



**ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**THE PRACTICE OF SUPPLY CHAIN MANAGEMENT AND ITS
RELATIONSHIP WITH ORGANAZATIONAL PERFORMANCE
THE CASE OF ETHIOPIAN MARBLE PROCESSING ENTERPRISE**

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List of Abbreviations and Acronyms

EMPE- Ethiopian Marble Processing Enterprise

CR: - Customer Relation

ILP: - Internal Lean Practices

LIQ: - Level of Information Quality

LIs: - Level of Information Sharing

OP: - Organizational Performance

ROI: - Return on Investment

SCM: - Supply Chain Management

SSP: - Strategic Supplier Partnership

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ABSTRACT

To be successful, organizations must look into their performance in supply chain management. Much emphasis on strategic supplier partnership, customer relationship, level of information sharing and internal lean practice are important for effective organizational performance, because many researchers have shown that supply chain management has a positive effect on organization's performance. The study was conducted on the supply chain management practices and challenges in the case of Ethiopian Marble Processing Enterprise, Addis Ababa. The general objective of this study was to examine supply chain management practices and challenges. The design of the study was descriptive in nature. Primary data and secondary data were used in this study. Since the total populations of employees were known, the student researcher used stratified random sampling techniques for the study. The student researcher conducted the research by taking the sample determination method developed by Carvalho (1984). Accordingly fifty employees were selected and presented them with closed-ended questions. However unfortunately, seven employees hadn't returned the questionnaires. And an interview was conducted with the manager. The techniques of analysis used in this study are descriptive (frequency, percentage, mean and standard deviation) and inferential analysis (regression & correlation). The finding of the study shows that there is strong relationship between SCM practices and organizational performance. Besides, SCM practices and challenges have an influence on organizational performance. Therefore, in order to enhance organizational performance, it is better for the organization to give due emphasis to the SCM practices and challenges.

Keywords: Supply chain management practice, organizational performance

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

In today's competitive business there is an increased focus on delivering value to the customer. The focus of attention of most of businesses is providing products and services that are more valuable compared to its competitors. Concurrent to the focus on customer value, the marketplace in which businesses operate today is widely recognized as being complex and turbulent (Christopher, 2000). The growth of supply chain aims to improve profitability, customer response and ability to deliver value to the customers and also to improve the interconnection and interdependence among firms. Due to market expanding from domestic market to global market increase customer demands, for instance demanding lower prices, faster delivery, higher quality products or services and increase the variety of items (Braunscheidel, 2005).

According to Towill and Christopher (cited in Thatte, 2007), the end customer in the marketplace today determined by the success or failure of supply chains management practices. They stated that getting the right product, at the right price, at the right time to the customer is not only improved competitive success but also the key to survival.

Supply chain Management practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. Tan et al. (2002), identify six aspects of supply chain management practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity and JIT capability. According to Muhammad (2004) this variable refers to several activities or practices related to operational function of firms. It is used to measure the supply chain management adoption and its level of practices. Related practices are divided into six dimensions namely strategic supplier partnership, customer relations practices, information sharing, information quality, lean system and postponement. A number of literatures show many different perspectives of supply chain management practices (Tan et al. 2002 and 2004; and Li, 2002 and 2005). These different writers' perspectives suggested a multi dimensionality of supply chain

management that covers set of activities and processes from upstream, firm's internal operations to downstream of the supply chain. Supply chain management involves a design of a seamless value adding processes across boundaries of an organization so that it will be able to meet real need of the customer (Fawcett et al. 2007). The design and implementation impose a lot of complex problems and challenges in the process of execution of supply chain management. These major problems must be first well identified in order to proactively come up with problem solving mechanisms.

Most supply chain management related-problems mainly occur from uncertainties and an inability to co-ordinate several activities and partners (Turban et al. 2000). 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, lack of managerial commitment, constrained resources, no employee dedication/ empowerment.

