

**MARKETING RESEARCH AND NEW PRODUCT DEVELOPMENT
A CASE STUDY OF MUKWANO GROUP OF COMPANIES, KAMPALA**

**BY
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**A RESEARCH REPORT SUBMITTED TO THE COLLEGE OF ECONOMICS AND
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DECLARATION

This research report is my original work and has not been presented for any academic award in any university or institution of learning.

Signature 

Date... 27th / 09 / 2018

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APPROVAL

I confirm that the work reported in this report was carried out by the candidate under my supervision.

MR. MASABA RICHARD (SUPERVISOR)

Signature Date.....

DEDICATION

This research report is dedicated to my mom Chebet Sitina, my dad Mr. Ahmed Seiko Abu, my aunt Chebet Kulthum, my brothers, sisters and friends for whom it wasn't for them, this report couldn't have reached to this stage. May almighty god reward you unconditionally.

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Lastly, I would like to exonerate the acknowledged persons and the organization from any liability for errors and omissions, should it occur in this report.

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ABSTRACT

The study examined the relationship between marketing research and new product development taking Mukwano Group of Companies as a case study. The research also capitalized on three objectives which required determining the effect that customer analysis contributes to new product development, determining the effect of market segmentation on new product development, and establish the relationship between marketing strategy and new product development. The study employed stratified, simple random and purposive sampling techniques to draw representative samples and a sample size of 60 respondents was determined from a population of 71 members using Slovin's Formula. Closes-ended questionnaires with five point likert scale were used to obtain response. During this research data was carefully collected, classified and analyzed using frequency tables and data was summarized using graphs and charts. The findings of the study revealed that there is a relationship between marketing research and New Product Development (NPD). This was attributed to the fact that marketing research acts as a tool to thoroughly understand the market too which new products are to be sold. In this case, marketing research addresses the issues relating which customers to buy, which product to introduce, at which price to sell, and when to introduce such a product to the market. The two variables also relate in such a way that it is thrush marketing research that continuous monitoring and identification of risks against new products are ascertained. The other elements of marketing research which included market segmentation and customer analysis were found to be great factors for success of new products if well implemented. Finally, the researcher suggested some recommendations which included prior studying customers and their markets and dividing the markets in heterogeneous groups to be able to properly serve the market. The researcher also recommended that there should be stakeholder involvement where all necessary individuals are involved in deciding which marketing strategy to employ for a certain product.

CHAPTER ONE

INTRODUCTION

1.0. Introduction

This chapter presents the study background which includes historical, conceptual and contextual perspectives; statement of the problem; study purpose; study objectives; research questions; content, geographical and time scope; significance of the study; and conceptual framework.

1.1 Background of the study

1.1.1 Historical perspective

The idea of marketing research was developed in the late 1920's by a man named Daniel Starch. This is about the same time that advertising was introduced in the United States. At that time, copywriters would write what they thought an advert should be, publish the advert, and then hope that readers would act upon the information provided.

During the early 1930's Daniel Starch developed the theory that effective advertising must be seen, read, believed, remembered, and then acted upon. Soon after, he developed a research company that would interview people in the streets, asking them if they read certain publications. If they did, his researchers would show them the magazines and ask if they recognized or remembered any of the ads found in them. After collecting the data, he then compared the number of people he interviewed with the circulation of the magazine to figure out how effective those ads were in reaching their readers. Thus surveying or marketing research was born.

As time went on, many marketing research companies began to emerge and began following Starch's example and worked to improve his techniques. A man by the name of George Gallup developed a rival system that was known as the "aided recall" which prompted people interviewed to recall the ads seen in a publication, without actually showing them the ads. This rival system was later used to measure the effectiveness of radio and television advertising.

In the late 1980's a man named Ronald Lindorf found what would be the largest marketing research companies in the United States, Western Wats. The focus of Western Wats was to leverage the current technology of W.A.T.S. telephone lines to conduct survey research. There was no longer a need to interview people on the streets or to organize and conduct focus groups. A representative

in a call center could collect all of the data desired. This greatly increased the number of surveys collected each year and again, improved the marketing research model tenfold.

Over the last 5 to 10 years marketing research has taken another great leap in terms of how it is collected. Yes, it is still collected via survey research; however, it is mostly collected via surveys over an internet connection. Western Wats (recently renamed as Opinionology) is still the largest marketing research company in the US and collects the majority of their research via their online panel called Opinion Outpost. Instead of cold calling an individual to collect the data, anyone interested in participating in these studies can sign up to receive surveys and freely share their opinion. It is much less intrusive and the quality of data is most times much higher since people can participate on their own schedule, instead of being rushed when they receive a phone call from a call center.

Today, Marketing Research has adapted to innovations in technology and the corresponding ease with which information is available. B2B and B2C companies are working hard to stay competitive and they now demand both quantitative (“What”) and qualitative (“Why?”) marketing research in order to better understand their target audience and the motivations behind customer behaviors.

This demand is driving Marketing Researchers to develop new platforms for interactive, two-way communication between their firms and consumers. Mobile devices such as Smart Phones are the best example of an emerging platform that enables businesses to connect with their customers throughout the entire buying process. Innovative research firms, such as OnResearch with their OnMobile app, are now providing businesses with the means to reach consumers from the point of initial investigation through to the decision, ultimately, and the purchase. It will be very interesting to see where marketing research goes in the next 10 or so years. Whatever the case may be, I’m sure it will evolve and become even better and easier to get than ever before.

1.1.2 Conceptual perspective

According to the Marketing Research Association (2000), "Marketing Research is the function which links the consumer, customer, and public to the marketer through information used to identify and define marketing opportunities and problems; generate, refine, and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process. Marketing Research specifies the information required to address these issues; designs the method of collecting information; manages and implements the data collection process; analyzes the results; and communicates the findings, recommendations and their implications.

It is the systematic gathering, recording, and analysis of qualitative and quantitative data about issues relating to marketing products and services. The goal of marketing research is to identify and assess how changing elements of the marketing mix impacts customer behavior. The term is commonly interchanged with market research; however, expert practitioners may wish to draw a distinction, in that market research is concerned specifically with markets, while marketing research is concerned specifically about marketing processes.

Marketing research is often partitioned into two sets of categorical pairs, either by target market: Consumer marketing research, and Business-to-business (B2B) marketing research or, by methodological approach (i.e. Qualitative marketing research, and Quantitative marketing research).

Consumer marketing research is a form of applied sociology that concentrates on understanding the preferences, attitudes, and behaviors of consumers in a market-based economy, and it aims to understand the effects and comparative success of marketing campaigns. The field of consumer marketing research as a statistical science was pioneered by Arthur Nielsen with the founding of the ACNielsen Company in 1923.

Thus, marketing research may also be described as the systematic and objective identification, collection, analysis, and dissemination of information for the purpose of assisting management in decision making related to the identification and solution of problems and opportunities in marketing.

1.1.3 Contextual perspective

Mukwano group of companies was established in 1986 although it did not start operations until 1989. Today the group is involved in five main areas of business; (a) manufacturing (b) real estate (c) bulk storage and shipment (d) cargo clearing and forwarding (e) agriculture.

