

**An investigation into the use of value chain analysis to enhance the
quality of fresh produce in the Zimbabwean retail sector: the case of
Interfresh Limited (2009-2013)**

A Dissertation Submitted In Partial Fulfilment
For The Masters Of Business Administration Degree

by

CHRISTOPHER M. MAFUWA

R068363C

Supervisor

DR N. KASEKE

**GRADUATE SCHOOL OF MANAGEMENT
UNIVERSITY OF ZIMBABWE
P.O. BOX MP167, MT PLEASANT
HARARE
ZIMBABWE**

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DEDICATION

I would like to dedicate this work to my parents, Christopher and Elizabeth Mafuwawho both passed on during the time I was pursuing this MBA program. May their souls rest in peace.

DECLARATION

I **Christopher M. Mafuwado** hereby declare that this work is the result of my own investigation and research, except to the extent indicated in the Acknowledgements, References and by comments included in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.

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Signature

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Date

SUPERVISOR

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Signature

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Date

ACKNOWLEDGEMENTS

I would like to acknowledge and thank my supervisor Dr. N. Kaseke for spurring me through this study. I also wish to express my sincere gratitude to my tutor James Mutandwa, for providing intellectual stimulation in the various preliminary corrections and providing invaluable input, whenever I strayed.

My special thank you goes to my wife, Miriam and my children, for understanding whenever I could not avail myself due to pre occupation with this Masters Programme.

ABSTRACT

This research investigates the use of value chain analysis as a strategic tool to enhance the quality of fresh produce. The horticulture industry offers an important source of employment and a contribution to GDP for developing countries such as Zimbabwe. Cultivation of fruit and vegetables is substantially more labour intensive and offers more post-harvest value addition in comparison to cereal crops. Value addition activities, which include washing, packing chopping, dicing, mixing range and branding are amongst the value additions offered by wholesalers and in some cases done at the point of production. It was for this reason that this research investigates the use of value chain analysis as a strategic tool to enhance the quality of fresh produce from farms to the retail sector with a focus on Interfresh Limited.

The methodology adopted in this study is a composite of positivism and phenomenology research philosophies. The major aim intent in using this philosophy was to provide a holistic analysis by integrating relevant issues in order to produce a more complete picture of the implementation of balanced scorecard at Interfresh Ltd. The approach made use of participatory questionnaires and conventional research methods. The population study comprised of the staff and management of Interfresh Ltd, TM Supermarkets, Commercial Farmers, Small scale Farmers, Transport Operators and other general stakeholders.

The main conclusion of the study revealed that Value chain disaggregates a firm into its strategically relevant activities to aid the comprehension of dynamics and behaviour of existing costs and potential sources of differentiation. This focuses on primary and support activities. Support activities enhance the primary activities. This includes firm's infrastructure, human resources, technology development and procurement. Value chain analysis looks at internal and external activities of a company and relates them to an analysis of the competitive strength. The value creating activities employed at Interfresh Ltd are limited to, advertising, Total Quality Management (TQM), customization of products and charging lower prices than those of rivals. TQM being the major differentiation proposition. The study recommended Interfresh Ltd to 'benchmark' the ideas of Japanese firms, where firms through in little extra things that ultimately drive extra ordinary customer satisfaction. It may use value chain as a tool to diagnose and enhance competitive advantage. Interfresh Ltd must ensure consistent supply of produce. Overriding seasons buy use of imports and eliminate shortages of its product offerings. Import parity must ensure affordable prices.

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ABBREVIATIONS

| | |
|--------|--|
| ABC | Activity Based Costing |
| AIDS | Acquired Immune Deficiency Syndrome |
| CSCMP | Council of Supply Chain Management Professionals |
| DANIDA | Danish International Development Agency |
| ECR | External Cost Recovery |
| FMCG | Fast Moving Consumer Goods |
| FCG | Food Chain Group |
| GDP | Gross Domestic Product |
| GNU | Government of National Unity |
| HPAZ | Horticulture Producers Association of Zimbabwe |
| HIV | Human Immunodeficiency Virus |
| KPI | Key Performance Indicator |
| NGO | Non-Governmental Organisation |
| NZKS | New Zealand King Salmon |
| PEST | Political Economic Social Technology Environmental Legal |
| SCM | Supply Chain Management |
| SWOT | Strengths Weakness Opportunities Threats |
| TQM | Total Quality Management |
| TM | Thomas Meikles |
| VCA | Value Chain Analysis |
| WFT | Wholesale Fruiterers Trading |
| ZSE | Zimbabwe Stock Exchange |

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CHAPTER ONE

1.0 Introduction

This research investigates the use of value chain analysis as a strategic tool to enhance the quality of fresh produce from farms to the retail sector with a focus on Interfresh Limited. The retail trade is a fundamental activity in the economics of both developed and developing countries. According to Risch (1991) the major goal of the retailing industry or merchandising system is to influence possible consumers to purchase an assortment of products. Under the global village, the retailing of goods turns out to be an integral theme in supply chain management. With the prevailing stiff competition in the consumer goods, manufacturers battle for their products to reach final consumers ahead of rivals. Supermarkets and Wholesale Market are the conduits, which form a critical platform for the buyers. Horticulture and Fresh produce players are not spared in this battle. Farmers markets have traditionally been viewed and termed informal markets, however considering the volumes and dollars traded through these markets, they are now key players in the flow of the fresh produce.

This chapter provides the background of the study, which looks into macro environment analysis, industry analysis using Porter's five forces model and background to the organisation. It also covers problem statement, objectives, research questions, significance and scope of the study and dissertation outline.

1.1 Background of Fresh Produce in Zimbabwe

Fresh produce trading in Zimbabwe involves many players which include, backyard growers, subsistence farmers, peri-urban growers, small scale farmers, commercial farmers, whole salers, supermarkets, convenient stores and fresh produce markets.

1.1.1 Fresh Produce Range

The world of fresh produce is made up of multitudes of lines across the globe with varied names and ways of preparation. The common aspect is the seasonality and nutritional values to human lives. Great strides have been made on organic modification of seed and produce over the years. The pictures below help to illustrate the varied composition of fresh fruit and vegetables.

Table 1.1 General Produce Availability Chart

| | PRODUCT | AVAILABILITY CHART | | | | | | | | | | | | | PRODUCT | AVAILABILITY CHART | | | | | | | | | | | |
|----|-----------------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|----|-----------------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|
| | Month | j | f | m | a | m | j | j | a | s | o | n | d | | Month | j | f | m | a | m | j | j | a | s | o | n | d |
| 1 | Apples | | | | | | | | | | | | | 36 | Marrows | | | | | | | | | | | | |
| 2 | Apricotes | | | | | | | | | | | | | 37 | Mangoe | | | | | | | | | | | | |
| 3 | Aparagus | | | | | | | | | | | | | 38 | Mazhanje | | | | | | | | | | | | |
| 4 | Avocados kg | | | | | | | | | | | | | 39 | Mawuyu | | | | | | | | | | | | |
| 5 | BabyCorn | | | | | | | | | | | | | 40 | Matohwe | | | | | | | | | | | | |
| 6 | Bananas kg | | | | | | | | | | | | | 41 | Mushroom button white | | | | | | | | | | | | |
| 7 | Beans kg | | | | | | | | | | | | | 42 | Mushroom oyster | | | | | | | | | | | | |
| 8 | Beans | | | | | | | | | | | | | 43 | Naartjies | | | | | | | | | | | | |
| 9 | Beetroot bnch | | | | | | | | | | | | | 44 | Nuts cashew | | | | | | | | | | | | |
| 10 | Brinjal | | | | | | | | | | | | | 45 | Nuts almonds | | | | | | | | | | | | |
| 11 | Broccoli | | | | | | | | | | | | | 46 | Okra | | | | | | | | | | | | |
| 12 | Butternut | | | | | | | | | | | | | 47 | Onions kg | | | | | | | | | | | | |
| 13 | Cabbage D/Head | | | | | | | | | | | | | 48 | Oranges kg | | | | | | | | | | | | |
| 14 | Cabbage Red | | | | | | | | | | | | | 49 | Pawpaws | | | | | | | | | | | | |
| 15 | Cabbage Variety | | | | | | | | | | | | | 50 | Peaches | | | | | | | | | | | | |
| 16 | Carrots kg local | | | | | | | | | | | | | 51 | Pears box | | | | | | | | | | | | |
| 17 | Cauliflower | | | | | | | | | | | | | 52 | Pepers | | | | | | | | | | | | |
| 18 | Celery | | | | | | | | | | | | | 53 | Peas | | | | | | | | | | | | |
| 19 | Coconuts | | | | | | | | | | | | | 54 | Pine apples | | | | | | | | | | | | |
| 20 | Cucumber english each | | | | | | | | | | | | | 55 | Potatoes 15kg | | | | | | | | | | | | |
| 21 | Cucumber | | | | | | | | | | | | | 56 | Pomogranates | | | | | | | | | | | | |
| 22 | Goose Berries | | | | | | | | | | | | | 57 | Pumpkin | | | | | | | | | | | | |
| 23 | Garlic | | | | | | | | | | | | | 58 | Radish | | | | | | | | | | | | |
| 24 | Gemsquash kg | | | | | | | | | | | | | 59 | Rape each | | | | | | | | | | | | |
| 25 | Ginger | | | | | | | | | | | | | 60 | Spinch each | | | | | | | | | | | | |
| 26 | Grapes black | | | | | | | | | | | | | 60 | Tsungu each | | | | | | | | | | | | |
| 27 | Grapes red globe | | | | | | | | | | | | | 61 | Stawberries | | | | | | | | | | | | |
| 28 | Grapes white | | | | | | | | | | | | | 62 | Sweet Corn | | | | | | | | | | | | |
| 29 | Grapefruit | | | | | | | | | | | | | 63 | Sweet potatoes | | | | | | | | | | | | |
| 30 | Green Mealies each | | | | | | | | | | | | | 64 | Tomatoes kg | | | | | | | | | | | | |
| 31 | Leeks bunch | | | | | | | | | | | | | 65 | Turnips | | | | | | | | | | | | |
| 32 | Lime | | | | | | | | | | | | | 66 | Watermelon kg | | | | | | | | | | | | |
| 33 | Lemons kg | | | | | | | | | | | | | 67 | herbs | | | | | | | | | | | | |
| 34 | Lettuce | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | Lettuce fancies | | | | | | | | | | | | | | | | | | | | | | | | | | |

Source: Zimtrade (2010)

A group of 15 produce lines often defined as Always Available Line (AA Lines) comprise of vegetable lines and fruit lines. These produce line are volume movers in the retail of fresh lines. Retailers may vary some on the lines but generally includes Potatoes, Tomatoes, Onion, Cabbage, Broccoli/Cauliflower, Carrots, Lettuce, Rape/Spinach, Cucumber, Beans and Butternut on the vegetables lines. The AA range of fruit are Oranges, Apples, Bananas and Pears. This coincides with the 5-a-day campaign for healthy eating. This encourages people to eat at least 5 fruit and vegetable lines per day.

The study focus' on AA Lines as key representative lines of produce commonly handled in both formal and informal markets in Zimbabwe. The range of these lines and their average volumes supplied in to retail are presented in Table 1.2 below.

Table 1.2: General Volumes of AA Lines Supplied in to Retail

| PRODUCE TYPE | Mbare Musika | TM Supermarkets | OK Barzaars | Spar |
|--------------------------|---------------------|------------------------|--------------------|-------------|
| APPLES | 179,588 | 268,800 | 38,400 | 25,920 |
| BANANA | 3,488,872 | 2,654,400 | 921,600 | 216,000 |
| BROCOLLI | 1,135 | 268,800 | 38,400 | 25,920 |
| BUTTER NUT | 899,960 | 235,200 | 115,200 | 64,800 |
| CABBAGES | 558,065 | 672,000 | 76,800 | 54,720 |
| CARROTS | 775,315 | 252,000 | 134,400 | 100,800 |
| CAULIFLOWER | 7,568 | 184,800 | 86,400 | 64,800 |
| CUCUMBER | 854,058 | 218,400 | 96,000 | 36,000 |
| GREEN BEANS | 87,859 | 84,000 | 42,240 | 21,600 |
| LETTUCE | 690 | 302,400 | 76,800 | 36,000 |
| ONIONS | 2,212,943 | 369,600 | 153,600 | 86,400 |
| ORANGES | 1,085,528 | 336,000 | 134,400 | 79,200 |
| POTATOES | 2,265,945 | 2,016,000 | 768,000 | 504,000 |
| TOMATOES | 16,616,733 | 1,344,000 | 748,800 | 25,920 |
| LEAF LINES(RAPE/SPINACH) | 680,178 | 268,800 | 38,400 | 25,920 |
| PEARS | | 252,000 | 115,200 | 24,480 |

Source: Emkambo (2014)

1.1.1 Background to Interfresh Limited

Interfresh Limited is a diversified agro-business and horticultural Group of Companies. The organisation grows cashcrops, fruit and vegetables for both the local and export market. Its local client composition includes major retail chains, hotels, caterers', informal traders and food processors. Interfresh Ltd is a public listed company on the Zimbabwe Stock Exchange. The Interfresh Group is made up of seven distinct business units, which are predominantly agro-based.

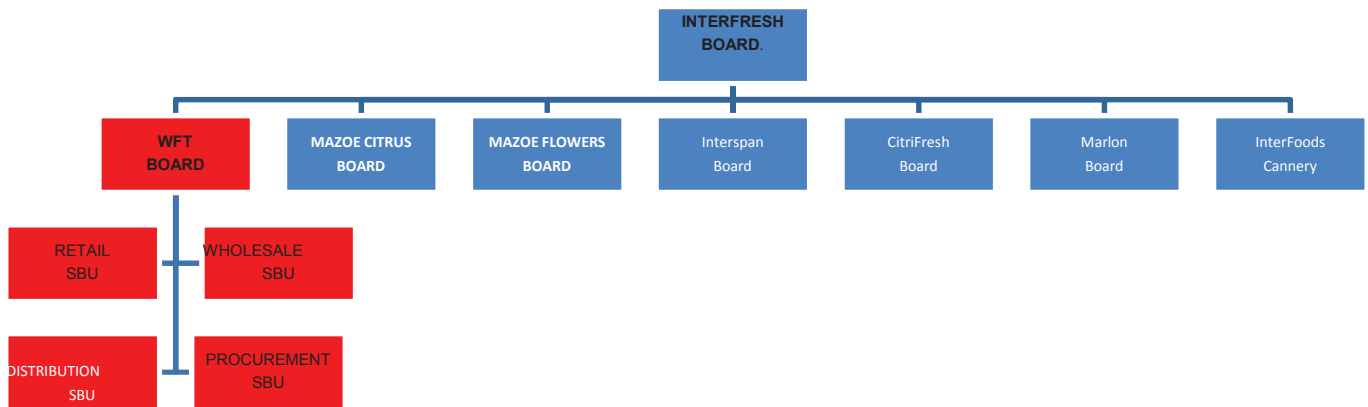


Figure 1.1: Interfresh Group Business Units

Source: Interfresh Ltd Financial Statement (2012)

According to the 1998 IPO prospectus, it was established in 1953 under the name Wholesale Fruiterers Trading as a family business. Interfresh has grown from strength to strength as reflected by additional business units acquired. It is now a major horticultural concern in Zimbabwe according to the Horticulture Producers Association of Zimbabwe (HPAZ). The group boasts of offering a diverse range of fresh produce lines, which are sourced from contract farmers, scheduled growers, small-scale farmers and own farms. Interfresh also imports fresh produce to augment local seasons and ensure consistent supply of fresh lines to the market.







A variety of value-added vegetables and fruits are distributed from the high care facility in Harare, the capital of Zimbabwe. There are four distribution centres around Zimbabwe located in Harare, Bulawayo, Mutare and Victoria Falls delivering same day or overnight to all destinations, utilising the own account fleet or third party distribution. The study covers dispatch of produce from farms that are part of the Interfresh Group, commercial growers, contract growers, small-holders farmers, peri-urban growers and some individuals.

Interfresh has various major functions, which are at the centre of its core activities. These include Production, Procurement, Wholesale, Retail and Distribution. The procurement department has, over the years, proved the hub of our core activities. The current operations involving the movement of fruit and vegetables from one place to the other and its form are the prerogative of the person in possession of the commodity. This means produce can be delivered on foot, open trucks, push carts, bus tops, lorry or whatever means available to the farmer or trader.

Interfresh schedules and contracts farmers on its out-grower schemes to grow a variety of fresh produce lines, strict guidelines and specification are agreed upon which, growers must adhere to in order for their commodities to fetch competitive prices on the market. The group provides agronomy and extension services with a fair amount of interfacing with the Ministry of Agriculture and Mechanisation-Agritex personnel in the field. Extension services contribute to the expected quality and yields achieved by the individual growers and provide formal statistical information on product availability and timings.

Harvesting is timed and scheduled in liaison with the extension officers and procurement department at Interfresh. The farmer is responsible for the entire harvesting process and transportation of the produce to the pack houses. Produce is then graded and dispatched from the pack house. Destinations will vary according to grade and quality of product.

Table 1.1: The General Flow of Fresh Produce

| | | | | |
|--------------|---|---------------------------------------|---|---|
| First grade |  | Interfresh |  | Local Retail/Regional Exports |
| Second Grade |  | Interfresh Mbare Musika Vendors |  | Processors/Wholesale Market Consumers/Vendors Various |
| Third Grade |  | Farm Store |  | Vendors |

Source: Interfresh(2014)

While quality is key in deciding the distribution flow of fresh produce, Seasonality, Price and Demand are market forces which influence changes to the standard channels. Interfresh Limited enjoyed exclusive fresh produce supply contracts with TM, SPAR, FCG and Town & Country Supermarket chains. According to the Interfresh Ltd (2009) financial report, TM Supermarket Chain accounts for over 60% of Interfresh's retail business which equates to 15% of the Interfresh consolidated group turnover per annum

TM is a retail giant and part of the Meikles Africa group, which is listed on the Zimbabwe Stock Exchange. This chain boast of 60 stores country-wide. The stores are located in all sectors cutting across the common income brackets which are Low and High density.

1.1.2 Macro environmental Analysis (PEST)

There are many factors in the macro-environment that affects the decisions of how an organisation is managed. Tax changes, new laws, trade barriers, demographic change and government policy changes are all examples of macro change. To help analyse these factors managers categorise them using the PESTEL model.

1.1.2.1 Political

Factors influenced by politics refer to government policy including any degree of intervention in the activities of the economy. Certain questions are critical with regards the involvement of any government. These may include defining goods and services a government wants to provide. The extent of any subsidies must be clear and also laying out specific priorities in terms of business support. Political decisions can affect many vital areas for business of Interfresh Ltd. The substantive political factor that influenced the business of Interfresh Ltd is the Land redistribution act invoked unofficially in 1999 and enacted in parliament in 2002.

The study however commences from the Government of National Unity (GNU), which created a calm political environment with the country aspiring to be re-integrated with the international community boards. The fast track land resettlement program undertaken a few years back in the country reduced the output in the farms and this has greatly affected Interfresh Ltd. Interfresh Ltd used to partner with the commercial farmers before the farm inversions. Their supplies used to be so consistent and well structured.

The politics and policies of the government of the day influence regional and international relations with governments, world bodies, and investors at large. This leads to economic activity.

1.1.2.2 Economic

Economic factors are pivotal to many business activities. These include Interest rates, tax regime, economic growth, inflation and foreign currency exchange rates. Higher interest rates may deter investment from both local and Foreign Direct Investments (FDI). Export parity is influenced by exchange rates in many aspects and this can make exporting more difficult.

Inflation is one element that pushes the cost of production particularly on higher wages. However, higher national income growth may trigger demand for a firm's products.

The above impact Interfresh's viability and sustenance in various ways. Cost of production and possible disposable income for the consumer are influenced by the economic regime prevailing in the country. Higher Interest rates increase the cost of borrowing. Recurrent expenditure and production inputs are often affected by inflationary pressure. All upward trends in majority of the indicators will increase the price of the fresh produce to the consumers.

1.1.2.3 Social

The social factors refer to changes in social trends, which can impact on the demand for products and the availability of labour. The industry is being negatively impacted by the prevalence of HIV and AIDS, which are affecting the most active population in the country with more impact in farms, which produce the fresh produce. While awareness campaigns on HIV are prominent in the rural and farming areas, the pandemic remains a concern in the country due to lack of entertainment, crowding in the farm compound and problem of lack of behavioural change in farms. Social factors have significant impact on the global front, with issues such as wages above Poverty datum lines for farm workers, use of child labour on farms amongst other fundamentals.

Consumption trends of fruits and Vegetables have been influenced significantly by social factors. Chief amongst these are healthy eating, which has been promoted by many health fanatics globally. Zimbabwe is not spared in this trend. The middle income earners and the rich thrive on healthy trends. Cultural and social diversity of race, religion and ethnic backgrounds plays its part amongst social factors on shoppers.

1.1.2.4 Technological

The technological factors have been significant in the agriculture industry, the world over, prompting the advancement of new genetically modified products and new pre and post-harvest processes. Agriculture mechanisation and irrigation is a stand-alone ministry in the government of Zimbabwe. Thus reflecting the impetus this has on the country's GDP and

ultimately the economy. Technology can reduce costs, improve quality and advance innovation. The entire Supply Chain of fresh produce is infested with technological advancements amongst them Atmospheric Controls, which includes refrigeration and moisture retention techniques. Dynamic pack-house management systems, freight handling techniques and packing regimes are key to effective conveyance of perishable produce.

These developments benefit consumers as well as the organisations involved in upstream or downstream positions in the supply chain. A company can be able to trade in global markets when their technology is well up to international standards. A developing country may view technology as a factor in increased unemployment however, it is also argued on the benefits for the country's economy at large.

