ST. MARY'S UNIVERSITY

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"ASSESSMENT OF SUPPLY CHAIN MANAGEMENT PRACTICES – A CASE STUDY ON K O J J FOOD PROCESSING COMPLEX PLC"

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION (MBA) IN GENERAL MANAGEMENT

ADVISOR: DR. TEMESGEN BELAY

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Acronyms

CLM – Councils of Logistics Management

CLM – Councils of Supply Chain Management Professionals

CPFR – Collaborative Planning, Forecasting and Replenishment

IT - Information Technology

IS - Information System

KOJJFPCP – K O J J Food Processing Complex PLC

SC – Supply Chain

SCM – Supply Chain Management

SCR – Suppler and Customer Relationship

Abstract

Supply Chain Management (SCM) is the means by which firms engaged in creating, distributing, and selling products, can join forces to establish a supply network with an unbeatable competitive advantage-has emerged as one of the most powerful business improvement tools around. Companies all over the world are pursuing supply chain as the latest methodology to reduce costs, increase customer satisfaction, better utilize assets and build new revenues. The purpose of this paper was to examine the practices of supply chain management from the five SCM practices perspectives i.e. Supplier and customer relationship, Internal operations, Information sharing, Information technology and Training and to see the integrations among SC partners. For the accomplishment of this, the study employed descriptive design. Both primary and secondary sources of data were used for this study. The selections of the respondents were carried out by using judgmental, purposive and convenience sampling techniques. The total numbers of K O J J Food Processing Complex PLC employees are 456 of these, 35 employees were considered as a sample unit. Furthermore, 40 customers were interviewed. Likert scaled questionnaire and interviews were used as instruments for data collection. The data was analysed by using descriptive statistics and presented in tables. The major findings indicated that, most SCM practices are moderately practiced with in the K O J J Food Processing Complex PLC's SC. whereas IT and training practices are poorly applied. Sales forecast information sharing with customers is not good that convey 2.22 mean value. Based on both quantitative and qualitative analysis the case company has not that much good relationship with its customers and suppliers and poor customers' services. Manufacturing, supply and demand uncertainties which conveys almost moderate mean values are the major headaches or challenges of the case company's SC which prohibits effective implementation of SCM. Hence, the case company is suggested to improve its relationship with suppliers from simply buy-sale relationship to a modern supply chain relationship through establishing strategic or long term relationship, contract, and continuous information sharing in order to minimize supply uncertainty which resulted in demand and supply unmatched and dissatisfaction of customers.

Keywords: *Supply Chain Management (SCM), SCM practices, Barriers/Challenges of SCM, Supply Chain Performance*

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DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other University, that all the sources of material used for the thesis have been duly acknowledged.

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Advisor Signature Date

Chapter 1
Introduction

1.1 Background of the study

The economic environment prevailing in Ethiopia has been providing opportunities for the private sectors to participate actively in investment activities as opposed to the previous socialist policies which put investment activities under state control. Due to this, the private sector's involvement in economic activities were tied up and entrenched to fall under the state dominance so that for long jeopardizes the private investment from flourishing. Among these investment areas food producing sector is the one.

Competing successfully in any business environment today requires companies to become much more involved in how their suppliers and customers do business. As global competition increases, making products and services that consumers want to buy means that businesses must pay closer attention to where materials come from, how their suppliers' products and services are designed and assembled, how finished products are transported and stored, or what consumers or end-product users are really asking for (for instance, many companies may not even know how their products are used in the final products bought by consumers or end users). Over the past ten years, many large firms or conglomerates have found that effectively managing all of the business units of a vertically integrated firm a firm whose business the boundaries extend to include onetime suppliers and/or customers is quite difficult. What is occurring at many of these firms today is an effort to pare down the organization to focus more on core capabilities while trying to create alliances or strategic partnerships with suppliers, transportation and warehousing companies, distributors, and other customers who are good at what they do. This team approach to making and distributing products and services to customers is becoming the most effective and efficient way for businesses to stay successful- and is central to the practice of supply chain management Yan, Z. and Cheng, H. (2001).

In 1982, Keith Oliver, a consultant at Booz Allen Hamilton introduced the term "supply chain management" to the public domain in an interview for the Financial Times. In the mid-1990s, more than a decade later, the term "supply chain management" gained currency when a flurry of articles and books came out on the subject. Supply chains were originally defined as encompassing all activities associated with the flow and transformation of goods from raw

materials through to the end user, as well as the associated information flows. Supply-chain management was then further defined as the integration of supply chain activities through improved supply-chain relationships to achieve a competitive advantage.

In the late 1990s, "supply-chain management" (SCM) rose to prominence, and operations managers began to use it in their titles with increasing regularity. As it was mentioned by Neeley, (2006) that Forrester was the first researcher who gave the concept that would eventually become Supply Chain Management. Forrester's theory of distribution management was introduced in 1950's. This theory was about an understanding of inter-organizational relationships and coordination.

Supply chain management (SCM) has raised the interest in the past years as organizations started to realize that, the actions taken by one member of the chain actually have an influence on the profitability of other members in the chain. This scheme generated the act of competing as a part of supply chain against the other supply chains instead of competing as a single firm against other individual firms (Silver. et al., 1998).

This is due to the fact that, nowadays the new source of business competition lies outside the walls of organizations, and it is determined by how effectively companies link their operations with their supply chain partners such as suppliers, manufacturers, distributors, wholesalers, retailers and end customers (Silver. et al., 1998).

Therefore, Supply chain management offers a management philosophy to manage activities and integrate with down-streams, up-streams as well as firms internal supply chain operations (Ross, 1998).

With the growth of inter-network competition, individual business may no longer compete solely as independent company but must do as supply chains. Companies associated in the same network require efficient supply chain integration in order to optimize their collective performance. Moreover, numerous companies have started to appreciate that, as SCM plays a major role in building a sustainable competitive edge for their products in highly competitive markets (Jones, 1999).

Because of the collaboration between members of the chain, supply chain management gives significant opportunities to the firms involved in terms of cost reductions, revenue enhancement, flexibility, customer satisfaction, speed and economy of time (Forrester, 1958 cited in Neeley, 2006).

Morten (2003) concluded the general understanding of the business environment in most industries as, competition has been increasing and the condition under which business is running becomes more turbulent. By understandably this, many companies are now focusing on improving and developing their supply chain processes because it can play a significant role in customer service and their profitability.

Currently the Ethiopian business environment is becoming customer driven, competitive and technology based. Hence, it is unquestionable that companies should build an integrated and efficient system through which resources would flow in a seamless and instantaneous manner across the supply chain. The current practices of Ethiopian manufacturing industries with regard to supply chain management is traditional in that, partners involved across the supply chain act independently in designing, developing and executing strategies with minimum effort made to align strategies with the partners doing business with them particularly suppliers, whole sellers, distributors, and customers Mentzer, J.T. Min, S. & Zacharia, Z.G. (2004).

Russell, (2006) as a coping up strategy suggests that the relationship with suppliers and other partners should be supported with an appropriate level of collaboration, information technology, information system and lean- agile principles. Though similar studies which were conducted in the context of Ethiopia are not available abundantly, the one which is conducted by Assefa B., (2011) identified as there exist independent decision making across the supply chain and hence integration among suppliers and customers is poor. Moreover, integration among the internal operation is not a commendable one which is manifested in weak handling of order patterns and market change, internal logistics flow and the like. However, unlike this study the information technology and information sharing practice on a research conducted by Assefa B., (2011) reveals worthy information sharing on sales forecast with customers and suppliers and commendable investment was also observed on IT and IS tools which assist for a better SCM practice being deployed.

Therefore, the investigator has, thus, been inspired to conduct a study on the practices of SCM in K O J J Food Processing Complex PLC to look the extent to which SCM was put into effect.

1.2 Statement of the problem

Though it is clear that other sectors of industry are also playing a significant role for the economic growth of Ethiopia, agriculture which is the back bone of the economy has a dominant role in all economic aspects in the modern Ethiopian economic history.

The justification for targeting on food processing sector is that, food price increases are creating severe difficulties for poor people and have led to political unrest in many parts of the world. Currently in Ethiopia the price of food related items are increasing and even there is shortage of some food items on the market this may be due to poor supply chain management, collaboration, and other factors across the supply chain partners.

One of the many management philosophies that boost the growth, flexibility and management efficiency is SCM, that operate under an integrated, collaborative and efficient value chain all over the world but its effective implementation varies from country to country. As witnessed from various research works conducted domestically, there can be obtained many research works on various business practices in Ethiopia particularly; financial performance, technology application, and the like. Unfortunately, the researcher has hardly come across sufficient research works on this timely global management philosophy i.e. SCM which effect competitive advantage in many proxies if managed well.

Therefore, the rationale of this study is to build awareness on supply chain management and to fill the empirical gap.

Companies which recognize opportunities in the supply chain management will usually direct their effort towards developing a competitive supply chain that is based on speed, flexibility, innovation, quality & responsiveness is believed to significantly improve customer service and their profitability. Therefore, the primary goal of supply chain management is to enhance competitive performance by closely integrating the internal functions within a company &

closely linking them with external operations of suppliers, customers and other channel members (Kim, 2006).

For seeking the efficient and effective cooperation between organizations of a supply chain, each chain member must seek not only to improve its own individual competitiveness (i.e. quality, cost, delivery lead time, and etc.) but also improve the competitiveness and performance of all enterprises in its supply chain. This involves sharing of information, working together to reduce costs, cut lead-time and building total quality into all the stages of the supply chain (Davis, 1993).

Makweba & Xu, (2009) concluded that, the majority of food processors operate individually without any strong relationship with their downstream partners apart from sell-buy relationship. Each member within the network seeks to optimize individual profit rather than the entire supply network. This is an implication of yet, reform heterogeneous supply chains is not an easy task, since each company has individual work structure, organizational structure, work flow, information flow and culture.

With the use of SCM, enterprises can rationalize manufacturing processes across functional or organizational boundaries and possess up-to-date production schedule of suppliers and avoid the bullwhip effect and finally promote the product and service quality (Yan and Cheng 2001).

Lazarevic et al., (2007) disclosed that, in order to make the SCM effective there must be implementations of the supply chain management practices, namely good supplier and customer relationship, information sharing, internal operation, information- technology (SCM) and training of employees among the upstream, internal and down streams of the supply chain. This would be applicable to the extent of expected degree when there is trust and honesty among the supply chain members. On the other hand Lee et al., (2000) suggested that trading partner companies, should get out of mere coordination and move towards collaborative SCM in an effort to reduce the information imbalances that result in the "bullwhip'' effect, while increasing their responsiveness to market demand and customer service. Olsson and Skjolde, (2008) conclude as, a food supply chain is complex, time-critical and dynamic and the Swedish consumers' are experienced with products that is lower food quality than achievable, shorter shelf life than possible, more waste than necessary and in the

worst case, health risks due to a combination of limited knowledge in all steps in the food supply chain and certain negligence in the food handling.

Therefore, food supply chain needs effective management, integration, knowledge, and due attention throughout the supply chain. If properly implemented SCM can improve the company's responsiveness, flexibility and efficiency (Olsson and Skjolde, 2008).

However, most of the researches related to the supply chain managements were carried out in developed countries which have different economic, political, technology, social, legal and cultural status. As a result, it may be difficult to directly apply and generalize that the same practices and collaboration as well as problems of SCM exists in Ethiopia. This is because Ethiopia has different Economic, political, social, legal and cultural status than other countries. In Ethiopia the practice of integration, collaboration, and having willingness and the trend of managing the SC from supplier to the customer is traditional i.e., not more than just buy–sale/ transactional relationship. Even if there is SC by default it is not well managed, and implemented for getting the benefits resulted from effective SCM. So that, each partners with in the SC are using their own individual efforts to improve their own competitiveness (like, quality, cost, delivery lead time, and etc) but it is not as such effective.

KOJJFPCP is one out of these companies. Therefore, the overall intention of this study was to assess the case company's orientation towards supply chain management practices and its performance level. The selection of the case company for conducting this study is pertaining to the results of the preliminary observations made on few selected companies of which the researcher has identified problems on the SCM practices of KOJJFPCP.

1.3 Basic research questions

Hence, this study is primarily aimed to answer, what the practices of SCM in K O J J Food Processing Complex PLC are and more specifically to answer the following basic research questions.

1. What is the current supplier and customer relationship practices of K O J J Food Processing Complex PLC looks like?
2. What does the current information sharing practices of K O J J Food Processing Complex PLC looks like?

3. What does the current internal operation of K O J J Food Processing Complex PLC looks like?
4. What is the information technology practices of K O J J Food Processing Complex PLC looks like?
5. What do the training practices of K O J J Food Processing Complex PLC looks like?
6. What is the collaboration/integration among the key players of the SC?
7. How is the case company working towards integrated internal operation for customer service?

1.4 Objectives of the study

The general objective of this study is to look into the practices of SC management of the case company and assess problems hindering its effectiveness.

