will be formed Sathe *et al.*, (1981) and Gupta (1988) observed significant decrease in hardness of control and biscuits. This was apparently due to mellowing action of fat on protein, which increased the spread and reduced hardness, compactness of biscuits. Singh *et al.*, (1997) standardized fat (20-35%) and sugar (28-43%) biscuits and observed that with increasing level of

fat, the thickness of biscuits decreased whereas diameter, weight spread ratio and percent spread factor of Product increased gradually irrespective of flour incorporation in formulation.

Sugar:

Sugar is essential component of biscuit. Sugar functions not only as a nutritive agent but also as a texture, coloring agent and means of controlling spread. Singh et al. (2000) standardized the level of sugar in biscuits and found that with the increasing level of sugar up to 37% in formulation, attributes such as weight, diameter ratio and percent spread factor of biscuits increase whereas thickness and hardness of product decreased irrespective of soy flour incorporation. Higher level of sugar in a cookie recipe leads to shortness and tenderness, thereby reducing the hardness mainly due to its action in dispersing the flour gluten (US Wheat Associates, 1988). It was found that the addition of an optimum concentration of a carbohydrate hydrolyzing enzyme preparation such as barely, wheat is important in absence of added sugar. Although HFCS is colorless, the effect can be somewhat market in highly colored cakes, such as devils food (Saussele, 1976)

Sugar is used principally as sweetening agent in the preparation of biscuits. In addition to the pure sugar, crude sugar (i.e. brown colored sugar), corn syrup and honey are also used. Sugar being hygroscopic in nature, absorbs and retains the moisture. The products remains moistened for a longer time. It caramelizes when heated, which provides dark brown color to the product (Patel et al., 2003).

Whole milk powder:

Whole milk powder is used in the biscuit manufacturing because of its extended shelf life and consistent quality as compared to fresh and other forms of milk. It is most important moistening agent. The crust color and water retention power of biscuits are improved by the milk sugar, i.e. lactose. Milk powder contain casein as a principal protein, it also contain all the essential amino acids hence it improve the nutritional quality of the biscuits (Patel et al., 2003).

Salt:

The basic function of salt in biscuit is to contribute flavor. Salt also have inhibiting effect on the formation of gluten during mixing. Salt imparts taste and makes the products appetizing and

palatable. It lowers the caramelization temperature of cake batter and biscuit dough and, thereby, improves the crust color and bloom (Patel et al., 2003). Biscuit manufacture is no longer considered a craft but a fully fledged technology, developed after a full understanding of the various processes involved with the help of basic principle of science and engineering. All over the world, manufacturing equipment has been replaced by new and advanced automatic machines with high outputs. In some of the foreign countries biscuit manufacturing has been computerized.

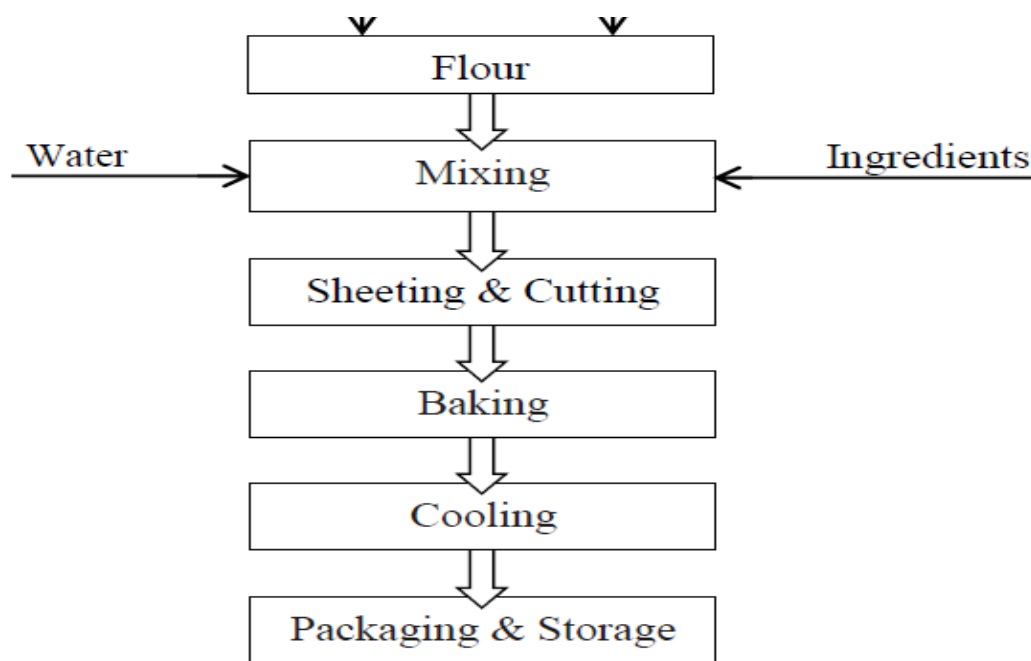


Figure1. Flow diagram for biscuit production

2.2 Type of New Product development

Based on Sexena (2002) the process of new product development starts with the search for product idea. To be successful, it is important that this search should not be casual. The top managements should spell out corporate mission an objective for new product.

Mayo (2010) divides the history of new product innovation in three phases. The first historical phase takes place before War World II; during this period companies were more product orientated and did not pay much attention to customers" needs and requirements, The second

phase, according to Mayo, started at the middle of 60's and it is characterized by emergence of competition and development of the markets. During this period, knowledge about the markets was very important in the NPD process: what needs and wants customers have and how companies can satisfy them. The third, and the last, phase has revealed contemporary concepts of the NPD process. Modern NPD requires investments in innovations and R&D process together with the focus on diverse customers' needs (Mayo, 2010).

According to Kahn (2006), several types of NPD can be found. Depending on their focuses and goals, he distinguishes next categories of NPD: cost reduction, new uses, new markets, product improvements, line extensions, new entries and new to the world (Kahn, 2006). According to Lamb and et.al (2004) new product can be categorized in to; **new to the world Products** -also called discontinuous innovation these products create an entirely new market. New to the world products, represent the smallest category of new products. **New Product Lines** -these products which the firm has not previously offered, allow it to enter an established market **Additions to existing product Lines**- this category include new products that supplement a firm's established line. **Improvements or Revision of existing Products**- the new and improved product may be significantly or slightly change. Most new products fit into the revision or improvement category. **Repositioned Products**-these are existing products targeted at new markets or market segments. **Lower-Priced Products**- this category refers to products that provide performance similar to competing brands at a lower price.

2.3 Factor Influencing Product Development

Based on Beri (2000) a company may find itself in a situation where it may be advisable to develop a new product. When sales of its current range of a product have been decline over the past few years or where it receives complaints about its product from customers, distributors, retailers, it may have to find the possible reason for the improving of existing product or the development of all together new product. In addition, the concept of product life cycle suggest that a product pass through different stages when a company find that some of its product have entered the decline stage; it may have to take concern measures to replace them. This can be achieving in two ways; acquisition and innovation.

2.4 New-Product Strategy

According to Etzelet.al (2004) new product strategy is a statement identify the role of a new product is expected to play in achieving corporate and marketing goal. A new product might be design to protect market share, meet a specific return-on-investment goal, or establish a position in new market. On the other hand, new products role might be it maintain the company's reputation for innovation or social responsibility. If the company goal is to defend market share, product strategy must be introducing an addition to an existing product line or revise an existing product or if the company's goal is to strength a reputation as an innovator, product strategy will be introduce really new product not just an extension of an existing one. In addition, a new product strategy can also help the company avoid the problem of numerous products under development but few actually becoming ready for the market. The priority in the strategy can be use to determine which prospect products should need special attention, which should go on the "back burn", and which should be scraped.

In addition, Baker (2000) mention that new product development should be guide by new product strategy, it is important that the strategy is not so prescriptive as to restrict, or stifle, the creativity necessary for new product development. In addition to the stating the level of newness, a new product strategy encompass the following

Technology and Marketing; this is seen as a dichotomy between allowing the market to pull new product from companies and companies pushing new technology to the market. The advantage of the former one is that new product, derived from customers, are more likely to meet their need, while the advantage of the later is that new technology will meet needs more effectively and will be hard for competitors to emulate, leading to greater sales, profit and competitive advantage for longer period of time. Each however, has disadvantage. With new product development through market pull, there is a greater tendency of the new product to be better than existing product, leading to product proliferation, possible cancelation of brands. With technology push products, there is the risk that the new technology is not, in fact, relevant for customers and is rejected by them. As ever, the emphasis should be on achieving a balance between the two. Baker (2000)

Product advantage; product strategy that emphasizes the search for different advantages, through the product itself, it may comprise the following elements: technical superiority, product quality, product uniqueness, product attractiveness. Baker (2000)

Synergy; is the relation between the new product development and existing activities, known as the synergy with existing activity. High levels of synergy are typically less risky, because a company will have more experience and expertise, although perhaps this contradicts the notion of pursuing product differentiation. Baker (2000)

Risk acceptance; finally, the creation of an internal orientation or climate which accept risk is high limited as a major role for new product strategy. Although synergy might help avoid risk association with lack of knowledge, the pursuit of product advantage must entail acceptance that some project will fail. Baker (2000)

2.5 New Product Life Cycles Strategy

After launching new product, management wants the product to enjoy a long and happy life. Although it does not expect the product to sell forever, the company wants to earn a decent profit to cover all the effort and risk that want in to launching it. Management is aware that each product will have a life cycle, although the exact shape and length is not known in advance. The product life cycle have five distinct stages.

2.5.1 Introduction

During the first stage of product life cycle, it is launched into the market in a full scale promotion and marketing program. The entire product may be new or the basic product may be well known but have a new features or accessory that is in introduction stage. Strategy for entry stage; in the management of product life cycle, a crucial question concerns the timing to entry into the new market. Should we enter during the introductory stage or should we wait and plunge in during the early part of the growth stage, after innovation companies have prove that there is a viable market. (Etzel and others, 1999).

Kumar and Mittal (2001) one of the crucial decision to be taken in the market pioneering stage is the price strategy to be adopted for the product. No past data or comparisons are available and the firm normally options for one of the following pricing strategy.

- **Market skimming;** the skimming strategy involve high price, taking advantage of early entry. Mittal (2001)
- **Market penetration;** penetration pricing will involve low price with the view of having a good market coverage and eventually by mass market for the product. Mittal (2001)

2.5.2 Growth

In the growth stage or market acceptance stage, both sales and profit rise, often at rapid rate. Competitors enter the market in large number if the profit outlook is particularly attractive. Sellers shift to a secondary demand rather than primary demand promotional strategy. The numbers of distribution outlets increase, economics of scale are introducing, and price may come down a bit. Typically, profit start to decline near the end of the growth stage. (Etzel and et.al, 1999)

2.5.3 Maturity

During the first part of this period sales continue to increase, but at a decreasing rate. While sales are leveling off, the profit of both producer and retailers are declining, marginal producers are force to drop out of the market, price competition intensifies, and the producer assumes a greater share of the total promotion effort in a fight to retain dealers and shelf space in their stores. New model are introduce as producer broaden their lines, and trade in sales become significant. *Strategy for maturity stage*, a product line may be extending during the maturity stage of its life cycle by making product modification, design new promotion, or devising new uses. (Etzel and et.al 1999)

2.5.4 Decline

Based on Kumar and Mittal (2001) at the decline stage, the sales begin to fall, the demand for the product shrinks probably due to new and functionally advanced products becoming available in the market or the market become apathetic to the product. In any case, price and margin get depressed; the total sales and the profit diminished. *The strategy for decline stage;* the strategy will depend on the companies. Some firms at this stage may try to link the sales of this product with some other premium products they have developed and thus try to stretch out the life of a

product but most firm perceive properly the impending; total decline and prepare for the gradual stage phasing out of a product. Successful firms quite often keep new product ready in a line to fill the vacuum created by the decline of existing product.

2.6 Buyer Decision Process for New Product

According to Kotler and Armstrong (2006) buyers may pass quickly or slowly through this stage, and some of the stages may even be reverse. Much depend on the nature of the buyer, the product, and buying situation. So that, Adaptation process is the mental process through which an individual passes from first learning about an innovation to final adaptation and adaptation as the decision by individual to become regular user of the product.

2.7 New Product Adoption and Diffusion

The likely hood of achieving success with a new, especially a really innovative product, is increased if management understands the adoption and diffusion processes for that product. Once again, we stress that organizations need to understand how prospective customers behave. The adoption process is the set of successive decision an individual person or organization makes before accepting an innovation. Diffusion of a new product is the process by which an innovation spreads through out a social system over time. By understanding these processes, an organization can gain insight into how a product is or is not accepted by prospective customers and which groups are likely to buy a product soon after it is introduce, later on, or never. This knowledge of buying behavior can be valuable in designing an effective marketing program. (Etzel and other, 2004)

2.7.1 Stages in Adoption Process

According to Kotler and Armstrong (2006) consumers go through five stages in the process of adopting new product, **Awareness** The consumer becomes aware of the product, but lacks information about it, **Interest** The consumer seeks information about the product, **Evaluation** The consumer considers whether trying the new product makes sense, **Trial** The consumer tries the new product on small scale to improve his or her estimate of its value, **Adaptation** The consumer decides to make full and regular use of new product.

2.7.2 Factors Influencing the Adoption Process

Marketers recognize the following characteristics of the adoption process differences in individual readiness to try new products, the effect of personal influence, differing rates of adoption, and differences in organizations' readiness to try new products. Some researchers are focusing on use diffusion processes as a complement to adoption process models, to see how consumers actually use new products.(Kotler and Keller ;2012)

2.7.3 Stages in Adoption Process

Based on Kotler and Keller (2012) the degree to which an individual is relatively earlier in adopting new ideas than the other members of his social system. Some people are the first to adopt new product. After a slow start, an increasing number of people adopt the innovation, the number reaches a peak, and then it diminishes as fewer non-adopters remain. The five-adopter groups differ in their value orientations and their motives for adopting or resisting the new product. **Innovators** - are technology enthusiasts; they are venturesome and enjoy tinker with new products and mastering their intricacies. In return for low prices, they are happy to conduct alpha and beta testing and report on early weaknesses. **Early adopters** - are opinion leaders who carefully search for new technologies that might give them a dramatic competitive advantage. They are less price sensitive and, willing to adopt the product if given personalized solutions and good service support. **Early majority** - are deliberate pragmatists who adopt the new technology when its benefits are proven and a lot of adoption has already taken place. They make up the mainstream market. **Late majority** are skeptical conservatives who are risk adverse, technology shy, and price sensitive. **Laggards** are tradition bound and resist the innovation until the status quo is no longer defensible.

2.8 Factor Influence Degree of Standardization

For the analysis of this thesis NPD process, the issue of adaptation and standardization of marketing mix's elements will be taken into account and several questions regarding this will be developed to support the interview response and not to come up with biased recommendation and conclusion of the thesis, also to increase trust worth of the finding.

Ranchhold says that discussion around standardization versus adaptation is one of the most difficult areas of the company strategy (Ranchhold; 2007). During the last years however the discussion around advantages and disadvantages of standardized products across the markets versus product adaptation to local markets is coming to a solution that a proper product strategy lies in between of those two extremes, but degree of a proportion adaptation/standardization should be found by each company individually. (Szymanski, Sundar & Varadarajan, 1997)

Figure provides an overview of several parameters that can be harder or easier standardized on the global scale.

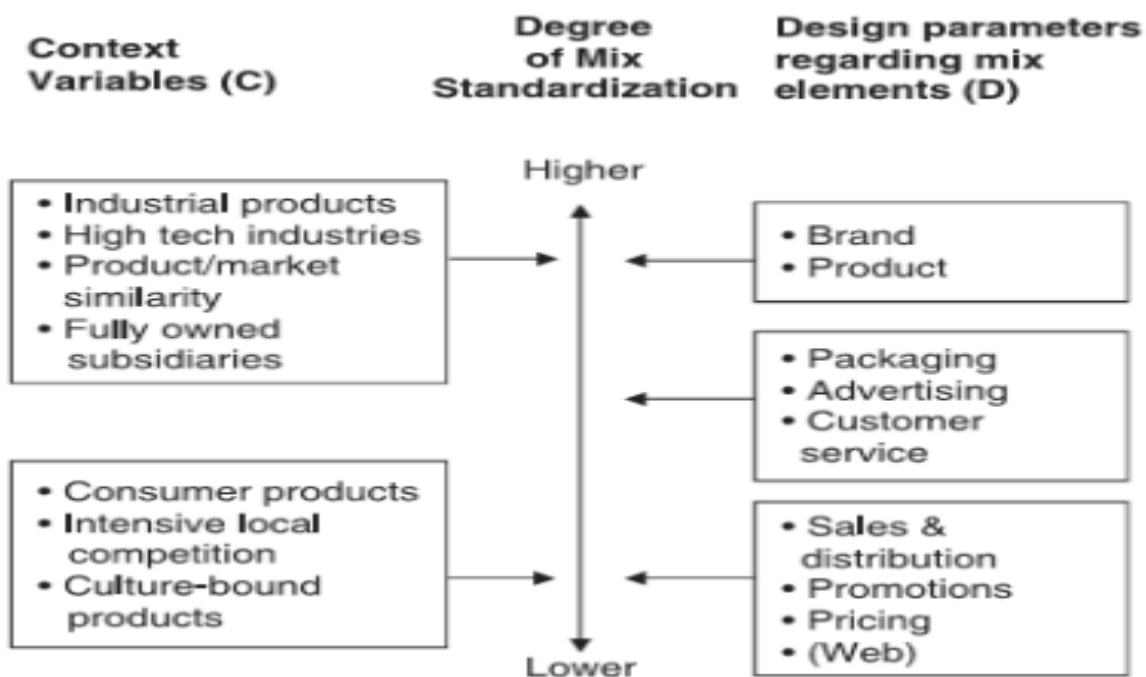


Figure2; factors influences the degree of product standardization (Birnik, Bowman, Powers, Loyk)

2.9 Conceptual Framework

This part include conceptual framework about new product development team and NPD models by different authors. The main objective of this division was to understand general outlook of NPD model in different angles and by whom each stage must be accomplish, after all student researcher by regarding consumer's feedback about the new product performance in the market modify NPD model to fit Kality Food S.C.