Transportation technology is critical in the flow of produce to markets formal and informal. The costs of mechanising an entire industry are however often prohibitive to poorer nations. Evidently, though, quality is in some way compromised when the human element is divorced in some processes. Hand picked cotton from the Sanyati areas is cleaner than that reaped by combine harvesters, so is the case with citrus pickings in the Mashonaland citrus orchards.

1.1.2.5 Environmental

Environmental factors include the weather and climate changes. According to farmers weakly, Zimbabwe enjoys satisfactory climate for agribusiness. Effects of environmental management have taken centre stage in the country with a dedicated ministry overseeing this faculty. Changes in temperatures in either form, of excessive heat, drought, flooding or even extreme low temperature can affect initially on agriculture but ultimately affect all sectors of the economy and present a risk of food scarcity.

1.1.2.6 Legal

The legal factors related to the prevailing legal environment in which companies operate. The country's legal framework allows for free business enterprising governed by the Company's act. The indigenization law mandates foreign investors to collaborate with local people in economic activities in the country. This framework ensures a 51% stake for locals and 49%

for other investors. The agriculture sector is well structured in legal terms for local trade, exports and the importation of products. Food security is at risk in the absence of legal processes to validate trade of agricultural products.

1.1.3 Industry Analysis: Porter's Five Forces

Porter (2005) identifies five forces that any organisation will need to be wary of and constantly check upon in order to maintain and create competitive advantage in this emerging networked economy. These are:

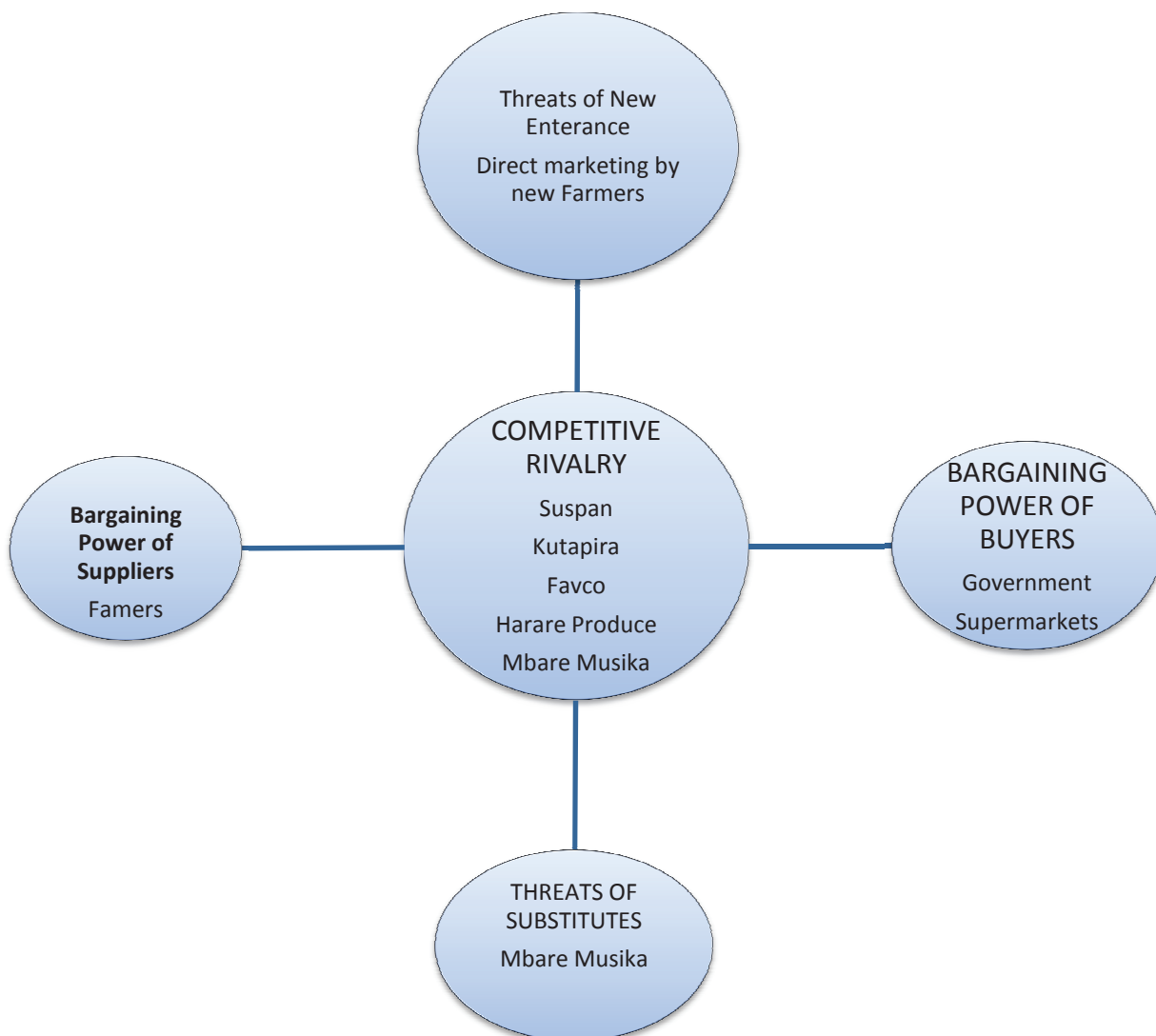


Figure 1.3 Porter's Five Forces

Source: Porter (2005)

1.1.3.1 Bargaining power of suppliers

Suppliers are the businesses that supply materials and other products into the industry (Porter 2005). With agricultural produce, if suppliers have high bargaining power over a company, it means that the industry is less attractive. Therefore, it is the farmers that hold the ultimate powers when it comes to supplies' bargaining power. They can hold onto their product and cause artificial demand and force prices to raise meaning that the suppliers will have a higher bargaining power.

While the latter is true, the perishability aspect of fresh produce has a push factor on the part of the grower. They can only play with a few days before fresh produce is at risk of deteriorating.

1.1.3.2 Bargaining power of buyers

Porter (2005) states that the bargaining power of the buyers has increased over the years. Major customers of Interfresh Ltd are Manufacturers, Wholesalers, Retailers as well as individual consumers. Customers are now price sensitive and some customers are opting to buy from informal outlets. The advent of transport and logistics, which aids the global village and compliments international trade, allows buyers to consider supply chains beyond their borders. Import-parity is now an issue with buyers comparing both local and regional prices mainly from South Africa thus buyers now have the power to reduce prices largely due to the information available about other fresh produce markets such as the City Deep Fresh Produce Market in Johannesburg.

1.1.3.3 Threat of Substitute products

There are competitive pressures that arise from substitute products, which tend to split the market if the switching costs are minimal, (Porter, 2005). Interfresh Ltd faces this competition from other players, such as Favco, Kutapira, Sunspan, Wilsgrrove, Freshpro and Mbare Musika Traders, where most farmers go direct with their farm produce. There are also other many small beverages companies, which are also bringing competition in the market.

1.1.3.4 Barriers to entry/Rivalry

According to Porter (2005), barriers to entry are unique industry characteristics that define an industry. The barriers reduce the rate of entry of new firms. Barriers can be exploited to enhance a firm's competitive advantage. Kotler (2001) also identifies some sources of these barriers as:

Government policies and the final factor is the rivalry among competitors that can be achieved through a number of strategies such as pricing policies innovation in operation.

The market now comprises of many players. These can easily come in and exit the industry without any restrictions. The difference in this industry when it comes to rivalry or competitors is that they can help each other in times of need. For example, Interfresh Ltd can help Favco to store its produce when they have any challenge with their cold rooms. On the other hand, Favco can also give an order to Interfresh Ltd to supply their client when they do not have the product in stock. The information gained on the competitive pressures should then be used to define the model to be adopted by the organisation and provide ultimate insights on what is required to build a successful entity.

1.1.4 Internal analysis of Interfresh Ltd using SWOT analysis

A SWOT analysis explains the internal (SW) and external (OT) factors that affects an organisation. These are Strength, Weaknesses, Opportunities and Threats.

STRENGTHS

- Infrastructure includes High-Care and Cold Room space for storage.
- International strategic partnerships with Outspan, Tesco, Marks & Spencer.
- Well Diversified in Agro-business to including Canning and Interfoods.
- Strong Distribution Networks.
- Well established Contracts with Large Supermarket Chains and Hospitality Groups.
- Structured collaboration with Commercial, Small-Holder and Peri-urban Farmers.

WEAKNESSES

- Failure to control new farmers on Out Grower Schemes to honour Supply arrangements.
- Lack of defined systems and adoption of technological advancements in the industry.

- Reliance on natural weather patterns which are inconsistent.

OPPORTUNITIES

- Regional expansions on exports
- Regional expansions on exports
- Venture into live stock.
- Forward integration in the Retail arena
- Joint ventures with Processors such as Cairns Foods
- Venture into live stock.
- Forward integration in the Retail arena
- Joint ventures with Processors such as Cairns Foods

THREATS

- High entrance of new players
- New Government laws
- Own account procurement and management of Fresh produce by supermarkets
- Skills flight to neighbouring countries

1.2 Problem Statement

Undeniably fresh produce supply chains endure more pressure in light of the perishability of this range of consumer goods from producer to the consumer's plate of food. Convenience stores, Food Markets, Weekend Open Stall Fresh-Markets, which complement the supermarket chains, are an integral part of the retailing business. Taking a focus on fresh produce in Zimbabwe, the bottleneck of quality may be alluded to Post Harvest activities, which encompasses movement and storage of fresh produce in the various stages of the supply chain process. The fresh produce business has become much more sophisticated in terms of product specification, health standards and packaging. What is now required is a supply chain stretching from the grower to the consumer where all the service providers agree and apply common standards and treat the logistics flow as a single integrated system. The supply chain process must also influence availability overcoming seasonality.

The lack of controlled atmosphere, multiple handling and supply chain inefficiencies contribute significantly to the quality of produce displayed in our retail chains. Consumers

buy fresh lines with some of their natural senses, see, smell, touch and taste. Hence this has a direct bearing on the rate of sale of any line and that's ultimate stock turn resulting in increased or decline in demand.

This study is focusing on the use of Value Chain Analysis in Fresh Produce Supply Chain from Producer to Retailer. This trade is concerned with product availability, systematic flows of product from farm to shop, product information and the supply chain channel as a whole. The concern in retail and distribution are with the logistics channels, which involve a distribution mix that must be integrated for a successful supply chain. The organisation is experiencing lost sales and market share loss in the country. Therefore, the study investigates the use of value chain analysis by Interfresh Limited as a strategic tool to enhance the quality of produce in the supply chain of fresh produce to the retail sector and recommend ways of improving the value chain for the organization.

1.3 Research Objectives

The objectives of this research are therefore to:

- a. identify the value chain activities of Interfresh Ltd to its retail customers
- b. establish the extent to which value chain analysis by Interfresh Ltd enhances value creation to its customers
- c. establish the key success factors that enhance quality in the supply chain to retail markets.
- d. formulate recommendations to interested stakeholders of the organisations and the industry at large.

1.4 Research Questions

In an endeavour to establish how the value chain analysis can be used as a strategic management tool for value creation in the Retail logistics industry, this study will aim to provide answers to some or all of the questions below:

- a. What are the value chain activities of Interfresh Ltd to its retail customers?
- b. To what extent does VCA by Interfresh Ltd help in enhancing value creation to its customers?

- c. What are the key success factors that enhance business performance in Fresh Produce logistic industry of Zimbabwe?

1.5 Research Proposition

The research proposes that undertaking the value chain analysis in the fresh produce logistics industry will enhance value creation in the Zimbabwean fresh produce logistics industry.

1.6 Justification of Research

The study seeks to investigate the use of value chain analysis as a strategic tool to enhance value creation in the fresh produce retail logistics industry of Zimbabwe. It also seeks to identify the value chain activities of Interfresh Ltd as diversified agri-business entity. The research also highlights the strategic importance of VCA in enhancing value creation. It also seeks to identify key success factors that enhance business performance in logistic industry of Zimbabwe. The other anticipation is that the findings from this research will help in improvement of logistical systems that are necessary for the improvement of company performance. The research will help consideration of post-harvest technologies for a wider spectrum of agrarian/horticulture producers and consideration of use of cold-chain techniques in the logistics channels to preserve freshness of produce. The research will add to the existing board of knowledge and will facilitate further research on the subject. The research will facilitate the formulation of recommendations to interested stakeholders in this industry.

1.7 Scope of Research

The study focused on the use of value chain analysis as a strategic tool to enhance value creation in the retail logistic industry of Zimbabwe. The key stakeholders of this industry include the retail trade, the Ministry of Agriculture, farmers' organisations and the logistics Industry. However, despite that the study could have taken the longitudinal multi-sectorial approach, due to time limitations, a case study approach was considered. The study fully covered Interfresh Limited and TM/Pick'n'Pay Supermarkets. Secondary research data was obtained from a sample of personnel involved in retail logistical operations in these organisations. The study was expected to be representative and unbiased because TM Supermarkets is active in all income brackets High, Medium and Low density sites. The

researcher restricted his discussions to issues mentioned in the objective section. The interviews were conducted by telephone, email and internet communications.

1.8 Summary and Structure of the Study

The study was broken into the following chapters. Chapter 1 introduced the study, background of Interfresh Ltd, research problem, objectives, justification and scope. Chapter 2 captures the literature review and critical analysis of models relevant to the problem statement. Chapter 3 deals with research design, instruments to data collection and measurement. Chapter 4 presents the discussion area about the report findings as they are. This involved just putting the raised issues as they are and then interpret them (opinion). Literature concept and models are also put in their perspective here. Chapter 5 is where the conclusion and recommendations are put across. Recommendations were clear points that show the investigator's understanding and judgment. The conclusion is not a repeat of recommendations but concise discussion of the findings and the final of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Literature Review

This chapter will provide the literature review of this dissertation. According to Brink (2000), a literature review involves the systematic identification and evaluation of literary work with information allied to the research problem being investigated. Kasokonya (2007:7) states that appropriate literature refers to sources that are relevant in providing the detailed information needed for studying a specific subject. This literature review is aimed at obtaining detailed knowledge on the use of value chain analysis as a strategic tool to enhance quality of products in the supply chain of fresh produce to the retail sector. This literature review will also enable the researcher to establish what has been studied and published on the subject being studied by academics. In addition, this review will expose the principles, and strategies that have been found useful in investigating the problem in question.

2.1 The Value Chain Concept

The value chain, also known as value chain analysis (VCA), is a business management concept that was first described and popularized by Michael Porter in his 1985 best-selling book, *Competitive Advantage: Creating and Sustaining Superior Performance*.

According to Porter (1985) the value chain concept is defined as a primary analytical tool used in strategic cost analysis for creating customer value. He asserts that competitive advantage arises from the way in which firms organise and perform activities. Porter (1985) argues that the 'value chain' approach, which involves "disaggregating a firm's operations into strategically relevant activities in order to understand the behaviour of costs and potential sources of differentiation", can be an important managerial tool. Svenson (2006) articulates this further, explaining that business activities are not the same as business functions. Functions are the familiar departments of the business (e.g. Production function, Finance function), which reflect the formal organisational structure, and the distribution of labour; whilst activities are what actually goes on and the work that is done.

Lewin and Harris (2007) defines value chain as a management tool used to identify and analyse business processes that are of strategic significance to the organisation, while Hwang (2009) refers to the value chain as the sequence of major business activities that add usefulness to the products or services provided by an organisation to its customers.

According to Shank and Govindarajan (2008) the ‘value chain’ of any firm in any business is the linked set of value-creating activities all the way from basic raw material sources through to the ultimate end-use product delivered into the final consumer’s hands. They viewed the value chain framework as a method of breaking down the chain of activities that runs from basic raw materials to end-use customers into strategically relevant segments in order to understand the behaviour of costs and the sources of differentiation. He further argues that there are no two firms, not even in the same industry that compete in exactly the same set of markets with exactly the same set of suppliers and hence the overall value chain for each firm is unique. Suppliers not only produce and deliver inputs used in a firm’s value activities, but they importantly influence the firm’s cost differentiation position.

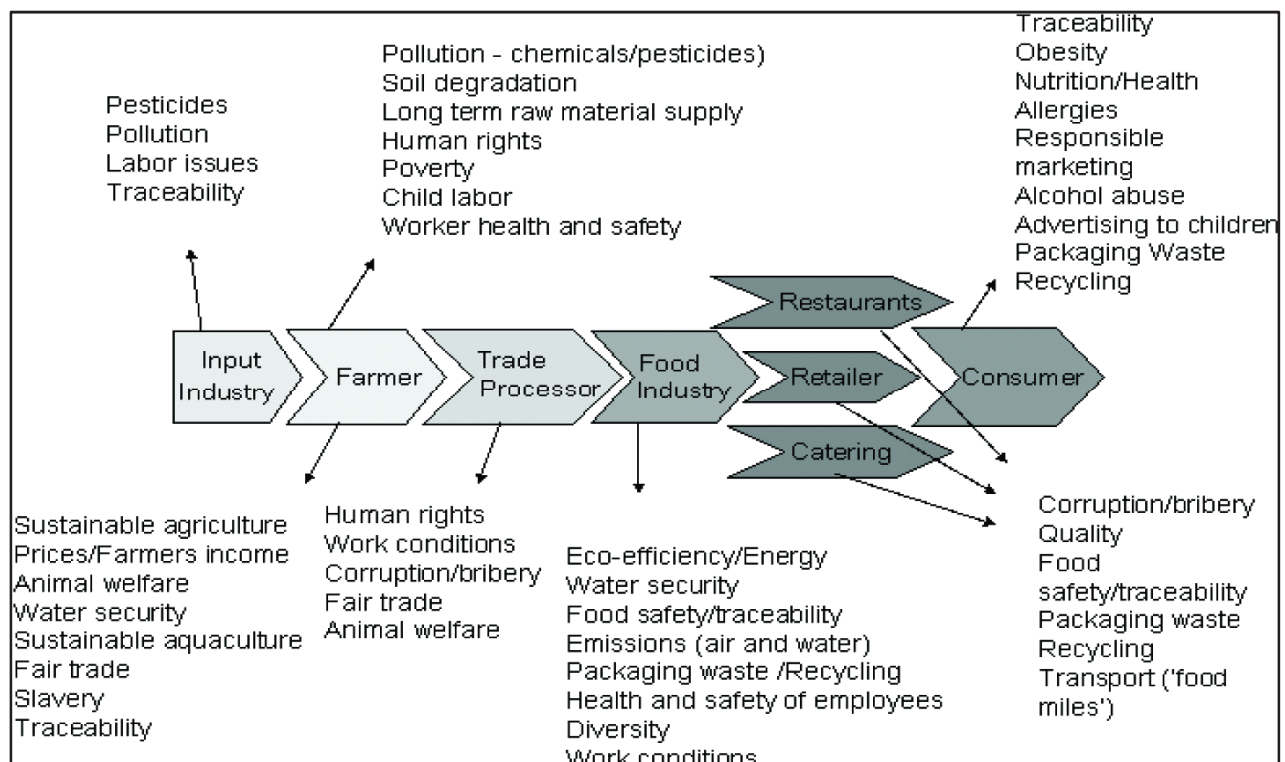


Figure 2.1 Value Chain Flow

Source: Shank and Govindarajan, (2008)

Shank and Govindarajan (2008) pointed out that gaining and sustaining competitive advantage requires that a firm understand the entire value creation and delivery system, not just the position of the value chain in which it participates. Suppliers and customers have profit margins that are important to identify in understanding a firm's cost/differentiation positioning, since the end-user customers ultimately pay for all the profit margins along the entire chain.

According to Johnson and Scholes (2004) value chain describes the activities within and around an organisation, which together create a product or service. It is a cost of these value activities and the value that they deliver that determines whether best value products or services are developed. Drury (2000) views value chain as 'linked set of value-creating activities all the way from basic raw material sources for component suppliers through to ultimate end-use product or service delivered to the customer. He thus observes that increased attention is now being given to value chain analysis as a means of increasing customer satisfaction and managing costs more effectively.

Value chain is fundamental to the performance of an organisation (Porter, 1987). Porter (1985) cited in Gamble et al (2004) proposes a conceptual "value chain" of linked primary and support activities that, once disaggregated, disclose the economics of service delivery or a product offering. These activities include both structural cost drivers and executional cost drivers, which differ from firm to firm and are controllable by managers through strategic decisions regarding choice of technology and through the execution of day-to-day operations. The costs and value drivers are identified for each value activity.

2.2 The Generic Value Chain of an Organisation

Value chains differ from company to company among competitors. However, according to Porter (1985) 'every firm's value chain is composed of nine generic categories of activities which are linked together in characteristic ways. The generic chain is used to demonstrate how a value chain can be constructed for a particular firm, reflecting the specific activities it performs.' The value chain model for organizations, therefore categorizes the generic value-adding activities of an organization and consist of the "primary activities" include: inbound logistics (supply chain management), operations (production), outbound logistics (distribution), marketing and sales, and services (maintenance); and the "support activities"

include: administrative infrastructure management, human resource management, Research and Development, and procurement, and finally the “margin” or profit for the business (Thompson, et al,2006).