The specific objectives of this study are:

1. To study the current supplier and customer relationship practices of K O J J Food Processing Complex PLC.
2. To study the current information sharing practices of K O J J Food Processing Complex PLC.
3. To study the current internal operation of K O J J Food Processing Complex PLC.
4. To study the information technology practices of K O J J Food Processing Complex PLC.
5. To study the training practices of K O J J Food Processing Complex PLC.
6. To assess the extent of collaboration/integration among the SC partners;
7. To assess the case company's orientation of internal operation towards customer service.

Hence, those listed items were the most critical parts of the conceptual framework and basic research variables of this paper. Therefore, the discussion of the above conceptual framework components answer the basic research questions and meets the stated objectives of this study.

1.5 Significances of the study

Investigating the practices of supply chain management and hindrances for its effective implementation in the current complex and dynamic business world is believed to have the

following advantage to the academicians, corporate managers, policy makers; and generally for business practitioners, but more specifically, for the case company.

Hence, this study can be taken to have the following major significances:

- It is going to be used for educators or training institutions to take into consideration while designing training on the issues related to the SCM.
- It will serve as an additional reference to conduct further study in the subject in caption; this is because in the current situation we can infer that only a limited number of researches are conducted in the area in Ethiopia.

1.6 Scope of the Study

Supply chain management (SCM) enables to see the members of the supply chain (SC) as an integrated whole and elicit synergy impact. In other terms, an effective and efficient SCM has the importance of cost minimization, reducing lead time, defect prevention, operational flexibility, system integration, resource utilization and ultimately customer satisfaction.

SCM encompasses vast areas of managerial practices. However, it is difficult and unmanageable to conduct the study in all areas that summarizes SCM. Therefore, the scope of this study was delimited to specific context that is practices of SCM in the case of K O J J Food Processing Complex PLC in Addis Ababa. It was also limited to the company's point of reference towards collaboration, supplier and customer relationship, information sharing, information technology, internal operations of SCM and customer services. Moreover, the scope of the study was limited to the case company i.e, K O J J Food Processing Complex PLC and the down streams of the supply chain.

1.7 Limitation of the study

The research sample didn't incorporate all the SC participants namely: the suppliers in the sample due to time constraint so that it couldn't be generalized/applied to the complete SC of the company under investigation.

On the other hand the sample size of customers may not represent the total customers because of its size was not sufficient. And it did not also incorporate customers at different regional levels.

1.8 Definition of terms

Bullwhip effect- it is the distortion of information with in the supply chain which lead to an increment of inventory fluctuation than really expected.

Logistics- is the management and movement of goods, services, information and other resources from the point of origin to the point of consumption including storage and warehousing (Eyong, 2009).

Lean logistics: means doing more with less time, less space, less human effort, less machinery, less material with high cost precision and giving the customer what they want (Eyong, 2009).

Integration: is the process of combining or coordinating separate function processes or producers and enabling them to interact in a seamless manner (Sunil, 2004).

Supply chain: is all inter-linked resources and activities needed to create and deliver products and services to customers (Sunil, 2004).

Supply Chain Management: is a network of relationships, with the goal to deliver superior value, i.e., the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole (Christopher 2005).

1.9 Organization of the Paper

This project paper is organized into five chapters: Chapter one contains the introduction part dealing with back ground of the study and company, the research problem, objectives of the study, scope and significance of the study. The second chapter discusses the literature review of the subject matter. In chapter three the research methodologies are assumed to be presented. In chapter four the results and discussion of the study and finally chapter five presents the major findings, conclusions and recommended suggestions.

Chapter 2
Review of Related Literature

2.1 Historical Development of Supply Chain Management

Before the term supply chain was coined, the term used for management and movement of product and services was logistics. The development of logistics was originally undertaken by the military in ancient times (Britannica, 1999). Therefore, Supply Chain Management is driven from Logistics concept. The term supply chain management was coined in 1982 by Keith Oliver, a management consultant at Booz Allen Hamilton (Cortada, 2001). Oliver used the term to develop a vision for tearing down functional silos that separated production, marketing, and distribution. As Cortada stated the concept was enlarged upon efficiencies and mutual benefits associated with information sharing and decision coordinating to up and down a supply chain.

In 2005, the Council of Logistics Management (CLM) changed its name to the Council of Supply Chain Management Professionals (CSCMP) (Council of SCM, 2005 cited in Christopher, 2005). A supply chain is simply sequentially-connected organizations and activities involved in creating and making a product available. Conversely, if one looks in the reverse direction at the same activities, a supply chain can be viewed as a demand chain.

2.2 Drivers of Supply Chain Development and main initiatives

In today's global economy, companies face increasing pressure to reduce costs while maintaining production and quality levels to deliver results to the customers. (Handfield and Nichols, 1999) summarized the basic drivers for SC development as: Ever-increasing customer demand in terms of product and service cost, quality, delivery, technology, and cycle time brought by global competition.

Companies all over the world are pursuing supply chain as the latest methodology to reduce costs, increase customer satisfaction, better utilize assets, and build new revenues. In order to achieve these goals, companies must successfully overcome a numbers of challenges/ problems (Makweba & Xu, 2009).

The consequence of this development is that companies are putting more and more efforts into developing new ways to increase competitiveness on the market in terms of more efficient and effective supply chain management.

2.3 Key Components of Supply Chain Management

Johnson and Pyke, (2000) identified twelve areas of SCM from their own experience of teaching and researching on supply chain management, from analysis of syllabus and research papers on supply chain and from discussions with a number of renowned managers of different companies.

These twelve categories they identified and defined are: location, transportation and logistics, inventory and forecasting, marketing and channel restructuring, sourcing and supplier management, information and electronic mediated environments, product design and new product introduction, service and after sales support, reverse logistics and green issues, outsourcing and strategic alliances, metrics and incentives and global issues. So that when anyone think about SCM should have to consider these issues.

2.4 Collaboration in Supply Chain

The best supply-chain performers are deeply involved in relationships that call for tight links partners. As companies migrate toward more extended supply chains, collaboration is becoming their most strategic activity. Collaboration can have a variety of meanings but for the purpose of this study the researcher adopt the definition from Cohen et.al. (2004) that is: collaboration is the means by which companies within their supply chain work together toward mutual objectives through the sharing of ideas, information, knowledge, risk and rewards. Practically, coordination and collaboration of up-stream and down-stream of a supply chain is difficult because of uncertainty in demand and supply and the lack of communication between members of a supply chain which is amplified through successive linkages (Lee 2000).

In fact a very immediate and available opportunity when two or more companies involve in a chain is, the situation where partners would be able to recognize each other's competencies and combine them in order to satisfy the customer requirements. Some other features which may participant anticipate when entering in a partnership are joint planning, management and measurement; and sharing goals, objectives, benefits, resources, information, and risks with partners. Collaboration is a recognized term which could explain and entail all of the above features (Sunil, et.al. 2004).

Some companies have achieved integration through information sharing and inter-organizational collaboration. In a study to measure the degree of integration among the companies it was found that information sharing and inter-organizational integration were the underlying factors for integration with suppliers and customers in areas like supply chain design, inventory management, and customer relationship management (Bagchi & Chu ha, 2005). But from time to time Firms have been struggling to balance their competitive and cooperative relationships with other firms and stakeholders in the supply chain (Morgan et. al., 2007).

Ultimately supply chain management is about getting the right product, at the right time, in the right quantity to the right customer (Higgins, 2010).

2.4.1 Antecedents of Cooperative Behaviour (Trust & Commitment)

Trust is the belief, willingness, and extent to which the partners rely on with whom one has confidence and will act in ways that will bring positive outcomes for the firms and does not want to take unexpected actions that may bring a negative outcome (Ganesan & Shankar, 1994).

Commitment of trading partners in the supply chain is the willingness of each partner to exert effort on behalf of the relationship along the supply chain (Balsmeiere & 1996; Lee & Kim 1999). Therefore, the two fundamental components for improving the relationship among supply chain are trust & commitment (Sunil, et.al. 2004).

Trust & commitment among the supply chain partners will improve relationship with their future value. In order to make the relationship to be continued the supplier of supply chain must deliver the correct stock, in the correct quantity, at a price that is reasonable to both parties. This will increase the trust & commitment levels of the supplier relationship. When the relationship becomes collaborative, it will allow the supply chain participants to maximise the efficiency of their capabilities, resources & lower their cost (Achim & Ritter 2003).

Collaboration can be with suppliers and customers. Customer collaboration is gaining grip in many industries that are pushing to become more demand driven. Customer collaboration embraces the ability to sense demand signals and automatically replenish the customer's

inventory on the basis of actual demand. This is most commonly seen in consumer products and other industries that operate downstream distribution structures that extend to retailers Kenneth, L. And Brian, F. (2006).

2.4.2 Collaborative Planning, Forecasting and Replenishment (CPFR)

CPFR is aimed at improving collaboration between buyer and supplier so that customers' service is improved while inventory management is made more efficient.

It is quite obvious that when each company have more information available regarding the customer demand the better the forecast may be. Therefore, in CPFR which was familiarized for the first time in 1995 by Wal-Mart, it was seen that collaboration is used to solve the errors in forecasts (Ross 1998).

The cooperative behaviours, such as trust & commitment will influence both supply chain practice & supply chain performance indicators (Ruyter et al., 2001). Levi et al, (2003) stated that, forecasts are always wrong, thus it is impossible to predict the precise demand for a specific item; even with the most advanced forecasts techniques are used. While this expression is quite true, but a very effective method which company may able to alleviate inaccuracy in the forecasts is collaboration.

2.5 Practices of Supply Chain Management

SCM practices are defined as a set of activities undertaken in an organization to promote effective management of its supply chain. Many manufacturers and distributors are waking up to the potential for the major cost reduction and service improvements offered by implementing best practices in their supply chain.

A number of literatures show many different perspectives of SCM practices (Tan et al., 2002; Chen and Paulraj 2004; and Li, 2002 and 2005). These different writers perspectives suggested a multi-dimensionality of SCM that covers set of activities and processes from upstream, firm's internal operations to downstream of the supply chain. Supply Chain Management is now recognized as a critical business process for companies manufacturing or distributing products. This is because customers' demand for most products are ever more demanding in response time, in choice and in seeking more competitive prices and thanks to

globalization, customers can choose from an increased number of suppliers (Lazarevic et al., 2007).

There are five basic dimensions/perspectives of supply chain management practices. These are namely; supplier and customer relationship, information sharing, internal operation, information technology and training (Perry and Sohl 2000; Lazarevic et al., 2007).

2.5.1 Supplier and Customer Relationship (SCR)

Supplier and customer relationship is defined as a set of firms' activities in managing its relationships with customers and suppliers to improve customer satisfaction and synchronize supply chain activities with suppliers, leverage suppliers' capacity to deliver superior products to customers. This is due to the ultimate objective of SCM is to deliver products to the satisfaction of end customers (Tan, 2001). The growth of mass customization & personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival (Bowersox et. al, 2000).

The customer relationships include the complete range of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers & improving customer satisfaction (Tan et al. 1998; Claycomb et al. 1999). Close customer relationship allows a company to be more responsive in fulfilling customers' demand and differentiate its product from competitors, sustain customer loyalty, & dramatically extend the value it provides to its customer through improving customer satisfaction by proactively seeking customers' needs and requirements. The ability to build a close relationship with customers will bring companies in to a long-lasting competitive edge (Bowersox et. al, 2000).

SCM suggests that firms need to integrate with their suppliers and customers to achieve both financial and non-financial growth objectives (Tan, 2001). Stank et al, (2001) asserted that, the industry leaders increasingly build competencies to integrate with suppliers and customers and find that, these competencies lead them to supply chain excellence. Coordinating operational activities through joint planning with suppliers also results in inventory reduction, smoothing production, improve product quality, reducing supply uncertainty and lead time reduction (Lee, 2002). Makweba & Xu, (2009) in their study revealed that customers' need to be given its deserved weight. In today's competition, firms with a superior ability to provide services that customers perceive as valuable incur an important competitive advantage.

The food processors need to make commitments to learn what customers need and set strategies that implement customer friendly process relationship rather than the existing one buy-sell traditional relationship. This is because; in most cases customers base their purchasing decisions on the service they receive, not just on price. Therefore, quality and availability of the product that provides superior service to the customers is very important for the firm (Makweba & Xu, 2009).

2.5.2 Internal Operation

In addition to the upstream and downstream integration, SCM also emphasize on the importance of both effectiveness and efficiency of firm's internal operations on its performance. This is due to a significant element of SCM practice in an internal operations which are the basis for developing a competitive advantage before embarking into external integrations. Poor internal operations can lead to failure in coordinating with external partners (Handfield and Nichols, 1999).

Internal operation summarizes all activities related to production system and internal logistics flow (Handfield and Nichols, 1999). To judge the SCM practice as an effective and value adding, the internal operation should be flexible in responding to changing market needs, which is expressed on the basis of agility principles. This means that, a production system must be able to perform rapid change over in both order patterns and mass customization (Lambert and Cooper 2000). Power and Sohal (2001) find that technology utilization, continuous improvement and computer based automation in manufacturing are some of characteristics of agile/flexible organization. Thus, the effectiveness of SCM can be examined by the ultimate effect it would have on customer satisfaction through responsiveness and lower price resulting from lean internal operations. Automated orders and automated productions are the key enablers to realize the quick response program (Perry and Sohal, 2000).