2.10 NPD Team

This part will be divided into four parts: role of top managers, role of project managers, role of product developers and role of the marketing.

2.10.1. Top Management

Many researchers (Lewis & Wong; 2004, Barkley; 2007) underline the fact that the top management of a company is the starting point of the NPD process. Lewis and Wong (2004) describe some processes, which helps top managers to create excellent conditions for the project team. They consider the aspect that the top management attitudes should be open regarding the development of the project; this means that they should give enough resources for the development of the project and keeping the milestone unchanged through the life-time of the project. (Lewis & Wong, Accelerated Project Management, 2004) On the other hand, however, the top management should not be involved too much in the management of the NPD process. *“projects are no more successful in the marketplace than other projects despite the added support of the top management”* (Milton, Griffin, Castellion, & Anschuetz, 1996)

2.10.2. Project Manager

The project manager is one who manages a successful project, Usually project managers has two responsibilities in managing a project: the technical components of the project plans, financial analysis, schedules and monitoring the project and organizational skills assembling and managing the team, controlling, and so forth (Thayer 1987). Nowadays, the project manager is also seen as a person who is implementing the values of the company and the person who is leading the company towards the success (Kloppenborg and Opfer 2002).

Richman (2002) argues that a successful project manager has to be strong in five areas. These skills are important because they assuring planning and managing the project

- People skills, according to Richman (2002), are the ability for project managers to convince other people to work on a task and highlights the aspect that these skills, should be considered as the most important skills that project managers should have since the most important assets of the company are the employees.

- Integration skills mean that the project manager knows how to assemble the team, and who and how should work on the project.
- In addition key task for the project manager is project management skill of the various parts of the project.
- Technical skills refer to the experience of the project manager in the technical area of the project; usually the project manager performs better if he or she has some experience in the production development (Richman Larry, 2002).
- The last skill is knowledge of organization, which is of great value as the project manager has to have knowledge about the company culture, its vision/mission and to keep the quality of the product as high as possible.

2.10.3 Product Developer/Manager

Clark and Fujimoto (1991) concluded in their article that there are some models of integration of product manager's work (Clark & Fujimoto, 1991):

- Traditional functional structure*- in which the product manager has to manage the rules and procedure, which have previously been adopted;
- Lightweight product manager* - product manager has less power in the development of the product, and their main objective is to assure that everything is working properly and the deadline are on time;
- Heavyweight product manager* – they are responsible for the entire product development, but they lack on marketing access;
- Project execution team structure* – the functional managers take the part of the work a product manager has to do, also in some cases the functional managers are the only ones in control of the development (Clark & Fujimoto, 1991).

2.10.4 Marketing Manager

Crawford and Benedetto (2008) say that “the role of the marketing personnel changes and accelerates as the product nears the end of the development phase and moves closer to launch” Marketing experts are usually involved into the NPD process from the beginning, as they should handle the market for that product. (Crawford & Benedetto, 2008)

Moreover marketing experts are involved in every step of the NPD process. First, they are involved in developing the new product idea and research of the future market for the product. Further they bring to the project requirements of the customers and working with a business plan. Finally, they are leading the launch stage of the NPD process (Crawford & Benedetto, 2008).

2.11 Stage gate model by Cooper and Edgett

This part starts with presentation of three different models of NPD. It is continued by choosing one of these models by Cooper and Edgett, (2010) which analyzed in more details used further for the purposes of this research as basement.

The Stage Gate model is an organized, structured product development and launch process which is used to decrease the product failures and increase the success of the companies in launching new products. The Stage gate model is a proven successful method and many international companies have been using it when launching new products. International Paper, which is world’s largest player in pulp and paper industry, is using use Stage Gate process in managing the development and launch of new products. This reference makes the Stage Gate model more relevant to this case study (Cooper 2001).

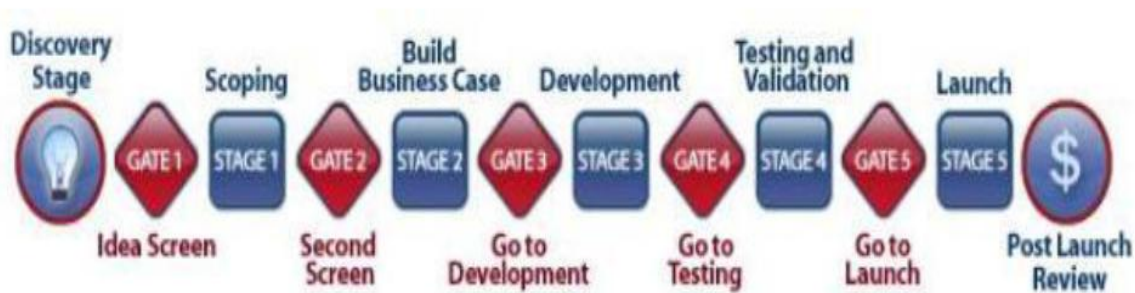


Figure 3; the typical Stage Gate model – from discovery to launch Cooper and Edgett (2010)

As it was stated at the beginning of this part, the NPD model presented by Cooper and Edgett (2010) was used for this research. Researcher can see presented models as similar to each other. Nevertheless student researcher found that this model better describes all the processes during each step of NPD and thereby provides most valuable input for my research. The stage-gate part of the model was illustrated with the study of Cooper and Edgett (2010), in view that the focus of this study was stage-gate part of the NPD process.

2.11.1 Idea Generation for New Products

Based on Sexena (2002) source of new product development includes; **Customers:** Customers are sometimes able to discuss their requirements and offer ideas that will meet those problems. **Competitors:** Systematic comparison or bench marking with the competition may offer good source of new product ideas. **Distributors:** Suggestions from distributors and their problems in handling present products often thrown up new ideas. **Creative techniques:** Brainstorming, focused interviews, and technological forecasting enable one to find out the latent capabilities of innovations. **External world:** The external world, especially the use of their technology, offers a good source of ideas for implementation in the home market. **Research and development:** Create new product ideas through R&D.

As a stage in product development process the concept generation serves to bring to the company as many concepts as possible, review the concepts and determine the best options which should be considered for further product development. (Kahn 2011, 68) A good or bad product idea can determine the success of a project, as the ideas generation will lead to the new products which can be offered to the customers. There are many ideas that a company can work on, but the quality of the ideas is usually low quality or low-value. For this fact it is important that a company structures a process for generating new ideas which would help in creating new successful products. (Cooper 2001) According to Cooper, it is very important to have a product strategy which defines the areas of the strategic focus decide which areas you want to search for new developments. These clear specifications will help to generate more clear and effective ideas which are difficult to get from a scattered search.

There are two routes which are used to generate new ideas in a company; “bottom up and discovered occasionally” or “top down and planned”. An example of “bottom up” is a sales person visiting a customer facility and during the visit notices a problem. When the sales person defines a solution, he reports the new product idea to the company. On the other hand “top-down” is more direct and structured. A particular market segment and focus area are defined. A market research finds the customer problems which the company should resolve, and the project team work in these problems, developing new products over few years (Cooper 2001).

➤ **Idea generation methods**

A detailed ideation study was conducted by Cooper & Edgett in 2008, and eighteen ideation methods which are divided in three approach groups were listed; Voice of customer methods (VOC), Open Innovation methods and other approaches. Other authors have been studying the new product development process, and identified new methods which companies are using when generating new ideas for the NPD process.

- **Anthropological research** has been used by many companies to identify new product opportunities. This is a VOC method and it is an expensive method but very effective. In this method it is important to visit the customers and gain insights in customer needs. In order to understand the customer needs and wants the company needs to be closer with the customer. In B2B markets it is important to focus in customers' work-flow, observing how the customer uses the products and what the problems they face are. The new products should not be just an upgrade of the old ones but new solutions which increase efficiency and effectiveness. (Cooper 2001)
- **Lead user analysis** is another VOC method which has been applied in many companies. The method was developed by Eric von Hippel in 80's. The base of this theory is working with innovative customers, will lead in developing innovative products. Collaborating with innovative customers and discussing new solutions which would help them is very effective source in generating new innovative products. (Ulrich & Eppinger; 2012,Edgett & Cooper; 2008)
- **Product Value Analysis** and **Identifying market trends** are two other methods that use VOC to develop new products. The first method is an experimental method that was pioneered by Ron Sears. In this method customers interact with aspects of company's product, and then express his concerns, views and difficulties. This method helps the companies to be in interaction with the customer and solve problems which concern them. The second method is identifying the market trends and needs by conducting customer surveys or focus groups. After defining the trends and needs, the company form a group of experts to discuss the problems or possible solutions (Edgett & Cooper; 2008, Cooper; 2001,Kahn; 2011)

- **Internal search** is another method which uses team knowledge and creativity to generate new ideas. This method is often called brainstorming. In this method the aim is to generate as many ideas as possible and normally two general guidelines are defined; the first one is that all judgments must be deferred and all ideas are welcome. Criticism is not good and should be inappropriate. This helps to generate high quantity of ideas. The second one is that quantity breeds quality, the more ideas, the better it is (Kahn 2011; Ulrich & Eppinger 2012). Another valuable source to generate new ideas are **competitors**. The idea is not to copy the products of your competitor, but to analyze their products for gathering ideas for new improved products. When using this method it is very important to analyze each part of the competitors' product and define what is wrong with it. It is also important to analyse how well the product is doing and what are the materials which have been used for the positioning of the product.
- Another Source of generating new ideas is technical **universities**, where you can gather information regarding the latest development. Establishing contact with key research centers in different universities of your field may be very beneficial to generate new ideas for the new products. (Cooper 2001)
- **Searching patents** can also help the company to be informed for the latest development and technologies available. Patents offer a rich content material which can be used to generate new ideas. Many of these patents are protected for 20 years and if considering using them, a ratty fee can be applied. However, patents are also useful to see what products are protected and must be licensed or avoided (Ulrich & Eppinger; 2012).

2.11.2 Scoping

Kumar and Mittal (2001) the purpose of idea generation is to create a large number of ideas. The purpose of the succeeding stage is to reduce that number. The first idea reduce stage is idea screening, which help spot good ideas and drop poor ones as soon as possible. Product development cost rising greatly in later stage, so the company want to go head only with a product idea that are mostly likely to turn in to profitable products.

Scoping is the first stage of the new product development and launch process. In this stage firstly a *preliminary market assessment* is done. During the preliminary assessment a quick scoping of the market prospects for the product is essential. Such assessment includes; the potential of the

product, market acceptance and the requirements for the product. This process is not a detailed market research but a desk research which is based only in the existing recourses. Secondly a *preliminary technical assessment* is con-ducted the technical assessment is focused on the conceptual assessment and the technical feasibility, manufacturing process assessment, intellectual properties and technical solutions. A *preliminary financial and business assessment* is the final check before the recommendations are given. In this phase only a sacrificial check of business rationale and financial prospects is done (Cooper 2001).

2.11.3 Building Business case

Moreover, Crawford and Benedetto (2008) suggest that all the departments should have a common denominator called product protocol. For development of this product protocol next concepts should be considered. (Crawford & Benedetto, 2008)

- a) “*Tested concept* – the consumers agree with the idea and the company has a basic confirmation from them;
- b) “*Fully screened concept* – the company can manage the product and all major issues concerning the NPD process are resolved and debated;
- c) *Protocol concept* – the company gets a clear view of the product, for which it is created and what is the potential market for it. (Crawford and Benedetto, 2008)

After the preliminary assessments the second stage is the last predevelopment stage. In this stage the studies are more detailed. Firstly a study of *user needs and wants is conduced*. Defining the customer value and benefit can determine a successful product (Cooper 2001).

When the idea moves pass the screening step, it is evaluate more carefully. Getting reaction from customers about how well a new product idea fits their need. Concept testing use marketing research, such as, ranges from informal focus group to formal survey of potential customers. Companies can often estimate likely cost, revenue, and profitability at this stage. In addition, market research can help identifying the size of potential market. Even informal focus groups are useful, especially if they show that the potential users are not existed about the new idea. If results are discouraging, it may be best to kill the idea at this stage (Perreault and McCarth, 1999).

Competitive analysis is another important part of this stage. In order to be successful a company should provide greater customer value and satisfaction than its competitors do (Kotler et al. 2013). A detailed look of the competition should be conducted to determine who are the competitors, what are their strengths and weakness, pricing and business model. Furthermore, *market analysis* determining the market size, trends, segmentation and buyers behavior, is combined with the two studies mentioned above. This analysis in is a continuation of the preliminary analysis which was done in the first stage, however this is a more in depth analysis (Cooper; 2001).

Cooper also defines the detailed *technical assessment* as very important in this stage. During the assessment the company maps out the technical solutions and defines the possible risks which the product may face. Manufacturability, suppliers and intellectual properties are also analyzed in this phase. After technical detailed assessment a *concept testing* is very important before going to development. The concept testing helps the company to prove the interest of the customer or end-user and to add the final components to the concept. As conclusion, *financial business analysis* and a *plan of actions* are the final reports which should be prepared before going to the stage 4, which is development (Cooper 2001)

2.11.4 Development

According to Kotler and Keller (2012) Up to now, the product has existed only as a word description, a drawing, or a prototype. The next step represents a jump in investment that dwarfs the costs incurred so far. The company will determine whether the product idea can translate into a technically and commercially feasible product. If not, the accumulated project cost will be lost, except for any useful information gained in the process.

Crawford and Benedetto (2008) describe this phase as the one —*during which item acquires finite form – a tangible good or a specific sequence of resources and activities that will perform an intangible service. It is also the stage during which the marketing plan is sketched and gradually fleshed out.*(Crawford & Benedetto, 2008)

A product can exist as a concept passing all the business tests mentioned above. However the product concept needs to go to the next stage that is the development. In this phase, the R&D team starts developing the concept into a physical product (Kotler et al. 2013). An important part

of the development is to build a prototype and start the testing with the customers as soon as possible. During this stage is vital to seek customer feedback and input continuously. The customer feedback will help to maintain the product development in the right direction, meeting all customer requirements (Cooper 2001). Cooper underlines that rapid development is also very important during this stage. The product should reach the market as fast as possible in order to gain competitive advantage and receive faster revenue.

Once the product's first prototype has been developed and tested with the customers, continuous improvement is necessary. The development team should always give priority to customer feedback and features that bring value to the customer and not the product itself (Hogan, 2013) Moreover, Robert Cooper (2001) states that a post launch plan is very important to be developed in parallel with the product development. At this stage the company will need to define what will occur after the product launch; what should be measured and how it will be done?

2.11.5 Testing and Validation

Beside the work with the technical side of the product, marketing plan is created during this phase and the product starts to be ready for the launch (Cooper & Edgett, 2010). Marketing strategies of the product should be developed, such as “*package design, brand name selection and tentative marketing budget*” (Crawford & Benedetto, 2008)

The marketing strategy review studied the new product idea in relation to the marketing program to support it. The proposed product is assessing to determine whether it will help or hurt sales of existing products. Likewise, the product is examined to assess whether it can be sold or through existing channels or if new outlets will be needed. Economic consideration focused on several issues, starting with cost of R&D, production, and marketing. For financial projection, the firm also forecast the possibility revenue from future product sales and forecast market shares (Berkowitz and others, 1994).

➤ Test methods

The purpose of this stage is to completely validate the product and prepare it for the final launch. Testing is very important to validate the functionality and documentation of the product.

Avoiding this stage can very often result in a failed product launch (Soni & Cohen 2000). There are several test methods that can be implemented starting with the *preference test*, which measures the market acceptance. During this test the finalized product is presented to the customer, facing its preferences. The concept and development tests, which are done in previous stages are applied only in description models, and cannot be fully reliable for the final product launch.

- **A Beta Test** is a testing methodology, which is carried out for a longer period of time and includes the customers and partners. Commonly, beta testing is the second phase of the testing after the internal testing. The product is given or loaned to the customer who will use it in its working environment. During this test, the product is displayed in the real working environment. The display will help in defining the strengths and weakness of the product. Some deficiencies that the product may have sometimes are not properly shown in the lab testing (Cooper, 2001).
- **Market Testing** is the final testing methodology that can be done before the product is launched. The benefits and the cost will depend on the product strategy, distribution channel and the uniqueness of the product. The main goal of this type of testing is to verify the expected sales and market acceptance before going to the gate five which gives the green/red light for the launch of the finalized products. The second outcome of this type of testing is that company can evaluate different launch plans by introducing them into small segments in two different groups. In the industrial products such type of testing is also called trial selling where each detail is in accuracy with the final launch plan (Cooper 2001)

According to Lehmann and Winer (2005) the purpose of such test is to; predict sales and profit from major product launch, and practice so that marketing, distribution, and production skill are developed before entering full scale operations. Several decisions must make. **Action standard;** Standard for evaluating the result should be set up in advance. This standard should specify when the various possible decisions on stop the test, continue the test, revamp the product, go national will be implemented. **Where to test;** the choice of where to test market is a serious problem, so that the firm have to be seriously focus on the where the market have to be tested. **How long;** The question of how long to run a test is not easily answered. Obviously, a long run give more

information, but it is also cost more and gives competitors more time to formulate a counterattack. Repeat usage as well as trial can be accurately assessed. **Cost;** for a consumer package good, test marketing cost, advertising, and promotion costs. **Information gathering;** during test market, a variety of information is gathered, most of it related to actual sales (Lehmann and Winer; 2005).

