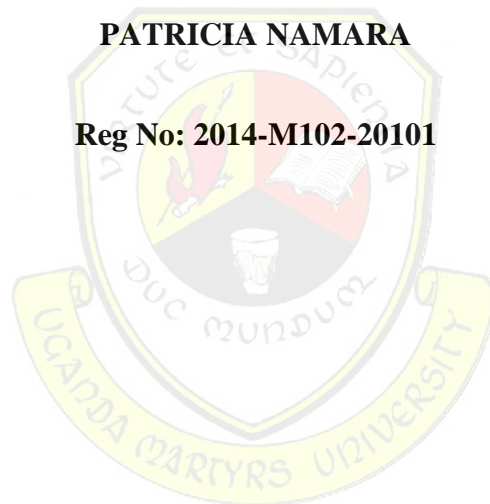# THE EFFECT OF PRODUCT QUALITY ON ORGANIZATIONAL PERFORMANCE

OF THE BEVERAGE INDUSTRY IN UGANDA.

A CASE STUDY OF NILE BREWERIES LIMITED

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A DISSERTATION SUBMITTED TO THE FACULTY OF BUSINESS ADMINISTRATION INPARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER'S DEGREE IN BUSINESS ADMINISTRATION OF UGANDA MARTYRS UNIVERSITY.

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NBL: Nile Breweries Limited

ROI: Return on Investment

TQM: Total quality management

ABSTRACT

The study was about product quality and organization performance of the beverage companies in Uganda, with the case of NBL. The study objectives were to: assess the effect of perceived quality on organization performance at NBL, to identify relationship between reliability and organization performance at NBL and also to establish the relationship between responsiveness and organization performance at NBL.

The study adopted a case study approach using both quantitative and qualitative approaches. Data was collected using questionnaires, interviews and documentary review, from a sample of 169 respondents.

The study findings revealed that perceived quality positively affects organization performance were significantly related at 0.622**, there is a positive influence of reliability on organization performance confirmed at 0.657**and there is a positive significant relationship between responsiveness and organization performance at NBL which was confirmed at Pearson correlation coefficient of 0.762**.

From the above conclusion, it can be recommendedthat policy makersshould focus on planning production processes, improved new products in order respond to market signals in a timely manner through proactive support of branding activities. Reliability analysis to be carried out and this could be both qualitative and quantitative. Reliability management should also be addressed as this deal with the various management issues, design, manufacture and/or operation of reliable products and systems. Policy makers must pay attention to the factors affecting the quality of products such as price policy, store image, advertising, warranty, and brand image among other factors that may affect the perception of the customer**.**

CHAPTER ONE

GENERAL INTRODUCTION

1.1   Introduction

In today's dynamic business environment, product quality is assumed to be of paramount importance to the survival and success of products (Choi and Pucik, 2005; Tellis, Yin, and Niraj, 2009). Not surprisingly, firms invest extensively in product quality initiatives to ensure the superior quality of the products that meet customers' demand and satisfaction to improve on the company market share and growth (Adam and Foster, 2000). Moreover, the business press routinely cites quality as the cause of the success and failure of businesses (Mitra and Golder, 2006). While practitioners devote considerable resources to ensuring superior product quality to improve on the market share and market growth, prior research has shown that these investments do not always achieve their objectives (Henard and Szymanski, 2001; Rust,Moorman, and Dickson, 2002). Tellis and Johnson (2007) provide some insight into why some firms undervalue the importance of quality, mainly due to the difficulties of defining quality or because market response to quality is not instantaneous but occur over time.

Therefore, this chapter consist of the background of the study, Conceptual framework, statement of the problem, purpose of the study, the objectives of the study , research question, scope and the significance of the study thus giving justification of the study and operational defines.

1.2.0 Background of the Study

The key concepts in this study include product quality and organization performance.Tamimi(2002) defines product quality as means to incorporate features that have a

capacity to meet consumer needs (wants) and gives customer satisfaction by improving products (goods) and making them free from any deficiencies or defects.Almansour (2012) defines product quality as the group of features and characteristics of a saleable good which determine its desirability and which can be controlled by a manufacturer to meet certain basic requirements. Most businesses that produce goods for sale have a product quality or assurance department that monitors outgoing products for consumer acceptability.Teboul (1991) identified quality as a means of winning market share, enhancing sales and creating barriers to entry.

However, despite the product quality systems employed by Nile Breweries Limited, the desired performance is no yet achieved. This is due to a few indicators like reduced profit, reduced market share, reduced responsiveness of customers toward the products among others.

Product quality has been studied with three dimensions which include perceived quality, reliability and responsiveness. Blischke and Murthy (2000) defined the reliability of a product (system) as the probability that the product (system) will perform its intended function for a specified time period when operating under normal (or stated) environmental conditions. The reliability of a product gets determined by the decisions made during the pre-production stages (Front-end, Design, Development) and the production stage of the product life cycle. Bhuian (1997) defined perceived quality as a judgment on the consistency of product specification or an evaluation on added value of a product. Garvin (1984) proposes that perceived quality is defined on the basis of users' recognition while objective quality is defined on the basis of product or manufacturing orientation. The differences between objective quality and perceived quality lie in that objective quality has a pre-design standard to a product, and perceived quality is influenced by internal and external product attributes which is an evaluation basis for consumers (Olshavsky, 1985; Zeithaml, 1988).

Performance is defined as the extent to which an organization, as a social system, could consider both its means and ends (Robbins, 1987). This definition is in line with the earlier one suggested by Georgopoulos and Tannenbaum(1957),Nevertheless, Cherrington (1989) defined organizational performance as a concept of success or effectiveness of an organization, and as an indication of the organizational manner that it is performing effectively to achieve its objectives successfully. The definition of organizational performance mostly focused on the capability and ability of an organization to efficiently utilize the available resources to achieve accomplishments consistent with the set objectives of the company, as well as considering their relevance to its users (Peterson, Gijsbers, and Wilks, 2003). In this definition, the three general elements of OP, i.e., "efficiency," "effectiveness," and "relevancy" have been taken into consideration. Conversely, the performance of an organization is believed to be able to cover broader areas including the connection between performance and organizational goals (effectiveness); organizational resources (efficiency); and, satisfaction of the stakeholder's relevancy (Peterson, 2003).

The historical review of this study, reveals that quality movement can trace its roots back to medieval Europe, where craftsmen began organizing into unions called guilds in the late 13th century. Until the early 19th century, manufacturing in the industrialized world tended to follow this craftsmanship model. The factory system, with its emphasis on product inspection, started in Great Britain in the mid-1750s and grew into the Industrial Revolution in the early 1800s. There was a time, going back at least 70 years, when all it took to be successful in business was to make a product of good quality. If you offered good coffee, whiskey or beer, people would come to your shop and buy it. And as long as you made sure that your product quality was superior to the competition, you were pretty much set. Well into the 1970s, a savvy consumer could distinguish between high-quality and shabby products quite easily (Ali, 2013).

In the early 20th century, manufacturers began to include quality processes in quality practices. After the United States entered World War II, quality became a critical component of the war effort: Bullets manufactured in one state, for example, had to work consistently in rifles made in another. The armed forces initially inspected virtually every unit of product; then to simplify and speed up this process without compromising safety, the military began to use sampling techniques for inspection, aided by the publication of military-specification standards and training courses in Walter Shewhart' statistical process control techniques. The birth of total quality in the United States came as a direct response to the quality revolution in Japan following World War II. The Japanese welcomed the input of Americans Joseph M. Juran and W. Edwards Deming and rather than concentrating on inspection, focused on improving all Organizational processes through the people who used them (Goetsch and Stanley, 2014).

According to Goetsch and Stanley (2014), after the World War II, during the late 1940s and early 1950s, Japanese business integrated quality throughout their organizations and developed a culture of continuous improvement. In the 1970s, the United States of America companies developed what was referred to as leadership through quality better known as total quality management TQM, thus quality excellence became recognized as a key to worldwide competitiveness and was highly promoted. Managers began to realize that the lasting improvements could not be accomplished without significant attention to the quality of the management practices used on daily basis. For example manufacturing companies had to maintain quality of the products that are being produced to their customer expectation and satisfaction.

1.2.1   Background of the case study

Nile Breweries Limited was established in 1951 by a group of businessmen, associated with the Construction of Owen Falls Dam. A leading Asian-Ugandan entrepreneur Muljibhai Madhvani

and Company bought and managed it from 1957 till 1972, when Idi Amin expelled Asians from Uganda (NBL, 2016). It remained a state enterprise until 1992 when the Uganda government divested itself under a wide-ranging privatization programme. Nile Breweries was returned to the Madhvani Group. In 1997, South African Breweries bought a 40 percent share in the brewery and this was raised to full ownership in July 2001. The headquarters and main brewery of NBL are in the town of Njeru in Buikwe District, approximately 6 kilometres (4 mi), north-east of the central business district of Jinja, Uganda. This is approximately 77 kilometres (48 mi), by road, east of Kampala, the capital and largest city of Uganda. The coordinates of the company headquarters are 0°26'19.0"N, 33°10'47.0"E (Latitude: 0.438620; Longitude: 33.179720)(GFC, 2016). A maltings plant with a 120-ton batch size was built on the brewery site at Njeru in 2011 to support a local barley growing initiative and to supply barley malt to the brewery. Involved in this construction was Excel Construction Limited, part of the Madhvani Group (Kirya, 2013).

In October 2013, NBL opened a new brewery in Mbarara, about 250 kilometers (155 mi), south-west of Kampala. Built at a cost of US$90.6 million (about UGX: 235 billion), the factory was projected to produce 5.5 million crates of beers annually. The new brewery uses sorghum, maize, and barley, which are grown mostly by farmers in the region. The products of this factory are marketed locally and exported to South Sudan and the Democratic Republic of the Congo(Tumushabe, 2013).Nile Breweries Limited is the producer of Nile Special, Club Pilsener, Eagle Lager, Eagle Extra, Eagle Dark, Nile Gold, Castle Milk Stout, Redd's, Redd's Vodka Lemon, Castle Lite, Chairman's ESB, Chibuku and our new brand Hero. NBL imports and distributes Castle Lager and Grolsch in Uganda. The company's rich portfolio of brands is complemented by Rwenzori Mineral Water, following the integration of Rwenzori Bottling Company, the SABMiller water subsidiary in Uganda, into Nile Breweries (Barigaba, 2013).

1.3   Statement of the problem

The quest for quality has become the mindset of various manufacturing organizations around the world with the hope that the application of quality management principles will aid in solving organizational problems by enhancing organizational performance and success in the global market space (Almansour, 2012).Nile Breweries as manufacturing company operating in a competitive beverages industry has pursued product quality interims of perceived quality, reliability and responsiveness to its estimated customer with the aim of improving its organization performance (Barigaba, 2013). In line with its commitment to make more beer of good quality but using less water, the company now uses 4.8 liters of water to produce every liter of beer with perceived quality mindset at its Jinja plant and it will continuously strive to use less water in its production processes to maintain its product quality and meeting customer satisfaction and demands (NBL Sustainable Development Report, 2014).NBL is focused on being a returnable glass operation. This alone ensures that glass bottles used are returned to the plant for reuse in packaging so as to maintain product reliability (Nile Breweries Limited Sustainable Development Report, 2014).