2.5.3 Information Sharing

Information sharing is an important aspect in achieving perfect integration in a supply chain. Cross functional integration and inter organizational integration requires the visibility of information across the supply chain. Poor information sharing between partners in a supply chain will result in poor coordination that will lead to many serious problems such as high

inventory levels, inaccurate forecasts, low resource utilization, and high production costs. Indeed, information sharing is highly considered as the way to reduce demand uncertainty (Lee and Whang, 2000; Lee, 2002). Many studies have reported that information sharing can bring many benefits to both suppliers and buyers, such as inventory reduction, and reduced manufacturing costs Raghunatahan, (2003).

The way companies share information whatever the confidential level or not; determines the success of the collaboration. The nature of information to be across the supply chain differs based on the degree of integration, institutional trust and availability of infrastructure that facilitate the practice (Lazarevic, et al., 2007). Therefore, an informatics perspective is vital in the supply chain since information flow is an integral part of SCM and material flow is closely dependent on information flow.

2.5.3.1 Types of Shared Information

Sales Data: In the traditional supplier-buyer relationship, companies communicate demand information exclusively in the form of orders. Indeed, orders from downstream serve as a critical source of information about future businesses.

When the information is transferred in the form of orders tends to be distorted, can misguide upstream partners in their inventory and production decisions. It ultimately harms the efficiency of the supply chain in the form of excess raw material inventory, unplanned purchases of supplies, additional manufacturing expenses created by excess capacity, inefficient utilization and overtimes, excess warehousing expenses, premium shipping costs, and poor customer service level (Lee, et al. 1997).

Sales Forecast: To exploit the vendors' superior forecasting capabilities, retailers including Wal-Mart formed an initiative called Collaborative Planning Forecasting and Replenishment (CPFAR), which calls for the retailers and the manufacturers to exchange knowledge and jointly develop forecasts and replenishment plans.

The common form of forecast sharing involves a downstream site sharing the information to the supplier, as it is closer to the market and is thus better positioned to forecast future market demand Tsay (1997).

Inventory Level: One of the most common data shared between supply chain partners is inventory level. Access to supply chain inventory status can contribute to lowering the total inventory level in the supply chain. If the retailer and the manufacturer independently manage their respective inventories without sharing inventory status information, they may end up having duplicate safety inventories or stock-outs at both locations (Milgrom and Roberts, 1998)

Other Information Sharing: Other information often shared in a supply chain include may be performance metrics and capacity. Performance metrics include product quality data, lead times, queuing delays at workstations and service performance. By sharing this type of information, the supply chain can identify the bottlenecks of the chain and improve the overall performance (Tsay, 1997).

2.5.3.2 Level of information sharing

Level of information sharing refers to the extent to which critical & proprietary information is communicated to one's supply chain partner. Many researchers have suggested that the key to make supply chain effective and efficient is making available undistorted & up-to-date marketing data at every node within the supply chain (Balsmeier et. al.1996; Child house and Towill, 2003)

The impact of information sharing on SCM depends on what information is shared, quality on shared information, and company's capability in using and translating the information in to a supply chain strategy and operational activities (Moberg et al, 2002). Basically, information sharing can vary from strategic to tactical & from information about logistics activities to general market & customer information (Mentzer et al. 2004).

2.5.3.3 Quality of information sharing

Quality of information sharing includes aspects such as the accuracy, timelines, adequacy & credibility of information exchanged. As information sharing is vital, its major impact on supply chain management depends on what information is shared, when & how it is shared, & with whom it is shared (Monczka et. al., 1998; Moberg et. al. 2002).

Having different interests & opportunities by supply chain participants affect the quality of information. Given these predispositions ensures that, the quality of the shared information becomes a critical aspect of effective supply chain practice (Feldmann and Muller 2003).

Therefore, organizations need to view their information as a strategic asset & ensure that it flows with minimum delay & distortion (Feldmann et al. 2003).

2.5.4 Information Technology (IT)

Nowadays, since IT is involved in every step of operation in each company, therefore it is not surprising that organizations' Supply Chain Management supported by adopting IT. Talluri, (2000) makes the comment that the advances in IT systems have given opportunities for organizations' to transform the way they manage their business.

In SCM, IT is highly regarded as a major enabler in achieving effective SCM. As a supply chain spans many organizations in developing products to customers both up-stream, downstream and many functional areas within a company, the implementation of IT allows the companies to increase communication and coordination of various value adding activities with their partners and between functions within their own operation (Simchi- levi et al, 2000). In addition, to advance development of the internet technology offers significant opportunities for cost reduction, increasing flexibility, increasing response time, and improving customer services (Lee and Whang, 2001).

The benefits of IT in SCM do not come from the capabilities of IT itself; instead the significant benefits come from the combination of its application with corporate strategy and the nature of relationship between companies. IT will improve collaboration and coordination between supply chain members in the environment where trust and long–term commitment between partners exist (Chae, 2005). Li et al, (2005) revealed that, the objectives of IT in SCM are; to provide the information availability and visibility to supply chain partners, to enable the collaboration with organizations in the supply chain and to allow the decision making based on the total supply chain information.

2.5.5 Training

Effective SCM requires managers to have an understanding of supply chain dynamics and ability to use information based tools. Lee and whang, (2000) argue that information visibility throughout a supply chain will bring significant impact if companies do not have a capability to utilize the information in effective ways. Hence companies need to consider the skills requirements and education when integrating their value-adding activities with their partners (Gattoma and Clark, 2003).

The major concept of SCM is collaboration and seamless integration between various value adding activities with in individual companies and across different organizations along a supply chain. Beginning this concept in to practice requires significant changes in corporate culture as well as a new level of human performance. Successes full implementation of SCM concept which largely depends on human aspects of organizations (Bowersox et al, 2000; Mentzer, et. al. 2004).

The review literature of different studies indicates that, there are various complicated and sophisticated operations and decision making those primarily demand knowledge based employees. To this end, organizations are supposed to enhance and maintain existing skills and knowledge of employees. Continuous development and skill building activities demand are sources of competent employees (Lazarevic, et al., 2007). Therefore, effective training and knowledge based learning is essential in developing and maintaining these new SCM skills.

2.6 Supply Chain Performances

Empirical studies by Ross (1998), confirmed the theory that, SCM practices considerably improve companies performance. Moreover, the results specifically highlight that IT and information sharing significantly contributes to more performance measures than supplier and customer relationship practice.

With regard to the relationship between SCM strategies and operational performance, Tan et.al., (2002) observed that the following SCM-related strategies were significantly related to overall product quality and overall customer service: namely determination of customer's needs, reduction in response time and supplier delivery time, improvement of integration activities, trust among supply chain members, communication of future needs, use of information sharing, and assistance of suppliers in JIT (just in time) capability.

The supply chain performance is now increasingly perceived as critical means for attaining a competitive edge over others competitors. The traditional way of measuring performance based on cost alone has giving way to more innovative approach incorporating non-cost performance measures like quality, flexibility, time, and the need for customer satisfaction (Ashish, 2006).

The driving force for a supply chain performance is the supply chain performance enablers: delivery speed, new product introduction, collaboration across enterprise boundary, data interchange, flexibility and customer responsiveness. This in turn leads to a positive effect on the overall cost, lead time, quality, and service level, over all capacity, which constitutes supply chain determinants. The current market situations require increasing service levels and quality in union with low cost and small lead times (Ashish, 2006).

Supply chain performance is a two dimensional definition which consists of effectiveness & efficiency. Effectiveness is about 'doing the right things' & efficiency is about 'doing things right'. Supply chain effectiveness relates to the preference of the end-consumer & the sole indicator is consumer satisfaction Tan et.al., (2002). Therefore, customer satisfaction comes from meeting customer requirements, fitness for use, continuous improvement, elimination of waste, customer support, flexibility to meeting demands, design and engineering, quality assurance, inventory and etc (Eyong, 2009).

2.7 Challenges /Barriers of Supply Chain Management

Most SCM related-problems mainly occur from uncertainties and an inability to co-ordinate several activities and partners (Turban et al, 2004). Fawcett, (2001) identified top ten barriers to supply chain management these are: Inadequate information sharing, Poor/conflicting measurements, Inconsistent operating goals, Organizational culture or structure, Resistance to change- lack of trust, Poor alliance management practices, Lack of supply chain vision (understanding), Lack of managerial commitment, constrained resources, No employee dedication/ empowerment.

Currently, companies are striving for lower cost so that they will be competitive in the market while they have to maintain their service level. The key factor to offering the features that the customers want at the level of service they are willing to pay for is to minimize the lead time. One approach suggested to solve this problem is synchronised material movement where all parts of the supply chain have access to the information at the same time (Waters, 2003).

2.7.1 Uncertainty

SCM basically comprises of suppliers, manufacturers and customers. Manufacturers usually enter into a very complex relationship with suppliers in a supply chain that involves

numerous sources of uncertainty. Generally Davis, (1993) identified three major sources of uncertainty: manufacturing, demand and supply uncertainty:

(1) **Manufacturing uncertainty:** Machine breakdowns that lead to the postponement of production, poor process design that causes a bottleneck in production or produces product of poor quality, are the manufacturing variables accounting for the late delivery and reduction in customer satisfaction.

(2) **Demand uncertainty:** Irregular orders from inconsistent customers may easily mislead manufacturers to make wrong forecasts, which cause excess inventory or insufficient supply.

(3) **Supply uncertainty:** Normally, suppliers fail to commit to promised dates, possibly due to poor material quality, machine breakdowns or deficiency in natural resources and so forth. Wilding, (1998) states one key issue known to impact on the effectiveness of a supply chain is that of uncertainty. The major source of supply chain uncertainty is the demand forecast, which may be influenced by several factors such as competition, prices, technological development, customers' general confidence, and more.

Other uncertainties exist in delivery times which depend on many factors ranging from machine failures to road conditions and traffic jams that may interfere with shipments. Levi et al., (2003) states some factors interfere to uncertainty, they emphasized the challenge of matching supply and demand, the impact of inventory and forecast, and finally factors except those embrace demand as a source of uncertainty; including delivery lead times, manufacturing yields, transportation times, component availability, and so on can also have significant supply chain impact.

2.7.2 Bullwhip Effect

Another barrier that different companies have been facing in their supply chain is the bullwhip effect. The Bullwhip Effect is an observed phenomenon in forecast-driven distribution channels. The concept has its roots in Forrester's Industrial Dynamics (1961) and thus it is also known as the Forrester Effect. This phenomenon has been observed across most industries resulting in increased cost and poorer service. (http://en.wikipedia.org/wiki/Bullwhip_effect). Hau, et al., (2004), concluded as, one of the most common problem that hamper the smooth functioning of SCM is the so-called bullwhip effect which is resulted from inaccurate or distorted information flows. The bullwhip effect has been viewed as one of the forces that paralyze supply chains.

The major Consequences of bullwhip effects are:

- Inefficient production or excessive inventory.
- Low utilization of the distribution channel.
- Necessity to have capacity far exceeding average demand.
- High transportation costs.
- Poor customer service due to stock outs.

2.8. Conceptual Framework

2.8.1 Major components of the Conceptual Framework

The relationship of the conceptual framework is described and the implication is mentioned here under.

