# St. Mary's University School of Graduate Studies

# Departments of Marketing Management

## THE EFFECT OF NEW PRODUCT DEVELOPMENT (NPD) ON MARKETING PERFORMANCE THE CASE OF TOP BOTTLED WATER COMPANY IN ADDIS ABABA

**BY: ELSA W/SILASE**

**JUNE 2023**

**ADDIS ABABA, ETHIOPIA**

# THE EFFECT OF NEW PRODUCT DEVELOPMENT (NPD) ON MARKETING PERFORMANCE THE CASE OF TOP BOTTLED WATER COMPANY IN ADDIS ABABA

## ST. MARY'S UNIVERSITY
## SCHOOL OF GRADUATE STUDIES
## DEPARTMENT OF MARKETING MANAGEMENT

### BY: ELSA W/SILASE

A THESIS SUBMITTED TO ST. MARY UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS DEGREE IN MARKETING MANAGEMENT

### ADVISOR: GETIE ANDUALEM (PhD)

**JUNE 2023**
**ADDIS ABABA, ETHIOPIA**

# ST. MARY'S UNIVERSITY
# SCHOOL OF GRADUATE STUDIES
# FACULTY OF BUSINESS

# THE EFFECT OF NEW PRODUCT DEVELOPMENT (NPD) ON MARKETING PERFORMANCE THE CASE OF TOP BOTTLED WATER COMPANY IN ADDIS ABABA

## BY:

## ELSA W/SILASE

## APPROVED BY BOARD OF EXAMINERS

| | |
|---|---|
| _____ | _____ |
| Dean, Graduate Studies | Signature |
| _____ | _____ |
| Advisor | Signature |
| _____ | _____ |
| Examiner External | Signature |
| _____ | _____ |
| Internal Examiner | Signature |

# DECLARATION

I, Elsa W/Silase, the undersigned person declare that the thesis entitled "*The Effect of New Product Development (NPD) on Marketing Performance the case of Top Bottled Water Company in Addis Ababa*" is my original and submitted for the award of Master of Art Degree in Marketing Management, St. Mary University at Addis Ababa and it hasn't been presented for the award of any other degree. Under this study, fellowship of other similar titles of any other university or institution of all sources of material used for the study has been appropriately acknowledged and notice.

Elsa W/Silase           _____           _____

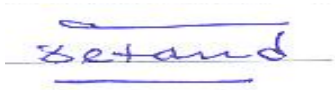    Candidate                         Signature                       Date

# CERTIFICATION

This is to certify that Mrs. Elsa W/Silase, has properly completed his research work entitled "*The Effect of New Product Development (NPD) on Marketing Performance the case of Top Bottled Water Company in Addis Ababa*" with my guidance through the time. In my recommendation, her task is appropriate to be submitted as a partial fulfillment requirement for the award of Degree in Marketing Management.

Research Advisor

Getie Andualem (Ph.D.)

Signature and Date

# ACKNOWLEDGEMENTS

# TABLE OF CONTENTS

# LIST OF TABLE

# LIST OF FIGURES

# ABBREVIATIONS/ACRONYM

NPD          New Product Development

PDPs        Product Development Practices

QFD          Quality Function Deployment

R&D         Research and Development

RBV         Resource Based View

SCP          Structure Conduct Performance

SPSS        Statistical Packages for Social Scientists

# ABSTRACT

*This study used a top bolted water company in Addis Ababa to examine the effect of new product development on marketing performance in the case of Top Water in Addis Ababa. Both qualitative and quantitative data were collected using both a descriptive and an explanatory study approach. The responders were employees of Ethiopia's Top Bottled Water SC in Addis Ababa. In this study, 461 targeted customers were chosen and 214 sampled respondents were selected based Yamane (1974) formula using stratified and random sampling techniques. Even though 214 were distributed in the study area, only 189 of them were correctly completed and returned, yielding an 88% response rate. While content analysis was used to analyze qualitative data, statistics analysis was used to analyse quantitative data, including mean and percentage calculations as well as inferential analysis (multivariate regression and correlation procedures). The results demonstrated a respectable level of market performance in new product development categories such as product quality, product branding, product packaging, and product line. This study showed that quality, branding, packaging, and product favourably and significantly affected market performance.  As a result, it is advised that companies be encouraged to create new product ideas, consumer needs and wants should also be explored, and consumer complaints and other information should be documented and then turned into new product ideas.*

*Keywords: Bottled, Water Market Performance, New Product Development, Product Quality, Product Branding, Product Packaging, Product Line*

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

The presence and course of a business in the form of a company, enterprise, or corporation are directly associated with the course of its products. A business unit exists to sell products, and as long as the product sales go well, so does the business unit. Products, like everything else in life, have a certain life cycle (Terrar, 2018). Each product goes through this life cycle and eventually dies out. Products that were once household names have disappeared from the market as they entered the decline phase of their life cycle. So due to this fact, the long-term operation of a business depends on the on-going development of new products. The rapid development of new technologies, the shift in customer needs and attributes, and the gradual increase in competition have forced all businesses to adopt new product development (NPD) as a necessary and unavoidable business practice (Nigist, 2020). NPD is a complex and time-consuming process that cannot be taken lightly since it holds more perils than first meets the eye. As the course instructor recommended that we develop a new product and work on following the eight phases and branding it, the group has designed the work as follows (Yalew, 2018).

The seller has to provoke the branding decision when developing a marketing strategy for individual products. Branding is a main issue in product strategy. Developing a branded product requires a great deal of long-term investment, especially for advertising, promotion, and packaging. Branding is a means to differentiate the products of one manufacturer from those of another. In consequence, corporate growth and profitability rely on a globalization strategy combined with product innovation. Product development plays a key role in attaining a sustainable competitive advantage in international markets (Ogbor and Edeme, 2021).

To create a workforce that provides sustainable competitive advantage and value creation, an organization must create an environment that allows their human capital to grow, much like money sitting in an interest-bearing account does. This growth, expressed within people as increased knowledge, increased motivation, increased engagement, etc., can be used to create a competitive advantage that would be very difficult for competitors to imitate (Roems, 2017). Ogbor and Edeme (2021) emphasize that a firm experiences a competitive advantage when its

actions in an industry produce economic value and when few competing companies are engaging in similar actions. Dziallas (2020) argued that a firm obtains above-normal performance when it generates greater than expected value from the resources it employs. Terrar (2018) also claimed that the perceived value of the product and service affects the customer's judgment about his or her satisfaction or loyalty with the product or service. Companies that take a global approach to new product development do better than those that focus their research spending on their home market (Thanasopon, Papadopoulos, and Vidgen, 2016).

Products designed for and targeted at world and nearest neighbor export markets are the best-performing new products. By contrast, products designed for only the domestic or home market and later adjusted and sold to the nearest neighbor's export markets are far worse (Ogbor and Edeme, 2021). To show how new products can be developed by taking a practical case of the TOP Bottled Water Manufacturing Organization in Ethiopia, TOP Water is an Ethiopian-based bottled water company with its headquarters in Addis Ababa. It is assumed that one of the newly established and holder of awards across various institutions It is primarily engaged in the development, production, and marketing of bottled water. In order for an organization to be successful in any market, it must create value for its clients. This value can be created using a new strategy, new technology, or some other 'gimmick," but in order to sustain this value (and the competitive advantage it brings), it has to be developed and maintained by an engaged, knowledgeable, and creative workforce. This bottled water firm assumed Primary operates in Ethiopia and sells its product under different brands (Top Water, 2022). The company has several project plans with a revolutionary product that promises to remove the target consumer's dependence on quality and customer values. The magnitude of the differences between international new products and domestic products is striking—two or three to one on various performance gauges. The main objective of this study is to investigate the effect of new product development on marketing performance in Ethiopia. This study showed how this organization successfully develops new products for bottled water through a series of logical steps, starting with the process of idea generation and ending with the launch of the product into the market.

## 1.2 Statement of the Problem

The ability of staff to manage the decision-making process itself, an appropriate organization for decision-making, and the capability to use tools for decision-making and the decision-making

process are three fundamental components of the decision-making process in product development (Nigist, 2020). Given that products are designed to meet requirements of some sort, decisions on new product development are frequently made quickly.

Due to the associated costs and the manager's belief that their products may still be profitable in the face of competition, Top Water Firm does not appear to be aware of this. According to the initial expert and manager interviews, this company frequently does not allocate specialists to research the technical environment in search of innovative approaches to suit client needs. Throughout the development process, product designers must overcome a number of obstacles, particularly technical ones. Poor or uneven product quality and product failure have both increased by 12%, and products that perform below consumer expectations may have lower sales. Due to production issues, this bottled water cannot deliver 100% of the quality needed to satisfy demand. As a result, competitors may obtain an unanticipated market share. According to the company's annual report, some of the issues are caused by external factors, including cost, economic changes, competitor influence, company policy, etc. (Top Water, 2022). This shows this firm has a lack of marketing research, which is a vital aspect of new product development. It's the very first step that determines the success of any product. The management of Top Water needs to fine-tune its research program with a view to improving the quality of their product.

The literature that is now available on bottled water research mostly consists of articles that examine issues in environmental science, science education, natural resource management, and related fields. There is still a dearth of empirical research on bottled water use based on social scientific theory (Jovarauskait et al. 2020). By combining a set of antecedent cognitive and affective elements with the theory of reasoned action (TRA) to explain intention to consume bottled water, the current study seeks to close this theoretical and empirical gap. The methodology used in this study was similar to that used in earlier studies that applied the TRA framework. Antecedent variables pertinent to the marketing and consumption of bottled water were measured in conjunction with the TRA constructs in the context of consumer decision-making (Carolyn and Xiaowen, 2021).

Product innovation and development are critical business considerations in today's chaotic, dynamic world. In order to build a high-tech product, it is necessary to integrate numerous actors with various knowledge bases and levels of skill (Terrar, 2018). Many noteworthy studies have focused on the connection between product development, innovation, and performance

(Thanasopon et al., 2016, and Ogbor and Edeme, 2021), and they have found substantial evidence to support this claim. Product development and innovation have an impact on an organization's performance as a whole. Despite the difficulties faced in providing customers with satisfactory items, it concentrates more on developing new products as it appears to fail in the market. Failure can be very costly and challenging to deal with.

The present study endeavors to address a knowledge gap in past research on new product development by examining its impact on the marketing performance of the selected beverage industry. In the context of Ethiopia, the research on this topic has been rather limited and has not received due attention from academic researchers. This dearth of knowledge and assistance for new product development also poses challenges to the promotion efforts of manufacturing companies. The primary objective of this essay is to explore the interplay between product development and marketing success in Ethiopia. Furthermore, the study also considers the relationship between product development and market expansion, as well as the significance of product quality and profitability for organizational success.

## 1.3 Research Questions

### 1.3.1 Main Research Question

1. What is the effect of new product development on marketing performance in the case of Top bottled Water in Addis Ababa?

### 1.3.2 Sub-Research Questions

1. What is the effect of quality on marketing performance in the case of Top bottled Water in Addis Ababa?

2. What is the effect of packaging on marketing performance in the case of Top bottled Water in Addis Ababa?

3. What is the effect of branding on marketing performance in the case of Top bottled Water in Addis Ababa?

4. What is the effect of product line on marketing performance in the case of Top bottled Water in Addis Ababa?

## 1.4 Objectives of the Study

### 1.4.1 Main Objective

- To examine the effect of new product development on marketing performance in the case of Top bottled Water in Addis Ababa

### 1.4.2 Sub-Objectives

1. To examine the effect of quality on marketing performance in the case of Top bottled Water in Addis Ababa
2. To test the effect of packaging on marketing performance in the case of Top bottled Water in Addis Ababa
3. To investigate the effect of branding on marketing performance in the case of Top bottled Water in Addis Ababa
4. To examine the effect of product line on marketing performance in the case of Top bottled Water in Addis Ababa

## 1.5 Significance of the Study

A diversity of perspectives and ideas can generate problems such as increased confusion and decision complexity. Product development is guided by market needs. A lot of new product ideas come from scientific discoveries and new technologies. The findings of this research will be of great value to professionals within the marketing as they would enable the practitioners to come up with appropriate strategies for ensuring that high levels of marketing performance attained within the organization's objective. This study helps to appraise the marketing performance of the firm in respect to new product development concepts including how to reduce organizational costs, improve customer satisfactions, integrate the entire production activities, reduce conflict and reciprocate on mutual goal-related matters. It also helps to enhance marketing performance and overall product functions of its customers within competitive advantage of the firm.

The findings of the study will be of value to manufacturing industry and there since it will highpoint the impact of new product development systems hence the industries will be able to determine whether it is a worthwhile investment and how they can optimize the system for better results. The study will also assist industries to recognize major areas of concern for seamless

movement of bottled water and their services from the source to the end users. It will also help to understand the marketing performance measurement and facilitate knowledge of cost, speed, risk and flexibility and their contracts. Moreover, the study will give insights on areas that require additional resources in order to improve the organizational performance and product service delivery.

Essentially, it helps to formulate policies and operational planning that will aid effective service delivery for a better and pronounced performance. The study assists the government to have the holistic approach of ensuring growth and development of new products across the developing countries. The study also provides relevant data and information that helps the government and other regulatory bodies to formulate and implement such policies that would facilitate effective development of innovative products at country level. The findings of this study will support the policy makers to review and develop policies that guide industrial marketing in Ethiopia.

The study will also be useful to donors who play a leading role in other organizations and will guide their decision making in terms of investment in new product development systems in the organizations which they are supporting. The findings of the study will also be useful to students, researchers and other scholars since it will provide additional literature for referencing in this area.

## 1.6 Scope of the Study

This section presents the delimitations of the research that the researcher is purposely leaving out of the research scope. The scope of the study was stated in terms of conceptual, methodological and geographic and times scopes.

The ultimate objective of the study is to investigate the effect of new product development on marketing performance in industry. Since most of the manufacturing activities are working in more serious external challenges and it needs to review the challenges, the geographical location of the study is delimited to a specific area at Addis Ababa. In view of this the study is geographically limited to only one local manufacturing firm  in Addis Ababa, it did not include other industries, its Head office, East African and other industrial parks and area of the country. It was conducted from March to May, 2023 in Addis Ababa

Conceptually, this study is limited to Resource Based View (RBV) theory and other related theories like network coordination theories were not included to value of marketing challenge of effective implementation of new product development system. The variables of new product development such as product quality, product packaging and product branding had effect on marketing performance. The basis for new product development execution getting progressively significant for hierarchical execution is that organizations stand up to expanded degrees of rivalry, quickly changing business sector conditions, higher paces of specialized outdate nature, and shorter item life cycles.

All these research efforts were studied based on both descriptive and explanatory research design. Descriptive analysis was displayed by employing mean and standard deviation while inferential analysis was used correlation and multiple linear regressions. In conducting this research, both secondary and primary sources of data was suitably used. The researcher obtained data and information from primary sources through self-administered questionnaires and direct personal interviews with key informants. With this approach, the researcher gains a general understanding and use research as a tool to help them find the problems we may handle in the future more quickly. Finding the why and what of a subject of study is its aim. It allows for an increased understanding of a specific topic.

## 1.7 Research Limitations

It is to be recalled that the study is not free of limitations, which could be engaged into thought to fully explore further scopes of research. More diverse range of respondents' particularly regional bottled water factories could be reached in order to enrich the data. In addition, more variables could help to analyze buying behavior of Consumer to obtain a wider view on the subject matter. These limitations may arise from two sides that are limitations arise from the researcher and limitations arise from organizations. In addition, this study was limited to four new product development variables but it did not include market orientation, company's proficiency, market testing, launch budgeting, launch strategy, and launch tactics. On other hand, some respondents did not be corporative and this may be serious by the respondents, and the respondents were not interested and willing to fill and return the questionnaire timely. As a result, the research may have geographical, technical and conceptual limitations.

## 1.8 Definitions and Terms

- **Market Performance** is how successfully the firm's aims are accomplished, which shows the assessment of how well the process of marketing is carried out (Claudy et al., 2016).