However, despite of such efforts to ensure improved organization performance through improved product quality, there still gaps that sees the company not meeting its expected sales target for the last previous years. According to the Nile Breweries Sales Performance Report (2015), there has been a slit short fall in the organizational performance to 52%.

The market share of the Ugandan beer market was estimated in 2013 at 50% of the total beverages on the market in Uganda. Instead of an increment the NBL market share of the beer market, there was instead a drop from 57% to 52% despite the fact that the company launched Eagle Lager produced out of locally grown sorghum to make lager beers and to reduce reliance on imported

raw materials. This has affected the organization performance of the company due to a reduction in the customer retention and Market share. This is attributed to the product quality dimensions pursued by the company like perceived quality, reliability and responsiveness oris due to the changes in the product quality that affects customer perception toward the product like the use less water in the beer which one should assume to be good for improving product quality or it is due to the improved product quality of the competitors in the beverage industry that produce similar product (Nile Breweries Sales Performance Report, 2015). This begs a myriad of questions around the product quality dimensions used and why effective application of these dimensions does not seems to bear the desired fruits. This study, therefore sought to investigate the effect of product quality on organization performance in Beverages companies in Uganda using case study of Nile Breweries (U) Limited.

1.3   Purpose of the study

The purpose of the study was to assess the effect of product quality on organization performance in Beverages companies in Uganda using case study of Nile Breweries (U) Limited

1.4   Objectives of the study

i.   To assess the effect of perceived quality on organization performance at Nile Breweries (U) Limited

ii.   To identify the relationship between reliability and organization performance at Nile Breweries (U) Limited

iii.   To establish the relationship between responsiveness and organization performance at Nile Breweries (U) Limited

1.5   Research questions

   i.   What is the effect of perceived quality on organization performance at Nile Breweries (U) Limited?

  ii.   What is the relationship between reliability and organization performance at Nile Breweries (U) Limited?

 iii.   What is the relationship between responsiveness and organization performance at Nile Breweries (U) Limited?

1.6.0   Scope of the study

1.6.1   Content scope

The study focused generally on the effect of product quality on organization performance with more emphasis on the perceived quality, reliability and responsiveness as the main product quality dimensions, thus leading to Customer retention and growth, Market share and Customer satisfaction/expectation.

1.6.2   Geographical scope. The study was carried out at Nile Breweries Depot Kampala Service Centre located on Plot 6/10, Luzira Uganda, and Kampala. The use of this location was because of its existence in business for a long period and accessibility and it gave the researcher a foundation for other studies.

1.6.3   Time Scope

The study literature was longitudinal from 1978-2016 as the period of data consideration. This was suitable for determining various patterns of events as they have been put forward by the different scholars. In this case, information from 2010 to date from the company concerning product quality and organization performance was considered to complete the study.

1.7   Significance of the study

It is envisaged that the study will address the product quality challenges resulting into organizational performance gaps in the product quality design. It is important to note that the study will benefit the product quality controller and sales personnel both locally and globally as well as Scholars in the marketing profession on how to effectively plan for the product quality to meet the customer desire and satisfaction in the market.

Product quality is one of the competitive advantages for beverage companies. Good product quality achieves more market share and market growth of the company which is the most interest of the stakeholders of a company and the government. This study will also benefit the Production and Marketing departments in beverage companies in the sense that beverage companies will improve on their product quality. This knowledge will be of benefit in the quality compliance and monitoring of beverage companies by the Quality control committee.

The study will also benefit stakeholders to have better value for money, higher quality goods and service delivery and identifying procurement objectives.

1.8   Justification of the Study

Prior studies that have been done which relate to this study have been so much on product quality and organizational performance more so in developed economies, however there has been no study conducted on product quality especially in the Beverage Companies in Uganda. For this reason relatively little has been written on the subject, most of the materials available on the subject are presented in management and administrative reports, which makes it less useful for practical reference and use. Beverage companies in Uganda and other manufacturing companies have invested huge sums of money in product quality; however functionality rate which is a measure of

sustainability has remained at low level in the market compared to similar products from other countries. This hinders the achievement of millennium development goals of improving the organizational performance both local and international markets. Thus, the rationale behind the choice of this study is to empirically examine the effect of product quality on organizational performance using Nile Breweries (U) Limited. Therefore, this study is justified on the ground that there is no study that has ever been conducted in this field hence a big cornerstone to academic development.

1.9   Conceptual Framework

Figure 1: Conceptual framework of the study

Independent variable   **Dependent variable**

Product Quality (IV)   **Organization Performance (DV)**

- Perceived quality
- Reliability
- Responsiveness

- Customer retention
- Market share
- Customer' loyalty

Moderating   Variable (MV)

Economic Environment

- Inflation rate
- Interest rate
- Income ratios
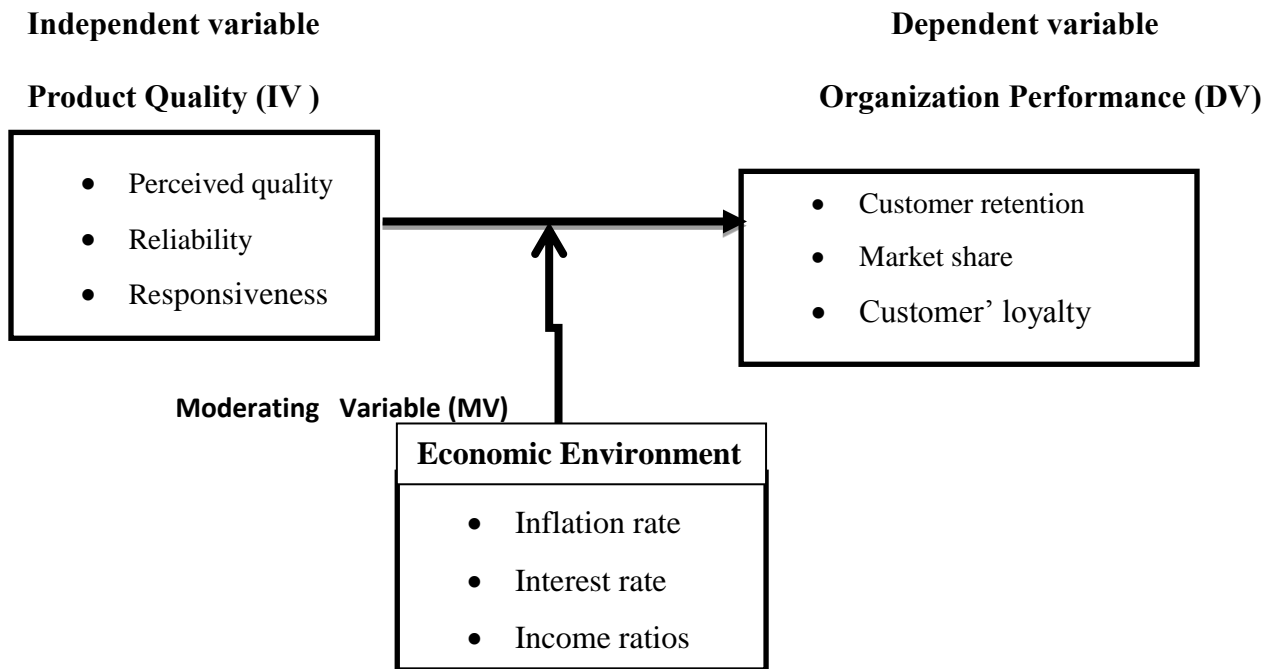
Source: *Adopted from SERVQUAL model of Parasuraman Zeithaml & Berry (1985) and*

Nyeek, Morales, Ladhari, & Pons (2002) and modified by the Researcher

The conceptual framework above illustrates how the independent variable affects the dependent variables. The Independent variable in this case is the product quality with key dimensions of

perceived quality, reliability and responsiveness from (Nyeek, Morales, Ladhari, & Pons, 2002).Organization performance as the dependent variable is described with the main dimensions of Customer retention, Market share and Customer loyalty /satisfaction. The relationship between product quality dimensions and organizational performance is businesses adopting the marketing concept and embracing a market orientation culture. Experience attributes that add intrinsic value to the product are responsiveness, reliability which is determined by manufacturing through building a product that each time it works as expected and perceived quality which is the emphasis of sales and distribution by helping to build brand equity and consumer loyalty (Nyeek, 2002).Therefore, to register better organization performance, an organization must put into consideration product quality dimensions which add intrinsic value to product. The effect is moderated by the economic environment which is affected by inflation rate and interest rate. This is intended to investigate a many to one type of relationship of the dimensions of product quality and a single variable of organization performance. However, in this study, the moderating variables (economic environment) were not studied.

1.10   Operational Definitions

Product quality; this means to incorporate features that have a capacity to meet consumer needs (wants) and gives customer satisfaction by improving products (goods) and making them free from any deficiencies or defects.

Perceived quality; this refers to as "the customer's perception of the overall quality or superiority of the product or service with respect to its intended purpose, relative to alternatives." In fact, the perceived quality is different from actual or objective quality, product-based quality, and manufacturing quality.

Responsiveness; this refers to the availability of the provider to attend voluntarily to users, providing a service in an attentive manner, with precision and speed of response. It concerns the availability of employees of the institution to assist users and provide the service promptly.

Reliability; this is translated into the ability of the supplier to execute the service in a safe and efficient manner. It depicts the consistent performance, free of non-compliance, in which the user can trust. The supplier must comply with what was promised, without the need for rework.

Performance; is defined as the extent to which an organization, as a social system, could consider both its means and ends.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains the assessment of literature on the independent variable, product quality in terms of perceived quality, reliability and responsiveness examining the effect they have on the dependent variable, organizational performance as put forward by different scholars, conceptual review and theoretical review. It further reviews literature on how these two variables impacts each other, clearly underscoring gaps in literatures of different academicians.

2.2 Theoretical review of the study

The study was guided by the SERVQUAL model of Parasuraman Zeithaml& Berry (1985). The model looks at product quality in terms of reliability, responsiveness and courtesy of staff Nyeek, Morales, Ladhari, & Pons (2002) started the SERVQUAL measuring tool "remains the most complete attempt to conceptualize and measure service quality". The main benefit to the SERVQUAL measuring tool is the ability of researchers to examine numerous manufacturing industries such as beverage companies (Nyeck, Morales, Ladhari, & Pons, 2002). Buttle (1995) Critiques SERVQUAL in the article "SSERVQUAL: review, critique, research agenda" on a number of theoretical and operational bases. He particularly notes that SERQUAL's 5 dimensions (Reliability, Assurance, Tangibility, Empathy and Responsiveness) are not *unreverals,* and that the model fails to draw on established economic, statistical and psychological theory. Although SERVQUAL's face and construct validity are in doubt, it is widely used in published and modified form to measure customer expectations and perceptions on service or product quality. Thus this

theory enabled to evaluate the quality of products at the Nile Breweries (U) Limited as to the customer expectations, market share and customer retention and market growth (organizational performance).