The generic value chain model below was adapted from Porter (1985)

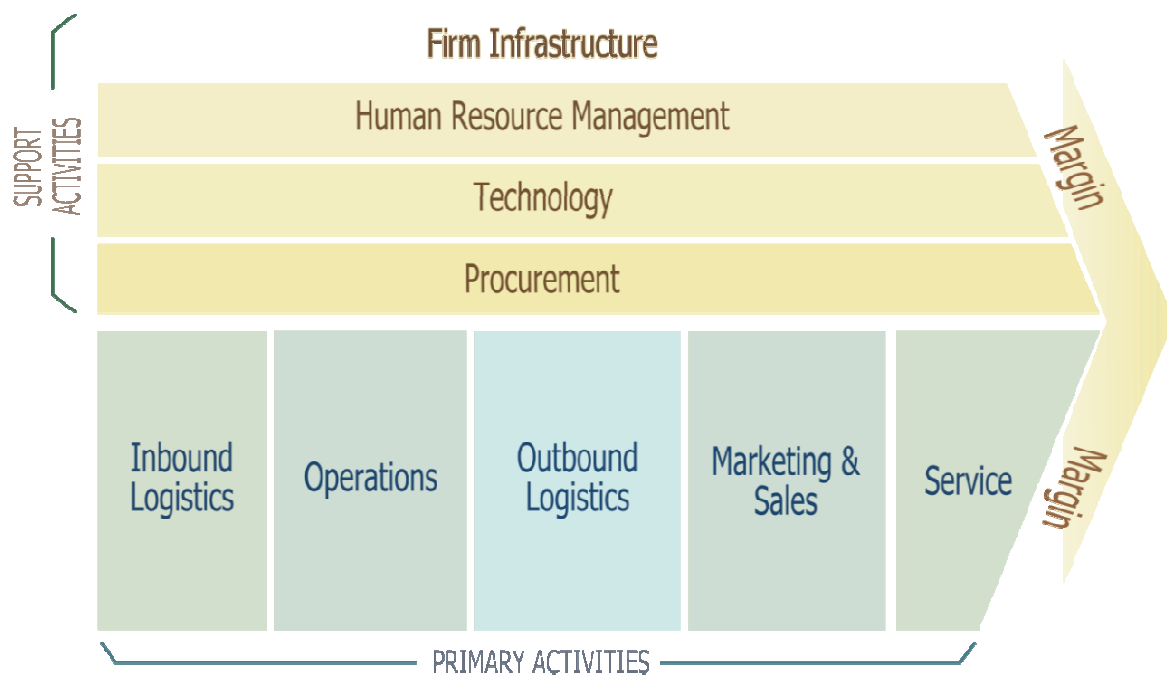


Figure 2.2 Value Chain Model.

Source: Thompson et al (2006)

2.2.1 Primary Activities

Primary activities are integral to the creation or delivery of a good or service (Johnson and Scholes, 2004). Thompson et al (2006) view them as the foremost in creating value for customers. According to Hill and Jones (2001), primary activities have to do with the design, creation, and delivery of the product as well as its marketing and its support and after sales service.

2.2.1.1 Inbound Logistics (Supply Chain Management)

Supply chain management refers to activities, assets and costs associated with purchasing of fuels, energy, raw materials, parts and components, merchandise, and consumable items from

items; receiving, storing and disseminating inputs from suppliers; inspection; and inventory management (Thompson et al. 2006).

The Council of Supply Chain Management Professionals (CSCMP, 2009) defines Supply Chain Management (SCM) as the planning and management of all logistics management activities. This also includes coordination and collaboration with various partners, which help to integrate supply and demand within and across companies. This agrees to Macbeth, Ferguson, Neil, and Baxter (2009) and Ellram (2010) who asserts that supply chain management is an integrative philosophy that manages the total flow through a channel from the producer to consumer.

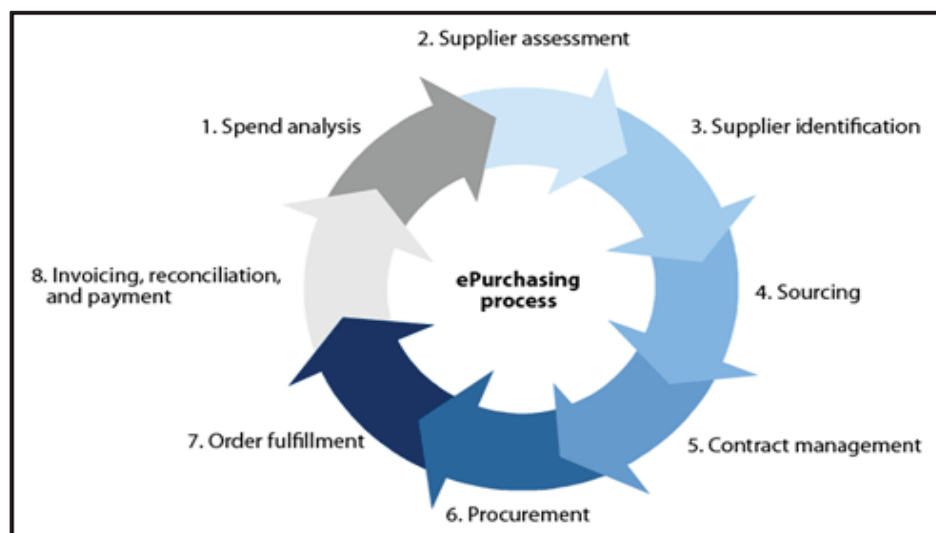


Figure 2.3 ePurchase Process

Source: Forrester, 2007

The primary function of the supply chain maybe to transfer goods and services from one source to another in appropriate form or quality, right timings, right place and right quantity (Ellram, 2010). However, Compton and Jessop(2008) argue that the chain also provide a vital exchange of information and a channel for the flow of money between traders.

This view is supported by Gates (2009) who also observes that digital information flow makes it possible for the company to create boundary less organisation which takes a new corporate mind-set and culture to turn suppliers from ‘them to ‘us’. He argues that in the traditional business model, suppliers have often been merely tolerated for what they provide but were not treated as an integral part of the business process needed to serve customers. He

views the supply chain as implying links in a linear relationship, looking back from retailer to distribution to transportation to manufacturing. In contrast, today's approach is that of a 'value network', a web of partnerships enabled by digital information flow. He further argues that everyone who touches the product must add value, and communications go both forward as well as back. Thus companies in the value network are not restricted to their places in line by heavy chains of process but can interact and do business with multiple vendors, as they need to.

2.2.1.2 Operations

According to Johnson and Scholes (2004), operations transform the various inputs into the final products or service: machining, packaging, assembly, testing, and so forth. Hill and Jones (2001) view this process as concerned with the creation of a good or service. Thompson et al (2006) regard them as activities, costs and assets associated with converting inputs into final products or services.

2.2.1.3 Outbound Logistics - Distribution

Johnson and Scholes (2004) identify distribution or outbound logistics –as were originally referred to by Porter (1985) as those activities relating to storing the product and its distribution to customers. Laudon and Laudon (2000) and Johnson and Scholes (2004) concur.

2.2.1.4 Sales and Marketing

These are activities, costs and assets associated with getting customers purchase the firm's products and services, for example advertising, market research and promotions (Morden, 1993). Aaker (1995) add communication, pricing and channel management as other activities and costs associated with this function. Hill and Jones (2001) identify the following activities as essential to the marketing and sales function that can help an organisation to create value:

- Brand positioning and advertising- can increase the value that consumers perceive to be contained in the company's product and

- Discovering consumer needs and communicating them to the research and development function will aid in value creation if the company can design products that better match those needs.

2.2.1.5 Service

The role of the service function of an enterprise is to provide the after sales service and support (Hill and Jones, 2001). They argue that this function creates a perception of superior value in the minds of consumers by solving customer problems and supporting customers after they have purchased the product or service.

2.2.1.6 Support Activities

According to Thompson et al (2006) support activities facilitate and enhance the performance of primary activities. Mackey and Thomas (1995) concur. Johnson and Scholes (2004) note that each of the group of primary activities is linked to support activities, which help to improve the effectiveness or efficiency of primary activities. They consist of procurement, technology development, product research, human resources management and general administration

2.2.1.7 Procurement

Van Weele and Rozemeijer (1996) defined procurement as a function which encompasses the activities from the supplier to the place where it is actually used. Critical roles involve purchasing function, store, in and out bound logistics, incoming inspection and quality control and assurance.

The specific activities of purchasing are, as described by Dobler (1990:100):

- formulation of requirements and detailed specifications of requirements;
- supply market research;
- supply negotiations;
- buying activities;
- management of supply contracts;

- quality approvals and
- contracting inbound transportation services.

Dooley (1995) argues that purchasing and supply management has developed to be a critical strategic platform of a firm's decision making. Dobler (1990) further asserts that purchasing has two significant purposes, which are either to purchase for resale, consumption or for conversion. This element also differentiates businesses in many fronts. Merchants and speculators purchase for resale. Such traders prey on knowing demand trends of the respective products in the final market. This allows them regardless of the cost of purchase, to trade profitably.

Procurement or purchasing activities are the instigators of most inbound logistics. It may also be argued that recruitment is a purchasing activity on that it involves the hiring of people.

2.3 Evaluation of Value Chain Model

Regardless of Porter (1985) widespread usage and acknowledgement of the value chain model, some authors who include Fleisher and Bensoussan (2003), Gadish and Gilbert (2008), Hergert and Morris (2009), observed some challenges in using this model. The following are the strengths, weaknesses, and notable challenges of the Value Chain Model.

Competitive advantages are the collection of unique competencies that are considered valuable by the consumer (Morash, 2001). While some strategies to create competitive advantages may be copied, the advantages that are imbedded in the chain efforts are more complex.

2.3.1 Strengths

According to Fleisher and Bensoussan (2003), value chain analysis addresses several critical deficiencies with the inward-looking focus of previous management tools. The Value Chain Analysis (VCA) facilitates a detailed and analytical regime with regards cost and value analysis. The respective VCA economic models are critical tools in competitor evaluations as well as during mergers and acquisition analysis.

Additionally, Value Chain Analysis enlightens interested parties of the nature of competitive advantage in industry (Porter.1985). By determining the industry profit pool, value chain analysis provides the broadest view of profit trends in industry. According to Gaiesh and Gilbert (2008) mapping the profit pool, not only shows the current state of the industry, but also reflects a number of trajectories about the industry evolution.

VCA identifies the firm's competitive position in the specific market, its sources of competitive advantage, or which activities create profits for the firm along the value chain. It therefore highlights the distribution of profits along the total value chain (Hergert and Morris, 2009). Fleisher and Bensoussan (2003) therefore argue that the value chain analysis model creates better understanding of a firm's competitive positioning relative to key customers, suppliers and competitors.

Operationally, value chain analysis has the ability to magnify the sources of a competitive advantage or differentiation in a firm(Johnson and Scholes 2004).Accordingly, Miller (2000) concurs with this view when he argues that one of the major advantages of value chain analysis lies in the fact that it produces a useful understanding of competitor actions.

Similarly this concept of linking in small producers is prevalent in the agriculture and horticulture arenas. Small scale growers are contracted to produce and become players in the supply chain.This notion of organisational inter-linkages underpinning value chain analysis makes it easy to analyse the inter-relationship between formal and informal work and not to view them as disconnected spheres of activity.

2.3.2 Weaknesses

Despite all the unique strengths of the value chain model, several weaknesses have also been associated with it. Porter has been criticised for being too simplistic because many of his qualitative prescriptions are extremely difficult to quantify (Svenson, 2006). Hence value chain analysis requires significant amounts of resources because initiatives such as customer and competitor value analysis, value creation analysis and industry structure analysis require focused and committed effort. It is therefore apparent that value chain analysis appears to be straightforward in theory, but relatively complex in practice (Fleisher and Bensoussan, 2003).Svennson (2006) challenges the view that each firm in the supply chain improves the

product through activities and transformation, each of which leads to an increasing and stepwise evaluation process in a value chain or value system. He argues that nothing in a value chain attains a value in a holistic supply chain context until it reaches the ultimate consumer.

The consumer is the final determinant of value, he further argues. All activities and transformations that have taken place before the product reaches the ultimate consumer can lose all of or at least a major part of their original value depending willingness of the consumer to pay for it. Value in this case does not exist in real terms, but only in theory (O'Connor, 2005). Durgee, O'Connor and Veryzer (2005) concur as they advocate for a more consumer driven value process, which must work, back from the ultimate consumer and not towards him as a final step.

When conducting value chain analysis, in many instances, the available data will be inappropriate or necessary data will be missing. Svenson (2006) therefore questions its empirical validity, because it may contain some of the basic dimensions and data that are highly questionable. The efficiency of the value chain analysis is also challenged by the radical changes affected by the availability of information and explosion in the information technology field. Traditional value chain analysis originated around vertical linkages, and in particular, around the firm's physical assets.

2.4 Dimensions of Value Chains

There are many possible dimensions to consider in a bid to comprehend a business or a collection of entities engaged in a coordinated value chain. Six dimensions of value chains are proposed by Sako (1992) and are discussed below.

2.4.1 Product Flow

Moran (2008) provides the second critical dimension of a value chain is the specification of the product flow features of the chain. These features would include:

- Transportation and logistics necessary to move products between processes,
- Details of flow scheduling to make sure that product are available at various stages of the process without accumulating excessive inventory,
- Enhancement and maintenance of various quality attributes, and

- Full utilisation of plant and equipment in all stages of the value chain to reduce downtime or bottlenecks.

At the same time, a critical issue in managing the product flow in a supply chain is managing slack or flexibility to accommodate unexpected interruptions or events. Concepts of statistical process control, inventory management, and logistics management are critical to understand this product flow dimension of a value chain.

Kaplan and Norton (1991) argue that Product flow has to do with the efficiency and effectiveness of managing products to markets and customers. Each of the macro value chain processes adds a little different twist. For example, Design effectiveness of product to market flow could be measured and analysed through new product development cycle time. Supply effectiveness could be measured and analysed by inventory days of supply. Analytical techniques such as value stream mapping, network analysis, and/or inventory optimisation provide value in assessing process efficiency.

2.4.2 Financial Flow

According to O'Connor (2005) argued that the third important dimension of a value chain is the financial or cash flow across the participants and processes. Recent development of electronic funds transfer technology has improved the efficiency of financial and funds flows compared to earlier systems of billing and cheque-writing. An additional element of this dimension is the sharing of financial performance information across the stages or processes and participants in the chain. Such information is typically presumed to be proprietary in nature, but more open sharing of financial information among chain participants may be critical to optimising the financial and physical performance of that chain and proving a fair allocation of returns for value created.

2.4.3 Information Flow

A fourth critical dimension of a value chain according to Sako (1992) is the information flow across the chain. Information flows across traditional agricultural supply chains revolve around availability and demand which is reflected in the offered price. Collectively, these are used as signals that hopefully stimulate other sectors to provide the products that are needed.

The new value chains can focus on needs, intentions, and price as a way to drive the supply, quality, and physical coordination. Finally, actual performance of the product and processes can be shared with the sectors that may be able to influence improvement in future performance.

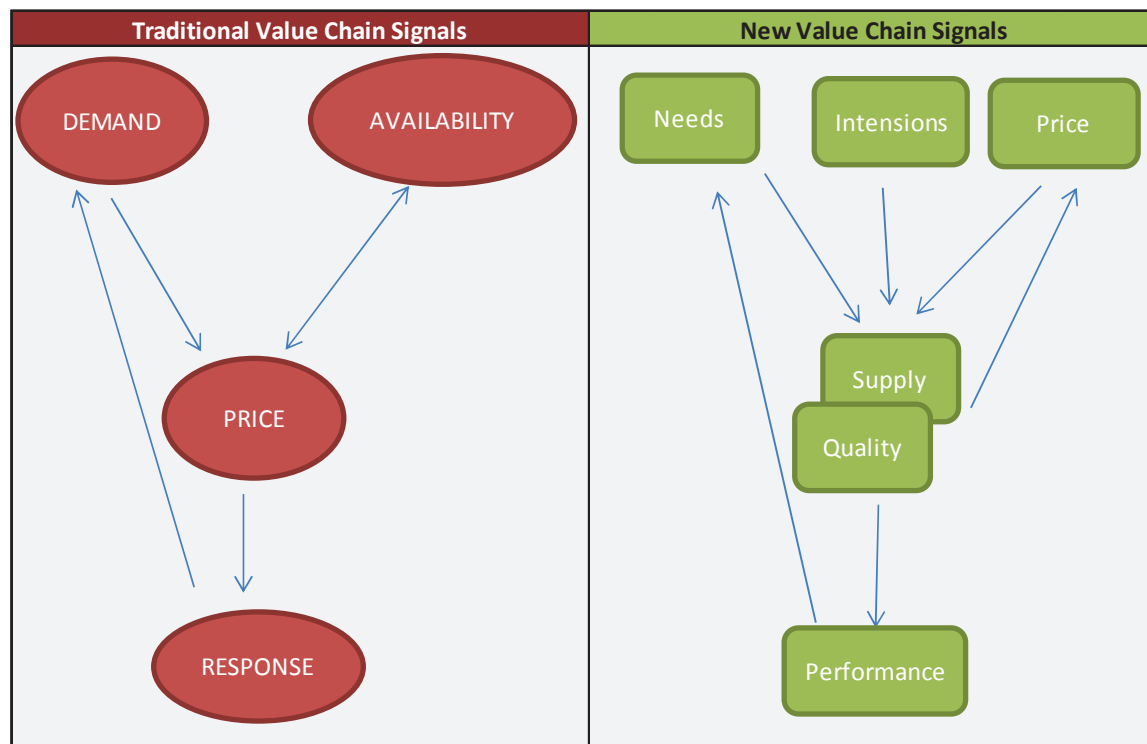


Figure 2.5 Traditional and new value chain analysis

Source: Sako (1992)

Important elements of the information flow dimension include Sako (1992):

- Timing and accuracy of messages;
- Strength of these messages;
- Cost of messaging, and
- Assurance that potentially sensitive or confidential information is only exposed to those who need that information to improve the functionality of the value chain.

T

Technology developments that will enable the increased flow of information are probably some of the most significant drivers of change in agricultural value chains. These include functional advances and cost reduction for computing technology, remote sensing, and enhanced network capabilities. The domino effect of this trend is that the value individual firms can add through enhanced information flow will continue to evolve.

2.4.4 Incentive Systems

According to Kaplan and Norton (1991) a fifth important dimension of a value chain is the incentive systems that are used to reward performance and share risk. Such systems might include price premiums, profit sharing, minimum pricing arrangements, window contracts, cash flow or financial assistance contracts, loan guarantees, qualified supplier recognition programs, cost sharing arrangements, long-term commitments, and knowledge or market access.

Taylor (2001) asserts that new incentive mechanisms will evolve as the value chain participants begin to adopt and use new information technologies and build new relationships across the chain. Taylor (2001) further highlighted that conflicts may be encountered with incentive systems that do not adjust with market conditions and result in the inequitable sharing of losses and profits. This will drive participants to develop more flexible incentive systems such as contribution based percentage sharing of final product gross revenue.

2.4.5 Governance

Taylor (2001) pointed out that a sixth and final dimension of a value chain is the chain governance/coordination system. Alternative governance or coordination Systems might include open access markets and various forms of contracts, strategic alliance, joint ventures, franchising arrangements, networks, cooperatives and vertical ownership. Kotler (1997) propounded that the choice of governance/coordination system will have a significant impact on who has power and control in a value chain and how risks and rewards are shared. The structure and linkages that tie the emerging value chains together will be much more complex than they have been in the past. The six dimensions outlined above can provide a basis for describing and evaluating the value chain of the future.

Kaplan and Norton (1991) added that strategy is another dimension of value chain, strategy was founded on the key value chain performance measures and the competitive priority necessary to grow profitably. They argue that one common model of organising key performance indicators is the Balanced Scorecard. The basic idea is that an organisation must measure its performance from a balanced view (Customer, Internal Process, Financial and Employee perspectives) against its goals as established in its vision and strategy. Each of the

macro processes in the value chain framework contributes relevant measures for Customer, Process and Financial.

2.5 Why and How Value Chains are Governed?

According to Giuliani *etal* (2005), there are two reasons why the global buyers do not rely on the market and create control in value chains is to minimize the risk of supplier failure. No firm will incur the expense of developing arrangements with specific suppliers in order to purchase products that the market freely provides.

2.5.1 Product Specification

The more the buyers pursue a strategy of product differentiation, for example, through design and branding, the greater the need to provide suppliers with precise product specification and to ensure that these specifications are met.

2.5.1.1 Risk of supplier failure

Importance of non-price competition continues to increase based on factors such as quality, response time and reliability of delivery, together with increasing concerns about safety and standards, means that buyers have become more vulnerable to shortcomings in the performance of suppliers.

2.5.1.2 Arm's length market relations

The buyer and supplier may not necessarily develop close relationships because the product is standardized. A range of firms can fulfil the buyer's requirements and the switching costs are low.

2.5.1.4 Key Insights

- (a) **Captive networks**: here the buyer exercises a high degree of control over other firms in the chain. The buyer determines the characteristics of the product and follows and monitors that their instructions have been carried out. This occurs to ensure conformity to standards.

- (b) **Hierarchy**: the lead firm takes direct ownership of some operations in the chain. The critical issue is to keep in mind that there are different kinds of value chains and different chains may require varied responses from local firms.

2.5.2 Characterising Governance in Value Chain Analysis

Gereffi (1994) defines chain governance as autonomy and authority in relationships that influence how financial, material and human resources are allocated in the supply chain. Humphrey and Schmitz (2000) argues that governance involves the co-ordination of economic activities via inter-firm and intra-firm relationships. This highlights draw on transaction-cost theory.

They distinguish between:

- arm's-length market relations;
- network relations based on co-operation between "equals";
- quasi-hierarchy, combining co-operation with asymmetrical power relationships;
- hierarchy, associated with vertical integration.

Such typology provides a basis for characterising the organisational architecture of value chains that can be further developed in a number of directions:

- to differentiate power relations and co-ordination mechanisms in the definition of chain governance;
- to distinguish co-ordination mechanisms from their application within and between firms and
- to assess the determinants of governance modes, or the foundations of power relations and co-ordination mechanisms within global value chains.

2.5.2.1 Power and co-ordination within value chains

Differentiation of unique dimensions of power and co-ordination within chain governance allows for the distinguishing drawbacks or advantages relative to the given power configuration. Humphrey and Schmitz (2000), clearly made a distinction between network

and quasi-hierarchy which shows that a similar co-ordinating mechanism or co-operation through trust and long-term relations, can be used within the context of different power relations.

