

**THE RELATIONSHIP OF INVENTORY MANAGEMENT ON PERFORMANCE OF
FOOD MANUFACTURING COMPANY**

**A CASE STUDAY OF BROOKSIDE DAIRY RUIRU BRANCH IN KIAMBU
COUNTY**

BY

TERESIAH NJERI.W

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE IN
BACHELOR OF PURCHASING AND SUPPLY MANAAGEMENT OF GRE TSA
UNIVERSITY.**

SEPTEMBER 2019

DECLARATION

This research project proposal is my original work and has not been presented for award of degree or any other award in other institution.

Signature.....

Date.....

NAME: TERESIAH NJERI.W

BUS-4-2127-17

This research project proposal has been presented for examination with the approval as the university supervisor.

Name

Signature

Date.....

DEDICATION

I dedicate this project to all my family members my parent Mr. and Mrs. Waithiru my supervisor Madam Fridah for their immense support above all I thank Almighty God for being my guardian throughout my project period

ACKNOWLEDGEMENT

My deepest gratitude to the almighty God who gave me the gift of life and the strength to go through the course and in particular to undertake this research project proposal. To my supervisor madam Fridah Kathure, am grateful for the support and the guidance you gave me through out. This work would not be complete without your guidance and support. Thank you.

I would also like to acknowledge the Gretsia University fraternity for providing a conducive environment that was a key to my completing of my research project proposal as well as my studies.

Lastly I would like to extend my sincere appreciation to Brookside dairy Limited for allowing me to undertake my research in their organization.

DEFINATION OF KEY TERMS

Demand management: this involve a unified method of controlling and tracking business unit requirement and internal purchasing operation

Organization: It refers to two or more people working together in a coordinated manner to attain a group result (Bishop 2008)

Demand forecasting: In procurement this is the process in which historical sales data is used to develop an estimate of an expected forecast of the customer demand.

Inventory control: This an essential factor under which its important in the process whereby it facilitates the systematic flow of activities in any particular given organization

LIST OF ABBREVIATION

SPSS	:	Statistical Package for Social Sciences
GDP	:	Gross Domestic Product
ECA	:	East and Central Africa
GOK	:	Government of Kenya
FFGD	:	French Food Group Danone

ABSTRACT

The purpose of this study will be to establish the relationship of inventory management on the performance of food manufacturing company in Kenya. The study will mainly focus on Brookside Dairy Limited. The specific objectives included investigating how inventory control, demand management and demand forecasting affect the organization food performance. The company has been facing challenges on production performance of food and therefore the researcher chooses to concentrate on the above named objectives to find the solution to the problem. The researcher used a case study research design. The researcher was guided by the following research questions; How does demand management affect the relationship performance of food manufacturing companies as the case of Brookside dairy company? How does demand forecasting influence the relationship of performance of food manufacturing companies as the case of Brookside dairy companies? How does inventory control influence the relationship performance of food manufacturing companies as the case of Brookside dairy company? The theoretical framework involved two theories that is; organization learning theory and pecking order theory. The study target population was 100 employees from the three Brookside Dairy departments from which a sample of 30respondents will be drawn for the study using 30% of the target population. The population target includes purchasing department, sales and marketing department and also stores department. Stratified sampling technique was used where the researcher divided the population in to separate groups that is strata then a probability is drawn from each group to select a sample. Structured and unstructured questionnaire and interviews were used by the researcher to collect data. The data collected was analyzed through various statistical methods such as frequency count and percentage through the used graphs and pie- charts for ease of reference and interpretation of the results. It was observed that demand management is the key determinant affecting the relationship of inventory management on performance of food manufacturing company. The study concluded that there is need for the management to take measure on improving demand management, inventory control as well as demand forecasting to ensure effective result on performance of food production in the company.

TABLE OF CONTENTS

DECLARATION.....	1
.....	
.....	
.....	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
DEFINATION OF KEY TERMS.....	v
LIST OF ABBREVIATION	vi
ABSTRACT	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
CHAPTER ONE	1
1.0 Introduction.....	1
1.1 Background of the study	1
1.1.1 Brookside Dairy organization	2
1.1.2 Profile of Brookside dairy	2
1.2 Statement of the problem.	3
1.3 Objectives of the study	4
1.3.1 General objectives	4
1.3.2 Specific objectives.....	4
1.4 Research questions	4
1.5 Justification of the study.	5
1.6 Scope of the study.....	5
1.7 Significance of the study.....	6
1.8 Limitation of the study	6
CHAPTER TWO	7
2.0 LITERATURE REVIEW	7
2.1 Introduction.....	7
2.2 Theoretical framework	7
2.2.1 Organization learning theory.....	7
2.2.2Pecking order theory	7

2.3 Conceptual framework (Analytical module)	8
2.4 Literature review	8
2.4.1 Demand management	8
2.4.2 Demand forecasting	9
2.4.3 Inventory control	9
2.4.4 Food performance	10
2.5 Empirical literature review	10
2.6 Research Gap	10
2.7 Summary of the literature review	10
CHAPTER THREE	11
3.0 RESEARCH METHODOLOGY	11
3.1 Introduction	11
3.2 Research design	11
3.3 Target population	11
3.4 Sampling and Sampling Technique	12
3.4.1 Sampling Frame	12
3.4.2 Sampling technique	12
3.5 Data collection instruments	13
3.6 Data collection procedure	13
3.7 Pilot Testing	13
3.7.1 Validity of research instruments	13
3.7.2 Reliability of research instrument	13
3.8 Data analysis and presentation	14
3.8.1 Data analysis	14
3.8.2 Data presentation	14
CHAPTER FOUR	15
4.0 DATA ANALYSIS, FINDINGS AND INTERPRETATION	15
4.1 Introduction	15
4.2 Analysis and interpretation	15
4.2.1 Response Rate and Education level	15
4.2.3 Age brackets of the respondent's	16
4.2.4 Gender of the respondent's	17
4.2.5 Working experience of respondents	18

4.3 The effect of demand management on performance of food manufacturing company	20
4.4 Effect of inventory control on food performance.....	23
SUMMURY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS	29
5.1 INTRODUCTION.....	29
5.2 SUMMARY OF FINDINGS	29
5.4 RECOMMENDATION.....	30
5.3 CONCLUSION OF THE STUDY	31
REFERENCE.....	32
APPENDIX 1.....	34
LETTER TO THE RESPODENTS.....	34
APPENDIX 2.....	34
BUDGET	34
APPENDIX 3.....	35
WORK PLAN	35
APPEDIX	36
QUESTIONNAIRE.....	36

LIST OF TABLES

Table 3.2 Sample frame	12
Table 4.1 Education response rate.....	15
Table 4.2 Age bracket response	17
Table 4.3 gender responds	18
Table 4.4 working response rate.....	19
Table 4.5 Response on whether demand management affect the relationship of performance	20
Table 4.6: response of demand management program.....	21
Table 4.7 Response on the effect of demand management in the organization	22
Table 4.8 Response on the inventory control method available in the organization	23
Table 4. 9 Response on the inventory control used in the organization	24
Table 4.10 Response on whether demand forecasting affect food performance.....	25
Table 4.11 Response on method of demand forecasting used in the organization.....	26
Table 4.12 : Response on effective demand forecasting method in the organization	27

LIST OF FIGURES

Figure 4.1 Education response rate	16
Figure 4.2 Age bracket response.....	17
Figure 4.3: gender responds	18
figure 4.4 working response rate	19
Figure 4.5: Response on whether demand management affect the relationship of performance	20
Figure 4.6: response of demand management program	21
Figure 4.7: Response on the effect of demand management in the organization.....	22
Figure 4.8 : Response on the inventory control method available in the organization.....	23
Figure 4. 9: Response on the inventory control used in the organization	24
Figure 4.10 Response on whether demand forecasting affect food performance	25
Figure 4.11 Response on method of demand forecasting used in the organization	26
Figure 4.12 : Response on effective demand forecasting method in the organization	27

CHAPTER ONE

1.0 Introduction

This chapter contains the background of the study, statement of the problem, objectives and research questions, significance of the study, limitation and scope of the study.

1.1 Background of the study

Inventory is the stock of any item or resource used in an organization. According to (Duru, Oleka Okpe, 2014), inventory constitutes a substantial proportion of the current asset group. It represents investments made for obtaining a return. Inventory management refers to management of stocks. It also refers to maintaining the organization inventories at a level that a company will require minimal financial capability consistency with other management targets (Kwadwo, 2016). Inadequate stock in the manufacturing organization has an adverse potential impact on a suitable business running while stock in excess involves extra cost which results to company profit reduction (Panigrahi, 2013).

Performance of food manufacturing in the company under the influence of inventory management has been recognized as a major area in production process in that it should meet the aspect of production demand. Many food manufacturing industries have identified the benefits accrued from inventory. These include benefits of economies of scale which enable the manufacturing industries to balance demand and supply, enable specialization in manufacturing, provide protection from uncertainties in demand and order cycles act as a buffer between critical interfaces within the channel of distribution, allow purchase of items that are going out of production, seasonal operations continue, make full loads and reduce transport cost, give cover for emergencies and are profitable when inflation is high. However, the food manufacturing industries inventory mainly deal with highly perishable products and thus tend to purchase raw materials and work in progress in small quantities to avoid losses.