- **New Product Development** refers to the transformation process of a market opportunity and a set of assumptions regarding product technology into a product accessible to the market (Nkemdilim, Immanuel and Olayinka, 2020).

- **Organizational Performance**- the extent to which an organization achieves a set of pre-defined targets that are unique to its mission (Terrar, 2018).

- **Performance** is defined as the evaluation of constituents using efficiency, effectiveness, or social referent criteria to measure how well an organization meets the aspiration levels of constituents (Thanasopon et al., 2016).

- **Performance Measurement** is an analytical tool in the performance measurement process that records measures, displays results, and determines subsequent actions and it is a metric that can be used to quantify performance (Roems, 2017).

## 1.9 Organization of the Study

The structure of this research project is as follows. First, the introduction briefly summarizes the study topic and its purpose. The definitions of the important ideas are covered in the introduction, along with the boundaries of the thesis. Second, the main theoretical frameworks employed in the thesis are utilized to discuss the pertinent literature. Additionally, the idea of the new product development system, marketing effectiveness, and its distinctive features are explored from an industrial perspective. The research methodologies used in this study are described in the third place. In qualitative research, issues including study design, methodology, data collecting, analysis, and quality are examined. Fourth, the outcomes and conclusions are presented and examined in light of the chosen company's marketing through

# CHAPTER TWO

# REVIEW OF RELATED LITERATURES

## 2.1 Introduction

In order to understand the relevant theories of new product development and marketing performance, the literature review for this chapter looks for pertinent literature on industrial marketing strategies, performance, and related theories. It also clarifies information systems and organizational management and looks at empirically related literature. These were created via a thorough desk review of pertinent publications (articles and journals).

It also presents empirical studies in similar studies, and finally, the conceptual framework of the study is constructed appropriately. New Product Development (NPD) is the complete process of bringing a new product to the market that involves systematic methods of designing, creating, and launching. The term new product development is all-embracing and ranges from products that are totally new to the world to minor modifications (Cheng and Yang, 2019). Cooper (2019) noted that NPD is the development of original products, product improvements, product modifications and new brands through the firm's own product development efforts.

## 2.2 Theoretical Literature Review

The definition of new product development and marketing performance, as well as its performance indicators, performance measurement frameworks, and relevance to organizational management, are all covered in this chapter. It also gives one of the most frequently quoted frameworks for product development and marketing performance measurement because the goal of a commercial business is to generate a profit. In its entirety, it provides definitions of fundamental ideas as well as a theoretical and empirical analysis of new product creation and marketing effectiveness. The chapter also displays a conceptual framework and a research gap. Product development is an interdisciplinary activity that requires contributions from the functions of a firm; nevertheless three functions are almost central to a product development effort. These include marketing, design and manufacturing (Cooper, 2019). Filling the requirements of customers is not exclusively a marketing challenge, nor is it exclusively a design problem or manufacturing issues.

### 2.2.1 Concept and Definitions

### 2.2.1.1       New Product Development

Product development, often known as new product development, is the process of turning a market opportunity and a set of technological presumptions into a marketable product. By rationally merging a number of activities, it is a process that results in the introduction of new items into a market as a response to a market opportunity (Nkemdilim, Immanuel, and Olayinka, 2020). The actions taken by businesses while creating and introducing new products are included in the NPD process. A new product's development through a series of stages, starting with a preliminary product concept or idea that is assessed, developed, tested, and introduced to the market (Nadia, 2013).

 The new product development (NPD) concern highpoints and directly indicates the consequence of introducing new products on the market for continuing business success. Its inspiration to the growth of the businesses, its effect on profit performance, and its role as a key factor in business planning has been well documented. New products are in charge for employment, economic growth, technological progress, and high standards of living. Consequently, the study of NPD and the processes through which they appear is significant (Benson, Willyand Charles, 2015).

This grouping of activities into categories can also be seen as a progression of information gathering and evaluation phases. As a result, management can evaluate and reevaluate its initial decision to embark on development or launch as the new product develops and as management becomes increasingly aware (or less uncertain) about the product. By reducing the amount of risk and allocating fewer resources to ultimately unsuccessful goods, following this process of information collecting and evaluation can help businesses make better decisions about new products. The NPD process varies from sector to sector and from company to company. In order to suit unique company resources and needs, it should in fact be customized for each organization (Cheng and Yang, 2019).

It is an issue with product development. Offering a new or improved product for current markets is known as product development. A company can see ways to introduce new versions of popular programs, or attributes of innovations, by understanding the needs of the current market. These

new versions of popular programs can be used to add or modify product features, establish multiple quality levels, or add more types or sizes. Any organization's success can be traced back to its ability to develop successful products, which depends on their capacity to recognize client demands and respond promptly to these needs with new products. The lifeblood of each corporate organization can therefore be characterized as product creation (Claudy, Peterson, and Pagell, 2016).

The marketing department mediates communications between the company and its clients. The identification of client demands is frequently facilitated by marketing. Additionally, marketing often sets prices, coordinates product launches and promotions, and facilitates customer-company contact. The physical form of the product is defined by the design function to best suit client needs. Engineering, industrial, promotional, or all of the above could be the design role. The design and management of the production system necessary to create the product fall primarily under the purview of the manufacturing function. Purchasing, distribution, and installation are all included in the manufacturing activity, broadly speaking (Cooper, 2019).

## 2.2.1.2 New Product Development Model

The Booz, Allen and Hamilton model (1982), often known as the BAH model, is the most well-known detailed NPD model that has been created over time and is the model that serves as the basis for the majority of other NPD systems that have been proposed, according to Nadia (2013). Nadia (2013) cited Booz, Allen and Hamilton (1982) who discovered that businesses that have positively launched new products are more likely to have some kind of formal NPD process and that they generally pass through all of the above stages. This extensively documented model appears to encompass all of the basic stages of models found in the literature. It is based on extensive surveys, in depth interviews, and case studies and, as such, appears to be a fairly good representation of prevailing practices in industry. The NPD phases of the model are as graphs in the subsequent diagram:
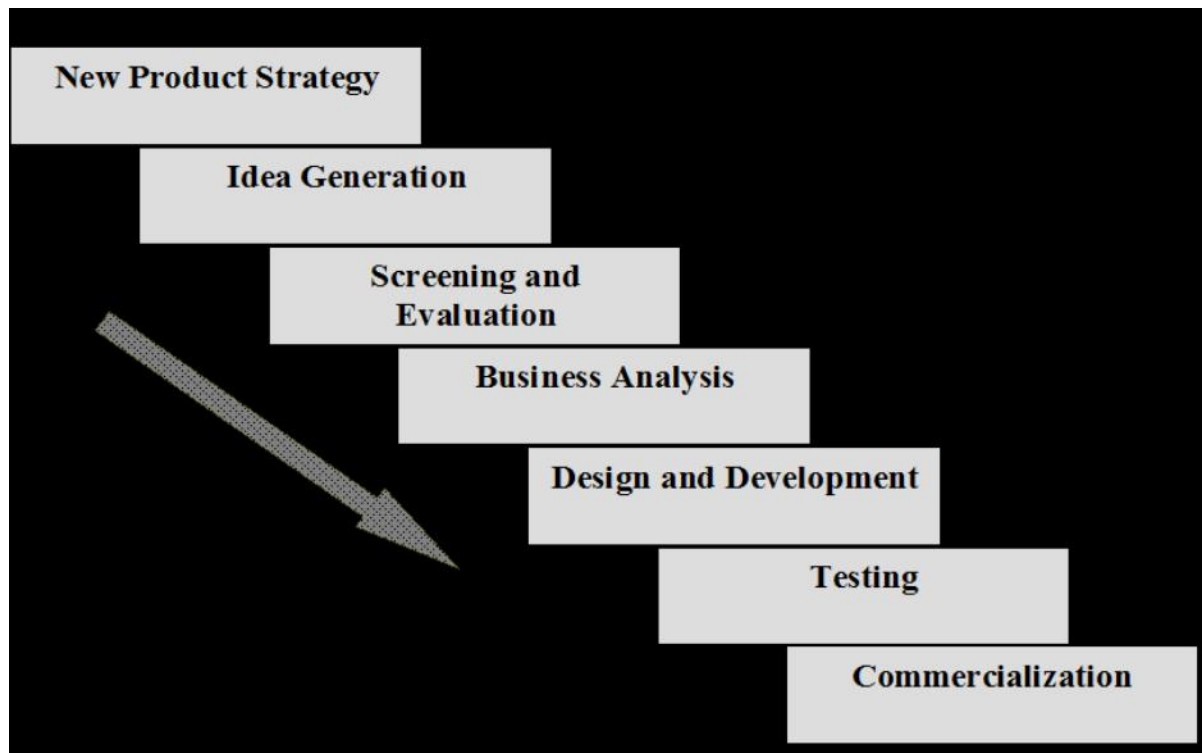
**Figure 1 Stages of New Product Development (NPD)**

## New Product Strategy

It establishes a connection between organizational goals and the NPD process, gives direction for developing ideas and concepts, and specifies rules for creating screening standards. Companies must establish goals and have a clear new product strategy (NPS) to achieve them before starting an NPD initiative. This phase's goal is to offer direction for the new product initiative. It outlines the strategic business demands that the new product must meet, which are drawn from the corporate goals and overall business strategy of the company. The new goods are given responsibilities to play according to these business requirements, which in turn are determined by market demands (Cooper, 2019).

## Idea Generation

It looks for product concepts that advance business goals. Every new product development process and every new product itself begins with idea generating. Idea creation is a method that uses imaginative thinking to generate a lot of ideas for brand-new products. It is crucial to collect all ideas, no matter how absurd or outlandish they may seem. In general, brainstorming is a very

effective method for coming up with numerous answers to an issue. Brainstorming can generate broad, strange ideas for new products that can be built very quickly. Since the technique aims to expand options and dispel preconceived notions about one's idea creation limitations, no idea is ever rejected during brainstorming sessions.

**Screening**

It includes an initial analysis to discover whether concepts are relevant and call for more in-depth investigation. It is necessary to collect and manage all feasible ideas before further developing, going through, ranking, and evaluating them in order to choose one to develop into a product concept. Dot sticking is a concept or idea selection method that involves a large group of participants. When there are numerous possible or rival ideas on the table, the tool is quite helpful. Each participant in the tool receives a set of colored dots that they can use to express their preferences. The tool's methodology may be broken down into five easy steps. Each concept or idea is initially a similar way having the same amount of detail so that the persons involved in the process can make their choices without bias.

Typically small drawings of each concept or idea are presented to the persons engaged in. Formerly stage 2 demonstrates that that the participants must be then selected. The next step 3 dots are allocated to each of the participants. Depending on the number of concepts or ideas these can be 3 to 5. Various colour dots can be used to specify different things such as performance, functionality, design etc. Contributors can use his or her dots to designate choice, by sticking them next to the concept or idea drawing. Step 4: After everyone has utilized their matching dots, the top notion is determined by adding the dots for each thought or idea. The finest two or three strongest concepts or ideas can be chosen for a second round of dot sticking. Final point: Understanding the cause of the voting or dot sticking might occasionally be useful and required. In this scenario, the participants are instructed to use post-it notes to express or remark what they like and dislike about the topics. This enables the design team to keep in mind the beneficial aspects of solutions that were rejected.

**Business Analysis**

Consideration should also be given to the ideas' quantitative merits, such as earnings, Return on Investment (ROI), and sales volume. The next step is to determine whether the company has the

financial resources to support such a project now that a wonderful idea for a new product has been selected, the product design has been produced, and the marketing plan is workable.

**Concept Development and Testing**

The concept development process transforms an abstract notion into a demonstrable and scalable product, while the testing phase carries out the practical experiments required to support prior business conclusions. A product concept must be created based on the one idea that is chosen from among numerous generated ones through a screening procedure as detailed in Levels 1 and 2. This product idea needs to be a ground-breaking solution that will be bought by customers and bring in money for the company. Evaluation of many product concepts based on a single product idea is a step in the concept generating process.

**Commercialization**

In this stage, products are introduced. At every stage of the NPD process, product testing is possible. Concept testing can be done at the conclusion of concept development, prototype and beta testing can be done at the conclusion of prototype development, and final product testing can be done at the conclusion of technical implementation. End users or clients conduct beta testing. The test is carried out right before the product or service is introduced to the market, after all the necessary development has been finished.

## 2.1.1.3. New Product Development Practices

Product development practices PDPs are understanding drivers of new product development efforts because when properly implemented, they can positively impact an organization's market share, profitability and long-term survival. PDPs comprise practices that help business organizations arrive at quality and viable products that meet market needs and can capture value for the organization while creating value for customers (Nkemdilim et al., 2020). (PDPs) are a defined set of tasks, steps and phases that define the standards by which a company repetitively converts embryonic ideas into sellable products or services. They are firm practices that translate into the development and launch of new products as a response to new market opportunities. The concept impacts three broad aspects of organizational success: operational, financial, and marketing performance. It is noted that practices such as the development of product

programmes, research and development (R&D) and innovation can translate into the success of a new product. There are two categories of PDPs – process speed and integrative practices (Claudy, Peterson, and Pagell, 2016).

## Process Speed

This mentions to the compression of activities versus traditional sequential new product development practices. Process speed could be agile development, early feedback or late decision-making product development practices for accelerating the speed of the product development process. Agile development is characterized by rapid development iterations used to gain feedback combined with overlapping processes where the next iteration begins before the current iteration finishes. Agile development contrasts with the traditional waterfall development methodology that focuses on preparing a complete and detailed design specification before the execution phase begins (Roems, 2017). Early feedback refers to frequently gathering feedback from multiple constituents at the earliest stages of the product development process. Capabilities and designs are not finalized until the last phases of the development process. Late decision-making contrasts with the traditional stage-gate style processes where product development is in a sequential structure of decision gates. At each decision gate, a facet of the product is agreed upon and frozen before moving to the next gate (Nkemdilim et al., 2020).

## Integrative Practices

These are processes used by the organization to regenerate its understanding and information base. They comprise foundational customers and supplier participation. Introductory customers are customer representatives who participate in the new product development process in a manner that helps shape the requirement analysis for new product development. In-depth requirement analysis of market realities is critical for the success of financial products. Validating initial market assumptions requires engaging customers that can provide a near real-life input to the requirement analysis and initial product design stages (David-West, Iheanachor and Umukoro, 2019). Supplier participation refers to the various roles that suppliers play in the product development process. It ranges from merely delivering parts based on a specification to substantial involvement in the design process. Suppliers are a critical category of stakeholders in the product development process. The interface with customers provides useful feedback on

customer buying and consumption behaviour. It is also identified that supplier involvement and inter-functional integration can also eliminate barriers that lead to new product failure (Roems, 2017).

## 2.2.1.4. Marketing Performance

### 2.2.1.4.1 Definition of Concepts

The market's performance is taken into account when determining a product's pricing, costs, and output volume and quality. Poor market performance is to be expected if an industry's market structure approaches a monopoly rather than being purely competitive. Market performance is an indicator of how well the firm's objectives are met and provides insight into the effectiveness of the marketing process. Is the produce put together, delivered on schedule, and wasted-free? Is it attractively packaged and presented? Is the quality dependable and the contract's conditions followed? Are product sales booming and product consumption rising in a cutthroat market? There are such concrete measures of a marketing system's effectiveness (Claudy et al., 2016).

By way of a method for analysis the Structure Conduct Performance (SCP) paradigm assumes that the association exists between the three levels distinguished. One can envisage a causal relations starting from the structure, which control the conduct, which together determine the performance (technological progressiveness, growth orientation of marketing firms, efficiency of resource use, and product development and extreme market services at the least possible cost) of agricultural marketing system in developing countries (Najafi-Tavani, Sharifi and Najafi-Tavani, 2016).