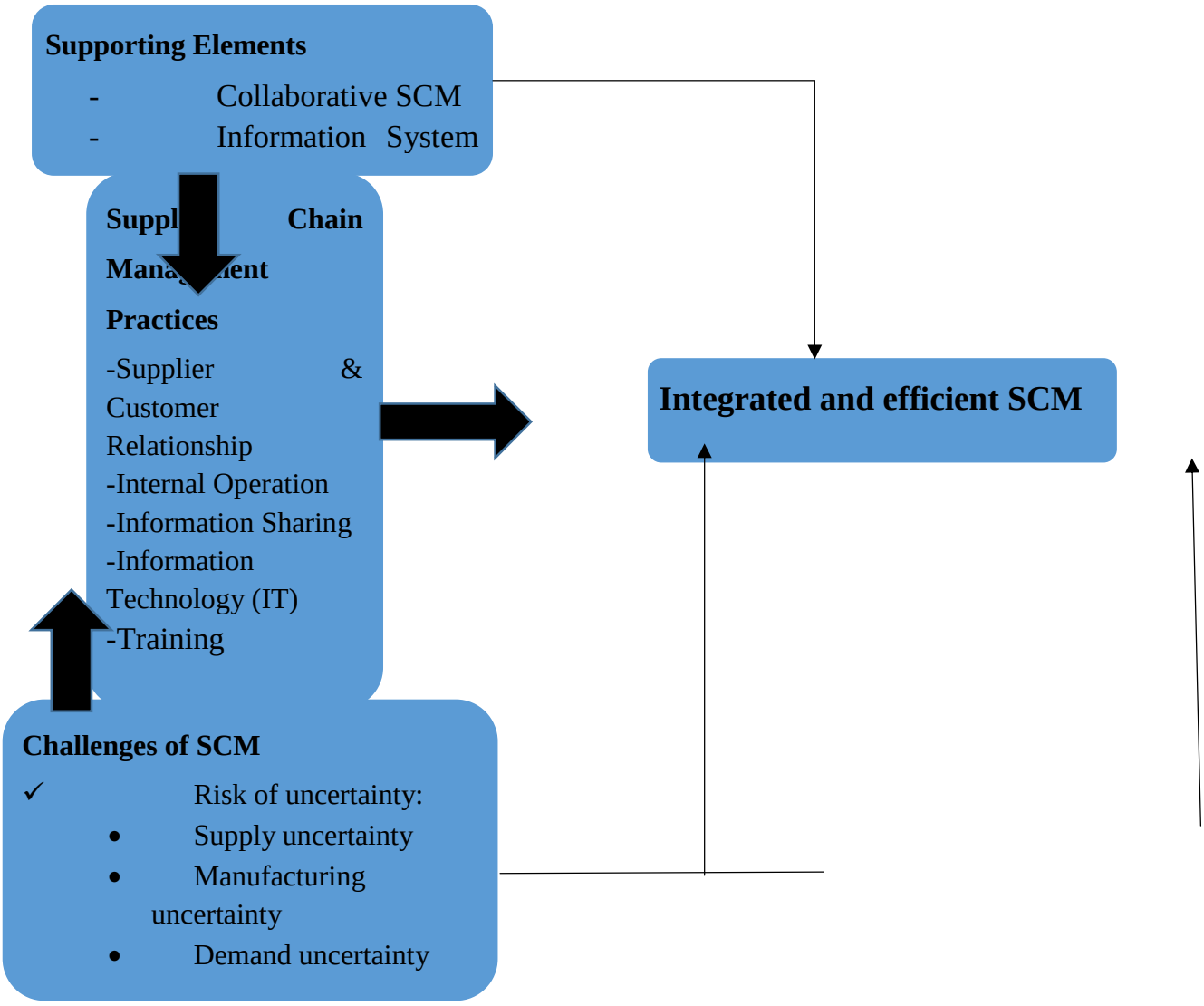

Figure 2.1: Conceptual Framework Developed for this study

After going through tremendous literatures (journals, articles, books and etc.) the researcher has tried to extract the conceptual frame work of this study in five essential parts: SCM practices, supporting elements of integration and efficiency, challenges of SCM, integration and efficiency, business and societal gain which is the ultimate goal of collaboration. As the diagrammatical expression of the conceptual framework indicates commonly known SCM practices namely: supplier customer relationship, information sharing, information technology, training and internal operation.

According to Eyong M, (2009) having this practices in a typical organization is not sufficient to judge an enterprise's SCM as integrated and efficient or generally poor. He states that each practice should be measured for their appropriate level of integration and efficiency. To this end, the parameters of supporting elements that were used to measure the efficiency and integration level are collaborative SCM, information systems and leadership.

On the other extreme, literatures indicate that SCM is not an easy going management system; it has many challenges especially bullwhip effects and uncertainties associated with strategic planning and implementation. According to the conceptual frame work companies that are able to pass through all the practices in an integrated and efficient manner having red off impediment can provide a better advantage to the actors in the SC and a societal gain which is the ultimate goal of SCM.

This conceptual framework is developed for the purpose of this study. Some components of the framework are adopted from different authors developed at different time; where as other parts are taken from review of literatures, which were findings of some other researchers.

Chapter 3
Research Methodology

This part describes the methodologies that are used in this study: the choice of particular research designs, sampling techniques, sources of data and data collection tools along with an appropriate justification associated with each approach.

3.1 Research Approach and Design

Depending on the purpose of research projects can be of three types: exploratory, descriptive, and explanatory. Exploratory research is often conducted in new areas of inquiry, where the goals of the research are: scope out the magnitude or extent of a particular phenomenon, problem, or behaviour, generate some initial ideas about that phenomenon, or test the feasibility of undertaking a more extensive study regarding that phenomenon. Descriptive research is directed at making careful observations and detailed documentation of a phenomenon of interest and it answers what, where, and when of a phenomenon. Explanatory research seeks explanations of observed phenomena, problems, or behaviours it seeks answers to why and how types of questions using hypothesis testing (Sekaran, 2006). This research work adopts descriptive statistics research design. The reason why the researcher adopts descriptive research design is due to the fact that the research is conducted in aiming at assessing the current state of SCM practice in the company selected for the case study.

Research designs can be classified into two general categories- positivist and interpretive- depending how their goal in scientific research. Positivist studies are those that are used for theory (hypotheses) testing, while interpretive studies are those that are used for theory building. Popular examples of positivist designs include laboratory and field experiments, survey, secondary data analysis, and case research while examples of interpretive designs include case research, focus group, grounded theory, action research, and ethnography (case research can be used for both theory building or theory testing, though not at the same time) (Sekaran, 2006) and in this research survey method is adapted. Surveys are non-experimental designs that do not involve controlling for or manipulating independent variables or treatments. Field surveys capture snapshots of practices, beliefs, or situations from a random sample of subjects in field settings through a survey questionnaire or less frequently, through a structured interview. It is a popular and commonly used in business research and it allows

the collection of large amount of data from a sizable population in highly economized way (Sekaran, 2006). The survey method is conducted using structured questionnaire.

3.2 Sources of data

3.2.1 Primary sources

According to Du, J. (2011), primary data are originated by the researcher for the specific purpose of addressing the problem at hand. Even if obtaining can be expensive and time consuming, primary data being the most significant and were gathered through structured questionnaire. The primary data are those which are collected afresh and for the first time, and thus happen to be original in character (Kothari, 2005). The researcher uses quantitative type of data. The Data that would be collected from sample survey through questionnaire that describes numerical figures. The main sources of primary data were respondents who are employees of KOJJ Food Processing Complex PLC and the customers of the company through questionnaire distribution and collection.

3.2.2 Secondary sources

Secondary data means data that are already available i.e., they refer to the data which have already been collected and analysed by someone else (Kothari, 2005). Secondary data are usually collected from journals, existing reports, and statistics by government agencies and authorities. The secondary data for this particular study was collected from marketing journals and other existing reports such as government agencies and annual report of the company. These data help to create better comprehension for the title study. As a general rule Du, J. (2011), states "examination of available secondary data is the prerequisite to the collection of primary data". Start with secondary data and proceed to primary data only when the secondary data sources have been exhausted or yield managerial returns." Thus, this study conducts and analyses primary data with the rationale of the secondary data.

3.3 Population of the Study

The population is the totality of entities in which the researcher is interested in i.e. the collection of individuals, objects or events about which the researcher want to make inference (Trochim, 2000). Correspondingly, it refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2006).

In our case, the target population of this research were employees of KOJJ Food Processing Complex PLC who are well informed of the subject under study and whose work directly affects the SCM and customers of the case company who have direct links with the company through supplying inputs and have direct effect on the SCM practices.

3.4 Sampling Techniques and Procedures

In general, there are two basic sampling techniques: probability and non-probability sampling. A probability sample is defined as a sample in which every element of the population has an equal chance of being selected (random selection). Alternatively, if sample units are selected on the basis of personal judgment (non-random selection), and elements of the population does not have equal chance of being selected, the sample method is a nonprobability sample (Adams et al., 2007; Kothari, 2004). Probability sampling includes Simple Random, Systematic, Stratified, Cluster and Multistage sampling methods (Adams et.al. 2007).

Furthermore, the exact sample units of respondents were considered from the company's management and employees on the basis of judgmental/non-probability sampling technique. Therefore, the researcher preferred convenience sampling to contact the customers who are located at long distance with infrequent visit to the case company, this is due to its difficulty to address the whole customers of the case company. Therefore, these respondents were addressed as per their arrival or availability at the case company.

3.5 Sample Size Determination

Sample size determination is an important element in any survey research. According to Israel (2009), there are four strategies to determine sample size – using a census for small population, using the sample size of similar studies, using published tables like the table of Krejcie and Morgan (1970) or using formulas to calculate a sample size. However, to determine the sample size the researcher has preferred to use a method developed by Trochim (2000), as cited in Du, J. (2011).

There were 336 employees of the case company which were eligible for being considered as the entire population of the study. Therefore, from the entire population 35 employees were considered as sample respondents as per the Du, J's sample determination method,

considering the heterogeneity of sample respondents on the basis of position within the organization.

Due to absence of up to date and properly held customers list at the case company, the researcher used a sample size of 40 customers which is almost one fourth of the major customers as a sample unit. Interviews were also made on selected day and time whereby more customers visit the company particularly on Monday and Thursday morning as per information obtained from sales department of the subject company. Accordingly, 40 customers were interviewed within six days with the help of researcher administered interview questions.

3.6 Methods of Data Collection

Basically there are two sources of data namely, primary and secondary sources. In this research both primary and secondary sources of data are used which are through questionnaires and interviews.

The primary data is collected in the form questionnaires that are distributed to employees of the company and personal interviews with customers, procurement and supply manager, product manager, marketing and human resource managers. Whereas, the secondary data is gathered from books, articles, journals, magazines, and brochures.

Questionnaire: Close ended questionnaire in a 5 point likert scales is used to collect data from the sample respondents. The questionnaire has 5 rating scales ranging from 1- very low to 5- very high. Data gathered through questionnaires is simple and clear to analyse and it also allows for tabulation of responses and quantitatively analyse certain factors. Furthermore to this, it is time efficient for both the respondents and the researcher himself. The questionnaire is structured in such a way that it is developed to include all relevant parts of information to clearly acquaint the respondents.

Interview: In order to obtain sufficient information the researcher used personal interview with management bodies of the case company and customers. Research issues like awareness, practices of SCM, strategic view and logical justifications of the case company is addressed through interviews which are difficult to obtain through questionnaire in as much detailed as required.

3.7 Pre-test procedures

A pre-test is necessary to assess the reliability and validity of a questionnaire Du, J (2011). In this study, a random sample of 20 customers is drawn to check the clarity of the question and run reliability analysis. The respondents were also asked to make comments and corrections on grammatical and clarity problems of the questionnaire.

3.7.1 Validity

Validity is the strength of conclusions, inferences or propositions. It involves the degree to which one is measuring what is supposed to be measured, more simply, validity is the accuracy of measurement (Adams et al., 2007). There are four types of validity commonly examined in research undertakings and these are Internal, External, Construct and Conclusion Validity.

Internal validity refers to the approximate truth about inferences regarding cause-effect or causal relationships (Trochim, 2000) thus, internal validity is only relevant in studies that try to establish a causal relationship. External validity refers to the ability to generalize the results of the study to other settings (Adams et al., 2007). Construct validity refers to the degree to which inferences can legitimately be made from the operationalizations in the study to the theoretical constructs on which those operationalizations were based (Trochim, 2000).

In order to ensure the validity of this study and data collection instrument, the following actions were taken:

1. To assure construct validity, questionnaire items were adapted from previous related studies.
2. A pilot survey was conducted on randomly selected 10 employees of the company and 15 customers by making use of the questionnaire developed for this study in order to ensure that the questionnaire was appropriate and statements were generally understandable.
3. The questionnaire was translated to Amharic for better understanding.

3.7.2 Scale Reliability

The reliability of a measure indicates the extent to which it is without bias and hence ensures consistent measurement across time and across the various items in the instrument (Sekaran, 2006).

As Trochim (2000, pp. 94–100) discussed it, there are four general classes of reliability estimates, each of which estimates reliability in a different way. These are: - Inter-Rater or Inter-Observer Reliability, Test-Retest Reliability, Parallel-Forms Reliability and Internal Consistency Reliability.

According to Trochim (2000), among the four estimates of reliability, internal consistency reliability is the widely used one. Internal Consistency Reliability used to assess the consistency of results across items within a test. In internal consistency reliability estimation, single measurement instrument administered to a group of people on one occasion to estimate reliability. In effect the reliability of the instrument can be judged by estimating how well the items that reflect the same construct yield similar results (Trochim, 2000, p. 97).

3.8 Methods of Data Analysis

In general there are two types of data analysis techniques namely: qualitative and quantitative where by the choice of these methods greatly depends on the type of information the researcher has at hand. If most of the collected information contains numerical data, the analysis calls for quantitative tools and descriptive statistics can be used to characterize the data. On the other extreme, if most of the data collected are in words which mean data gathered using individual interviews, open –ended questions and focus group discussion, it is logical to apply qualitative data analysis tools Nunnery et al., (1994).

The data analysis methodology applied is descriptive statistical analysis to analyse the five components of the SCM conceptual framework which are developed for this study. In addition to this, the qualitative information obtained through interviews from both the concerned employees and customers of K O J J Food Processing Complex PLC was used to analyse the following issues. The analyses is on: Supply chain management practices, Challenges of SCM, Collaboration /integrated supply chain management and Customer services.