Production performance on food manufacturing should also include the creation of technology and application in order to control and monitor the production and delivery of various goods and services that's by introduction of new modern use of technology. This reduces human error and is more accurate when dealing with inventory management.

1.1.1 Brookside Dairy organization

Brookside Dairy Limited was founded or rather commenced in the year 1993 after a decision made by the government in 1992 to liberalize the local dairy industries and went through hard times. It had grown into Kenya's second largest producer of milk and dairy products when Abraaj began negotiating its investment.

After Kenyan government deregulated the dairy industry in the year 1992 the sponsors saw an opportunity to complete in a Kenya economic sector that had formerly been dominated by KCC. Brookside Dairy Limited is the market leader in (ECA) East and Central Africa.

Brookside Dairy limited is also in partnership with over 300,000 farmers all over Kenya. The industry aims at producing high quality products which is done by improving the skills of human resource available, having quality circle, staff training and seminars throughout the year in and outside Kenya with the assistance of their partner at Tetra Pak Kenya.

As an organization, Brookside has corporate social responsibilities by being sponsors in different sports, sponsoring the freedom from hunger walk, donating money, uniforms and equipment to the police, providing free healthcare, supporting the needy and also the keynote cup treat.

The industry has installed state of the art equipment and produces 400,000 liters a day with the ultra-modern 800,000 liters' capacity milk processing plant. It is fully automated and this helps reduce physical handling and ensures proper sanitation, standards of products produced.

Its products are consumed both locally and for export; they include dairy fresh, long life milk, butter, ghee and yoghurt. BDL produces monthly newsletters so as to inform stakeholders of the industry's progress. It provides its products through distribution agents, depots and subagent to outlets in East Africa.

1.1.2 Profile of Brookside dairy

Brookside Dairy Limited is said to be one of the processing company in Kenya and it's also the largest economic Dairy in East Africa. Brookside Dairy is one of a number of Dairy industry chain in Kenya that serve the region including the leading milk industrial markets. The company was founded in the year 1993 by member of the Jomo Kenyatta family.

The main objective at the time was to create job opportunities and also to create outlets for the equitable distribution of commodities. French food group Danone (FFGD) has also given the

Brookside dairy limited access to its innovation team and its milk products for local production after buying 40% stake in Kenyan dairy company.

The firm has itself been on an expansion drive in recent years taking over market rivals such as Spin knit Dairy, Ilara and Delamere. Brookside has a portfolio spanning from fresh to powdered milk yoghurt and butter.

1.2 Statement of the problem.

This study begins with the aim examining the relationship of inventory management on the performance of food manufacturing company a case study of Brookside Dairy Company limited. The research tends to obtain how the variable; inventory control, demand management and forecasting demand affect the relationship of food performance in the company.

The role of inventory management is to maintain a desired stock, level of specific product or item, being in a position to balance the economic conflict of not holding less inventory or too much inventory at any production performance time (Kumar & Bahl, 2014). In Kenya majority of organization are adopting inventory management with the aim of enhancing performance (Swaleh & Were 2014).

For the last 20 years, Kenyan dairy sector has grown to one of the best examples of the agri-business around the world, in that the neighboring countries sends their delegations of farmers and agriculture ministry officials to visit dairy milk processors and other related services.

Though the above statement has meant that the milk production in Kenya is at optimal levels, there are challenges that need be addressed to sustain better milk production at Brookside dairy.

Supplier of the material needed for production performance have been complaining for not getting payed on time therefore, they have lagged behind in delivering of production material to the organization (GOK, Report 2015). The customers have not been left behind as they complain of the company not meeting their demand.

Access to inventory management has been identified as a dominant constraint the company today (Lader,2006). A world Bank study found that about 90% of the businesses surveyed stated that credit was a major constraint to investment (Parker et al. 2005). The dairy sector accounts for 14% of the agricultural gross domestic product (GDP) and 3.5% of the total GDP. For many

years' performance has been poor due to price fluctuation, massive wastage of milk during rainy season when animals are feed in plenty feeds.

According to Kenya dairy board, 4 billion liters of milk produced back in year 2016, 2 billion liters of milk was consumed at the household level in Kenya, in addition to that, for about 30% of the milk is processed thus showing that the highest amount of milk remain unprocessed creating room for other players to operate. Lack of proper demand management which is a unified method for controlling and tracking business unit requirement and internal purchasing operation. There is need for Brookside Dairy to embrace inventory management process to balance the customer's requirement in order to be more competitive and effective in the market industry.

1.3 Objectives of the study

1.3.1 General objectives

The main objective is to assess the relationship of inventory management on the performance of food manufacturing company under Brookside Dairy Limited as a case study

1.3.2 Specific objectives.

- a) To find out how demand management affects the relationship performance of food manufacturing companies
- b) To find out how demand forecasting affect the relationship performance of food manufacturing companies.
- c) To find out how inventory control affect the relationship performance of food manufacturing companies.

1.4 Research questions

- a) How does demand management affect the relationship performance of food manufacturing companies as the case of Brookside dairy company?
- b) How does demand forecasting influence the relationship of performance of food manufacturing companies as the case of Brookside dairy companies?

- c) How does inventory control influence the relationship performance of food manufacturing companies as the case of Brookside dairy company?

1.5 Justification of the study.

Through this study, local industries understand that involvement of demand management allows the balancing of the customer's requirement with the capability of the supply chain. According to (Rose 2016) good demand management process can enable the company to be more proactive to anticipated demand and more reactive to unanticipated demand. To enable great work force in the company Brookside Dairy company need, take concern on demand management. Demand management facilitates planning and use of resources for profitable business results. The study also emphasis on demand forecasting for the company as it can be utilized to better align sales and marketing effort to reduce the risk of the stock out which results in lower turnover rates. Demand forecasting is the process in which historical sales data is used to develop an estimate of an expected forecast of customer demand. To business, demand forecasting provide an estimate of the amount of goods and services that its customer will purchase in the foreseeable future. Inventory control method is employed to maximize a company's use of inventory. Under the stated information above if Brookside Dairy fall on the positive exercise it will thrive in the business and fight competition from other competitors

1.6 Scope of the study

The study was conducted at Brookside Dairy company, located in Ruiru, Kiambu County. The study strives to investigate effects of demand management, inventory control and demand

forecasting on inventory management in food performance. The emphasis of the study also focused on the procurement department, purchasing and supplies, production, sales and marketing departments. The study includes how Brookside Dairy Limited serves the public, which are both internal and external customers. The research chooses the case study for Brookside Dairy limited to conduct her research on the fact that the industry has been facing many challenges on inventory management and considered that it's among the largest dairy industry in the country.

1.7 Significance of the study

Through this research study, individuals, private and public sector will benefit in one way or the other.

a) Government of Kenya and other private sector

The government will be able to come up with various way to improve technology in firm businesses to avoid challenges in the future development and also create many sources of fund that which can fund the organization as source of capital to start their business

b) The management of Brookside Dairy

The researcher will help the procurement division of the company to understand fully the challenges faced when dealing with inventory management.

c) Other researcher

Through the research, it will create an important role that will help other researcher to go in the same field and conduct research.

1.8 Limitation of the study

a) Confidentiality

Being confidence while answering or responding to questions ask by a researcher is very sensitive especially at workplace. The researcher should approach the respondent in the right way and also ensure that the information should not be used elsewhere other than research

b) Bureaucracy

The bureaucracy nature of offices in the firms and the respondents creates bigger challenges to the researcher on reaching to the respective individual with accurate data that the researcher will require during her study.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The chapter presents a review of literature based on the research topic and the study objectives. It contains theoretical framework, conceptual framework research gaps and summary of the entire chapter.

The purpose of the study is to determine effects of inventory management on food performance at Brookside Dairy Limited. The study also looks at factors such as financial capability, lead time, automation, forecasting.

2.2 Theoretical framework

Theoretical review of literature involves locating reading and evaluating all relevant information captured and cited from the books and the journals report from previous studies observation and opinions related to the study (Magenda & Magenda 1999)

A theory is a reasoned statement or groups of statements which are supported by evidenced meant to explain phenomena. A theoretical framework is a collection of interrelated ideas based on theories (Kombo & Tromp 2006). According to (Everett & Hotelman, 2006) a theoretical review is a collection of interrelated concept like a theory which can be classified according to their scope, function, structure and levels but not necessarily so well worked out

2.2.1 Organization learning theory

Common (2004) discussed the concept of organizational learning in a political environment to improve public and policy-making. The author details the initial uncontroversial reception of organizational learning in the public sector and the development of the concept with the learning organization. The concept of policy learning and policy transfer are then defined with detail on the conditions for realizing organizational learning in the public sector.