### 2.2.1.4.2 Methods of Evaluating Marketing Performance

Market performance can be assessed by analysis of costs and margins of marketing agents in different channels, and market integration. A normally used measure of system performance is the marketing margin or price spread. Margin or spreads can be useful descriptive statistics if used to show how the consumer's food price is divided among participants at different levels of the marketing system (Claudy et al., 2016). Regarding marketing costs and margins, marketing costs refers to those costs, which are incurred to perform various marketing activities in the shipment of goods from producers to consumers. Marketing cost includes: Handling cost

(packing and unpacking, loading and unloading putting inshore and taken out again), transport cost, product loss (particularly for perishable fruits and vegetable), storage costs, processing cost, and capital cost (interest on loan), market fees, commission and unofficial payments (Najafi-Tavani et al., 2016).

A marketing margin, on the other hand, is the portion of the weighted average selling price that each link in the marketing chain keeps from the final price. The price the customer pays compared to the price the producer or farmer receives for their goods is known as the total marketing margin. According to Roms (2017), it is the gap between the farm price and the retail price. A large margin typically translates into high consumer prices and low production pricing. The expenditures associated with marketing services overall as well as profit margins or net returns can all be broken down into separate parts to get the total marketing margin. Due to the anticipated abnormal profit, the marketing margin in a market with imperfections is likely to be higher than it is in a market with competition. Nevertheless marketing margins can also be high, even in competitive market due to high real market cost (Najafi-Tavani et al., 2016).

Sectorial policy tools like import tariffs, tariff rate quotas, export subsidies or taxes, intervention mechanisms, and exchange rate policies isolate domestic markets and obstruct the full transmission of international price signals by affecting the excess demand or supply schedules of domestic commodity markets (Roems, 2017). In addition to policy, domestic markets may also benefit from the substantial marketing margins created by high transfer costs. The propagation of price signals is hampered by high transfer costs and marketing margins, which may make arbitrage impossible (Claudy et al., 2016). Price transmission studies, which purportedly use empirical methods to evaluate the economic theories' hypotheses and offer crucial information on how changes in one market are transmitted to another, represent the degree of market integration, as well as the extent to which markets function efficiently (Najafi-Tavani et al., 2016).

## 2.2.2  Theory related to this Study

### 2.2.2.1        Resource Based View (RBV)

One of the numerous organizational behavior theories fits in nicely with the idea of people as human capital in an organization. According to this view, known as the Resource Based View (RBV), a firm's application of resources can provide it a competitive edge. The two major tenets of the resource-based view of firms are resource diversity and resource immobility. These presumptions are known as resource diversity (also known as resource heterogeneity), and they concern whether a company holds a resource or competence that is also owned by multiple other rival enterprises. If so, that resource cannot give the firm a competitive advantage. Conversely, resource immobility is mentioned to a resource that is difficult to obtain by competitors because the cost of developing, acquiring or using that resource is too high. As an example of resource immobility, consider the following: a firm is trying to decide whether they should buy an 'off-the-shelf' inventory control system or have one built specifically for their needs (Nkemdilim et al., 2020). According to the resource-based view of the firm, an organization's human capital management strategies can considerably help it maintain a competitive advantage by fostering unique knowledge, skills, and a company culture that are challenging to replicate (Esen, 2018). In other words, a sustained competitive advantage can be built and maintained by increasing resource diversity (more knowledge and skills) and/or resource immobility (a culture that people want to work in).

### 2.2.2.2        Dynamic Capabilities Theory

The concept of dynamic capability makes use of Schumpeterian logic, which sees dynamic capability as an additional rent-creating process based on organizational capabilities. Dynamic capacities are described as "a set of specific and recognizable processes" that are "idiosyncratic" in their specifics and "dependent" in some way upon one another. According to Najafi-Tavani et al. (2016), the formation of disparate firm performance within an industry may be explained by a firm's dynamic capacities. The timing of the deployment of dynamic capabilities and learning to deploy dynamic capabilities were determined to be performance significant features of dynamic capabilities, which include the innovativeness of products. It basically covers the well-established resource-based view (RBV) theory. The dynamic capabilities theory emphasizes the

ability of a firm to integrate, develop and reinvigorate its internal capacity to address challenges arising from rapidly changing business environments (Nkemdilim et al., 2020). From the above definition, this study will use DCs as it promotes continuous change and the configuration of the productive resources of a firm to adapt better to the environment. It proposes that the management of various competitive organizations invests in product development practices as a strategic solution for long-term survival in some dynamic environments.

## 2.2.3 The Relationship between New Product Development Practices and Market Performance

When customers believe that a task might have been completed in a shorter amount of time, they get unsatisfied and depart. Both objective and subjective perceptions of quality exist (Dziallas, 2020). In product development, it is desired that a company will stay in its current markets while creating new items for them. According to Cooper (2019), the combination of product and process innovations has greatly improved company growth and inventive performance is a key engine for firm growth. According to Terrar (2018), a company's operating performance was typically determined by its marketing and financial performance. Market shares served as a gauge of marketing performance, while financial performance included return rate, pretax income, return on sales, volume of sales, and sales growth rate. Competitive advantage can be found from either applying a value generating strategy not simultaneously being used by any potential or current competitors. A company's competitive advantage can be shaped by providing the means to outperform its competitors by paying attention to external factors (Ogbor and Edeme, 2021).

### 2.2.3.1    New Product Quality

Currently, customers demand for customized products forces firms to increase product range, i.e. increase the variety they offer in the market. Product variety shields both exterior diversity, i.e. the range perceived by the customers and internal variety, i.e. the variety of mechanism and semi-finished products (Ogbor and Edeme, 2021). The NPI) process defines product variation. Performance of the supply chain is impacted by this choice. Delivery delays, manufacturing overhead, and inventory levels, for instance, all rise in tandem with an increase in product diversity in direct production costs (Dziallas, 2020). SCM decisions determine the size of the

effect of diversity on supply chain performance. The distinctiveness of a product, which encompasses its color, quality, attribute, flavor, product expertise and innovation, ingredients, and brand image, is also acknowledged to influence consumer decision-making. Because they provide the benefits that customers want from the items, a product's attributes are important to them (Nkemdilim et al., 2020).It emphasizes how consumer purchasing decisions are also influenced by a product's flavor. As a result, how customers perceive quality influences how they make decisions. Innovation in products is also another element contributing to consumer purchasing behaviour. Therefore;

*Ha1. New product quality has a positive and significant effect on marketing performance in Beverage Industry.*

## 2.2.3.2    New Product Packaging

Product packaging is becoming a more popular sales marketing technique among businesses. Package turns becomes a key selling point that encourages impulsive purchasing, lowers advertising expenses, and boosts market share. According to Najafi-Tavani et al. (2016), the packaging draws customers' attention to a particular brand, enhances its reputation, and affects how they perceive the product. Additionally, packaging adds distinctive value to goods, serves as a tool for differentiation, i.e., aids consumers in making a purchasing decision among a wide range of comparable goods, and influences consumer behavior (Esen, 2018). As a result, the packaging plays a significant part in marketing communications and may be considered one of the most important variables influencing a consumer's purchase choice.

Customers presently are shelled with a lot of marketing stimuli, clues in order to being attracted by different firms. The key objective of packaging is to protect the product, nonetheless packaging can be used by firms as an instrument for promoting their marketing offer and for enhancing their sales. A good packaging helps to differentiate and identify products to the customers. Packaging is used for easy safety and delivery purpose. Packaging helps firms to differentiate the product from other brand (Nkemdilim et al., 2020). Consequently, packaging elements colours, sizes, shapes, and labels influence customers to respond positively. Many packaging elements are components that affect the buying behaviour of customers such as, packaging colour, printed information, packaging material, design of wrapper, printed

information, brand image, innovation and practicality (Ogbor and Edeme, 2021). Consequently, packaging does more than just protecting the organization's products. It also helps in developing the image of the product in customer mind. These days, there are customers that pay more attention to label information since they are more concerned with nutrition and health issues (Nkemdilim et al., 2020). The package is what the consumer sees and helps make his/her decision to purchase. The final aim of the packaging is to get the consumer buying the product. Therefore;

***Ha2. New product packaging has a positive and significant effect on marketing performance in Beverage Industry.***

## 2.2.3.3     New Product Branding

What the brand should and shouldn't do with its marketing is determined by brand positioning, which also establishes the direction of marketing initiatives. In order to distinguish the brand and build competitive supremacy, brand positioning requires creating strong brand connections in the minds of consumers and other important stakeholders (Dziallas, 2020). The ability of the target market to distinguish one product from another is a factor in the success of any consumer product or business. The main tool used by businesses and marketers to set their products apart from those of rivals is branding. Creating, preserving, and enhancing brands is thought to be one of the most distinctive abilities of expert marketers. It is crucial that businesses have a name that can be quickly and easily recognized by target market and also helps to distinguish the product in question from those of competing products (Ogbor and Edeme, 2021).

Numerous businesses do not brand their product because they either unable or unwilling to assume the two major responsibility inherent in brand ownership: his responsibility for demand stimulation through advertising, personal selling and other forms of promotion and the responsibility of maintaining an adequate quality of output. The selection of a brand is a very critical decision because the name affects customers' image and attitude towards products and the firm Najafi-Tavani et al., (2016). Branding, being a part of marketing concept and process has contributed greatly to survival of many business organizations and in marketing environment because they all interrelated with products, finance as well as other business concepts. Therefore, it is a contributing factor in making it a winner or loser in the competitive market. This is to say

that organizations should consider a variety of issues when selecting a brand name which is the most difficult task facing marketing management. Branding must therefore, develop and recover the company's image, boost sales and profit. Thus;

***Ha3. New product branding has a positive and significant effect on marketing performance in Beverage Industry.***

## 2.2.3.4    Product Line

Businesses typically generate new products in the form of significantly improved or modified versions of the products described in the preceding section. For instance, more than 80% of Sony's new items are upgrades of the company's current offerings. Similar to Sony, Nike began with running shoes and gradually expanded its product line to include a wide variety of sports apparel while making continuous advancements (Dziallas, 2020). Therefore, during the early stages of new product development, it is important to carefully evaluate where new product developments fit into the existing product line, portfolio, or product category.

A product line is a series of products that are related to one another because they are offered to the same customers using the same types of marketing methods, perform similarly, or are priced similarly. For instance, Nike makes a variety of sports shoes, and Apple makes various computer types. Both companies strive to meet the needs of various clientele (Najafi-Tavani et al., 2016).An important topic for businesses to monitor profit changes is the estimation of how many related items will be produced, or, in other words, the length of the product line and how each product in the line will contribute to the profit on a regular basis.

The length of a product line is determined by business goals and resources. To attract high-income customers, for instance, a corporation may develop new items by incorporating luxury characteristics into the present product. An example of this would be an automotive series that starts with an economy model and progresses to a luxury model. Or, a company can oppose to cross-selling, such selling HP printers and toner. Additionally, businesses may argue that in the event of economic difficulties, profit losses can be avoided by developing many brands with various pricing, such as Gap, which has several brands (Nkemdilim et al., 2020) that cater to customers with various income levels. A company has a product portfolio if it offers a variety of

product lines. A product portfolio has four major dimensions which are width, length, depth and consistency.

*Ha4. Product line has a positive and significant effect on marketing performance in Beverage Industry.*

## 2.3 Empirical Literature Review

### 2.3.1.1    Theory of New Product Development

According to Esen (2018), it is essential for firms to build new product development (NPD) departments because of their direct impact on the manufacturing process. A product, whether it be a physical item or a service, should be practical and appealing to the senses in order to meet the needs of the consumer, provide value, and be provided in the manner they requested. Additionally, it must incorporate other particular components, such as offering client services. A new product is the result of a creative and original idea that can satisfy customers. It is important to remember that new product development involves changing not just the physical aspects of the product but also every part of it.

For each stage of the new product development (NPD) process, Nadia (2013) offered a framework of important success criteria, metrics, and tools and techniques for putting those metrics into practice. In order to accomplish this goal, a survey of the literature on NPD success and methods for achieving it was conducted. These studies were examined for similar elements among businesses that experienced commercial success with new products. The elements that contribute to NPD success are outlined in the article, along with metrics that should be used to measure them and suggested tools and methods for doing so. This was carried out at each stage of the NPD process and combined into a framework that the authors recommend should be used for complex NPD projects.

### 2.3.1.2    Global Perspective

In conjunction with the idea of reasoned action, Carolyn and Xiaowen (2021) explored a conceptual framework to investigate the impact of perceived product knowledge and trust in bottled water advertising on consumer beliefs about bottled water. N = 445 college students in the United States were included in the study's sample. Results demonstrated that consumer

opinions regarding the quality and image of bottled water were substantially correlated with greater trust in bottled water advertising, more misleading knowledge, and less factual knowledge. Additionally, purchase intention was positively correlated with higher positive cognitive views, affective beliefs, attitude, and perceived subjective norms about bottled water usage. It would be advantageous to use marketing techniques to make carrying a reusable water bottle fashionable and accepted in order to decrease the buying of bottled water by young adults.

With a systematic assessment of the literature and consideration of many ideas and theories, Smita, Jirarat, Emeritus, and Achara (2020) sought to design the method of the innovative goods that can be used to food and beverage products. They are discussed in a wide gap, the study revealed. The study's second goal was to investigate how well-liked the creative product development methodology for food and drink is. As the market changes today, there are restrictions that prompted the development of a model with three phases: Phase 1: Product Design Development, Phase 2: Prototype, and Phase 3: Industry Scale and Commercialization. The research findings then examine model acceptance utilizing a focus group methodology. It is well known that many small- and medium-sized business (SME) owners did not create a systematic product, which led to failure in a market with numerous competitors and challenges with adaptation and problem-solving. Entrepreneurs will find it easier to grasp and have more direction for product development after they have studied the food and beverage creative product development model step by step. This will result in new items or processes that have lower costs and higher profits. Time is used efficiently, resources are saved, including raw materials and labor, environmental damage is decreased, and resources are used to their full potential.

Mastrisiswadi and Amalia (2017) used the Quality Function Deployment (QFD) method to create a water-bottled product that satisfies consumer expectations. Customer needs are translated into technical features with a calculated value of absolute importance using the results of QFD and House of Quality (HOQ). Affordability of pricing (11%), portability (10.9%), lightness (10.8%), ease of use (10.8%), safety (10.7%), thermostat (9.98%), high capacity (9.93%), simple design (9.11%), exquisite appearance (9.02%), and glass storage (7.69%) are the client needs that are deemed to be most important. Additionally, depending on the results of the total QFD calculation, the following specifications should be included in the design and development of adult water bottles: Bottle design (13.6%), bottle material (12.8%), bottle

dimension (15.8%), and bottle cap / cover shape(9.71%), temperature control system (8.91%), bottle cap / cover mechanism system (7.47%), bottle color( 6 .12%), additional for storage space (5.12%).

Organizational information processing theory (OIPT) is a framework that Ahmad, Mallick, and Schroeder (2013) use to examine how two key NPD project characteristics—project complexity and project uncertainty—affect the performance of NPD projects. There is evidence, however, that the interactions between project complexity and team integration have a favorable effect on overall NPD performance and that the interactions between project uncertainty and the concurrent NPD process have a negative impact. The study also discovered evidence of a direct positive association between project complexity and overall NPD performance rather than the indicated direct negative relationship between project uncertainty and complexity and overall NPD performance.

### 2.3.1.3      African Studies

The impact of new product development techniques on marketing effectiveness was investigated by Ogbor and Edeme in 2021. The sample was chosen using a stratified random sampling procedure. The study used a sample size of 221 workers from chosen beverage-related businesses in Lagos State, Nigeria. A cross-sectional survey study design approach was used, and multiple regression analysis and basic percentage statistical procedures were applied. Results indicated that the sub factors of new product development in the Nigerian beverage industry were responsible for the change in marketing performance. The first variable, new product quality has a favourable impact on marketing effectiveness. The second variable, new product packaging has a favourable impact on marketing effectiveness. The study concluded that new product development strategies have significant positive effects on marketing performance in the Nigerian beverage industry.