2.3   Conceptual review of the study

2.3.1   Perceived quality and organizational performance.

One of the reasons why perceived quality is different to real quality is because a previous bad image of a product may influence consumers' judgment on product quality in the future; even if the product quality has been changed, consumers may not trust that product because of their unpleasant experience in previous (Aaker, 1996). However, manufacturers and consumers have different views on the judgment of the quality dimensions (Aaker, 1996), customers rarely hold enough information to assess a product objectively and even though customers have enough information, there may be insufficient time and motivation to do a further judgment, and at the end they may only be able to select little important information to make an evaluation on quality (Wan, 2006). In essence, perceived product quality is very significant in maintaining existing customers. Adding to this, perceived quality is a comparative concept which possesses situational, comparative, and individual attributes. Perceived quality will be affected by factors such as previous experience, education level, and perceived risk and situational variables such as purchase purpose, purchase situation, time pressure, and social background from consumers (Brucks, 2000).

External quality is based on customers' perception regarding extrinsic cues like brand, price, country of origin, or warranty (Teas and Agarwal, 2000). On the other hand, internal quality cannot be changed without altering the nature of the product itself and is further distinguished as being either objective or subjective. Objective product quality evaluates whether the product performs

as it is supposed to, incorporates features customers do not expect, or has a low probability of failing (Curkovic and Droge, 2000). By contrast, subjective product quality is based on customers' perceptions of things like product image or product design (Creusen and Schoormans, 2005). All the above product quality perception can affect the organizational performance in terms of market share, market growth and customer satisfaction.

Stobart (1994) said that perceived product quality can result in brand power and dominant market share. In order to create power brands, entrepreneurs and managers must start with a clear sense of needs and desire of a well-defined group of customers. They must produce products and supply the associated services that meet those needs exceptionally well. Effective 'quality control' measures ensure they do things right the first time in delivering those products and services. Therefore, they achieve superior quality in areas that matter to the customer together with a cost structure no higher than that of lower-quality competitors. Then, they advertise to communicate their products' advantages. The customer perceives the quality and the exceptional value are offered. The result leads to a power brand is created and dominant market share follows.

Agarwal (2000) revealed that perceived product quality affects perceived value by the customer because it provides value in several ways which also affect the organizational performance as a result of the customers' perception of the product quality. First, in many contexts, perceived quality of a brand provides a pivotal reason-to-buy, influencing which brands are included and excluded from consideration, and the brand that is to be selected. A customer often will lack the motivation to obtain the information that might lead to an objective determination of quality in given application. Sometimes, the information may simply be unavailable or the customer may not have the ability or resources to obtain or precede it. In many cases, perceived quality becomes central in the customers' decisions. Second, perceived product quality can be used as a positioning

strategy of various products, whether a car, a computer, or a shirt or the type of beer as per this study. These products can be shown as a premium product for the high-end consumers. Third, a perceived product quality advantage provides the option of charging a premium price. Also, the price premium can increase profits and provide resources with which to reinvest in the brand. These resources can be used in such brand-building activities as increasing awareness or associations, or in R&D activities to improve the product. A price premium not only provides resources, but can also reinforce the perceived quality. Fourth, perceived product quality can also be meaningful to retailers, distributors, and other channel members and thus aids in gaining distribution. We should know that the image of a channel member is affected by the products or services included in its line. As a result, stocking "quality products" can attract customers significantly.

Aaker (2000) stated that perceived product quality is one of the key dimensions of product quality. Perceived quality will directly influence purchase decisions and brand loyalty, especially when a buyer is not motivated or able to conduct a detailed analysis. It can also support a premium price which, in turn, can create a gross margin that can be reinvested in brand equity. Having brand equity will provide values to customers by enhancing customers'; interpretation/processing of information, confidence in the purchase decision and satisfaction thus enhancing a company's' organizational performance. As part of its role in adding value for the customer, brand equity has also the potential to add values for the firm by increasing; efficiency and effectiveness of marketing programs, brand loyalty, prices/ margins, brand extensions, trade leverage and competitive advantages. Furthermore, perceived product quality can be the basis for a brand extension which in turn leads to market growth, improved market share and meeting customer satisfaction. If a

brand is well-regarded in one context, the assumption will be that it will have high quality in related context as well.

Teas (2000) provide insights on how perceived quality does create profitability; perceived product quality affects market share. After controlling for other factors, products of higher quality are favored and will receive a higher share of the market. Perceived product quality affects price. Higher perceived product quality allows a business to charge a higher price. The higher price can directly improve profitability or allow the business to improve quality and further more to decrease competitive barriers. Further-more, a higher price tends to increase perceived quality by acting as quality cue. Perceived product quality has a direct impact on profitability in addition to its effect on the market share and price. Improved perceived quality will increase profitability even when the price and market share are not affected. Perhaps the cost of retaining existing customers declines less with higher quality, or competitive pressures are reduced when quality is improved. In any case, there is a direct link between quality and Return on Investment (ROI) Perceived product quality does not affect cost negatively. In fact, it doesn't affect costs at all. The image that there is a natural association between a quality/prestige niche strategy and high cost is not reflected in the data (Aaker, 2000).

In summary, perceived quality is a consumer subjective judgment on product quality, and he or she will evaluate product quality from their previous experiences and feelings and according to how it meets their expectations.

2.3.2   Reliability and organizational performance.

Reliability of a product conveys the concept of dependability, successful operation or performance and the absence of failures. It is an external property of great interest to both manufacturer and

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consumer. Unreliability (or lack of reliability) conveys the opposite. The reliability of a product gets determined by the decisions made during the pre-production stages (Front-end, Design, Development) and the production stage of the product life cycle. Murthy *et al.* (2007) deal with reliability decision making during the Front-end (or Feasibility) and the Design and Development stages of new product development.

Garvin (1988) asserts that reliability specifies the probability that the product will be operating properly over a specific period of time under the stated condition of used. Product reliability as the factor in effecting on customers toward a product in satisfying themselves (Madu et al, 1995).Customer satisfaction perceived as high has quite a number of benefits whereas it in enhance customer loyalty, improved reputation, lower down price elasticity, lower the cost in future transaction and also increase employees competence (Swanson and Kelly, 2001). Customer satisfaction is resulted from the comparison of service and also the performance with expectation in determination. It is a mindset where customers" needs, wants and also expectations on a product or services has met or exceeded, in which it resulted in repeating in purchasing and also loyalty thus enhancing organizational performance (Anton, 1997).

Adamides et al. (2004) revealed that given the assumption that the buyer faces constant demand for product usage, the maximum revenue that he/she can generate (in case there is no product outage) is a constant. Without loss of generality, we normalize this value to zero. Each time a product failure occurs, the buyer incurs a fixed cost $r \geq 0$. For example, in commercial airline operations, r represents, among other things, the cost associated with rescheduling flights that results from delays due to an engine coming off-wing for repair. In addition, if the vendor does not have inventory on hand to replace the failed product, the buyer incurs a variable cost $\chi > 0$ per unit time until the system function is restored. The cost χ represents the direct revenue loss to the buyer

resulting from system inoperability due to the failed product for example; the cost of replacing an operating machine in Beverages Company affects the performance of the company due to the break down in constant provision of products to the estimated customers. .

As the developer of a product equipped with new technology, the manufacturer or producer possesses superior knowledge about the product's characteristics, including an estimate of its failure distribution, at the time he/she introduces the product to the market (GAO 2004, Boito et al. 2009). While this gives the manufacturer an informational advantage, it also creates an incentive to misrepresent the information: a manufacture or producer whose product has low reliability may claim otherwise. This presents a challenge for the manufacture or producer whose product has high reliability, since any such claim may not be viewed by the buyer as credible. This problem is compounded by the fact that the buyer lacks the ability to independently verify the manufacture's or producer's claim. For example, Kappas (2002) reports that OEMs' databases describing the material properties of alloys in aircraft engines are not publicly available. More importantly, inferring the reliability of products from actual failures of deployed units is challenging because little historical data exist for the new technology and failures occur infrequently; for instance, the median time between failures for an aircraft engine reported in Guajardo et al. (2012) is five years.

Trivedi (2002) assumes that for an accurate computation of reliability, the actual usage time of the product by the user needs to be determined to be able to calculate the failure rates. As a convenience, it is often implicitly assumed that the product is used, on an average, for the same amount of time every day by every user. With this assumption, the day count can be used for determining reliability. However, the usage duration for different users may vary considerably for mass-market products. As the failures encountered by a user clearly depend on the amount of usage of the product the longer the usage duration the more the chances of encountering failures to get

an accurate idea of the reliability of the product in use, we need to capture the usage time. Employing usage time instead of number of days of ownership for reliability computation is similar to the calendar time for example CPU time discussion in reliability growth models. For reliability growth models, it is widely believed that using CPU time gives better reliability estimates. Note that usage time collection throws up new issues for mass market products as the use of such products is generally spread over many sessions.

2.3.3 Responsiveness and organizational performance.

Sudhir (2010) observed that consumers can evaluate a product along several levels. Its basic characteristics are inherent to the generic version of the product and are defined as the fundamental advantages it can offer to a customer. Generic products can be made distinct by adding value through extra features, such as quality or performance enhancements. The final level of consumer perception involves augmented properties, which offer less tangible benefits, such as customer assistance, maintenance services, training, or appealing payment options. In terms of competition with other products and companies, consumers greatly value these added benefits when making a purchasing decision, making it important for manufacturers to understand the notion of a "total package" when marketing to their customers. For example, Beverage Company, a high-performing product will provide the customer base with basic benefits thus meeting the customer satisfaction.

Shin (2010) revealed that the quality products and services that an industrial company has to offer are generally organized around its customers' needs in addition to the level of expertise and production capabilities of the firm. Creating a strategy for product development is an important and often multifaceted segment of running a successful enterprise, and it brings together a range of different principles, such as research and development, marketing, engineering, design,

materials, and manufacturing. In most cases, an industrial product development strategy will depend on two main goals: keeping the new product or product line within the company's overall objectives and marketing philosophy, and developing a system for assessing the performance of an existing product. For evaluating the success of an existing product, factors such as sales, customer response, profits, competition, and market acceptance are usually involved.

Van Mieghem (2000) revealed that there are several reasons to believe that high profitability customers are inherently more attracted by superior product quality competition. First, customers who believe they are highly profitable to the firm may wish to be treated accordingly. If so, they may be particularly sensitive to product deficiencies. Second, in absolute terms, high value customers have more at stake in the service relationship. Accordingly, they may be more selective about the quality of product offered by their provider, and more willing to pay for it. Consistently, several queuing models feature priority-pricing schemes in which customers are able to pay a higher price for expedited product (Van Mieghem, 2000). Third, to the extent that highly profitable customers are wealthier, they may also be fewer prices sensitive. Richer consumers are often assumed to prefer higher quality products and a deli's most price sensitive customers have been shown to be the least averse to waiting in a queue (Lu et al, 2013). For these reasons, the product sensitivity effect should make high profitability customers more likely to defect in the wake of increased product quality competition.

In general, the investments a customer makes in a service provider that engender switching costs tend to be positively associated with that customer's profitability. Over time, as the length of a customer's relationship with a firm increases, psychological switching costs intensify, as customers develop a pattern of repeat purchase through habit or loyalty. Customers with lengthy relationships with the firm tend also to be older, wealthier, and responsive to the company's

products. Furthermore, as the numbers of products are consumed by the customer increases, setup and learning costs intensify (Burnham et al, 2003). As such, each new product offering at play in the relationship simultaneously increases switching costs for the customer and revenue for the company which enhances the organization performance. Therefore, the dynamics of switching costs would suggest that high profitability customers would be less likely to defect following the entry or expansion of competitors offering superior product quality (Burnham et al. 2003).