The data obtained through questionnaire is presented and analyzed using descriptive statistics. For the purpose of descriptive analysis, the mean value was calculated for each and every item under study. The mean value was computed by adding the response of employees and customers of the case company and dividing it by the number of the respondents in that firm. Accordingly, the company's existing SCM practices and the challenges which hindered its effectiveness are evaluated. That means the purpose of this research was to find out the underlying facts and /or actual circumstances existing within the company with regard to SCM practices and describing the prevailing facts.

3.9 Ethical Research Considerations

As suggested by (Sekaran, 2006; Trochim, 2000), the researcher ensured the strict adherence of the following ethical conducts:

- Respondents take part in the research voluntarily and data was collected based on the consent of the individual.
- The purpose of the research was clearly explained to respondents
- Information provided by respondents was treated with strict confidentiality and the researcher ensured that participants will remain anonymous throughout the study.
- There was no misrepresentation or distortion of the actual data collected from respondents.

In this research all the above ethical considerations as well as other ethical concerns which are related to the conducted research are strictly uphold.

Chapter 4
Results and Discussion

This chapter deals with presentations, discussion and interpretation of the data collected through questionnaire and interview. The discussion particularly focuses on respondents profile, SCM practices, and supply chain integration, challenges of SCM and Customer services.

Out of thirty five (35) questionnaires distributed to respondents thirty two (32) were returned (accepted). From the accepted responses one was found invalid whereas the remaining thirty one (31) responses were found valid and used for the analysis. This accounts for 88.57% of response rate. Thus, based on the responses obtained from the respondents data presentation analysis were made as follows.

4.1 Frequency Analysis of the Respondents' Profile

The demographic profile of the sample respondents is presented and analyzed below. The purpose of assessing respondents' age, sex, is that, to determine whether the researcher considered heterogeneity of sample units. On the other hand assessing the work experience and education level of the respondents' is that, when the respondents are more experienced and educated they have better opportunity to understand the case and give better response than else.

Table 4.1: Sex distribution

Validity	Sex	Frequency	Percent	Valid percent	Cumulative percent
Valid	Male	24	77.4	77.4	77.4
	Female	6	19.4	19.4	96.8
Missing		1	3.2	3.2	3.2
Total		**31**	**100**	**100**	**100**

(Source: Researcher's survey)

Sex frequency of the respondents shows that the numbers of male respondents were almost three times as female respondents. This is 77.4% of the respondents were male while 19.4 % were female respondents.

As table 4.2 below shows that, the researcher divided the age of the respondents in to five categories, starting from 20- 25 years of age to above 40.

In this study, the researcher can conclude that most of the respondents were above 40 ages. This group covers 29% of the respondents to the questionnaire.

Table 4.2 Respondents' frequency distribution of age

Validity	Age	Frequency	Percent	Valid percent	Cumulative percent
Valid	20 – 25 Years	5	16.1	16.7	16.7
	26 – 30 Years	8	25.8	26.7	43.4
	31 – 35 Years	5	16.1	16.7	60
	36 – 40 Years	3	9.8	10	70
	Above 40 Years	9	29	30	100
	Total	30	96.8	100	
Missing		1	3.2		
Total		**31**	**100**		

(Source: Researcher's survey)

The next age group with valid percent of 25.8 is respondents gain aging between 26 and 30. On the other hand, respondents within age group of 20-25 and 31-35 show similar percentage, which is 16.1%. In addition, 36-40 age groups represent 9.7 % of valid respondents. At last, one respondent (3.2) did not mention in which age group he/she is. Surprisingly, there was no respondent below age of 20.

As table 4.3 below clearly shows the frequency distribution of respondents work experience, the largest of the respondents 45 % (14) have more than eleven (11) years of work experience. In the same case, 29% (9) of respondents have from 1-3 years of work experience and followed by 4-6 years of experience, which accounts 16% and 6.5 % (2) respondents represents having 7-10 years of experience. The remaining one respondent (3.2%) did not respond. This implies that in total more than 67.5% of the respondents have more than 4 years of work experience with in the case company and it is sufficient to judge and give

views. This is because when the respondents are more and more experienced within the organization they have better opportunity to know more and more about the organization.

Table 4.3 Respondents' frequency distribution of Experience

Validity	Year of experience	Frequency	Percent	Valid percent	Cumulative percent
Valid	1-3 Years	9	29	30	30
	4-6 Years	5	16.1	16.7	46.7
	7-10 Years	2	6.5	6.7	53.3
	Above 11 Years	14	45.2	46.7	100
	Total	30	96.8	100	
Missing		1	3.2		
Total		31	100		

(Source: Researcher's survey)

As shown below in table 4.4 the highest education level attained by most of the respondents are college diploma holders which represents, (9) 29% out of the valid respondents and followed by first degree holders which accounts for (8) 25.8%. Surprisingly, three education levels that are Grade 10 completed, Grade 12 completed and certificate levels shows similar results that is 9.7% each out of the valid respondents.

Table 4.4 Respondents' frequency distribution of qualifications

Validity	Qualifications	Frequency	Percent	Valid percent	Cumulative percent
Valid	Below grade 8	2	6.5	6.9	6.9
	Grade 10 completed	3	9.7	10.3	17.2
	Grade 12 completed	3	9.7	10.3	27.6
	Certificate	3	9.7	10.3	37.9
	College diploma	9	29	31.0	69
	First degree	8	25.8	27.6	96.6
	Second degree and above	1	3.2	3.4	100
	Total	29	93.5	100	
Missing		2	6.5		
Total		31	100		

(Source: Researcher's survey)

Only two (6.9%) respondents are below grade eight. Out of the valid response, the least percentage was second degree and above education level, which is one (3.2%). Finally, two (6.5%) respondents were not responding their education level. Therefore, out of valid respondents about 57% are diploma and above diploma holders.

4.2 Descriptive Statistical Analysis

As it were revealed in the methodology part, the designed method is descriptive statistical analysis to analyze the five components of the conceptual framework developed for this study. In addition to the quantitative analysis, the qualitative information obtained through interviews from both managers and customers of KOJJFPCP's is also used to analyze the following issues. The analyses were on: Supply chain management practices, Challenges of SCM, Collaboration /integrated supply chain management and Customer services.

The above listed items are the most critical parts of the conceptual framework and basic research variables of this paper. Therefore, the discussion of the above conceptual framework components will answer the basic research questions and meets the stated objectives of this study. For the analysis of all these variables, mean and standard deviation is used. Particularly mean value of the respondents has considered as an important indicator to the extent of the company's practices on each items. To conclude, the overall performance of the case company's practices on each variable, group mean was calculated and used.

The mean and group mean statistical values approaching to 2.00 and less indicates the poor performance, 3.00, average/moderate while 4.00 and 5.00 indicates higher and very high/excellent performance of the company on that particular item and variable respectively.

4.2.1 Supply Chain Management Practices

As it was briefly mentioned in the literature part of this study, the most common supply chain management practices are supplier and customer relationship, internal operation, information sharing, information technology and training (Perry and Sohal 2000; Lazarevic et al., 2007). This study is focused on the case company's SCM practices from these five perspectives. For each practices different items were developed and measured based on their mean and group mean values.

A. Suppliers and Customers Relationship (SCR)

According to Sunil, (2004) the most commonly known characteristics of suppliers and customers relationships are: joint product planning, cooperativeness, frequent meeting, and others. To measure K O J J Food Processing Complex PLC's orientation concerning the SCR seven items were developed by the researcher.

Table 4.5 below indicates the extent of relationship that exists between suppliers, Customers and the case company. Accordingly, the group means of suppliers and customers' relationship is 2.74 which is average/moderate performance with respect to the overall measures taken into consideration. Specifically, joint product planning with major customers, and joint product planning with suppliers, shows the mean value of 2.32, and 2.53, respectively. These, mean values imply that K O J J Food Processing Complex PLC has poor relationship with its customers and suppliers particularly, on joint product planning. In line to this analysis, Tan et al., *(*1998) and Claycomb et al.*, (*1999) states that customer relationships include the complete range of practices that are employed for the purpose of building long term relationships with customers & improving customer satisfaction.

Table 4.5 Suppliers and Customers Relationship Practice of SCM

S.No.	Items	N	Mean	Standard deviation
1	Joint product planning with suppliers	31	2.5333	1.00801
2	The level of cooperativeness with suppliers	31	2.8065	1.04624
3	Customers' delivery adherence requirement	31	3.0968	1.04419
4	Compliance with customers' delivery in full requirement	31	2.7742	0.92050
5	Compliance with customers' delivery on time requirements	31	2.7742	1.05545
6	The level of cooperativeness with customers	31	2.9032	1.04419
7	Joint product planning with major customers	31	2.3226	1.04521

(Source: Researcher's survey)

Whereas Compliance with customers' delivery in full requirement and Compliance with customers' delivery on time requirements represents similar mean values of 2.77. This implies the case company is not meeting the full requirements of the customers as per their desire. On the other hand, customers are not fully satisfied in getting the amount of product

they required. From the items used for customers and suppliers relationship, Customers' delivery adherence to requirements relatively represents the higher result which is 3.09. This implies that there is a gap between the customers' adherence requirement and company's actual performance. The reason for this gap is the case company is not able to deliver the required amount of products to the customers' due to shortage of raw materials particularly pasta and macaroni products. The shortage of raw materials is because of the KOJJFPCP's weak relationship with its customers on joint product planning as it was presented in table 4.5 above.

The level of cooperativeness with suppliers scored mean value of 2.80. In order to experience successful relationship with customers and suppliers, there has to be a joint production and product planning. This is because, according to Lee, (2002) Coordinating operational activities through joint planning with suppliers and customers results in inventory reduction, smoothing production, improve product quality, reducing supply uncertainty and lead-time.

Therefore, even the mean value of joint product planning with major customers reveals poor of such practice (2.32). The group mean value result implies that SCM practice from the perspective of suppliers and customers' relationship of the case company is moderate, that is 2.74.

On the other hand, customers' delivery adherence requirement replies that the customers are more dependent on full quantity and timely delivery of their requirement. So that, this can add pressure on the case company to meet its customers' requirement. But, the current performance of the company to meet this is moderate. If the case company is not in a position to improve this and other supplier and customer relationship practices, without any doubt the case company's customers' have an opportunity to go to its competitor companies those provide these services in a better way than the case company. And the case company has also a great possibility to lose its major customer.

Therefore, simple sale-buy and weak relationship of the case company with its suppliers resulted in not fully satisfy its customers adherence requirement on time due to shortage raw materials like for pasta and macaroni products.

B. Internal Operation

Internal operation is the starting point to make the environment favourable for integration with the external partners. Handfield and Nichols (1999), states that Poor internal operations can lead to failure in coordinating with external partners. As table 4.6 below illustrates that ten items were used in order to see the extent of the internal operation of the case company. The mean value of respondents' reveals that Management Know-how regarding supply chain effectiveness and extent of automated quality control is 3.03 and 3.00, respectively. According to Perry and Sohal, (2000) automated orders and automated productions are the key enablers to realize the quick response program.

On the other hand, the fourth item, which is the extent of innovation in product, is relatively the lowest mean value which is 2.67 out of other internal operation perspectives of SCM practices. Up-to-datedness of production system, flexible production system to market change and flexibility of production system to handle order patterns shows 2.74, 2.87, and 2.96, respectively.

Table 4.6 Internal Operation Practice of SCM

S.No.	Items	N	Mean	Standard deviation
1	Up-to-datedness of production	31	2.7419	1.18231
2	Flexibility of production system to handle order pattern	31	2.9677	0.87498
3	The extent of production process automation	31	2.9355	0.99785
4	The extent of innovation in product	31	2.6774	1.13687
5	The extent of continuous and instantaneous product and service improvement	31	2.9032	0.90755
6	Management know-how regarding supply chain effectiveness	31	3.0323	0.87498
7	Flexible production system to market change	31	2.8710	0.92166
8	Efficient utilization of resources	31	2.7742	1.17501
9	Extent of automated quality control	31	3.0000	1.09545
10	The extent of internal logistics flow	31	2.9333	1.17248
Group Mean			2.8837	

(Source: Researcher's survey)

As stated by Lambert and Cooper (2000) a production system must keep pace with a rapid change in both order patterns and mass customization. In view of this theory, from the mean values presented above in table 4.6, the extent of flexibility of K O J J Food Processing Complex PLC to market change and handling order pattern is moderate, and it clearly reveals that there are problems prohibiting flexibility to handle these changes. In fact, the customers' preferences and the marketing environments are changing very rapidly over time. This change enforces organisations to adopt flexibility to meet the changing market and order patterns.

Efficiency on resource utilization of internal operation has scored mean value of 2.77 which approximates to moderate performance. The intention of efficiency is to minimize overall cost of production, wastage of materials, time and effort, which ultimately ensures productivity and profitability.

Furthermore, continuous and instantaneous product and service improvement and internal logistics flows have almost similar mean value that is 2.93. In order to make an internal operation effective and efficient, logistics flow plays an important role. Thus, the current performance of the case company in product and service improvement is moderate, 2.90. It implies that, KOJJFPCP has to take corrective actions to meet the customers' preferences. Finally, the overall group mean value of KOJJFPCP's SCM practice from the perspective of internal operation is 2.88. In general, each item's and group mean values of internal operation practice is more than 2.6, which conveys moderate/average internal operation practices are there in KOJJFPCP.