The diverse forms of power relations developed within global value chains may now be accounted for more systematically by defining the governance not only the co-ordination of economic activities. This includes the methodical allocation of resources or systematic distribution of gains within the chain.

According to Humphrey and Schmitz's (2000), the chain governance can be defined as

- (i) the co-ordination of value-creating activities, or how resources are used within the chain, and
 - (ii) the distribution of value created, or how resources are allocated within the chain.
- Such a definition integrates Humphrey and Schmitz's (2000) emphasis on co-ordination within a broader view of governance as conveyed by Gereffi's (1994) definition.

The two dimensions of power and co-ordination are closely intertwined in chain governance, as control over value creation processes presumably increases a firm's capacity to appropriate or retain value. Firms that are in a position to appropriate the value created within the chain might be better equipped to co-ordinate value-creating activities. However, to isolate the dimension of power can be of particular relevance when studying value chains within a development perspective.

This puts emphasis on local firms' capacity to extract rents out of their participation in global value chains. The dimension of co-ordination sheds lights on the capabilities needed for meeting competitive requirements within the chain. In such perspective, successful integration within global chains or industrial upgrading, involves increasing value creation. This is achieved through the sophistication of locally performed activities and outward linkages, but also appropriating greater value at the local level through higher profits and higher wages.

2.5.2.2 Symmetrical and asymmetrical power relations

A key question arises from this typology: under which condition is trust associated with symmetrical versus asymmetrical power relations? More generally, what determines the configuration of power relations within global value chains? A few propositions can be made regarding this issue by comparing various cases of production relationships in the electronics and apparel industries.

Sturgeon (2000) shows that turnkey producers in electronics have developed symmetrical power relations with their large clients, whereas core suppliers in, say, the New York garment industry, remain highly dependent on their main clients, thus extracting limited financial gains from their trading relationships (Palpacuer, 1996). On what basis did turnkey producers gained higher bargaining power than their garment counterparts? It can be proposed that two characteristics of the transaction contribute to define the bargaining power of a supplier:

- *transactional dependency* vis-à-vis core clients, measured through exchange concentration and
- *competence dependency*, or the extent to which competencies developed by suppliers can constitute entry barriers into their segment of activity.

The study of subcontracting relationships in the New York garment industry shows that some peripheral suppliers exhibit high levels of transactional dependency while working with clients because of market relations. These suppliers are not trusted due to their limited capabilities, and remain in a peripheral position within their clients' production networks. Conversely, some suppliers involved in trust relationships have succeeded in diversifying their market base, thus reducing their dependency on core clients and reaching a dominant position among local suppliers (Palpacuer 1996).

2.6.2 The Value Chain System

A firm's value chain is part of a larger system that includes the value chains of upstream suppliers and downstream channels to customers. Porter (1985) has called this series of value chains the value system.

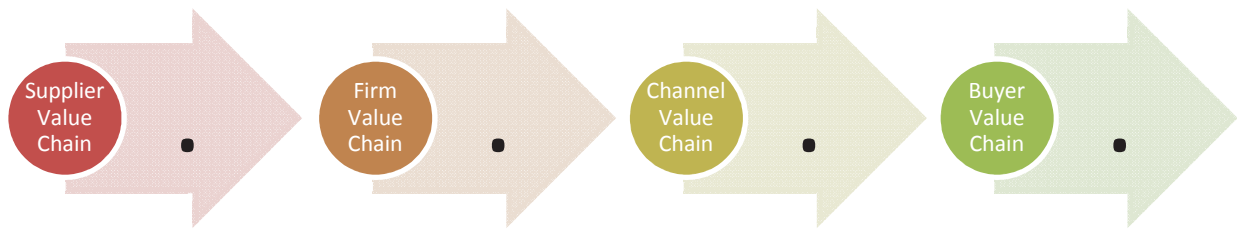


Figure 2.6: The Value System

Source: Williamson (1985)

According to Williamson (1985) linkages exist not only in a firm's value chain, but also between value chains. While a firm exhibiting a high degree of vertical integration is pulled to better coordinate upstream and downstream activities, a firm having a lesser degree of vertical integration nonetheless can forge agreements with suppliers and channel partners to achieve better coordination. For example, an auto manufacturer may have its suppliers set up facilities in close proximity in order to minimise transport costs and reduce parts inventories. Clearly, a firm's success in developing and sustaining a competitive advantage depends not only on its own value chain but on its own ability to manage the value system of which it is a part.

2.7 Chapter Summary

This chapter discussed literature review on value chain analysis. Major concepts under discussion were the general understanding of value chain analysis, dimensions of value chains, value chain innovation, global value chain, value creation, methods and materials of value chain analysis, value chain and profit margin and a case study of value chain analysis. The next chapter discusses the methodology of this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes how the study was conducted. The major areas covered include research design, research subjects, research instruments, data collection procedures and data analysis, presentation and discussion.

3.1 Research Design

Zikmund (1997) defines research design as seeking through methodical processes to add to one's body of knowledge and hopefully to that of others, by the discovery of non-trivial facts and insights. Fraenkel and Wallen (1996) define a research design or method as a systematic and orderly approach taken towards the collection of data so that information can be obtained from the data.

3.1.1 Research Philosophy

There are two approaches to research, positivism and phenomenology, (Saunders, Lewis and Thornhill, 1997).

3.1.1.1 Positivism

The positivist approach to research makes assumptions that things can be studied as facts and relationships which can be established as scientific laws. For positivists, such laws have the status of truth and social objects are studied in much the same way as natural objects (Hughes, 1994). The positivist approach believes that it is possible to identify and communicate knowledge as being hard, real and tangible, so that knowledge is capable of being acquired. According to Saunders, Lewis and Thornhill (1996), positivism seeks to elaborate and predict future activities in the world of business by seeking irregularities and relationships between variables, whilst the anti-positivists oppose this stating that the

business world can only be understood from the point of view of individuals directly involved in the activities under study.

3.1.1.2 Phenomenology

Under phenomenology, the researcher reality is flexible it is a formulation of those individuals active in the research. Reality seldom exists in a vacuum; its composition is influenced by its context (Hughes, 1994). Phenomenology implies that knowledge is of a softer, subjective and spiritual nature based on personal experience and insight, so that it has to be personally experienced.

The methodology adopted in this study was largely premised on the positivist research philosophy. The major aim of this philosophy was to provide a holistic analysis by integrating relevant issues in order to produce a more complete picture of the implementation of a balanced scorecard at Interfresh Ltd. The approach made use of participatory and conventional research methods. The other reasons for the use of the positivist approach were;

- Defined theoretical view for the research;
- Easily comparable data;
- Researcher control of the research process and
- Economical collection of data.

3.1.2 Research Strategies

According to Gill Et al (1997: 178-179), deduction and induction are two main approaches to management research. Deductive research refers to “the development of a conceptual and theoretical structure prior to its testing through empirical observation”. Inductive research is “the reverse of deduction as it involves moving from the observation of the empirical world to the construction of explanations and theories about what has been observed.”

3.1.2.1 Exploratory Research

This is appropriate when the research problem is badly understood or defined (Boyd et al., 1981). Exploratory research seeks to assist the researcher to have an insight of the problem. It allows for clarifying the nature of the problem. It also seeks to discover new relationships while conclusive research is designed to help executives choose among various possible

courses of action (Boyd et al, 1981). An exploratory research is designed to solve an unstructured problem. Data collection methods include the following:

- Search for secondary data
- Survey of knowledgeable persons
- Focus group discussions
- Case study

3.1.2.2 Case study

Robson (1993) refers to case study as the development of detailed, intensive knowledge about a single case or number of closely related cases. He argues that the case-study approach also has considerable chance to generate answers to questions why, what and how and is used to carry out an in-depth study of the situation.

The major advantages of a case study approach, according to Zikmund (1997) are that;

- The strategy enriches the understanding of the context of research and the processes being enacted; and
- It allows several data collection methods to be used such as questionnaires, interviews, observations and documentary analysis.

However, the case study approach has its weaknesses (Zikmund, 1997); and these include:

- The approach becomes difficult to use when dealing with quantitative data because of its qualitative nature although this problem is usually not very significant; and
- Data analysis may be difficult due to the use of various methods of data collection having been employed at the same time hence especially if a quantitative analysis is to be done

Owing mainly to the issue of limited research time, instead of pursuing a longitudinal study, the researcher confined the research to only one organisation, Interfresh Limited. To this effect, the research was a case study investigation, evaluating the effectiveness of using value chain analysis to enhance supply chain of fresh produce in retail.

3.1.2.3 Descriptive Research

According to Ghaurietet al. (1995), descriptive studies are designed to describe something, for example, characteristics of users of a given product, the degree to which product use varies with income, age, sex and other characteristics. In a descriptive research, the problem is structured and well understood. Data collection methods include the following:

- Observation
- Survey study using personal interviews
- Telephone interviews
- Questionnaires

The key characteristics of this type of research design are structure, precise rules and procedures (Ghauri et al, 1995). If data is to be collected by the survey method, a detailed sampling plan must be made with regard to how many people and whom to interview, and how interviews shall be conducted. All interviews should be conducted in the same way so that variation in the data collection is as small as possible. Descriptive research is quantitative and conclusive.

The descriptive research design is applicable to this study as this study is quantitative and seeks to make conclusive decisions and recommendations. Data collection was done using the case study approach and survey approach using questionnaires. The structure of this study required the collection of views from Interfresh Ltd staff and management regarding the effectiveness of the current challenges of implementing a performance management system.

3.1.2.4 Survey

Quee (1999) defined survey research as a methodical way of gathering primary data using structured questionnaires and communication. Robson (1993) reiterated that a survey involves the systematic collection of information in standardised formation from groups of people. Features of a survey include defining samples of individuals from known populations and collection of relatively small amount of data from each individual. Surveys usually employ questionnaire or structured interview. This strategy was employed because of the following advantages it comes with, and these according to Zikmund (1997) are:

- Survey study is simple and objective
- Quantitative analysis of data is made easy by the structure
- It is cheap. There is no need to collect data from the total population but the use of a sample makes it cheap and easy

The major challenge in using the survey strategy is that the research has to be well structured and understood and the objectives must be spelt out clearly.

3.2 Population and Sampling Techniques

3.2.1 Population

The population is the group upon which the researcher is interested in making inferences (Baker, 1998). Also, the study results are generalized on this group. The population includes all individuals whom the researcher is interested in obtaining information and making inferences on. Fraenkel and Wallen (1996) divide the population into two categories, the target and the study populations.

The target population is the actual population to which the researcher wishes to generalise the research findings. However, due to various reasons, this population is not readily available. Thus, the population to which the researcher is able to generalise is the study population (Saunders et al., 1997). The study population is the collection of study units for which the values of the variables of interest could possibly be determined (Barzun and Graff, 1997). The study population for this research are all employees of Interfresh and Retail outlets in Zimbabwe.

3.2.2 Sampling

Zikmund (1997), defines a sample as a small part of anything structured to show the style, quality and nature of the whole. The purpose of a sample is to approximate the measurement of the whole population within acceptable limits. He further asserts that sampling is an important aspect of life in general. Smith (1995) contends that sampling is closely linked to external validity or the general form of the findings in a study, the extent to which what has been found in a particular situation at a particular time applies more generally. The idea of a

‘sample’ is linked to that of a ‘population’. Population refers to all the cases while a sample is a selection from the population.

The study population for this study comprises staff and management of Interfresh Ltd, TM Supermarkets, Commercial Farmers, Small holder farmers, transport operators and other suppliers. The aspects of VCA being essentially a management issue, the researcher targeted all the 15 managerial staff at Interfresh Ltd and the management of the 30 TM Supermarket outlets in Zimbabwe.

3.2.2.1 Sampling Techniques

Various types of sampling plans are divided into probability sample based and non-probability samples ones (Walker, 2001). In probability sampling, statistical inferences about the population can be made from responses of the sample while in non-probability samples, it is not possible to make statistical inferences. Probability sampling considers all selection methods. Observations to be included in a sample have been chosen on a totally random basis from the population (Cohen and Manion, 1999). In this study, probability sampling was chosen because of need to cut costs and time as well as the nature of the study.

3.3 Data Collection Methods

3.3.1 Questionnaire

Kervin (1999) defines a questionnaire as a data collection instrument used in survey research where people answer questions by recording their own answers. Bell (1999) and Zikmund (1997) widened the definition to include face-to-face or telephonic interviews. Fraenkel and Wallen (1996) views the major advantage of using the questionnaire, is that it can be administered to large numbers of people at the same time. This method is cost effective and convenient in collecting data. Drop and pick questionnaire method, was used in this research.

Being a quantitative study, this research employed the use of structured questionnaires for the reasons stated below;

- The nature of the research requires the collection of primary data at the respondent’s own free time hence questionnaires are the most applicable
- They collect data from more than one respondent at the same time

- Questionnaires are cost effective and convenient in data collection especially in this research

Foddy (1994) and de Vaus (2002) give the major disadvantages of using a drop and pick questionnaire as a research instrument as follows;

- Response rate is often low as potential respondents fail to complete and return the questionnaires
- It is difficult to control who completes the questionnaire as questionnaires may be completed at home in the absence of the researcher
- The respondents may find it difficult to answer particular questions since the researcher might not be available to explain where assistance is required.

The nature of questions in a questionnaire is such that they precisely address research questions and objectives (Saunders et al., 2003). A questionnaire is useful in a structured data collection process and when information is required (Wegner, 1995). The problem of low response was reduced by continuous follow-ups on respondents until they return the questionnaires and by the use of convenience sampling which entails the selection of the most convenient respondents.

3.4 Data Analysis Procedure

After data collection the data was cleaned, making sure all irrelevant data is discarded. The data was then coded before the process of data entry was carried out using Epi-info version 3.3; a statistical package that is considered good for data entry. Data analysis was done using the Statistical Package for Social Scientists (SPSS version 12) and Microsoft Office Excel 2007 used for its good looking graphs and charts. The results are presented in the form of graphs, charts, tables and percentages for easy understanding and follow through. The report was then be compiled in Microsoft Office 2007, joining all the chapters to come up with one comprehensive document.

3.5 Research Limitations

This study was partly limited by the fact that the researcher was part of the organisation being studied and this limited the openness of responses. However, in order to limit the impact of

this to the study the researcher used closed questions and explained the importance of the study to the organisation through the Chief Executive Officer.

3.6 Validity

Validity of a measuring instrument is the standard to which the instrument measures what it is designed to measure. Diamantopolous & Schlegelmilch (2010) suggest that validity is the extent to which a particular measure is free from systematic and random error. Validity is measured in the context of content and construct. Content validity determines whether the research instrument contains enough questions to cover the purpose of the study and this was achieved by aligning the questions to the research objectives.

Construct validity refers to the construction of questions in the questionnaire by ensuring concise and clear questions. The researcher achieved this by phrasing the questions in a clear and precise format as well as use of closed questions for ease of response. The researcher ensured use of simple language and avoided technical terms. Before embarking on the full study a pilot study was conducted to see whether the respondents understood the questionnaire.

3.7 Reliability

Reliability refers to the level of accuracy of the data. It is the consistency with which a measuring instrument yields a certain result when the entity being measured has not change i.e. the extent to which the measure is free from random error. (Leedy and Ormrod, 2010).

A pilot test of the questionnaire was conducted with to ensure questions are specific and unambiguous so that the questionnaire obtains the results intended for the research study. The pilot study allows for quality checks and test of possible errors that may impact the research results.

3.8 Ethical considerations

According to Leedy and Ormond (2010), research disciplines involving human beings who have potential to think, feel and experience physical or psychological distress, therefore it is imperative to consider the ethical implications of the researcher intentions. The study took

into account the right to privacy and disclosure policy, honesty with professional colleagues, informed consent as well as protection from harm.

Planning the research project was an important step to lessen the risk of producing deceptive outcomes. Planning protects and ensures dignity and welfare of all participants as well as those affected by the results of the research. The researcher made all effort to guard against plagiarism, risk of fabrication and falsification of data was minimized.

Institutional consent was obtained in the form of an ethical clearance letter from the University of Zimbabwe as part of the review for ethical considerations. To ensure the rights of the retailers were not infringed upon the researcher obtained authority and consent from the retailers to proceed with the study.

The researcher was accountable and responsible for retaining the dignity and welfare of all participants by ensuring the rights of the respondents were protected from any potential psychological harm, unnecessary risks or mental and physical discomfort inherent in the research process. For instance there were no financial enticements or other forms of inducements given to respondents to encourage participation. Participants not interested to take part were not forced and free to decline.

The researcher assured the participants that the research was approved by the Graduate School of Management. A statement regarding the coding of data to protect the participants' identity intended to alleviate concerns about privacy and confidentiality. For example no names were mentioned in the research process. The researcher adhered to the disclosure policy regarding the purpose and nature of the study as guided by the University of Zimbabwe. Participants were informed about the general nature of the study as well as any potential risks the study may have. An Informed consent was obtained in writing from participants. The researcher made sure to communicate to the respondents that all results were to be treated with confidentiality.

3.9 Chapter Summary

Chapter 3 has discussed the research methodology that was used to collect, process, analyse and present data from Interfresh Ltd staff and management. The researcher used a descriptive

research design employing the use of questionnaires, which were administered on staff and management from Interfresh Ltd. The next chapter presents the findings of the research and their discussion.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the research from the data collected using the methodology discussed in the preceding chapter. The chapter will start by discussing the response rates, followed by the presentation of demographic data. The actual findings of the research will be presented, thematically in line with the research objectives, and will be discussed with relation to the theoretical framework discussed in the second chapter.

4.2 Response Rate

A total of 60 questionnaires were administered to retailers and wholesalers and 14 more questionnaires were administered to the staff and management of Interfresh Ltd. Forty four questionnaires administered to retailers and wholesalers were successfully completed while only 10 questionnaires were completed successfully by the staff and management of Interfresh Ltd as shown in the Table 4.1 below.

Table 4.1: Response Rate

| | Administered | Returned | Response Rate |
|--------------------------------------|--------------|-----------|---------------|
| Retailers and TM Supermarkets | 60 | 44 | 73.3% |
| Interfresh and Wholesalers | 14 | 10 | 71.4% |
| Total | 74 | 54 | 72.35% |

From the above findings, the response rate from retailers and wholesalers was 73.3%, while that from Interfresh staff was 71.4%. This translates to an overall response rate of 72.35%. This response rate, according to Bryman et al (2007) is high enough to warrant validity and reliability of the research findings.

4.3 General Understanding of Value Chain

This section provides an understanding of the value chain by staff and management of Interfresh Ltd. Figure 4.1 shows that 72% of respondents understood value chain as activities within and around organisation, 64% defined it as the amount buyers are willing to pay for what a firm provides them and 52% understood it as the tool used to diagnose and enhance competitive advantage.

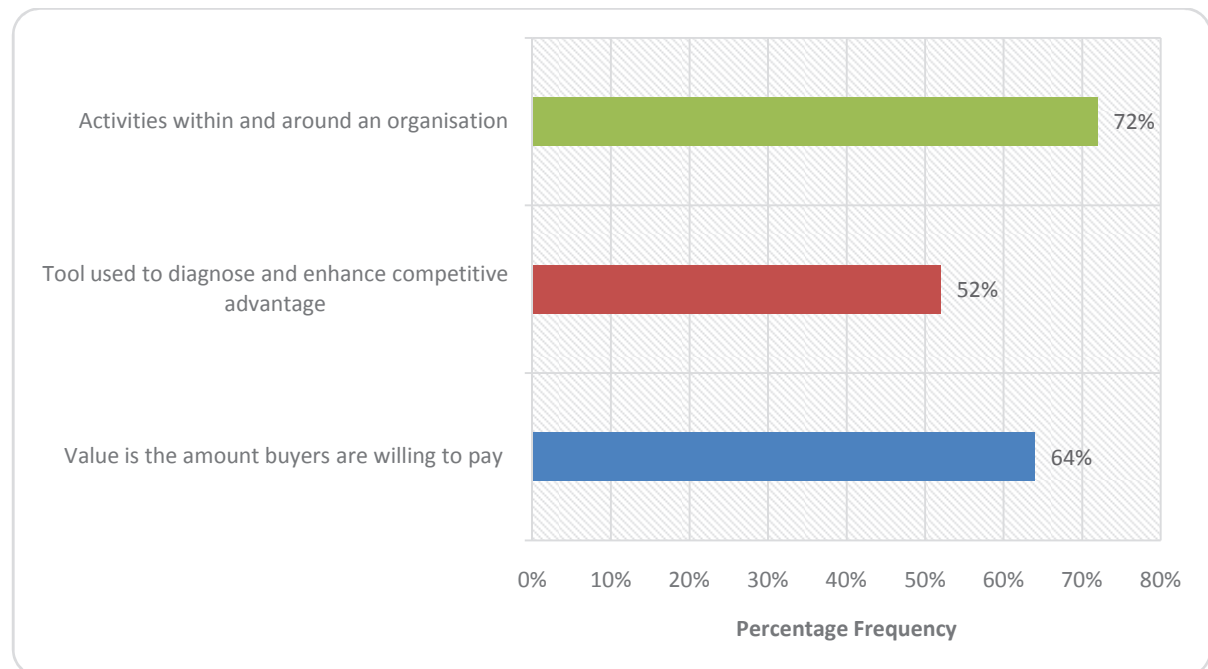


Figure 4.1: Understanding Value Chain

Figure 4.1 provides ways respondents understood value chain. Porter (1985), understands that value chain disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and the potential sources of differentiation. Value chain consists of primary activities and support activities. Primary activities are the activities involved in the physical creation of the product and its sale and transfer to the buyer as well as after-sale assistance, such as inbound logistics, operations, outbound logistics, marketing and sales and service. Support activities support the primary activities and each other, such as firm infrastructure, human resource management, technology development and procurement.