Scholastica and Maurice (2013) looked at the connection between business performance and product innovation. The information was gathered from marketing managers, operations managers, and managers who have played a significant role in the process of product creation and innovation. 120 Nigerian companies were used as a research sample, and a total of 185 usable questionnaires were filled out. The Likert model and SPSS software were used to analyze

the study's results using certain acceptable statistical approaches, including factor analysis, regression, and reliability analysis. The results demonstrate that when customers view product innovation as stronger, more favorable, and more distinctive, it has a greater impact on organizational success in Nigeria. The innovation process' creativity and quality have a favorable impact on product development and performance.

Benson et al. (2015) empirically investigated the relationship between new product development strategy and firm performance. To do this, two indicators of the product development strategy—the creation of new products and the enhancement of existing ones—were taken into account as independent variable indicators, and output turnover, profitability, sales volume, and capacity utilization were used as performance metrics. Because of its vital function in the agriculture subsector, the Kenyan industry was selected as the empirical context for the examination of the current study. The findings of this analysis support the study's hypothesis by demonstrating that improvements to existing items have been made through packaging and branding while the introduction of new products other than sugar has mostly been negligible. Resultant performance was positive in total output turnover, sugar sales quantities, capacity utilization was moderate while profitability after tax gave fluctuating results.

### 2.3.1.4      Ethiopian Studies

The impact of bottled water packaging characteristics on consumers' buying decisions was revealed by Yalew (2018). The study was centered in Addis Abeba, Ethiopia. The study used consumers' purchase decisions as a dependent variable and color, graphic design, size, printed content, and packaging shape as independent variables. This empirical study was carried out by use of a survey that included open-ended questions and a 5-point Likert scale. 200 people completed the questionnaire, and 96.5% of those responses were used in the analysis. Descriptive and inferential statistics including mean, correlation, and multiple regression were used. The study's conclusions demonstrate that consumers' decisions to buy bottled water are highly influenced by the color, graphic design, size, and form of the package.

Market orientation, launch strategy, product performance, organizational performance, profitability, and financial performance were all examined by Nigist (2020). Employees of specific Ethiopian beer manufacturers BGI Ethiopia were the target populations, and samples

from these populations were obtained using the judgemental sampling approach. Data was gathered by a survey questionnaire, and the link between the leading variable was examined using a linear regression analysis. Finally, it was discovered that market orientation, launch strategy, product performance, and organizational performance all have an impact on the profitability and financial success of businesses. To increase profitability and financial performance, it is advised that businesses concentrate on improving their market orientation, launch strategy, product performance, and organizational performance.

Daniel (2022) examined the impact of new product development on organizational performance in the context of Addis Abeba-based manufacturing firms. For this study, a cross-sectional field survey, a descriptive research design, and a quantitative research approach were used. The stratified random sampling approach, namely the probability sampling technique, was used to choose sample responders from the total population of 268.With the aid of SPSS Version 20.0, data were analyzed using descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and multiple linear regression). The outcome showed that three independent variables, including product quality, size, and design, have a moderately favorable association and considerably impact organizational performance. whereas the fourth independent variable is a product line is the fourth independent variable has a weak relationship and insignificant effect on the performance of target organizations.

## 2.4 Research Gap

Consumer decision-making is influenced by how they perceive the quality of the product. Product innovation is yet another factor influencing consumer purchasing patterns. The ability to try different things is regarded as a sign of inventive shopping. A good package makes things easier for buyers to distinguish and recognize. Packaging is used for transportation convenience and safety. Businesses use packaging to set their products apart from competing brands. The choosing of a brand is crucial because it influences how people feel about the company and its products. As a result, it influences whether something succeeds or fails in a cutthroat market. In marketing strategy, branding is a powerful instrument for promoting products and services for maximum sales and profitability of commercial and consumer goods. However, prior research on new product development has focused on the characteristics of bottled water packaging, such as in Yalew's 2018 study; Nagist's 2020 investigation into the relationships between market

orientation, launch strategy, product performance, and organizational performance; and Daniel's 2022 assessment of the impact of new product development on organizational performance.

The impact it might have on beverage manufacturing marketing performance was not covered in earlier studies. Performance was somewhat sensitive to changes in product processes and procedures, but it was bad when new products were introduced since actualization had not yet occurred. Therefore, this study looked at how it affected marketing success in Ethiopia's beverage business, specifically in the production of bottled water.

Ethiopia has had amazing growth in both size and number, and prior studies like performance Nigist (2020) suggested that this expansion was made possible by some firms' performances through efficient product creation. Additionally, Daniel (2022) discovered that, with the exception of product line, there is a positive correlation between product sixe, design, and quality as independent factors and organizational success. However, Ogbor and Edeme (2021), who looked at how new product development affected marketing effectiveness in the food and beverage sector, discovered that product line has a beneficial influence. This demonstrated the inconsistent nature of the outcomes. These will just be beliefs, hunches, and conjectures unless they are amply supported and verified by a concentrated empirical effort. The state of the nation's industrial sector does not appear to have sparked attention among academics and researchers up to this point. There are consequently very few studies done in Ethiopia on the topic of NPD.

## 2.5 Conceptual Framework

According to Dziallas (2020), a conceptual framework is a collection of overarching concepts and guiding ideas drawn from pertinent disciplines of study and utilized to organize a future presentation. Daniel (2022) from Addis Ababa University discussed the connection between OP (dependent variable) measurements like profitability and sales volume and NPD indicators (independent variables such as product quality, product size, product line, and product design). While Ogbor and Edeme (2021), who investigated the impact of new product development on marketing success in the food and beverage business in Lagos State, Nigeria, served as the study's primary source of inspiration. Marketing effectiveness may be impacted by new product development factors such product quality, packaging, and branding. But the product line variable was not included in this analysis. To remain competitive, businesses must frequently update and improve their goods. The process in question is a product line change. Product line changes

could require in-depth market investigation and analysis. The conceptual framework of the study examined causal relationships between dependent and independent variables shown below:

| Independent Variables | Dependent Variables |
|---|---|

| | |
|---|---|
| *New Product Quality* | |
| *New Product Packaging* | Marketing Performance |
| *New Product Branding* | |
| *Product Line* | |
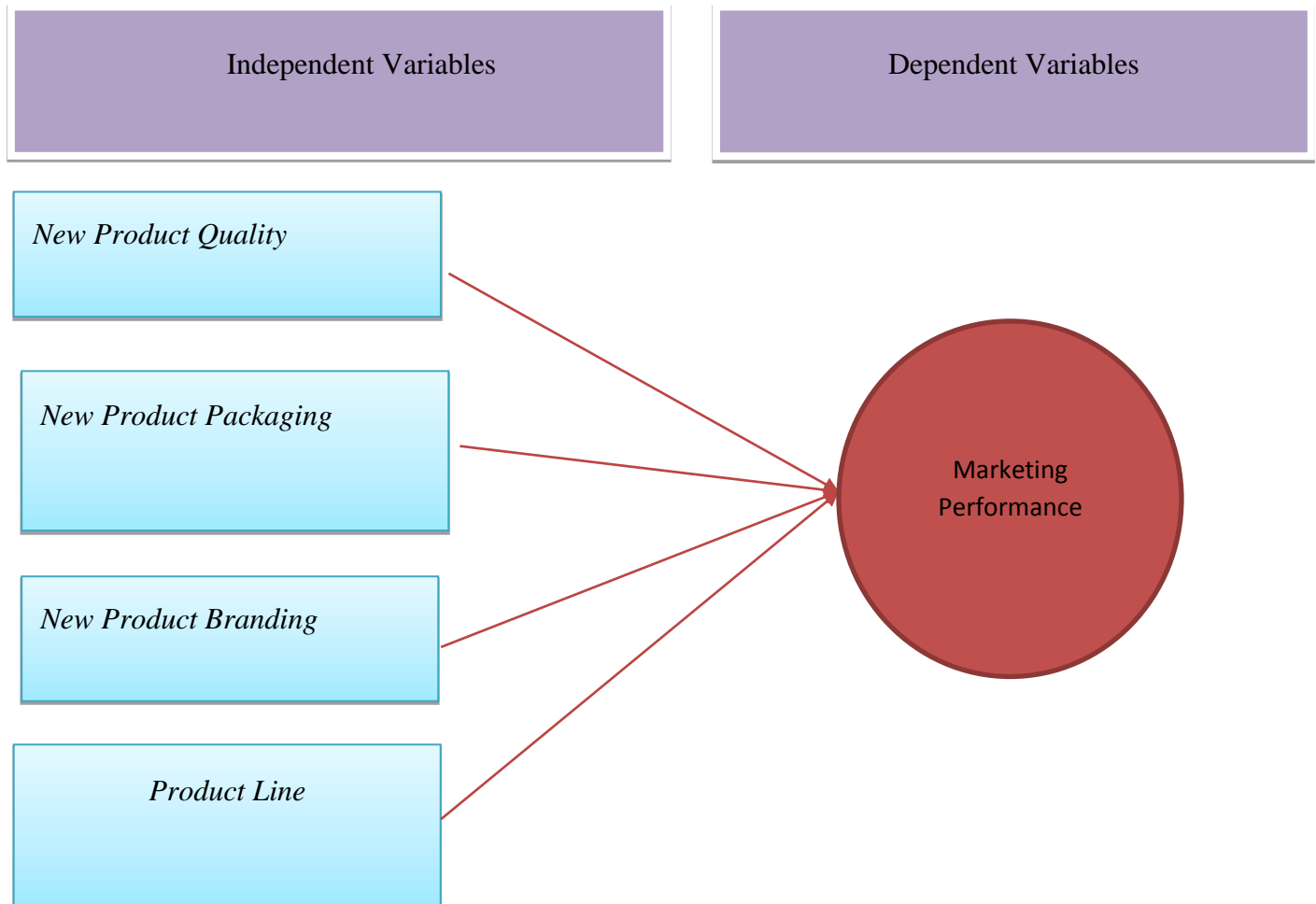
Figure 2 Conceptual Framework

Adapted from Ogbor and Edeme (2021)

While the fourth independent variable in this study, a product line, has a relationship with and a significant impact on the performance of the target firms. However, Daniel (2022) discovered that a product line only had a marginally positive link with the performance of the target businesses. The purpose of the study is to examine how new product development affects marketing effectiveness in the beverage industry. Conceptually, this study contained one

dependent variable—marketing performance—and four independent variables—product quality, product packaging, product line, and product branding. Several variables, including market share, sales, revenue, and client acquisition, are used to gauge the dependent variable or performance of the market. This case study on the product development practices of financial services is based on the DC theory, which helps to explain how financial service providers develop and integrate assets, resources, and capabilities for new product development in response to the demands of a changing business environment. Figure 2 illustrates how the four crucial new product development methods of product quality, packaging, line, and branding influence the marketing effectiveness of bottled water.

# CHAPTER THREE
# RESEARCH METHODOLOGY

## 3.1 Introduction

The procedures to be employed with the intention of achieving the study's goals are examined in this section. It draws attention to the research's design, data source, and data gathering techniques. It also specifies the study's target demographic, sample size and frame, sampling strategy, and other research procedures.

## 3.2 Study Area and Description of the Industry

### 3.2.1 Study Area

The study was conducted in Addis Ababa, where the leading and newly emerged bottled water industry manufacturing and headquarters are located. In addition, the study was conducted around Bole and Akaki Kality Sub Cities. These sun cities are located around the eastern and southern parts of the city, and they encompass the selected east and south districts of the surveyed beverage industry – Top Water. These places are more densely and highly populated. These sub cities also widely recognized as the business hubs of the city as they are the center of Addis Ababa's economy and almost all the headquarters of the private and public sectors are located in this city. The city has in recent years seen a robust annual growth rate, and population counts as of 2017 are growing by more than five million (Source: Addis Ababa City Administration, 2022).

### 3.2.2 Description of the Industry

Top Water is a brand of bottled water derived, bottled, and shipped from Ethiopia. Top Water is headquartered in Addis Ababa, Ethiopia. Its vision is to be outstanding, deliver beyond excellence and have TOP bottled water which is a brand of Ethiopia by 2023. It commits its vision through making our business, society, and environment sustainable. Its mission is to be the first choice of bottled water & non-alcoholic beverage companies in Ethiopia by partnering with our customers, suppliers and community. It strives to be an outstanding corporate by being honest, fair, and integral in everything we do. It knows its customers deserve water & non-alcoholic beverages at its highest form of purity and it lives to serve it.

## 3.3 Research Approach

There are three types of research approaches mentioned in research methods such as quantitative, qualitative, and mixed (Kothari, 2019). Creswell (2014) stated that a quantitative approach is one in which the investigatory primarily uses postpositive claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories), employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data. Alternatively, a qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives or advocacy/participatory perspectives or both.

The researcher employed a quantitative research approach in order to gather the intended data from the sample population. For that reason, this study was better comprehended the attitudes and perceptions of the employees towards the existing marketing practices of beverage industry. This study determined the research questions about the current state of new product development and marketing performance. More specifically, for collecting data from the representative samples, survey research design was used. This study was a survey research method, which is a systematic research method for collecting data from a representative sample of individuals using instruments composed of closed-ended and open-ended questions. The key goal of survey research is to collect data and describe the behaviours, thoughts, and attitudes of a representative sample of individuals at a given point in time and place. It was used to collect data for co relational research studies, experimental studies, and quasi-experimental studies. Sampling is the process of randomly selecting a subset of a population to represent the entire population to which one wishes to generalize in quantitative research. Thus, the overriding consideration is how representative the target population is of the larger population in terms of certain characteristics.

## 3.4 Research Design

Generally, this study applied explanatory and descriptive research designs. This is because, according to descriptive research designs, they aim to answer research questions about the current state of affairs, identify factors and relationships among them, and create a detailed quantitative description of phenomena. Therefore, it provides a snapshot of the feelings,

opinions, practices, thoughts, preferences, attitudes, or behaviours of a sample of people, as they exist at a given time and a given place (Creswell, 2014).

For the sake of describing and assessing the magnitude and degree of the existing relationship between the study variables, a co relational research design was employed. Therefore, co relational research involves collecting data from a sample of individuals or objects to determine the degree of the relationships between two or more variables, with the possibility of making predictions based on these relationships. This study also used the most common statistical methods for prediction purposes, which are simple and multiple regression analyses. The significance of co relational research stems from the fact that many complex and sophisticated statistical analyses are based on co relational data. This study employed both descriptive and explanatory research design.

## 3.5  Data Type and Source

The researcher used mainly primary data. Primary data was collected via a semi-structured and structured questionnaire to get adequate and reliable information. The data types were also both quantitative and qualitative. The other form of data collection was based on an interview-based on a structured interview to enable face-to-face discussion with the respondents. Data was collected through a field survey of beverage industry of Top Water in Addis Ababa. In conducting this study, the researcher basically made use of primary data types for making analysis and interpretation of the study results.

Mainly primary data collection method was used in this study in order to counterbalance shortcomings from each technique. Primary sources of data were collected from questionnaire that constitutes the information a researcher obtains from the field that is data collected from the subjects in the sample. In this study, secondary sources of data was involved the use of published and unpublished documents obtained from libraries, offices and the Internet. Such documentary materials included published books, reports, theses and dissertations.

## 3.6 Population and Sampling Design

### 3.6.1 Target Population

Employees from the investigated Bottled Water industry, which is based in Addis Ababa City, who work in marketing, logistics, and production, are included in the study's population. According to the production and head office of the investigated beverage business, 461 personnel were chosen for this study and participated from those locations (Top Water, 2022).

### 3.6.2 Sample Frame

The sample frame of the study which was the list of the employees or respondents was found from payroll or the monthly salary list of the employees for March, 2023. Since the population of this study comprised of employees of the studied beverage industry in Addis Ababa, its employee data was collected from the two places specifically its manufacturing site and headquarter. Therefore, the target employee was selected based on their full range of employee profile data base, considering the selected production site and head office to obtain the list of the employee profile data.

### 3.6.3 Sampling Techniques

To select the respondents, the study used probability sampling techniques. This study used stratified, proportional and random sampling methods. Firstly, it used stratified sampling method probability by stratified the respondents and random sampling or staff according to their working position (production and head office employees), then proportional sampling was applied and finally this study was used simple random sampling. Simple random sampling was used to select employees from the surveyed organization. The aim of using simple random sampling was made to sure that each staff has equal chance of been chosen.