Based on the overall analysis of the case company's internal operation practice the researcher concludes that it is moderate. However, this does not mean sufficient, because of the internal operations criticality for creating integration or relationship with external participants or supply chain partners. According to Lazarevic et al., (2007) internal operation is the most critical factor to measure organization's potential to go for external integration.

These writers state that companies should be internally efficient and effective before embarking on external integration. Therefore, it implies that, the case company has an assignment to improve its internal operation to create effective relation with external partners.

C. Information Sharing

The theoretical evidence confirms that supply chain management rides on the back of information in order to meet the required resources at the right time, and at the right place, seamless and instantaneous information flow should exist across the value chain (Russell, 2006).

With respect to the above theoretical justification, this study tried to investigate the practices of information sharing among the supply chain participants of the case company. Accordingly, seven items related to information sharing practice were used by the researcher.

Table 4.7 below indicates, the mean value of each items and group mean that can generalize the information sharing practice of the case company with its up and down-stream supply chain partners.

Table 4.7 Information Sharing Practice of SCM

S.No.	Items	N	Mean	Standard deviation
1	Sales forecast information sharing with customers	31	2.2258	1.02338
2	Sales forecast information sharing with suppliers	31	2.6129	1.02233
3	Other product related information sharing with suppliers	31	2.8387	1.00322
4	Other product related information sharing with customers	31	2.8710	1.02443
5	Adequacy and quality of information sharing throughout the SC	31	2.6452	0.79785
6	Overall efforts of inter-organizational co-ordination and information sharing	31	2.5806	0.80723
7	Sense of trust and confidence along the supply chain	30	3.0000	0.98261
Group Mean			2.6820	

(Source: Researcher's survey)

Relatively, the highest and the lowest mean values are scored by sense of trust and confidence along the SC and sales forecast information sharing with customers that is 3.00 and 2.22, respectively. On the other hand, the Sales forecast information sharing with

suppliers scored mean value of 2.61. This implies that the case company has poor information sharing practice with its customers than with its suppliers particularly on sales forecast. The overall effort of inter-organizational coordination and information sharing has a mean value of 2.58. Whereas, other product related information with both customers and suppliers, adequacy and quality of information sharing throughout the SC scored 2.87, 2.83 and 2.64 mean values, respectively.

In SCM, information sharing is another important practice that should have to be given due attention in order to make the SC robust. Because, when there is distortion, inadequacy and lack of accuracy in information flows with in the SC partners, it will negatively affect the SC participants. The mean value of the respondents on adequacy and quality of information sharing throughout the SC implies that, there is information sharing among the SC partners but it is not sufficient and it lacks accuracy.

From the above presented data, the researcher concluded that the information sharing practice between KOJJFPCP and its customers is poor. This is based on the mean value obtained with respect to sales forecast information sharing which scored 2.2. In fact, customers like whole sellers, distributors, agents and retailers are closer to the end customers. They have better opportunity for understanding the end customers' demand. Sharing forecast information with such customers would help the case company and consolidate its market demand forecasts. So that, having poor relationship with such partners is a cause for poor information sharing practices which make the forecast of the case company weak and unrealistic. According to Lee and Whang, (2000) poor information sharing between partners in SC will lead to many serious problems such as high inventory level, high demand uncertainty, inaccurate forecasts, low resource utilization and high production costs.

Furthermore to the above theory, many studies have reported that information sharing can bring many benefits to both suppliers and buyers, such as inventory reduction, and reduced manufacturing costs Raghunatahan, (2003). However, the information sharing practice of the case company with its customers particularly on sales forecast is poor the groups mean value of SCM practice from information sharing perspective shows 2.68, which is moderate.

The empirical study of Lazarevic et al., (2007) states that efficiency in meeting customers' requirement is significantly differentiated by the level and quality of information sharing among SC partners.

Therefore, based on the analysis, empirical study and the current (21st) century real practice and importance of information sharing and its impacts on any kind of organization, even if the group mean value shows moderate mean value, with respect to these stated issues the result is not sufficient to create effectiveness and efficiency in SCM activities.

D. Information Technology

Advance in information technology have given opportunities for organizations to transform the way they manage their business Talluri (2000).

As table 4.8 reveals that, four items were used to measure IT application of the case company. Out of four items developed to see the extent of IT application in K O J J Food Processing Complex PLC's SC, surprisingly all of the items scored the mean value approximate to 2. The adequacy of IT throughout the supply chain and the level of IT-based automated ordering from major customers represent mean value of 2.00. On the other hand, the mean value of Up-to-datedness of IT throughout the supply chain, IT-based automated ordering from major customers and IT-based automated ordering to major suppliers revealed that 2.2, 2.06 and 2.19 mean value, respectively.

Generally, the groups mean value of SCM practice from IT perspective is 2.12, which is interpreted as there is poor IT application practice across the KOJJFPCP'S supply chain.

Table 4.8 Information Technology Practices of SCM

S.No.	Items	N	Mean	Standard deviation
1	The level of IT based automated ordering from major customers	31	2.0645	0.89202
2	The level of IT based automated ordering to major suppliers	31	2.1935	0.87252
3	Up-to-datedness of IT throughout the supply chain	31	2.2258	0.804656
4	The adequacy of IT systems throughout the supply chain	31	2.0323	0.65746
Group Mean			2.1290	

(Source: Researcher's survey)

Eng (2005) illustrates as good experience in information technology have a positive effect on the firm's ability to enhance customer satisfaction and supply chain responsiveness. In addition to the data collected through questionnaire, interview was held with the general manager and marketing manager of the case company. According to the interview there are poor information technology facilities within the company. But, now the company is implementing intra-network connection facilities to connect marketing, purchasing, production and administration departments. However, it does not give real time and comprehensive reports, due to absence of supportive IT instruments or information system.

According to Levi et al.,(2003) the objectives of IT in SCM are; to provide the information availability and visibility to supply chain partners, to enable the collaboration with organizations in the supply chain and to allow the decision making based on the total supply chain information. Currently, many manufacturing companies are using integrated information systems to manage their business activities. To share information there should be an up-to dated IT and integrated information system which is capable of connecting all functional units of the company and its external participants.

Based on the data collected both in questionnaire and interview and the analysis made on the IT practices, the existing IT System of KOJJFPCP's supply chain cannot support effective SCM implementation.

Therefore, based on the mean value of each items, group mean and interviews, the SCM practice of IT in the case company is poor and conveys that a lot has to be done to bring about change in the IT system.

E. Training practice

As presented in the literature review, the last (fifth) SCM practice is training. The ultimate objective of SCM is customer service as it was depicted in the conceptual framework developed for this study. To provide good customer service, organizations are supposed to enhance and maintain existing skills and knowledge of employees.

Table 4.9 Training Practice of SCM

S.No.	Items	N	Mean	Standard deviation
1	Adequacy of training and development for management	31	2.4333	1.10433
2	Employees training in supply concepts and management	31	1.9677	0.91228
3	The overall adequacy of employees training	31	1.9355	0.99785
4	Provision of diversified skill training to employees	31	1.7419	0.77321
5	Giving training to downstream SC members	31	1.6774	0.83215
Group Mean			1.9512	

(Source: Researcher's survey)

According to Bowersox et al, (2000) and Mentzer, et. al. (2004) the successful supply chain management implementation concept largely depends on human aspects of the organizations. With respect to this theory effective training and knowledge based learning for both managers and employees of organizations is essential in developing and maintaining SCM skills.

Table 4.9 above shows five items developed to investigate the training practice of KOJJFPCP's. Even if the training practice is considered as one of SCM practices, with exception of the first item i.e., adequacy of training and development for management which scored mean value of 2.43, the remaining mean values of other items is less than 2.00 including the group mean. The group mean scored 1.95, which is the least mean value, even compared with other SCM practices group mean values.

Employees training in supply chain concepts & management, the overall adequacy of employees training, Provision of diversified skill training to employees and giving training to downstream SC members scored mean value of, 1.9677, 1.9355, 1.7419, and 1.6774, respectively. This clearly implies that, there is a great problem with the human resource management area of the case company. It is a fact that whatever the extent of information technology, information sharing and other SCM practices is applied; without skilled and committed human resource it is nothing. These all practices of SCM require the human resources to make SCM effective.

In addition to the responses obtained through questionnaire, there was an interview conducted with human resource manager and human resource officer. According to their response, still

now there is no well-organized training program within the company to the employees and managers. Even when some invitations come from government and other training institutions simply some managers or employees have been sent to the training without consideration of the relevancy of the trainee to the company's real problem.

There is no established criterion to evaluate and prepare employees and leaders for the training that fits or concerns them. Furthermore, per day at least three to five employees are leaving the company. If the case company would not take actions in order to solve such poor practice and related problems it creates great negative consequences on its SC. The vivid impact of poor training program/practice is reflected on internal operation of the company, which is a spring board for external integration.

As it was asserted by Gattoma & Clark (2003) managing supply chain actually involves the interaction between human behaviour, IT and infrastructures. In addition, training can enhance the agility of work force and the organization. But, the current training practice of the case company does not support to achieve the above mentioned benefits. Therefore, based on the above analysis the researcher find out inconsistency between the theory and the real practices that is going on in the case company. And there is consistency between qualitative and quantitative information collected from the respondents.

So that, the SCM practice from the training perspective of the case company at hand is poor. If it continues in such a way the company will be at risk in the future to achieve its objectives and to satisfy its customers.

4.2.2 Challenges of Supply Chain Management

The third part of the conceptual framework developed for this study is challenges of SCM that consists of uncertainties, bullwhip effect. As illustrated in table 4.10, out of six items used to determine the extent of challenges in supply chain management: willingness to share risks and benefits shows the lowest mean value, which is 2.38. This implies that the participants in the SC of K O J J Food Processing Complex PLC are not willing to share risks and benefits associated with their supply chain. When there is poor willingness to share risks and benefits with the SC partners that conveys weak relationship and integration among the SC partners. The implication is that the supply chain practice is traditional. It means,

partners/members with in the chain do their own decision and take the responsibility for any risk in a disintegrated manner.

The remaining items scored moderate mean values. Accordingly, inventory fluctuation due to bullwhip effect and institutional trust to share confidential data represented mean value of 2.63 and 2.77, respectively. The result of institutional trust to share confidential data shows moderate institutional trust in sharing confidential information and as it is good for those of SC partners.

Whereas the mean value of inventory fluctuation due to bullwhip effect conveys that there is distorted and inaccurate information flow with in the SC of the case company. This implies that there is a relationship between bullwhip-effect, information sharing and IT practices of SCM. Therefore, poor information sharing practice is resulted from poor IT which ultimately resulted in distorted information flows.

Table 4.10 Challenges / Barriers of SCM

S.No.	Items	N	Mean	Standard deviation
1	Supply uncertainty (Supplier inability to carry out the promise)	31	2.8387	1.06761
2	Institutional trust to share confidential data	31	2.7742	0.88354
3	Willingness to share risks and benefits	31	2.3871	0.88232
4	Inventory fluctuation due to bullwhip effect	30	2.6333	1.06620
5	Manufacturing uncertainty	31	3.4194	1.11876
6	Extent of demand uncertainty	31	2.7742	0.99028
Group Mean			2.8045	

(Source: Researcher's survey)

As it was analyzed above the quantitative analysis of information sharing and IT practices of the case company revealed near to moderate and poor group mean values, respectively. On the other hand, demand uncertainty followed by supply uncertainty and manufacturing uncertainty is the greatest challenge for the case company, which represents 2.77, 2.83 and 3.41 mean values, respectively. The groups mean value for challenges of supply chain management of the case company are moderate with 2.80. The reason for manufacturing uncertainty is identified as a challenge is that, it was affected by both internal and external

factors. Some of the internal factors are breakdown of machineries, ineffectiveness of employees, electric power interruption; while the external factors are change in demands of customers' and suppliers' inability to provide the required inputs according to their promises. So that, manufacturing uncertainty of KOJJFPCP is victimized with these factors.

For further, consolidating quantitative analysis and qualitative information were collected through interview from procurement, marketing and production managers and major customers. These management bodies also confirmed that manufacturing, supply and demand uncertainties are their major problems. According to the production manager's response, there are greater possibilities of stoppage of production due to shortage of inputs and absence of orders from customers. Particularly, for pasta and macaroni products, there is shortage of supply. Sometimes, there is also power interruption, which enforces to stoppage of production.

For triangulating the analysis, procurement and supply manager was interviewed for supply uncertainty. According to his response, there is a shortage of supply for the above-mentioned products, and the reason is that domestically there are few sources of supplies for such products (i.e. pasta and macaroni). Furthermore, importing these inputs from abroad at the current situation is costly. In addition, the case company has no common source of supplies or long term suppliers. This is because, it buys its inputs through bidding and always the company that wins the bid will supply the items.