For this specific research however, we dealt with the products under manufacturing sector to determine how market research would or determined their development and success in the market. Such products included; Roki fortified edible cooking oil, Nomi powdered washing detergent, Aqua Sipi bottled water, Mukwano jelly, Plastic ware, Chapa Nyota laundry bar soap, Mama-powdered washing detergent, Marine Margarine, Sunseed edible sunflower oil, among others

1.2. Statement of the Problem

Marketing research is a crucial aspect in new product development. It is the very first step which determines the success of any product. It acts as the foundation and cornerstone of any product. Businesses need not only to rely on promotional strategies, but also have to fine tune their marketing research programs with view of improving the quality of their product. To obtain the desired and appropriate results from marketing research, organizations must be guided by certain plans to satisfy all or at least most of the company objectives for it to be worthwhile.

However important the aspect of marketing research is to any organization, it receives the least attention by many managers.

Less information concerning the time of market entry for new products, customer analysis, market segmentation, market strategy, demand analysis, among others has been acquired and utilized by most businesses in Uganda. This has therefore led to their collapse within the early stages of their existence. It was therefore upon this background that the researcher raised a need to determine the extent to which marketing research influence the success of a new product.

1.3. Purpose of the study

The purpose of this study was to establish the relationship between marketing research and new product development.

1.4. Objectives of the Study

1. To determine the effect that customer analysis contributes to new product development
2. To determine the effect of market segmentation on new product development
3. To establish the relationship between marketing strategy and new product development

1.5. Research questions

1. How does customer analysis contribute to new product development?
2. What is the effect of market segmentation on new product development?
3. What relationship is there between marketing strategy and new product development?

1.6. Study scope

Content scope

This study capitalized on the topic of marketing research and new product development. In this case marketing research was used as an independent variable whereas new product development as a dependent variable. The findings and deductions for this research were on the three objectives already stated above.

1.6.1. Geographical scope

The study was carried out at Mukwano group of companies located at Mukwano road, near bypass road, in the capital- Kampala. This area was chosen as a case study because it is near the researcher's access and also due to the availability of plenty of new products. This helped the researcher to intensively collect the required data for the study.

1.6.2. Time scope

This research was conducted for a period of six months (that is, March to August). This period was used because the researcher believed that she would be able to coherently gather information from respondents which required them (respondents) to give responses that are typical of their opinion from observations that were made over the period. The researcher also used the data from Mukwano group of companies cited from 2009-2014.

1.7. Significance of the study

The findings of this study will be significant/ helpful in the following ways.

To scholars and researchers; the findings of the study are expected to contribute to the existing literature regarding marketing research and new product development.

To the company management; the study will help the management of MGC to adjust to the latest means of marketing research.

To the researcher; the accomplishment of this study will enable the researcher to acquire hands on skills about processing of research work and data analysis. This research will enable the researcher to handle such related work with a lot of proficiency and precision.

1.8. Conceptual framework

Independent Variable

MARKETING RESEARCH

- Customer behavior analysis
- Market segmentation
- Demand analysis
- Marketing strategy

Dependent Variable

NPD

- NPD practices
- NPD strategy
- Management commitment

Intervening Variable

Marketing mix

- Timing
- Pricing
- Promotion
- Distribution

Source: Hart & Diamantopoulos (1993)

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter consists of existing literature by different scholars/research studies from magazines, text books, internet, journals, and newspapers, basically focusing on market research and new product development. It covers conceptual review and review of related literature on both marketing research and product development.

2.1 The concept of marketing research

Marketing research is a tool that helps managers assess future profitability and understand situational market variables.

Kotler, (1997) defines marketing research as “the systematic design, collection, analysis and reporting of data and findings relevant to a specific marketing situation facing the company”. Similarly, Eric, Rogers and Williams (1989) defined a marketing research as “the process of defining a marketing problem and opportunity, systematically collecting and analyzing information and recommending actions to improve an organization’s marketing activities”.

Marketing research can therefore be seen as the systematic and objective approach for the gathering, analyzing and making available information to guide managers in carrying out marketing decision to solve marketing problems.

From the above definitions the followings should be noted;

First, systematic refers to the research being well planned in advance. It should be directly tied to the decision being made or the problem to be solved, and all aspects of the design will be developed in detail beginning with the identification of problems and information needs and setting out in advance the methods of data collection and analysis. At this juncture it is important that we emphasize, that marketing research and market research should not be confused. Marketing research implies a broader sphere of activity than market research. Market research (i.e. research into a particular market) is just one component of marketing research. The term market research investigates and tends to be restricted to a research that merely looks into the market place. Marketing research covers estimates of market size.

Problem solving is the major task of business manager; it is in this area that marketing research renders its services to business management. Marketing research is the tool by which management is supplied with the necessary information which imagination and ingenuity converts into a stronger competitive position. (Bearden, 2004)

Marketing research, as in marketing management, the objective is to develop the means and methods by which business executives can get the right goods to the right place and at the right price. Marketing research informs management where the company stands in its industry, predicts and analyses industry trends. It is an essential management tool in appraising and improving sales management effectiveness and it also aids management in the development and introduction of new products.

2.2 The concept of product development

New Product Development (NPD) is often costly as it involves substantial expenses. Therefore, it is essential to manage NPD effectively and efficiently. In terms of managing NPD performance, (Anderson 2008) stated that a company's overall new product performance depends on the five elements: the NPD process; the organisation of the NPD program; the NPD strategy; culture and climate for innovation; and senior management commitment to NPD.

However, application to actual practice has been somewhat less common. (Poolton and Barclay 1998) even suggest that much research on NP success factors is too generic, and has not actually been applied to specific contexts very well.

They say that success factors and their importance depend heavily on industry and firm characteristics. They also suggest that much research focuses too heavily on variable by variable analysis.

NPD studies are markedly broad. Over the past decades, a number of researchers such as (Cooper, 1979; Cooper and Klein Schmidt, 1987, 1993; Maidique and Zirger, 1984) investigated many aspects of innovation. What emerged from such work was that one of the key themes in innovation research was to identify the factors that are associated with NPD success. In facing vigorous competition globally, many manufacturing and engineering companies have adopted various techniques or advanced methods in order to be innovative and competitive. Although NPD brought many new opportunities to companies, however, the potential risks underpin the NPD process causes a number of cases of failure due the inadequate management process in NPD.

Stages in product development

Every physical product passes through several stages before they are eventually developed and launched into the market for consumption.

These stages include the following;

Idea generation

Before a new product is developed and launched into the market, there are stages it must undergo. The idea generation is a stage where an idea of product is generated. The idea can come from many sources such as salesman, company order, employees, and consumers through their complaints, competitors and trade association. The major technique used at this stage is brainstorming.

Idea screening and selection

During the period of idea generation, many ideas must have come into the head of the product planner. Definitely, it is not all ideas that could be very sound and feasible.

The idea screening stage therefore is a stage where one screens out ideas. It should be noted that all ideas that are not consistent with company policies and objectives and those in conflict with government regulations and enactments, are the ideas that will be impracticable either due to the cost expected revenue or the technology and equipment to be in conflict with the culture and ethical practice of the people. Similarly at this stage, product planner looks for ideas that are worthy for further study by eliminating irrelevant ones.

Ideas analysis and evaluation

Ideas which pass through the screening stage will be further analyze.

The concern here is to be able to determine which of the ideas is feasible and practicable technically, economically, financially and other wise. Also the long-term potentials of the business enterprise are looked into. At this stage, therefore, the product features, product profitability, estimated demand, as well as the possible returns on investment are considered. Only idea(s) with the greatest potentials for success are accepted.

Product design and development

The first three stages involve paper work, but at this stage, the most feasible and practicable idea which has been accepted is practicalized by producing samples or prototype. Only few quantities are produced so that the products can be tested in the market to practically determine its feasibility.