2.2.2 Pecking order theory

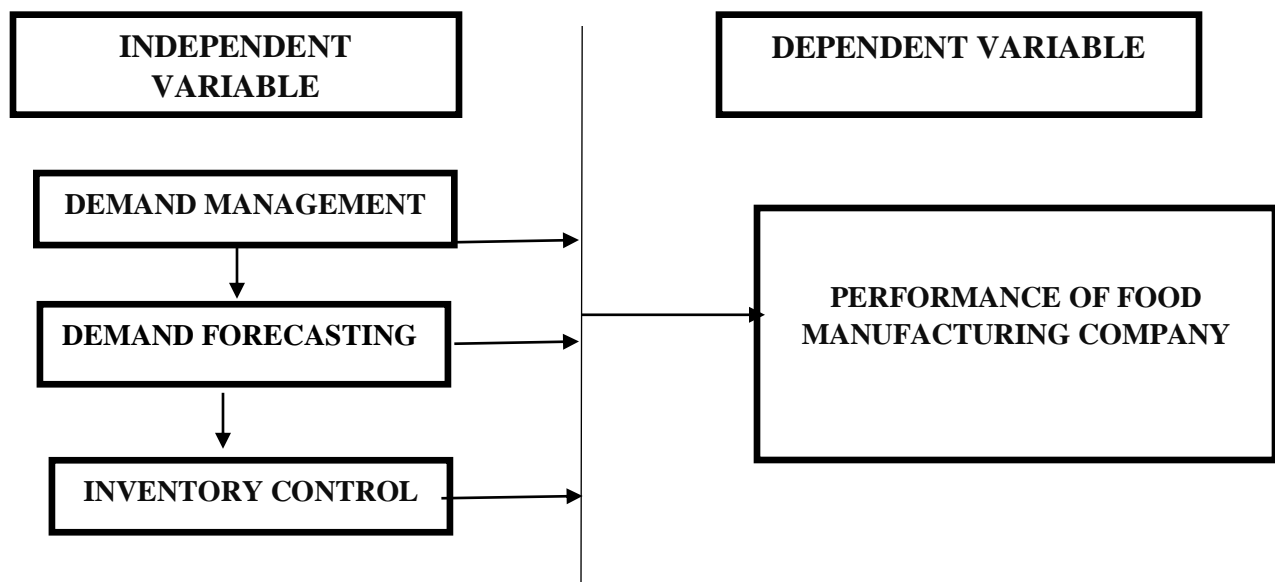
Pecking order theory was suggested by Donaldson in 1961 and further modified by (Stewart C. Myers and Nicolas M in 1984). It states that companies prioritize their sources of financing from

international financing to equity. Pecking order theory is a financial theory, which is considered in relation to small operated business enterprise financial management (Atiyet 2012).

2.3 Conceptual framework (Analytical module)

Conceptual framework is a scheme of concept (variables) which the researcher operationalizes in order to achieve the set objectives (Mugenda & Mugenda 2003).

The figure below illustrates the conceptual framework of the study identifying the dependent and independent variables which forms the basis of the study.



2.4 Literature review

2.4.1 Demand management

Demand management is an essential factor under which it is essentially valid whenever a company in turn intends to look deeply and vehemently in the process of the manufacturing of any production activity (Paul,2016)

Under this factor most companies that in turn are working for any organization so far with the mandate to venture in the food production or agricultural sector as a whole must comprehensively in turn look at the essential factors on how to management the level of demand and supply in any organization in turn.

A researcher by the name of (Alfred 2018) suggested in turn that demand management should be an essential key factor under which an individual may be able to critically factor out the essential ways under which one may be able to control, the demand and supply of any given company so as to facilitate the maximization of a firm's potential out-put gain in return.

2.4.2 Demand forecasting

Demand forecasting in procurement is the process in which historical sales data is used to develop an estimate of an expected forecast of the customer demand. Demand forecasting are such as passive demand forecasting which is carried out for a stable business with a conservative growth plan and external macro level demand forecasting dealing with broader market and depends on macroeconomic environment.

According to (Rose2016) the researcher suggested that it is collectively important for any organization to have the essential basic demand forecasting under where they may be able to look at the different methods under which one may be able to tackle out wisely on the ways procurement industry is collectively on so as to ensure that there is a systematic flow of information and transition of business transactions to both the public as well as the state bodies who in turn may see it wise to perform this tasks.

2.4.3 Inventory control

Inventory control is an essential factor under which its important in the process whereby it facilitates the systematic flow of activities in any particular given organization (Little,V. 1997)

According to peter (Druker 2009) he suggest in turn that inventory control should be a common factor under which it impact on ensuring that all the necessary activities are conducted accordingly in the respective area of activity.

He further states that for every activity being conducted in mostly the food and industry sector its essential to ensure that the flow of food commodities does not necessarily cause any out flow of activities.

Its therefore essential to state that the flow of activities in the food production should be strictly looked upon by any individual for inventory control is employed to maximize a company use of inventory

2.4.4 Food performance

Food performance is the consistent demonstration of the type of performance behavior and results that are deemed necessary to support the company strategic objectives. And desire to cooperate culture (John Shield 2007). To satisfy customer firms do much but do not pay attention of food performance. According to the result study, conducted by (Yang 2008) on performance, shows that the performance level of production cannot be verified by company not imposing the right procedure to with stand their performance.

2.5 Empirical literature review.

This segment gives out a descriptive literature review of some of the necessary related literature works under which it shows in turn the relationship between the literatures captured by the researcher in terms of their past research works. According to (Nanaka &Takeuchi, 2001), workplace relationship such as training development should be fostered to promote transfer of tactic of knowledge. food performance in the relation to inventory management a company is very important as it enable the company to mark the growth strategies.

2.6 Research Gap

Managers especially in the Brookside dairy company have to deal with the performance of food manufacturing; however, there are challenges of privately owned businesses. There have been studies on food performance manufacturing but few of the researchers have elaborated on how private owned businesses challenges government owned business Through procurement management and the key objective explained above it I vital for Brookside dairy achieving corporate objectives and vision.

2.7 Summary of the literature review

It can thus be identified that the activity of procurement currently revolves under the following factors and variables such as the effect of inventory control, the effect demand management and the effect of demand forecasting in order to facilitate a further significant performance in the food and manufacturing industry in respect to the comprehensive literature review capture

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides information on the methodology that will be used in the study. The chapter also covers the overall strategies such as the research design, target population sampling frame and techniques data collection procedures and methods data analysis and pilot testing

3.2 Research design

A research design refers to a plan or a framework that acts as a guide to a researcher on how to perform the investigation. (Orodho 2004) defines research as a scheme that is used to give answers to research problems. Also according to (Politet *et a.,l* (2001); the research design is a plan for conducting the study in order to answer the research questions. It indicates the steps used to be followed in conducting the research

The study will use a case study design method to identify and describe the effects of inventory management on the performance in food manufacturing organization at Brookside Dairy.

3.3 Target population

Target population is that population is the population which the researchers want to generate results as defined by (Mugenda &Mugenda 2003).

The target population will be the Brookside dairy staff that will include department involved in inventory control management process.

The study population will be narrowed down to comprise store department, purchasing department and sales and marketing department.

Data available includes that there are 100 employees in the three department in Brookside Dairy limited.

Table 3.1 target population

Employee category	subtotal
Purchasing department	40
Sales and marketing department	25
Stores department	35
Total	100

3.4 Sampling and Sampling Technique

3.4.1 Sampling Frame

The purpose of sampling is to provide a means for choosing the particular member of the target population that will be studied. The obtained sampling frame of this study is 100 staff in the Brookside Dairy.

Table 3.2 Sample frame

Total population	30% of the population	Sample size
100	30	30

3.4.2 Sampling technique

According to (Ordhod & Kombo 2002) sampling is the process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristic found in the entire population. 30% of the accessible population can represent the total population (Mugenda &Mugenda 2003). Stratified random technique sampling will be used to ensure that each member of the population has an equal chance of being included in the sample

3.5 Data collection instruments

The study used questionnaires as a method of collecting for collecting. A questionnaire is a list of questions usually printed, submitted for replies that can be analyzed for usable information (Harris and Brown, 2010). In order to data collection to be successful the questionnaires were prepared relating them to the objective of the research study.

3.6 Data collection procedure

The questionnaire was self-administered to the employees to be completed by them at their homes and later on returned anonymously to the box set up for the purpose by a specific date. Respondent were reminded two days before the due date to return their questionnaires if not ready after the two days they were added one day. This was to ensure a high return rate of the filled questionnaires.

3.7 Pilot Testing

3.7.1 Validity of research instruments

Validity is also the extent to which a measure measures what you intend to measure. Validity is the accuracy and meaningfulness of inferences which is also the degree to which results obtained from the analysis of data. According to (Rapando 2010) some aspect of validity will be determined for the instruments: face validity by assessing the items on the instrument and ensuring they appear relevant, meaningful and appropriate to the respondent. Content validity is ascertained by the supervisors who consider the measuring techniques and advise whether it measured what it was intended to measure.

3.7.2 Reliability of research instrument

(Gay 1996) defined reliability as the degree of consistency that the instrument demonstrates. The researcher used pilot testing method because it was expected that some items or questions would have several possible answers. Reliability of a measure concerns its ability to produce similar results when repeated measurements are made under identical conditions (Bordens & Bruce, 2008). Since the pilot study is carried out on the same target population but different respondents, many economic and geographical characteristics were shared, thus variations could be minimal.