Finally, the marketing manager replied as, the demand is always changing. ''Some times, there is decrease in demand and at another day; the demand may be greater than expected''. Due to this, the customers may not get the full quantity when they need it. Major customers also confirmed the above problems i.e. shortage in supply and fluctuations in demand. Therefore, based on all of the above quantitative and qualitative analysis the case company's SC is exposed for different challenges. Out of these challenges manufacturing, supply and demand uncertainties are major problems that the case company has been facing. Next to these problems, inventory fluctuation due to bullwhip effect is also another challenging factor that prohibits effective supply chain management. So that, these all challenges are mostly arise from the existence of poor relationships between SC partners, weak information sharing, poor IT and weak internal operation practices of SCM.

4.2.3 Collaboration in Supply Chain

As companies migrate toward more extended supply chains, collaboration is becoming their most strategic activity. Collaboration may be with customers, suppliers and even with in organization's functional units. Some of the features which many participants anticipate when entering in to collaboration are: joint planning, management and measurement, sharing goals, objectives, resources, information, risks and benefits with partners (Sunil, et.al. 2004).
When the level of collaboration is becoming more and more strong it leads to integrated and efficient SCM. Based on this, the researcher has tried to see the extent of integration of the case company with suppliers, customers and cross functional units within the company.

4.2.3.1 Integration with Suppliers

In this part, the researcher tried to see the level of integration between K O J J Food Processing Complex PLC (KOJJFPCP) and its suppliers. Integration is the process of combining or coordinating separate functions, processes or producers and enabling them to interact in a seamless and continuous manner (Kenneth and Brian 2006).

Table 4.11 Company Integration with Suppliers

S.No.	Items	N	Mean	Standard deviation
1	The level of strategic partnership with suppliers	31	3.0000	0.89443
2	The establishment of quick ordering system	31	2.6774	0.90874
3	Stable procurement through network	31	2.6129	1.02233
Group Mean			2.7634	

(Source: Researcher's survey)

As illustrated in table 4.11, there are three items used to determine the extent of integration of the case company with its suppliers. Accordingly, relatively to other items the high mean value was scored on the level of strategic partnership with suppliers which are 3.00, followed by the establishment of quick ordering system, 2.67. The mean value of stable procurement through networking indicates 2.61.

Furthermore the group mean shows that 2.76 mean value. The group mean value approximately reveals as moderate integration between KOJJFPCP and its suppliers. In addition to this, an interview was conducted with procurement and supply manager of the case company to consolidate the information obtained through questionnaire. According to

the interview response, K O J J Food Processing Complex PLC has no common supplier both in domestic and foreign cases. This is due to the procurement method the case company follows is bidding. And any supplier who fulfils the specification and requirements of the company wins the bid and the company buys the materials from those winner organizations. According to the interview there is no stable procurement through networking. Due to the inconsistency between the response of the procurement and supply manager and the respondents of questionnaires, the researcher interviewed both local and foreign purchasers to clearly understand the level of integration with suppliers. They also assure the same point as the procurement and supply manager. They replied that the company has no strategic/planned relationship with its suppliers. But, sometimes the company made contracts with the winner suppliers for three or four months.

Therefore, the researcher tried to identify the area for the respondents' difference through triangulated analysis. Even if the group mean value of company integration with suppliers reveals as moderate it is not convincing. Because it is inconsistent with qualitative information of the responses found through interviews from procurement and supply department. The respondents of the questionnaire assumed the three to four month contractual relationship as a strategic alliance which does not actually exist. Therefore, based on information obtained from both sources (qualitative and quantitative) the level of integration between the suppliers and the case company is poor.

4.2.3.2 Integration with Customers

SCM suggests that, firms need to integrate with their suppliers and customers to achieve both financial and none financial growth objectives (Tan, 2001).

Table 4.12 Company Integration with Customers

S.No.	Items	N	Mean	Standard deviation
1	Follow-up customers for feedback	31	2.6129	0.91933
2	Monitoring and measuring customer service level	31	2.3871	0.88232
3	The level of market information sharing with major customers	31	2.6129	0.84370
4	Frequency of contacts with major customers	31	2.4516	0.92516
Group Mean			2.5161	

(Source: Researcher's survey)

As table 4.12 above depicts, four items were used to evaluate the case company's integration with its customers or downstream of the SC. Accordingly, the first item: follow-up customers for feedback and the level of market information sharing with major customers scored mean value of 2.61 each which is approximates to moderate level of integration.

Monitoring and measuring customers service level and frequency of contacts/meeting with major customers' indicates mean value of, 2.38 and 2.45, respectively. When the level of collaboration between SC partners is becoming strong and strong, it leads them to integration, which in turn makes the SC more effective. So as to make integration with customers' follow-up customer for getting feedback, monitoring and measuring the service level, good market information sharing and frequent meeting with customers are some of the attributes to be considered.

The mean value of Follow-up customers for feedback and the level of market information sharing with major customers are 2.61 mean values each which conveys that it is moderate. Therefore, based on the above data the mean value of both Monitoring and measuring customers' service level and frequency of contacts/meetings with major customers indicates poor result which is 2.38 and 2.45 respectively. This implies that the case company is not in a position to pay attention for measuring the extent of customers' service level and to make an improvement to satisfy the customers. On the other extreme, for doing so, meetings should have to be made with major customers to discuss on what is going on in their supply chain. But, these attributes scored poor mean values which is 2.45. Whereas, the group mean result shows 2.51 which implies that the case company's integration with its customers is weak.

In addition to the mean value obtained through questionnaire, an interview was conducted with customers, marketing manager and sales man of KOJJFPCP. According to their response particularly the whole sellers, replied that as they do not have such a strong integration with the case company. Because, these whole sellers are not only buying and selling to retailers the case company's products, they also buy and sale other companies products.

As marketing manager and sales man responded there is very weak follow-up of customers for feedback, poor contacts/ meetings with customers. In addition to this the marketing manager of the case company replied as not only with the whole sellers, but also with some of the company's agents who are acting as distributors of company's products that the current

integration is poor. Because of this, the case company is enforced to stop its relationship with some agents.

On the other extreme, as per the sales man's response, there is no planned or contract based order from whole sellers with the exception of government customers, particularly ministry of defence. The major customers simply ask when they need some products of the company, whether what they need are there in the stock or not. As a result of such practices, sometimes the whole sellers may not get in full quantity when they need it.

Therefore, the total implication of the KOJJFPCP's integration with its customers is poor. This will leads to the dissatisfaction of its customers and in a long-run there may be a chance losing its customers. If it is so, it may be difficult and dangerous to the company to survive and compete in this intensive competitive market environment.

4.2.3.3 Cross functional integration with in a company

Eng (2005) reported that a cross-functional orientation in SCM has positive effects on customer satisfaction and supply chain responsiveness in terms of improved efficiency among different functions in the supply chain. Integration plays a decisive role for successful SCM (Kenneth and Brian 2006). To realize an effective internal operation functional integration plays a great role.

Table 4.13 Cross Functional Integration with in the Company

S.No.	Items	N	Mean	Standard deviation
1	Data integration among internal functions through network	31	2.5806	0.92283
2	Information system integration among internal functional units	31	2.4839	0.92632
3	Team work and intra-organizational co-ordination	31	2.8710	1.11779
4	Extent of integration between production and sales department	31	2.9355	1.06256
5	Periodic intra departmental meetings	31	2.6774	1.32633
Group Mean			2.7097	

(Source: Researcher's survey)

Table 4.13-above represents the extent of internal integration of KOJJFPCP's functional units.

Accordingly, almost all items except the 2nd item: information system integration among internal functional units, the rest items scored a mean value greater than 2.5, namely: data integration among internal functions through network, team work and intra-organizational coordination and Periodic intra-departmental meetings scored mean value of 2.58, 2.87 and 2.67, respectively.

Relatively, the extents of production and sales department have scored better mean value than others which is 2.93. Information system integration among internal functional units is the least mean value which is 2.48. This is really, the reflection of poor SCM practice from IT perspectives.

The case company has poor IT practice therefore: with such environment information system integration could be poor. On the other hand, data integration among the functional units of the case company is also highly related with IT application so that, even if its mean value approaches to moderate it is not as such sufficient. This implies that poor IT application practice also affects other factors like the extent of integration. On the other hand, the overall group mean of internal integration is, 2.70 which reflects the internal integration of the case company is moderate.

4.2.4 Customer Service Analysis

The ultimate goal of an integrated, efficient and effective SC system is superior customer service: short lead-time, quick response to requirements, accurate delivery, product accessibility, risk sharing, functional and proper complaints handling etc (Christopher1998; Kenneth 2006; Russell 2006; and Eyong 2009).

Table 4.14 Customer Service Descriptive Statistics

S.No.	Items	N	Mean	Standard deviation
1	Reduction of lead time/speed of order handling	31	2.5161	0.88961
2	The accuracy of order processing for customers	31	2.7419	1.06357
3	Effectiveness and flexibility in meeting customers requirement	31	2.6774	0.83215
4	Product accessibility	31	2.8710	1.02443
5	Low stock out frequencies	31	2.6774	1.07663

6	Timely invoice completion	31	2.8065	1.07763
7	Effectiveness in customers' complaints management	31	2.3871	0.84370
8	The extent of aftersales service	31	2.3226	0.87129
Group Mean			2.6250	

(Source: Researcher's survey)

Table 4.14 above depicts that eight essential customer's service attributes were used to investigate the extent of the case company's orientation towards customer's service performance. In view of this, except effectiveness in customers' complaints management and the extent of after sales service all items scored a mean value of greater than 2.5. Reduction of lead time, the accuracy of order processing for customers, effectiveness and flexibility in meeting customers' requirement represents 2.51, 2.74 and 2.67, respectively. On the other hand, product accessibility, low stock out frequency, timely invoice completion shows, 2.87, 2.67 and 2.80, respectively, but effectiveness in customers' complaints management and the extent of after sales service are represents poor performance that is 2.38, and 2.32 mean values, respectively.

Lazarevic et al., (2007) empirically found that, SCM practices significantly affect company's performance particularly lead time, inventory turnover, cost reduction and avoidance of product reject/return, product accessibility and meeting customers' requirement. Accordingly, the groups mean value of customer service reveals that the case company's orientation towards customers' service is moderate. And as it was presented in the conceptual framework developed for this study, customers service is the last component. This implies that, customer service is resulted from practices of supply chain management, level and nature of SC challenges, collaboration, and integration of the company with its suppliers, customers and internal functional units. All of these variables except training and IT practices of SCM shows a moderate performance. This is in line with the theory of successful development of SCM performance has to focus on customers' needs and wants. Consequently, the performance of the supply chain can affect customer satisfaction (Chandra and Kumar, 2000; Svensson, 2003).

The researcher held an interview with marketing and production managers and major customers of the case company to triangulate and state the extent of services given to the customers' and which finally results in customer satisfaction and loyalty. As per the interview

held with marketing and production managers of the case company reveals that in lead time reduction, there are problems resulted from both external internal factors. As their response the external factor is related with suppliers i.e., some inputs are bought from abroad and it takes up to four months to reach to the company which may increase lead time. Whereas from the internal factors there is inefficiency. Sometimes due to shortage of materials, power interruption, breakdown of machines; the production department do not produce the required amount and make it ready to the customers'. But, to minimize the delay resulted from shortage of input materials as much as possible the case company has materials stock with in warehouse which pushed inventory cost up.

For the issues related with effectiveness and flexibility in meeting customers' requirement and product accessibility, as marketing manager's response shows the company has different agents at different regional levels and about eight retailers at Addis Ababa. But it is not sufficient and at the current time the company stopped its agreement with some agents. In order to make products accessible to the customers' the case company has been using both direct and indirect shipping system.

In the case of meeting customers' requirement, at the time of shortage in input materials the company gives priority to some major customers. And the level of flexibility is an average.
In the case of effectiveness in managing customers' complaints, at the very beginning the company checks the quality and other requirements before issuing the products. The main reason for doing this is in order not to take any risk. If any complaints comes from customers the company could manage it as its rationality.

In addition, most private customers are not happy with prioritization principle of the company i.e. whenever there is serious shortage government institutions would be given priority (Interview with customers buying from the plant). On the other hand, customers buying from the retailers namely: Asko main shop, Teklehaimanot shop, and Megenagna shop complain the accessibility of the company's product in the right time, at the right quantity and place.

With respect to compliant management, major customers replied as, the case company is not responding their complaints immediately, to solve this complain at least it took two weeks. Therefore, the above analysis of both quantitative and qualitative with different management bodies and customers conveys that the company's orientation towards customers' service is poor.

Chapter 5
Summary, Conclusion and Suggestions

This chapter summarizes the purpose of the study, the major findings and conclusions, the study implication for theory and practice and makes recommendation.

5.1 Summary of Findings

The purpose of this study was to assess the case company's orientation towards managing its SC and how this impacts the customers' service. The KOJJFPCP's orientation of SC was evaluated through five SCM practices and three types of integrations that determine effectiveness. In addition, the impact of SCM orientation was examined through customer service level which is the ultimate goal of an effectively managed supply chain.