Product testing (market testing)

The few quantity of prototypes produced at the stage above are hereby tested in a very small geographical market or market that is used to test new product. The reasons for test marketing are to determine;

- a. Whether the market will accept the product.
- b. The marketing programme that will be eventually used.
- c. Whether the products can even be marketed profitably.
- d. The product quantity and the price at which consumers will accept the product.

Product commercialization

Where the idea and the prototype passed through both the technical and market test (test marketing) successfully, the product can then be fully commercialized. Full scale production and marketing programme are planned and executed and the product is then launched.

Before commercialization of a product takes place, the product planner has the full control over the product, but after the product has entered the market, forces within the external environment over which he may have little or no control can distort its success tremendously.

2.3. Related Literature

2.3.1. Market segmentation and product development

The number of articles addressing segmentation and product development have been growing. Still there seems to be "tension between the theoretical desirable and the managerial possible", as Mitchell & Wilson (1998) wrote some years ago. The problem still seems to be that practitioners have not moved away from very simple approaches which can be handled as Abratt (1993) demonstrated years ago, and that theory offers a variety of approaches which are quite advanced but which are difficult to handle in practice (Millier, 2000; Dibb & Simkin 2001).

Many articles about segmentation focus especially on the importance of the customer. The customer is regarded as the basis of the company's segmentation efforts. However, marketing campaigns are usually only effective if they are targeted at individual customers: marketing campaigns that are too broad or multi-focused are usually inefficient. Also, the needs of individual customers usually differ, and therefore the customers expect unique and tailor-made solutions. This is a challenge for companies: Firstly because the company has to develop a product/service that precisely satisfies the need of the customer, secondly because the company constantly has to

be able to meet the expectations stemming from these tailor-made solutions; and thirdly because these individualized solutions must give the company such a strong competitive position that charging a higher price is legitimate, also in order to match the increased demand for a proper return on the large development costs.

Satisfying customers' needs by developing individualized products/services contain at least two vital questions: How can customer needs be clearly identified, and how can the development of a product/service match this need? Developing a general and applicable model for defining the exact customer need or even to describe those conditions under which different models or approaches would be the most appropriate have turned out to be very difficult. For example, the often applied "Nested Approach" model is evaluated as follows: "The authors propose no precise rule to decide when we must stop looking for relevant variables. Some criteria (circumstance) are sometimes linked to some others (environment). And moreover, a major problem lies behind the choice of circumstance variables, can we consider for example that some specific circumstances (order urgency, for example) are relevant segmentation criteria?" (Wind in Millier. 2000). In other words, it is difficult to identify customer needs efficiently so that an appropriate segmentation of customer needs can take place. This problem does not only affect marketing efforts but it also influences the company's product development.

POI (1994) recommend with reference to Bonoma & Shapiro demographics as a good starting point for segmentation as they write "Much more demographic information is required about targeted business as well as competitors" (p. 40). In particular they recommend: "Data on size of the business (e.g. revenue and number of employees), how long the business has been in existence (i.e., age), number of competitors, proximity to competitors, and characteristics of the organization other than size (e.g. occupational structure and size of management team) can prove valuable in setting and implementing strategy".

From this string of research, two assumptions seem to be clear. Basically, the product seems to be given, as the major challenge for segmentation is targeting the customers. This has then the consequence that there is no explicit input for product development. On the other hand it is clear that when the product is given and when there seems to be no reason for phasing out a product it can be useful to look at demographics for segmentation for marketing purposes.

In addition to this, Sollner & Reese (2001) focus on the Importance of competitors' market positions and how this position influences a segment: "Competitive behavior has a significant effect on the substantiality of segments and on their temporal stability" (p. 26) and they add to this "we are convinced that the formation and selection of segments can be improved if we include theoretical aspects of competitor orientation" (P. 35).

Therefore, in the segmentation process, the company has to consider whether segmentation is only about targeting marketing efforts and making adjustments — considering competitors' behaviour — or whether other factors such as strategic considerations and product development should also be included in the segmentation process.

A much debated issue is the buyer and what the buyer wants to purchase (Wind & Cardozo. 1974, Bonoma & Shapiro. 1983: Plank, 1985: Goller et al., 2002). Buyers differ in numerous ways (Webster & Wind. 1972) and this forms the basis for a segmentation of the market. As shown in a number Of studies, the easiest collected data on differences among buyers are often the poorest predictors for differences among buyers and vice versa (Cheron & Kleinschmidt. 1985; Freytag & Mols, 2001). As Dibb & Wensley (2002) indicate, the whole idea of segmentation is based on the fact that differences among buyers exist: "Market segmentation is based on the assumptions that customers demonstrate heterogeneous preferences and buying behavior". Likewise it is assumed that the heterogeneity in preferences and buying behaviour is closely connected to the differences among buyers regarding the use of products and user characteristics. Within literature about product development, the question about preferences and the use of products also play a significant role. A problem which has been thoroughly discussed in literature about product development is that customers are not always aware of their preferences. "The customer does not know which chair he prefers until he sees it" one furniture designer said during an interview about the company customers' buying behaviour and the determinants behind it (Freytag & Nielsen, 1990). This makes it difficult to assume ex ante that all customers are aware of their needs, and that it is only a question of identifying these customer needs. On the other hand, many customers in the industrial market do sometimes know exactly as much as the supplier regarding what they need and what they want. Therefore it can be difficult to disconnect the market segmentation process from the production development process. Instead, it may be appropriate to ask whether these two processes are not to be regarded as interlinked.

Thus, another factor regarding the content of a good segmentation method is the buyer himself and what the buyer wishes to purchase. One problem is, however, that the customer's amount of knowledge about what he really wants and needs may range from total ignorance to high awareness. This in turn raises the question about the nature of the business relation with the customer and whether the customer is included in the product development process and how the production development process is linked to the marketing efforts,

The segmentation process is central because it can group customers in a way that makes it possible to target marketing efforts more accurately. This is very crucial since products are often used very differently from one company to the other, and since companies generally differ in their ways of conducting business.

2.3.2. Customer analysis and product development

New product developers have increasingly utilized input from customers to co-create innovative new products. Relationship marketing and interaction between business partners has recently received widespread interest among researchers and managers alike (Lusch and Brown, 1996). Some authors even suggest that these emerging ways of doing business are a new marketing paradigm (Gronroos, 1994) that represents “a fundamental reshaping of the field” (Webster, 1992). Another shift of focus in marketing is that “after a decade of restructuring and reengineering, with an emphasis on cutting assets and personnel, the new priority is renewal and growth through innovation” (Day, 1996). Given the importance of both relationship marketing and innovation, research exploring the effect of customer interaction in the context of new product development should be of particular relevance to the development of marketing thought. The research reported in this article was motivated by the question of whether and how success can be increased by interacting with customers in the specific context of new product development. Some companies report on the success of such activities. For example, Boeing interacted closely with its customers (the airlines) during the development process for its new Boeing 777 airplane (Condit, 1994). Analyzing performance impact of customer interaction in new product development on a more general level (i.e., beyond isolated examples) can yield important managerial insights.

This article investigates empirically the impact of customer interaction on success in new product development. Due to the paramount importance of the process perspective for new product development (e.g., Saren, 1994), we will analyze the performance impact of customer interaction at different stages of the new product development process. The choice of the partner is another core aspect of interacting with customers. As an example, von Hippel (1988) focuses on innovating with customers exhibiting “lead user” characteristics. Also, Heide and John (1990, p. 34) pointed out that “bilateral governance is not universally desirable.” We will therefore investigate the impact of customer characteristics on new product success as the second major research question.