An analysis to investigate whether retailers are happy with the services provided by Interfresh was carried out and the results are presented in Figure 4.2 below.

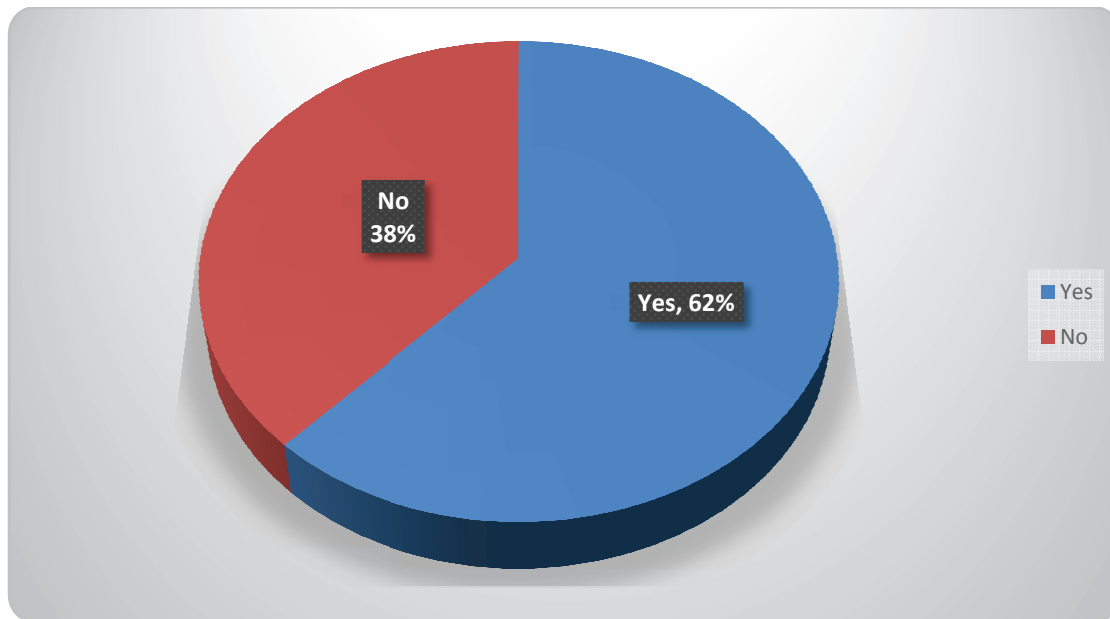


Figure 4.2 Retailers Satisfaction

From the analysis above, 62% of the retailers indicated that they were happy with the services that were being offered by Interfresh Private Limited, with the other 38% expressing their despondency.

4.3.1 Relationship between company management and Retailers

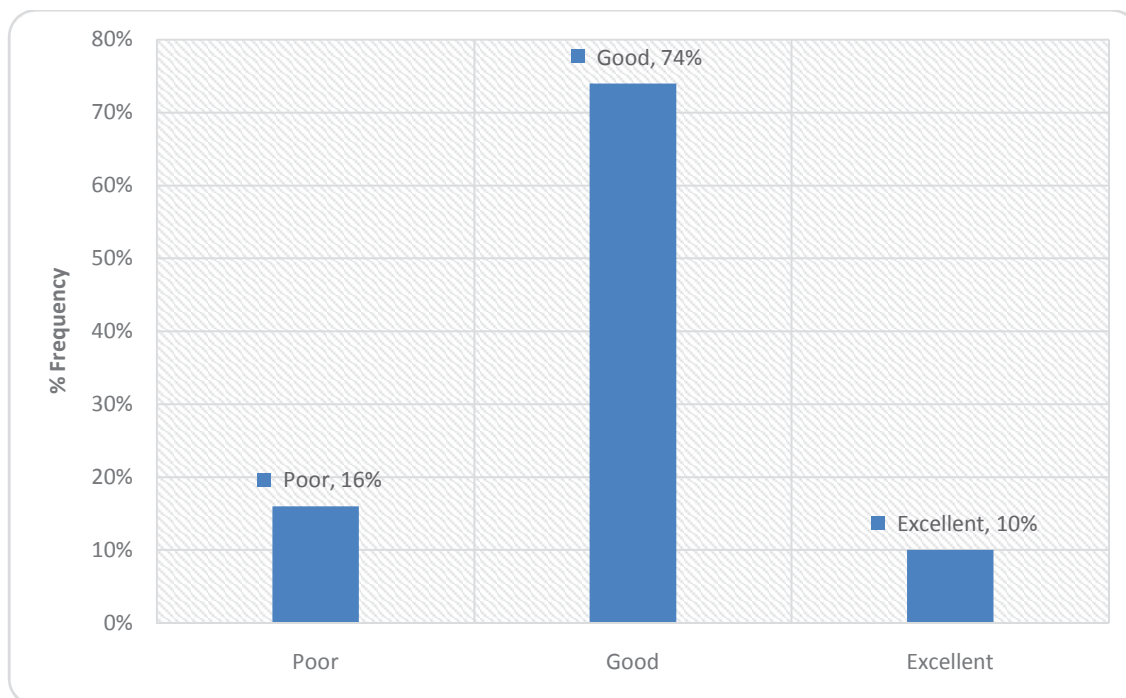


Figure 4.3 Management and Customer Relationship

Figure 4.3 shows an analysis of the description of the relationship between the company management and retailers. It was revealed that 74% of the respondents said the relationship is good, 16% said that it is poor and 10% said that it is excellent. Generally, this implies that the relationship between management of Interfresh Ltd and customers is good. New relationships in the value chain can provide new opportunities for value creation. Consider how Interfresh Ltd might be able to change the nature of value created along each step of the value chain through better vertical communication and coordination. The good relation is a platform for collaborative marketing strategies and the sharing of strategic information in the trade.

4.4A Detailed Review of the Value Chain

4.4.1 The perception of customers to Interfresh Ltd offerings

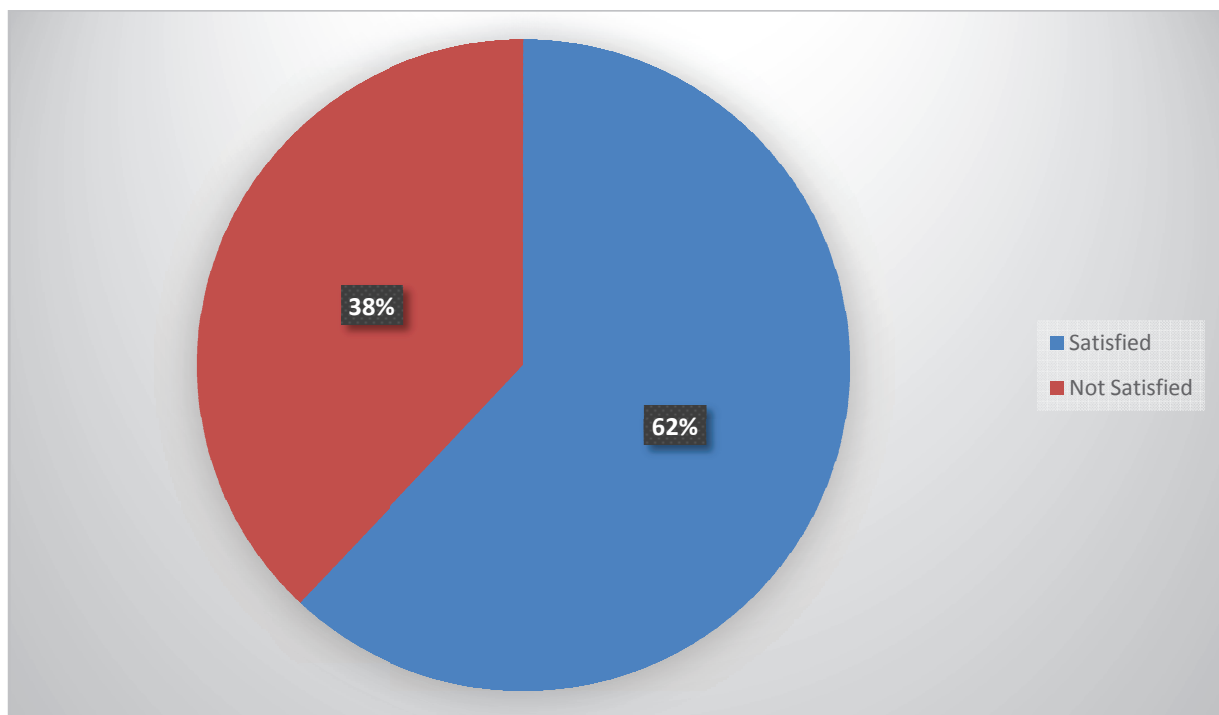


Figure 4.4: The perception of clients to Interfresh Ltd offerings

Figure 4.4 shows that 62% of the respondents are satisfied by the offerings of Interfresh Ltd and 38% are not. Although 38% is a significant percentage, most respondents are happy with the product and service offerings of Interfresh Ltd. This implies that Interfresh has room to improve on its offering. This is a critical aspect as it has bearing on the competitive advantage Interfresh has in regard to fresh produce and service offerings.

4.4.2 The definition of Value Chain

A company's value chain is basically a sequence of interrelated activities for transforming inputs into outputs that customers will value. The respondents managed to air out the following definitions to the value chain concept and these are presented in Table 4.2.

Table 4.2 Definitions of value chain

| Definition | Response (%) |
|---|--------------|
| The amount buyers are willing to pay for what a firm provides them | 64 |
| Tool used to diagnose and enhance competitive advantage | 52 |
| Activities within and around an organisation, and relates them to an analysis of the competitive strength of the organisation | 72 |

From Table 4.2, 52% of the respondents defined value chain as tool used to diagnose and enhance competitive advantage, 64% argued that it is the value buyers may pay for what a firm provides them and 72% said value encompasses the activities within and around an organisation and relates them to an analysis of the competitive strength of the organisation.

Porter (1985) defines value as “... *the amount buyers are willing to pay for what a firm provides them.*” Kippenberger, (1997) identifies the concept of value chain as a tool used to diagnose and enhance competitive advantage. The above findings, therefore, tend to suggest that most respondents defined value chain as the activities within and around an organisation, and relate them to an analysis of the competitive strength of the organisation. The definition given by the greater majority was rather correct, and this tends to confirm that the respondents were well knowledgeable of the concepts under study, something that served as a way to justify the validity of the results.

4.5 Value Chain Activities Being Done By Interfresh

4.5.1 The Provision of affordable products to retailers by Interfresh Ltd

Figure 4.5 below shows the responses by respondents as to whether Interfresh Ltd providing products customers are willing to pay for:

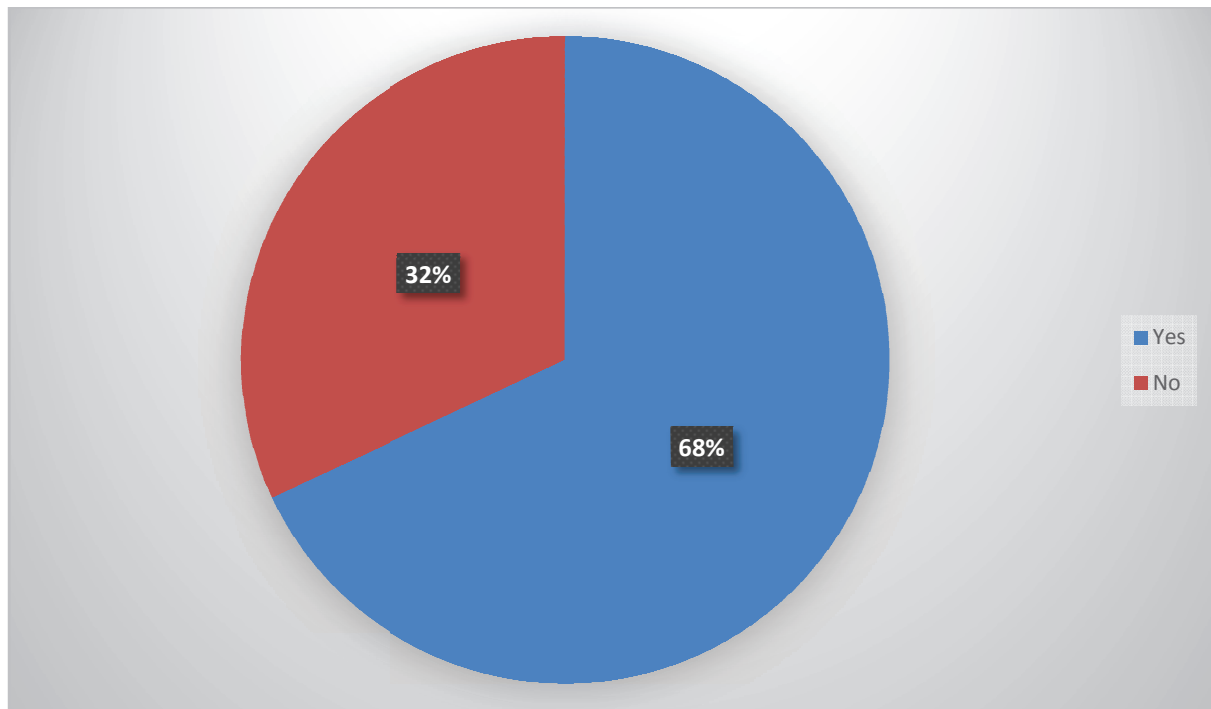


Figure 4.5: The provision of produce by Interfresh Ltd

Figure 4.5 shows that 68% of participants do agree that Interfresh Ltd is providing products clients are willing to pay for and 32% said it is not. Thus most participants do agree that Interfresh Ltd is providing products clients are willing to pay for. This implies that Interfresh is concerned about improving its value chain. According to the Institute of Management Accountants of Montvale (2013), if customers perceive the service and products to be superior, they will pay a premium price. Interfresh leads its value chain activities under its brand of ‘Freshpak’. Interfresh pays substantial attention to product range and freshness as a competitive edge.

4.5.2 The Company’s internal and external relationships

Figure 4.6 presents the results showing the relationship between the company’s management team and its clients. From Figure 4.6, 16% of respondents said the relationship of the management team of Interfresh Ltd and customers is poor, 74% said it is good and 10% said it is excellent. This means that most respondents argued that the management-clientele relationship is good. In short, relationships matter.

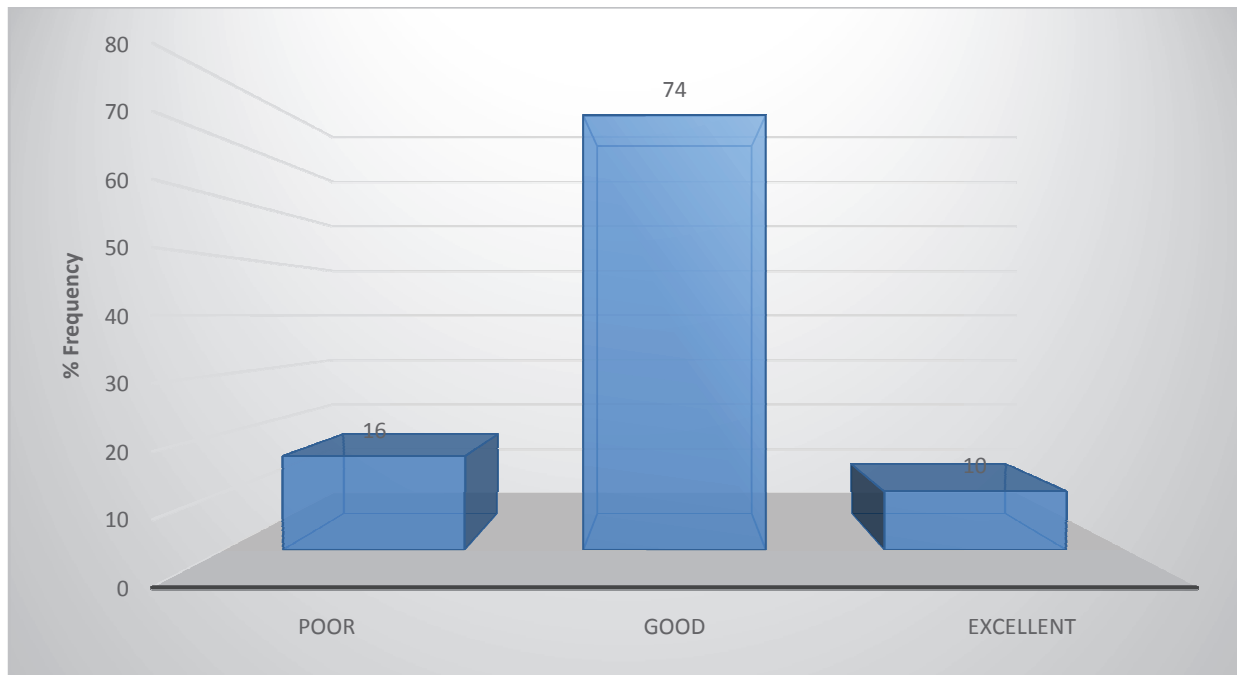


Figure 4.6: The relationship of management team and clients

4.5.3 Satisfaction of customers

The satisfaction of customers was assessed and the results are presented in the Figure 4.7.

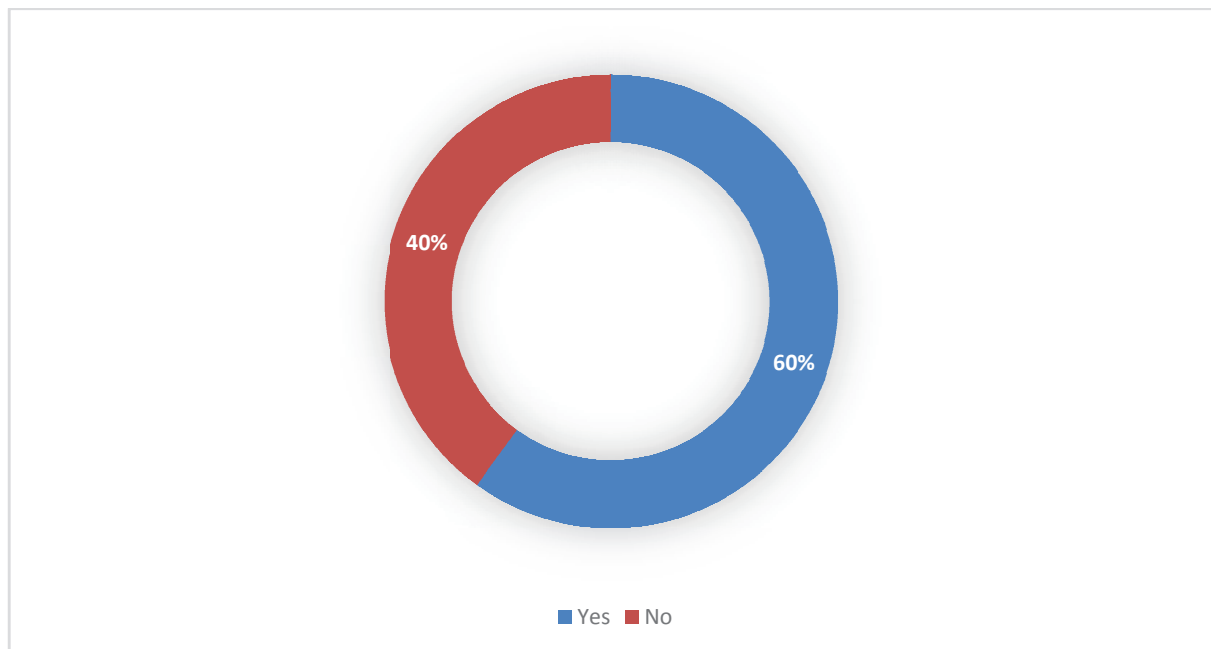


Figure 4.7: The level of satisfaction of customer expectations

Figure 4.7 shows that 60% of the respondents do agree that Interfresh Ltd is meeting customer expectations and 40% said it is not due to issues like shortages and expensive

products. However, most respondents said it is meeting the expectations of its clients. In Japan, there is a trend in manufacturing firms to give clients more. For example, if a lamp bulb has a mean time of failure of 1000 days they will make sure that it is 20% more. They call these extra little things ‘extra-ordinary customer satisfaction’, or ‘delighting the customer’. Thus, Japanese companies make sure that they are meeting or exceeding clientele needs. This implies that Interfresh can sell more volumes of fresh produce through the TM Supermarket Retail outlets. Customer loyalty and repeat business opportunities are enhanced. Good stock turnover of produce displayed prompts freshness as nothing goes stale or deteriorates on display.

4.5.4 Value Chain aspects at Interfresh

This section will analyse the value chain aspects at Interfresh Limited.