Over time, customers become acutely aware of the strengths and deficiencies of the companies that serve them. The theoretical literature on customer switching behavior models customer learning in two ways: customer defection as an immediate response to a product failure (Hall and Porteus, 2000) or updating one's perspective based on a history of service experiences including failures and successes (Gans, 2002). Assuming product failures are low probability events (and especially low probability events among high quality product firms), customers with higher tenure are more likely to have experienced them than customers with lower tenure. Similarly, customers who have more relationships with the firm, and as a consequence, transact more frequently with it, are more likely to have experienced deficient product. Buell et al., (2010) found that customer defection probabilities increased in the total number of transactions conducted by a customer, controlling for the customer's tenure, balances, and counts of the types of product offerings utilized. High tenure customers and customers with more touch points with the firm will have had more opportunities to learn about the level of products offered by the firm and may be, as a result, be better positioned to evaluate whether an entrant's value proposition is more attractive. Hence, the effects of customer learning should cause high profitability customers to be more likely to defect following the entry or expansion of competitors offering superior product quality.

2.4.0   Organization Performance.

2.4.1   Customer retention

Organizations continuously strive to increase their customer base. They provide products and services to fulfill different needs of the customers. The focus is now moving from short-term satisfaction to long-term relationship between the firm and its customers (Grönroos, 2000). Finding new customers is important for a business, but equally important is keeping the old customers since many researchers found that focus on customer retention has resulted in economic benefits (Buttle, 2004; Dawkins and Reichheld, 1990).

Customer retention is considered to be the primary goal for organizations that practice relationship marketing (Coviello et al., 2002). Once a customer is retained it means that the amount of purchase grows which in turn reduces the customer replacement costs. Retained customers may pay higher prices and purchase regularly without any discount offers which is the tool used to acquire new customers (Ang&Butle, 2006). Interesting findings by Lindgreen, et al. (2000, p.295) state that "it can be up to ten times more expensive to gain new customer than to retain a customer and the cost of bringing new customer to the same level of profitability as the lost one is up to 16 times more". This emphasizes on the significance of customer retention and its desirable outcomes for organizations.

2.4.2   Market share

If higher-quality firms can undercut low-quality firms (even when the lower quality firms are pricing near marginal cost), then product proliferation becomes unlikely. This case occurs when marginal cost is constant in quality and can also occur when marginal cost is increasing but concave in quality. When increased quality does not greatly increase marginal cost, it seems empirically reasonable to think that the cost of quality may be born in part by fixed costs(Campbell, J. R., andH. A. Hopenhayn, 2002). It is urged that when the burden of quality improvements falls

on fixed costs, product proliferation will not occur. Instead, the concentration of products within the market will not go to zero as market size increases, but will have some lower bound. In particular, there is a lower bound (independent of market size) to the market share of largest product, and there will be at least one high-quality product in the market (which may or may not also be the largest product in the market.) The maximum quality level offered in the market is constrained by market size, but will go off to infinity as market size increases thus improving the organization performance.

2.4.3 Customer' loyalty

The product can be a good starting point to satisfy customers and create customer loyalty (Eduardo, T.M., Arturo, Z.V.P. and Forge, Z.G, 2008).Customer loyalty expresses an intended behavior to support a product, which is by communicating their experience to others through saying positive things (Selnes, 1993). When the company's customers recommend someone to buy the product, a high degree of loyalty is reflected.Kotler and Keller (2006) believed that better product quality will maintain a high level of customer satisfaction, which encourages customers to make their next purchases. Thus, customer loyalty is gradually formed. Numerous studies showed that improved product quality benefits companies by building a long-term customer base, and creating a valuable asset for company customer loyalty (Gronholdt, L., Martensen, A. and Kristensen, K, 2000). However, in order to stand out in today's competitive market, firms should pay much attention to product quality, as it is believed to be the starting point for generating customer loyalty.

2.4.4 Price sensitivity

Branding and pricing strategies contribute to the level of price sensitivity in the market. Companies typically use advertising and other promotional techniques to make consumers less price-focused and more concerned with core product benefits. The more a customer values other benefits, the less price sensitive he becomes. Additionally, establishing and maintaining a higher-end upfront price point is a common approach to making customers less price-conscious. Targeting higher-income buyers is another strategy. Some companies use penetration pricing, or low upfront prices to attract customers, often at the risk of establishing price-orientation and sensitivity at the onset of a product launch. However, much as companies use penetration pricing some fail to achieve their goals due to the quality of products already in the market by identifying the gap thus affecting their performance (Coviello, 2002).

2.4   Summary of Literature Review

The chapter addressed literature related to product quality and was guided by three product quality dimensions (perceived quality, reliability and responsiveness) and organization performance. The review of literature finds that effective perceived quality is an important route towards the sales performance. Perceived quality is a consumer subjective judgment on product quality, and he or she evaluated product quality from their previous experiences and feelings and according to how it meets their expectations. Literature review indicates that poor perceived quality leads to poor organizational performance. Although the above studies highlight the importance of product quality dimensions on organizational performance, most of the literature is faced with contextual and methodological gaps which needed to be addressed hence need for this study.

CHAPTER THREE

METHODOLOGY

3.1   Introduction

This chapter presents and discusses the research design, study population, sample size and sampling techniques and procedure, data collection methods and instruments, the validity and reliability of data collection instruments, the research procedure, data analysis and presentation and limitation of study.

3.2   Research Design

The study adopted a triangulation of a case study design and both qualitative and quantitative techniques were employed. The case study design is preferred because the researcher neither had the time nor financial resources to conduct a survey of all the Beverages Companies in Uganda. Secondly, as Mugenda &Mugenda (2008) states, a case study research design permits a researcher to conduct an in-depth examination of a single phenomenon at a given point in time, to arrive at findings that are applicable to the broader phenomenon that the case represents.

3.3   Study Population

Sekaran (2003) defines a population as the entire group of people, events or things which the researcher wishes to investigate. The target population for this study was305 employees of Nile Breweries Limited (NBL) of all age groups, including staff members from finance, sales and distribution, technical,Human Resources, Marketing Department and Administrative departments. The target population was employees of Nile Breweries Limited (NBL) who had worked at least

from 2012 to date, which was the time scope of the study (Human pay roll of Nile Breweries Limited of December, 2015).

3.3 Sample size and procedure

3.3.1 Sample size

The definition of a sample according to Sekaran (2003) is a subset of the population and sampling is the selection of items from the population. A sample of 169 respondents was selected using Krejcie & Morgan's table (1970) for determining population. The Sample size and selection was broken down as in table 1 below:

Table 1: **Showing the Population, Sample Size of the Respondents and Sampling Technique.**

Category	Population	Sample size	Sampling technique
Finance Department	48	20	purposive
Sales and Distribution Department	175	106	purposive
Technical Department	50	21	purposive
Administrators	2	2	Census
Marketing Department	10	10	Census
Human Resource department	20	10	purposive
Total	**305**	**169**	

Source: Adapted from Human pay roll of Nile breweries limited (2015) and Krejcie& Morgan table (1970) for determining population size and self-modified by the researcher.

3.3.2   Sampling Procedures

Employees from all the departments which include the finance department, Sales and Distribution, Technical Department, Human resource department, Marketing Department and administrators were considered. Purposive sampling will be used to select the respondents known to possess the required information for the study (Mugenda and Mugenda, 1999). This method was chosen because quality is a concern for all and hence the researcher used purposive sampling to ensure that the required data relevant to the study was obtained. This was used to select respondents from different departments which included; 20 from Finance Department, 106 Sales and Distribution Department, 21 Technical Department and 10 Human Resource department.Also a sample of 2administrators and 10 from marketing department were selected using census sampling technique. The advantage of using this technique is that it increases confidence interval and gives maximum chance of obtaining relevant data required for the study.

3.4 Sources of data

In this study, the sources of data were both primary and secondary source.

3.4.1   Primary data

Primary data refers to new information that is collected directly by the researcher. The primary data is the first hand information collected from the field using collection tools such as questionnaires and interviews (Mugenda & Mugenda, 1999).

3.4.2   Secondary data

According to Amin (2005) secondary data provided a basis of comparison with the collected primary data results. Secondary sources of data included the internet, newspaper, text books,

journals, document and reports from the organization about their product quality reports, organizational reports, and customer compliant on product reports, reports on product quality, reports on market growth and market share. This method wasused to analyze existing data.

3.5   Data Collection Methods and research instrument

3.5.1   Questionnaire survey method

Sekaran (2003) defines a questionnaire as pre-formulated written set of questions to which respondents record their answers within closely defined alternatives. This method was used since it is reliable and dependable for large samples, gave respondents adequate time, free from interviewer bias and cheap, (Mugenda & Mugenda, 2003). The questionnaires were sent by the researcher to the respondents through email. This was convenient since the selected population had access to the email facility. The questionnaires were delivered by the researcher and her team. The researcher administered the questionnaires to various respondents under the study each item in the questionnaire was developed to address a specific objective, research question or hypothesis of the study and these questionnaires were distributed by the researcher herself with the help of the research assistant. The questionnaire was addressed to total number of 153 respondents and these are the employees working with organization since they are many and the researcher cannot reach them all.

The researcher designed a set of questions and made questionnaires. The respondents to fill the questionnaires were mainly employees of Nile Breweries Limited from different departments. A five link -scale questionnaire was used to investigate the relationship of product quality and organizational performance in Beverages Companies in Uganda. The questionnaire was comprehensive enough with a total of 30 questions to cover the extent of the problem according to the objectives and study variables and responses to the questions was anchored on a five (5)

point like scale ranging from 1 - strongly disagree and 5- strongly agree to (Appendix I). The instrument was chosen because the majority respondents were literate, a hard copy could be filed for reference purposes and almost uniform answers that can be quantified and processed easily to give a tentative answer and where there is need for clarification it can be done (Denscombe, 1998).

3.5.2 Interview method.

The Interviewing method of data collection was used in a structured way, which according to Sekaran (2003) is a method used when it is known at the outset what information is needed. This method was used because it offered the researcher an opportunity to adapt questions, clarify them by using the appropriate language, clear doubts and establish rapport and probe for more information (Sekaran, 2003). A list of pre-determined questions was made and these acted as an interview guide, which the researcher used during the interviews. The interviews were conducted by face-to-face or through the telephone based on the agreed convenience of both the researcher and the respondent. Questions were asked to the respondent and the answers were written down by the researcher during the interview. Interviews were carried out from a sample of 169 respondents who included heads of departments that is marketing, human resource, Technical, Sales and Distribution, Finance and administration. To obtain accurate information through interviews, the researcher established friendly relations with the respondents for maximum cooperation prior to conducting the interviews (Mugenda&Mugenda, 2003).

An interview guide was prepared based on the research objectives. The interview guide consisted of structured open-ended and closed questions based on the research objective, which was used as a guide for the researcher during the interview. The interviews were conducted face-to-face or through the telephone based on the agreed convenience of both the researcher and the respondent. For either technique, the method enabled the researcher to collect accurate information from the

officials who were selected to participate as key informants; because, they had wealth of experience and knowledge on the product quality and organizational performance. The instrument well ensured that reliable information is gathered; because, it facilitates a deeper investigation into the topic under study. It helped the researcher to explain or clarify questions thereby increasing likelihood of useful responses. The interviews only applied to members of the only heads of departments who are responsible for review of organizational performance of the company in addition to the questionnaires issued (Mugenda&Mugenda, 2008) (Appendix II).