In the context of our study, information on customer needs and user experiences might be viewed as resources companies depend upon for successfully developing new products. From the discussion of the three factors determining the dependence of a company on resources, a high dependency on customer information can be concluded for three reasons. First, customer related information is highly important for continued operation in the present context. Second, the customers have discretion over the resource. Third, customer related information can only be obtained from customers themselves. Cooperation with customers thus can be viewed as a bridging strategy to secure access to the critical resource of information on customer needs. According to resource dependence theory, this strategy increases organizational effectiveness and thus performance.

This conceptualization of the customer does not assume that all information utilized in the new product development process is provided by the customer. Rather, the assumption is that information provided by the customer may be relevant to the firm developing a radical innovation because of the ability of the customer to provide both information on the market as well as the technology. There may in fact be other sources of information available to the firm. The customer is but one of these sources.

2.3.3. Market Demand Analysis and product development

Market demand estimation is widely used to assist companies in assessing the financial feasibility of new product development (NPD) projects. Market demand estimation commonly involves choice modeling and market potential estimation. Choice modeling is a common method used in the decision-making process to understand customer buying behavior and preferences and measure tradeoffs among attributes in a given set of product alternatives. Early choice modeling applications have been used to solve problems in the travel, transportation, and tourism industries according to the principle of utility maximization of customers. In the last decades, choice modeling has been widely applied in marketing research. In recent years, it has been used to associate consumer preferences with design attributes for NPD.

Choice modeling has a number of applications in the demand modeling of product design because of the necessity of integrating engineering design attributes with marketing desired attributes. Choice modeling can capture consumer preferences for a set of competitive products, thus making this approach suitable for integrating marketing and engineering approaches in product design. Choice modeling outputs provide important information to decision makers in determining product features and variables to satisfy customer expectations. The latest research in choice modeling aims to understand heterogeneous consumer preferences, estimate market demand under competition and/or uncertainty, and study uncertainties associated with customer purchasing behavior in demand modeling.

Discrete choice analysis (DCA) is a disaggregate approach to choice modeling that is based on probabilistic distribution theory, which seeks the utility fraction of a given product among a set of competitive products. DCA aims to maximize the total utility of individual consumers who respond to experiments/surveys by capturing the tradeoffs among product attributes. DCA uses preference data to estimate the choice probabilities of competing alternatives for individual consumers. These individual estimations are then aggregated to predict the total choice share. Various DCA models, such as multinomial logit (MNL), nested logit and mixed logit (MXL), have been applied in the demand modeling.

Conjoint analysis is a popular technique for capturing consumer preferences and measuring tradeoffs by estimating the consumer part-worth utilities for each attribute level of a product.

Conjoint analysis can be used to generate the utility functions of products and determine the optimum setting of product attributes by using the collected data of conjoint surveys. Various types of conjoint analysis such as rankings, ratings, and choice-based alternatives exist. Conjoint analysis and DCA have been successfully applied to develop market share models for new products. Market potential estimations are combined with the generated market share models to develop market demand models. The jury of executive opinion method, wherein several experts are involved in the estimation, is commonly used in industries to estimate market potential for new products. However, marketing experts estimate market potential mainly based on their own subjective judgments and their estimates are always ambiguous such as 'somehow about 80 thousands', and 'close to 95 thousands'. As described by Kosko, fuzziness is "event ambiguity" which indicates the degree of occurring an event rather than randomness. Thus, estimates of market potential based on the jury of expert opinion can contain a high degree of fuzziness.

Studies have been conducted to consider the uncertainties in market demand estimation. Uncertainties such as subjective responses in surveys data, dynamic market conditions, and rapid technological development can significantly affect the predictive accuracy of developed market demand models. Therefore, the uncertainties should be considered in the development of market demand models. Turksen and Willson (2007) developed a fuzzy set preference model to solve the problem of linguistic variable ambiguity in demand modeling in which fuzzy set was introduced to define subject ratings as linguistic ratings rather than numerical ratings, which is applied on conjoint analysis. Given the vagueness of consumer preferences, Lau et al. (1991) extended the MNL model with switching regression techniques. Fuzzy part-worth utilities were proposed under different crisp and fuzzy scenarios to determine an optimal product line extension scheme, and estimate the market share by considering the uncertainty in consumer preferences [1994]. Resende et al. [2001] applied the Delta method to consider the uncertainty of choice model parameters in determining an optimal setting of product design attributes because of the vagueness in profit and market share estimations.

Demand uncertainty is caused by preference dynamics, demand model misspecification, choice context, and response variability. Xiong et al. [2009] studied uncertainty in consumer demand by integrating fuzzy set theory into demand modeling to solve a dynamic pricing problem. Williams et al. [2008] used multi-objective robust optimization approach to handle uncertainty issues in the market share estimation of bundled products. Razu and Takai [2000] attempted to model uncertainty in market demand by estimating customer utility errors by applying boot strap and Monte Carlo simulation on choice-based conjoint analysis. Lemos et al. [1993] introduced the evolving fuzzy linear regression tree method to manage the risks and uncertainties associated with the sales forecasting of petroleum products. Lin et al. [1994] studied the uncertainty of consumer preferences caused by poor awareness of new technologies, which can lead to the fuzziness of market potential estimation.

2.3.4 Marketing Research and New Product Development

Many researchers argue that information is one of important key elements in marketing activities. According to Naveh & Halevy (2000), better information is needed to make better decisions. In their early articles, Tookey (1964) mentioned that “a marketing policy is only as good as the information on which it is based” and Kotler (1966) stated that “the company’s effectiveness in the marketplace is increasingly at the mercy of the executive’s marketing information”. Furthermore, there is a widespread consensus in the marketing literature that using marketing research information in decision making is a crucial factor in overall business performance (Baker, Hart, Black & Abdel-Mohsen, 1986; Kohli & Jaworski, 1990; Moorman, 1995), increasing the probability of marketing success (Gandz & Whipple, 1977) and customer value (Narver & Slater, 1990). In this context, it can be said that marketing research has multiple roles on marketing activities such as tracking changes in marketplace (Köksal, 2008), generating, refining and evaluating marketing action and monitoring marketing performance (Malhotra, 2007).

In marketing literature, there are a lot of studies related with marketing research information. According to Diamantopoulos & Horncastle (1997), managerial perceptions of the contribution of marketing research information, characteristics effecting information usage, differences in marketing research information usage by organizations, differences in perceptions between research providers and research users, the role of marketing research information in organizational politics, cross-country differences in the implementation of marketing research activities and

information sources, the types of research studies undertaken and some other researches in export marketing are the common research areas about marketing research in literature.

Marketing research activities can be organized in two ways: in-house research department and external agencies. As Powell, Koput & Smith-Doerr suggest (1996), “in industries in which know-how is critical, companies must be expert at both in-house research and cooperative research with such external partners”. Moreover, Brooksbank & Taylor (2007) found in their study about a comparison of higher and lower performing manufacturing firms in UK that none of those firms use external agencies on account of their markets were so specialized as to be beyond the expertise of marketing research firms. As well, it would be predicted that organization of marketing research varies among firms differing in marketing performance (Hart & Diamantopoulos, 1993).