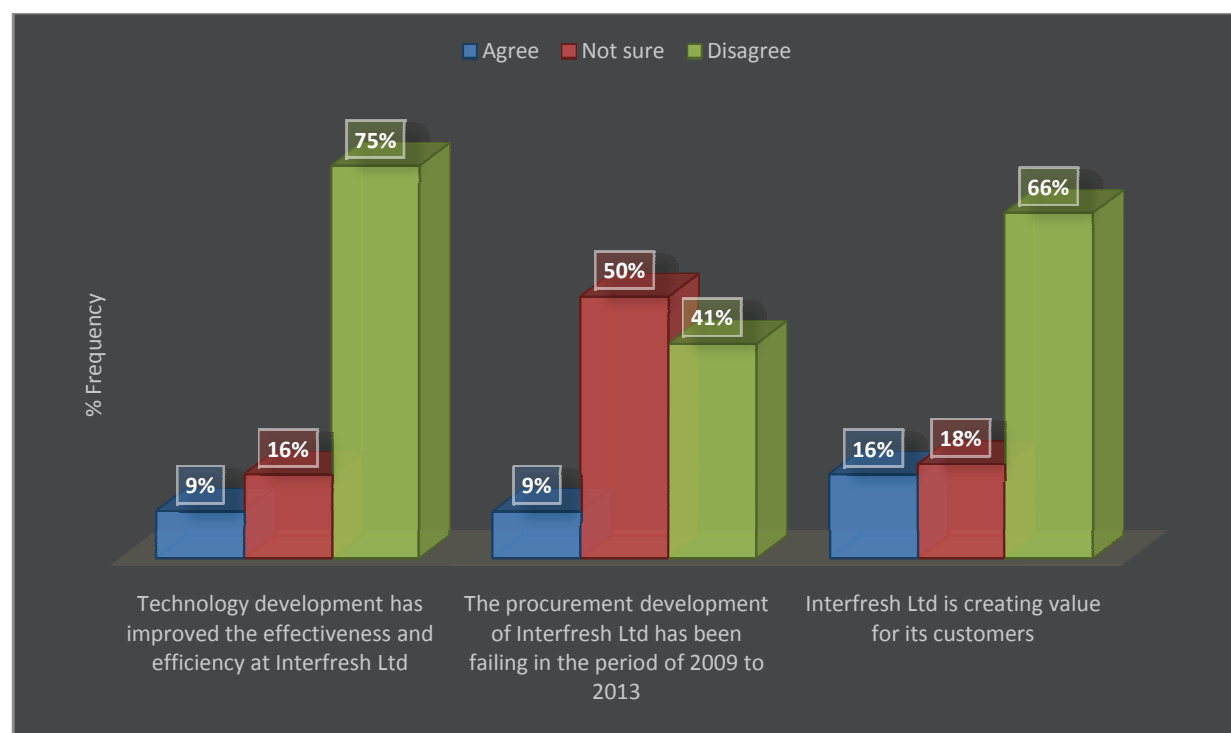


Figure 4.8: The analysis of value chain aspects at Interfresh Ltd

Figure 4.8 shows that 9% of respondents agreed that technology development has improved the effectiveness and efficiency at Interfresh Ltd, 16% were not sure while 75% disagreed. Figure 4.8 also reveals that 9% of the respondents agreed that the procurement development of Interfresh Ltd had been failing in the period of 2009 to 2013, 50% were not sure and 41% disagreed. Again, 16% of the participants agreed that Interfresh Ltd was creating value for its customers, 18% were not sure while 66% disagreed.

Generally, it can be seen that technology development is not improving the efficiency and effectiveness of Interfresh Ltd, the procurement development has been failing in the period of 2009 to 2013 and, also, Interfresh Ltd is failing to absolutely create value for its customers. According to Gereffi and Kaplinsky (1994) value chain analysis describes the activities within and around an organization relating them to competitive strength analysis. This means it evaluates which each particular activity adds to the organization's goods or services.

In this research, the key issues that arose as possible value chain enhancement attributes were:

- Provision of Affordable Products
- Fostering Internal and External Relationships
- Satisfaction of Customers
- Technology Development
- Procurement Development

To inferentially evaluate the value of each activity, Factor Analysis was availed of, using the Principal Component Analysis (PCA) as the extraction method. To help improve the validity of the principal components, Varimax rotation was employed, using Kaiser Normalisation. The computed components were chosen on the basis of at least an initial eigenvalue of 1.0. The eventual extracted factors and their associated variance is shown in the Table 4.3 below.

Table 4.3: EigenValue Assessment

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 3.489 | 69.772 | 69.772 | 3.489 | 69.772 | 69.772 | 2.694 | 53.889 | 53.889 |
| 2 | 1.325 | 26.493 | 96.265 | 1.325 | 26.493 | 96.265 | 2.119 | 42.376 | 96.265 |
| 3 | .162 | 3.237 | 99.503 | | | | | | |
| 4 | .025 | .496 | 99.999 | | | | | | |
| 5 | 6.3E-5 | .001 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

From Table 4.3, two components were extracted, having eigenvalues of 3.489 and 1.325 respectively. The corresponding contribution of each of those components to the effectiveness and efficiency of Interfresh can be related to the variance associated with each

component. For instance, the first component was seen to contribute 53.889% in aiding the effectiveness of Interfresh. If including the second component, the synergic impact of both on efficiency improvement was 96.265. In other words, 96.265% of the effectiveness and efficiency at Interfresh could be attributed to the extracted components. The rotated component matrix is shown in the Table 4.4 below.

Table 4.4: Rotated Component Matrix

| | Component | |
|---|-----------|------|
| | 1 | 2 |
| Provision of Affordable Products | .732 | |
| Fostering Internal and External Relationships | .959 | |
| Technology Development | .980 | |
| Satisfaction of Customers | | .970 |
| Procurement Development | | .847 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

According to Bryman et al. (2007) factor loadings of at least 0.5 are generally accepted as the minimum for the selection of viable factors. From the above findings, the primary component, primary determinant of high effectiveness and efficiency comprised of the following variables:

- Provision of Affordable Products
- Fostering Internal and External Relationships
- Technology Development

In other words, in order to increase the effectiveness and efficiency at Interfresh, the above factors are the primary issues that must be addressed. However, the second component comprised of the following variables:

- Satisfaction of Customers
- Procurement Development

Likewise, having addressed the primary factors, to aid the efficiency at Interfresh, the above secondary factors also needed to be addressed.

4.6 Activities That Will Create Value to the Organisation

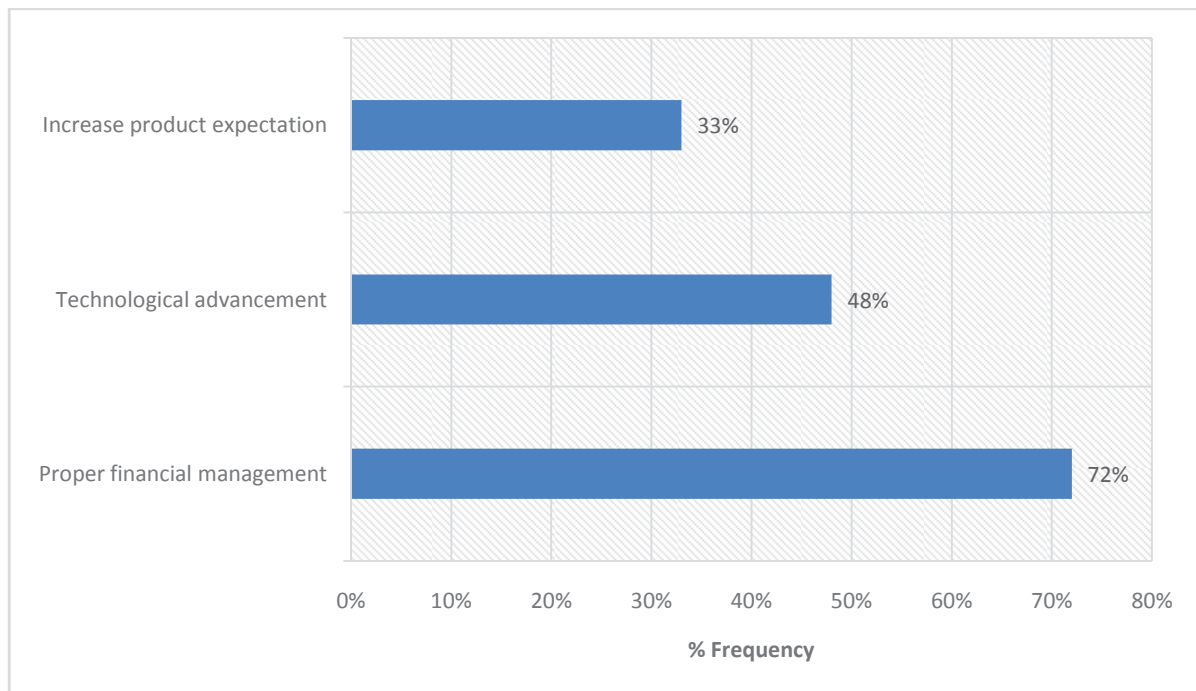


Figure 4.9 Activities to create value to the organisation

From Figure 4.9 above 72% mentioned proper financial management as an activity to create value to the organisation, 48% mentioned advancement in technology and 33% states product exportation. Most respondents mentioned proper financial management as an activity to create value to the organisation. Some of the dimensions to create value chains are proposed by Sako (1992) and include product flow, financial flow, information flow, incentives systems. Kaplan and Norton (1991) argue that Product flow has to do with the efficiency and effectiveness of managing products to markets and customers.

4.6.1 ANOVA Analysis – Value Creating Activities

With a view to inferentially evaluate the statistically significant value creating activities, ANOVA analysis was adopted with the following hypotheses and parameters:

Test: One-Way ANOVA Analysis

Hypothesis:

H₀: *Increasing product expectation (or technological advancement, or proper financial management) is not a significant value creating activity*

H₁:Increasing product expectation is not a significant value creating activity

H₂:Increasing technological advancement is not a significant value creating activity

H₃:Improving financial management is not a significant value creating activity

Significance Level: 95% (2-tailed); 3 degrees of freedom

Rejection Criteria: Reject H₀ if $p \leq 0.05$; Accept H₀ if $p > 0.05$

The results of the analysis are shown in the Table 4.5 below.

Table 4.5: ANOVA Analysis – Value Creating Activities

| | | Sum of Squares | df | Mean Square | F | Sig. |
|------------------------------|----------------|----------------|----|-------------|-------|------|
| Increase product expectation | Between Groups | 2.468 | 3 | .823 | .684 | .566 |
| | Within Groups | 62.514 | 52 | 1.202 | | |
| | Total | 64.982 | 55 | | | |
| Technological advancement | Between Groups | 14.960 | 3 | 4.987 | 3.281 | .028 |
| | Within Groups | 79.022 | 52 | 1.520 | | |
| | Total | 93.982 | 55 | | | |
| Proper financial management | Between Groups | 13.215 | 3 | 4.405 | 7.695 | .000 |
| | Within Groups | 29.767 | 52 | .572 | | |
| | Total | 42.982 | 55 | | | |

H₁:Increasing product expectation is not a significant value creating activity – $p=0.566$

H₂:Increasing technological advancement is not a significant value creating activity – $p=0.028$

H₃:Improving financial management is not a significant value creating activity – $p=0.000$

From the results above, the corresponding p-value for increasing product expectation was 0.566. Being greater than the normative 0.05, we therefore accept the null hypothesis and conclude that there is no sufficient evidence at the 95% confidence level to suggest that the increase in product expectation will create value to the organisation.

With regards to *Technological advancement* and *Proper financial management*, their p-values were 0.028 and 0.000 respectively. In this effect, being less than the normative threshold of 0.05, we reject the null hypothesis and conclude with the alternative hypothesis that there was sufficient evidence at the 95% confidence level to suggest that both *Increasing technological advancement* and *Improving financial management* will help create value to the organisation.

An important dimension of a value chain is the financial or cash flow across the participants and processes. Recent development of electronic funds transfer technology has improved the efficiency of financial and funds flows compared to earlier systems of billing and cheque writing. More open sharing of financial information among chain participants may be critical to optimizing the financial and physical performance of that chain and providing a fair allocation of returns for value created. Incentive systems might include price premiums, profit sharing, minimum pricing arrangements, window contracts, cash flow or financial assistance contracts, loan guarantees, qualified supplier recognition programs, cost sharing arrangements, long-term commitments, and knowledge or market access. Taylor (2001) asserts that new incentive mechanisms will evolve as the value chain participants begin to adopt and use new information technologies and build new relationships across the chain.

On the point of technologies, Kippenberger, (1997) interestingly states that “Porter (1985) defines it (technology development) as wider than R and D. It includes engineering and process development and, while usually associated with an engineering or development function, is also dispersed”. “R and D has a too narrow connotation to most managers” (pp 165- 200), hence he uses the term technology development rather than R and D.

4.7 Key Success Factors That Enhances Quality in the Value Chain.

4.7.1 Production

One can define production as the manufacture of goods and/or the provision of services. Figure 4.15 below illustrates the challenges acting as hindrances to the aspect of production at Interfresh Ltd:

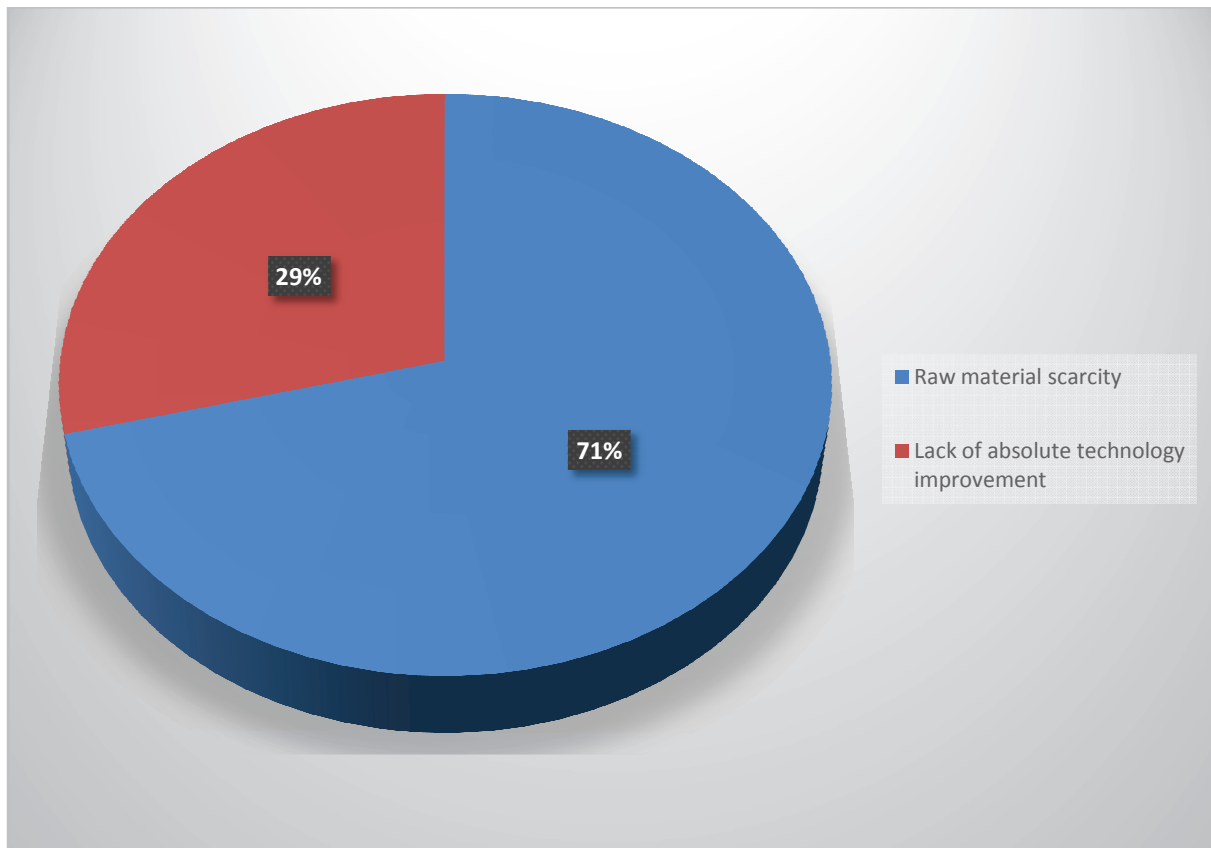


Figure 4.10: Production challenges

Figure 4.10 shows that 71% of the respondents argued that scarcity of raw materials is hindering production and 29% mentioned the lagging of technological improvement. Thus, most respondents said the scarcity of raw materials is hindering production. In studies on the electronics sector, Sturgeon (2002) and Sturgeon and Lee (2001) emphasize production equipment and other resources are essential for the manufacture of goods. This implies that Interfresh has a need to ensure consistent supply of product even when out of local season.

4.7.2 Inventory

Inventory is stock. It can be raw materials, work-in-progress or finished goods, or all of them. Figure 4.11 shows that 31% of the respondents said firms are facing the challenge of when to order raw materials, 53% said they are facing the challenge of how much to order and 16% mentioned the issue of space to stock the inventory.

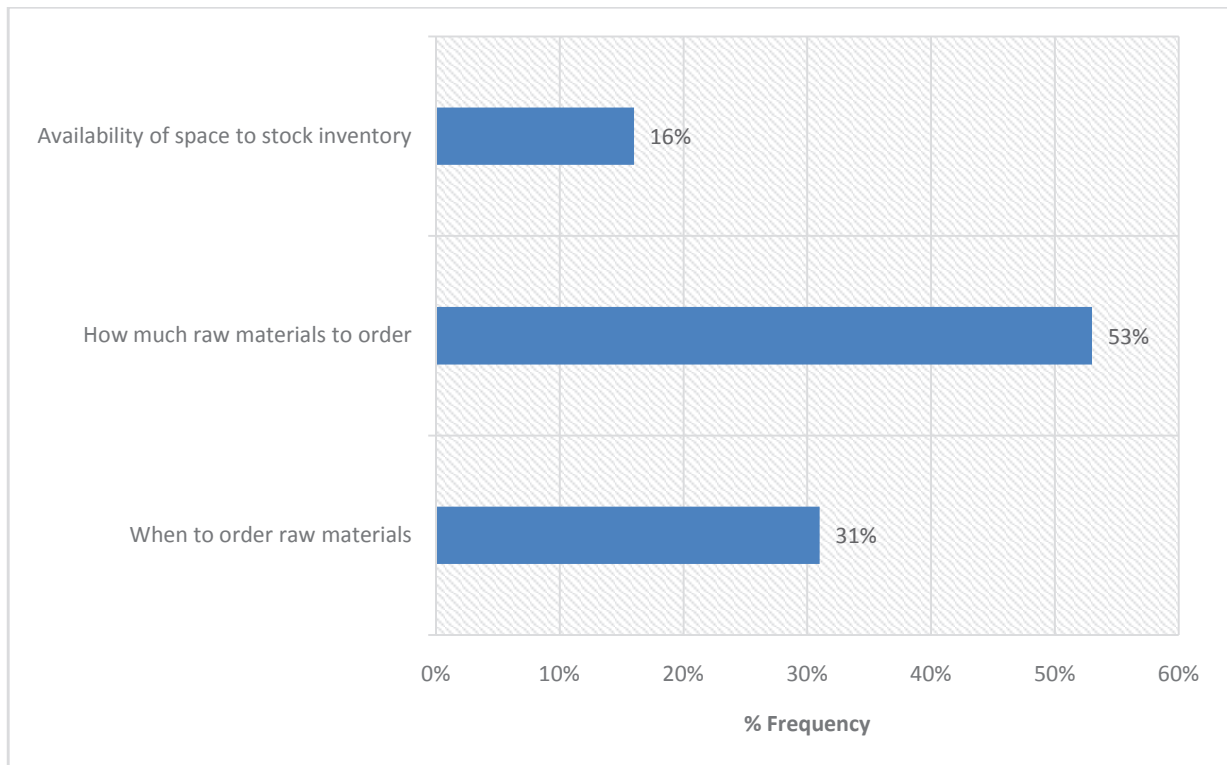


Figure 4.11: Inventory challenges

4.7.3 Distribution

Distribution refers to the channels a product follows when it is transshipped from the point of the manufacturer to the consumer. Figure 4.12 below shows the challenges Interfresh Ltd is facing in distributing its product offerings to the retailers:

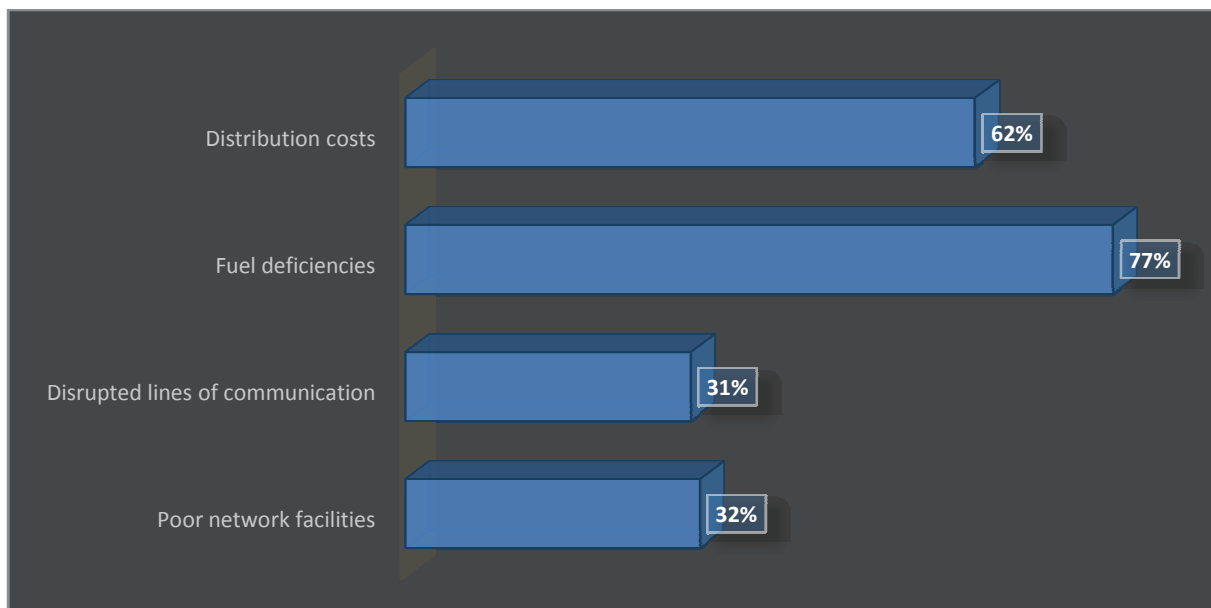


Figure 4.12: Distribution challenges

From Figure 4.17, 32% of the respondents mentioned the poor network facilities as a challenge that is negatively impacting on the aspect of distribution at Interfresh Ltd, 31% mentioned disrupted deliveries from farmers, 77% mentioned fuel deficiencies and 62% mentioned distribution costs. Therefore, most respondents mentioned the challenge of fuel shortages.