### 3.6.4 Sample Size

In order to select the sample of this research of respondent, the sample size was calculated by using (Yamane, 1973) formula with 95% confidence level. Sample size refers to a number of items to be selected from the universe to constitute a sample. Sampling is referred to as the process of selecting units from a population of interest so that by studying the sample a researcher may fairly generalize his results back to the population from which they are chosen (Kothari, 2004).

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

$$n = \frac{461}{1 + 461\,(0.05)^2}$$

$$= 214$$

The calculation was presented as below. Sample size for $\pm$ 5% precision levels Where Confidence Level is 95% and P=.5; for 461 size of population, the sample Size (n) for precision (e) of 5% was 214. Therefore, sample size of the study was 214 respondents in Addis Ababa.

**Table 1 Sample Size Determination**

| Staffs in Study Organization | Target population | Proportion | Sample size |
|---|---|---|---|
| Head Office Staffs including sales and logistics | 387 | 0.46420824 | 180 |
| Production Staffs | 74 | 0.46420824 | 34 |
| **Total** | **461** | | **214** |

Source: Survey result, 2023

## 3.7 Data Collection Instrument

Data collection refers to systematic focused and orderly collection of data for the purpose of obtaining information to solve research problems. Questionnaire is a set of questions, which are usually sent to selected respondents to answer at their own convenient time and return back the filled questionnaire to the researcher (Kothari, 2019). Questionnaires were distributed to respondents including principals, head of departments and subordinates who filled them under the administration of the researcher. This study employed questionnaire that adapted from Ogbor and Edeme (2021) and Dziallas (2020) for new product development practices and marketing performance. It encompassed open ended questions, close ended questions and five point likert scale questions.

## 3.8 Measurement Design and Scale Reliability and Validity

### 3.8.1 Measurement Design

Several techniques have been employed to gather or obtain data for statistical analysis. Direct observation, experiments, and surveys are three of the most widely used techniques (Creswell, 2017). This study used the survey method, which involves asking participants for information. Personal interviews and a self-administered questionnaire were used to deliver this study.

### 3.8.2 Questionnaire

The researcher designed the questionnaires (see Appendix I) in two categories: general profile information and five Likert scale questions examining the level of company satisfaction. This is the main approach for gathering data. Likert scale items was done through the popular measurements such as Strongly disagree, disagree, neutral, agree, and strongly agree are the five categories on the interval scale. The questionnaire was modified from Ogbor & Edem (2021) for product quality, branding and packaging on their study on new product development strategies and marketing performance in the Nigerian food and beverage industry while product line items were derived from the study of Daniel (2022). Open and closed questions were also be added.

### 3.8.3 Interview

For the study's qualitative data collection, an interview checklist (See Appendix II) was created as shown in Appendix II. Twelve specialists in the bottled water and food and beverage manufacturing industry who were marketers, relators, distributors, and customers were therefore questioned for the study.

### 3.8.4 Validity of the Instruments

Validity aims at whether the tools are truly measuring what they intended to measure. Pilot study was done to test whether the tools truly measure what they intended to measure (Kothari 2019). Validity of the tool was made by piloting the questionnaires before a comprehensive exercise of data collection to see if the tool can measure what it was supposed to measure from different respondents. It was conducted by 10 experts in new product development, technicians, engineers, marketing and organization performance, academicians and industrial marketing, supervision and leadership experts.

### 3.8.5 Reliability of the Instruments

Reliability is the extent to which a test or procedure of data collection yields similar results under constant conditions on all occasions (Kothari, 2019).

**Table 2 Sample Size Determination**

| Variable | Cronbach's Alpha | N of Items |
|---|---|---|
| Product Quality | .868 | 6 |
| Product Packaging | .871 | 5 |
| Product Branding | .802 | 5 |
| Product Line | .867 | 5 |
| Marketing Performance | .830 | 8 |

Source: Survey result, 2023

The reliability of this study's instruments was determined by using Cronbach's Alpha test. The purpose of deriving a scale score by having multiple items is to obtain a more reliable measure of

the construct than is possible from a single item. According to Cronbach (1951) there are several devices for checking reliability in scales and tests such as Test and re- test, alternative forms methods or split half method. Cronbach's alpha gives the proportion of the total variation of the scale scores that is not attributable to random error.  Therefore, Cronbach's alpha gives the Proportion of the total variation of the scale scores that is not attributable to random error. This study used more than .70 test results as considered as excellent (Benson et al., 2015).

## 3.9 Data Processing and Analysis

The researcher used Statistical Packages for Social Scientists (SPSS) version 23 for the analysis of Quantitative data.

### 3.9.1  Descriptive Statistics

Data was sorted, coded and entered into the SPSS software. After data entry, the researcher could able to present that in descriptive statistics including frequencies, mean, and percentages and making cross tabulations of variables to check the relationships.

### 3.9.2  Inferential Statistics

### 3.9.2.1 Correlation Analysis

This study applied Pearson's Correlation Coefficient (Gopa, 2019). Correlation coefficient is measuring the degree to which two random continuous variables are linearly associated in a sample. It measures the degree of linear correlation between two variables (new product development practices and marketing performance). Sample correlation coefficient (r) measures the strength and direction of linear relationships between pairs of continuous variables. on the relationship between two variables was from 0.01 up to 0.09 negligible association, 0.10 up to 0.29 low association, from 0.30 up to 0.49 moderate association, from 0.50 up to 0.69 substantial association from 0.70 and above very strong association (Flex, 2018). A Pearson's Product Moment Correlation was conducted to establish the strength of the relationship between the variables.

## 3.9.2.2 Multiple Regression Analysis

Multiple regression is a flexible method of data analysis that may be appropriate whenever a quantitative variable (the dependent or criterion variable) is to be examined in relationship to any other factors (expressed as independent or predictor variables). Relationships may be nonlinear, independent variables may be quantitative or qualitative, and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Felix, 2018).

**Linearity**

Multiple regression models the linear (straight-line) relationship between Y and the X's. Any curvilinear relationship is ignored. This is most easily evaluated by scatter plots early on in your analysis. Nonlinear patterns can show up in residual plots.

**Constant Variance**

The variance of the $\varepsilon$' s is constant for all values of the X's. This can be detected by residual plots of ej versus y j or the X's. If these residual plots show a rectangular shape, we can assume constant variance. On the other hand, if a residual plot shows an increasing or decreasing wedge or bowtie shape, non-constant variance exists and must be corrected.

**Normality**

It is assumed the $\varepsilon$ ' s are normally distributed when hypothesis tests and confidence limits are to be used.

**Multi co linearity**

Co linearity, or multi co linearity, is the existence of near-linear relationships among the set of independent variables. The presence of multi co linearity causes all kinds of problems with regression analysis, so you could say that we assume the data do not exhibit it. Multi co linearity can create inaccurate estimates of the regression coefficients, inflate the standard errors of the regression coefficients, deflate the partial t-tests for the regression coefficients, give false non-

significant p-values, and degrade the predictability of the model. Further, it also used inferential statistics such as correlation and multiple regression analysis.

## Model Specification

The multiple linear regression model of the study is based on the theoretical regression model as indicated follows

$$Y=a+b1x1+b2x2+b3x3+b4x4+e$$

Where:

Y= Marketing Performance

a= the y intercept.

X1 – Product Quality

b1= the regression coefficient Product Quality

X2–Product Packaging

B2= the regression coefficient of Product Packaging

X3 – Product Branding

B3= the regression coefficient of Product Branding

X4 –Product Line

B4= the regression coefficient of Product Line

e= error term.

The following assumptions were considered when using multiple regression analysis (Frost, 2017).

## 3.10 Ethical Considerations

Research is the collection of information and material that is provided to the researcher on the basis of trust and confidentiality, and it is vital that the participant's feelings, interests and rights are protected at all times. The study kept the surveyed organization policy in relation to any intellectual property rights of the organization. Regarding privacy of the respondents, their responses are strictly confidential and only used for academic research purposes. There did not have any bias, exposing leaking, hyperbolizing and understatement of the information from the respondents. The information regarding the purpose and procedure of the study was provided through both verbal means when personally meeting each of the participants as well as through a written form that is included with the questionnaires. Information obtained was held in strict confidentiality by the researcher. It cannot be ethical to access some confidential documents of the organization. Therefore, the organizations code of ethics taken in to account without significantly compromising the findings of the study. Concerning references, all the materials and sources are properly acknowledged. All assistance and collaboration was acknowledged properly and ethically. In addition, all the collected data through the questionnaires and interviews was employed only for this particular research project and did not is used in any other contexts or other research purposes.

# CHAPTER FOUR

# DATA ANALYSIS AND PRESENTATION AND DISCUSION

## 4.1 Introduction

The data presentation, analysis, and discussion for the study are presented in this chapter. They include the research methodology and the demographic profile of the respondents. The purpose of the study's data collecting effort, which was covered in the Methodology Chapter, was to gather information from customers and 10 managers of the top bottled water company in Addis Ababa, Ethiopia.

## 4.2 Response Rate

Below is a presentation and summary of the information regarding the data that was gathered and the corresponding response ratings.

**Table 3 Response Rate**

| Branch | Sample size | Returned Questionnaire | Response Rate |
|--------|-------------|-----------------------|---------------|
| Head Office Staffs including sales and logistics | 180 | 163 | 91% |
| Production Staffs | 34 | 26 | 76% |
| **Total** | **214** | **189** | **88%** |

Source: Survey result, 2022

To make sure that the sample was representative of the workforce at the surveyed bottled water company, it was crucial to include responders from a variety of top bottled water companies. Even though 214 questionnaires were delivered in the research region, only 189 of them were correctly completed and returned, yielding an 88% response rate. In addition, 10 management and staff members of the surveyed bottled water company were questioned for this study. In terms of the personnel interview, 10 supervisors and managers took part, making up 83.3% of the bottled water company, exceeding the appropriate 50% level suggested by Roems (2017). The study used 189 responses for this analysis. Accordingly, demographic profile of the respondents and response analysis are followed.

## 4.3 Respondents Profile

To assess the potential and cooperative competency of the respondents to respond about the study in the surveyed firm, this part gives the profile of the respondents, including information on their education, gender, age, and other factors.

**Table 4 Respondents Demography Characteristics**

| Variables ( Category) | | N | % |
|---|---|---|---|
| Age (in years) | Young adults (ages 18-35 years) | 37 | 19.6 |
| | Middle-aged adults (ages 36-55 years) | 113 | 59.8 |
| | Older adults (aged older than 55 years) | 39 | 20.6 |
| Sex | Female | 61 | 32.3 |
| | Male | 128 | 67.7 |
| Education level | Diploma and below | 61 | 32.3 |
| | First Degree | 114 | 60.3 |
| | Masters and above | 14 | 7.4 |
| Year of Experience Knowing Top Bottled Water Company | 1 – 5 Years | 36 | 19.0 |
| | 6 -10 Years | 50 | 26.5 |
| | More than 11 years | 103 | 54.5 |
| Have you visited various shops of Top Bottled Water Company? | Never | 0 | 0.0 |
| | Frequently | 147 | 77.8 |
| | Sometimes | 41 | 21.7 |
| | Rarely | 1 | 0.5 |

Source: Survey Result, 2023

The aforementioned table shows the demographic details of the sampled respondents, including gender participation and age group. Nine questions were given about demographics in order to describe the sample characteristics of the respondents: age, education level, brand preferences, and years of experience working for the investigated bottled water company. As is obvious, there were more men (128) than women (61), indicating a ratio of 67.7% to 32.3%, respectively, in the final sample. This shows that men make up the majority of the bottled water company's workforce, probably twice as many as women. This is in line with the fact that men predominantly outnumber women in jobs at bottled water companies.

Additionally, the modal age range represented by 19.6% of respondents was 18 to 35 years, followed by the 36 to 55 years range, which included 59.8% of respondents. Additionally, 20.6% of the respondents in this poll were people over the age of 55 or older. As a result, the majority of the workforce is young, which is in line with the average age of the bottled water industry (Yalew, 2018).

Table 4 shows the respondents' educational levels, with certificate holders and those with less making up the biggest percentage (32.3%), undergraduate degree holders making up the bulk of respondents (60.3%), and postgraduate degree holders (7.4%). Since the majority of them had in-depth knowledge of this industry, it was easier to gather information from these respondents. The majority of responders, as shown in the above table, have worked for the organization on multiple occasions. 19.0% of respondents said they would prioritize working for the company for 1 to 5 years, while 26.5% said they would prioritize 6 to 10 years. This suggests that the respondents to this study can provide significant information about their experiences working for bottled water companies.

The above table shows that the majority of the respondents' (77.8 %) have frequently known various shops of this bottled Water Company and 21.7 % of them sometimes visited these shops but there were regular user of bottled water. Most respondents including interviewees' result show that not only this bottled Water Company dominant the market and has become a market leader on the Ethiopia Water Company. Accordingly, most respondents were from both gender categories, in active age group, as having variety of bottled water products.

## 4.4 Level of New Product Development

To exhibit the various features for data sets, the response analysis was carried out using mean and standard deviation. In this study, descriptive statistics aid in making the data more understandable and facilitates easier data interpretation. Daniel (2022) studied in a comparable area, and his mean scores were 4.51–5.00 excellent; 3.51-4.50 very good, 2.51-3.50 good, 1.51-2.50 ordinary or moderate and 1.00–1.50 low. The results show in the following table.

**Table 5 Respondents' Reponses (N = 189)**

| Variables | Grande Mean | SD |
|---|---|---|
| Product Quality | 3.94 | .9102 |
| Product Packaging | 3.65 | .9645 |
| Perceived Quality | 3.63 | .96487 |
| Product Line | 3.90 | .9101 |
| Marketing Performance | 3.88 | .92441 |

Source: Survey Result, 2023

### 4.1.1 Level of Product Quality

Product quality refers to how well a product satisfies customer needs, serves its purpose and meets industry standards (David-West et al., 2019). Businesses examine a number of important elements when assessing the quality of a product, including whether it solves a problem, functions effectively, or serves the needs of customers. As a result, the mean score for product quality (3.94; See Table 5) was considered to be very good in this survey. Additionally, this table displays a sample test result for itemized variables with a P value larger than 0.05. The mean scores for all latent variables are thus shown to be significantly different. This suggests that sampled employees are better knowledgeable about this bottled water company, that it

consistently meets numerous requirements for the consumer's use of it, and that it has correct finishing with no sharp edges or subpar visual appearance.

As per the findings in the above table, the respondents indicated that this Bottled Water Company  product/service portfolio up to their expectations and the percent units received in acceptable condition is right in a strongly agree or great extent as shown by 71 %. This implies that it is essentially a process of looking at a company's products and services and categorizing them based on how well they're performing and their competitiveness.

This study found that among respondents 76 % of them agreed that the product/service portfolio of Top Bottled Water Company enhances its image.  This means this firm uses a pre-defined process at each stage consists of a series of activities to achieve the desired results before continuing to the next stage of product development. The way through each step is called a door, each door has a process that controls the quality.

Additionally, 77 % of them agreed that the units that are supplied (100%) are correct units. Further, 69 % of them agreed that new product/service development is a continuous phenomenon in Top Bottled Water Company and 71 % said the units that are delivered (100%) are in correct quantity. It shows that consumers who choose to drink bottled water can rely on its consistent record of safety and quality. One of the experts indicated that (Respondent 1)

> *We are greatly concerned about quality and we always need to the same quality standards. There is no reason to believe that bottled water is not safer; we need to work hardly to get a quality product.*

This implies that the nature of the product and customers' ability helps them to recall and recognize the brand as reflected by their ability to identify the brand under different conditions and to link the brand name, logo, symbol, and so forth to certain associations in memory. When a consumer becomes familiar with the brand, customers were committed to purchase the product or service circumstances (Cooper, 2019).