Despite the agreement that marketing research information is a key for business success, there have been astonishingly few empirical studies that examine the link between marketing research activities and business performance (Hart & Tzokas, 1999; Ganeshasundaram & Henley, 2007). For example, Baker, Black & Hart (1988) claimed that successful companies fulfill marketing research better than less successful companies. Similarly, Hooley, Lynch, Brooksbank & Shepherd (1988) found that level of use of marketing research techniques affect profitability and competitive standing. Tsai & Shih (2004) specified that marketing information system affects marketing capabilities positively. On the other hand, Hart & Diamantopoulos (1993) found insignificant relationship between research and performance.

Marketing performance can be measured by multidimensional measures (Clark, 1999) and has two dimensions named marketing efficiency and marketing effectiveness (Walker & Ruekert, 1987). Marketing effectiveness is the degrees of desired market-based goals are achieved (Morgan, Clark & Gooner, 2002) and marketing efficiency is the ratio of marketing expenses/gross revenue.

In conclusion, despite the relevant literature suggest the positive relations between marketing research and new product development or some issues in marketing, the relationship between marketing research and new product development has not been empirically demonstrated enough. Due to that, very little is known about how marketing research activities affect marketing performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter covered the background against which data was gathered. It discusses the research design, study population, sampling, and study variables, sources of data, data collection methods and instruments, data processing, analysis and presentation, and finally the study limitations.

3.1. Research design

The researcher used a cross sectional survey design basing on the use of qualitative and quantitative approaches that were adopted to establish the relationship between marketing research and new product development. In this study, data was collected using both primary sources like questionnaires and interviews and secondary data sources. This design was used for profiling, defining, segmenting, estimating, predicting, and examining associative relationship between the two variables. Cross-sectional studies easily provide a quick snapshot of what is going on with the variables for the research problem.

3.2. Study population

This study covered a population of 71 respondents from which a desired sample was selected. The respondents included managers, employees and clients/customers from Mukwano group of companies. Much as most of the departments featured during selection of respondents, marketing department was given the highest opportunity of respondents since the research was entirely in this area (marketing department).

3.3. Sampling design, size and selection

The study mainly employed two sampling methodologies that is, stratified sampling and simple random sampling methods.

3.3.1 Sample size

This research involved 60 respondents. The sample size was selected by the researcher to be representative enough of the entire population.

The sample size was determined using *Slovin's Formula* as expressed below;

$$n = \frac{N}{1 + Ne^2}$$

Where n= sample size, N= population size and e= sample probability= 0.05

N= Study Population = 71 respondents

$$n = \frac{71}{1 + 71 \times (0.05)^2}$$

$$n = \frac{71}{1.1775}$$

n= 60 respondents

Table 1: sample size and population in percentage

Designation	Population (N)	Sample size (n)	Percentage (%)
Managers	20	17	31.5
Employees	30	25	36.5
Clients	21	18	32
Grand total	71	60	100

3.3.2 Sampling techniques

Sampling is a process of selecting a few representatives from a big group (the sampling population) to become the basis for estimating or predicting facts, situations, or outcomes regarding the bigger group (Kurmar, 1999).

Stratified random sampling technique used in this study involved dividing respondents into three strata of managers, employees and customers. Each stratum represented a number of members from which the 60 representatives were selected using simple random sampling.

3.5 Methods of data collection and instruments

3.5.1 Questionnaires

A questionnaire is a reformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. The questionnaires was used on the basis that the variables under study could not be observe for instance the views, opinions, perceptions and feelings of the respondents . The questionnaires was equally be used because the information was collected from a large sample within a short period of time yet the respondents could read and write (Sekaran, 2003). The questionnaires consisted of both open and close ended questions administered to respondents of Mukwano group of companies, Kampala as far as to how marketing research influences new product development.

3.5.2 Interviews

The researcher also administered interviews. An interview is a dialogue between an interviewer and interviewee. It is an organized conversation aimed at gathering data about a particular topic. This is where a researcher interviews respondents to obtain information on the issue of interest. In this case, the interviews during this research were structured and administered to staff of Mukwano group of companies.

3.6 Data quality control

3.6.1 Validity

Amin (2005) defines validity as the appropriateness of the instrument. Experts in the field will be consulted about the content of instruments, ambiguity of question items and their relevancy. Validity is important in determining whether the statements in the questionnaire instrument and interview manuals are relevant to the study. Content and construct validity was obtained by the

help of the supervisors input who acted as reviewer during the proposal stage of the study. According to Amin (2004), validity can be and in this case was assured by use of the Content Validity Index (C.V.I)

$$C.V.I = \frac{\text{Agreed items by all judges as suitable}}{\text{Total number of items being judged}}$$

3.6.2 Reliability

Reliability of data refers to whether repeating the same measurement under similar conditions yields the same results (Kumar, 1990). Amin (2005) defines reliability as the consistency of the instrument in measuring whatever it is intended to measure. The reliability of the questionnaires was improved through pretesting of pilot samples from the field which enabled the rephrasing of some questions. Additionally, reliability of the items was done with the application of the Cronbach Alpha coefficient as illustrated below;

$$A = \frac{K}{K-1} \left(\frac{1 - \sum SD^2}{\sum Dt^2} \right)$$

Where A= Reliability, $1 - \sum SD^2$ =sum of the variance of the individual items in the questionnaire, $\sum Dt^2$ =variance of the entire questionnaire, and K= Number of items in the questionnaire.

3.7 Study variables and measurements

The independent variable for this study is marketing research while new product development serves as a dependent variable. However there are other intervening variables which are assumed to affect new product development visa-vie marketing research. All these variables are clearly shown under the conceptual framework in the chapter one of this study. The scale of both marketing research and product development was measured on a 5 point scale such as strongly disagree = 1, disagree = 2, not sure =3, agree = 4, and strongly agree = 5.

3.8 Data processing, analysis and presentation

Data was collected, checked for completeness, categorized and coded and entered into a computer system where it was summarized into frequency tables.

Quantitative data was presented in the form of descriptive statistics using frequency tables. Qualitative data was sorted and graphed into themes. There after the researcher valuated and analyzed the adequacy of information in answering the research questions through coding the data, identifying categories and parameters that emerge in the response to the variables of the study. Qualitative data was presented using narrative text.

3.9 Ethical consideration

It was important during the process of research for the researcher to make respondents aware that participation was voluntary and that participants were free to refuse to answer any question and to withdraw from participation at any time they were chosen.

Another important consideration involved getting the informed consent of those who were to be met during the research process which involved interviews and observations on issues that were dedicated to some respondents, the researcher undertook to bear this seriously in mind.

Personal privacy and confidentiality were very important since the report is public. If private information had been accessed, the confidentiality had to be maintained (Stephan P. 2002). All respondents were therefore re-assured of this before being involved.

Accuracy and honesty during research were very important for academic research to be protected. The researcher treated the research with utmost care, in that there was no temptation to cheat and generate research results, since it jeopardizes the concept of research.

3.10 Study limitations

The researcher encountered a few limitations during the research especially when it came to intervening. They include the following;

Time: the researcher was faced a challenge of meeting the deadlines as stipulated in the time scope.

Financial challenges: the researcher was also faced with financial challenges while carrying out the study. This however was solved through adjusting the estimated budget by minimizing expenses as much as possible. Fore stance, by doing the entire research for themselves without including any research assistance like typing among others.

Language barrier: the researcher might find it difficult to communicate with the multi-ethnics. This is due to a variety of languages spoken especially by the customers of the company.