4.7.5 Key Success Factors – Factor Analysis

Having reviewed the identified key success factors that enhance business performance in the value chain, to critically assess their relative efficiency, Factor Analysis was employed. To this end, the Principal Component Analysis was engaged as the extraction method, while the Varimax algorithm was adopted for the rotation of the extracted factors. The results from the analysis are presented in Table 4.6 below.

Table 4.6: Eigenvalues – Extracted Components

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 3.319 | 82.986 | 82.986 | 3.319 | 82.986 | 82.986 |
| 2 | .669 | 16.726 | 99.711 | | | |
| 3 | .012 | .289 | 100.000 | | | |
| 4 | 1.546E-16 | 3.865E-15 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

From the above table, it can be seen that only one component was extracted, with an eigenvalue of 3.319. The corresponding percentage of variance contribution was identified to be 82.986%. In other words, 82% of business performance could be attributed by the synergic effect of the four key success factors in the value chain.

Table 4.7: Component Matrix^a – Critical Success Factors

| | Component |
|--------------|-----------|
| | 1 |
| Production | .974 |
| Inventory | .659 |
| Distribution | .994 |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Again, following the prescriptions by Bryman et al (2007), the significant factors had to have a factor loading of at least 0.5. With regards to the component matrix above, all the four factors, that is, production, inventory, distribution and consumption were identified with factor loadings greater than the normative 0.5. It follows, therefore, that all the factors were significant. However, with regards to their respective magnitudes, the critical factors with respect to their relative importance were:

1. Distribution
2. Production
3. Inventory

4.8 Value Creating Strategies Employed By Interfresh Ltd to its Products

Figure 4.9 below shows the 'hows' or 'ways' or 'strategies' Interfresh Ltd is using to create value to its products. From the analysis, it can be seen that 40% of the respondents said Interfresh Ltd is creating value to its products by advertising, while 60% said it was applying Total Quality Management, 48% mentioned customization of products and 6% said it was charging lower prices than those of rivals. Most respondents maintained that Interfresh Ltd is creating value to its products through the aspect of Total Quality Management (TQM). This is in line with the suggestions of Kotler (1997) who argued that if the purpose of business is value creation, it follows that the mission of any company should be defined in terms of its primary value-adding activities.

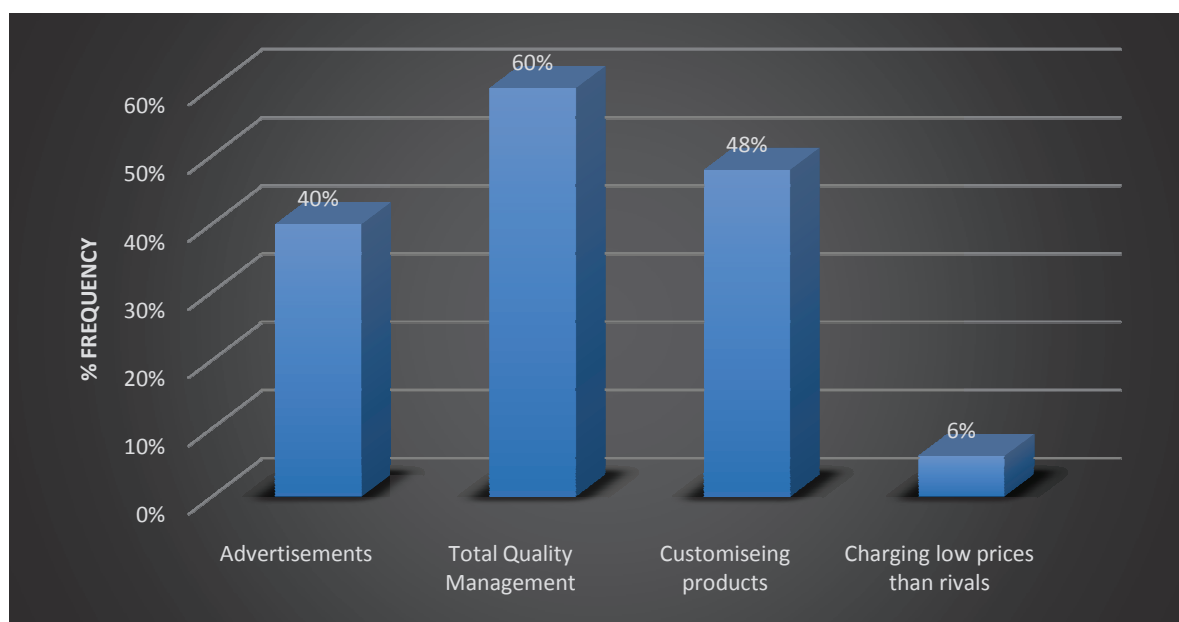


Figure 4.13: Strategies employed by Interfresh Ltd to create value to its products

The main primary value adding activity of many firms rests on quality. Simply put, Honda should think of itself primarily as a maker and marketer of quality automobiles. McDonald's should think of itself as providing meals of consistent quality throughout the world, in a clean, friendly atmosphere.

On the same aspect, Richardson (1972) added that creating value for investors means delivering consistently high returns on their capital. Paradoxically, to create this value, organizations must see themselves as financial engines whose purpose is to generate attractive financial returns that the company is least likely to maximize those returns in the long run (Gereffi et al 1994). However, the issue is not only about the ability to produce standard quality output to maximise revenue but also the ability to customize and provide what the customer wants is an important aspect in today's competitive environment.

4.8.1 The application of Total Quality Management

The diagram below shows the responses as to whether Interfresh Ltd is applying the concept of Total Quality Management to its products:

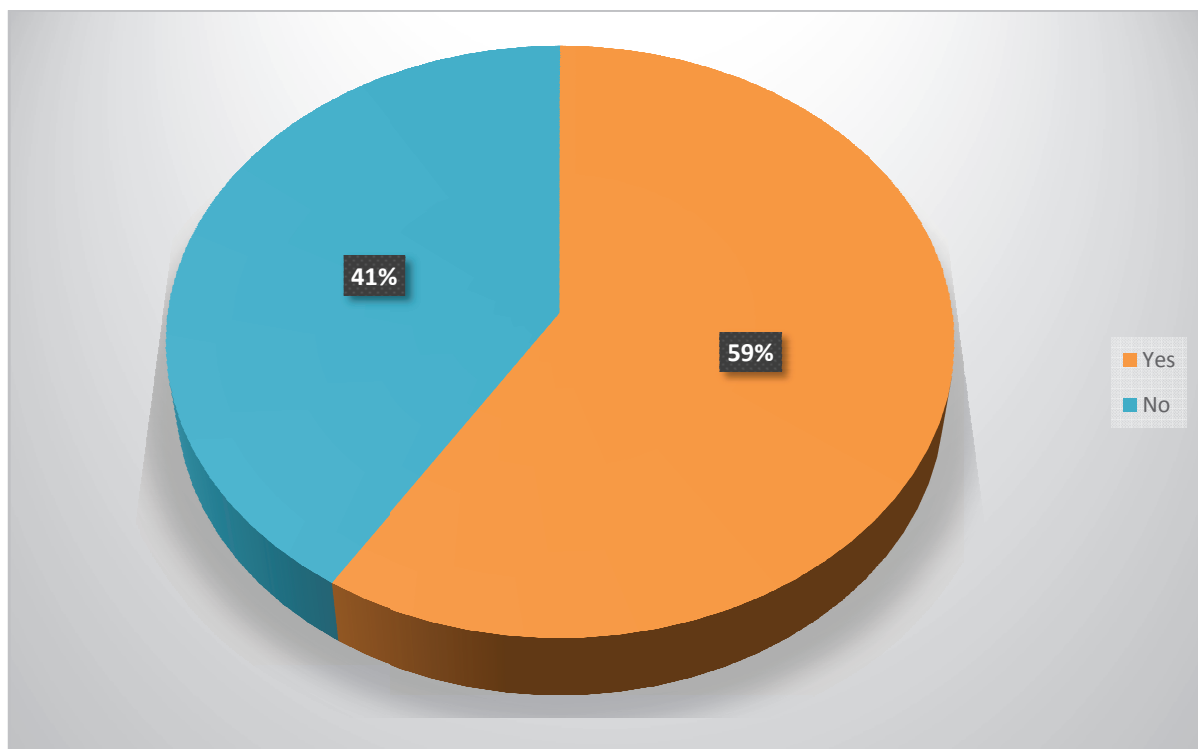


Figure 4.14: The application of TQM by Interfresh Ltd to its products

It can be seen in Figure 4.14 above that 59% of the respondents agreed that Interfresh Ltd was applying the concept of TQM through continuous improvement, benchmarking and branding of its products, however, 41% said it is was applying the concept of TQM. A larger fraction of the participants do maintains that Interfresh Ltd is applying the concept of TQM. Besterfield *et al* (1996) defined TQM as the art of managing the whole organisation to achieve product (or service) excellence. The aspects of TQM include benchmarking, continuous improvement and involvement and participation.

4.9 Strategic Importance of Value Chain Analysis of Interfresh

4.9.1 Competitive advantages

Competitive advantages are the distinctive competencies that make a firm superior over rival firms. The diagram below shows the competitive advantages that Interfresh Ltd have over its competitors:

4.9.2 Affordable Prices

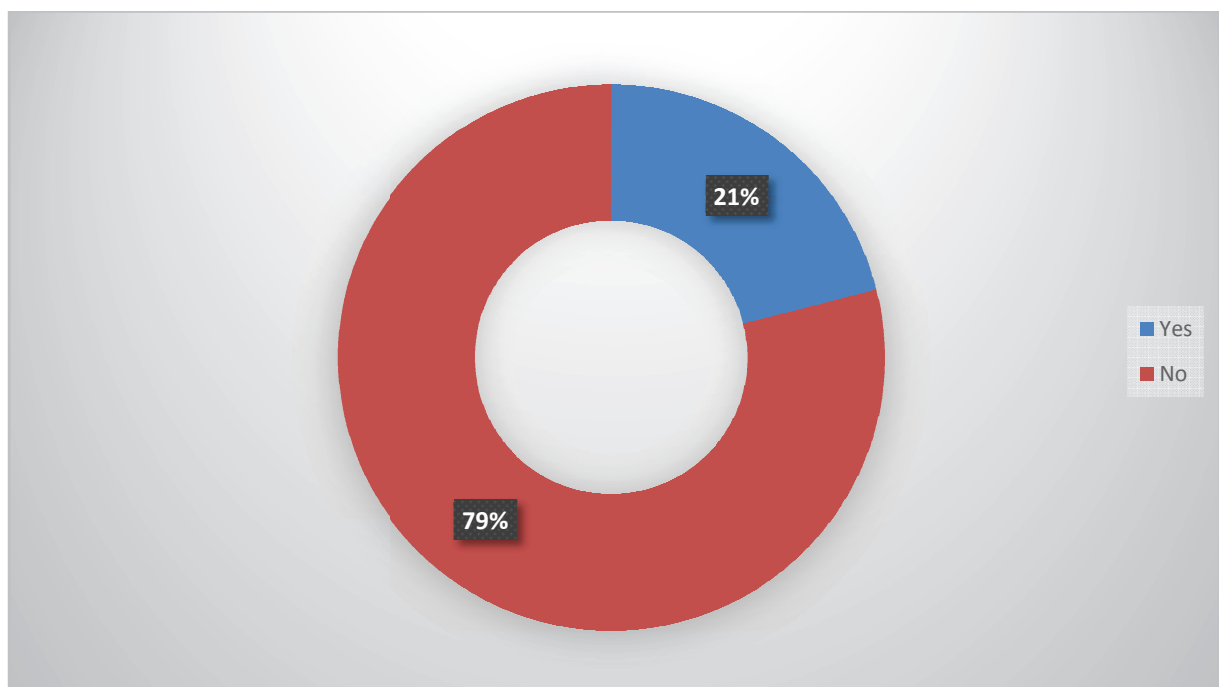


Figure 4.15: The affordability of prices

Figure 4.15 shows that 21% of the respondents do agree that the prices charged by Interfresh Ltd are affordable and 79% said they are not. Thus, most respondents maintains that the

prices charged by Interfresh Ltd are unaffordable. Since value is measured by total revenue, a reflection of the price a firm's product commands and the units its can sell, affirm must make sure that the price (or value) it attaches to its products will project the quality of its products.

4.9.3Offering numerous products lines

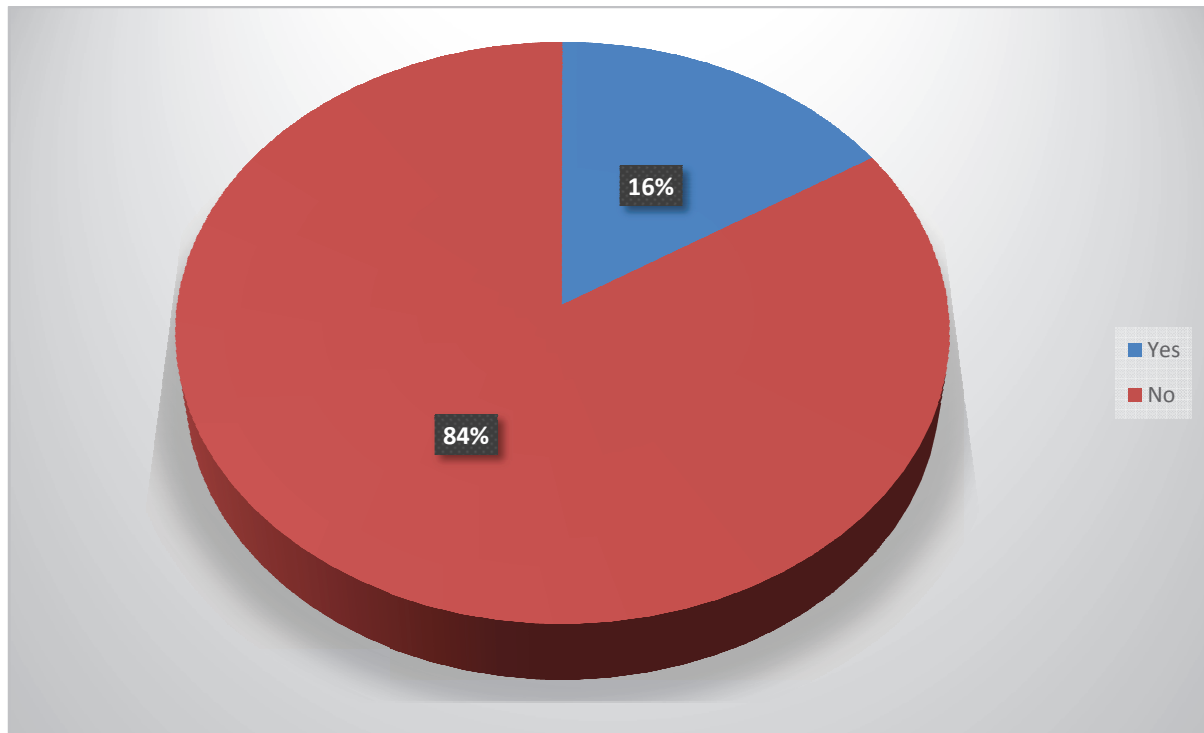


Figure 4.16: Many product lines

Figure 4.16 shows that 16% of the respondents do agree that Interfresh Ltd has an advantage of a wide range of products over its competitors and 84% disagree. Thus, the findings mean that Interfresh Ltd has an advantage of a wide range of products. Importation of out of season range augments local suppliers. Having a wide range of products is an edge in a perceived global village, Supermarkets endeavor to stock products which cater for people of varied cultures and dietary preferences. An assortment of fresh produce lines will also present options, complimenting lines and substitutes for the final consumer.

4.9.4 High Quality Products

Figure 4.17 shows that 32% of the respondents said Interfresh Ltd has an advantage of high quality (or no-frills) products and 68% said it does not. Thus, most respondents do not agree that Interfresh Ltd has an edge of superior products.

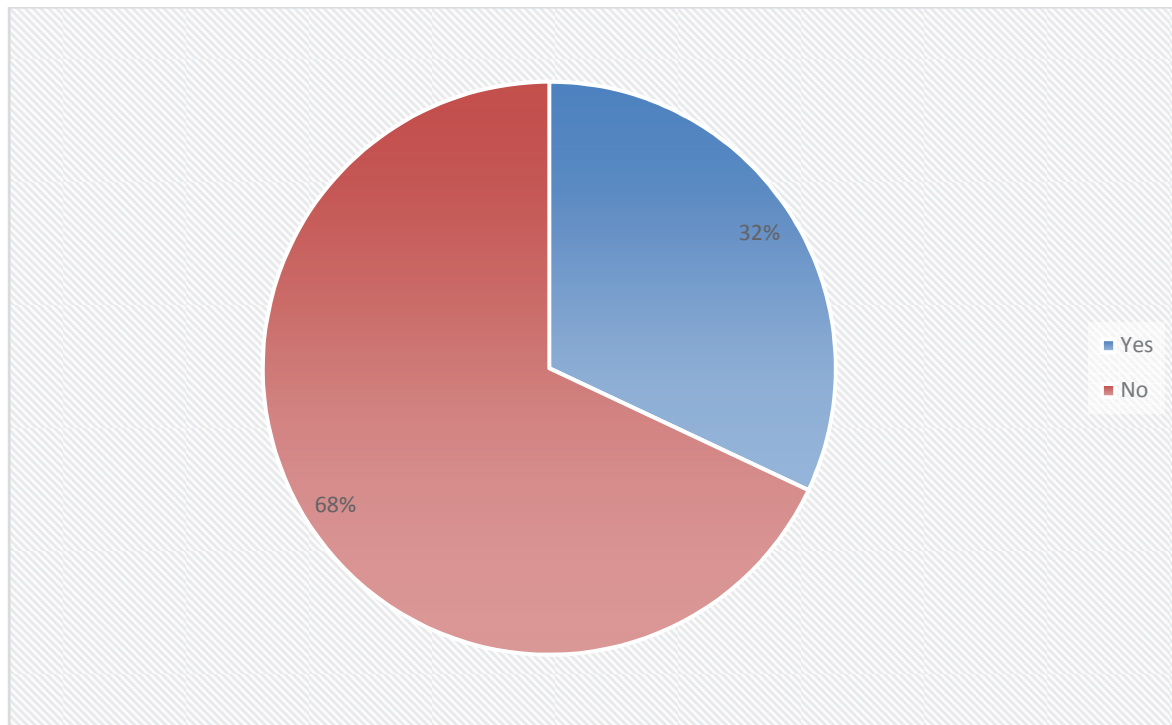


Figure 4.17: High quality products

4.9.5 Importance of Value Chain Analysis in Enhancing Value Creation

From the foregoing, it has been established that VCA is very strategic as a means of enhancing value creation through the creation of, among other things, competitive advantages, affordable prices, multifarious products lines and high quality products. However, to statistically determine the extent to which value chain analysis enhances the creation of value to Interfresh customers, the non-parametric Chi-square analysis was computed, under the following conditions.

Test: Chi-Square Analysis

Hypothesis: H_0 : VCA does not enhance value creation to Interfresh Ltd customers

H_1 : VCA enhances value creation to Interfresh Ltd customers

Significance Level: 95% (2-tailed); 6 degrees of freedom

Rejection Criteria: Reject H_0 if $p \leq 0.05$; Accept H_0 if $p > 0.05$

The results of the analysis are shown in the Table 4.8 below.

Table 4.8: Chi-Square Test – VCA/Value Creation

| | Value | df | Asymp. Sig. (2-sided) |
|------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 23.775 ^a | 6 | .001 |
| Likelihood Ratio | 26.718 | 6 | .000 |
| Linear-by-Linear Association | 15.135 | 1 | .000 |
| N of Valid Cases | 208 | | |

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 2.01.

The p-value was computed to be 0.001. From the earlier prescriptions, being less than 0.05, we reject the null hypothesis and conclude with the alternative hypothesis that there was sufficient evidence at the 95% confidence interval to validate the proposed hypothesis that Value Chain Analysis indeed helps to enhance value creation to their customers.

4.9.7 Extent to which Value Chain Analysis Enhances Value Creation

Having established that value chain analysis enhances value creation, it was one of the aims of this study to establish the extent to which the former impacted on the latter. To achieve this end, the simple linear regression analysis was conducted with value chain analysis as the predictor variable, and value creation as the dependent variable. The results from the analysis are presented in the Tables 4.9 and 4.10 below.

Table 4.9: Regression Model – VCA/Value Creation

| Model Summary | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .895 ^a | .801 | .812 | 4.81757 |

a. Predictors: (Constant), Value Chain Analysis

Table 4.10: Regression Model Evaluation – VCA/Value Creation

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 601.116 | 1 | 601.116 | 22.331 | .017 ^b |
| | Residual | 1756.484 | 8 | 219.560 | | |
| | Total | 2357.600 | 9 | | | |

a. Dependent Variable: Value Creation

b. Predictors: (Constant), Value Chain Analysis

From the above analysis, the regression coefficient, R , was found to be 0.895, too high a statistic to validate the afore-established significant relationship between value chain analysis and value creation. However, with relation to the r -square statistic, which was 0.801, it follows therefore that of the variability in *value creation*, 80.1% was being attributed to value chain analysis. This finding was significantly justified by the model p -value of 0.017 from Table 4.5 above, which validates the reliability of the regression model. In other words, 80.1% of the to-be created value in Interfresh Ltd or any other organisation, will be attributed to the prior performance of value chain analysis.