2.11.6 Launching product onto the market

This is the final stage of the initial development process and is very costly. Decision such as when to launch the product, where to launch it, how to launch it and to whom based on information collected through the development process. Launch strategy includes any advertising and trade promotion necessary. The sales force may require extra training in order to sell the new product effectively (Baker, 2000).

The final stage of the product development and launch process is the introduction of the product into the market. On this stage the role of marketing and sales is crucial. For instance developing a marketing plan is very essential activity in this stage (Cooper 2001). For better understanding of the content of a marketing plan, the appendix three present the content of marketing plan defined by Kotler et al.(2013) A common definition of marketing is, putting the right product, in the right place, at the right price, at the right time.

➤ Defining the Marketing Strategy

Cooper (1990) claims the idea that the marketing is essential during this stage and that the company should be right on time and precise with the marketing mix elements:

- a) *“Product”*– should have at least the same quality as the other products;
- b) *“Price”*– should be big enough to create profit for the company, and low to be attractive for the customers;
- c) *“Promotion”*– to develop a promotion plan for the product;
- d) *“Place”*– here implies that the company will contact the suppliers, or those who are responsible for getting the product to the customer.

In a product launch process, the company's mission and objectives are defined by the company since the beginning of product planning. The goal of Marketing is to create value for the customers and ensure a profitable relationship with the customers. To accomplish this, a

marketing strategy is necessary. The marketing strategy defines which is the group of the customers company will serve and how will it be served to this customer group. The group of customers is defined through segmentation and targeting and the answer on how the company will serve to its customers comes via differentiation and positioning (Kotler, et al. 2013).

Furthermore, Kotler et al (2013) defines positioning as a place which companies occupy in the customers mind to distinguish their products from the competitors. In the positioning of a company, the customer value differentiations and the advantages of the products towards the customers are very important. If a company promises better value than the competitor, it is a must to deliver those values. This process is reached through the differentiation of the market offering to create greater customer value (Kotler, et al. 2013, 52).

➤ **Defining the marketing mix**

After defining the marketing strategy, the company should prepare the marketing mix. The marketing mix is the most important set of marketing tools which companies can use to influence the demand of the customers for its products. This set of tools is collected into a group called the four P's of marketing (Kotler, et al. 2013)



Figure 4. The marketing mix (Kotler & Keller 2009)

Product is the article which has been developed by a company or manufacturer which desires to sell it to the customer. Product is the main competing item of the company and it is considered to be the heart of marketing mix. If a product does not fulfill the customer needs, or satisfaction, the price, promotion and place will not be able to achieve the marketing target (Akrani; 2010).

Price of the product defines the value of the product to the customer. It is the most important factor which influences the marketing. Price can be determined by several factors such as; product manufacturing cost, market share, target customers, type of the product etc (van Vliet, 2013).

Promotion is all about defining the way how the company will communicate with the customers. The core message is delivered to the customers via defined promotion tools used in sales and marketing. Promotional activities help to differentiate the product from competitors, and create a good relationship with the customers (van Vliet 2013, Akrani, 2010).

Place is considered as distribution channel which is used to deliver the products to customers. However the type of product, which a company offers, influence the way how it should be distributed (Ehmke et al. 2013).

2.11.7 Post launch review

According to the company case study conducted by Scott Edgett (2013) a product post launch review is held between three to six months after the launch. In authors opinion the example shows that the time of post launch review can be applied differently by companies according to their business type or industry. The author supports the idea that the industry and the type of the product which company is offering influences the timing in which a company can receive reliable results from its product launch.

2.12 NPD models by Crawford and Benedetto

Nowadays we can find many models of the NPD processes. One of such models was proposed by Crawford and Benedetto (2008). The authors argue that their model can be used as an initial model for the NPD process in all types of companies. Below Figure illustrates this model.

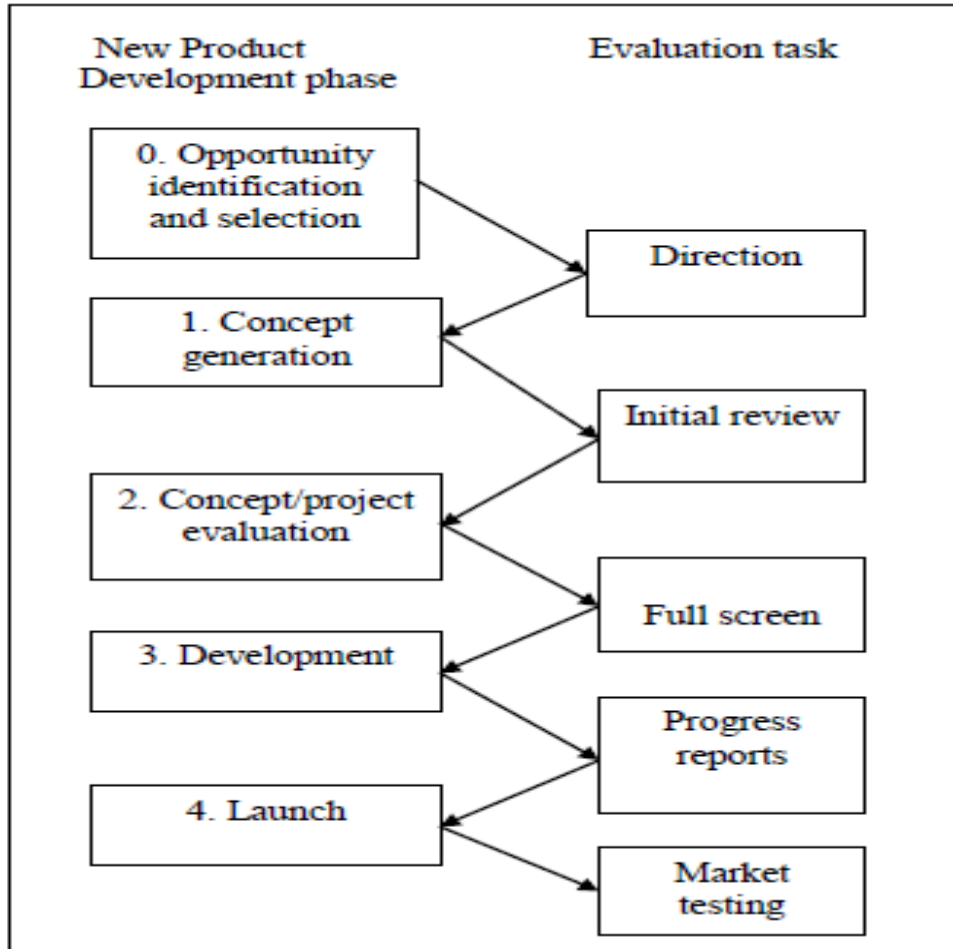


Figure5; NPD model by Crawford and Benedetto (2008)

As we can see, there are five main phases in this model (figure 5). Crawford and Benedetto (2008) argue that there are some review points between these phases where everyone who is involved in the process meet together and discuss the development of the process.

2.13 NPD model by Shepherd and Ahmed (2000)

In addition, the model proposed by Shepherd and Ahmed (2000) who also agree that stage-gate process should be reviewed by the company requirement. They have proposed these gates as a tool for companies to develop a strong NPD process.

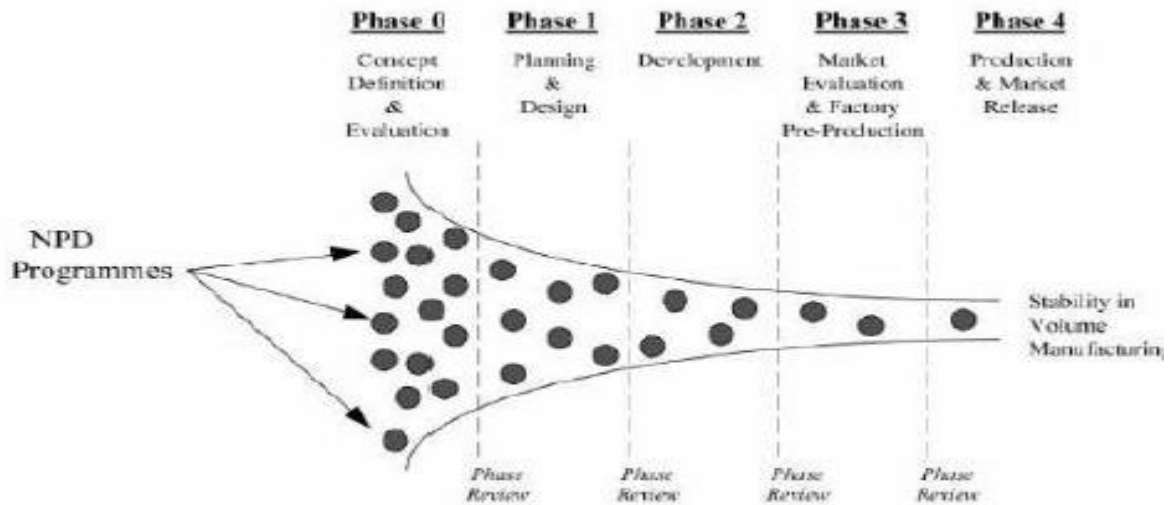


Figure 6; NPD model by Shepherd and Ahemd (2000)

Shepherd and Ahemd (2000) describe the NPD process as a tunnel, as it can be seen in figure 6, where numerous ideas are gathered at the beginning, but just a few of them can reach the end of the process.

2.14 Empirical Review

2.14.1 NPD Process and Model

Experts argue that the easiest types of NPD are the ones that aim to reduce costs or improve existing products in view that product technologies and markets are well-known (Jorgensen & Messner, 2009). On the other hand, the hardest way of new product development is the new entries and new to the world products. In view that markets and technologies are new for the company such NPD processes require much time and effort. (Crawford & Benedetto, 2008)

NPD has evolved considerable in the last 30 years. During this time, however, the focus of the process was shifting from one aspect to another. Thus, during the 80's the main aspect for companies was the quality of their product; in 90's they were more concerned about the re-engineering; and nowadays companies emphasize more on the aspect of "time to market", shorter time between developing of a new product and its launch to the market, companies that are not able to launch a new product to the market fast, might lose the competitive advantage (Lewis & Wong; 2004).

Cooper and Edgett (2010) there are five stages and five stage-gates in there model. The authors argue that such a stage-gate model *—is a conceptual and operational road map for moving a new-product project from idea to launch. Stage-Gate divides the effort into distinct stages separated by management decision gates (gate keeping). Cross-functional teams must successfully complete a prescribed set of related cross-functional activities in each stage prior to obtaining management approval to proceed to the next stage of product development.*

However in the latest study Robert Cooper explains that the Stage-Gate model is a process that can be modified depending on the complexity and size of the project. For instance in a low risk project the stage one and two can be assessed together, continuing with stages three and four and concluding with the fifth stage. This system would have three gates instead of five (Cooper; 2013).

Other author Mac Cormack et al. (2012) fully supports the idea of companies modifying the Stage-Gate model in accordance with their needs. In a shorter process the company would save time, money and would be accessible for all different types of projects. One product development or launch process would not be reliable if it is always requiring the same steps. Different products have different characteristics and naturally they differ in the requirements. Such claim has been also studied by different authors who have come up with the same conclusion; one strategy does not fit to all products (Mac Cormack et al.; 2012).

(Crawford and Benedetto; 2008, Shepherd and Ahmed; 2000) also agree that the idea of companies modifying the Stage-Gate model in accordance with their needs that there are some review points between these phases where everyone who is involved in the process meet together and discuss the development of the process.

Cooper (1990) strength that new ideas can come from customers, consumer complains, by brainstorming with marketing, sales and technical staff. The ideation activity that a company undertakes to generate a set of product concept represents the concept generation.

2.14.2 NPD marketing mix

Many researchers agree that product strategy play a critical role in a company's performance in the global market. Two main approaches to product strategy can be found: to develop products

(standardization) or to adapt products specifically to each market (adaptation) (Zou & Cavusgil, 2002; Ranchhod & Gurau, 2007; Powers & Loyka, 2010).

Furthermore researcher review factors that influence this decision. Focus of this study however will be on product strategy as well as the rest of elements of marketing mix. Given the importance of product adaptation in international markets theoretical review of these elements can give valuable inputs for NPD process understanding and analysis: necessity of product adaptation influences process of technical stages of NPD process while necessity of promotion, distribution and price adaption are important issues during marketing strategy development and launch stages.

Marketing strategy is global if product offering, promotion, price and distribution across different countries are standardized. Proponents of this perspective argue that customers all over the world have some similarities that created by advanced communication technology and transportation (Levitt, 1983; Zou & Cavusgil, 2002).

Viswanathan & Dicksson (2007) argue that success of new products depends on three factors: transformation of competitive advantages between local markets, differences in customer preferences and business environment. These factors will be reviewed below.

Ability to transfer competitive advantages can be illustrated with an example. The low price of the product on the market “A” can be perceived as high by customers from the market “B”. In this case price should be adapted to the market B in order to save this competitive advantage. The sources of competitive advantage can be found in a product itself or in other marketing mix elements (Viswanathan & Dicksson, 2007).

Authors argue also that customer homogeneity should be perceived not as similarity in customer needs, but similarity in customer response to marketing mix. Customers of market “A” perceive a product as one with high quality as well as customers from market “B”. In this case the product can be introduced to the market B without any changes, so standardized product strategy can be implemented. But in a case of different quality perception between markets “A” and “B” some adaptation of marketing mix elements will be required. Homogeneity in all four elements should be examined (Viswanathan & Dicksson, 2007).

Taking a contrary view Zou and Cavusgil (1993) suggest that such factors as technology, culture, competition, and international experience of the company should be reviewed in order to take decision about standardization/adaptation strategy. Thus technology intensive industry should seek to standardization of a product and promotion in order to take advantages of the economies of scale. If the product reflects culture differences among customers, than it needs to be adapted. In case of high competition in the market, all marketing mix elements should be customized for a better integration of the customer. However, in a case of superior product, strategy of standardization can be implemented; Finally, a company can implement standardization strategy to the market if it does not possess enough information about this market in order to implement some adaptations (Zou & Cavusgil, 1993).

Levitt (1983) argues that *price* must be the most difficult element of the marketing mix for standardization. Suggest to use “premium pricing” when demand for the product is strong and competition is weak; and use “competitive pricing” strategy when demand is weak and competition is high. Pricing adaptation usually depends not only on costs but on competitors’ prices, local taxes and local market factors.

In addition Thomas L. Powers and Jeffrey J. Loyk (2010) indicate that distribution is significantly influenced by internal company factors such as subunit cooperation and others. *Place adaptation* involves changes in distribution, inventory, and transportation decisions in local markets. *Promotion adaptation* can be closed connected with product adaptation. It is often related to culture differences among countries, religion, regions, differences in customer’s consumption process, language and so on. Authors also found that the *product* itself is the most global element of marketing mix that does not require so much adaptation as other elements. While distribution appeared to be the most local element with the highest need of adaptation. (Thomas L. Powers and Jeffrey J. Loyk; 2010)

2.14.3 NPD Team

Importance of this sub-part

As it can be seen through, the role of the personnel who are involved in the NPD process is significant and these empirical concepts provide significant inputs for this study. This part

presents empirical framework regarding the different roles of experts who are involved in the NPD process, and for further reference the detail establish in the conceptual framework.

This issue was reviewed in view that student researcher believe that the personnel has a significant role in the NPD process and there is some different between Kality food s.c new product team and what the theory says. In addition, student researcher used to answer my research question since how is NPD process managed in the company. For the purposes of this research, an expert who has this position and involved in the NPD process was interviewed.

Different authors divided NPD team into four parts: role of top managers, role of project managers, role of product developers and role of the marketing.