3.5.3 Document Reviews method.

Documentary review was used to collect secondary data during the study. Data and information was sourced and obtained from existing documentary evidence in Nile Breweries Limited, which was relevant to the study. This included manuals, policies, reports, performance charts, meeting minutes and organization performance reports. These helped the researcher get an internal view of the relationship between product quality and organizational performance. A documentary checklist was developed and used to guide the researcher on the data to look for in order to generate the necessary information for the study (Mugenda&Mugenda, 2003).

The primary data was the first-hand information collected from the field using documental checklist. Information was sourced from document related to the area of study. The document review checklist was a list of documents which the researcher looked for during the data collection process. These included product quality review reports, organizational performance report, incident reports, Email trails, IT Service desk notifications and department performance reports (Appendix III).

3.6   Validity and Reliability

3.6.1   Validity

Validity is the ability to produce findings that are in agreement with the theoretical or conceptual values (Mugenda and Mugenda, 2003). This point out the types of validity test that was conducted to test the goodness of the measuring instruments is content validity. Face validity is whether a questionnaire appears to measure what it is supposed to measure (Denscombe, 1998). This study was subjected its instruments of data collection to face validity because it ensured the appropriateness, meaningfulness, and usefulness of the inferences made from the results. The research instruments were proof read by Uganda Martyrs University (UMU) supervisors to establish their face validity. In this case, the data was collected to represent the respondent's opinion. The researcher ensured that the questions are relevant through the calculation of Content Validity Index (CVI), given by the formula:

CVI = No. of items declared Valid

Total no. of items on the instrument

Table 2: Showing validity of instruments

Variables	No. of items before Computing CVI	No. of items after Computing CVI	CVI
Perceived quality	9	6	0.7
Reliability	8	6	0.8
Responsiveness	7	5	0.7
Organisation performance	8	6	0.8
Total	**32**	**23**	**0.72**

Source: Primary data

The results of the calculated CVI indicated that out of the 32 items only 23 items with the CVI of 72% were declared valid because they were corresponding CVIs within the accepted range of 0.7 to 1 which is in line with Amin, (2005) and these were finally considered in the questionnaire for data collection.

3.6.2 Reliability

Sekaran (2003) defines reliability of a research instrument as the extent to which it is without bias and therefore error-free. In order to ensure reliability, a test-retest was done by administering the same questionnaire/instrument twice to the same group of respondents at different points in time, which included in the sample (Mugenda and Mugenda, 2003).

Thus, the reliability was pretested using the Cronbachs Coefficient Alpha (Cronbachs Alpha; Cronbachs, 1946), which used for multiple scaled items. The two scores were then correlated and results evaluated. The Cronbanch Alpha reliability coefficient wasperceived quality, reliability and responsiveness and organizational performance in Beverages Companiesin Uganda. The data collection instruments were tested for reliability on 0.7 of the study elements to ensure that they produce results whenever the same instrument is used to collect data. After a period of seven (7) days the same instruments were given to the same people to determine whether responses are consistent. Thereafter, the two tests results were correlated by comparing the responses from the same person at both instances. The higher the coefficient of the stability, the more reliable with a minimum coefficient of 0.5 is assumed as suggested by Mugenda&Mugenda (2003) in which case the research proceeded.

Table 3: Reliability table

Reliability Statistics			
	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Perceived quality	.962	.975	6
Reliability	.856	.865	6
Responsiveness	.641	.640	5
Organizational performance	.898	.888	6

Source: Primary data

Table 3 above illustrates that the reliability analysis results according to Cronbach's Alpha coefficient for the variables was above 0.5 that ranges from 0.640 to 0.975. Basing on Mugenda&Mugenda (2003), the results imply that the items that were adopted in this study were highly reliable.

3.7 Procedure for Data Collection

Upon completion and approval of this research proposal by the supervisors, the researcher did defense before a panel as per UMU procedures. During the defense, recommendations for improvement was made and taken up by the researcher to address by making the necessary adjustments to the proposal. The proposal was then submitted to the supervisors and upon approval. Using an introduction letter from the graduate school, the researcher obtained approval from UMU authorities to conduct the research. The researcher contacted with the various authorities to whom the letter was addressed and together with the authorities made appointments

as to when the study was to be carried out to enable proper planning. On the agreed dates, the researcher went to the various user departments in Nile Breweries Limited to meet the respondents and collect the data. The data collection was carried out for a period of one week. In the event of any incompleteness of the data collecting exercise, the researcher rescheduled the appointments on consultation with the respondents. After data collection, data analysis was done and a report was made, which made mark the final activity of the research process.

3.8   Data Analysis and Presentation

Data was collected, edited, coded and checked for accuracy.

It was subjected to further analysis for easy understanding and interpretation where both qualitative and quantitative data was analyzed.

The qualitative data was collected by way of interviews and was analyzed by content analysis. Content Analysis is a technique for gathering and analyzing the content of text (Mugenda&Mugenda, 2008). The content was informed of words, phrases, sentences, paragraphs or ideas. The initial step involved sorting the content into themes, which depended on the content. Data collected was organized into a common data pool. It was transcribed, synchronized and grouped into themes. During analysis; themes were generated from the responses and categories. A coding scheme was devised, in basic terms like frequency (amount of content), direction (who the content is directed to), intensity (power of content), and space (size of content) to enable reduction of the themes into major themes. It is these major themes that formed the basis of extrapolating out the emergent issues relate to the research question subject matter. Patterns of

linkages and clues from the themes related to the research questions were observed and data interpretation was done in respect to the research objectives (Mugenda&Mugenda, 2008). Checking was done to minimize errors of double selection and other forms of repetition.

Quantitative analysis; this is the process of presenting and interpreting numerical data. The results including quantitative data analysis contain descriptive statistics and inferential statistics. Descriptive statistics include measures of central tendency and measures of variability about the average (mean and standard deviation). Inferential statistics helped in undertaking correlation analysis. The statistical package for social scientists (SPSS version 20.0) was used to generate descriptive and correlation and regression statistics that gave the researcher a 'picture' of the data that was collected and used in the research as well as helping to interpret the data.

The data was presented in simple essay format, charts, graphs, frequencies and table format to allow further analysis with the help of Statistical Package For Social Science (SPSS version 20.0) in order to come up with clear tables and correlations about the relationship between product quality and organizational performance in Beverages Company's in Uganda.

3.9 Limitation of the study.

The researcher experienced time constraint in data collection, analyzing data and in final presentation of the report. However the researcher managed to overcome this limitation by ensuring that time element was put into consideration and all appointments agreed with the supervisor and respondents are fully meet.

The researcher experienced a limitation of non-response from respondents who were given questionnaires to fill. However, the researcher assured the respondents that any information given was to be treated with utmost confidentiality.

Costs regarding this limitation were transport, printing and photocopying of relevant materials. However the researcher managed to overcome them by borrowing some money from relatives and friends.

3.10. Measurement of variables

The variable of the study include product quality as the independent. This was measured against organization performance which constituted as the dependent variables of the study. The study area was adopted from previous studies. A Likert scale rated on five(5) point scale from 5- strongly agree, 4- agree, 3-undecided, 2- disagree and 1- strongly disagree was used (Amin, 2005).

3.11. Ethical considerations

The researcher first sought endorsement in a form of an introduction letter from Uganda Martyrs University in order to conduct the research. The survey was conducted in harmony with Uganda Martyrs University research guidelines. The research also sought approval (written letter) from Uganda Martyrs University where the research was conducted. All collected data from respondents was protected with high confidentiality by non-disclosure of the respondent. As supported by Mugenda & Mugenda (2003), the researcher should take care not to cause harm to respondents or making them nervous. Likewise Sommer & Sommer (1997) approves that ethical matter such as anonymity and confidentiality are key in research. The researcher therefore sought consent from appropriate authorities and explained to the respondents the purpose of the study and assured them of the confidentiality of their identities for example during the interview, pseudo names were used and the questionnaire required no name of respondents. The researcher also acknowledged all the pieces of work of other scholars.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION OF RESULTS

4.0   Introduction

This chapter presents analyses and interprets the results. It is divided into two sections of the research study findings on the demographic characteristics and the section second section is about the empirical study results. The first section of the empirical study presents analyses and interprets the results on the effect of perceived quality on organization performance at NBL. The second section presents analyses and interprets the results on the influence of reliability on organization performance at NBL. The third section presents analyses and interprets the results on the relationship between responsiveness and organization performance at NBL.

4.1   Response Rate

Table 4: Showing the response rate.

	Target No	Released NO	Percentage
Questionnaire	153	109	
Interview	16	11	
Total	**169**	**120**	**71**

Source: Primary data(2016)

Basing on table 4 above, the researcher was able to collect information on 120 respondents is 71%out of 169 from the study targeted population and according to according to Amin (2005), the response rate of 70% is a good representation of the study population. However, out of the 153 questionnaires expected to be filled and returned by the respondents, only 109 were filled and returned which was a good response rate for the research to base on for data analysis. The

respondents that were interviewed by the researcher were 11 out of the 16expected respondents and these provided the researcher with qualitative information to add on the quantitative data.

4.1.1 Demographic Characteristics

In this section, data is presented on the socio-demographic composition of the sample obtained through the questionnaire, which included; age, gender, level of education and length of service. All the tables are based on the 109 respondents. The purpose of collecting demographic data on respondents was to help in establishing the respondent sample characteristics and be able to form appropriate opinions about the research findings. The detailed analysis of these characteristics and interpretation are presented in the following subsections:

4.1.2 Distribution by gender

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Nile Breweries Limited (NBL) employees from the various departments.

Figure 2: **Presents results on gender of the respondents.**

Gender of the respondents
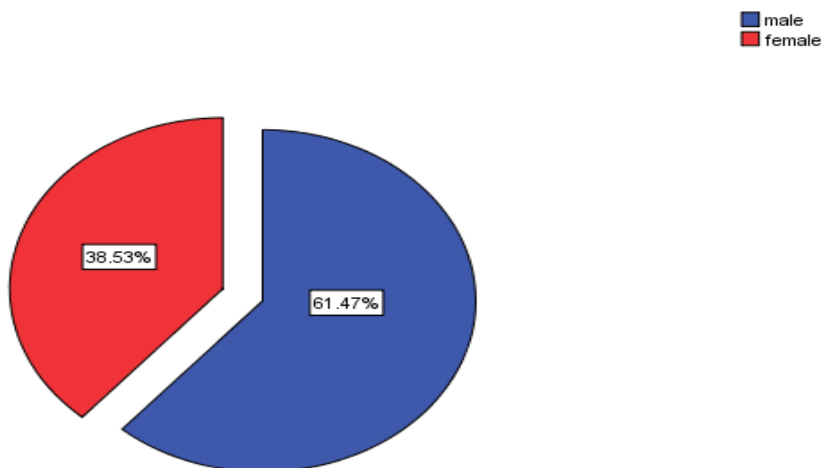
Source: Primary data (2016)

Figure 2 above illustrates that 61.47% of the majority respondent were male and 38.53% were female respondents thus both sex was captured. This implies that this organization employee both sex which is in line with affirmative action and the majority being the male employees involved in the product quality compared to the female employees. The huge numbers of the male respondents is because most of the employees are hired to do technical work like loading trucks, truck selling among other jobs which require men to be effectively executed.