Based on the quantitative and qualitative data analysis, discussion of results with respect to the basic questions, the following are the summary of major findings of this study. The degree of relationship across the supply chain of KOJJFPCP is levelled to be transactional or adversarial, which is characterized by less joint product planning with suppliers and customers' and independent decision making across the SC. The descriptive analysis and interview with management bodies has verified the prevalence of these characters of traditional relationship.

With regard to internal operation, the descriptive data and interview analysis conveys that, there is good automated quality control system, moderate flexible production system for handling order patterns and market change, and internal logistic flow. Relatively the case company is weak in innovation of new products, efficient resource utilization, and up-to-datedness of production.

Information sharing practices of SCM in the case company is generally moderate. But, there is poor information sharing on sales forecast with customers and suppliers which revealed mean value of 2.22 and 2.61, respectively. Again the overall efforts in coordinating and sharing information across the supply chain partners are weak. Even the shared information lacks adequacy and quality.

Concerning information technology, the quantitative and qualitative analysis indicated that, poor and absence of IT & IS tools with in the case company which scored 2.12 groups mean. Supply chain management practice from training perspective of KOJJFPCP is the poorest in respect to other SCM practices which revealed mean value of 1.95. Each items and the overall training practice performance shows very poor than expected. This adversely affects the effectiveness of SCM.

Among the possible challenges of SCM, demand uncertainty, supply uncertainty and manufacturing uncertainties appeared as the major headache of the case company with mean values of 2.77, 2.83 and 3.41, respectively. Inventory fluctuation due to in accurate information (bullwhip) effect is also another challenges of the case companies SC. There is also poor willingness to share risks and benefits among the SC partners.

Regarding to integration among the SC partners the group mean of KOJJFPCP integration with its supplier's shows 2.76 which approximate to moderate level. But, the qualitative analysis reveals poor integration. The quantitative analysis of customers' integration conveys group mean value of 2.51 and it is really poor even if it approaches to moderate the customers have no strong integration with the KOJJFPCP than buy-sale transition.

Concerning to the internal integration, data integration through network and information system integration among internal functional units are poor and would not support external integration. But, the overall internal integration is moderate represented by mean value of 2.70.

With respect to orientation towards integrated superior customer service, both qualitative and quantitative analysis revealed that, the company's effectiveness and efficiency in meeting customers' requirement is poor and effectiveness in handling customers' compliant is poor and customers were dissatisfied with the company's compliant management. At the time of shortage of materials the case company gives priority to major customers and this dissatisfies other customers. In general the case company's orientation towards customers' service is poor.

5.2 Conclusions

Based on the results of the study obtained and summary of findings the following conclusions are given.

_ The eventual conclusion of this study is that generally, the case company's orientation towards SCM is traditional that lacks substantial indicators of an integrated, efficient and effective SCM. In addition, the quantitative analysis of the company's customer service group mean is moderate that is 2.62. Therefore, this can't ensure customer satisfaction with respect to customer service. Based on qualitative and quantitative analysis the investigator comes up with conclusion that the case company's orientation towards customer service is poor and SCM practices have direct impact on customers' service.

_ The primary reason mentioned for poor level of customer service is the internal operations that have direct effect on the company's ability (potential) to embark on external integration. In other words, its effect is clearly reflected on customers not getting what they need when they need it, long lead time, and poor complaints management, poor integration with suppliers, not having effective flexible production system that could respond to the changing market and customer's preference.

_ From SCM practices the case company has a great problem on training and IT practices. These two practices play a decisive role for creating effective and efficient SCM. Poor IT facilities lead to poor information sharing and poor information sharing practices makes a supply chain management ineffective. On the other hand, supply chain management need effective internal operation for creating integration with external partners. For making internal operation effective, the human resource is a critical factor and in order to have skilled, committed, and capable employees and managers, to utilize resources effectively and efficiently training plays a significant role. But, the case company's training practice to make both employees and managers competent is the poor among the five SCM practices. Therefore, the company's poorness in training and IT leads to poor/ week integration both in internal and external partners.

_ The SCM main concept is creating a relationship with other partners through the SC to provide products and services in order to satisfy the customers. The relationship of the

KOJJFPCP with its customers and suppliers is not strong, in sharing sales forecast, cooperativeness, joint product planning, is moderate. Therefore, these relationship shows as the relationship between KOJJFPCP's SC participants are traditional, that is buy-sale relationship. The researcher concludes that the great challenges that prohibits effective SCM of KOJJFPCP's like, manufacturing, supply and demand uncertainties and fluctuation of inventories due to distorted information (bullwhip effect) are because of poor relationships between SC partners.

5.3 Suggestions

On the basis of the findings and conclusions reached, the following suggestions were forwarded in order to improve the Supply Chain Management of the case company.

_ It is noticeably explained that internal integration is vital in increasing the potential of the company to get external integration. KOJJFPCP is suggested to integrate the internal operational units, so as to bring about flexible, responsive and efficient production. This can be done first, by networking the functional units of the organization with appropriate IT and integrated information system. Secondly, breaking functional silos to encourage coordination and interdependent work design accompanied with agile work force and multipurpose machineries to improve flexibility and responsiveness to market and customers' requirements.

_ The human resource is the essential factor that performs all activities to make Supply Chain Management effective and efficient. At the current situation marketing competition, customer preferences, and everything is changing rapidly. Therefore, this change enforces companies to change their strategies, and operations. Out of these changes having skilled, agile, and lean man power is the one. So that, KOJJFPCP is highly suggested to prepare training program for its employees and managers in order to enable them to be competent, committed, responsive, finally which improves internal operation and customer service. This can be done through creating relation- ship with training institutions, strengthen the internal human resource department and internal sourcing. Using appropriately the opportunities given by the government through sending the right person to the training program.

_ The current information technology practice of the case company is weak and affects effective communication and integration of data within the company. The case Company

should improve and invest on IT facilities to enhance information sharing both internally and externally. This can be done through hiring IT specialists or out sourcing.

_ More importantly, the case company is suggested to improve its relationship with suppliers from simply buy-sale relationship to a modern supply chain relationship through establishing strategic or long term relationship, contract, and continuous information sharing in order to minimize supply uncertainty which resulted in demand and supply unmatched and dissatisfaction of customers. Because, this could help the case company to obtain the inputs at the right time and quantity from these suppliers and provide the required quantity by the customers when they need it. So that, this will minimize the dissatisfaction of customers due to shortage of materials.

_ Another important issue that is suggested to the case company's marketing department is improving the relationship with customers through a continuous information sharing, establishing a good follow-up mechanism and get feedback, monitoring customers' perceptions towards service of the company and improving its compliant management through conducting market research for better responsiveness.

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Appendices

Appendix 1:

QUESTIONNAIRE

The purpose of this questionnaire is to gather data on the Practices of Supply Chain Management in K O J J Food Processing Complex PLC (KOJJFPCP). The study is purely for academic purpose and thus not affects you in any case. So, your genuine, frank and timely response is vital for successfulness of the study. Therefore, I kindly request you to respond to each items of the question very carefully.

Part I. Respondents Profile

1. Sex: Male ☐ Female ☐

2. **Age:** Below 20 years ☐ 20-25 years ☐ 26-30 years ☐
31-35 years ☐ 36- 40 years ☐ above 40 years ☐

3. Year of work experience in the organization:
1-3 years ☐ 4- 6 years ☐ 7-11 years ☐ Above 11 ☐ years

4. Educational Qualification:
Below grade 8 ☐ Grade 10 completed ☐ Grade 12 completed ☐
Certificate ☐ College diploma ☐ First Degree ☐
Second Degree and above ☐

5. Field of your Specialization _____

6. Your current position_____

Appendix 2:

Profile for Supply Chain Management Practices

Using the following Rating Scales under the columns, ‘‘circle only on one number from the given numbers in the box after reading the variable on the left hand.’’

The numbers represent: *1- Very Low, 2-Low, 3-Average, 4-High and 5 -Very High*

S.No.	Variables	Rating numbers				
A	**Suppliers and Customers relationship:**	Very Low	Low	Average	High	Very High
1	Joint product planning with suppliers					
2	The level of cooperativeness with suppliers					
3	Customer’s delivery adherence requirement					
4	Compliance with customer’s delivery in- full requirements					
5	Compliance customer’s delivery on time requirements					
6	The level of cooperativeness with customers					
7	Joint product planning with major customers					
B	**Internal Operation Practices:**					
1	Up- to- datedness of production					
2	Flexibility of production system to handle order pattern					
3	The extent of production process automation					
4	The extent of innovation in product					
5	The extent of continuous and instantaneous product and service improvement					
6	Management know-how regarding supply chain effectiveness					
7	Flexible production system to market change					

8	Efficient utilization of resources					
9	Extent of automated quality control					
10	Internal logistics flow					
C	**Information sharing practices:**					
1	Sales Forecast information sharing with customers					
2	Sales Forecast information sharing with suppliers					
3	Other product related information sharing with suppliers					
4	Other product related information sharing by customers					
5	Adequacy and quality of information sharing throughout the supply chain					
6	Overall efforts of Inter-organizational information co-ordination and sharing					
7	Sense of trust and confidence along the supply chain					
D	**Information Technology:**					
1	The level of IT-based automated ordering from major customers					
2	The level of IT-based automated ordering to major suppliers					
3	Up-to-datedness of IT technologies throughout the supply chain					
4	The adequacy of IT systems throughout the supply chain					
E	**Training Practices:**					
1	Adequacy of training and development for management					
2	Employees training in supply chain concepts & management					
3	The overall adequacy of employee's training					
4	Provision of diversified skill training to employees					
5	Giving training to downstream SC members/intermediaries					
F	**Challenges/Barriers for effective SCM implementation:**					
1	Supply uncertainty (supplier inability to carry out the promise)					
2	Institutional trust to share confidential data					
3	Willingness to share risks and benefits					
4	Inventory fluctuation due to inaccurate information sharing (bullwhip effect)					
5	Manufacturing uncertainty like, breakdown of machineries, interruption of power, poor process design etc					
6	Irregular orders from inconsistent customers (Demand					

	uncertainty)					
G	**Supply Chain Collaboration:**					
G1	**Company's integration with suppliers:**					
1	The level of strategic partnership with suppliers					
2	The establishment of quick ordering system					
3	Stable procurement through network					
G2	**Company's Integration with Customers:**					
1	Follow-up customers for feedback					
2	Monitoring and measuring customer service level					
3	The level of market information sharing with major customers					
4	Frequency of contacts with major customers					
G3	**Cross functional integration within a company:**					
1	Data integration among internal functions through network					
2	Information system integration among internal functional units					
3	Teamwork and intra-organizational coordination					
4	Extent of interaction between production and sales department					
5	Periodic interdepartmental meetings					
H	**Customer service satisfaction:**					
1	Reduction of lead time/ speed of order handling					
2	The accuracy of order processing for customers					
3	Effectiveness and flexibility in meeting customers' requirement					
4	Product accessibility					
5	Low Stock out frequencies					
6	Timely invoice completion					
7	Extent of customers' complaints management					
8	The extent of after sales service					

Appendix 3:

List of Interview questions:

For Procurement and Supply Manager:

1. How do you see the suppliers' capability? Are they permanent?
2. How do you evaluate the extent of information sharing practice between your company and your suppliers?
3. What about the extent of integration between your company and your suppliers?
4. Is there uncertainty of suppliers, sense of trust?
5. Do you think that it is important to establish strategic or long term relationship with suppliers?

For Human Resources Manager:

1. Does your company have training program & criterion in order to make employees & managers competent?
2. How do you see provision of multi skill training for your employees?
3. How does your company manage employees' complaints?
4. Does your company have flexible /agile man power?
5. How do you see the employees' commitment and initiation for work and learning?
6. How do you see the internal operation practices of your company?

For Marketing Manager:

1. What look like your supply chain system?
2. How do you see, your company's effort to maintain and develop existing and new customers?

3. How your company manages customers' complaints?
4. How do you see making your products accessible for your customers both in quantity and quality?
5. How do you see the extent of information sharing practice between your company and customers?
6. Is there demand uncertainty?
7. How do you see team work, flexibility, integration with in the company for meeting change in market condition?
8. How do you see the general integration between your company and customers?

For Production Manager:

1. How do you see the extent of supply uncertainty?
2. How do you see the internal logistics system?
3. Do you have flexible production system to meet change in market and orders?
4. What about innovation of new products and improvement of existing products?
5. How do you see the extent of manufacturing uncertainty?
6. What about effective resource utilization?

For Customers:

1. How would you see your relationship with K O J J Food Processing Complex PLC?
2. Does K O J J Food Processing Complex PLC provide the quantity you need at the promised date?
3. How do you see information sharing practice between you/your company with K O J J Food Processing Complex PLC? What about the level of integration with you/your company and K O J J Food Processing Complex PLC?
4. How would you see the company's compliant management and its effectiveness?
5. How do you see the accessibility of K O J J Food Processing Complex PLC?
6. What about the willingness to share risks and benefits with K O J J Food Processing Complex PLC?
7. How do you express the level of your/your company satisfaction with the service or product of K O J J Food Processing Complex PLC?