## 4.1.2 Level of Product Packaging

Product packaging is the process of designing and creating packaging for a product. This includes the materials used, the design, the printing, and the assembly. It is generally accepted that a package is a product's outer covering used for handling, storing, and shielding the product from environmental variables like sunshine, moisture, breakage, etc. The average response (3.65 See Table 5) for product quality level was afterwards judged as being very good. Additionally, this table displays a sample test result for itemized variables with a P value larger than 0.05. The mean scores for all latent variables are then considered to be significantly different. This suggests that sampled employees are better knowledgeable about the bottled water company. This business uses the product packaging as a crucial marketing tool to boost branding and highlight the salient qualities of its offering.

This study found that among respondents 68 % of them agreed that Top Bottled Water packaging holds regulations on consumer info. It means these requirements are in place to ensure that labels accurately reflect the product. Bottled water must be stored in conditions suitable for food products as recommended by the supplier. It shows a cool, dust-free environment, away from direct sunlight and potential sources of contamination, such as strong smelling chemicals or diesel fume. Additionally, 63 % of them agreed that Top Bottled Water packaging provides consumers with a basis for making a purchase decision and 62% of them stated that Top Bottled Water packaging addresses environmental issues. One of the managers indicated that (Respondent 2)

> *The labels on bottled water must meet legal requirements. There are labelling requirements for the source, content, quality, and uses of the water. For example, if the label on the bottle says "spring water," then the water must come from a spring.*

In general, the drinking water quality standards describe the quality parameters set for drinking water (Yalew, Mamo. 2018). This bottled water has fulfilled the Ethiopian government standards as per the legal basis in the country or, are subject to enforcement. Another manager indicated that (Respondent 4)

*This Ethiopian Standard specifies the physical, chemical and bacteriological requirements of water for drinking and domestic purpose. I think it is based WHO requirements on the concentration of total dissolved solid in the studied bottled water samples ranged 4.67-139 mg/L. It is recommended TDS value below 500 mg/L as acceptable for drinking water, while the Ethiopian Standard extends the limit to 1000 mg/L. It may include Minimum durability date, or expiration date for highly perishable food products, special conditions of conservation and use, Name or company name and address of the manufacturer or packer.*

This means that this bottled water may be the best choice for customer as this firm provides a safe supply and it posted the health condition requirements. Further, 57 % of them agreed that Top Bottled Water packaging is designed to protect or contain the product during shipping and below half of them (47%) said the units that Top Bottled Water packaging holds important marketing message. Esen (2018) stated that a bottle label is a label that is intended to be applied on a bottle. Bottle labels can be printed with a logo, marketing information and the best before date of the bottle together with a batch number to allow product tracking.

It means bottled water labels enable the consumers to choose brands that can best fit to their needs and preferences. Mastrisiswadi & Amalia (2017) stated that bottled water as water that is intended for human consumption and that is sealed in bottles or other containers with no added ingredients except that it may contain safe and suitable antimicrobial agent. This implies that sampled employees more aware about legal and packaging requirements and its need for marketing messages. Top Bottled Water Company uses its packaging as messengering quality requirements, brand type and legal requests. As a result, consumer can easily recognize the brand and recall it among products or services category.

Top Bottled Water Company's package helps customers to know more about the product type, process or retrieve information, are the basis for differentiation and extensions, provide a reason to buy, and create positive feelings. This may be associated with brand association include product attributes, customer benefits, uses, users, life-styles, product classes, competitors and countries. It exhibits they consider the company and people who stand behind the brand have the

required expertise to deliver the service. Ndege and Kegoro (2019) stated that consumers use brand associations to process, organize, and retrieve information in memory and this helps them to make purchase decisions. This shows that this Top Bottled Water Company understand the core dimensions of marketing messaging and brand image, which is brand personality, this it can be said that this Top Bottled Water Company strongly build brand equity in the market. This means branded bottled water gives brands a simple and effective way to get its message across.

### 4.1.3 Level of Product Branding

People engaged in branding seek to develop or align the expectations behind the brand experience, creating the impression that a brand associated with a product or service has certain qualities or characteristics that make it special or unique. A brand is therefore one of the most valuable elements in an advertising theme, as it demonstrates what the brand owner is able to offer in the marketplace (Mastrisiswadi and Amalia, 2017).

This study revealed that the mean average score for branding was 3.632 (See Table 5) and the mean result of level of perceived quality responses was rated as very good. This table also displays that one sample test result of itemized variables; which exhibited greater than 0.05. Consequently, it can be concluded that the mean scores for all latent variables are significantly different. This implies that this Top Bottled Water Company is better as compared to other bottled water companies in performance, customer service and safety. This also implies that this Top Bottled Water Company brand is distinctive or unique.

This study found that among respondents 64 % of them agreed respondents like Top Bottled Water new products that provided by its brand. When they consider about new products, Top Bottled Water new products comes first their mind. It means product brands are predominantly different since service characteristics are different from those of physical goods and that they rely on employees' actions and attitudes.

Additionally, 66 % of them agreed that respondents find Top Bottled Water brand interesting in a sensory way. As per the majority of the interview responses this Top Bottled Water Company brand and its physical facilities do not much or comparable. This difference is realized to focus around the belief that services are conceptually different from products; services are seen to have

a number of unique characteristics including intangibility, inseparability of production and consumption, heterogeneity of quality and perishability (Dziallas, 2020).

Around half of them Top Bottled Water new products fulfil their expectation of hotel service bottled water (48%) and Top Bottled Water new products' brand induces feelings and sentiments (56 %). Mastrisiswadi, H. & Amalia (2017). A water bottle brand's logo, messaging, and design shouldn't go without heavy testing for consumer engagement. One of the managers indicated that (Respondent 2)

> *One of the biggest trademarks of major bottled water brands is their source. In Ethiopia, the majority of the Bottled Water companies said water from highlands of Ethiopia. Or They said Highlands water from…*

Top Water is Ethiopian leading bottled water producer and selling in the major parts of the country. Its waters are bottled at source and Highland Spring water is drawn from protected land in outskirts of Addis Ababa Oromia special zone, Geferesa Nono. Top Water is a brand of bottled water derived, bottled, and shipped from Ethiopia. This bottled water brands boast of a pure source evoking images of striking locations. Therefore, emerging its brand has chosen ould its source wisely, and, if possible, select a unique one.

This means that sampled customers are committed towards the organization and its brands such that he or she re-bought and gave priority to the specific brand. It also means customer will spread a word of mouth of Top Bottled Water Company brand, customer always choose Top Bottled Water Company compare to other brand and they always want to try this Top Bottled Water Company  new products. As per the behavioural perspective of branding, customers are committed towards the brand or reason to buy the brand or to use this Top Bottled Water Company effectively. This is because as per Mohsin, David-West et al., (2019) summaries branding as the attachment that a consumer has towards a brand" and an important asset of brand equity.

## 4.1.4  Level of Product Line

Product line can be defined as a product group which consists of several products related to each other because of being sold by same type of marketing tools to the same customers, functioning in a similar way or priced similarly.

This study revealed that the mean average score was 3.90 (See Table 5)and below one standard deviation as per Table 10. The mean result of level of brand loyalty responses was rated as very good. This table also displays that one sample test result of itemized variables; which exhibited greater than 0.05. Therefore, it can be concluded that the mean scores for all latent variables are significantly different.  This study found that among respondents 78 % of them agreed Top Bottled Water provides various product varieties based reasonable price strategies. Water produces different kinds of products based on the quantity or amount of the water contained in the package. This can of business aim to address the needs of different kinds of customers. Additionally, 70 % of them agreed that Top Bottled Water provides various products with varies promotional mix and it offers product grouping with different product processing. Moreover, 71 % of them agreed that Top Bottled Water provides various product varieties within different places. Around more half of them agreed that Top Bottled Water provides various product varieties.

## 4.1.5  Level of Marketing Performance

This study revealed that the mean average score for marketing performance was 3.88 4.33 and it also found below one standard deviation as per Table 5. The mean result of level of marketing performance responses was rated as very good. In this study the level of marketing performance was rated as high. Its marketing performance is determined by analysing sales, analysing market share, analysing sales to marketing expenses, and overall financial performance. The majority of the respondents indicated that this firm achieved increased profitability (84 %) and more sales (82 %).  This means that this firm appropriately manages their marketing activities and keenly observes its output while taking appropriate corrective action where necessary. Understanding influences of marketing on performance is significant because marketing activities have direct influence on sales and to a large extend the overall performance of the firm.

## 4.5 Inferential Analysis

## 4.5.1 Correlation Analysis

The Pearson Correlation (r) was conducted to indicate the strength of a linear relationship between two variables. Correlation analysis attempts to quantify the direction of association between two variables. Thus, an assessment of the correlation matrix between all the independent variables and marketing performance are positively related. A Pearson's Product Moment Correlation was conducted to establish the strength of the relationship between the variables. As a result, an assessment of the correlation matrix between all the independent variables and marketing performance are positively related. Though the above simple correlational and mean analysis gives an important insight to the simple relationship between the dependent and independent variables, therefore, there is a positive and significant (Sig. (2-tailed) .000 with correlation is significant at the 0.01 level (2-tailed). The findings are presented in the below table.

## Table 6 Result of Correlation Analysis

| | | Product Quality | Product Packaging | Product Branding | Product Line | Marketing Performance |
|---|---|---|---|---|---|---|
| Product Quality | Pearson Correlation | 1 | | | | |
| | Sig. (2-tailed) | | | | | |
| | N | 189 | | | | |
| Product Packaging | Pearson Correlation | .581** | 1 | | | |
| | Sig. (2-tailed) | .000 | | | | |
| | N | 189 | 189 | | | |
| Product Branding | Pearson Correlation | .536** | .469** | 1 | | |
| | Sig. (2-tailed) | .000 | .000 | | | |
| | N | 189 | 189 | 189 | | |
| Product Line | Pearson Correlation | .590** | .634** | .471** | 1 | |
| | Sig. (2-tailed) | .000 | .000 | .000 | | |
| | N | 189 | 189 | 189 | 189 | |
| Marketing Performance | Pearson Correlation | .594** | .540** | .574** | .558** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 189 | 189 | 189 | 189 | 189 |

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

*Survey result, 2023*

This study found that ll of the independent factors and marketing performance is modestly and favourably correlated, according to the correlation matrix analysis. Intially, according to this research, there is a moderately favorable association between marketing effectiveness and product quality (r=.594) (Table 10). Roems (2017) shown that it is favorably and significantly associated to marketing performance in line with this study. This implies that an increase will result in a proportional shift in marketing effectiveness.

The evaluation of the correlation matrix between product packaging and marketing effectiveness is the next step. There is a positive and significant (Sig. (2-tailed).000 with correlation is significant at the 0.01 level (2-tailed) correlation even though the aforementioned simple correlational and mean analysis provides a substantial insight into the link between the dependent and independent variables.) Product packaging and marketing effectiveness have a moderately favorable association (r =.540) (See Table 10). Yalew (2018) found a similar relationship that is both favorably and significantly connected to marketing performance.

An evaluation of the correlation matrix reveals a third positive link between marketing performance and one of the independent variables, product branding. As a result, there is a positive and substantial association that is significant at the 0.01 level (2-tailed) (Sig. The correlation between product branding and marketing performance is somewhat positive (.574) (See Table 10). This result is in line with Ogbor and Edeme's findings from 2021, which showed that marketing performance is positively and strongly correlated.

A fourth positive relationship between marketing success and one of the independent variables, product line, is also seen when the correlation matrix is examined lastly. As a result, there is a correlation between product line (.558) and marketing effectiveness that is significant at the 0.01 level (2-tailed) (Sig) (See Table 10). This result is consistent with the findings of Yalew (2018) and Ogbor and Edeme (2021), which showed a favorable correlation between it and marketing performance.

## 4.5.2 Regression Analysis

Multiple regression exhibits how much of the variance in the dependent variable can be explained by the independent variables. It also gives an indication of the relative contribution of

each independent variable. Tests allow determining the statistically significant of the results, both in terms of the model itself and the individual independent variables (Stephanie, 2018). A multiple linear analysis was conducted to see the predictive power of individual NPD dimensions and marketing performance. The assumption test was done based on theoretical and empirical multiple regression concepts. This section contains diagnostic tests for testing the regression assumptions such as multi collinearity test, homoscedasticity, normality test, sampling adequacy, normality and linearity tests for parameter stability were performed.

## 4.5.2.1  Assumptions and Diagnostic Test

Efforts have been conducted to test normality, multicollinearity; autocorrelation and test for average value of the error term are found in appendices part; next to the data collection instrument in this study (Frost, 2017).

**Multicollinearity Test**

**Table 7  Result of VIF Test Result Analysis**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | (Constant) | | |
| | Product Quality | .526 | 1.901 |
| | Product Packaging | .520 | 1.922 |
| | Product Branding | .662 | 1.512 |
| | Product Line | .513 | 1.948 |

*Survey result, 2023*

The Variance inflation factor (VIF) was tested in all the analysis which is not a cause of concern according to Stephanie (2018) who indicated that a VIF greater than 10 is a cause of concern. The simple assumption is that the error terms for different observations are uncorrelated (lack of multi Collinearity) (Table 11).

## Normality Test

The present study employed the descriptive statistic of Kurtosis and Skewness statics calculation and demonstrates that the distribution is normal because Kurtosis and Skewness are in between -2 and +2, thus data is normally distributed and had a reasonable variance to use subsequent analysis. A variable that is normally distributed has a histogram (or "density function") that is bell-shaped, with only one peak, and is symmetric around the mean. The terms kurtosis ("peakedness" or "heaviness of tails") and skewness (asymmetry around the mean) are often used to describe departures from normality. The empirical distribution of the data (the histogram) should be bell-shaped and resemble the normal distribution. This might be difficult to see if the sample is small.

**Table 8  Kurtosis and Skewness statics Result Analysis**

**Descriptive Statistics**

| | N | Skewness | | Kurtosis | |
|---|---|---|---|---|---|
| | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Product Quality | 189 | -.751 | .177 | -.165 | .352 |
| Product Packaging | 189 | -.663 | .177 | -.270 | .352 |
| Product Branding | 189 | -.512 | .177 | -.265 | .352 |
| Product Line | 189 | -.599 | .177 | -.570 | .352 |
| Marketing Performance | 189 | -.610 | .177 | -.739 | .352 |
| Valid N (listwise) | 189 | | | | |

*Survey result, 2023*

From the finding on the histogram test on normality, the study found that significance in both test were less than 0.05 which is leads to the rejection of the null hypothesis that that data on the all variables were not normally distributed this is an indication that data on the variables were normally distributed (Table 12).

## Test for Autocorrelation

The lack of independence is called autocorrelation if the observations have a natural sequence in time or space. Supposition that is made of the multiple linear regressions disturbance terms is that the covariance between the error terms over time (or cross-sectional, for that type of data) is zero. To test the presence of autocorrelation, the popular Durbin-Watson Test was employed in this study. The Durbin-Watson statistic is 1.630 (Table 13), representing that the residuals are uncorrelated; therefore, the independence assumption is met for this analysis.