Many researchers (Lewis & Wong; 2004, Barkley; 2007) underline the fact that the top management of a company is the starting point of the NPD process. Top managers must create excellent conditions for the project team. They should give enough resources for the development of the project and keeping the milestone unchanged through the life-time of the project. (Lewis & Wong, Accelerated Project Management, 2004) On the other hand, however, the top management should not be involved too much in the management of the NPD process. *“projects are no more successful in the marketplace than other projects despite the added support of the top management”* (Milton, Griffin, Castellion, & Anschuetz, 1996)

Richman (2002) argues that a successful project manager has to be strong in five areas. People skills, Integration skills, project management skill, Technical skills, knowledge of organization, Integration skills these skills are important because they assuring planning and managing the project

Clark and Fujimoto (1991) concluded in their article that there are some models of integration of product manager's work *Traditional functional structure, Lightweight product manager, Heavyweight product manager, Project execution team structure*

Crawford and Benedetto (2008) say that “the role of the marketing personnel changes and accelerates as the product nears the end of the development phase and moves closer to launch” Marketing experts are usually involved into the NPD process from the beginning, as they should handle the market for that product (Crawford & Benedetto, 2008).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Research approach and Design

According to Babie (2009) there are three types of studies according to their purpose: exploratory, descriptive and explanatory. The first one is used in order to clarify some concepts, find explanations, assess phenomena or seek for new insights. The main goal for such research is to develop a theory. Such kind of research is known as a very flexible one. Second type of research, the descriptive one, seeks to describe people, events or situations. The researcher must have a clear picture of phenomena before conducting the research. Thus all required changes must be done before the process of research has started. The last type, explanatory research, provides the cause and effect relationships between variables (Babie, 2009)

The main goal of this research is to find facts how the NPD process run in Kality Food S.C how the NPD model looks and implementing in the company, and also tray to show whether the company's new product fulfill customers need and want or not. The research that seeks to clarify the relevant theory and understand the problem classified under descriptive research so that this study used descriptive research design method. Because it would enable the student researcher to gather and show bright information and provide information for formulating more sophisticate revision. In addition Descriptive researches are valuable in: providing facts on which scientific judgments may be based, providing essential knowledge about the nature of objects and persons, for closer observation into the practices, behavior, methods and procedures, playing a large part in the development of instruments for the measurement of many things, formulating of policies in the local, national or international level (Calmorin and Calmorin; 2007)

The main difference between quantitative and qualitative data is the difference between numerical and non-numerical data. (Babbie, 2009; Kent 2007) Quantitative research requires gathering of numerical data that can be studied in a less biased statistical way. The main advantage of quantitative research is ability to count gathered data and to implement some statistical models. Quantitative research is characterized by deductive relationship between theory and research (Bryman, 2007) that means that a researcher should have understanding of a

researched issue before starting the measurements. Finally, a set of numbers will be collected and after a statistical analysis they will lead to results. Qualitative research is the one that emphasizes words rather than quantification during collection and analysis of data. Qualitative research stresses on the understanding of the words rather than numbers and seeks to answer “why” and “how” questions. Kent clarify Compared to quantitative data, the qualitative one is, from one hand, richer and more detailed, and from the other hand, contains information from much less number of respondents, potential of its creativity as the main strength of qualitative data. Further, open ended questions and subjective nature of qualitative research is strength. The qualitative research is going beyond the description on a general level to a more detailed and full research (Kent, 2007).

From other hand, the advantage of a quantitative research is its accuracy and explicit observations. Quantitative research allows aggregating, comparing and summarizing the data, it gives possibilities of a statistical analysis, ranging the data and implementing different mathematical models. Thus quantitative research provides numbers instead of words in order to measure some quality (Babbie, 2009).

Based on the fact that the objective of this research is to realize NPD process, primarily qualitative research was chosen as a research method but it's not mean that quantitative research method is forgotten because student researcher use quantitative method to support the interview response and also increase reliability, accuracy of the finding by distribute questionnaire for end users and consider it as “voice of consumer”. So that student researcher has applied both the quantitative and qualitative methods. The qualitative help to interpret ideas which gather through open ended question, this aid in addressing the respondents ideas which might been raised in the cloth ended questions so as to have a wide perspective of consumer interest, also It allowed student researcher to understand this process more deeply and get in-depth information from interviewees, moreover this approach gave researcher an opportunity to ask additional questions that could appear during the interviews. Finally, qualitative research was more appropriate for this research due to its nature: it is not reviewing the cause and effect of a problem, but it is more associated with understanding and making sense of it. In addition student researcher gathered data from final consumer of the company who purchase biscuit from the company's sells shop by using questionnaire. As result, quantitative measurement method used to interpret responses

which were gathered through close ended question, So that the final suggestions are not based only on the literature review but are also supported by end-users judgment of the company new biscuit that already lunch in the market. By cross checking qualitative and quantitative data response student research come up with trustful, relevant and reliable conclusion and recommendation.

3.2 Population, Sample Technique, and Sample Size

Population

Marketing manager and employers who participate on new product development process of the company's biscuit are considered as major target population of the thesis and also final consumer who purchase biscuits of Kality Food S.C. were considered as other participant of this study.

Interview with the marketing manager considered as main source of data. As long as the company has no registered or list of final consumers, student researcher forced to declare final consumer size is infinite, or it is difficult to list down all population(final consumers)so that only selected end users were participant of this study. Student researcher believe those participant consumers are representative and increase reliability, accuracy, trustfulness of the finding and also help to understand clear observation of the facts about the company new product success and acceptability.

Sample Technique

In order to find a proper sample technique, one out of two approaches should be chosen: probability or non-probability sampling approach. The main difference between two of these techniques is the fact that in the first case the chance of each unit being selected from the population is known and usually this chance is equal for all units. In contrast, the probability of each unit from the non-probability samples is not known, so generalization will be done not on statistical grounds (Saunders, 2007). Often qualitative researches are associated with usage of non-probability sampling, even though probability sampling is used sometimes as well (Bryman, 2007).

Since Kality Food S.C has large number of final consumers in Addis Ababa it makes difficult for student researcher to manage and list all population, so that student researcher conducted non-

probability sampling approach. Among the non-probability approach student researcher used convenience sampling technique because it uses for testing and gaining idea or rough impression about subject of interest and also student researcher meet respondents inside the company's sales shop which sell only the company's product because it's the perfect place to get the right consumers at right time.

Sample Size

Based on the recommendation provided by Yamane (1967), with respect to non-probability sampling approach when the population of the study is not defined and for large population size, although tables can provide a useful guide for determining the sample size, you may need to calculate the necessary sample size for a different combination of levels of precision, confidence, and variability. When the population is more than 100,000 for Precision (e) of $\pm 6\%$ and Where Confidence Level is 95% and $P=0.5$ and to determining sample size (no) it's applicable to use one of several formulas (Yamane, 1967).

For populations that are large, Cochran (1963) developed the Equation to yield a representative sample for proportions. Which is valid where (no) is the sample size, Z is the abscissa of the normal curve that cuts off an area α at the tails ($1 - \alpha$ equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population, and q is $1-p$. The value for Z is found in statistical tables which contain the area under the normal curve (1.96).

$$n_0 = \frac{Z^2 pq}{e^2}$$

So that student researcher by use recommendation of (Yamane; 1967) and formula by (Cochran; 1963) determine sample size as follow. Taking 95 % confidence level Z is termed to be 1.96, with a precision of $\pm 6\%$ and assuming $p=0.5$ and q is 0.5 Putting the figures in the equation the sample size is determined to be 266. This means that two hundred sixty six (266) customer respondents have been taken as a reliable sample size for this study but only 239 questionnaires

were collected because of different reasons as long as 90 % of the questionnaires are returned the final conclusion is depend on 239 respondents. In addition Based on the recommendation provided by Malhotra (2006) with respect to non-probability sampling, when the population of the study is not defined and for large population size, student researcher can use minimum size of 200 as a sample so that 239 found valid for this study.

3.3 Type of data Collected

Student researcher employed both primary and secondary data for this study. The primary data collected from final consumer by using questionnaire and also interview with the marketing manager and other NPD process participants of Kality Food S.C. In addition to the primary data student researcher also used secondary data that obtained from different sources and publications such as book, journal, and articles.

3.4 Method of data Collection

Methods and approaches of qualitative data analysis depend on the nature and purpose of the research (Babbie; 2009). Kent highlights such qualitative research methods as interviews, observation, ethnography, consultation and focus groups (Kent, 2007).

Primary data enable me to understand the reality and investigate the NPD process through what participant tells me about the process and how the company NPD team run this process inside the company, And reality was comes from student researcher effort by digging out data from Kality food s.c final consumer and NPD squad by using different data gathering tools and understand current situation of Kality food s.c new product development practice whether it's on the right track or not, and comp up with some recommendation by using stage gate model and theoretical frame work that presented in chapter two of this thesis.

To get first hand information which is important for this study, student researcher collects the primary data through guide interview. The interviews were conduct with the company's marketing manager and other NPD process participant of Kality Food S.C. Interviews as a main source of primary data were chosen in view that this data collection technique was able to provide serious, detailed and valuable information. Moreover by conducting structure interviews student researcher keep the right focus on research topic.

In addition to the interview, 239 questionnaires which contain open and close ended questions were distributed to final consumers; in a sense that student researcher gathered primary data from final consumer who purchase the company's biscuit for personal consumption by using questionnaire and for ethical purpose the student researcher has explained the purpose of the research to make the respondents feel confident enough in providing the necessary information. Some questionnaires were distributed to the respondents through the company's sales persons who work inside Kalitys.c sales shop because it's the right place to get the right consumers at the right time and the rest of the questionnaires distribute by student researcher.

3.5 Data Analysis Method

Data was entered in SPSS and arranged for statistical analysis. After that student researcher interpret the results so as the information can be put in use of decision making and been help full for the recommended NPD model. After reviewing the literature from different sources and by considering stage gate model, student researcher studies the current situation of the Company. The qualitative review conducted with the marketing manager were used for better understanding of how the company is managing the NPD process, and what is expected to being developed in the near future. Qualitative data analysis specifically narrative was used to analyze the response obtained from open ended questions and interview all collected data is firstly analyzed and then paired with the literature implication. The data, which was gathered through closed ended questions, was analyzed using the statistical tools which include percentages, frequency, mean, standard deviation, variance and correlations. The data, which was gathered through open ended questions, was narrated to support the findings of quantitative once.

Other important data, which are essential for the results of this thesis, comes from end users by using questionnaire; in addition to interview with the company employees student researcher includes external opinions from consumers. The experience and interaction with the end-users makes the finding very valuable for the outcome of this report. The feedback received during the gathering process from the end-users regarding Company biscuit has been collected and used as "the voice of the customer" and put in terms of frequency, percentage, standard division and variance has been presented in table.

3.6 Reliability Test

As Andrew, Pedersen, and McEvoy, (2011) adopted from (Nunnally and Bernstein, 1994), a popular method for measuring the internal consistency reliability a group of items is cronbach's alpha coefficient, often referred to as simply cronbach's alpha or cronbach's α . In short, cronbach's alpha measures how well a set of variables or items measures a single, uni-dimensional latent construct. It is essentially a correlation between the item responses in a questionnaire; assuming the statistic is directed toward a group of items intended to measure the same construct, cronbach's alpha values will be high when the correlations between the respective questionnaire items are high. Cronbach's alpha values range from 0 to 1, and, in the social sciences, values at or above 0.7 are desirable, but values well above 0.9 may not be desirable as the scale is likely to be too narrow in focus.

| Item | Cronbach's alpha | Number of items |
|------------------------------------------|-------------------------|------------------------|
| All variables | 0.855 | 20 |
| General NPD | 0.753 | 5 |
| New product attributes | 0.728 | 7 |
| Factors affecting Consumer choice | 0.740 | 8 |

The data on the above table shows that all cronbachs' alpha variables result is 0.855 this shows that the questionnaire variables considered on this research is reliable. Regarding on the general NPD the cronbachs' alpha shows 0.753 this implies that the result of the questionnaire variables are reliable, and new product attributes result 0.728 The third item that is Factors affecting consumer choice, the cronbachs' alpha result is 0.740 this implies that the result also complement the reliability of the questionnaire variables and the totality of the questionnaire is reliable.

CHAPTER FOUR

ANALYSIS OF QUALITATIVE AND QUANTITATIVE DATA

This part of the research paper deals with analysis and interpretation of the collected data through questionnaires (open ended and close ended questions).

Questionnaires were distributed to final consumers who purchase biscuit for consumption. Out of 266 copies of questionnaires distributed 239 (89 %) has been filled out thoroughly and returned, the rest could not be collected for different reasons. The data, which was gathered through closed ended questions, was analyzed using the statistical tools which include percentages and frequency, mean, standard deviation, variance and the data, which was gathered through open ended questions, was narrated to support the findings of quantitative once.

4.1. Quantitative Analysis

4.1.1. General Profile of Respondents

From the data collected 168 (70.3 %) from the total of 239 respondents are males whereas the rest 71(29.3 %) respondents are females. This shows that males purchase the company biscuit than women consumers inside the sales shop of the company. Regarding the age structure of respondents 16 (6.7 %) are under age, 57 (23.8 %) are in the age 19-30, respondents age of 31-42 count to be 131 (54.8 %), 35 (14.6 %) of the respondents are in the age of 43 and above. This implies that the majority of respondents who purchase the company biscuit are under the age category of 31-42 this is good advantage for the student researcher finding because peoples in this age are more responsible and rational on their behavior than other age group.

Concerning the educational background of respondents, 26.8 % of respondents are primary, 32.2 % of them are high school completed, 25.1 % of them categorized in a group who have certificate, 13.8 of the respondents are first degree holders, and the last 2.1 % of respondents are second degree and above.

In this measurement student researcher tray to show how long the respondents have been consumers of Kality Food S.C biscuit, from the data gathered from 239 consumers 92 of them know the company biscuit less than a year, 78 of them were customers of the company biscuit

for the past 2-3 years, and also 47 of them 4-5 year, 18 respondents from 239 under 6-7 years, only 4 of the respondents were aware and consume the company biscuit for the past 8 and above years. This shows that most of the consumers are new for the company so the company have to work harder than ever to make them loyal consumers in the future if not they are sensitive to shift to competitor products but only 22 respondents where hard core loyal consumers those stay with the company more than 6 years, indirectly this shows that even if the company stay in the business for many years but the ratio show consumer who visit the company's sales shop frequently are new ones, it gave sense that the company have gap on holding current customers.

4.1.2 General New Product Analysis

As it is shown in the table attached in the last part of the paper, (21)8.8 % and (58)24.3 % of the respondents strongly agreed and agreed that they easily differentiate the company's biscuit from others in the market, (10)4.2 % of the respondents are neutral, the rest (38)15.9 %, and (112)46.9 % of the respondent replied disagree and strongly disagree about it. The mean data is 3.68 close to 4 which strengthen the data obtained, most of respondents are disagree that the company biscuit is not easily differentiated by them or don't have any additional attribute to make the differentiate it easily form competitor biscuits and the SD and Variance is 1.476 and 2.177 respectively by which relatively the responses are somehow inconsistency.

In the table shown at the appendices, in perceiving the company biscuit as a new one in the market only 13 of the respondents agreed and strongly agreed, 2 of them neutral and from total of 239 respondents 224 of them strongly disagree and disagree that the biscuits are not perceived as a new one by consumers mind. By using the theory in the past chapter new product must perceive by the consumer as new one but here the data show that the Kality food s.c biscuit lack something to convince consumers that the product are new. The mean value which is 4.47 approaches to 5 indicates that majority of the respondents strongly disagree that the product is new for them and don't perceive the new biscuit as a new one when they found it in the market. Hence one can conclude from this that, there is no balance between the response of customer acceptance of new product as a new one but the company perspective the product are new products and launch to market as a new one. In addition to this the SD is .0864. This implies that the response of the respondents is consistent from the response of the average respondents.

From the table we can see that 8(3.3 %) have strongly agreed and 10(4.2 %) have agreed that the new biscuit come with superior value than others. 128(53.6 %) strongly disagree and 88(36.8%) disagree on the issue while the rest were neutral 5(2.1%). The mean value which is 4.33 approaches to 4 indicating that majority of the respondents says that the new biscuit have no special attribute to make them believe that it have superior value than competitor biscuits in same market. Hence one can conclude from this that, there is consistency among the respondents that they can't observe or experience the new products superior value the company adds to attract them. In addition to this the SD and Variance is .959 and 0.920 respectively. This implies that the majority of response has near value from the response of the average respondents.

From the total of 239 respondents; 28 that is 11.7 % answered positively, and in reverse 202 of them 84.5 % had negatively responded that means they don't see any innovation on the biscuit. While the rest 9 of the respondents that is 3.8 % were neutral regarding innovativeness of the product. The mean value which is 4.19 indicating that, the respondents believe that the company's new biscuit in not innovative at all so, one can conclude from this that the respondents are consistent on buying competitors' biscuit than Kality food S.C biscuits. In addition to this the SD is 1.19 and variance of 1.41 this implies that the response of the respondents is conflicting or more move away from the response of the normal respondent

As it is shown in the table on aggregate 108 (45.2 %) strongly agree and agree that there expectation much with the new product performance. On the other hand 112 (46.9 %) of the respondent disagreed and strongly disagreed that new biscuit match with their expectation. 19 (7.9%) are neutral. The mean data is 2.95 close to 3 which balanced data is obtained and the SD and Variance is 1.7 and 2.9 respectively by which relatively the responses are inconsistence. Even if the response is balanced and 108 respondents believe that the company biscuit match with their expectation student researcher don't take is serious because majority of same respondents response negatively for other attributes like differentiation, perceive the product as a new, design, attractiveness, and innovativeness of the company so the reason that there expectation and the product performance match may come from they have less confidence on the company to produce a product that can satisfy their higher expectation, that means that their past experience with the company may make their expectation in the bottom line.

4.1.3 New Product Attributes

only 2(0.8 %) respondents are neutral, other respondents reaction on the company's biscuit whether its good in design or not, only 14(5.8 %) respondents believe that the company biscuit come up with good design, while the rest of the respondents 223(93.3 %) believe that the company biscuit design is poor. The mean value which is 4.74 approaches to 5 indicating that the biscuit design is poor and few of them reply against the issue. Hence one can conclude from this that, there is consistencies among the respondents on the company's new biscuit are poor in design so the company have to see this issue as serious one and must modify it as soon as they can. In addition to this the SD and variance are 0.859 and 0.737 which shows that the response is not conflicting or less diverge from the response of the average respondents.

From the data obtained majority of the respondents (68.2 %) have negative attitude towards attractiveness of the biscuit size. Only (16.8%) of the respondents have positive responded to this question. This implies consumers are not attractive by the size of biscuit so that if they get any other biscuit which is attractive than Kality food S.C product they will have no reason to stay with the company, in addition (15.1 %) where neutral The mean value which is 3.89 approaches to 4 indicating that respondents say that they purchase the company's new product even if it's size not attractive than others biscuits in the market and some of them are impartial. Hence one can conclude from this that, there is no strong consistency among the respondents on the issue. In addition to this the SD is 1.236 which shows that the response is inconsistent or more turn from the response of the regular respondents.