3.8 Data analysis and presentation

3.8.1 Data analysis

The researcher used quantitative and qualitative techniques for data analysis. Quantitative approach was to collect and analyze data from the questionnaire close ended questions. Qualitative was used to analyses open ended questions on the questionnaire. [SPSS] statistical package for social science software version 22 was used for statistical analysis since there is an involvement of quantitative data collection.

3.8.2 Data presentation

Data was presented using tables and figures. The main aim was to help users of the study to understand the entire information and facts gathered in an effective manner. The data was therefore presented using frequency distribution tables, pie charts, bar graphs and correlation coefficients

CHAPTER FOUR

4.0 DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

Chapter four presents and discusses the analysis of data collected, data analysis findings and interpretation for the various respondent.

4.2 Analysis and interpretation.

4.2.1 Response Rate and Education level

Concerning the level of education of the employees in Brookside Dairy Limited the high education level accumulated under Bachelor's degree with 33 %of the respondent, followed by diploma level with a respondent of 40% master's degree level with 17% doctorate with a level of 10% while certificate level there was none. This shows that Brookside Dairy organization has a high level of educated employees

Table 4.1 Education response rate

Literacy level	frequency	Population
Doctorate	3	10%
Masters	5	17%
Bachelor 's degree	10	33%
Diploma	12	40%
Certificate	0	0%
Total	30	100%

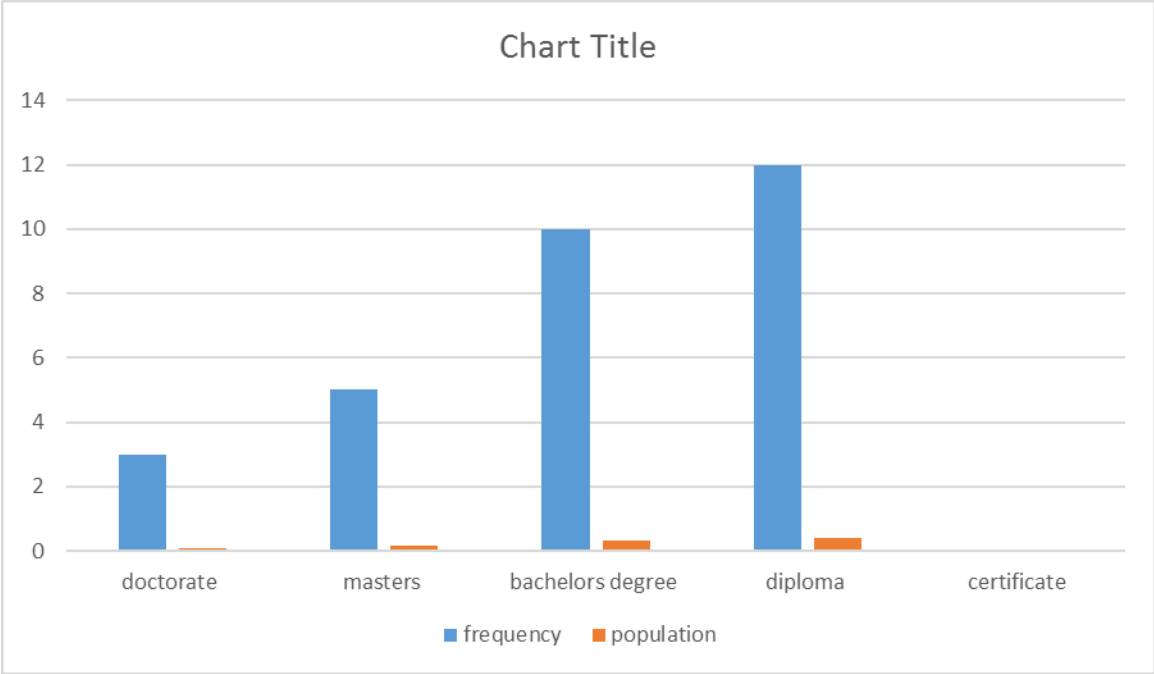


Figure 4.1 Education response rate

4.2.3 Age brackets of the respondent’s

According to the researchers finding the Brookside Dairy employees age were as follows according to the percentage of the respondent; the age between 20-28 years which gives 17%, age bracket between 29-35 years with a highest percentage of 50%, and the least age bracket appeared to be over35 years with a percentage of 33%. Majority of the employee in the organization range to the age between 29-35 years.

Table 4.2 Age bracket response

Age bracket	Frequency	Percentage
20-28	5	17%
29-35	15	50%
Above 35	10	33%
Total	30	100%

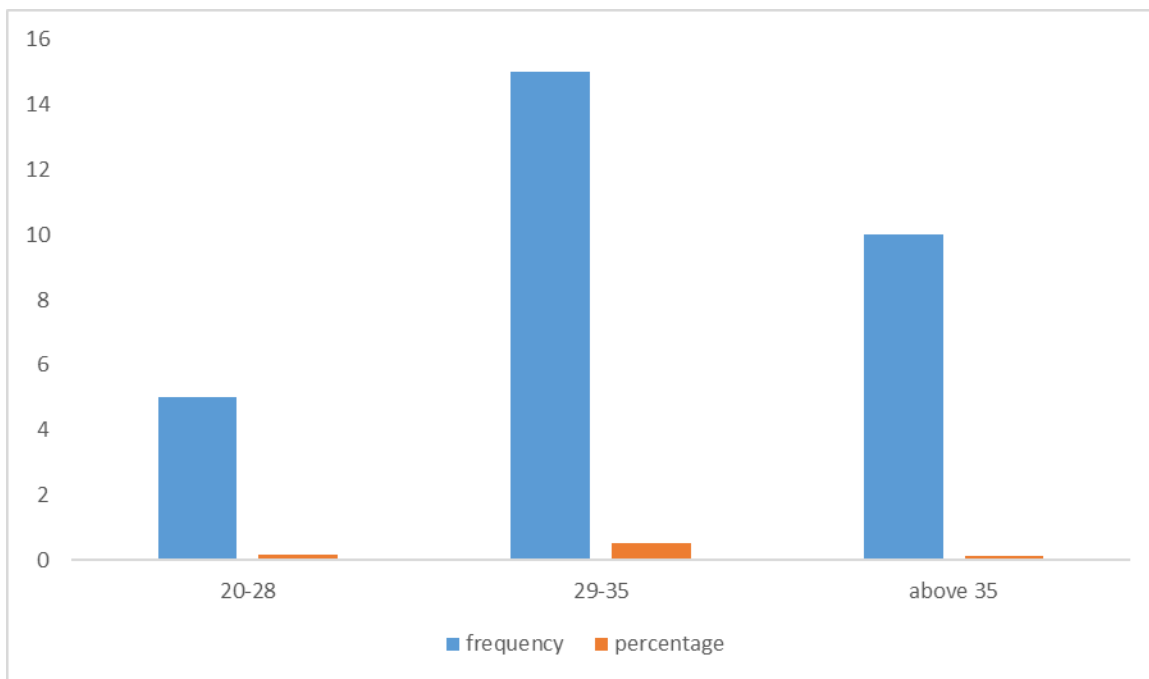


Figure 4.2 Age bracket response

4.2.4 Gender of the respondent's

The gender respondent of the employees was as follows according to their response; the female appeared to have the highest percentage of 63% followed by the male employees in Brookside Dairy organization with a percentage of 37%.

Table 4.3 gender responds

Gender of the respondent	Frequency	Percentage
Female	19	63%
Male	11	37%
Total	30	100%

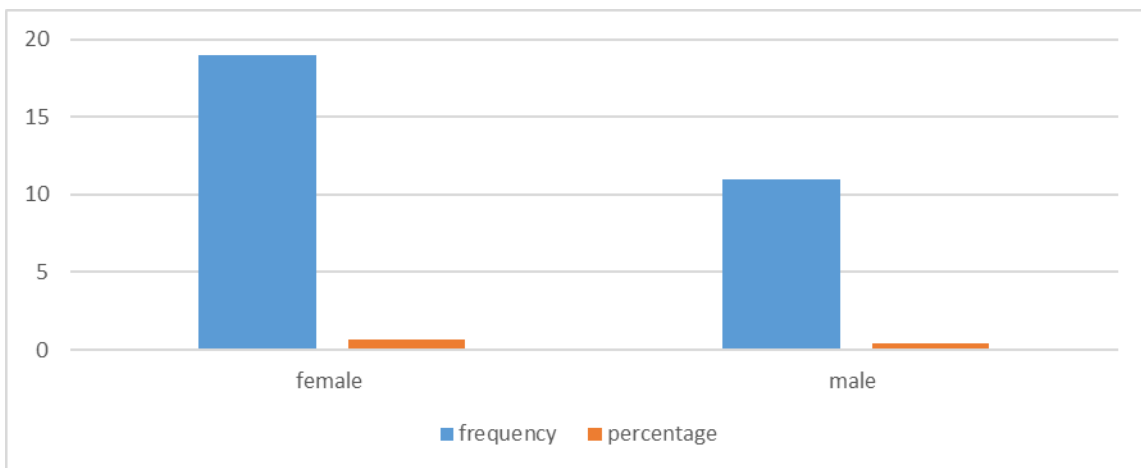


Figure 4.3: gender responds

4.2.5 Working experience of respondents

The researcher was able to examine on the respondents working experience and thus was able to observe that 57 % of the respondents had acquired a working experience of between 1-10 year, 27% was extracted from employee with the experience of 10-20 years of work while the employees with experience of work above 20 years had a percentage of 17%.