**Table 9 Result of Durbin-Watson (N=189)**

| | | | Model Summary | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .702[a] | .493 | .482 | .814 | 1.630 |

a.    Predictors: (Constant), Product Line, Product Branding, Product Quality, Product Packaging
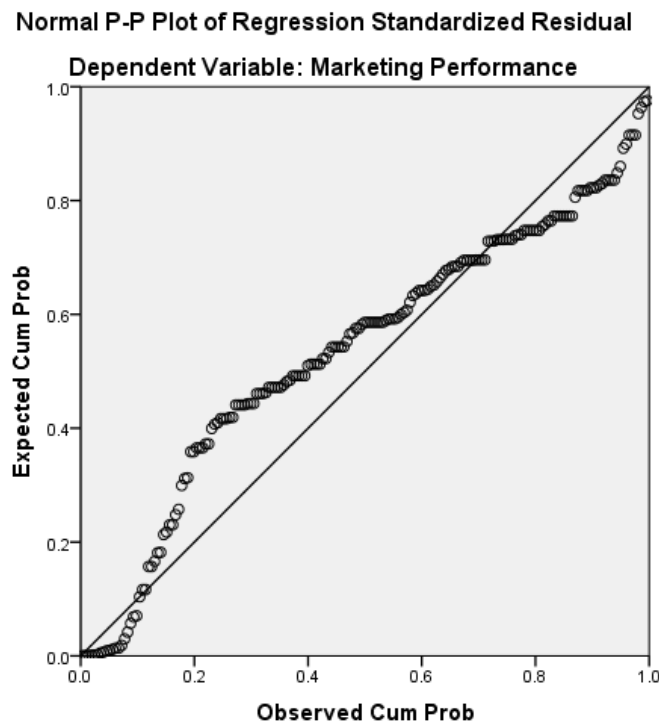
Survey result, 2022



**Figure 3 Normal PP Diagram**

*Survey result, 2022*
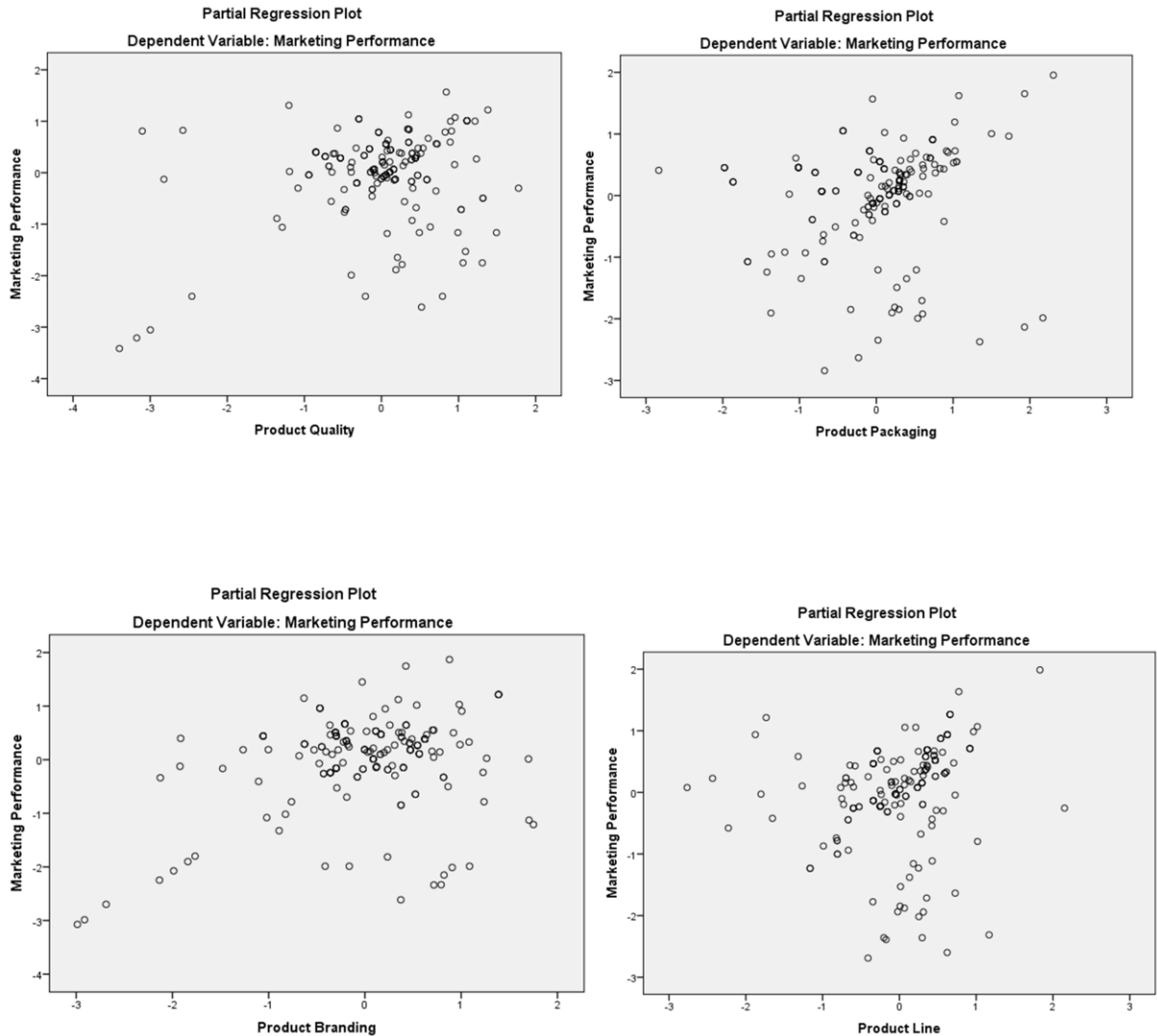
*Survey result, 2023*

When the homoscedasticity assumption has been encountered, the residuals will present as being randomly scattered around the horizontal line depicting ri=0. The above figure portrays the test result of a residual plot demonstrating a relative equal clustering of residuals along the horizontal line in a rectangular shape, therefore, the homoscedasticity assumption seems to have been met. It refer to homogeneity of variances that is, all of the treatment groups have the same variance. The homoscedasticity assumption can be tested through the visual examination of the same residual plots of the standardized residuals and predicted values depicted in the assumption of

linearity. When the homoscedasticity assumption has been met, the residuals will present as being randomly scattered around the horizontal line depicting ri=0. The study found the test result of a residual plot demonstrating a relative equal clustering of residuals along the horizontal line in a rectangular shape, therefore, the homoscedasticity assumption seems to have been met.

## Error Term

The leading assumption required is that the average value of the errors is zero when the test for average value of the error term is zero (E (ut) = 0). Consequently, since the constant term (i.e. α) was included in the regression equation, the average value of the error term in this study is expected to be zero.

## 4.1.2. Regression Test Results

The first table of interest is the model summary (Table 14). This table offers the R, R2, adjusted R2, and the standard error of the estimate, which can be used to determine how well a regression model fits the data:

**Table 10a Model Summary (N= 189)**

| | | | | |
|---|---|---|---|---|
| **Model Summary** | | | | |
| Mode l | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .702ᵃ | .493 | .482 | .814 |
| a. Predictors: (Constant), Product Line, Product Branding, Product Quality, Product Packaging | | | | |

*Survey result, 2023*

In this test as per Table 14a, R can be considered to be one measure of the quality of the prediction of the dependent variable; in this case, marketing performance. The "R" column represents the value of R, the multiple correlation coefficients. A value of .702 in this study indicates a good level of prediction. This study found the value of .493 that this study's independent variables explain 49.3 % of the variability of this study's dependent variable, marketing performance. And 50.7 % (100% - 49.3 %) of the variation is caused by factors other than the predictors included in this model.

Adjusted R-squared is a modified version of R-squared that has been adjusted for the number of predictors in the model. The adjusted R-squared increases when the new term improves the model more than would be expected by chance. It decreases when a predictor improves the model by less than expected. Adjusted R2 is a corrected goodness-of-fit (model accuracy) measure for linear models. It identifies the percentage of variance in the target field that is explained by the input or inputs. R2 tends to optimistically estimate the fit of the linear regression.

**Table 11b ANOVA (N= 189)**

| ANOVAª | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 118.450 | 4 | 29.613 | 44.698 | .000ᵇ |
| | Residual | 121.900 | 184 | .662 | | |
| | Total | 240.350 | 188 | | | |
| a. Dependent Variable: Marketing Performance | | | | | | |
| b. Predictors: (Constant), Product Line, Product Branding, Product Quality, Product Packaging | | | | | | |

*Survey result, 2023*

The F-ratio in the ANOVA (See Table 14b) tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically significantly predict the dependent variable, $F_{(4, 184)} = 44.698$, p (.0001) < .05.

**Table 12c Regression Coefficient**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .182 | .279 | | .652 | .515 |
| | Product Quality | .247 | .073 | .246 | 3.402 | .001 |
| | Product Packaging | .151 | .077 | .144 | 1.979 | .049 |
| | Product Branding | .334 | .075 | .287 | 4.448 | .000 |
| | Product Line | .226 | .089 | .186 | 2.542 | .012 |
| a. Dependent Variable: Marketing Performance | | | | | | |

*Survey result, 2023*

Statistical significance of each of the independent variables tests whether the unstandardized (or standardized) coefficients are equal to 0 (zero) in the population (i.e. for each of the coefficients, H0: β = 0 versus Ha: β ≠ 0 is conducted). If p < .05, the coefficients are statistically significantly different to 0 (zero). The practicality of these tests of significance is to investigate if each explanatory variable needs to be in the model, given that the others are already there (Frost, 2017).

Accordingly, standardized coefficients are called beta weights, given in the "beta" column. The beta weight measure how much the outcome variable increases (in standard deviations) when the predictor variable is increased by one standard deviation assuming other variables in the model are held constant. These are useful measures to rank the predictor variables based on their contribution (irrespective of sign) in explaining the outcome variable.

The tests in this study tell us that product quality (B=.247) p (.001) 0.05 is significant, assuming that the t-value and associated p-value are in the "t" and "Sig." columns, respectively (Table 14c). This concludes that a unit increase in product quality will result in 24.7 % upsurge in marketing performance in Ethiopia. This also suggests that the model's explanatory variable, product quality, is more useful and that it positively contributes significantly to explaining marketing performance. This outcome is in line with research by Ogbor & Edeme (2021), Benson et al. (2015), and Daniel (2022), who reported a beneficial impact of brand awareness on marketing performance.

The tests in this study inform us that product packaging (B=.151) p(.049)0.05 is significant, presuming the t-value and corresponding p-value are in the "t" and "Sig." columns, respectively (Table 14c). This displays that a unit increase in product packaging will result in 15.1 % rise in marketing performance in Ethiopia. This also indicates that product packaging makes a significant addition to the model's explanation of marketing performance. This outcome is in line with what Ogbor & Edeme (2021) and Yalew (2018) found, which claimed that it had a beneficial impact on marketing performance.

The tests in this study inform us that the product branding (B=.334) p (.0001)0.05 is significant based on the t-value and associated p-value, which are in the "t" and "Sig." columns, respectively (Table 14c). This shows that a unit increase in product branding will result in 33.4 % increase in

marketing performance in Ethiopia. This also recommends that product branding is present in the model and that it significantly contributes to the understanding of marketing performance as per the explanatory variable analysis. According to this research, Ogbor & Edeme (2021) discovered that it significantly improves marketing performance.

Table (14)'s "t" and "Sig." columns show the t-value and accompanying p-value for this study, which indicates that the product line (B=.226) p(.012)0.05 is significant. This achieves that a unit increase in product packaging will result in 15.1 % upsurge in marketing performance in Ethiopia. This demonstrates that the explanatory variable, which is present in the model, significantly contributes to the explanation of marketing performance. Nkemdilim et al. (2020) felt that it had a good impact on marketing performance, which is consistent with this study. However, Daniel (2022) discovered that a product line only had a marginally positive link with the performance of the target businesses.

## 4.6 Discussion

Using correlation analysis, this study established the relationship between product quality and marketing performance (r=.594, .000), and tested the influence product quality on marketing performance in Top Bottled Water Company (Sig, 0.001) by applying multiple regression analysis. Then, the result of the regression analysis displays that it has a positive and significant effect on dependent variable; this assure that the hypothesis is accepted. In furtherance, the test of hypothesis indicated in table 4 showed that new product quality has a significant relationship with marketing performance (0.000 <0.05). Similarly, several studies like Nkemdilim et al., (2020) concluded that there exists a positive significant effect of it on marketing performance. Ogbor and Edeme (2021) reported that new product quality which is the first variable has positive effect on marketing performance. Daniel (2022) also proves that there is an existence of a positive and significant relationship between higher product quality and the sales growth of an organization. This is also in line with Roems (2017) findings that the quality of a tangible product can be ascertained by its technical attributes and its performance aspects. This implies that quality products are important to consumers because they are the ones that deliver the benefits that consumers are seeking from the products.

This study also employed correlation analysis and established the relationship between product packaging and marketing performance (r=.540, .000), and tested the influence product packaging on marketing performance in Top Bottled Water Company (Sig, 0.049) by applying multiple regression analysis. Then, the result of the regression analysis displays that product packaging has a positive and significant effect on dependent variable, marketing performance; this assure that the hypothesis is accepted. Benson et al., (2015) perceived that it positively affects marketing performance. Ogbor and Edeme (2021) showed that new product packaging which is the second variable has positive effect on marketing performance (B =.286, P<0.01). These findings are consistent with this study's finding of Yalew (2018) that reported as package attracts customer's attention to specific brand, improves its image and affects customer's perceptions about product. Also package imparts unique value to products, works as a tool for differentiation, i.e. helps customers to choose the product from wide variety of similar products, and stimulates consumers buying behavior (Nkemdilim et al., 2020). The implication of this finding is that package performs a relevant role in marketing communications and could be treated as one of the most vital factors influencing customer's purchase decision.

Using correlation analysis, this study established the relationship between product branding and marketing performance (r=.574, .000), and tested the influence product branding on marketing performance in Top Bottled Water Company (Sig, 0.0001) by applying multiple regression analysis. Then, the result of the regression analysis shows that product branding has a positive and significant effect on dependent variable; this assure that the hypothesis is accepted. Furthermore, the test of hypothesis indicated in table 4 showed that new product branding has a significant relationship with marketing performance (0.000 < 0.05). This result is consistent with the findings of Daniel (2022) perceived that product branding positively affects marketing performance. This is also in agreement with and Nkemdilim et al., (2020) view that brands that are identified more easily and quickly are liked more and highly chosen more. This implies that branding on packaging supports these memory processes, giving customers the information they need efficiently and quickly. Similarly, Ogbor and Edeme (2021) reported that new product branding which is the last variable has the highest positive effect on marketing performance. Yalew (2018) that brands are designed to enable customers to identify products or services which promise specific benefits. As such, they are a form of short hand in that they create a set of expectations in the minds of customers about purpose, performance, quality and price.

This study also employed correlation analysis and established the relationship between product line and marketing performance (r=.558, .000), and tested the influence product line on marketing performance in Top Bottled Water Company (Sig, 0.012) by applying multiple regression analysis. Then, the result of the regression analysis displays that product line has a positive and significant effect on dependent variable, marketing performance; this assure that the hypothesis is accepted. Several studies found similar results and it affirms other research findings, Yalew (2018) and Benson et al., (2015), to the effect that it affects marketing performance. This result is consistent with the findings of Daniel (2022) perceived that products that are created to replace existing products at lower cost: New products that provide a cost reduction, can replace existing products in the line, but can offer similar benefits and performance at a lower cost. Basically every product on the market today has been enhanced. These 'not-so- new" products can he replacements of existing products in a firm's product line. However, they provide improved performance or superior perceived value over the old product (Roems, 2017).

**Table 13 Summary of Findings**

| Variables | Hypothesis | r | β | Sig. | Decision |
|---|---|---|---|---|---|
| Product Quality | H$_1$ : Product Quality has a positive and significant effect on marketing performance in Ethiopia | .594** | .247 | .001 | *Supported* |
| Product Packaging | H$_2$ : Product Packaging has a positive and significant effect on marketing performance in Ethiopia | .540** | .151 | .049 | *Supported* |
| Product Branding | H$_3$ : Product Branding has a positive and significant effect on marketing performance in Ethiopia | .574** | .334 | .000 | *Supported* |
| Product Line | H$_4$ : Product Line has a positive and significant effect on marketing performance in Ethiopia | .558** | .226 | .012 | *Supported* |

*Survey result, 2023*

# CHAPTER FIVE

## SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

### 5.1 Introduction

This section of the study contains the study's concluding chapter, which includes a summary of its findings, a conclusion, and suitable suggestions in light of its findings.