From the total of 239 respondents; that is 22 (9.2 %) don't need fasting biscuit, and in reverse 184 of them (77 %) need fasting biscuit. while the rest 33 of the respondents react that is 13.8 % were neutral regarding to buy fasting biscuit on Wednesday and Friday. The mean value which is exactly 4 indicating that respondents say that they don't purchase the company's biscuit every Wednesday and Friday cause this days are the fasting days and some of them are not sure and the rest replied against them. In addition to this the SD and variance are 1.136 and 1.290 respectively shows that the response is inconsistent or more deviated from the response of the majority respondents. Hence one can conclude from this that, there is no strong consistency among the respondents on the issue, this indicate that even if student researcher don't ask about their religion but indirectly from 239 respondents above 184 of them are orthodox cause in Ethiopian

orthodox attitude Wednesday and Friday are fasting days so as long as the company offer them fasting biscuit the sales volume of the current biscuit will decrease on this days.

As it is shown in the table attached in the last part of the paper, 101 of the respondent that is 42.3 % and 129 of them that is 54 % responded disagree and strongly disagree respectively and 4 of them that is 1.7 % and 3 of the respondent that is 1.3% strongly agree and agree respectively while 2 of the respondent that is 0.8 % are neutral. When we aggregate the response 230 of the respondent that is 96.3 % respond against and only 7 of them that is 3 % responded positively. The mean value which is 4.46 indicates that majority of the respondents dislike taste of the biscuit. In addition to this the SD is 0.7 and Variance shows 0.5 this shows that the response of the respondents is inconsistent or less deviated from the response of the average respondents. Hence one can conclude from this that, the Company produce its new biscuit without considering consumer taste, as long as there is serious dissatisfaction on the taste of the biscuit consumers may not buy the product again and surly this will open big opportunity for other competitor company to attract this customers easily.

As it is shown on the attached table at the appendices 1.7 % of the respondents agreed, 2.1 % respondent strongly agreed and 3.8 % are natural while 47.3 % and 45.2 % of the respondent disagree and strongly disagree. This implies that the company biscuits flavor not accepted by sample respondents at all. The mean value which is 4.32 approaches to 4 indicating that majority of the respondents say that the company develops different flavors without customers interest so that its meaningless for student researcher to produce a product without considering customers flavor as long as their target is making profit in long run. In addition to this the SD is 0.804 and variance 0.646 and this implies that the response is incompatible or less move away from the response of the mass respondents. Hence one can conclude from this that, flavor is key factor to make consumers satisfy and make them buy the product frequently. as long as there is consistency among the respondents that they are really dissatisfied by the flavor of the new biscuit the company rather than fighting with consumers to make them purchase the product it's advisable to change the flavor of the new product at all cause almost all respondents react together that they are not interested on the flavor of the biscuit at all.

As it is shown in the table attached in the last part of the paper 110 of the respondent that is 46 % and 94 of them that is 39.3 % replied strongly disagree and disagree and 22(9.2 %) of them

responded neutral on the issue of the biscuit crispiness, the rest 8 of the respondent that is 3.3 % and 5 of them that is 2.1 % of the respondent strongly agreed and agreed. The mean value which is 4.23 indicating that, the respondents don't like the crispiness of the biscuit that much so, one can conclude from this that the respondents are consistent on not attracted by the crispiness of the new biscuit. In addition to this the SD is 0.943 this implies that the response of the respondents is consistent or less deviated from the response of the average respondents. And the variance show 0.890 that relatively there is turn between them.

For the question asked if the biscuit is stylish or not 10 (4.2 %) have answered strongly agree, 20 (8.4 %) respond agreed and 21 (8.8 %) of the respondents are neutral. 65 (27.2 %) and 123 (51.5 %) of the respondents replied disagreed and strongly disagreed. The mean value which is 4.13 indicating that, the respondents agree on the new biscuit is not stylish for them. In addition to this the SD is 1.141 and variance of 1.301 this implies that the response of the respondents is inconsistent or more move away from the response of the average respondents. To summarize this student researcher believe that the negative response comes not because the product is not stylish because the biscuits are so stylish than competitor biscuits but the problem that the company face is their target consumers are children's, for them it may be stylish but for older peoples it can't be cause it's not even comfortable to consume it everywhere and it may reflect their social status negatively, that means that in our society biscuits are considered as children's snack than adults.

4.1.4 Factors Affecting Consumer's Choice

From the data obtained one can clearly observe that color has huge influence on customer's psychology in point of purchase. The more attractive the color is the higher probability the product has to be purchased if not at least the customer will have the appetite to examine the product in detail which is better than not been seen at all. The mean value for the data is 4.00, which means the average respondents are convinced that color is one of the important aspects in purchasing the biscuit product, with the standard deviation of 1.285 and variance value of 1.403. From the data obtained majority of the respondents (70.7 %) have negative attitude towards the package color that is consumed by final consumers, (16%) where neutral the rest of the respondents have positive responded to the question. This implies customers believe that the package color is not attractive to choose it from the shelf.

From the data obtained out of 239 respondents 165 suggest that the package is easy to access and will encourage them to purchase the product and 48 of respondents argued it will be better if the existing package of the biscuit has changed, so as customers will be motivated to purchase more of that brand, still 26 stay neutral. The data mean value is 2.23 it shows that respondents agree that the package is easy to access the main biscuit and the SD is 1.274 which means that the data provided inconsistency among the questionnaires and the variance is 1.623. This data help Student researcher to say that the company package fit consumer's preference so it's better to keep it easy as it is.

For total of 239 respondents 122 of the respondent that is 51 % and 62 of them that is 25.9 % replied disagree and strongly disagree that the package of the biscuit is not friendly with the environment and 8(3.3 %) of them responded neutral on the issue of the environment, the rest 8 of the respondent that is 3.3 % and 39 of them that is 16.3 % of the respondent strongly agreed and agreed. The mean data is 3.8 close to 4 which strengthen the data obtained that most of the respondents believe that the package is not friendly with the environment so one can conclude that the company should have to come up with new package that match with the environment, and the SD and Variance is 1.101 and 1.212 respectively by which relatively the responses are somehow inconsistency and more dispersed. More than 75% of respondents believe that the package is not friendly with the environment

Again For total of 239 respondents 183 of the respondent that is 76.6 % and argue that the biscuit brand is easy to recall and they are good with it and 27(11.3 %) of them responded it's hard to recall the company's biscuit name, 29(12.1 %) stay neutral. The mean data is 1.9 close to 2 which strengthen the data obtained that most of the respondents believe that the brand name is easy to recall and pronounce it, and the SD and Variance is 1.202 and 1.444 respectively by which relatively the responses are one way or another inconsistency. From this student researcher can terminate that most of participants like the name of the biscuit and it's easy for them to recall and remember, in other word customers are really satisfy and not have that much complain on the brand name.

As it is obvious price is the most sensitive element, at least for most of the individuals, customers are willing to pay the current price. The data obtained supports the argument because most of the respondents 213 have agreed that they will purchase the product if the price stay as it is. Only 16

believe it's not fair price. The mean data shows 1.68 close to 2 that most of the respondents consider that the price is fair for them, to support the data obtained the SD and Variance is 1.017 and 1.034 respectively by which relatively the responses are no matter how the price is but its fair for most of consumers, but still the data show respondents are inconsistency on this issue.

From the data we can see that 31(13 %) have strongly agreed and 67(28 %) have agreed that if the company raise the price in any rate they will pick competitors product from the shelf. 31(13 %) strongly disagree and 83(34.7%) disagree on the issue that even if the company increase the price from their selling price they stay loyal and keep buying. the rest were neutral 27(11.3 %).The mean value which is 3.07 indicating that, the respondents may or may not shift if the company shift its price in any rate, one can conclude from this that the respondents are nonaligned that means they are between shift or stay so it's better for the company to stay as it is . In addition to this the SD is 1.291 and variance of 1.668 this implies that the responses of the respondents are more deviated.

Again For total of 239 respondents majority of them 216 of the respondent that is 90.4% and argue that company's biscuit it's not available in any shop in Addis Ababa and 9(1.7 %) of them responded it's not hard to find the biscuits anywhere they want, 14(5.9 %) stay neutral on this issue. The mean value which is 4.56 close to 5 it indicating that, the new biscuit is not available in any shop where ever the respondents are, one can conclude from this that the company is weak in distribution. In addition to this the SD is 0.833 and variance of 0.693 this implies that the responses of the respondents are not more turn aside instead majority of them agree that the new biscuits are not convenient for them .

Again For total of 239 respondents 150 of the respondent that is 62.8% start purchase after they see the advertising of the biscuit and 45(28.8 %) of them responded advertising is not their motivation to buy the product, 44(18.4 %) stay neutral. The mean value which is 2.38 proves that, respondents start purchasing the company's new biscuit after the advertising done to aware consumers. In addition to this the SD is 1.366 and variance of 1.866 implies that the responses of the majority respondents have the same opinion that the advertising pushes them to consume.

4.1.5 Relation between variables

The main goal of this correlation is to demonstrate the new product performance association with final consumer's preference and to associate it with qualitative analysis that gather by deep interview use it for recommendation. So that the New product performance of the company is the dependent variable of this thesis and student researcher try to categorize factors affecting consumer's preference as Independent variables these variables are: taste, flavor, crispiness, stylish, color, price, availability, advertising and so on. Correlations among all variables are displayed in Table at the end of this thesis.

4.1.6 Relation between new product performance and product attribute

There is a positive correlation between new product differentiation and new product attribute ($r=0.248$) taste of the new biscuit, ($r=0.392$) offer fasting biscuit, ($r=0.309$) crispiness of biscuit, have relatively lower relation to differentiation the company's new biscuit from other biscuits In other way variables like ($r=0.723$) attractiveness of the biscuit size, ($r=0.505$) stylishness of the biscuit with significant level of ($p < 0.01$) have strong relation for differentiating the company's biscuit from other biscuits in the market. This means that, Kality Food S.C. while designing their product should put in considerations on these important variables because all variables under product attribute have positive relation for differentiating the company's biscuit in the market. It might simplify and clearly explain how consumers differentiate the company's biscuit from competitors' in the market

There is also positive correlation between new product superior value and all product attributes, ($r=0.321$) taste of the biscuit, ($r=0.307$) crispiness of biscuit, which the program translates as a relatively weak correlation between superior value but ($r=0.481$) offering fasting biscuit, ($r=0.495$) attractiveness of the biscuit size, ($r=0.447$) stylishness of the biscuit and ($r=0.429$) design with person correlation magnitude significant level of ($p < 0.01$) relatively have strong relation for offering superior value than other biscuits in the market. This means that, Kality Food S.C. while producing their product should have kindness on this product attributes because all variables have positive impact to have superior value on the company's biscuit. The company can use this Product attributes to attract new consumers and satisfy current customers by providing superior value directly to safe guarded their future profitability.

There is a muscular correlation between consumer expectation and new product attributes ($r=0.577$) attractiveness of the biscuit size, ($r= 0.418$) taste of biscuit, ($r=0.404$) stylishness of the biscuit have relatively strong relation with what consumers expectation. This implies that the above elements are what consumers seriously want to satisfy their desire, so the company must produce a biscuit that have special features for consumers to differentiate and attractive them to purchase the product frequently.

4.1.7 Relation between product performance and factors affecting consumer choice

There is a positive correlation between new product superior value and factors affecting consumer choice, ($r=0.229$) color of package, (0.229) package friendly with environment, ($r=0.174$) availability all under significant level of ($p= < 0.01$) variables have weak relation to offer superior value for consumers. This correlation seriously advice the company to focus on consumers need and want and have to work hard on market analysis to investigate what competitors are doing and what they offer for consumers, because as long as all company's in same industry launch their product in same market Kality Food S.C. have to produce biscuit that offer superior value by using new technology and increase innovativeness of employers to match what consumers expect from the next new product.

Even if it is not strong but color of the package 0.281 , brand name of the biscuit 0.223 , fair price 0.264 and easy to access the package 0.417 have positive correlation with differentiating the company biscuit. This means that, Kality Food S.C. while designing their product should put in to considerations on package and brand name of the biscuit. These variables might make things easier and visibly explain the company biscuit for consumers.

in other way As we can notice from the correlation table, the direction of the relationship between some variables with expectation of consumers are negative, which means that there is a negative correlation – high scores on one variable are associated with low scores on the other. The relationship between consumer expectation and environmental friendly package is the first negative correlation ($r = -0.08$, $p=<0.05$). These numbers mean that the when Kality Food S.C makes a product package more friendly with the environment, the more negative consumers expectation match with the product. Going further we can notice a negative correlation between consumer expectation and shift consumers to other company product if price increase in any rate

by company ($r = -0.303$, $p = <0.05$), so if the company increase price in any rate, the more they are toward it, There is also negative relation between the consumer expectation and availability of the product in every shop ($r = -0.099$, $p = <0.05$), which signify the more the company make the product available in every shop, the more negatively they are toward it.

Negative relation between elements also observed in the correlation table, the direction of the relationship between the variables is mostly negative, which means that there is a negative correlation – high effort on one variable are linked with low scores on the other variable. The relationship between the company produce different in consumers flavor interest and easy to access the package is negative correlated ($r = -.047$, $p=<0.05$). These numbers mean that the more flavor biscuits the company produces; the more negative consumers can access the package. Going extra we can notice a negative correlation between flavor and easy to recall the brand name of the biscuit ($r= -0.141$, $p = <0.01$), so the more different flavor that match consumers preference produced, the more negative affect easy to recall the brand name, which sounds logical, but now was also proven through numbers. There is also negative relation between the flavor and fair price ($r = -0.033$, $p = <0.05$), which signify the more flavor the company produce, the more negatively it become fair price for consumers still it gave sense And also flavor of the biscuit and availability harmfully correlated ($r = -0.228$, $p = <0.01$), this implies if the company focus on producing different flavor to fit consumer taste, the availability of the new product will affect negatively.

4.2 Qualitative Analysis

The development phase already exists in the company but it is not well structured and presented in the time of interview. Company's marketing managers have good knowledge about product development stage and marketing strategy, surprisingly it is based on the Stage-Gate model.

Does the company produce products those are based only on customer need and market research? According to the interviews even if the main source of idea comes from management suggestions but still the management team believes that during the customers visit, they can define easier the customer needs and want but the drivers work as sales persons of the company, means that drivers are not skilled on doing the professional sales activities. That's why even if Company management team sees customer visit as the main inspiration source for the new

products ideas but still they don't use it as well, cause the management don't have confidence on the drivers to collect feedback from consumers and presented to responsible party in the professional way.

Internal and external source are the important methods of idea generation. At Company internal search method has been used very well, using the general knowledge and ideas which management implemented regularly. Company has not been cooperating yet with external source, which would be a valuable contribution for the idea generation and product development process and the company even have no well organized research and development department.

After analyzing the results of the interview with the management it was discovered that most of ideas come from management and few by analyzing customer problems. From there, the company develops new products. For instance, for two recently launched products; the company tray to analyze customers problem and develop product that is different from competitor's biscuit regarding amount, size, shape, color, design, and those ideas comes from the top management.

Philip Kotler et al. (2013) presented R-W-W (is it real? can we win? is it worth doing?) screening framework as a tool to evaluate the ideas. The approach that the Company is following has very similar approach comparing to the suggested method. However, the four questions are not officially documented into a standardized evaluation process from where everyone involved in the company could follow when evaluating the ideas

From the interview answers and study of the current product development plan it was discovered that the three initial assessments are partially made when evaluating the ideas. From the market prospective and management team have the necessary knowledge to make the first preliminary assessments? However, considering the size of the company and the unlimited group of customers, it would be more time and cost effective that the preliminary studies are made at the same time with the full analysis conducted before the development phase

From the interview was found that competitive products are analyzed during the process but only from the physical description. Company's philosophy is that all solutions offered should be initialized from customer's needs but student researcher still questions this answer?

The company strategy is to find solutions for customer problems and to improve existing products; existing products are reviewed naturally when analyzing customer needs. The company needs to know the solutions that customers are using and in most of cases these solutions are competitive products. The company studies the existing solutions and adds benefits and customer values.

From the theoretical point of view, Company is correctly fulfilling competitor study, and there is no need for further improvements. The study has been adopted to fit to the company strategy, but the concept is integrated and works fine. Patent search is another method, which Company has been implementing. However considering the company size and resources required in implementing this method would be advisable to keep in hold and also implement this method in the future projects.

From the interview with the management the student researcher found out that Company has already built an efficient product-testing network. Marketing manager say its preferential testing, Market testing is a new practice, which the company has not applied directly when launching a new product. They use one strategy for all markets.

The marketing mix, together with the marketing strategy should be further analyzed separately for each product in the process of creating the marketing plan. Taking into consideration Company's business strategy and the industry in which the company is operating, each section of marketing mix will vary depending on the product and target customers. For instance the distribution channels for existing products are both direct and indirect distribution channel. In each case the decision will depend on the company's strategy. The same rule applies to pricing and promotion different products need different strategy.

From the analysis was found out that trade shows and sales visits are the most common used marketing channels used by Company. These two channels have also been very successful in attracting customers, partners and end-user attention. Firstly from the interviews with the existing partners and customers it is confirmed that displaying Company's products in an exhibitions is the most effective way to attract the end users attention. From both interviews was stated that exhibition is the best place to display such innovative products.