4.3.2 Distribution by age bracket

The study aimed at establishing the gender of the respondents. This information was gathered using a questionnaire administered to the Nile breweries limited (NBL) employees from the various user departments of Nile breweries limited (NBL).

Figure 3: **Shows results on the age bracket of the respondents.**
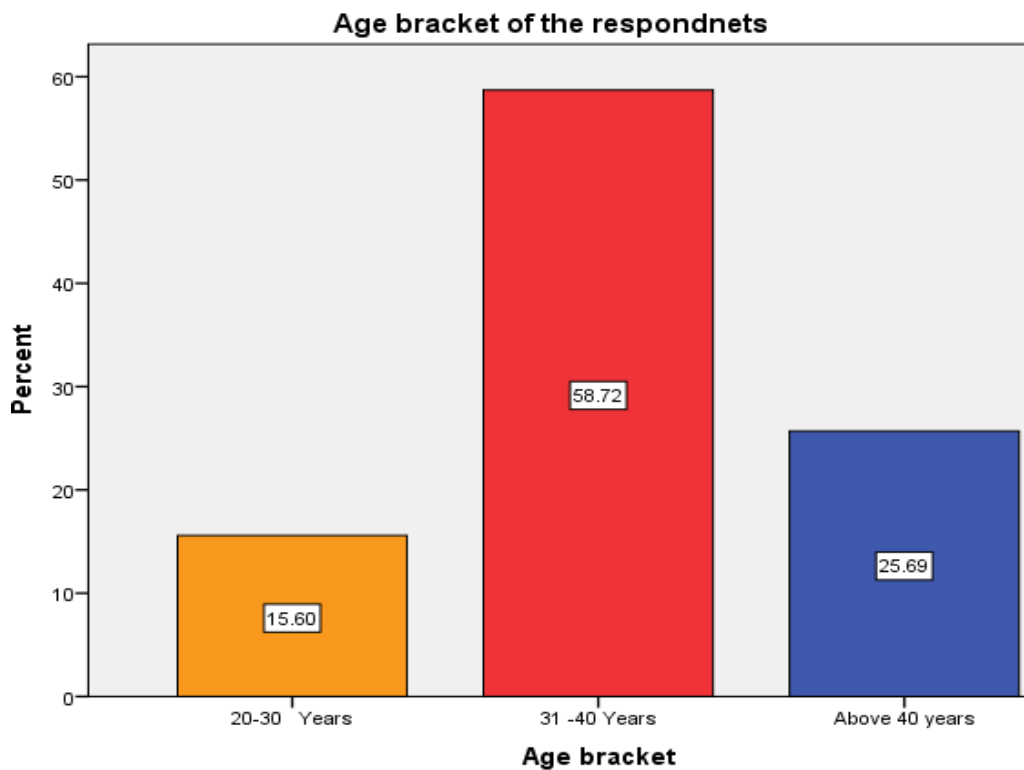
Source: Primary data (2016)

The result in figure 3 above shows that 58.72% of the respondents were in the age bracket of 31-40 years, 25.69% were above 40 years, 15.60% were between the age brackets of 20-30 years. This finding implies that the majority of the employees in this organization are between the age of 31-41 indicating people who are still strong and mature; they can contribute developmental ideas on how to improve on product quality so as to enhance organization performance.

4.3.2 Distribution by education level and length of service

Table 5: Education level and length of services

N=109

Description	Option	Frequency	Percentage
Educational level	Diploma	38	35
	Bachelor degree	47	43
	Masters	23	21
	PGD	1	1
	Total	**109**	**100.0**
Length of service at CBL	Less than a year	23	21
	1-3 years	53	49
	4-10 years	33	30
	Total	**109**	**100.0**

Source: Primary data (2016)

From table 5 above, it is illustrated that 43% of the respondents attained education up to Bachelor's degree, 35% are diploma holders, at least 21% have attained their education up to master's level and 1% of the total number of the respondents hold Post Graduate Degree. This implies the

respondents were able to read and understand the questions that were asked since the study questions were designed in English thus giving reliable results and had knowledge on product quality and how it affects organization performance.

The results in table5 above illustrates that 49% of the majority respondents have worked with this organization for a period between 1-3 years,30% have worked between 4-10 years and only 21% of the total number of the respondents have worked for less than 1 year. This implies that majority of the employees of this organization have worked between the period of 1-3 and 4-10 years thus they have good information and experience on the product quality and how it affects organization performance.

4.0 Empirical results

4.4.1 The effect of Perceived quality on organization performance.

This section presents results in line with perceived quality and organization performance at NBL. This objective was conceptualized using six questionnaire items which required each respondent to do self-rating on how the perceived quality affects organization performance. Responses were based on a 5-Likert scale ranging from 1 which represented strongly disagree to 5 which reflected strongly agree, although these were thereafter categorized into disagree, not sure and agree sections. The resulting summary statistics are in Table 6below, depicting the disagree, not sure and agree;

Table 6: Presenting the findings on the effect of perceived quality on organization performance

		Valid			
		Disagree	**Not sure**	**Agree**	**Total**
We consider perceived product quality as a very significant in maintaining existing customers	Frequency	24	6	79	109
	Percent	**22.0**	**5.5**	**72.5**	**100.0**
Our subjective product quality is based on customers' perceptions of things like product image or product design	Frequency	7	16	86	109
	Percent	**6.4**	**14.7**	**78.9**	**100.0**
We have the brand power and dominant market share	Frequency	4	19	86	109
	Percent	**3.7**	**17.4**	**78.9**	**100.0**
We provide information on product quality to our customers	Frequency	6	22	81	109
	Percent	**5.5**	**20.2**	**74.3**	**100.0**
Our product quality influence the purchase decision and brand loyalty of our customers	Frequency	5	21	83	109
	Percent	**4.6**	**19.3**	**76.1**	**100.0**
We are able to charge higher price basing on quality of our products.	Frequency	5	20	84	109
	Percent	**4.6**	**18.3**	**77.1**	**100.0**

Source: Primary data (2016)

Results in table 6 above indicate that respondents agreed that they consider perceived product quality as a very significant in maintaining existing customers and provide information on product quality to our customers at (72.5% and 74.3%) respectively, (5.5% and 20.2%) were not sure and

(.5.5% and 22.0%) of the respondents disagreed with the statement. The respondents agreed at (78.9%) that their subjective product quality is based on customers' perceptions of things like product image or product design, (14.7%) were not sure and (6.4%) disagreed with the statement. At (78.9%), the findings further indicate that respondents agreed that they have the brand power and dominant market share, (17.4%) were not sure and (3.7%) disagreed with the statement. With (76.1%), the respondents agreed that their product quality influence the purchase decision and brand loyalty of our customers, (19.3%) were not sure, (4.6%) of the respondents disagreed with the statement. The findings further, reveals that at (77.1%), the respondents agreed that they are able to charge higher price basing on quality of our products, (18.3%) were not sure and (4.6%) disagreed with the statement.

Adding on the quantitative finding as described above, qualitative findings gathered from the interviews that the researcher held with some key informants reveals;

> *During the interviews, one key informant revealed that their consumers have a high relative attitude toward a particular brand which can be exhibited through repurchase behavior. Customers willing pay buy our products and bring in new customers to the company which improves on our market share and customer retention of the organization. A consumer purchases a product to fulfill his needs and has certain amount of expectations from the brand he buys. When he/she is able to meet those perceived value from the brand or expectations, they normally develops a trust and satisfaction towards the brand which is called "Customer Satisfaction".*

4.4.1.1 Documentary checklist findings revealed that;

From the Nile Breweries Sustainable Development Report (2014), it was revealed that the company continues to realize that it is easier and more cost efficient to find ways to improve

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customer satisfaction and retain current customers instead of paying more attention to winning new customers. Creating customer satisfaction is a defensive strategy and the behavioral objective for the defensive strategy is customer loyalty or what is known as "Brand Loyalty.

Table 7: Regression analysis on the effect of perceived quality on organizational management

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.789[a]	.622	.569	.34601

a. Predictors: (Constant), Perceived quality

Table 7 above shows the regression model summary results, indicating the adjusted R square as 0.622, showing that about 62.2% of the variation (Adjusted R^2=0.569) in organization performance could be attributed to perceived quality. The result further shows that organization performance is dependent on perceived quality by 62.2% and 37.8% of the variance in organization could be explained by other factors outside the model used like conformance, durability, serviceability and aesthetics.

4.4.2 The influence of reliability on organization performance at NBL.

This section presents results in line with reliability and organization performance. This objective was conceptualized using six questionnaire items which required each respondent to do self-rating on the influence of reliability on organization performance. Responses were based on 5-Likert scale ranging from 1 which represented strongly disagree to 5 which reflected strongly agree,

although these were thereafter categorized into disagree and not sure and agree sections. The resulting summary statistics are in Table 8below, depicting the disagree, not sure and agree;

Table 8: Showing findings on influence of reliability on organization performance

Statements		Valid			
		Disagree	Not sure	Agree	Total
In this organization, reliability of a product gets determined by the decisions made during the pre-production stages	Frequency	38	41	30	109
	Percent	**34.9**	**37.6**	**27.5**	**100.0**
We are able to specify the probability that the product will be operating properly over a specific period of time	Frequency	12	18	79	109
	Percent	**11.0**	**16.5**	**72.5**	**100.0**
There is a constant demand for our products	Frequency	28	25	56	109
	Percent	**25.7**	**22.9**	**51.4**	**100.0**
We base on the actual usage time of the product to calculate the failure rates	Frequency	19	34	56	109
	Percent	**17.4**	**31.2**	**51.4**	**100.0**
We are equipped with new product technology to ensure reliability	Frequency	10	40	59	109
	Percent	**9.2**	**36.7**	**54.1**	**100.0**
We always ensure availability of products	Frequency	32	34	43	109
	Percent	**29.4**	**31.2**	**39.4**	**100.0**

Source: Primary data

From table8 above, it is illustrated that employees disagreed that in this organization, reliability of a product gets determined by the decisions made during the pre-production stagesat (34.9%), (37.6%) of the respondents were not sure, (27.5%) agreed with the statement. At (72.5%), employees said that they are able to specify the probability that the product will be operating properly over a specific period of time, (16.5%) were not sure and only (11.0%) disagreed with the statement. The findings also reveal that at (51.4%), employees agreed that there is a constant demand for their products and base on the actual usage time of the product to calculate the failure

rates, (22.9% and 31.2%) of the respondents were not sure and (25.7% and 17.4%) disagreed with the statement. The employees also agreed that they are equipped with new product technology to ensure reliability and this was revealed at (54.1%), (36.7%) were not sure and only (9.2%) disagreed with the statement. The results also indicate that employees always ensure availability of products at (39.4%), (31.2%) were not sure and (29.4%) disagreed with the statement.