Rigidity of information due to competition: the researcher was faced with low responses from the respondents since they were afraid that the researcher is seeking information to outcompete their organization.

Reluctance to respond: some of the respondents were reluctant to give the required information, as they were uneasy and suspicious of the information to be gathered and thinking that the data could be used for other motives against them. However this was solved by letting the respondents clearly know that the research was purely for academic purpose.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter discusses research questions in view of the research objectives stated earlier in chapter one so as to improve our salient issues of the subject matter in line with survey findings and literature reviewed. In the presentation of findings, tables, graphs and figures have been used; frequencies and percentages have also been used to describe findings

4.1. Section A: Bio Data

The research sought to analyze respondents basing on gender, age group, marital status, education levels and years spent at the in the organization and the following tables, graphs and figures diagrammatically presents the same.

Table 2: Respondents by gender category

Gender	Frequency	Percentage (%)
Male	34	57
Female	26	43
Total	60	100

Source; Researcher's primary data, 2018

The researcher was interested in knowing gender of the respondents and it was found that much there is relatively gender equality, more male are involved in telecom companies than female. This was proven by 57% of the total respondents being male and 43% were female. The imbalances in gender representation is attributed to the preferences of energetic men by the companies to work in the production section. However most female are involved in sales and marketing departments.

Table 3: Respondents by age-group (in years)

Years	No. of respondents	Percentage (%)
18 and below	2	3.3
19-30	10	16.7
31-40	15	25
41-50	21	35
Over 50	12	20
Total	60	100

Source; Researcher's primary data, 2018

The researcher was also interested in finding out the age bracket of respondents, and it was found that those aged 41-50 years and 31-40 years took the lion's share. This was represented by 35% and 25% representing 21 and 15 respondents respectively. Those over 50 years group which represented 20% included 12 respondents. Respondents between 19 and 30 years, and those less than 18 years had the rest respondents taking 16.3% and 3.7% respectively. The implication of these findings meant that since most of these respondents were mature, they were equipped with enough skills and experience to attempt the questionnaire presented to them, hence making this research reliable.

Table 4: Respondents by education levels

Education level	No. of respondents	Percentage (%)
Secondary	6	10
Certificate	6	10
Diploma	11	18.3
Degree	30	50
Others	7	11.7
Total	60	100

Source; Researcher's primary data, 2018

From the research conducted, degree holders represented the largest number of respondents, that is 30, representing 50%. This was followed by diploma holders with 18.3%. The others group which included postgraduates and primary leavers had 7 respondents making 11.7%. Respondents with certificates and secondary leavers had 6 representatives each scoring 10%. The fact that most of the respondents had higher qualifications, they had enough knowledge to attempt the questionnaire presented to them. The findings also indicated that manufacturing firms like Mukwano group of companies employ mostly educated and skilled people.

Table 5: Respondents by duration working/dealing with the Mukwano

Duration worked in the organization	No. of respondents	Percentage (%)
Less than 2 years	5	8.3
2 – 5 years	17	28.3
5 – 8 years	28	46.7
Over 8 year	10	16.7
Total	60	100

Source; Researcher's primary data, 2018

Research carried out in Mukwano Group of Companies shows that most of the respondents were experienced since they had worked with the company for quite a long period, and this therefore would mean that data presented by them is more reliable due to experience. Such an experienced category included those who had worked for 5-8 years with a frequency of 28 respondents followed by 2-5 years with a frequency of 17 respondents representing 47% and 28% respectively. The most experienced category which had eight plus years was 10 presenting 17%, and finally the least represented group was that with less than 2 years and was represented by only 8% of the total number of respondents.

4.2. Presentation of the objectives

The researcher collected data in a view to determine solutions to the objectives earlier set in chapter one of this study. These included;

4. To determine the effect that customer analysis contributes to new product development
5. To determine the effect of market segmentation on new product development
6. To establish the relationship between marketing strategy and new product development

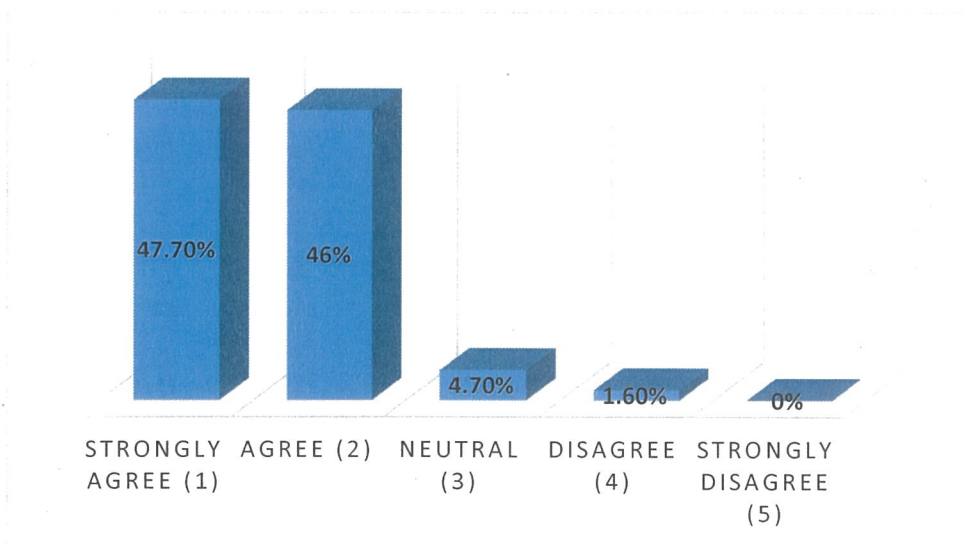
Table 6. Customer analysis and new product development

Statements	1		2		3		4		5	
	F	%	F	%	F	%	F	%	F	%
Information acquired from customers helps shaping policies for new products	30	50	28	46.7	2	3.3	0	0	0	0
Customer information improves the implementation of new products	26	43.3	27	45	5	8.3	2	3.3	0	0
Customer involvement improves your company understanding of the dynamics of the marketplace	23	38.3	28	46.7	6	10	3	5	0	0
Customer involvement helps your company to produce the right products desired by customers	31	51.7	29	48.3	0	0	0	0	0	0
Feedback from customers bout a new product helps to improve its performance	33	55	26	43.3	1	1.7	0	0	0	0
Total	143	238	138	230	14	23	5	8.3	0	0
Average	29	47.7	28	46	2	4.7	1	1.6	0	0

Table 7. Average response on customer analysis and new product development

Response	Frequency	Percentage
Strongly agree (1)	29	47.7
Agree (2)	28	46.0
Neutral (3)	2	4.7
Disagree (4)	1	1.6
Strongly disagree (5)	0	0.0
Total	60	100

Fig 1. Average response on customer analysis and new product development



The researcher wanted to determine the effect that customer analysis has to the development and survival of new products, and the above table and graph show the averages percentages of respondents on the same. As indicated, most of the respondents strongly agreed with the statements of the questionnaire on customer analysis. This was represented by 29 respondents (47.7%), closely followed by agree with 28 respondents (46.0%), whereas those who didn't know the concept of customer analysis were 2 represented by 4.7%. only one respondent (1.6%) did not agree with the questionnaire while none was for strongly agree.