The research result from the existing marketing plan found out that print media has been continuously active source of marketing. Print advertising have been present on Company's marketing plan. From the response collected for interview during the last year, print advertisement has played a very important role on branding of Company. Several prospect customers and end-users have immediately recognized the logo with the advertisement which has been advertised on magazines. Such advertisements are not only important for creating product awareness but also for strengthening Company's brand.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

In this portion of the research study major findings were summarized to get the whole picture, conclusions were drawn out of the findings and finally recommendations were given so as to take measures that might help to overcome the problems the company have in developing new product and it may increase success of the company biscuit in the future.

5.1 Summery

From the data collected 70.3 % from the total of 239 respondents are males where as the rest are females. In addition the majority of respondents who purchase the company biscuit are under the age category of 31-42 this is good advantage for the student researcher finding because peoples in this age are more responsible and rational on their behavior than other age group in addition majority consumers who visit the company's sales shop frequently are new ones.

Regarding the general over view of the new product majority of the respondents respond it's hard for them to differentiate the company biscuit form other biscuits and they don't perceive it as new one in the market because the new biscuits are not innovative and don't offer any special feature to be superior than competitors. But still

The finding show almost for half of the respondent's the new product performance match their expectation.

Regarding the general over view of the product attributes Majority of the respondents believe that the company biscuit design is poor and also not attracted by the biscuit size. Almost all respondent that is (96.3 %) indicates that they are not satisfy by taste of the biscuit, majority of same respondents respond the flavor and crispiness of the biscuit not fit their preference. Finding also shows most of the respondents need fasting biscuit to consume it on fasting days.

The outcome for factors affecting consumer's preference majority of respondents suggest that the package is easy to access but respondents (70.7 %) have negative attitude towards the attractiveness of the package color and also for some participants of this thesis the package is not friendly with the environment. In other way 183 respond argue that the biscuit brand is easy to

recall and they are good with it but only for 27(11.3 %) participants it's hard to recall the company's biscuit name.

Even if majority of respondents start purchase the company biscuit after they see the advertising and they are comfortable with the new product price but participants said if the company raise the price in any rate they will pick competitors product from the shelf. Also they say the new biscuits are not available in most shops nearest to their residence.

5.2 Conclusion

Based on student researcher finding male consumers visit the company sales shop than women, also most of the respondents are under the age category of 31-42. Even if Kality Food S.C. stay in the business for many years but the ratio show consumer who visit the company's sales shop frequently are new consumers, it gave sense that the company have opening on holding current customers.

Kality Food S.C's new biscuit don't have any special feature or additional attribute to differentiate by final consumers because consumers can't detect or experience the new products superior value that the company offers to attract them. In addition by using the theory in the past chapter new product must perceive by the consumer as new one but here the data show that the Kality food S.C lack something to convince consumers that the biscuit are new, hence one can conclude from this that the new products are new for the company not for final consumers.

Even if the response is balanced and 108 respondents believe that the company biscuit match with their expectation student researcher doesn't take is serious positive response because majority of same respondents' show their negative belief for other attributes. Student researcher conclude that unless otherwise the company work hard on research and development to produce innovative product and fulfill consumers need and want it will be good opportunity for competitor to turn potential consumers face to them.

Even if student researcher don't have any religion issue raised for respondents but still can conclude that from 239 respondents 184 of them are orthodox because they have serious interest on fasting biscuits, in Ethiopian orthodox religion followers Wednesday and Friday are fasting days so as long as the company don't offer them fasting biscuit the sales volume of the current biscuit will decrease on this days.

Most of biscuit attributes examine in this thesis are key factor to make consumers satisfy and make them buy the product frequently, Student researcher can conclude that the Company produce new biscuit without considering consumer interest on taste, size, flavor and design. So that it's meaningless to produce new product without considering consumer's interest, surly this will open big opportunity for competitors to attract dissatisfied consumers of Kality Food S.C. In addition this may be the reason that company have majority of new consumers.

From the finding obtained one can clearly observe that color has huge influence on customer's psychology in point of purchase. The more attractive the color is the higher probability on the product to be purchased. Easy to use at home or even during travel also encourages them to purchase the product. In other way the package of biscuit is not friendly with the environment and not comfortable to dispose it anywhere they want.

Student researcher can terminate that most of participants like the name of the biscuit and it's easy for them to recall and remember, the greater awareness of the brand increases the likelihood that consumers will consider it.

As long as consumer's shed light that they will shift to competitor's product if the price rise in any rate, Kality food S.C must offer superior value such as cheaper than any conventional snake items and must being easily available in massive variety of shops.

5.3 Recommendation

As long as there is consistency among the respondents that they are really dissatisfied by the flavor, size, taste, design and crispiness of the new biscuit the company rather than fighting with consumers to make them purchase the product it's advisable to change this attributes of the new product at all. This attributes of biscuit are key factors to make consumers satisfy and make them buy the product frequently so that developing new biscuit by considering consumer need and want is recommended.

Even if student researcher recommend that the company have to produce new biscuit with different flavor but still the company managers must put in mind that when increase the number of flavored biscuits there is negative correlation with package and brand name so must increase their effort by considering this factors. so that student researcher recommends the company must enhance brand awareness because it's crucial to differentiate their product from similar product and competitors, higher rate of brand awareness equate to higher sales and further serve competitive advantage that prevent competitors from gaining additional market share. Student researcher also recommend the company must differentiate unlike flavored biscuits with special color combination for example banana flavored biscuit with yellow colored package, strawberry flavor with red color, orange flavor with orange color, chocolate flavor with brown colored package is seriously recommended.

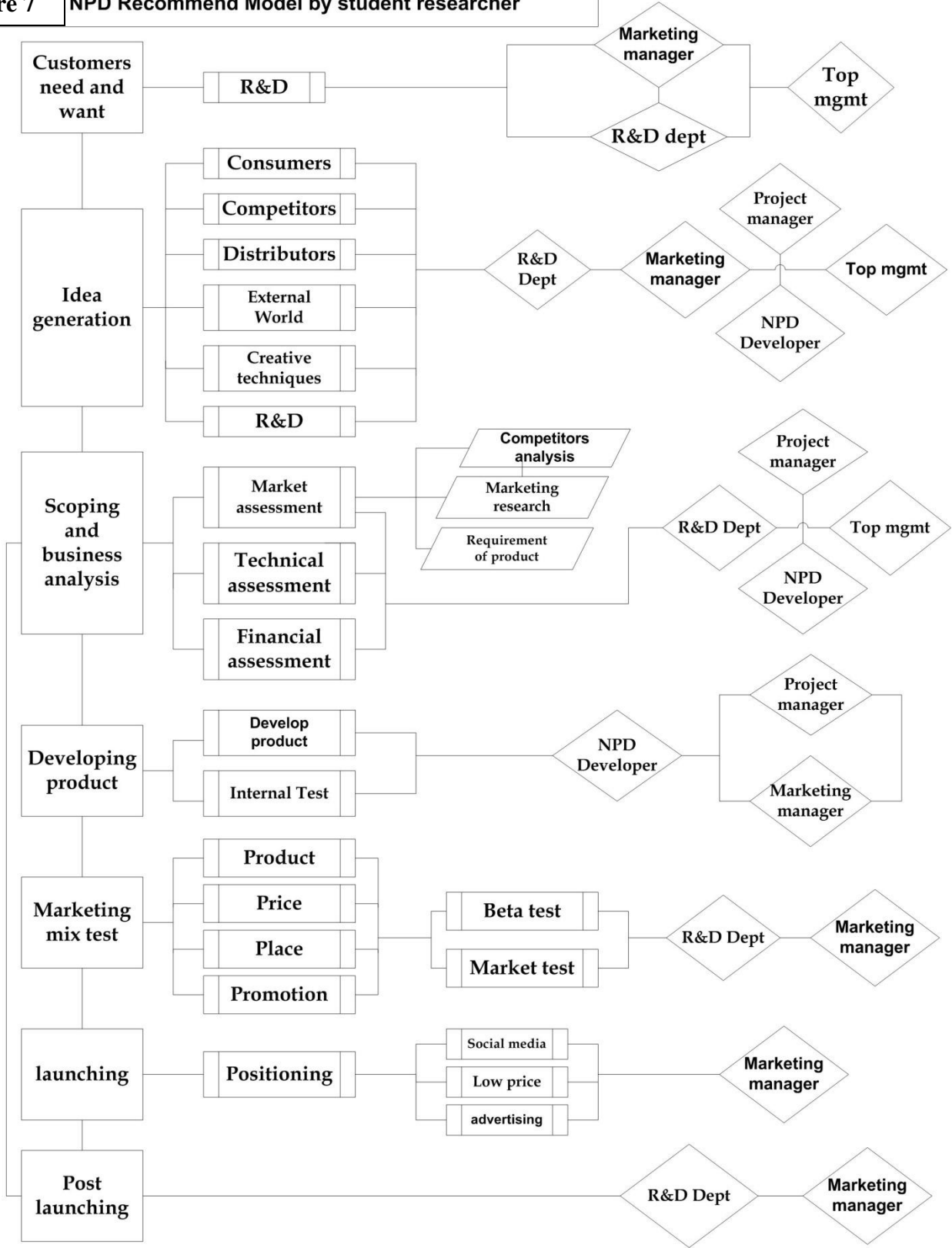
By observing ingredients of competitors biscuits, cocktail by Brothers biscuit and cinnamon snaps by Mo-Ya biscuits S.C. Student researcher recommend, the company must produce fasting biscuits and fulfill consumers desire by using different ingredients like cocktail fasting biscuit comp up with ingredients wheat flour, RBD palm oil, refined sugar, inverted sugar, iodized salt, leavening agent, dough improvers, emulsifiers, permitted food color and flavors. Cinnamon snaps by Mo-Ya with ingredients of flour, vegetable shortening, sugar, salt, vanilla, glucose, cinnamon, sodium bicarbonate on condition that student researcher as a marketer tray to show what competitors offer for consumers and will leave the rest of the work for responsible department of the company.

Even if respondents believe that the company biscuit match with their expectation student researcher don't take it as positive response and don't recommend the company to go on with the

current product performance because majority of same respondents response negatively for other attributes. From student researchers logical point of view the reason that there expectation and the product performance match may comes from consumers have less confidence on the company to produce better new product that can satisfy their higher expectation, that means their past experience with the company product may make their expectation in the bottom line. So student researcher seriously recommend as long as there is positive correlation between consumers expectation and the other attributes the company must work hard on this attributes and come up with superior new product performance that can delight current consumers those who have less expectation about it and can use it as a good opportunity because when product performance excides expectation its more than satisfaction in other word it will be delight for consumers and increase their satisfaction level easily.

For being a new and innovative company at the same time brings several advantages which will help the company in the positioning of the new products into the market. For instance, all the products the Company has been offering so far have had several benefits which are superior to other products. These benefits have helped Company products to build their position as an innovative solution on the roll handling equipment market.

Figure 7 NPD Recommend Model by student researcher



5.4 Discussion of recommended model

Kality Food S.C new product development process has not been structured, modified and documented according to company's need by following the stage-gate model guidelines. Student researcher does not recommend changes the stage gate model to other model instead recommended that it must be modify to fit the company and documented well to use it in the future. By relating the qualitative and quantitative finding with theories and stage gate model, the modified model explains in detail as follow.

5.4.1 Stage One; Conduct Research on Consumers Need and Want

Student researcher found that the reason why majority of respondents give negative feedback for this thesis comes from all new products idea comes from the management without considering the industry and consumers interest as student researcher point of view the company follow selling concept than marketing concept. So recommended that the first stage of the new product must be making research on consumers need and want and follow marketing philosophy than selling philosophy. The marketing concept holds that achieving organizational goals depends on knowing the needs and wants of target markets and delivering the desired satisfactions better than competitors do. Under this concept, customer focus and value are the paths to sales and profit. Instead of a product centered. The marketing concept is a customer-centered "sense and respond" philosophy. It views marketing not as 'hunting' but as 'gardening'. The job is not to find the right customer for your product but to find the right product for your customer. The selling concept takes an "inside-out" perspective, whereas, the marketing concept takes an "outside- in" perspective.

5.4.2 Stage Two; Idea Generation

According to Robert cooper (2001) the new idea generation process, presented two routes of generating new ideas; "top down" and "bottom up" At Kality Food S.C the first route is used continuously and is well implemented. The second route is only partly applied but almost zero rates. That means that most of the ideas come from the management and goes down for implementation. Student researcher strongly recommends that using both of the routes will help Kality Food S.C to have more high excellence ideas coming from all possible sources.

With this intention student researcher recommend the company to use additional source of new product development such as Customers, Competitors, Distributors, Creative techniques, External world, Research and development: Create new product ideas through R&D but first Kality food S.C. must have well organized R&D department.

5.4.3 Stage Three; Scoping and Business case

From the theoretical review, it was found that there are three assessments which should be done before preparing for the development phase; *preliminary market assessment*, *preliminary technical assessment* and *preliminary financial assessment* and again to Building Business case there are three concept taste must accomplish *Tested concept*, *Fully screened concept*, *Protocol concept*. However, the stage gate model allows companies to modify the stages according to their needs.

Student researcher recommended that by considering the size of the company and the unlimited group of customer, Company's limited resources, and small number of products launched indifferent year also it would be more time and cost effective if stage two and three should be completed at the same time. There will be no need for Company to firstly make a preliminary research and later on in depth analysis. The entire study must do at once, bringing all the necessary information needed to proceed in the development stage.

Furthermore to the above reason why student researcher recommend stage gate new product development model stage two and three conduct as sometime is, during the preliminary assessment the market prospects for the product is essential. Such assessment includes; the potential of the product, market acceptance and the requirements for the product. As long as the marketing research can answer competitors' analysis and consumers need and want student researcher can't see the exact helpfulness of doing under concept testing that provide the interest of the customer or end-user.

Technical assessment is must in the next stage so there is reputation of work in these stages. It is also important to mention that the technical preliminary assessment is not necessary for all products which Company will launch. The technical assessment will depend on the product strategy. For instance, if Company decides to purchase and resell other companies products as a tactical decision, the technical feasibility, manufacturing process and intellectual properties are

not studied. For biscuits which Company is designing and developing by its effort technical assessment shall be conducted and recommended.

It is strongly advised that an in-depth market analysis should be conducted before the product goes to development. Once again the student researcher suggests that such analysis can be made during the first preliminary stages.

5.4.4 Stage Four; Developing Product

Up to now, the product has existed only as a word description, a drawing, or a prototype. In this stage the biscuit becomes a physical product. Product developer with R&D must try their best to develop what consumer's desire. The raw idea of biscuit that comes from the customer's mind after it is passed and sensed by the NPD team at this stage it will become a physical product. In this stage consumer's dream will become real and internal testing will be conducted in the lab.

5.4.5 Stage Five; Test Marketing Mix (4P's)

Product testing methods that the company is applying at the moment is "Preference testing" commonly used and changes on this testing type are recommended because the findings show majority of respondents have negative reflection on the new product performance. This shows the testing method the company exercises can't satisfy majority of consumers. So that student researcher recommends, "Beta testing" OR "market testing" for the company.

Beta testing will help the company to solve the problems that student researcher investigates because in beta testing communicating with the customers and partners are very important. Beta testing is the second phase of the testing after the internal testing. During this test, the product is displayed in the real working environment. The display will help in defining the strengths and weaknesses of the product. Some deficiencies that the product may have sometimes are not properly shown in the lab testing.

In addition student researcher strongly recommends that the product launch should be firstly tested in a smaller scale before going to total market. A market test will help to test the marketing strategy and how attractive is the product to the customers or end-users. By evaluating the theory suggestions and company's long term ambition student researcher strongly recommends a structured market testing must apply for future new product launches. This

suggestion is more valid when the Company will expand its focus in other markets, as different markets may have different requirements the launch strategy may vary from one region to another. For such reason, market testing may be essential for reducing the risk of a product launch fail.

5.4.6 Stage Six; launching stage

During launching stage the company can differentiate itself from its competitors and have advantages in positioning its products, student researcher recommends further market mix analysis separately for each new product must be accomplish well. As long as the company try to produce new product that is different from the existing biscuit. Market mix analysis for one product may not be work for other product

Student researcher Recommend in the issue of promotion is its better for the company to uses social media. The company must paying attention to continuously send the messages to the customers by using the social media such as LinkedIn, Facebook or Google+. Social media has been considered as very important online media in today's business when launching the new products. The potential customers may also see social media as an important source of information cause this days social media become part of day to day activity in Ethiopia, even it become headache for the government cause it's the fastest and easiest way to transfer opinion and information, it's a shade light for the company to use social media to communicate customers as long as most people's are addicted and can access it everywhere they go.

In other aspect of marketing mix Price is the most important factor which influences the marketing. Price can be determined by several factors such as; product manufacturing cost, market share, target customers, type of the product so student researcher recommend price penetration strategy for the company because from the feedback gathered from final consumers relatively they believe the price is fair but if the price increase in any rate they will shift to other competitors' product this implies target consumers are price sensitive consumers so penetration strategy will make them to purchase and they will be attract by the low price of new product.

5.4.7 Stage Seven; Post launching stage

To measure the success or the failure of the product launch it is necessary to conduct a post launch review. In a post launch review it is important to discuss what went well during the launch of the product and what can be improved in the next product launch. A typical post launch review should be held within two months as the team members have all the information still fresh in mind. The launch process is recommended to take place in a friendly environment, with continuous constructive feedback without blaming team members for things that have gone wrong.