Table 4.4 working response rate

Working experience	Frequency	Percentage
1-10 years	17	57%
10-20 years	8	27%
Above 20years	5	17%
Total	30	100%

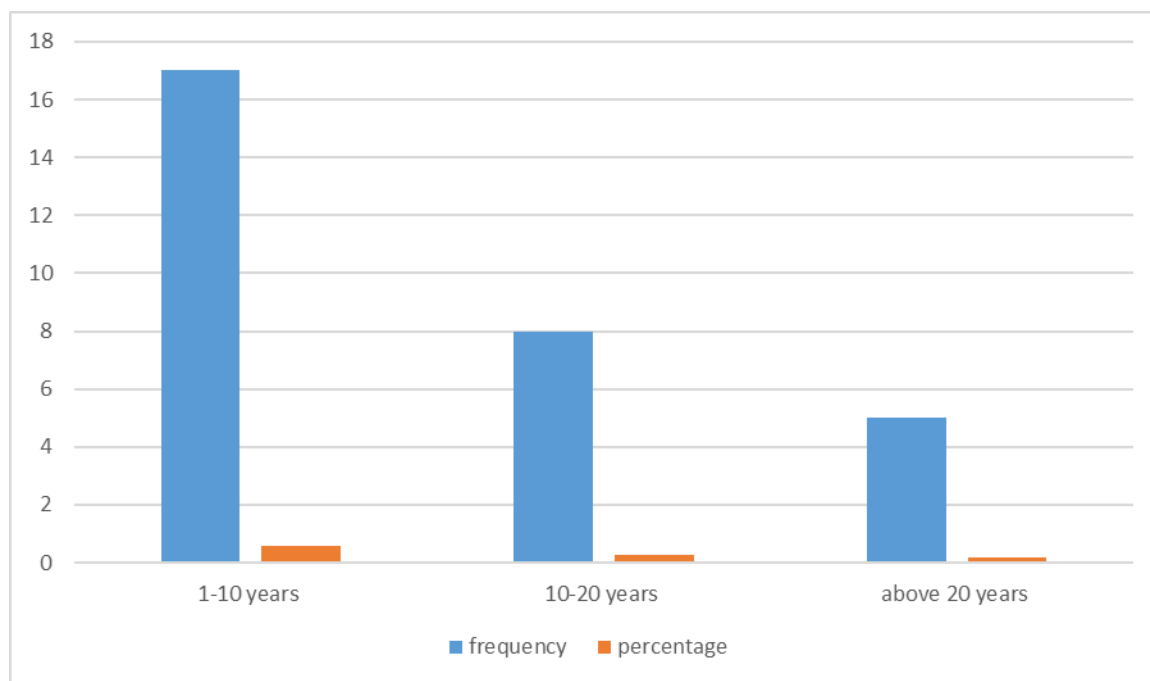


figure 4.4 working response rate

4.3 The effect of demand management on performance of food manufacturing company

Table 4.5 Response on whether demand management affect the relationship of performance

Response rate	Frequency	Percentage
Yes	23	77%
No	7	23%
Total	30	100%

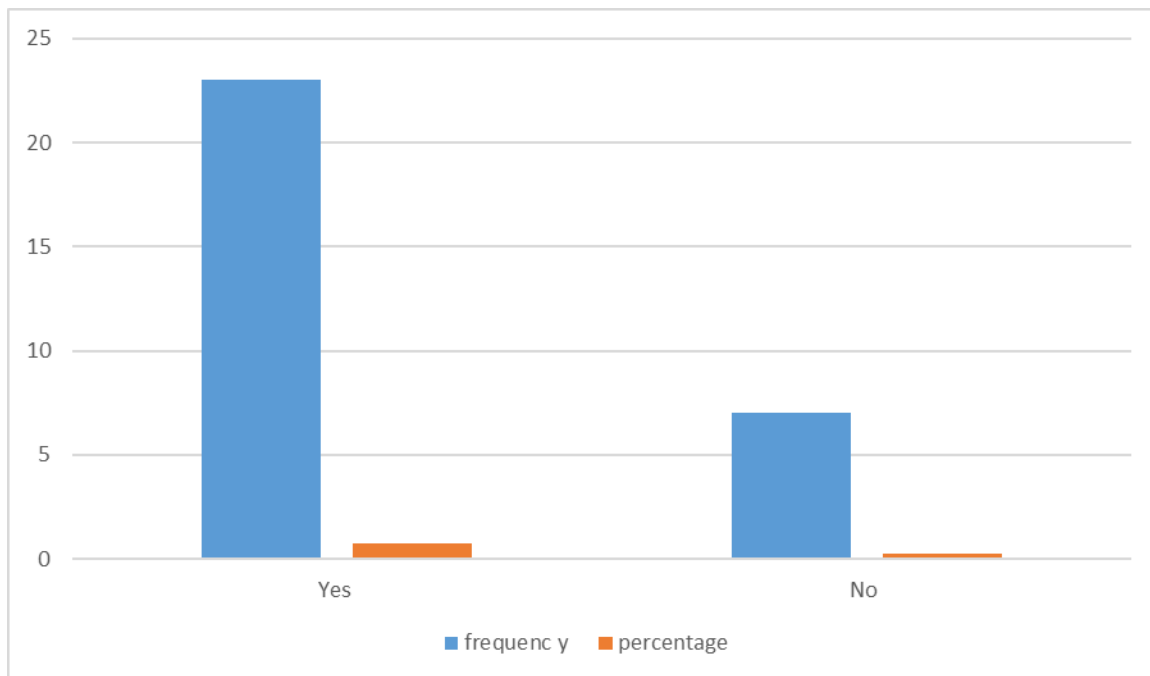


Figure 4.5: Response on whether demand management affect the relationship of performance

From the research analysis ,77% of the respondent agreed that demand management is a major factor that involve relationship performance while 23% disagreed.