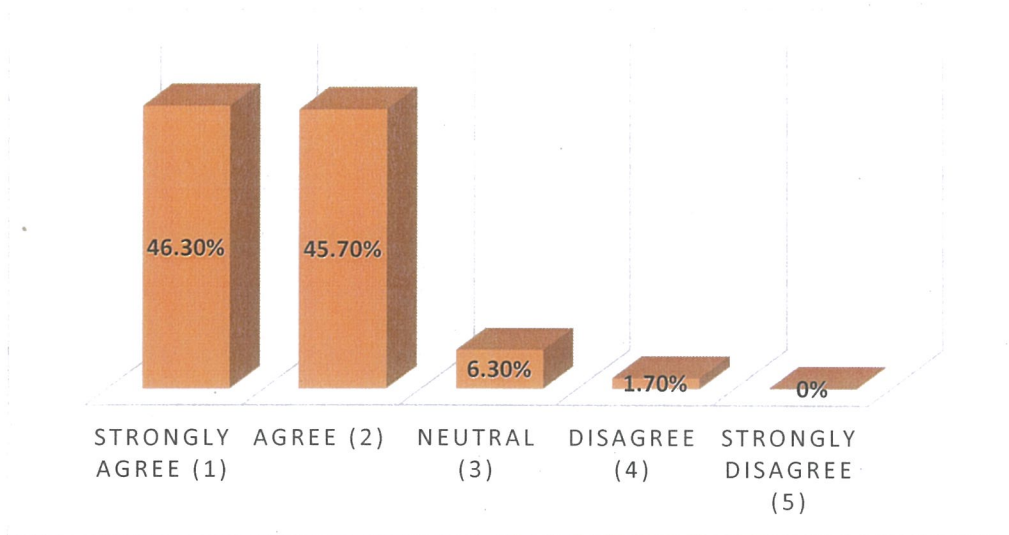
Table 9. Market segmentation and new product development

Statements	1		2		3		4		5	
	F	%	F	%	F	%	F	%	F	%
Marketing and sales activity will be closely focused, leading to more sales, lower costs and higher profitability	31	51.7	25	41.7	4	6.7	0	0	0	0
Better marketing planning as reactions to marketing activities of new products can be predicted	29	48.3	30	50	1	1.7	0	0	0	0
Segmentation helps in identifying which groups are most likely to buy	28	46.7	28	46.7	3	5	1	1.7	0	0
Segmented markets are easier to dominate	24	40	25	41.7	9	15	2	3.3	0	0
Marketers will get to know their customers better so that they can provide a better service	27	45	29	48.3	2	3.3	2	3.3	0	0
Total	139	232	137	228	19	32	5	8.3	0	0
Average	28	46.3	27	45.7	4	6.3	1	1.7	0	0

Table 10. average response on market segmentation and new product development

Response	Frequency	Percentage
Strongly agree (1)	28	46.3
Agree (2)	27	45.7
Neutral (3)	4	6.3
Disagree (4)	1	1.7
Strongly disagree (5)	0	0
Total	60	100

Fig 2. Average response on market segmentation and new product development



Similarly, the researcher wanted to know whether market segmentation has any effect on new product development and the data collected from the field indicated a great significant. This data has been averagely presented as strongly agree being 28 respondents representing 46.3%, closely followed by agree with 27 respondents representing 45.7% while neutral had 4 respondents representing 6.3%. Only one member (1.7%) disagreed whereas none ticked strongly agree on the 5-point likert scale.

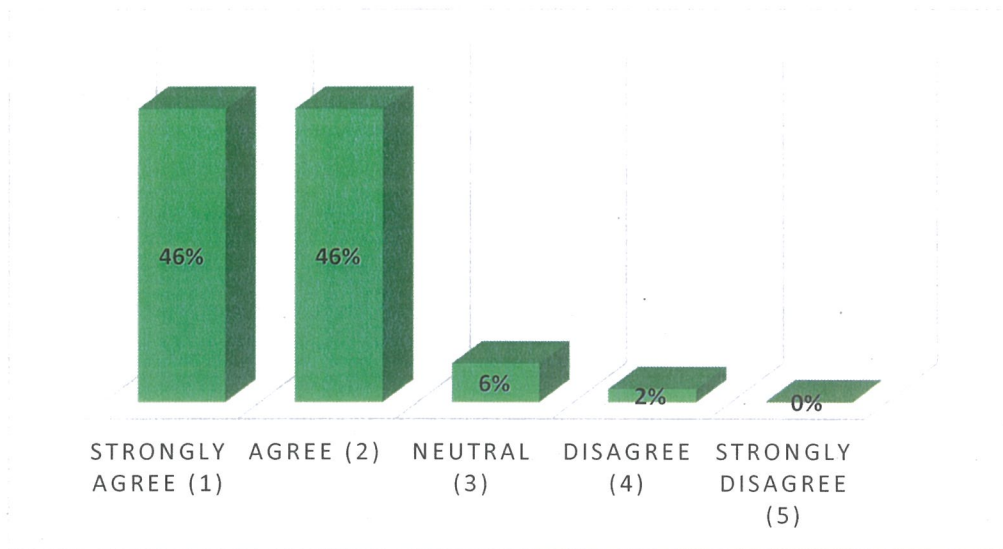
Table 11. The relationship between marketing research and new product development

Statements	1		2		3		4		5	
	F	%	F	%	F	%	F	%	F	%
Marketing research helps in allocating customers for a new product	30	50	27	45	3	5	0	0	0	0
Marketing research identifies and defines market opportunities for a new product	31	51.7	27	45	2	3.3	0	0	0	0
Through marketing research risks allocated to new product development can be defined	28	46.7	29	48.3	2	3.3	1	1.7	0	0
Marketing research assists in monitoring and evaluating market performance for a new product	25	41.7	26	43.3	6	10	3	5		0
Marketing Research specifies the information required to design the method of collecting information on a new product	25	41.7	28	46.7	5	8.3	2	3.3	0	0
Marketing research identifies and assess how changing elements of the marketing mix impacts customer behavior	29	48.3	29	48.3	2	3.3	0	0	0	0
Total	168	280	166	277	20	33	6	10	0	0
Average	28	46	28	46	3	6	1	2	0	0

Table 12. Average response on the relationship between marketing research and new product development

Response	Frequency	Percentage
Strongly agree (1)	28	46
Agree (2)	28	46
Neutral (3)	3	6
Disagree (4)	1	2
Strongly disagree (5)	0	0
Total	60	100

Fig 3. Average response on the relationship between marketing research and new product development



Data collected on relationship between marketing research and new product development indicated that most respondents believed in the questionnaire statements on this part. On average, this has been indicated by an equal representation of 28 members represented by 46% each ticking strongly agree and agree parts of the questionnaire on the likert scale. This was followed by only 3 respondents represented by 6% ticking neutral or not sure, whereas only one member was for disagree. Similarly, no respondent ticked strongly disagree.

Table 13. ANOVA regression analysis to determine the relationship between marketing research and new product development

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.881	1	12.881	14.866	.000 ^a
	Residual	52.317	252	.265		
	Total	76.302	253			
a. Predictors: (Constant), Marketing research						
b. Dependent Variable: NPD						

Source: Researcher, 2018

The ANOVA table 13 indicated that Marketing research has positive relationship on NPD and this was indicated by the (F -value=14.866 and Sig-value=.000, since the sig. value (0.000) was less than 0.05 which is the maximum level of significance required to declare a significant effect (decision rule). This showed that there is a significant relationship between marketing research and new product development.

Table 14. Coefficient regression analysis on the relationship between marketing research and new product development.