5.4.8 Participants of NPD Modified model

By using theoretical benchmark student researcher clarify the recommend model participants and their responsibility as follow

Top Management; top management of a company is the starting point of the NPD process, top management attitudes should be open regarding the development of the project, this means that they should give enough resources for the development of the project and keeping the objective unchanged through the life-time of the project. On the other hand, however, the top management should not be involved too much in the management of the NPD process.

Project manager; usually a project manager has two responsibilities in managing a project: the technical components of the project plans, financial analysis, schedules and monitoring the project and organizational skills assembling and managing the team and controlling.

Product developer/manager *Traditional functional structure-* in which the product manager has to manage the rules and procedure, which have previously been adopt; the reason student researcher want traditional functional structure is the product developer expected to have a good knowledge about the past product attributes and ingredients than anyone in the team.

Marketing manager; first, they are involved in developing the new product idea and research of the future market for the product. Further they bring to the project requirements of the customers and working with a business plan. Finally, they are leading the launch stage of the NPD process.

Reference

- Babbie, E.R. (2009). *The Practice of Social Research*. 12th edition. Canada: Cengage Learning.
- Baker, J. (2000). **The Marketing Book**. 4th Edition. New Delhi: Viva Books Private Limited Hill Company
- Beri (2000). **Marketing Research**. 3rd Edition. New Delhi: Tata Mc Graw-Hill Published Company Limited
- Berkowitz and others (2000).**Marketing**. 6th Edition. New Delhi: Irwin Mc Graw-Hill Published Company Limited
- Brentani, U., Kleinschmidt, E. J., & Salomo, S. (2010). Success in global new product development: impact of strategy and the behavioral environment of the firm. *Journal of product innovation management*, 27, 143-160.
- Bryman, A. (2008). *Social Research Methods*. Oxford University Press.
- Calmorin Laurentina P. and Calmorin Melchor A. (2007). **Research Methods and Thesis Writing**, second edition, Rex Bookstore, Inc, Manila
- Chamberlain N. (1984). The Chorleywood bread process: *International Prospects. Cereal Foods World*
- Clark, K., & Fujimoto, T. (1991). Heavyweight product managers. *McKinsey Quarterly*
- Cochran, W. G. 1963. **Sampling Techniques**, second edition ., New York: John Wiley and Sons, Inc.
- Cooper, R. (1990). Stage-gate systems: A new tool for managing new products. *Business Horizons* 33, no. 3 , 44-54.
- Cooper, R. 2013. The Stage-Gate Idea-to-Launch Process - Update, Whats new and Nex-Gen systems. *Journal of Product Innovation Management*., Volume 25, pp. 213-232.
- Cooper, R. G. & Edgett, S. J. 2012. Best Practices in the Idea-to-Launch Process and Its Governance. *Research-Technology Management*, p. 43.

- Cooper, R. G. 2001. *Wining at new products*. Persus Publishing. Cambridge, Massachusetts
- Cooper, R., &Edgett, S. (2010). Product Development Institute .Получено 24 August 2010 г., из Product Development: <http://www.prod-dev.com/stage-gate.php>
- Crawford, M. & Benedetto, A. (2008). *New product management*. New York: McGraw-Hill Higher Education.
- Donald, R. and Russell,S. (2002). **Product Management**. 3rd Edition. New Dahlia: Tata Mc Grow Hall Publishing Company Limited.
- Edgett, S. & Cooper, R. 2008. Ideation for Product Innovation: What are the best methods?.PDMA Visions Magazine, .pp. 3-4. 52
- Edgett, S. J. 2013. *Product Development: Capture your lessons learned*. Stage-Gate International. URL: http://www.stage-gate.com/resources_stage-gate_lessonslearned.php . Accessed 10 Feb 2014.
- Ehmke, C., Fulton, J. & Lusk, J. 2013. *Marketing four P's: First steps for new entrepreneurs*. *Purdue*. URL: <http://www.extension.purdue.edu/extmedia/ec/ec-730.pdf> . Accessed 4 Dec 2013].
- Etzel and et.al (2004). **Marketing**.13th Edition. New Delhi: Tata Mc Graw-Hill Published Company Limited
- Etzel and others (1999). **Marketing**.9th Edition. New York: Mc Graw-Hill, Inc.
- Gupta A. (1988)Use of defatted soy flour and full fat soy flour in biscuits preparation, M.Sc. Thesis, G.B. Pant University of Agriculture and Technology, pantnagar.
- Jorgensen, B., &Messner, M. (2009). *Accounting and Strategising: A Case Study from New Product Development*. Accounting, Organizations and Society, Forthcoming.
- Kahn, B. (2001). **New Product Planning**.1st Edition. New Delhi: Saga Publication India Pvt Ltd
- Kahn, K. (2006). *New Product Forecasting : An Applied Perspective*. M.E. Sharpe.
- Kahn, K. B. 2011. *Product Planning Essentials*. M.E.Sharpe, Inc. New York:

- Kent, R. (2007). *Marketing Research: approaches, methods and applications in Europe*. London: Thomas Learning.
- Kloppenborg, T., & Opfer, W. (2002). The Current State of Project Management Research: Trends, Interpretation, and Predictions. *Project Management Journal* , 5-18.
- Kotler and Armstrong. (2012). **Principles of Marketing**, New Jersey :Prentice Hall
- Kotler, P. (2002). **Marketing Management**.10th Edition. New Delhi: Prentice Hall of India Private Limited.
- Kotler, P. and Armstrong (2006) **Principle of Marketing** 11th Edition. New Dahlia: Prentice Hall of India Private Limited
- Kotler, P. and Armstrong. (2005). **Principle of Marketing**. 11th Edition. New Dahlia: Prentice Hall of India Private Limited.
- Kotler, P. and Keller (2012)**Marketing Management**. New Jersey Pearson Education, Inc., publishing.,
- Kotler, P. Armstrong, G., Harris, L. C. & Piercy, N., 2013. *Principles of Marketing*. 6th ed. Pearson Education Limited. Harlow.
- Koudal, P. & Coleman, G. (2005). Coordinating operations to enhance innovation in the global corporation. *Strategy and leadership*. 42005 (33). 20-32.
- Kumar, (2003). **Product management**. 1st Edition. Mumbai: Himaliya Publishing House
- Kumar, and Mittal (2001). **Marketing Management**.1st Edition. New Delhi: Anmol Publication PVT.LTD.
- Lamb and et.al (2004). **Marketing**. 7th Edition. Thomson – South – Westam
- Lehman, and Winer, (2005). **Product Management**. 4th Edition. New Delhi: Tata Mc Graw-Hill Published Company Limited
- Levitt, T. (1983). The globalization of markets. *Harvard Business Review*, 61(May-June), 92-102

- Lewis, J., & Wong, L. (2004). Accelerated Project Management. McGraw-Hill Companies
- MacCormack, A., Crandall, W., Henderson, P. & Toft, P. 2012. Do you need a new product development strategy?. Research-Technology-Management, pp. 34-43.
- Malhotra, K.(2006). **Marketing Research**. 5th Edition. New Dahlia: Prentice Hall of India Private Limited.
- Manley Jr. (1998). Baking and cooling of biscuits. Duncan. Vol. 3.
- Marshall, M. N. (1996). Sampling for qualitative research. Oxfords Jpurnals. Family Practice. 13 (6). 522 – 526
- Mayo, C. (10 05 2010 г.). New Product Development. Получено 19 08 2010 г., из Reference for business: <http://www.referenceforbusiness.com/management/Mar-No/New-Product-Development.html>
- Milton, R., Griffin, A., Castellion, G., &Anschuetz, N. (1996). The PDMA Handbook of New Product Development. John Wiley & Sons.
- Monga, G. and Shalini, A. (2003) **Marketing Management**. New Dahlia: Deep and Deep Publication PVT.LTD.
- Mora, M. 2010. Quantitative Vs. Qualitative Research -When to use which. Survey Gizmo. URL : <http://www.surveygizmo.com/survey-blog/quantitative-qualitative-research/>. Accessed 15 Nov 2013
- Patel, I.N., Rema, S. and Kamaliya, K.B. (2003) Biscuits ingredients. *Proc Food Ind*, 44-49
- Perreault, and McCarthy, (1999).**Basic Marketing**.13th Edition. Boston: Irwin McGraw-
- Powers, T. L. &Loyka, J.J. (2010). Adaptation of marketing mix elements in international markets. Journal of global marketing. 23. 65-79
- Ranchhod, A. &Gurau, C. (2007). Marketing Strategies: A Contemporary Approach. Pearson Education.

- Saussele H. (1976) High fructose corn syrup for bakery application, Baker Digest, 32-34.
- Saxena, R. (2002). **Marketing Management**. 2nd Edition. New Delhi: Tata McGraw Hill Publishing Company Limited.
- Sharma, G.K., Padmashri, A. and Bawa, A.S. (2003) Baked Products- A global Scenario. *Proc Food Ind*, 14-24
- Shepherd, C., & Ahmed, P. (2000). NPD frameworks: a holistic examination. *European journal of innovation management*, 160-173.
- Silverman, D. 2005. *Doing Qualitative Research: A Practical Handbook*. 2nd ed. SAGE Publications. London
- Singh R., Singh G. and Chauhan G.S. (1997) Development of soy fortified biscuits. 2nd Standardization of fat and sugar levels. *Journal of Food Science and Technology*. 34 (6) : 529-531.
- Singh R., Singh G. and Chauhan G.S. (2000) Nutrition evaluation of soy fortified biscuits. *Journal of Food Science and Technology* 37 (2): 162-164.
- Soni, A. & Cohen, H. 2000. *Successfully launching your product: getting it right*.
- Szymanski, D. M., Sundar, G.B. & Varadarajan, R. (1997). Standardization versus adaptation of international marketing strategy: an empirical investigation. *Journal of marketing*. 57. 1-17.
- U.S. Wheat Associates (1988). *Bakers digest handbook on practical baking*. U.S. Wheat Associates Publication, New Delhi.
- Ulrich, K. T. & Eppinger, S. P. 2012. *Product Design and Development*. McGraw-Hill. New York. 54
- Van Vliet, V. 2013. *Service Marketing Mix - 7P's toolshero*. URL :
- Viswanathan, N. K. & Dicksson, P.R. (2007). The fundamentals of standardizing global marketing strategy. *International marketing review*. 24. 46-63.

- Wall, S. & Minocha, S. (2009). *International Business*. Edinburgh: Pearson Education.
- Yamane, Taro. 1967. *Statistics, An Introductory Analysis*, second edition., New York: Harper and Row
- Yelkur, R., & Herbig, P. (1996). Global markets and the new product development process. *Journal of Product & Brand Management*, 5 (6), 38-47
- Zou, S. & Cavusgil T. (1993). Product and promotion adaptation in export ventures: an empirical investigation. *Journal of international business studies*. 24. 479-506.
- Zou, S. & Cavusgil T. (2002). The GMS: a broad conceptualization of global marketing strategy and its effect on firm performance. *Journal of marketing*. 66. 40-56.

Appendices

APPENDIX A

St. Mary's University

School of Graduates Study

Marketing Management Program

Questionnaire to be filled by Kality Food S.C Final Consumers

This questionnaire is prepared by graduate student of St. Mary's university in the field of marketing management masters program in fulfillment of a master's thesis. This study entails to assess the new product development practice of Kality Food S.C. biscuit and purely academic.

Therefore, you are selected to fill this questionnaire because student researcher has full trust on you to get complete and real information that are required for this research. Note that, the validity of your response has high contribution for success of my study due to this reason I would like to ask with due respect to give the right response. All information you provide to this study will be kept strictly confidential.

Thank you in advance for your cooperation.

Notice;

- It is not necessary to write your name.
- Please put a “√” mark on the space provided.

I. Personal information

1. Gender: Male Female

2. Age

< 18 yrs 19 – 30 31 – 42 More than 43

3. Education Background

Primary High School Certificate First degree Second degree

4. For how long have you been customer of Kality Food S.C?

A. Less than 1 yrs

C. 4 – 5 yrs

B. 2 – 3 yrs

D. 6-7yrs

E. more than 8yrs

II. Questions related to product development in Kality Food S.C.

Rank the questions based on the following alternatives

(Strongly agree = 1); (agree = 2); (Neutral = 3); (disagree = 4); (Strongly Disagree = 5)

| General NPD performance | | | | | | |
|--------------------------------------------|-------------------------------------------------------------------------------|----------|----------|----------|----------|----------|
| Item no. | Description | 1 | 2 | 3 | 4 | 5 |
| 1. | I can easily differentiate the company's biscuit from other | | | | | |
| 2. | I perceive the company's new biscuit as a new one in market | | | | | |
| 3. | The new biscuit has superior value | | | | | |
| 4. | I consider the company's new biscuit as innovative | | | | | |
| 5. | The company's new product matches with my expectations | | | | | |
| New Product attribute | | | | | | |
| Item no. | Description | 1 | 2 | 3 | 4 | 5 |
| 6 | The company's new biscuits are good in design | | | | | |
| 7 | The company's new product size is attractive | | | | | |
| 8 | I need fasting biscuit than current one to consume it on Wednesday and Friday | | | | | |
| 9 | The company improves its new biscuit taste based on customers need | | | | | |
| 10 | The company develops different flavors in customers interest | | | | | |
| 11 | I like the company's new biscuit crispiness | | | | | |
| 12 | The company's new biscuit is stylish | | | | | |
| Factors affecting consumer's choice | | | | | | |
| Item no. | Description | 1 | 2 | 3 | 4 | 5 |
| 13 | | | | | | |
| 14 | The color of new product package attracts me to purchase | | | | | |
| 15 | The company's package is easy to access the biscuit | | | | | |

| | | | | | | |
|----|-----------------------------------------------------------------|--|--|--|--|--|
| 16 | The new biscuit package is environmental friendly | | | | | |
| 17 | The company's new product brand is easy to recall | | | | | |
| 18 | The company's biscuit price is fair than others | | | | | |
| 19 | I will shift to other company if the price increase in any rate | | | | | |
| 20 | I easily find the company's biscuit in any shop in Addis Ababa | | | | | |
| 21 | I start purchasing, after the advertisement of the new biscuit | | | | | |

22. What suggestion you have for Kality food s.c to improve in the next new product?

23. Any different point you want to rise, that you think it's helpful for the company new product development.

Appendix B
St. Mary's University
School of Business
Marketing Management Program

Interview questions

1. Do you follow any development model?
2. Where do the new product ideas come from and where should they be coming from?
3. How the company assesses and implements the new idea received?
4. Does the company employ assessments which should be done before preparing for the development phase?
5. To what extent the Kality Food S.C study competitors and their products?
6. Does the company produce products those are based only on customer need and market research?
7. Do you go to customer through face to face meetings or do you create concept solutions internally, and then make market research to test the product concept?
8. What are the types of testing you are currently applying before and during the launch of the new products?
9. To what extent the company works to match customer's expectation with marketing mix

ቅድስት ማርያም ዩኒቨርሲቲ

የድህረምረቃ ትምህርት ቤት

ማርኬቲንግ ሜጅሎንት ፕሮግራም

በቃሊቲ ምግብ አክሲዮን ማህበር ደንበኞች የምሞላ መጠይቅ

ይህ መጠይቅ የተዘጋጀው በቅድስተ ማርያም ዩኒቨርሲቲ የማርኬቲንግ ሜጅሎንት ተመራጭ ተማሪ ነው። ይህ ጥናት የሚተከረው ስለቃሊቲ ምግብ አክሲዮን ማህበር የአዲስ ምርት ትግበራ ላይ ነው። ስለዚህ ለዚህ ጥናት የተሟላ እና ትክክለኛ መረጃ ለማግኘት የጥናቱ አጥኝ በእርስዎ መላ እምነት ኖሮት ይህንን መጠይቅ እንዲሞሉ መርጥዎታል።

ስለትብብርዎ አመክታለሁ።

ማሳሰቢያ

- ስምዎን መግፍ አስፈላጊ አይደለም
- መልስ መስጫው ሳጥኖች ላይ "✓" ምልክት ይጠቀሙ

: የግል መረጃ

1. ፆታ

ሀ. ወንድ ለ. ሴት

2. እድሜ

ከ18 በታች ከ19 እስከ 30 ከ31 እስከ 42 ከ 43 በላይ

3. የትምህርት መረጃ

1^ኛ ደረጃ 2^ኛ ደረጃ ሰርተፍኬት የመጀመሪያ ዲግሪ ማስተርስ ዲግሪ

4. ለምን ያህል ጊዜ የቃሊቲ ብስክት ተጠቅሚ ኖሯት?