Table 4.6: response of demand management program

Opinion	Frequency	Percentage
Best	15	50%
Moderate	9	30%
Fairs	6	20%
Total	30	100

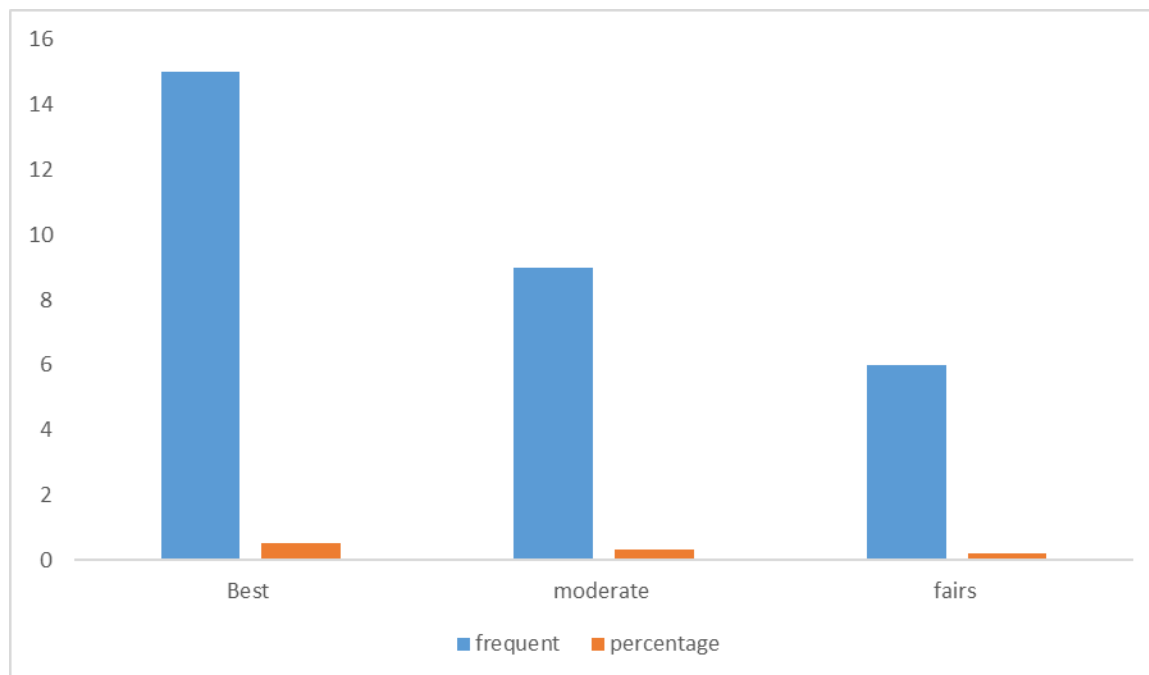


Figure 4.6: response of demand management program

Table 4.7 Response on the effect of demand management in the organization

Response rate	Frequency	percentage
Yes	24	80%
No	6	20%
Total	30	100%

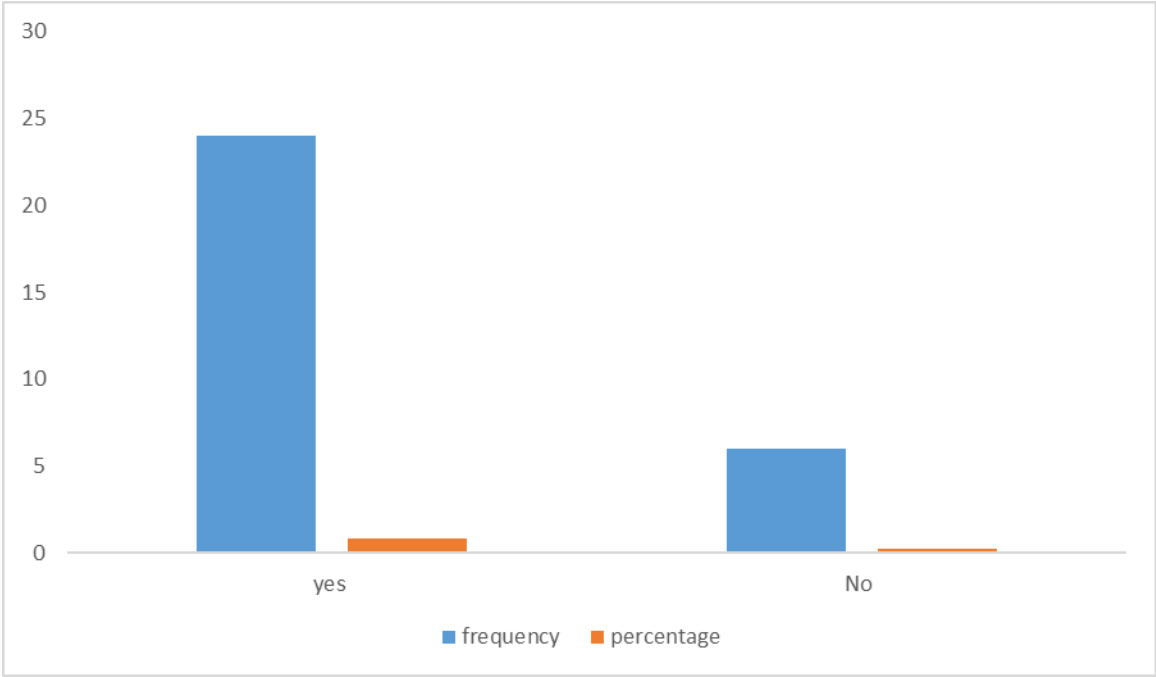


Figure 4.7: Response on the effect of demand management in the organization

80% of the respondents indicated that there was demand management effect in the organization while the remaining percentage 20% of the respondents shows that demand management in the organization had no effects whatsoever.

4.4 Effect of inventory control on food performance

Table 4.8 Response on the inventory control method available in the organization

category	Frequency	percentage
Contingency planning	14	47%
Regular auditing	7	23%
First -in first- out	6	20%
Accurate forecasting	3	10%
Total	30	100%

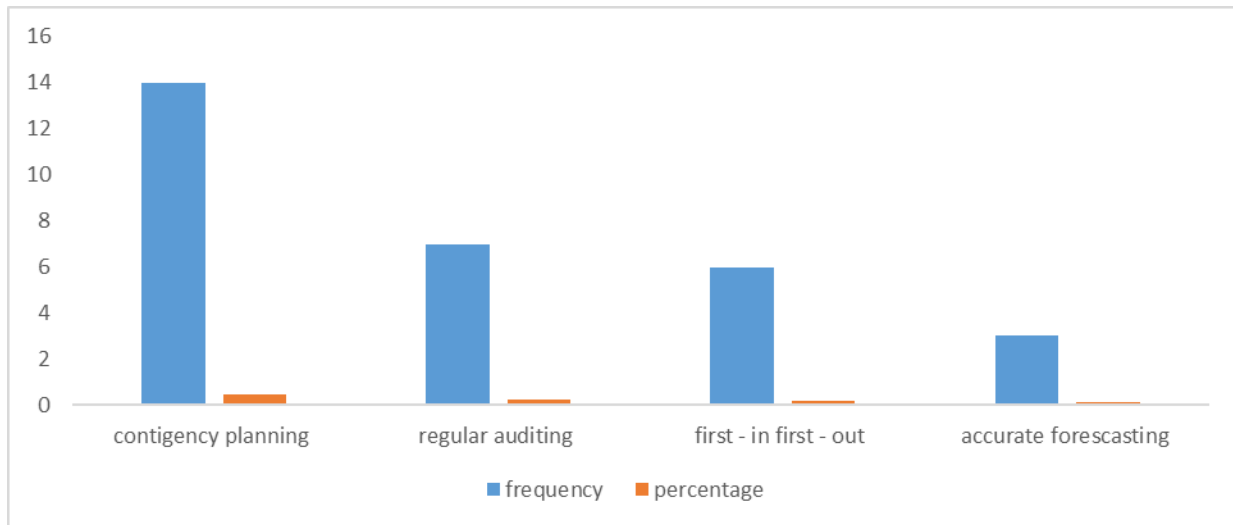


Figure 4.8 : Response on the inventory control method available in the organization

47% of the respondents had the highest percentage of with a response that contingency planning was available in the organization, followed by regular auditing with 23% of the respondents, the third percentage in the rank was 20% for First-in first-out and the least in the respondent was accurate forecasting with 10%.

Table 4. 9 Response on the inventory control used in the organization

Category	Frequency	Percentage
Contingency planning	14	47%
Regular auditing	7	23%
First-in first out	6	20%
Accurate forecasting	3	10%
Total	30	100%

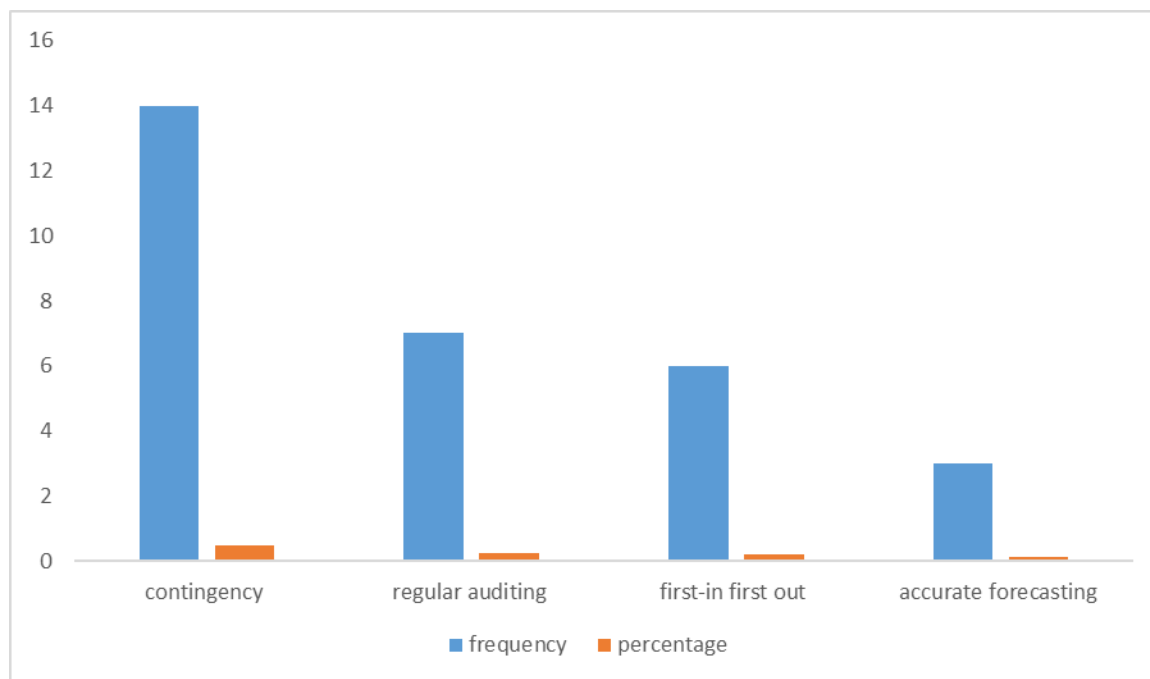


Figure 4. 9: Response on the inventory control used in the organization

r47% of the respondent agreed that contingency planning is used in the organization while regular auditing was at 23% from the respondent, first-in first-out method had 20% and the least method applied in the organization that is accuracy forecasting had 10%.

4.5 Effect of demand forecasting in food performance

Table 4.10 Response on whether demand forecasting affect food performance

Response rate	Frequency	Percentage
Yes	17	57% %
No	13	43%
Total	30	100%

From the respondents 57% of the respondent felt that demand forecasting affected the organization while the other 43% responded that demand forecasting has no effect in the organization.