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	2.925	.164		.000
	Marketing Research	.329	.137	.613	.000
a. Dependent Variable: NPD					

The coefficients table 4.15 indicated that considering the standard error, Marketing Research significantly influences NPD ($\beta=0.613$, Sig=0.000).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter summarizes the key study findings, draws conclusions based on the research objectives and findings and suggests recommendations.

5.1 Summary of Findings

The findings for this research have been derived from the data collected and presented in chapter four above. They indicate that most of the respondents in Mukwano group of companies were in agreement with the facts in the questionnaire presented to them.

The researcher found out that the information acquired from customers of manufacturing companies like Mukwano greatly improved the development of new products in a way that policies and procedures used to produce products for customers are done in customer interests. This has also improved quick implementation of decisions as since the manufacturing team actually knows for whom they are producing. The findings also indicate that marketing research carried out on customers of Mukwano group of companies greatly improved the understanding of the marketplace by about over 80% as the customers to serve have been clearly ascertained. This therefore has leads to the production of only those products that are desired by the customer.

The researcher also conducted research on market segmentation as one of the elements of marketing research and the findings indicated that this greatly influences the survival and continuous performance of a new product in the market. For Mukwano Group of Companies, dividing markets into groups has expanded their market share in a way that it can easily predict which groups are more likely to consume a certain product and efforts are made towards production of such a customer preferred products. A result of this is that marketing and sales activities re closely focused, leading to more sales, lowed costs and high profitability.

The researcher further was interested in ascertain the relationship between marketing research and new product development, and it was found out that the relationship is characterized by the many factors/benefits that the former has to the later. It was found out that Mukwano employs marketing research to perform among other; allocate customers for their new product, identify and ascertain

some risks, identify market opportunities, monitoring market performance, and managing change among others.

5.2 Conclusion

The conclusion for this research were based on the findings of data collected from the respondents of Mukwano group of companies. In this context, the researcher would conclude that there is an impact between customer analysis and new product development. This is attributed to the fact that the information acquired directly after a thorough analysis of customers in the market would improve innovation. This is because it is such a study that research and design team uses to improve the demands of customers or produce new products which are highly demanded by the market. This further improves product performance. Gronroos and Day, (1996) highlights that customer interaction in the context of marketing research improves innovation. Their research was motivated by the question of whether and how success can be increased by interaction with customers in the specific context of new product development.

It is also worth concluding that understanding the market basing on customer groups is a key resource for manufacturing companies to improve performance for their new products. As stated by Dibby & Wensley, (2002), market segmentation is based on the assumptions that customers demonstrate heterogeneous preferences and buying behavior. Likewise it is assumed that the heterogeneity in preferences and buying behavior is closely connected to the differences among buyers regarding the use of products and user characteristics. This therefore gives an understanding that groups that demonstrates similar traits be studied and produce products which are centered to them. This reduces production costs through wastes, leads to more sales and eventually high profits. This is so because marketers can easily identify which groups are more likely to buy what.

From the findings also, it is important to conclude that there is a strong positive relationship between marketing research and product development. This is attributed to the fact that marketing research acts as a tool to thoroughly understand the market too which new products are to be sold. In this case, marketing research addresses the issues relating which customers to buy, which product to introduce, at which price to sell, and when to introduce such a product to the market. The two variables also relate in such a way that it is through marketing research that continuous monitoring and identification of risks against new products are ascertained.

ANOVA regression analysis carried out in *table 13* of chapter for also proved the relationship between NPD. This was indicated by the (F -value=14.866and Sig-value=.000, since the sig. value (0.000) was less than 0.05 which is the maximum level of significance required to declare a significant effect (decision rule).

5.3 Recommendations

1. From the findings and conclusions discussed above, the research would therefore recommend that any organization whether big or small, manufacturing or service provider should take marketing research so serious especially when dealing with new products. This is because; it is through this concept of marketing research that the company can acquire information regarding the product that is yet to be introduced or already in the market.
2. There is also a need for management to get involved in the process of and support new product development projects. This improves employee motivation which results into them working to achieve the best output. Milestone for new product should be set and implementers work to achieve such set objectives. This would therefore ensure that work is focused to achieving objectives set.
3. Stakeholder involvement. Involving other stakeholders other than only top managers in the formulation of NPD plan would improve the efficiency of research as this would improve stakeholder's motivation during implementation stage since they be executing plans formulated by them. It was similarly recommended that management of Mukwano group of companies should as well get involved during implementation of the formulated plan rather than simply directing the blueprints below them for implementation.

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APPENDIX I

A QUESTIONNAIRE TO THE MANAGEMENT AND CLIENTS OF MUKWANO GROUP OF COMPANIES

Dear Sir/Madam,

I am a student from the college of economics and management science at Kampala International University. I humbly ask you to participate in this research on 'MARKETING RESEARCH AND NEW PRODUCT DEVELOPMENT' that will be carried out in your reputable manufacturing firm. This study is purely for academic purpose, thus it will not be disclosed in any other way for any other cause. It is a partial requirement for the award of Bachelor's Degree in Business Administration (marketing option) at the already mentioned institution.

You are cordially requested to spare some time and fill this simple questionnaire. The information obtained through this questionnaire shall be used for the mentioned purpose and shall be taken with utmost confidentiality. For this reason, I don't seek to know the name or identity of any respondent.

Yours faithfully

.....

Chebet Shadia (Researcher)

SECTION A: Background characteristics of respondents

Instructions: please tick where appropriate on the provided space

1. Sex

- i) Male ☐ ii) Female ☐ iii) others, specify.....

2. Age group

- i) 18 and below ☐ ii) 19-30 ☐ iii) 31-40 ☐ iv) 41-50 ☐ v) 50 and above ☐

3. Marital status

- i) Single ☐ ii) married ☐ iii) others, specify.....

4. Education background

- i) Secondary ☐ ii) Certificate ☐ iii) Diploma ☐ iv) Degree ☐ v) Others ☐

5. Occupation

Duration (in years) of work at the company

- i) Less than 2 years ☐ ii) 2-5 years ☐ iii) 5-8 years ☐ iv) over 8 years ☐

SECTION B: Review of Objectives

Part A. Customer analysis and new product development

	Measurement scale				
Statements	1	2	3	4	5
1. Information acquired from customers helps shaping policies for new products					
2. Customer information improves the implementation of new products					
3. Customer involvement improves your company understanding of the dynamics of the marketplace					
4. Customer involvement helps your company to produce the right products desired by customers					
5. Feedback from customers about a new product helps to improve its performance					

PART B. Market segmentation and new product development

	Measurement scale				
Statements	1	2	3	4	5
1. Marketing and sales activity will be closely focused, leading to more sales, lower costs and higher profitability					
2. Better marketing planning as reactions to marketing activities of new products can be predicted					
3. Segmentation helps in identifying which groups are most likely to buy					
4. Segmented markets are easier to dominate					
5. Marketers will get to know their customers better so that they can provide a better service					

PART C. The relationship between marketing research and new product development

	Measurement scale				
Statements	1	2	3	4	5
1. Marketing research helps in allocating customers for a new product					
2. Marketing research identifies and defines market opportunities for a new product					
3. Through marketing research risks allocated to new product development can be defined					
4. Marketing research assists in monitoring and evaluating market performance for a new product					
5. Marketing Research specifies the information required to design the method of collecting information on a new product					
6. Marketing research identifies and assess how changing elements of the marketing mix impacts customer behavior					

KEY

1 – Strongly Agree 2 – Agree 3 – Neutral/Not Sure 4 – Disagree 5 – Strongly Disagree