### 5.2 Summary of Key Findings

This study discovered using a descriptive and explanatory research approach that

- Product quality and marketing performance are moderately and positively related (r=.594,.000) using correlation method of analysis and based on regression analysis the data showed product quality positively and significantly influences marketing performance (Sig, 0.001)

- Product packaging and marketing performance have a moderately and positively e relationship (r=.540,.000) using correlation method of analysis and product packaging has a positive and significant effect on marketing performance (Sig, 0.049) based on regression analysis

- Product branding and marketing performance are positively and significantly related (r=.574,.000) using correlation method of analysis and based on regression analysis the data showed product branding has a positive and significant effect on marketing performance (Sig, 0.0001).

- Product line has a moderate and significant relationship with market performance (r=.558,.000)  by means of correlation method of analysis and based on regression analysis the data exhibited it has a positive and significant effect on marketing performance (Sig, 0.012)

### 5.3 Conclusions

This study came to the conclusion that new product development, specifically at Top Bottled Water Company in Ethiopia, has a favourable and significant impact on marketing success. Businesses have made investments to ensure that once a consumer buys their product, they would continue to practice the same repurchasing patterns throughout time while satisfying customers. Although most financial institutions display certain elements of brand equity, it

should be noted that not all of them spend in assuring brand creation; instead, they place a strong emphasis on sales promotion, which eventually results in a short-term gain for the product. As a result, this study draws the conclusion that product branding will improve marketing effectiveness.

The marketing transformation of awareness, knowledge, and perception of quality, purchasing circumstance, and product satisfaction leads to the growth of new products. In the branded financial institution, perceived quality was discovered to be an additional beneficial and statistically significant factor influencing customer happiness. This study therefore concludes that improved marketing effectiveness will result from improved product quality.

A good package makes things easier for buyers to distinguish and recognize. Packaging is used for transportation convenience and safety. Businesses use packaging to set their products apart from competing brands. Therefore, this study came to the conclusion that product packaging will enhance marketing effectiveness.

A product line is a collection of connected goods sold by the same business and marketed under a single brand name. Businesses market many product lines under their various brand names in an effort to set them apart from one another for easier consumer use. In light of this, the study draws the conclusion that product line will improve marketing results.

## 5.4 Recommendations

The following suggestions are made in light of the study's findings:

- This study applauds that employees should be encouraged to develop new product ideas, consumer needs and wants should also be researched in addition to new product ideas, and complaints and other information gathered from consumers should be recorded and then converted to new product ideas. In addition, many business departments should collaborate in order to ensure the success of the new product. For this reason, creative and imaginative employees should be employed in R&D, engineering, product design, and marketing departments as much as in the production department.
- Further, different business departments of this frim (Top Bottled Water) should work in cooperation in order to achieve the success of the new product.

- This study suggests that Top Bottled Water should revises its marketing strategy and it should be evaluated, business analyses should be carried out for ideas which passed transformation from ideas to production test and found suitable for production and the developed products should be commercialized after the market test phase.

- This study suggests this company should have a well formulated and adequate coordination between departments that will result in success of new product development, and achievement of new product development that will lead to a higher financial attainment.

- Attentions should be given towards improving existing product development and launching strategies so that organizational performance can be boosted in a competitive environment.

- The study recommends that bottled water companies should expand product base, one bottled water company has already devised ways of using the already existing infrastructure to add bottling in the product bracket. Further with improved procedures aiming at effective and efficient operations, it is evident that same products can be manufactured with less costs and thereby improvement on the returns.

## 5.5 Implications

The paper raises important policy implications. Over the last decade, companies have regarded innovation as an efficient instrument to decrease the striking disparities in marketing performance in Ethiopia, particularly small and newly formed companies. Companies should have therefore put some emphasis on NPD that has become even more critical in the today's highly competitive global environment. The need to respond quickly to these dynamic forces requires every company to integrate rapidly the perspectives and needs of product developers as well as of the customer. As for the industry, such context has seen significant advances in the packaging sector, with the development of active and intelligent innovations. These advances have led to improved product quality and safety. While some innovations have stemmed from unexpected sources, most have been driven by changing consumer preferences or specific customer's requirements.

New product development for a company is the development of product mix or portfolio. While the product portfolio is developed as important innovations, it can also be developed as product

advancement, repositioning of product or product additions. The production of a face recognition door by this manufacturer will enlarge the product portfolio. The production of different varieties of the door such as lock opening, automatic opening, etc. contributes to the length of the product line. The development of locking features such as door opening by a card reading or a device from inside of the lock contributes to the depth of the product line. Not adding this kind of door to the product mix by the door manufacturer although there is a demand by consumers in the target market will lead to a decrease in the market share, or producing it after competitors will lead to loss of taking the best part of the market and increase in the cost of winning the customers lost to the competitors.

## 5.6 Future Studies

The study explored examined the effect of new product development on marketing performance in the case of Top Water in Addis Ababa. Thus, future studies should focus on product development strategy, other strategic choices in relation to performance variables and further other industry contexts other than Bottled Water industry. Consequently, further and regress study in wider scope may provide a better outcome.

# REFERENCE

Ahmad, Sohel R. Mallick, Debasish N. and Schroeder, Roger G. (2013). New Product Development: Impact of Project Characteristics andDevelopment Practices on Performance, Operations and Supply Chain Management Faculty Publications, *J PROD INNOV MANAG* 2013, 30(2):331–348

Benson, Mbithi. Willy, Muturi. and Charles, Rambo. (2015). Effect of Product Development Strategy on Performance in Sugar Industry in Kenya, In*ternational Journal of Academic Research in Business and Social Sciences* Dec 2015, Vol. 5, No. 12 ISSN: 2222-6990

Carolyn A. Lin and Xiaowen Xu. (2021). Exploring Bottled Water Purchase Intention via Trust in Advertising, Product Knowledge, Consumer Beliefs and Theory of Reasoned Action, journals Social Sciences, Volume 10, Issue 8

Cheng, C. and Yang, M. (2019). Creative process engagement and new product performance: the role of new product development speed and leadership encouragement of creativity. *Jornal of Business Research*, 99, 215–225.

Claudy, M.C.Peterson, M. and Pagell, M. (2016). The roles of sustainability orientation and market knowledge competence in new product development success, *Journal of product Innovation Management,* 33, 72–85

Cooper, R.G. (2019). The drivers of success in new-product development, *Industrial Marketing Managmnet, Ind.. Mark. Manag.* 76, 36–47.

Creswell, John W. (2014). *Research design: qualitative, quantitative and mixed methods approach*, 3rd ed., Sage Publications, California

Daniel, Amente. (2022). The Effect of New Product Development on Organizational Performance: the Case of Biscuit Manufacturing Companies in AddisAbaba, Ethiopia, Annals of the University of Craiova for Journalism, Communication and Management, Volume 8, 2022 6

David-West, O., Iheanachor, N., & Umukoro, I. (2019). Sustainable business models for the creation of mobile financial services in Nigeria. *Journal of Innovation & Knowledge*, 5(2), 105–116

Dziallas, M. (2020). How to evaluate innovative ideas and concepts at the front-end?: A front-end perspective of the automotive innovation process. *Journal of Business Research*, 110, 502-518. doi:https://doi.org/10.1016/j.jbusres.2018.05.008

Esen, Gürbüz. (2018). Theory of New Product Development and ItsApplications, Nigde Omer Halisdemir University, Nigde, Turkey, http://dx.doi.org/10.5772/intechopen.74527

Frost, J. (2017). How to interpret R-squared in regression analysis. Retrieved fromhttp://statisticsbyjim.com/regression/interpret-r-squared-regression/ Accessed on 02 May 2022

Jovarauskaitė, Lina, Audra Balundė, Inga Truskauskaitė-Kunevičienė, Goda Kaniušonytė, Rita Žukauskienė, and Mykolas Simas Poškus. (2020). Toward Reducing Adolescents' Bottled Water Purchasing: From Policy Awareness to Policy-Congruent Behavior. SAGE Open 10: 1–12.

Kothari, C. R. (2019). *Research Methodology: Methods and Techniques.* 4th edition, New Delhi. New Age Publishers. ISBN: 978 81 224 24881 p 101

Mastrisiswadi, H. & Amalia (2017). The Product Design Of Water Bottled For Adults According To Customer Needs Using Quality Function Deployment (Qfd) Method', IJIRAE:: *International Journal of Innovative Research in Advanced Engineering*, Volume IV (Issue XI), 13-20

Nadia, Bhuiyan. (2013). A framework for successful new product development, JIEM, 2011 – 4(4):746-770 – Online ISSN: 2013-0953 – Print ISSN: 2013-8423 http://dx.doi.org/10.3926/jiem.334 - 746, Concordia University (CANADA)

Najafi-Tavani, S.Sharifi, H. and Najafi-Tavani, Z. (2016). Market orientation, marketing capability, and new product performance: the moderating role of absorptive capacity. *Journal of Business Research, J. Bus. Res*, 69 (11), 5059–5064

Nigist, Kelemu. (2020). A Survey on New Product Development, Market Orientation and Organizational Financial Performance: A Case Study on Selected Beer Factories in Ethiopia, *Asian Journal of Managerial Science*, ISSN: 2249-6300 Vol. 9 No.1, 2020, pp. 1-7

Nkemdilim, Iheanachor. Immanuel, Ovemeso. and Olayinka, David-West. (2020). The role of product development practices on new product performance: Evidence from Nigeria's financial services providers, *Technological Forecasting & Social Change* xxx (xxxx) xxx

Ogbor, J. O. , & Edeme, Nelson, C. (2021). New Product Development Strategies and Marketing Performance in the Nigerian Food and Beverage Industry, I*OSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 23, Issue 9, PP 12-23 www.iosrjournals.org

Roems, R. (2017). The implications of deviating from software testing processes: a case study of a software development company in Cape Town, South Africa (Doctoral dissertation, Cape Peninsula University of Technology).

Scholastica E. and Maurice I. (2013).   Impact Of Product Development And Innovation On Organisational Performance, *International Journal of Management and Sustainability*, 2013 Vol. 2, No. 12, pp. 220-230

Smita, Mortero. Jirarat, Anantagool. Emeritus, and Achara Chandrachai. (2020). Food and Beverage Innovative Product Development Model, 4th *International Conference on Business, Managmnet and Economics*, Berlin, Germany

Stephanie.    (2018).    Beta    Weight:    Definition,    uses.    Retrieved    from http://www.statisticshowto.com/beta-weight/ Accessed on 02 may 2012

Terrar, D. (2018). Stanfordd. School Design Thinking Process. Retrieved from http://www.theagileelephant.com/what-is-design-thinking/.

Thanasopon, B., Papadopoulos, T., & Vidgen, R. (2016). The role of openness in the fuzzy front-end of service innovation, *Technovation*, 47,32-46.

Yalew, Mamo. (2018). Influence of Bottled Water Packaging Attributes on Consumers'Purchase Decision: Case study in Addis Ababa, *European Journal of Business and Management, ISSN* 2222-1905 (Paper) ISSN 2222-2839 (Online), Vol.10, No.1

# ANNEX

## Annex I – Questionnaire



### St. Mary's University School of Graduate Studies
### Departments of Marketing Management

Greetings!

I am Elsa W/Silase a postgraduate student of St Marry University, department of marketing management. I am conducting a research titled " *The Effect of New Product Development (NPD) on Marketing Performance in the case of Top Bottled Water Company in Addis Ababa''*. This study is conducted *s*ubmitted in partial fulfilment of the requirements for the award of Master of Arts Degree in Marketing. Hence, the information you provide will strictly be used only for academic purpose and it will be kept confidential. Please note that your information will be kept secretly.

Your response in this regard is highly appreciated and the researcher thanks you in advance for your time and cooperation.

Your Sincerely

Elsa W/Silase

## Part One: Demographic Profile of Respondents

Instruction: Please choose the correct information about the questions response categories by putting √ mark in the box.

| | |
|---|---|
| 1) Age (in years): | |
| Young adults (ages 18-35 years) | |
| Middle-aged adults (ages 36-55 years) | |
| Older adults (aged older than 55 years) | |
| 2) Sex: | |
| Female | |
| Male | |
| 3) Education level: | |
| Diploma and below | |
| Degree | |
| Masters and above | |
| 4) Year of Experience Knowing *Top Bottled Water Company* | |
| 1 – 5 Years | |
| 6 -10 Years | |
| More than 11 years | |
| 5) Have you visited various shops of *Top Bottled Water Company*? | |
| Never | |
| Frequently | |
| Sometimes | |
| Rarely | |

## Part Two: Main questions

**Instruction: For each of the following questions choose the appropriate answer.**

How do you perceive and rate the following new product practices of Marketing Management of *Top Bottled Water Company* in terms of experience and expectation in Ethiopia? Please put "X" mark with the answer you choose. Please note that 1 represents for "Strongly Disagree"; 2 for "Disagree"; 3 for "Neutral"; 4 for "Agree" and 5 for "Strongly Agree".

| Variable | Code | Items | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| Product Quality | PROD1 | New product/service development is a continuous phenomenon in Top Bottled Water Company | | | | | |
| | PROD2 | The product/service portfolio of Top Bottled Water Company enhances its image | | | | | |
| | PROD3 | Top Bottled Water Company product/service portfolio up to my expectations | | | | | |
| | PROD4 | The percent units received in acceptable condition is right. | | | | | |
| | PROD5 | The units that are supplied (100%) are correct units. | | | | | |
| | PROD6 | The units that are delivered (100%) are in correct quantity. | | | | | |
| **Product Packaging** | PROM1 | Top Bottled Water packaging is designed to protect or contain the product during shipping. | | | | | |
| | PROM2 | Top Bottled Water packaging addresses environmental issues. | | | | | |
| | PROM3 | Top Bottled Water packaging holds important marketing message. | | | | | |
| | PROM4 | Top Bottled Water packaging provides consumers with a basis for making a purchase decision | | | | | |
| | PROM5 | Top Bottled Water packaging holds Regulations on consumer info. | | | | | |
| Produc | PB1 | I like Top Bottled Water new products that provided by its brand | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PB2 | When I think about new products, Top Bottled Water new products comes first my mind | | | | | |
| | PB3 | Top Bottled Water new products fulfil my expectation of hotel service bottled water. | | | | | |
| | PB4 | I find Top Bottled Water brand interesting in a sensory way. | | | | | |
| | PB5 | Top Bottled Water new products' brand induces feelings and sentiments | | | | | |
| **Product Line** | PL1 | Top Bottled Water provides various product varieties. | | | | | |
| | PL2 | Top Bottled Water offers product grouping with different product processing. | | | | | |
| | PL3 | Top Bottled Water provides various product varieties based reasonable price strategies. | | | | | |
| | PL4 | Top Bottled Water provides various product varieties within different places. | | | | | |
| | PL5 | Top Bottled Water provides various product with varies promotional mix. | | | | | |

To what extent has new product development affected the following performance indicators in your firm? 1= Not at all. 2= Some extent.3=Moderate extent.4=Great extent. 5= Very great extent

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PERFORMANCE INDICATORS** | PI1 | Increased Revenue | | | | | |
| | PI2 | Increased Market Share | | | | | |
| | PI3 | More Customer Acquisition | | | | | |
| | PI4 | Increased Profitability | | | | | |
| | PI5 | More Sales | | | | | |
| | PI6 | Higher Demand For Products | | | | | |
| | PI7 | New Market Acquisition | | | | | |

| | PI8 | Higher Prices | | | | | |
|---|---|---|---|---|---|---|---|

Thank You!

## Annex II – Interview Checklist

Greetings!

Dear Interviewee,

Please note that I am conducting a research study *on' The Effect of New Product Development (NPD) On Marketing Performance in the case of Top Bottled Water Company in Addis Ababa''*

I have few questions regarding this study.

Can I proceed?

**Thank you!**

1- What is the role of new product development on marketing performance in Ethiopian Beverage Industry particularly?

   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

2- What is the marketing management performance in this firm or bottled water companies in Ethiopia?

   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

3- What are product quality, product packaging, product branding and product line trends in beverage industry particularly Top?

   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   …………………………………………………………………………………………..
   ……………………………………………………………………………………………
   …………………………………………………………………………………………
   …………………………………………………………………………………………

   **Thank You!**