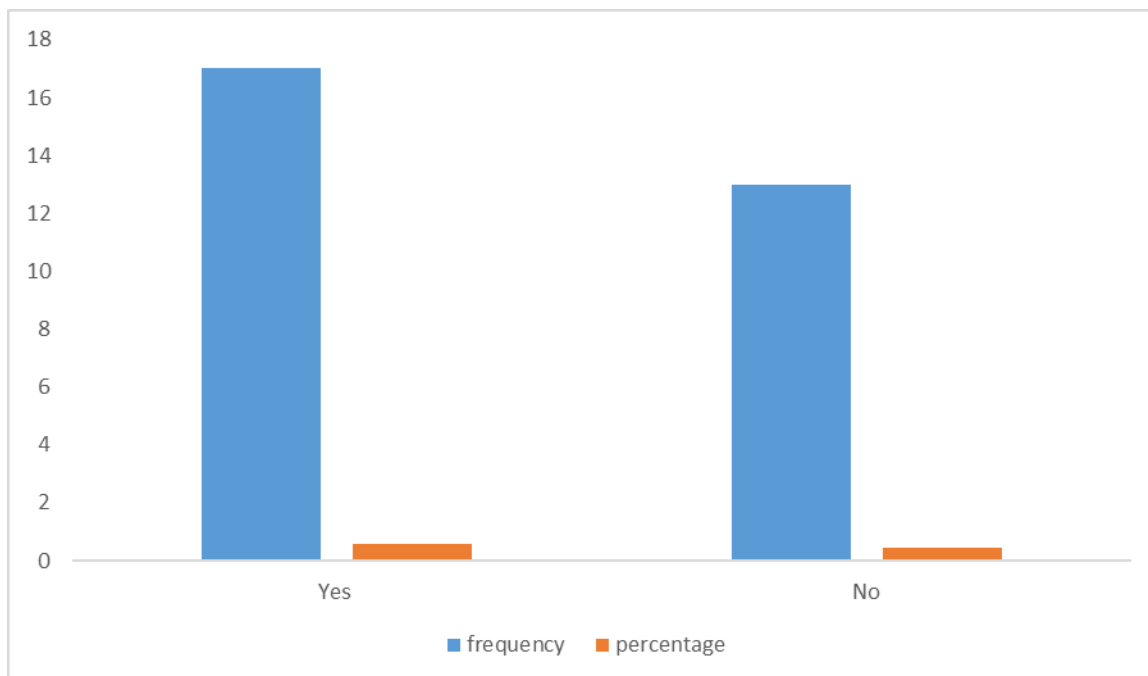


Figure 4.10 Response on whether demand forecasting affect food performance

Table 4.11 Response on method of demand forecasting used in the organization

Category	frequency	Percentage
Executive Judgement	15	50%
Controlled experiment	8	27%
Expert opinion	7	23%
Total	30	100%

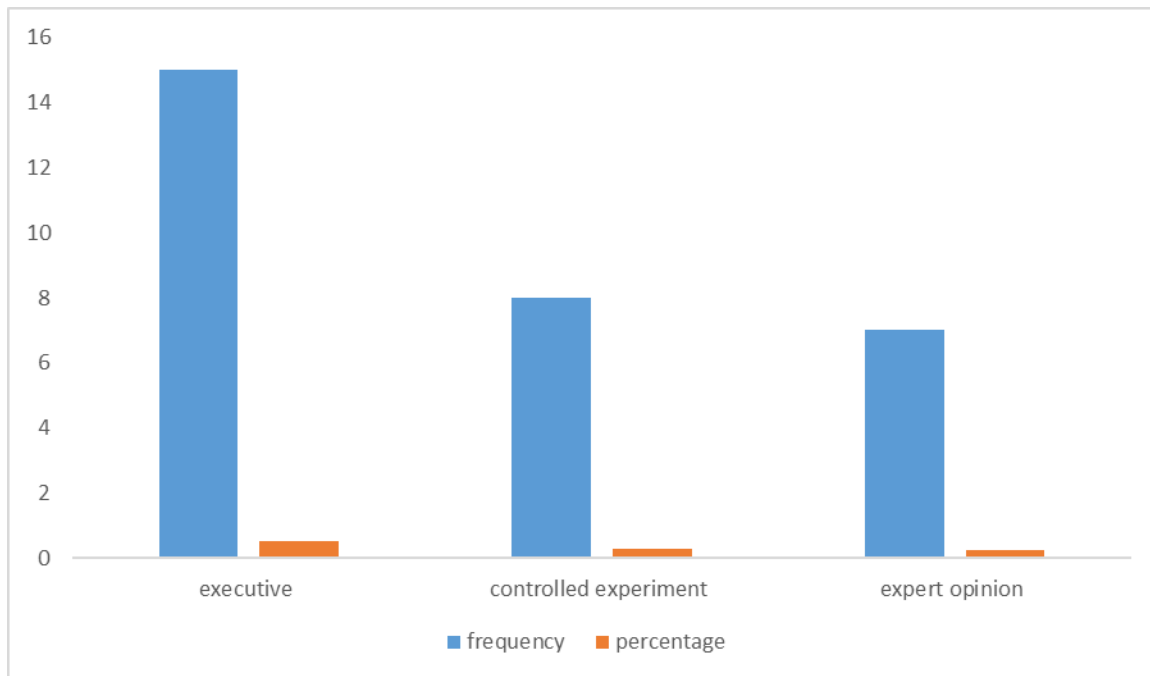


Figure 4.11 Response on method of demand forecasting used in the organization

From the study, the total population of 100 and a sample size of 30 employees, 50% of the employee's respondents agreed that executive judgement is used in the organization, 27% agreed on controlled experiment while those for expert opinion were 23%

Table 4.12 : Response on effective demand forecasting method in the organization

Category	frequency	Percentage
Executive Judgement	10	33%
Controlled experiment	3	10%
Expert opinion	17	57%
Total	30	100%

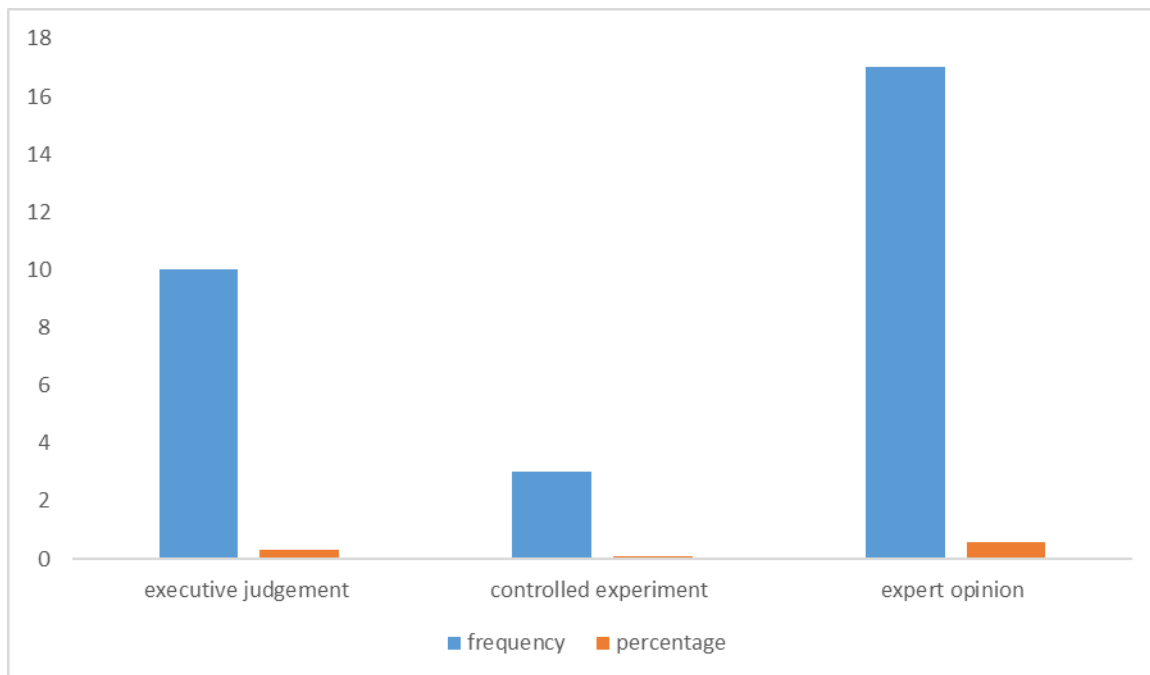


Figure 4.12 : Response on effective demand forecasting method in the organization

From the respondent 33% shows that even though executive judgement is one method used it's not that much effective, controlled experiment had 10% while expert opinion as a demand forecasting method had the highest percentage response of 57%

Response on how demand management, inventory control and demand forecasting management improves organization performance.

Majority of the respondents shows that there is need for the company to put measures on the side of demand in order to improve the level of food performance in the manufacturing process. According to (Armstrong **2010**), a good organization that who poses the right set of skills and is able to change with the current trends in the market.

CHAPTER FIVE

SUMMURY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter present the summary of the study findings, conclusion, recommendation and area of further study on the relationship of inventory management on performance of food manufacturing company.

5.2 SUMMARY OF FINDINGS

The general objective of the study was to assess the relationship of inventory management on performance of food manufacturing company, case study of Brookside Dairy Limited. The research was guided by the following research questions; How does demand management affect the relationship performance of food manufacturing companies as the case of Brookside dairy company? How does demand management influence the relationship of performance of food manufacturing companies as the case of Brookside dairy companies? How does inventory control influence the relationship performance of food manufacturing companies as the case of Brookside dairy company.