However, the results from the interviews that the researcher held with some respondents revealed that;

> *One respondent during interviews revealed that they carry out reliability analysis in two categories that is qualitative and quantitative. This is intended to verify the various failure modes and causes that contribute to the unreliability of a product or system. The latter uses real failure data in conjunction with suitable mathematical models to produce quantitative estimates of product or system reliability. This enables us to determine the market share and customer satisfaction compared to our competitors in the beverage industry specifically brewery.*

4.4.2.1 Documentary checklist the findings revealed that;

According to the Sustainable Development Report (2014) it highlights what the company has done to entrench sustainability in all aspects of its operations including training retailers in alcohol responsibility, significantly lowering the water usage, scaling up enterprise development, establishing the social return on CSI corporate social investment and earning the commitment of our suppliers to sustainable development by ensuring reliability as the products.

Table 9: Correlation coefficient on relationship reliability on organization performance.

Correlations

		Reliability	Organization Performance
Reliability	Pearson Correlation	1	.657**
	Sig. (2-tailed)		.000
	N	100	100
Organization Performance	Pearson Correlation	.657**	1
	Sig. (2-tailed)	.000	
	N	100	100

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

From the correlation coefficient table 9, showing the relationship between reliability and organization performance was 0.657 with probability value (p = 0.000) that is less than α = 0.01 level of significance. This implies that there is a significant positive influence of reliability on organization performance at Nile Breweries Limited.

4.4.3 The relationship between responsiveness and organizational performance at NBL

This section presents results in line with responsiveness and organization performance. This objective was conceptualized using five questionnaire items which required each respondent to do self-rating on the relationship between responsiveness and organization performance. Responses were based on 5-Likert scale ranging from 1 which represented strongly disagree to 5 which reflected strongly agree, although these were thereafter categorized into disagree, not sure, agree

sections. The resulting summary statistics are in Table 10below, depicting the disagree, not sure and agree;

Table 10: Presenting the relationship between responsiveness and organization performance

		Valid			
		Disagree	**Not sure**	**Agree**	**Total**
Our products have fundamental advantage that it can offer to a customer compared to our competitors.	Frequency	9	27	73	109
	Percent	**8.3**	**24.8**	**67.0**	**100.0**
Our product quality is generally organized around customers' needs.	Frequency	13	36	60	109
	Percent	**11.9**	**33.0**	**55.0**	**100.0**
In this organization, highly profitable customers are treated accordingly	Frequency	9	28	72	109
	Percent	**8.3**	**25.7**	**66.1**	**100.0**
We maintain customer relationship to develop a pattern of repeat purchase through habit or loyalty	Frequency	4	23	82	109
	Percent	**3.7**	**21.1**	**75.2**	**100.0**
We make sure that our customers are aware of the strengths and deficiencies of the companies that serve them	Frequency	3	27	79	109
	Percent	**2.8**	**24.8**	**72.5**	**100.0**

Source: Primary data

Findings in table 10 above indicate that employees agreed that their products have fundamental advantages that it can offer to a customer compared to our competitors at (67.0%), (24.8%) of the respondents were not sure and only (8.3%) disagreed with statement. At (55.0%), respondents agreed that product quality is generally organized around customers' needs, (33.0%) were not sure and (11.9%) disagreed with the statement. In this organization, highly profitable customers are treated accordingly revealed at (66.1%), (25.7%) of the respondents were not sure and (8.3%)

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disagreed with the statement. At (75.2%) of the respondents agreed that they maintain customer relationship to develop a pattern of repeat purchase through habit or loyalty, (21.1%) were not sure and (3.7%) disagreed with statement. The results shows that (72.5%) of the respondents agreed that make sure that our customers are aware of the strengths and deficiencies of the companies that serve them,(24.8%) were not sure and (2.8%) disagreed with the statement.

Basing on the qualitative data on the relationship between responsiveness and organization performance at NBL, the results from the interviews that the researcher held with some key informants were consistent with the quantitative data as revealed below;

> *One respondent revealed that they created a strategy for product development and it brings together a range of different principles, such as research and development, marketing, engineering, design, materials, and manufacturing. Product development strategy depends on two main goals: keeping the new product or product line within the company's overall objectives and marketing philosophy, and developing a system for assessing the performance of an existing product. This has enabled them to keep their customers and getting new customer thus increasing on the market share.*

4.4.3.1 The findings from the documentary checklist reveal that;

According to NBL sales department (2015), it revealed NBL's fair endeavors to make strategic interventions in ensuring a fair balance of its economic aspirations without compromising Ugandans and the world at large in addressing social and environmental challenges. For example, the NBL Sales & Marketing Compliance Committee (SMCC) was instituted and given the green light and independence to filter alcohol related communications with a view to ensure responsible commercial communication with the aim of promoting customer responsiveness to increase on customer loyalty. As an independent observer of SMCC performance, I have seen NBL retailers

actively engaging in promoting responsible alcohol trading and consumption. Also most companies (giant and small) have been reported to evade tax so as to catch up with financial stress. NBL has not been part of tax scandals.

Table 11: Showing the correlation coefficient on the relationship between responsiveness and organizational performance.

Correlations		Responsiveness	Organization Performance
Responsiveness	Pearson Correlation	1	.762**
	Sig. (2-tailed)		.000
	N	109	109
Organization Performance	Pearson Correlation	.762**	1
	Sig. (2-tailed)	.000	
	N	109	109

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

Table 11 above shows that the correlation coefficient results between responsiveness and organization performance was r = 0. 762**, with probability value (p = 0.000) that is less than α = 0.01 level of significance. This shows a significant positive relationship between responsiveness and organization performances. This implies that an improvement in responsiveness, there is likely to be a corresponding effect in terms of organization performance.

Table 12: Showing the multiple regression analyzing results on the effect of product quality (perceived quality, reliability and responsiveness) on organizational performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732[a]	.536	.522	.34738

a. Predictors: (Constant), Perceived quality, Reliability, Responsiveness

The results in table 12 above shows that about 53.6% of the variation (Adjusted R^2=0.522) indicates how much of the dependent variable, organizational performance can be explained by the independent variable perceived quality, reliability and responsiveness (product quality). It implies that organization performance is dependent on perceived quality, reliability and responsiveness (product quality) by53.6% and 46.4% could be attributable to other factors like pricing strategies, distribution other than product quality that were not used in this model.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1   Introduction

This chapter presents summary and discussion of the study findings as presented in chapter four, conclusions and recommendations and suggested areas for future studies.

5.2   Summary of major findings

5.2.1   The effect of perceived quality on organization performance.

The study findings in table 7revealed that perceived quality positively affects organization performance at NBL. This was observed at coefficient of 0.622 (62.2%) which is above 0.5 that indicate a strong significant effect of perceived quality on organization. However, the results that were obtained revealed a positive effect and therefore the null hypothesis (H0) was rejected and the alternate hypothesis (H1) accepted and thus the hypothesis should be adopted implying that perceived quality affects organization performance.

5.2.2   The influence of reliability and organization performance.

From the second objective, the findings in table 9 revealed that reliability positively influence organization performance at NBL. This was revealed at a coefficient of 0.657 which is above 0.5 signifying a strong significant influence of reliability on organization performance. However, the results that were obtained revealed a positive influence and therefore the null hypothesis (H0) were rejected and the alternate hypothesis (H1) was accepted and thus, the hypothesis should be adopted implying that reliability influences organization performance.

5.2.3 The relationship between responsiveness and organization performance.

From the third objective of this study, it was revealed that there is positive significant relationship between responsiveness and organization performance. A positive correlation coefficient was observed at r = 0. 762**, with probability value (p = 0.000) that is less than α = 0.01 level of significance. This meant that the results obtained in table 11 revealed a positive strong relationship and therefore the null hypothesis (H0) was rejected and the alternate hypothesis (H1) was accepted and thus, the hypothesis should be adopted implying that there is a relationship between responsiveness and organization performance.

5.3 Discussions of the study findings.

The discussion is organized according to the research objectives directly derived from the objectives of the study. In the course of the discussion, attempt is made to cross-reference the implications of the findings with existing literature.

5.3.1 The effect of perceived quality on organization performance.

Basing on the first objective of this study that was to assess the effect of perceived quality on organization performance. The study findings in table 6 revealed that perceived product quality is a very significant in maintaining existing customers and provides information on product quality to their customers. However, the findings correlate with Brucks (2000), as also perceived product quality is very significant in maintaining existing customers. Adding to this, perceived quality is a comparative concept which possesses situational, comparative, and individual attributes. Perceived quality will be affected by factors such as previous experience, education level, and perceived risk and situational variables such as purchase purpose, purchase situation, time

pressure, and social background from consumers which needs to be looked if an organization is to improve on its market share and customer satisfaction.

The findings in table 6 also revealed that respondents agreed that their subjective product quality is based on customers' perceptions of things like product image or product design. This confirms with Creusen and Schoormans (2005) as revealed that subjective product quality is based on customers' perceptions of things like product image or product design. External quality is based on customers' perception regarding extrinsic cues like brand, price, country of origin, or warranty. On the other hand, internal quality cannot be changed without altering the nature of the product itself and is further distinguished as being either objective or subjective.

The study results in table 6 also revealed that this organization has the brand power and dominant market share and their product quality influence the purchase decision and brand loyalty of our customers. This relates with the findings revealed by Stobart (1994) as said that perceived product quality can result in brand power and dominant market share. In order to create power brands, entrepreneurs and managers must start with a clear sense of needs and desire of a well-defined group of customers. They must produce products and supply the associated services that meet those needs exceptionally well which results into customer satisfaction and increases on the market share and productivity of the organization.

The respondents further agreed that they are able to charge higher price basing on quality of our products. The correlates with Teas (2000) as provides insights on how perceived quality does create profitability; perceived product quality affects market share. After controlling for other factors, products of higher quality are favored and will receive a higher share of the market. Perceived product quality affects price. Higher perceived product quality allows a business to

charge a higher price. The higher price can directly improve profitability or allow the business to improve quality and further more to decrease competitive barriers. Further-more, a higher price tends to increase perceived quality by acting as quality cue.

5.3.2   The influence of reliability on organization performance.

From the second objective of this study which was to determine the effect of reliability on organization performance. The results in table 8 revealed that reliability of a product gets determined by the decisions made during the pre-production stages and they are able to specify the probability that the product will be operating properly over a specific period of time. These findings correlate with the literature by Murthy *et al.* (2007) as revealed reliability of a product conveys the concept of dependability, successful operation or performance and the absence of failures. It is an external property of great interest to both manufacturer and consumer. Unreliability (or lack of reliability) conveys the opposite. The reliability of a product gets determined by the decisions made during the pre-production stages (Front-end, Design, Development) and the production stage of the product life cycle.

The findings in table 8 also revealed that employees said that they are able to specify the probability that the product will be operating properly over a specific period of time. The results were in line with the literature that was revealed by Garvin (1988) as asserts that reliability specifies the probability that the product will be operating properly over a specific period of time under the stated condition of used. Product reliability as the factor in effecting on customers toward a product in satisfying themselves (Madu et al, 1995).Customer satisfaction perceived as high has quite a number of benefits whereas it in enhance customer loyalty, improved reputation, lower

down price elasticity, lower the cost in future transaction and also increase employees competence (Swanson and Kelly 2001).

The respondents agreed that there is a constant demand for their products and base on the actual usage time of the product to calculate the failure rates. Trivedi (2002) assumes that for an accurate computation of reliability, the actual usage time of the product by the user needs to be determined to be able to calculate the failure rates. As a convenience, it is often implicitly assumed that the product is used, on an average, for the same amount of time every day by every user. With this assumption, the day count can be used for determining reliability.