4.10 The Overall Performance of Interfresh Ltd

This section presents the overall performance of Interfresh limited. From the Figure 4.18 below, 50% of the respondents said the performance of Interfresh Ltd against its rivals was good, 44% said it was fair and 6% said it was poor. A larger proportion of the respondents said the performance of Interfresh Ltd is good. Achieving attractive financial performance is the reward for having aimed at (and hit) the real target; that is, maximizing the value created for the primary constituents of the firm. Key performance indicators used to benchmark current capabilities and set future non-financial performance goals include considerations such as promotion effectiveness, delivery reliability, inventory turns, order fill rates and assortment complexity.

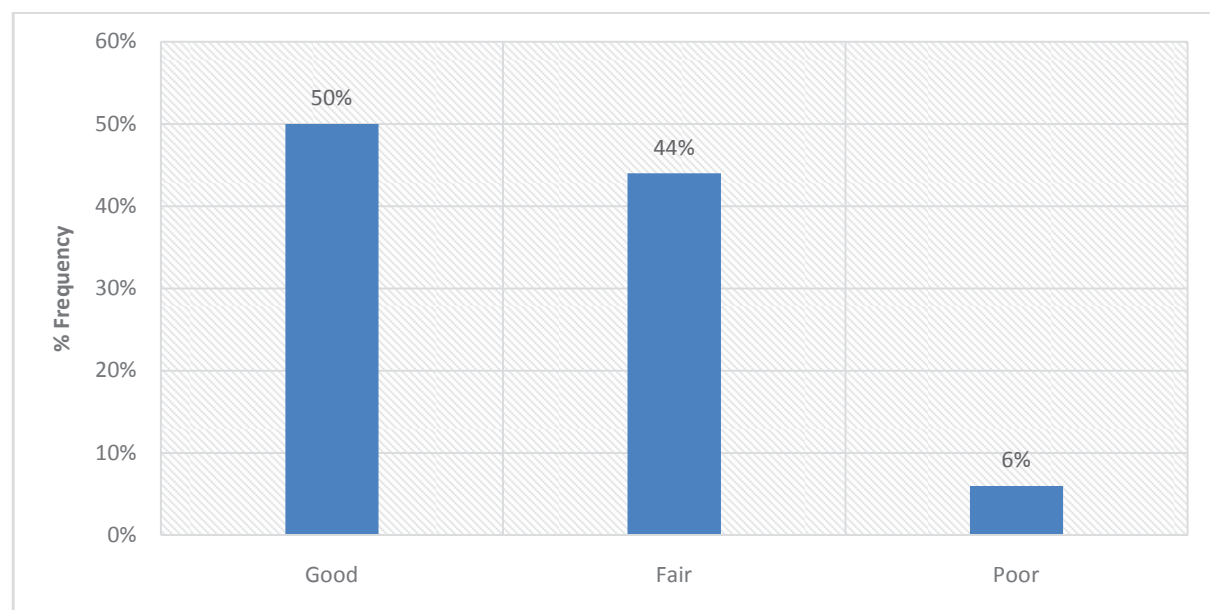


Figure 4.18: The performance of Interfresh Ltd against rivals

4.11 Value Chain and the Cash Cycle

4.11.1 Average Period - Inventory and Debtor-Creditor Management

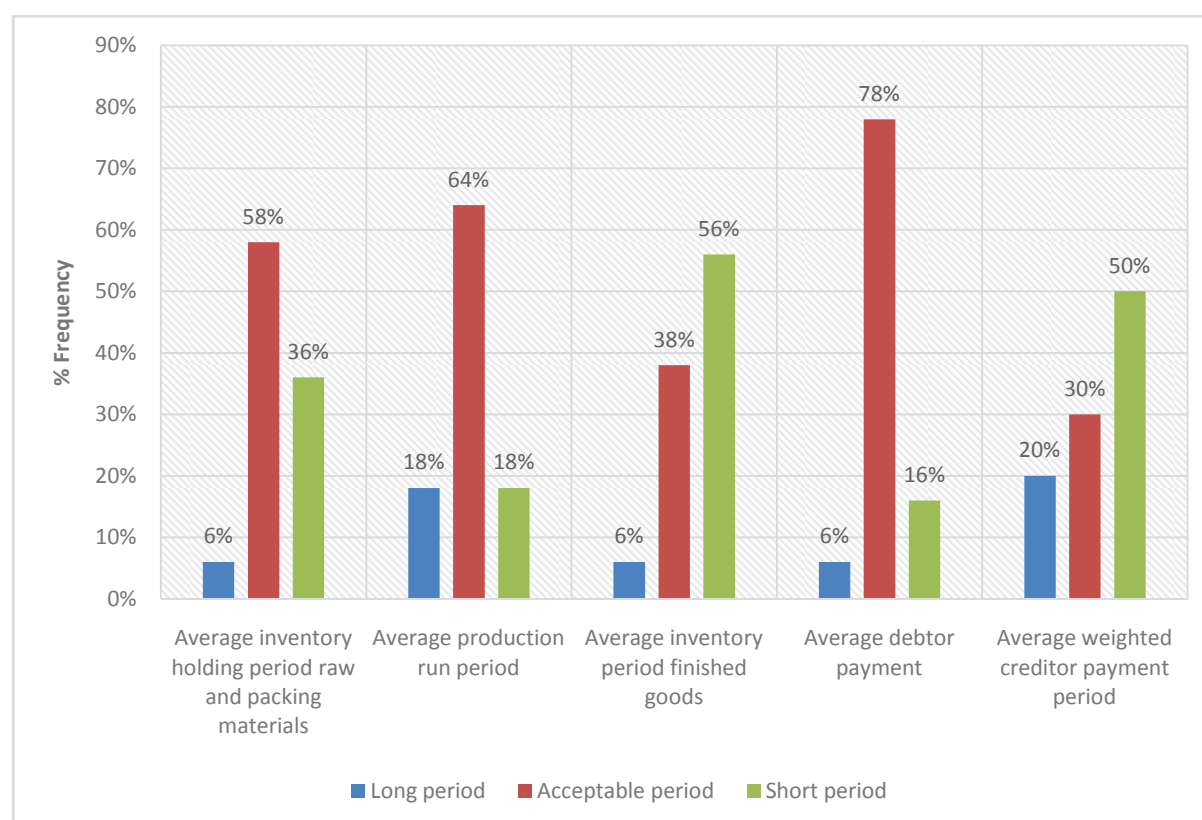


Figure 4.19: Period taken on its inventory and debtor-creditor management

Figure 4.19 shows that 6% of the respondents said the average inventory holding period for raw and packing materials is long period, 58% said is acceptable period 36% said its short period. For production run, 18% said the average period is long period 64% said its acceptable period and 18% said its short period. For finished goods 6% said the average inventory period is long, 38% said its acceptable and 56% said its short. For debtor payment, 6% said the average debtor payment is long 78% said it's acceptable and 16% said it's short. Lastly, 20% said the average weighted creditor payment period is long, 30% said its acceptable period and 50% said its short period. Generally, for almost all the aspects above, most respondents suggested the acceptable period to be the average period.

4.12 Aspects That Support Value Chain Activities at Interfresh Zimbabwe

Table 4.11 shows that 48% of the respondents argued that the level of infrastructure impact on the value chain activities on distribution and communication aspects. On the aspect of

human resources, 51% of the respondents aired out that it has an effect on production of goods and services and quality improvement. On technology, 61% of the participants suggested that it will lead to timely production and distribution of products as well as improving quality of produce. Also, 36% of the respondents said customers are recipients of products and therefore they generate revenue for the business enterprise.

Table 4.11: Aspects to support the value chain activities at Interfresh Ltd

| Aspect | Effect | Response (%) |
|-----------------|---|--------------|
| Infrastructure | Distribution; Communication | 48 |
| Human resources | Production; Quality management | 51 |
| Technology | Timely production and distribution; Quality improvement | 61 |
| Customers | Recipients of products; Revenue generation | 36 |
| Suppliers | Provide raw materials | 47 |

Thus, most respondents mentioned that technology has an effect of enhancing timely production and distribution of goods and also improves their quality. Technology has thus definitely becomes an important attribute in adding value to the existing activities. ‘Technology development’ is usually seen as the tool to carry out innovation.

Technology and innovation are so closely intertwined that perhaps it has led to this association. Nowak (1997), views Research and Development (R and D) as a trigger of quality and innovation processes. This should involve widening some RandD activities throughout all elements of value chain in order to accumulate knowledge and skills already developed in other components.

4.13Chapter Conclusion

The present chapter presented the findings of the study and their discussion. Major concepts discussed are the activities of value chain, the effect of the economic situation to all value chain activities and relationship between value chain and the cash cycle. These findings are discussed by drawing parallels to the literature reviewed in the study.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The present chapter presents the major conclusions and recommendations of the study. These are taken from the research findings. Furthermore, the study presents the area of further research.

5.2 Conclusions

5.2.1 Value Chain activities

This research concludes that value chain disaggregates a firm into its strategically relevant activities to aid the comprehension of dynamics and behaviour of existing costs and potential sources of differentiation. This focuses on primary and support activities. Primary activities involve the physical creation of the product, its sale or transfer to the buyer. Provision of cooking instructions or options of recipes for fresh produce are unique. Primary activities in and out bound logistics, operations, marketing and sales service.

The research further concludes that when an organization is not fully utilizing these value chain activities, it will eventually reduce the cash cycle of the organization. This follows from the established fact that the value creating activities employed at Interfresh Ltd are limited to, advertising; Total Quality Management, customization of products and charging lower prices than those of rivals. Total Quality Management being the major differentiation proposition..

5.2.2 Strategic importance of Value Chain Analysis

This research concluded that the overall performance of Interfresh Ltd is said to be acceptable as reported in the periods under study. Achieving attractive financial performance is the reward for having aimed at the real target. That is, maximising the value created for the primary constituents of the firm. Key performance indicators used to benchmark current capabilities and set future non-financial performance goals include considerations such as

promotion effectiveness, delivery reliability, inventory turns, order fill rates and assortment complexity.

The study also concluded that the following economic challenges also impacted the value chain of Interfresh Ltd, cash unavailability, foreign currency shortages, the hyper-inflationary environment, price controls by the Government and the increase in production costs. Also amongst major economic challenges is that of productive farmland, which has shrunk in support of national land acquisition policy and development.

5.2.3 Key Success factors that enhances quality in the supply chain

This research concluded that key success factors are Production, Inventory and Distribution. The product form does not change much from source to consumer. Interfresh has a perceived mandated to bring the farm in to the supermarket when it comes to freshness. Support activities enhance the primary activities. This includes firms infrastructure, human resource management, technology development and procurement. The research also found that Interfresh Ltd is applying the concept of TQM through continuous improvement, benchmarking and branding of its products. TQM is the art of managing the whole organisation to achieve product (or service) excellence. Other aspects of TQM include benchmarking, continuous improvement, involvement and participation.

The research also discloses that the acceptable number of days to hold vegetable stock is five days. This allows for maintenance of freshness of stock in the Retail outlets. The production challenges faced by Interfresh Ltd include the scarcity of raw materials and the lagging technological development.

Additionally, distribution challenges that are being faced by Interfresh Ltd include: fuel shortages, high distribution costs, poor network facilities and disrupted lines of communication. The Consumption challenges include reduced buying power of consumers and also, Interfresh Ltd products are viewed as luxury products.

5.3 Validation of Research Hypothesis or Proposition

From the main research objectives, the key objective sought to establish the extent to which Value Chain Analysis was important in enhancing the creation of value within Interfresh's supply chain. It was upon this light that the following hypothesis was contrived:

Hypothesis: **H₀:***VCA does not enhance value creation to Interfresh Ltd customers*
 H₁:*VCA enhances value creation to Interfresh Ltd customers*

Chi-square analysis was performed, to answer the above hypothesis at the 95% confidence level. With the p-value being less than the normative 0.05, we therefore reject the null hypothesis and conclude with the alternative hypothesis that indeed VCA enhances value creation to Interfresh Ltd customers. These findings are in line with the conventional school of thought as suggested earlier in the literature review (Peppard, 2006; Porter, 2005; Dooley, 1995; Morash, 2001).

5.4 Recommendations

The study makes the following recommendations:

5.4.1 Satisfaction of Customers

Interfresh Ltd is advised to 'benchmark' the ideas of Japanese firms, where firms through in little extra things that ultimately drive extra ordinary customer satisfaction.

5.4.2 Competitive Advantage

Interfresh Ltd is recommended to use value chain as a tool to diagnose and enhance competitive advantage. Interfresh Ltd must ensure consistent supply of produce. Overriding seasons buy use of imports and eliminate shortages of its product offerings. Import parity must ensure affordable prices.³

5.4.3 Value Creation

Interfresh Ltd should create value to its customers through a distinct health awareness campaign, Total Quality Management, customization of products and charging affordable prices than those of rivals. To create this value the mission of Interfresh Ltd should be

defined in terms of its primary value-adding activities. The main primary value adding activity of many firms rests on quality. A justifiable stigma in food products is clearly the Freshness of the good. The value creation must entail making products and providing services that customers find consistently useful. In today's economy, such value creation is based typically on product and process innovation and on understanding unique customer needs with ever-increasing speed and precision. To create value for investors, Interfresh Ltd must deliver consistently high returns on their capital. Interfresh Ltd is also urged to see itself as a financial engine whose purpose is to generate attractive financial returns that it is least likely to maximise those returns in the long run.

5.4.4 Using Flexibility

Interfresh Ltd is encouraged to achieve sustained competitive advantage by developing different types of flexibility in response to different factors of uncertainty. In addition, the enterprise must also offer numerous product lines and high quality products. It can ensure that it manufactures high quality products through close co-operative relations with large clients, involving technical assistance for the transmission and monitoring of quality standards.

5.4.5 Use of Performance indicators

Interfresh Ltd must look at performance indicators such as promotion effectiveness, delivery reliability, inventory turns, order fill rates and assortment complexity to benchmark current capabilities and set future performance goals.

Incentive programs might include unique premiums, profit sharing, minimum pricing arrangements, open contracts, cash flow or financially assisted contracts, loan guarantees, qualified supplier recognition programs, cost sharing arrangements, long-term commitments, and knowledge or market access.

Additionally, Interfresh Ltd is urged to ensure availability of raw materials; source fuel; improve its communication lines and network facilities. It must also properly handle products in a consistent way so that it reaches consumers in the expected condition.

To lessen the impact of economic challenges, Interfresh Ltd must enhance the co-ordination of economic activities through inter-firm and intra-firm relationships, thus draw on transaction-cost theory to maximise on coordinating mechanisms.

Interfresh Ltd is also recommended to fully utilise its infrastructure; train and motivate its staff properly to enhance production and the management of quality; invest in pre and post-harvest technology to ensure prompt production and distribution of fresh produce; to forecast demand accurately; improve its relations with clients and to satisfy their expectations since they are the source of revenue; improve its relations with suppliers to acquire raw materials timely and develop clear payment policies and methods.

5.5Area for Further Research

A further study should be conducted to establish the effect of the current economic environment to the activities of value chain.

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APPENDIX 1

QUESTIONNAIRE FOR STAFF AND MANAGEMENT

SECTION A: GENERAL INFORMATION

Please complete the questionnaire to reflect your understanding and opinions on the the value chain and its impact on Interfresh Ltd Zimbabwe's cost structure between 2009 – 2013.

Should you need assistance or have any queries, please contact:

| | |
|--------------|--|
| | |
| | |
| | |
| | |
| | |
| Tel: | |
| Fax: | |
| Email | |

CONTACT DETAILS

Please complete the following details:

Company Name  _____

Position of respondent _____

Years spent in the organisation _____

SECTION B: UNDERSTANDING VALUE CHAIN

1. Do you think that customers are happy with the products that INTERFRESH LTD is offering?

- a. Yes ☐
- b. No ☐

2. What do you understand by the term value chain?

- a. Value is the amount buyers are willing to pay for what a firm provides them
- b. Tool used to diagnose and enhance competitive advantage.
- c. The activities within and around an organization, and relates them to an analysis of the competitive strength of the organization.

3. Is INTERFRESH LTD providing products which customers are willing to pay for?

- a. Yes ☐
- b. No ☐

4. How would you describe the relationship between the company management team and its customers?

- a. Poor ☐
- b. Good ☐
- c. Excellent ☐

5. Do you think that INTERFRESH LTD is meeting customer expectations

- a. Yes
- b. No

6. If the answer is no to the above question can you please explain why?

SECTION C: VALUE CHAIN ANALYSIS

For each of the statements below, indicate whether you agree or not

7. Technology development has improved the effectiveness and efficiency at INTERFRESH LTD?

1 2 3 4 5 6
Strongly Disagree Strongly Agree

8. The procurement development of INTERFRESH LTD has been failing in the period of 2009-2013?

1 2 3 4 5 6
Strongly Disagree Strongly Agree

9. INTERFRESH LTD is creating value for its customers.

1 2 3 4 5 6
Strongly Disagree Strongly Agree

10. How does INTERFRESH LTD create value to its products in a way which of benefit the organisation?

- a. By advertising ☐
- b. By applying Total quality Management ☐
- c. By customizing its products ☐
- d. By charging lower prices than the competitor ☐

11. Do you think that INTERFRESH LTD is applying the concept of Total Quality Management to its products?

- a. Yes ☐
- b. No ☐

Explain your answer above

12. What competitive advantage does Interfresh Ltd has over its competitors?

- a. Affordable prices.
- b. It offers a wide range of products
- c. It offers products of high quality

13. In your own view, do you think that Interfresh is making use of these advantages to reduce its cost?

- a. Yes ☐
- b. No ☐

14. How do you rank the performance of Interfresh Ltd against its rivals?

- a. Good ☐
- b. Fair ☐
- c. Poor ☐

15. What activities do you think as a customer will create value to the organisation?

| |
|--|
| SECTION D: VALUE CHAIN AND THE CASH CYCLE |
|--|

16. In your own view, what do you think is the acceptable number of days that your organisation should keep stocks?

17. The table below shows the average period taken by Interfresh on tis inventory and debtor/ creditor management.

For each of the components listed in table below, can please comment the situation being experienced by your organisation?

Can you please tick relevantly in the space provided below?

| | Long Period | Acceptable Period | Short Period |
|--|-------------|-------------------|--------------|
| 1.Average inventory holding period raw and packing materials | | | |
| 2.Average production run period | | | |
| 3.Average inventory period finished goods | | | |
| 4.Average debtor payment | | | |
| 5.Average weighted creditor payment period | | | |

18. In your own view, what do you think are the best periods for each of the components listed in the table below?

| | |
|--|--|
| 1.Average inventory holding period raw and packing materials | |
| 2.Average production run period | |
| 3.Average inventory period finished goods | |
| 4.Average debtor payment | |
| 5.Average weighted creditor payment period | |

19. What are the production, inventory, distribution and consumption challenges that are negatively impacting the to the acceptable turnaround times of the list provided in table above?

Production

Inventory

Distribution

Consumption

20. Do you have any other components of value chain that are negatively impacting on the cost structure of Interfresh Ltd?

21. It is believed that the current economic challenges hinder Interfresh Ltd from properly administering its costing structure. Do you agree to this statement?

Yes

No

22. If your answer is yes to question 21 above, how is the value chain of Interfresh Ltd being affected?

23. How is the infrastructure, human resource management, technology, procurement, customers and suppliers support value chain activities at Interfresh Ltd?

| | Effect |
|-----------------|--------|
| Infrastructure | |
| Human resources | |
| Technology | |
| Procurement | |
| Customers | |
| Suppliers | |

24. What should be done to the following in order to reduce the financing gap of the organisation?

| | Recommendations |
|-----------------|-----------------|
| Infrastructure | |
| Human resources | |
| Technology | |
| Procurement | |
| Customers | |
| Suppliers | |

25. What can you recommend Interfresh to do in order to reduce the cash flow cycle within the value?

END OF QUESTIONNAIRE

THANK YOU FOR TIME AND EFFORT APPENDIX 2

QUESTIONNAIRE FOR RETAILERS

SECTION A: GENERAL QUESTIONS

1. How long have you been a customer of Interfresh Ltd?

- a) Less than 5 years ☐
- b) 5 to 10 years ☐
- c) More than 10 years ☐

2. Do you still want to do business with Interfresh Ltd?

- a) Yes ☐
- b) No ☐

3. Can you please explain your answer in question 2 above?

SECTION B: ACTIVITIES IN VALUE CHAIN ANALYSIS (VCA)

3. Are you satisfied with the kind of business which you are getting from Interfresh Ltd?

- a) Yes ☐
- b) No ☐

4. Can you assess the capacity of Interfresh Ltd in transporting your goods and products?

Tick the number relevantly

- | | | |
|------|---------|-----|
| 1 | 2 | 3 |
| High | Average | Low |

5. Can you please explain your answer in question 4 above?

6. Effectiveness of a service can be measured by the time between you make a request and the time you get the service. How do you ensure the responsiveness of Interfresh Ltd to your requests?

Tick the number relevantly

1

Quick

2

Average

3

Slow

7. May you please comment how you perceive the following components of value chain in relation to Interfresh Ltd?

Please tick relevantly

| Component | Good | Poor |
|-----------------------|------|------|
| Customer relationship | | |
| Supplier relationship | | |

8. What other aspects do you think will help to improve efficiency of transportation of your goods by this organisation?

9. Value chain is made up of the following components. In your own view as a customer, what is shortchanging you from getting high quality service?

Tick the following options relevantly

Suppliers

a. Agree

b. Not sure

c. Disagree

Procurement

a. Agree

b. Not sure

c. Disagree

Production

a. Agree

b. Not sure

c. Disagree

Quality of staff at Interfresh Ltd

a. Agree

b. Not sure

c. Disagree

Maintenance of equipment

a. Agree

b. Not sure

c. Disagree

**END OF QUESTIONNAIRE
THANK YOU FOR YOUR EFFORT AND TIME**