How does demand management affect the relationship of food performance company?

From the findings of the study, it is clear that the majority of the respondents felt that the demand management factor affected the performance of food manufacturing. Where a company has good demand management programmer the performance of food production is high and when the demand management is not keenly looked at the production of food performance has a challenge to give negative effects

How does demand forecasting affect the relationship of food performance company?

From the findings the respondents of majority indicated that there is need for improvement on the forecasting demand method used in the company to improve on food performance. The right forecasting demand and productivity, among other things can be the right remedy for greater food performance.

How does inventory control affect the relationship of food performance company?

The respondent believed that inventory control affects the relationship of food performance in the company. The respondent from the three department felt that the inventory control in the company was not flexible enough to facilitate positive aspect of food performance the in the company.

5.4 RECOMMENDATION

Effect of demand management on food performance

Brookside dairy company should implement demand management in the company since it influences the performance of food. There is need to effective demand management in the organization. The recommendation is agreed to ensure enhanced food performance.

Effects of demand forecasting on food performance

It is no doubt that demand forecasting reduces risk related to business activities and helps it to take efficient decision. Thus Brookside Dairy Company should focus on demand forecasting as the respondent from the employee of the three department shows that it affects the food performance in high level.

Effects of inventory control on food performance

Inventory management has been stated as an effect on the food performance in the company of Brookside Dairy and there is need for the company to take measures. inventory control enhances easy flexibility in the organization thus improving the food performance in the manufacturing company.

Suggestion for the further studies

The present study sought to ascertain the extent at which inventory control affect the food performance of Brookside Dairy Company. Further studies can be conducted with a focus on the other organizations with different lines of practice in order to establish any significant patterns or difference.

5.3 CONCLUSION OF THE STUDY

Effect of demand management on food performance

The first study objective sought to establish the effect of demand management on food performance in manufacturing company in Brookside dairy company. Out of the three variables studied, one of the main variable that affected the food performance was demand management. This requires the management of the Brookside dairy to update on the current trend of demand management as majority indicated that the programmer exist in a limited rate. Thus demand management plays a major role on the food performance.

Effect of demand forecasting management on food performance

The second research objective sought to examine the effect of demand forecasting on food performance in Brookside Dairy Company. The study established that executive judgement as one method of forecasting demand is used though less effective but there is also a need to employ all the other method to reach the company target hence achieving goals. Hence demand forecasting further helps the company to reduce risk related to business activities and helps to make efficient decision.

Effect of inventory control on food performance

Finally, the study objective sought to determine effect inventory control on food performance in Brookside Dairy Company. The study shows that contingency planning among other methods is used to improve the food performance manufacturing in the campany.it is in the regard that inventory management is used to help in maintaining production flow and demand in the company.

REFERENCE

- Bitner, M. J., Booms, B.H. & Tetreault, M.S. (2001), the service encounter: diagnosing favorable and unfavorable incidents, *Journal of Marketing*, 5(1):71-84.
- Bitner, M.J., (2002), Evaluating service encounters: the effects of physical surroundings and employee responses, *Journal of Marketing*, 54(2): 69-82.
- Bluel, B. (2000), Commentary: customer dissatisfaction and the zone of uncertainty, *The Journal of Services Marketing*, 4(1), 49-52.
- Brodie, R. J. Coviello, N. E., Brookes, R. W. & Little, V. (1997). Towards a paradigm shift in marketing; an examination of current marketing practices'. *Journal of Marketing Management*, 13(5), 383-406.
- Buttle, F. B. (1996). *Relationship marketing theory and practice*. Paul Chapman, London
Cambridge, MA: Marketing Science Institute.
- Chaffey, D. Mayer, R. Johnston, K. & Ellis, C. F (2000). *Internet Marketing*. Pearson Education, Harlow.
- Conway, A. & Swift, J. S. (2000). International Relationship Marketing: The Importance of Psychic Distance, *European Journal of Marketing*, 34(11/12): 1391-1414.
- Conway, A. (1997). Strategy versus tactics in the not-for-profit sector: a role for relationship marketing, *Journal of Non-Profit and Voluntary Sector Marketing*, 2(1): 42-51.
- Cook, Karen, S. & Richard, M. E. (1978), *Power equity and commitment in exchange networks*, *American Sociological Review*, 43 (October) 721-39.
- Cornelisessen, J. & Lock, A. (2001), the appeal of integration: managing communications in modern organizations, *Marketing Intelligence & Planning*, 19(6): 425-31.
- Cowles, D.L. (1997), The Role of Trust in Customer Relationships: Asking the Right Questions', *Management Decision*, 35(3-4): 273-283.

- Cresswell, J. W. (n.d.), *Research design qualitative and quantitative approaches*. Sage Publications.
- Cross, R. H. (1992), *The Five Degrees of Customer Bonding'*, Direct Marketing, Data, A.K (1975). *Material management, principles and practices*. 3rd Edition. Juice Publishing Ltd.
- David, K. (2005). *Logistics Management*. Prentice Hall International Publication Ltd.
- Day, G. S. (1970), *Buyer Attitudes and Brand Choice Behavior*. New York: The Free Press.
- Dobie, K., Grant, J. & Ready, K. (2001), Product motivation and purchasing activity: an explanatory study of consumers: Internet purchasing activity, *Journal of Promotion Management*, 6 1/2, 31 -43.
- Doherty, N.F. & Hart, C. (2002), Cyber retailing in the UK: the potential of the Internet as a marketing channel, *International Journal of Retail & Distribution Management*, 27(1), 22-36.
- Donaldson, L. (1990), A rational basis for criticisms of industrial organization economics, *Academy of Management Review*, 15 (3), 394-401
- Kothari, C. (1995). *Quantitative Techniques*. 3rd EDITION. Salemi publication.
- Lucey, T. (1988). *Quantitative Technique: An instruction manual*. 3rd Edition. Elb Publication.
- Lysons, (2000) *purchasing*. 4th Edition Irwin publication.
- Lysons, (2003). *Purchasing*. 4th Edition Homeland, Irwin Publication
- Mc Graw Hill International Edition Avlonitis, J. & Karayanni, A. (2000), The impact of marketing strategies on Customer Retention, *Journal of Marketing Management*, 29:441-459
October: 33-58.
- Peter and Farmer D. (1997). *Purchasing principles and management*. 2nd edition. Pitman International Publication.
- Waters, C.D.J.(1991). *Inventory control and management*. Singapore.

APPENDIX 1

LETTER TO THE RESPONDENTS

To whom it may concern

I am a student undertaking a degree in purchasing and supply management at Greta university. I have chosen Brookside dairy limited as my case study. The aim of the study is to analyze the relationship of inventory management on performance of food manufacturing company

Thank you for your co-operation.

APPENDIX 2

BUDGET

ACTIVITY	AMOUNT(KSH)
Feasibility	1500
Printing and binding	2500
Call charges and transport	3000
Internet research	2000
Total	9000

APPENDIX 3

WORK PLAN

PERIOD	ACTIVITY
September 2018-march 2019	Proposal writing
April 2019-June 2019	Data collection
July 2019- September 2019	Data compilation
November	Submission of the research project

APPEDIX

QUESTIONNAIRE

The questionnaire here is intended to collect information with regards to the effect of training on employee performance. Kindly provide information to all questionnaire items. for confidentiality do not write your name on this questionnaire. You are here by requested to avail the information by ticking the appropriate answers inside the provided boxes as honest as possible and giving the relevant details. This information will be treated with confidentiality.

SECTION A: DEMOGRAPHIC DATA

(Please tick where appropriate inside the box or give a brief answer where applicable)

1. Your Education level

- i. Doctorate
- ii. Bachelor's
- iii. Degree
- iv. Diploma
- v. Certificate
- vi. Others

Specify

2.Age

- i)20-28YRS
- ii)29-35YRS
- iii)Above 35yrs

3.Gender

- i. Female
- ii. Male

4.Number of years worked in this company

- i. 1-10yrs
- ii. 10-20yrs
- iii. Over 20yrs

SECTION B: EFFECT OF DEMAND MANAGEMENT ON FOOD PERFORMANCE

1.Does demand management affect the performance of food?

Yes

No

Explain.....

.....

2.how would you rate demand management programmer?

Best

Moderate

Fair

3.have you participated in any demand management programmer?

Yes

No

Explain.....

.....

SECTION C: EFFECT OF INVENTORY MANAGEMENT ON FOOD PERFORMANCE

1. Which inventory management method are available in your organization?

- i. Contingency
planning
- ii. Regular
auditing
- iii. First –in first-
out
- iv. Accurate
forecasting

2. Which method are used in the organization?

- i. Contingency
planning
- ii. Regular
auditing
- iii. First –in first-
out
- iv. Accurate
forecasting

3. Are the method used effective to the organization?

Yes

No

Explain

SECTION D: EFFECT OF DEMAND FORECASTING ON FOOD PERFORMANCE

1.Does demand forecasting affect the performance of food?

- i. Yes
- ii. No

Explain

2.which demand forecasting method are used in the company?

- i. Executive judgement
- ii. Controlled experiment
- iii. Expert opinion

3.Are the method used effective to the company?

- Yes
- No

Explain