The findings in table 8 also revealed that they are equipped with new product technology to ensure reliability and availability of products. This is in line with the literature which revealed that as the developer of a product equipped with new technology, the manufacturer or producer possesses superior knowledge about the product's characteristics, including an estimate of its failure distribution, at the time he/she introduces the product to the market (GAO 2004, Boito et al. 2009). While this gives the manufacturer an informational advantage, it also creates an incentive to misrepresent the information: a manufacture or producer whose product has low reliability may claim otherwise and thus affects the organization performance.

5.3.3 The relationship between responsiveness and organization performance.

According to the third objective of this study which was to establish the relationship between responsiveness and organization performances, the study results indicated that there is a positive significant relationship between responsiveness and organization performance. Basing on the questions that were asked on this objective, the results in table 10revealed employees agreed that their products have fundamental advantages that it can offer to a customer compared to our

competitors. This is line with Sudhir (2010) as observed that consumers can evaluate a product along several levels. Its basic characteristics are inherent to the generic version of the product and are defined as the fundamental advantages it can offer to a customer. Generic products can be made distinct by adding value through extra features, such as quality or performance enhancements. The final level of consumer perception involves augmented properties, which offer less tangible benefits, such as customer assistance, maintenance services, training, or appealing payment options thus improving the organization performance.

The study findings also revealed that respondents agreed that product quality is generally organized around customers' needs and highly profitable customers are treated accordingly. This was in line withShin (2010) revealed that the quality products and services that an industrial company has to offer are generally organized around its customers' needs in addition to the level of expertise and production capabilities of the firm. Creating a strategy for product development is an important and often multifaceted segment of running a successful enterprise and thus improving its performance. Also Van Mieghem (2000) revealed that there are several reasons to believe that high profitability customers are inherently more attracted by superior product quality competition. First, customers who believe they are highly profitable to the firm may wish to be treated accordingly. If so, they may be particularly sensitive to product deficiencies.

From the findings in table 10, it is agreed that employees in this organization maintain customer relationship to develop a pattern of repeat purchase through habit or loyalty and make sure that our customers are aware of the strengths and deficiencies of the companies that serve them. Hall and Porteus (2000) revealed that over time, customers become acutely aware of the strengths and deficiencies of the companies that serve them. Customer defection as an immediate response to a product failure (or updating one's perspective based on a history of service experiences (including

failures and successes). Burnham et al. (2003) also revealed that the investments a customer makes in a service provider that engender switching costs tend to be positively associated with that customer's profitability. Over time, as the length of a customer's relationship with a firm increases, psychological switching costs intensify, as customers develop a pattern of repeat purchase through habit or loyalty which improves organization performance.

5.4   Conclusions

5.4.1   Perceived quality and organization performance.

The study findings in table 7 revealed that perceived quality positively affects organization performance at NBL as the results indicate that product quality is based on customers' perceptions of things like product image or product design and brand power and dominant market share. However, despite of a positive effect, the results indicate areas that need to be improved on how to maintain perceived product quality which is very significant to the existing customers, providing information on product quality to the company customers and how to influence the purchase decision and promoting brand loyalty of the company customers at NBL.

5.4.2   Reliability and organization performance.

The study results also revealed that reliability positively influences organization performance at NBL as specifies the probability that the product will be operating properly over a specific period of time and equipped with new product technology to ensure reliability. However, despite of the positive effect, there is still a gap that needs to be filled as ensure the reliability of products as reliability of a product gets determined by the decisions made during the pre-production stages, ensure availability of products and actual usage time of the product to calculate the failure rates needs to be improved.

5.4.3 Responsiveness and organization performance.

Lastly the study found a significant positive relationship between responsiveness and organization performance which was revealed at 76%. However, despite of a positive relationship that was revealed, as respondents agreed that the maintain customer relationship to develop a pattern of repeat purchase through habit or loyalty and make sure that our customers are aware of the strengths and deficiencies of the companies that serve them, there is a gap that needs to be filled as product quality is not generally organized around customers' needs and highly profitable customers are less treated.

5.5   Recommendation

From the preceding of the findings in chapter four and conclusions, the following recommendations are made in line with the study objectives:

5.5.1 Perceived quality and organization performance

- This study recommends that NBL should focus on planning production processes as well as on better production of new products. Redesign of operations and formulation of a growth strategy through a market-oriented product strategy may be seen as a managerial function. Implication of a strong strategy as a market commitment can also be used to increase market share for businesses. On the other hand, all customer requirements in all categories (e.g., share of wallet) will be useful tools for learning customer profiles. Therefore, category-based market share may be increased.

- From a marketing perspective, beverage companies should respond to market signals in a timely manner or by proactive support of branding activities. Actually, the experience gained from new-product innovation may result in branding derived from the positive

relationship between the market and the learning organization system. At this point, as the product in operational marketing transforms to communication in communication marketing, beverage companies must gain the experience of communicating with consumers in the branding process. Brand concept is not only product-oriented but also a perception, considering how it improves according to product characteristics. Thus, new products must be analyzed from both businesses' and consumers' perspectives.

5.5.2 Reliability and organization performance.

- This study recommends that should carry out reliability analysis to ensure reliability of product. Reliability analysis can be divided into qualitative and quantitative. The former is intended to verify the various failure modes and causes that contribute to the unreliability of a product or system. The latter uses real failure data in conjunction with suitable mathematical models to produce quantitative estimates of product or system reliability to improve on the performance of the organization.

- The study also recommends that companies should implement reliability engineering which deals with the design and construction of systems and products, taking into account the unreliability of its parts and components. It also includes testing and programs to improve reliability. Good engineering results in a more reliable end product and thus improving organization performance.

- This study recommends that beverage companies should ensure reliability management which deals with the various management issues in the context of managing the design, manufacture and/or operation of reliable products and systems. Here the emphasis is on the business viewpoint, as unreliability has consequences in cost, time wasted, and, in certain cases, the welfare of an individual and organization performance.

5.5.3 Responsiveness and organization performance.

- The study recommends that beverage companies must pay attention to the factors affecting the quality of products such as price policy, store image, advertising, warranty, and brand image and should not talk boastfully about their product quality. Although their products are of high-level quality, they shouldn't boast about their products too much. Often, it will make the customers feel the products can't satisfy them as they highly expected before. Also, the dissatisfaction of your customers will happen.

- It is also recommended NBL focuses on customers' needs and reflects market knowledge creation, dissemination and usage belonging to existing customers and products. It should also discover consumers' unmet and latent needs and satisfying these needs by observing consumers' behaviors. It is achieved by working closely with end-users, conducting market experiments to explore future needs, and product cannibalism of sales of existing products thus improving on the organization performance.

5.6   Areas for Further Study / Research

This study focused on product quality in terms of (perceived quality, reliability and responsiveness), a further study should be carried out to undertake product quality by beverage companies as required by UNBS rules and regulations. A study should be carried out on product quality management and organisation performance in beverage companies in Uganda. The same study can be carried out in other manufacturing companies in Uganda.

Basing on the moderating variable (economic environment), a study should be carried out on inflation rate and organisation performance in beverage companies in Uganda.

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APPENDENCES

APPENDIX I

QUESTIONNAIRE

QUESTIONNAIRE ON THE IMPACT OF PRODUCT QUALITY ON ORGANIZATIONAL PERFORMANCE IN BEVERAGE COMPANIES IN UGANDA

Dear respondent,

I am **Patricia Namara** Masters student of Uganda Martyrs University Rubaga Campus and I am conducting research the effect of product quality on organizational performance in beverage companies in Uganda.I am pleased to inform you that you are one of the selected individuals who were randomly selected to respond to this questionnaire. The data collected using this questionnaire will be used to compile an academic research report to be presented to Uganda Martyrs University for award of a Master's Degree in Business Administration.

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

Yours Sincerely

……………………

Patricia Namara

RESEARCHER

SECTION A: BACKGROUND INFORMATION

Please answer the following questions by **ticking the box** with the most appropriate option:

1. Gender:

(a) Male ☐ (b) Female ☐

2. Age bracket:

(a) 20-30 Years ☐ (b) 31 -40 Years ☐ (c) Above 40 years ☐

3. Level of education;

(a)Certificate ☐ (b) Diploma ☐ (c) Bachelors ☐ (d) Master's degree ☐ (e) PhD ☐

4. Length of service with this organization;

(a) Less than 1 year ☐ (b) 1-3 years ☐ (c) 6-10 years ☐

SECTION B

In this section you are requested read the following statements, please tick the number that best indicate your opinion using the following scale; strongly disagree (1), disagree (2), Not sure (3), Agree (4) and strongly agree (5).

1. Perceived quality

	Statement	1	2	3	4	5
5	We perceived product quality as a very significant in maintaining existing customers					

		1	2	3	4	5
6	Our subjective product quality is based on customers' perceptions of things like product image or product design					
7	We have the brand power and dominant market share					
8	We provide information on product quality to our customers					
9	Our product quality influence the purchase decision and brand loyalty of our customers					
10	We are able to charge higher price basing on quality of our products.					

2.   Reliability

	Statement	1	2	3	4	5
11	In my organization, reliability of a product gets determined by the decisions made during the pre-production stages					
12	We are able to specify the probability that the product will be operating properly over a specific period of time					
13	There is a constant demand for our products					
14	I base on the actual usage time of the product to calculate the failure rates					
15	We are equipped with new product technology to ensure reliability					
16	We always ensure availability of products					

3.   Responsiveness

	Statement	1	2	3	4	5
17	Our products have fundamental advantages it can offer to a customer compared to our competitors.					
18	Our product quality is generally organized around customers' needs.					
19	In this organization, highly profitable customers are treated accordingly					
20	I maintain customer relationship to develop a pattern of repeat purchase through habit or loyalty.					
21	We make sure that our customers are aware of the strengths and deficiencies of the companies that serve them					

4 Organizational Performance

	Statement	1	2	3	4	5
22	We continuously strive to increase customer base					
23	Customer retention is considered to be the primary goal for the amount of purchase to growin this organization.					
24	We have high market share due to high quality product given to our customer.					
25	Our company's customers recommend someone to buy our products, thus creating a high degree of loyalty is reflected.					

26	We pay much attention to product quality as a starting point for generating customer loyalty.					
27	We use advertising and other promotional techniques to make consumers less price-focused and more concerned with core product benefits					

Thank you very much for your time

Namara Patricia

APPENDIX II

INTERVIEW GUIDE

INTERVIEW GUIDE FOR TOP AND MIDDLE MANAGERS

1) What is the effect of perceived quality on organization performance?

2) What is the influence of reliability on organization performance?

3) What is the relationship between responsiveness and organization performance?

4) What factors that influence perceived quality of a product?

5) What ways can be used to improve on customer responsiveness?

6) How can responsiveness of the customer be best improved in this organization?

7) Who can the market share be improved?

8) How can the performance of this organization be improved?

APPENDIX III

DOCUMENTARY CHECKLIST

1) Check for the report from the sales team performance.

2) Check for the product quality control reports

3) Check for reports on customer complaints

4) Check for minutes from the production department

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Source: Krejcie& Morgan (1970)

Note:-

N =is population size.
S =is sample size.