ከአንድ ዓመት በታች

ከሁለት እስከ አራት ዓመት

ከአራት እስከ ከስድስ ዓመት

ከስድስት እስከ ስምንት ዓመት

ከዘጠኝ ዓመት በላይ

ክፍል ሁለት፡ ከቃላት የምግብ ማቅነባበርያ ጋር የተያያዙ ቀጥተኛ ጥያቄዎች

በሚከተለው ማስፈርቶች መሠረት ጥያቄዎችን ይመልሱ

በጥም እስማሚያ = 1 እስማሚያ = 2 አልስማም = 3 በጣም አልስማም = 4 ማልስ የለኝም = 5

| ጥያቄ ቁጥር | ዝርዝር | | | | | |
|------------------------------------------|----------------------------------------------|---|---|---|---|--|
| | 1 | 2 | 3 | 4 | 5 | |
| 1 | በቀላሉ የቃላትን ምርት የሆኑትን ብስኩቶች ከሌሎች ማለት ይችላሉ | | | | | |
| 2 | የቃላት ምርት የሆኑትን ብስኩቶች አዲስ መሆናቸውን ይቀበላሉ | | | | | |
| 3 | የቃላት ብስኩቶች የተሻሉ ናቸው ብለው ያስባሉ | | | | | |
| 4 | የቃላት አዳዲሶቹ ብስኩት ከመቼውም በላይ የተሻሉ ናቸው | | | | | |
| 5 | አዳዲሶቹ የፋብሪካው ብስኩቶች ምርቶች እንደጠበቅኩት ናቸው | | | | | |
| የአዲሱን ብስኩት ምርቶች በተመለከተ | | | | | | |
| 1 | የቃላት ብስኩት ምርቶች ቅርፅ የተሻለ ነው፡፡ | | | | | |
| 2 | የአዳዲሶች ብስኩቶች ማጠን በቂ ሆኖ አግኝቻለሁ | | | | | |
| 3 | ከፍሰክ ብስኩቶች ይልቅ የጾም ብስኩቶች በጾም ቀናት እመርጣለሁ | | | | | |
| 4 | የአዳዲሶቹን ብስኩቶች ጣም በተጠቃሚው ፍላጎት መሠረት የተመረቱ ናቸው | | | | | |
| 5 | አዳዲሶቹ ብስኩቶች የመዛ ማክፈጫ በተጠቃሚ መሠረት የተመረቱ ናቸው | | | | | |
| 6 | የአዳዲሶቹን የቃላት ምርት ብስኩቶች ተሰባሪነቱ ለመጣብ ምቹ ናቸው | | | | | |
| 7 | አዳዲሶቹ የቃላት ብስኩቶች ለአይን ማህከ ናቸው | | | | | |
| የተጠቃሚዎችን ምር ጫየ ማወስኑ ጉዳዮችን ይመሆኑ ታል | | | | | | |
| 1 | የአዳዲሶቹን ብስኩቶች ማሻሻያ ቀለም ማህከ መሆኑ እንደገዛው አድርጎናል | | | | | |
| 2 | አዳዲሶቹ ብስኩቶች ማሻሻያ ለአጠቃቀም ምቹ ናቸው | | | | | |
| 3 | አዳዲሶቹ ብስኩቶቹ ማሻሻያ አካባቢን ይበክላሉ ብለው ያስባሉ | | | | | |

| | | | | | | |
|---|-----------------------------------------------------------------------|--|--|--|--|--|
| 4 | አዳዲሶቹን ብስኩቶች ስም በቀላሉ ለማስታወስ አያስቸግሩም | | | | | |
| 5 | አዳዲሶቹ ብስኩቶቹ ዋጋ ከሌሎች ጋር ሲነፃፅሩ ጥሩ ነው | | | | | |
| 6 | የዎጋ ጭምር በአዳዲሶቹ ብስኩቶች ላይ ካሳየ የሌለ ምርቶችን እገዛለሁ፡፡ | | | | | |
| 7 | የፋብሪካውን ምርት የሆኑ አዳዲስ ብስኩቶች በየትኛውም ሰቆቹ በቀላሉ ይገኛሉ፡፡ | | | | | |
| 8 | ምርቶቹን መገዛት የጀመርኩት ስለ አዳዲስ ብስኩቶች የተሰራውን ማስታወቂያዎችን ከሠራሁ (ከአየሁ) በኋላ ነው፡፡ | | | | | |

9. በቀጥታ የሚገኘው ብስኩት ምን ማሻሻያ በደረግበት ትላላችሁ

10. ለደርጅቱ ይጠቅሙል ብለው የሚጸሱበት ተጨማሪ ሀሳብ ካለት

Mean Standard deviation and variance

| | differentiate | perceive | superior value | innovative | expectation | design | attractive | fasting | taste | flavor | crispiness |
|----------------|---------------|----------|----------------|------------|-------------|--------|------------|---------|-------|--------|------------|
| N Valid | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | 3.68 | 4.47 | 4.33 | 4.19 | 2.95 | 4.74 | 3.88 | 4.00 | 4.46 | 4.32 | 4.23 |
| Std. Deviation | 1.476 | .864 | .959 | 1.190 | 1.699 | .859 | 1.236 | 1.136 | .737 | .804 | .943 |
| Variance | 2.177 | .746 | .920 | 1.417 | 2.888 | .737 | 1.527 | 1.290 | .543 | .646 | .890 |

| | stylish | color | Easy | environment | recall | Fair price | shift | shop | advertising |
|----------------|---------|-------|-------|-------------|--------|------------|-------|------|-------------|
| N Valid | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | 4.13 | 4.00 | 2.23 | 3.80 | 1.90 | 1.68 | 3.07 | 4.56 | 2.38 |
| Std. Deviation | 1.141 | 1.185 | 1.274 | 1.101 | 1.202 | 1.017 | 1.291 | .833 | 1.366 |
| Variance | 1.301 | 1.403 | 1.623 | 1.212 | 1.444 | 1.034 | 1.668 | .693 | 1.866 |

Frequency and Percentage

gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 168 | 70.3 | 70.3 | 70.3 |
| Female | 71 | 29.7 | 29.7 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

age

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-----------|-----------|---------|---------------|--------------------|
| Valid <18 | 16 | 6.7 | 6.7 | 6.7 |
| 19-30 | 57 | 23.8 | 23.8 | 30.5 |
| 31-42 | 131 | 54.8 | 54.8 | 85.4 |
| >43 | 35 | 14.6 | 14.6 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

education

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid primary | 64 | 26.8 | 26.8 | 26.8 |
| high school | 77 | 32.2 | 32.2 | 59.0 |
| certificate | 60 | 25.1 | 25.1 | 84.1 |
| first degree | 33 | 13.8 | 13.8 | 97.9 |
| second degree and above | 5 | 2.1 | 2.1 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

customer

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|-----------|---------|---------------|--------------------|
| Valid <1years | 92 | 38.5 | 38.5 | 38.5 |
| 2-3 | 78 | 32.6 | 32.6 | 71.1 |
| 4-5 | 47 | 19.7 | 19.7 | 90.8 |
| 6-7 | 18 | 7.5 | 7.5 | 98.3 |
| >8years | 4 | 1.7 | 1.7 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

differentiate

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 21 | 8.8 | 8.8 | 8.8 |
| Valid Agree | 58 | 24.3 | 24.3 | 33.1 |
| Valid Neutral | 10 | 4.2 | 4.2 | 37.2 |
| Valid disagree | 38 | 15.9 | 15.9 | 53.1 |
| Valid Strongly disagree | 112 | 46.9 | 46.9 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

perceive

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 6 | 2.5 | 2.5 | 2.5 |
| Valid Agree | 7 | 2.9 | 2.9 | 5.4 |
| Valid Neutral | 2 | .8 | .8 | 6.3 |
| Valid disagree | 77 | 32.2 | 32.2 | 38.5 |
| Valid Strongly disagree | 147 | 61.5 | 61.5 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

superior value

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 8 | 3.3 | 3.3 | 3.3 |
| Valid Agree | 10 | 4.2 | 4.2 | 7.5 |
| Valid Neutral | 5 | 2.1 | 2.1 | 9.6 |
| Valid disagree | 88 | 36.8 | 36.8 | 46.4 |
| Valid Strongly disagree | 128 | 53.6 | 53.6 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

innovative

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 19 | 7.9 | 7.9 | 7.9 |
| Valid Agree | 9 | 3.8 | 3.8 | 11.7 |
| Valid Neutral | 9 | 3.8 | 3.8 | 15.5 |
| Valid disagree | 72 | 30.1 | 30.1 | 45.6 |
| Valid Strongly disagree | 130 | 54.4 | 54.4 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

expectation

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 86 | 36.0 | 36.0 | 36.0 |
| Valid Agree | 22 | 9.2 | 9.2 | 45.2 |
| Valid Neutral | 19 | 7.9 | 7.9 | 53.1 |
| Valid disagree | 42 | 17.6 | 17.6 | 70.7 |
| Valid Strongly disagree | 70 | 29.3 | 29.3 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

design

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 7 | 2.9 | 2.9 | 2.9 |
| Valid Agree | 7 | 2.9 | 2.9 | 5.9 |
| Valid Neutral | 2 | .8 | .8 | 6.7 |
| Valid disagree | 8 | 3.3 | 3.3 | 10.0 |
| Valid Strongly disagree | 215 | 90.0 | 90.0 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

attractive

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 14 | 5.9 | 5.9 | 5.9 |
| Valid Agree | 26 | 10.9 | 10.9 | 16.7 |
| Valid Neutral | 36 | 15.1 | 15.1 | 31.8 |
| Valid disagree | 62 | 25.9 | 25.9 | 57.7 |
| Valid Strongly disagree | 101 | 42.3 | 42.3 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

fasting

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 18 | 7.5 | 7.5 | 7.5 |
| Valid Agree | 4 | 1.7 | 1.7 | 9.2 |
| Valid Neutral | 33 | 13.8 | 13.8 | 23.0 |
| Valid disagree | 88 | 36.8 | 36.8 | 59.8 |
| Valid Strongly disagree | 96 | 40.2 | 40.2 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

taste

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 4 | 1.7 | 1.7 | 1.7 |
| Valid Agree | 3 | 1.3 | 1.3 | 2.9 |
| Valid Neutral | 2 | .8 | .8 | 3.8 |
| Valid disagree | 101 | 42.3 | 42.3 | 46.0 |
| Valid Strongly disagree | 129 | 54.0 | 54.0 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

flavor

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 5 | 2.1 | 2.1 | 2.1 |
| Valid Agree | 4 | 1.7 | 1.7 | 3.8 |
| Valid Neutral | 9 | 3.8 | 3.8 | 7.5 |
| Valid disagree | 113 | 47.3 | 47.3 | 54.8 |
| Valid Strongly disagree | 108 | 45.2 | 45.2 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

crispiness

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 8 | 3.3 | 3.3 | 3.3 |
| Valid Agree | 5 | 2.1 | 2.1 | 5.4 |
| Valid Neutral | 22 | 9.2 | 9.2 | 14.6 |
| Valid disagree | 94 | 39.3 | 39.3 | 54.0 |
| Valid Strongly disagree | 110 | 46.0 | 46.0 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

stylish

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 10 | 4.2 | 4.2 | 4.2 |
| Valid Agree | 20 | 8.4 | 8.4 | 12.6 |
| Valid Neutral | 21 | 8.8 | 8.8 | 21.3 |
| Valid disagree | 65 | 27.2 | 27.2 | 48.5 |
| Valid Strongly disagree | 123 | 51.5 | 51.5 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

color

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 11 | 4.6 | 4.6 | 4.6 |
| Valid Agree | 21 | 8.8 | 8.8 | 13.4 |
| Valid Neutral | 38 | 15.9 | 15.9 | 29.3 |
| Valid disagree | 56 | 23.4 | 23.4 | 52.7 |
| Valid Strongly disagree | 113 | 47.3 | 47.3 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

easy

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 86 | 36.0 | 36.0 | 36.0 |
| Valid Agree | 79 | 33.1 | 33.1 | 69.0 |
| Valid Neutral | 26 | 10.9 | 10.9 | 79.9 |
| Valid disagree | 29 | 12.1 | 12.1 | 92.1 |
| Valid Strongly disagree | 19 | 7.9 | 7.9 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

environment

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 8 | 3.3 | 3.3 | 3.3 |
| Valid Agree | 39 | 16.3 | 16.3 | 19.7 |
| Valid Neutral | 8 | 3.3 | 3.3 | 23.0 |
| Valid disagree | 122 | 51.0 | 51.0 | 74.1 |
| Valid Strongly disagree | 62 | 25.9 | 25.9 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

recall

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 124 | 51.9 | 51.9 | 51.9 |
| Valid Agree | 59 | 24.7 | 24.7 | 76.6 |
| Valid Neutral | 29 | 12.1 | 12.1 | 88.7 |
| Valid disagree | 10 | 4.2 | 4.2 | 92.9 |
| Valid Strongly disagree | 17 | 7.1 | 7.1 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

Fair price

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 132 | 55.2 | 55.2 | 55.2 |
| Valid Agree | 81 | 33.9 | 33.9 | 89.1 |
| Valid Neutral | 10 | 4.2 | 4.2 | 93.3 |
| Valid disagree | 3 | 1.3 | 1.3 | 94.6 |
| Valid Strongly disagree | 13 | 5.4 | 5.4 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

shift

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 31 | 13.0 | 13.0 | 13.0 |
| Valid Agree | 67 | 28.0 | 28.0 | 41.0 |
| Valid Neutral | 27 | 11.3 | 11.3 | 52.3 |
| Valid disagree | 83 | 34.7 | 34.7 | 87.0 |
| Valid Strongly disagree | 31 | 13.0 | 13.0 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

shop

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 4 | 1.7 | 1.7 | 1.7 |
| Valid Agree | 5 | 2.1 | 2.1 | 3.8 |
| Valid Neutral | 14 | 5.9 | 5.9 | 9.6 |
| Valid disagree | 47 | 19.7 | 19.7 | 29.3 |
| Valid Strongly disagree | 169 | 70.7 | 70.7 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

advertising

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------|-----------|---------|---------------|--------------------|
| Valid Strongly agree | 79 | 33.1 | 33.1 | 33.1 |
| Valid Agree | 71 | 29.7 | 29.7 | 62.8 |
| Valid Neutral | 44 | 18.4 | 18.4 | 81.2 |
| Valid disagree | 10 | 4.2 | 4.2 | 85.4 |
| Valid Strongly disagree | 35 | 14.6 | 14.6 | 100.0 |
| Total | 239 | 100.0 | 100.0 | |

| | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---------------------|--------|--------|--------|--------|-------|---------|--------|--------|---------|--------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| stylish | Pearson Correlation | .505** | .183** | .447** | .510** | .404* | .361** | .432** | .334** | .327** | .288** | .331** | 1** | .395** | .285** | .212** | .188** | .229** | .071** | .200** | .267** |
| | Sig. (2-tailed) | .000 | .005 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .001 | .004 | .000 | .275 | .002 | .000 |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| color | Pearson Correlation | .281 | .144** | .229** | .513** | .278 | .413** | .316** | .103** | .144** | .313 | .256** | .395** | 1** | .167** | .200 | -.068** | .049** | .099** | .098** | .260 |
| | Sig. (2-tailed) | .000 | .026 | .000 | .000 | .000 | .000 | .000 | .112 | .026 | .000 | .000 | .000 | .010 | .002 | .296 | .452 | .127 | .131 | .000 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| easy | Pearson Correlation | .417** | .122 | .061** | .134** | .440* | .027 | .306** | .322** | .228* | .047** | .159 | .285** | .167** | 1* | .099** | .449 | .505** | .261** | .160* | .616** |
| | Sig. (2-tailed) | .000 | .059 | .346 | .038 | .000 | .678 | .000 | .000 | .000 | .468 | .014 | .000 | .010 | .127 | .000 | .000 | .000 | .013 | .000 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| environ ment | Pearson Correlation | .030** | .171** | .222 | .296** | .008* | .319** | .078 | .310** | .160** | .281** | .020** | .212 | .200** | .099** | 1** | .194** | .085 | .128** | .168** | .020** |
| | Sig. (2-tailed) | .646 | .008 | .001 | .000 | .906 | .000 | .231 | .000 | .013 | .000 | .763 | .001 | .002 | .127 | .003 | .193 | .049 | .009 | .761 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| recall | Pearson Correlation | .223** | .058** | .018** | -.022 | .189* | -.184** | .065** | .222 | -.048** | .141** | -.065** | .188** | -.068 | .449** | .194** | 1** | .706** | .264 | .132** | .481** |
| | Sig. (2-tailed) | .001 | .371 | .782 | .739 | .003 | .004 | .315 | .001 | .463 | .030 | .316 | .004 | .296 | .000 | .003 | .000 | .000 | .042 | .000 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| Fair price | Pearson Correlation | .264** | .165* | .157** | .034** | .163* | -.022* | .153** | .278** | .107 | .033** | .098* | .229** | .049** | .505 | .085** | .706* | 1** | .477** | .128 | .608** |
| | Sig. (2-tailed) | .000 | .011 | .015 | .600 | .012 | .731 | .018 | .000 | .098 | .607 | .131 | .000 | .452 | .000 | .193 | .000 | .000 | .048 | .000 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| shift | Pearson Correlation | .104* | .303** | .060** | .208** | .303* | .163** | .016** | .074** | -.068 | .073* | .060** | .071** | .099** | .261 | .128* | .264** | .477** | 1** | .250 | .438* |
| | Sig. (2-tailed) | .109 | .000 | .355 | .001 | .000 | .011 | .810 | .253 | .299 | .260 | .356 | .275 | .127 | .000 | .049 | .000 | .000 | .000 | .000 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| shop | Pearson Correlation | .167** | .135** | .174** | .209** | .099* | .288** | .127** | .211** | .016** | .228** | .107** | .200** | .098** | .160** | .168** | .132** | .128** | .250** | 1** | .188** |
| | Sig. (2-tailed) | .010 | .037 | .007 | .001 | .127 | .000 | .050 | .001 | .805 | .000 | .100 | .002 | .131 | .013 | .009 | .042 | .048 | .000 | .004 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |
| advertisi ng | Pearson Correlation | .400** | .237** | .030** | .190** | .267* | .107** | .254** | .286** | .146** | .001** | .074** | .267** | .260** | .616** | .020** | .481** | .608** | .438** | .188** | 1** |
| | Sig. (2-tailed) | .000 | .000 | .648 | .003 | .000 | .098 | .000 | .000 | .024 | .982 | .255 | .000 | .000 | .000 | .761 | .000 | .000 | .000 | .004 | |
| | N | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 | 239 |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).