Supply chain management has advantage. It helps companies to set themselves apart from competitors with new integration, knowledge, and collaboration. If properly implemented SCM can improve the company's responsiveness, flexibility and efficiency (Olsson and Skjolde, 2008)

It is natural that every business organization whether small or large, private or government, domestic or international operate in a turbulent and uncertain environment. In the context of changing customer expectations, technological discontinuities, increasing environmental uncertainties, business managers have a big challenge of making the right strategic choice and setting their strategic priorities in order to allocate their resources to different functions in an efficient manner for business success. Due to this, managers must develop new tools, new concepts, new strategy and the new mindsets to cope with the turbulent and chaotic environments leading to discontinuous change (Jain, 1997).

In this study the practices and challenges of Supply chain management were assessed by using the variables strategic supplier partnership- the long-term relationship between the organization and its suppliers, customer relationship- 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, level of information sharing- the extent to which critical and proprietary information is communicated to one's supply chain partner, quality of information sharing and internal lean practice- lean supply chain employs continuous improvement efforts that focus on eliminating waste or non-value steps along the chain. Hence in this study SCM is conceptualized as process of using strategic supplier partnership, customer relationship, level of information sharing and internal lean practice for effective organizational performance.

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

Ethiopian Marble Processing Enterprise was established by Italian investors. The establishment dates 70 years back, a man known as Signore Loliva Cesar, Who erected the first marble Processing plant in Addis Ababa at Gullele area. In 1950's E.C another Italian investor named Paulo Motta erected the second plant at Bole area. In 1960 E.C other Italian investor named Signore Frankety erected the third plant at Nifas- silk area.

In 1974, after nationalizing all processing plants, the Government organized the factories into one organization, the Ethiopian Marble Industry (EMI).

After the over throw of the “Derg” regime the transitional government of Ethiopia re-organized the industry by the proclamation No, 166/1986 as “Ethiopian Marble Processing Enterprise”. Currently, the enterprise extracts its raw materials from three regional states namely; Benishangul Gumuze, Oromia and Harrari National Regional states. And, it processes marble and limestone products at three processing plants located in Addis Ababa city at Gullele, Nefas- Silk and Bole area.

The purpose of this study was to examine supply chain management practices and challenges, in terms of strategic supplier partnership, customer relationship, information sharing and internal lean practice on operation, and performance of the firm.

1.2. Statement of the Problem

Because of the current imbalance of demand and supply, customers are not given due consideration and have to wait long time to collect their product orders. Internally, most firms in Ethiopia are organized functionally, not integrated as a flow of processes. As described by Hoole (2005), most of the people wear the hut of functionality. This leads to the lack of common thought of an integrated approach within and across organization.

Likewise Ethiopian Marble Processing Enterprise faced with problems while practicing/implementing the supply chain management with respect to organizations’ performance. The researcher observes the following major problems at EMPE; there is poor coordination among several activities and partners, there is inadequate information sharing in the supply chain process and poor relationships with customers and suppliers which affects customer satisfaction, which incorporate upper and down streams on marble processing industries in Ethiopia particularly on Ethiopian Marble Processing Enterprise which was also indicated on Annual report of EMPE on June 2017.

Wong & Wong(2011)studied the effectiveness of supply chain management with related to organizational performance through quantitative and qualitative approach and

conclude that failing to establish a good supply chain or poor supply chain management would cost high.

The researcher hardly finds enough literature on the current supply chain practice in the Marble Industry in Ethiopia. However, from the country's experience in the area of procurement, production, logistics and distribution management, the researcher generally will describe the current practice of the suppliers' and customers' relationship based on transactional basis instead of strategic alliances.

Most of the researches related to the supply chain management's 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 of Ethiopia has different Economic, political, social, legal and cultural status than other countries. In Ethiopia the practice 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. EMPE is one out of these companies.

The recent business environment is growing to be more challenging, and so, companies have to increase their business operations to stay competitive. According to this idea, one of the most important factors for improving business operations is implementing of supply chain management practices that will translate into improved organizational performance.

Although SCM is currently no longer a new strategy, there are still some serious practical problems that have yet to be addressed. Like lack of basic knowledge of SCM amongst the business practitioners and even though some of the practitioners have realized the

importance of SCM, they lack an understanding of what constitutes a comprehensive set of SCM practices.

Therefore, the research addressed what the supply chain Management practices and challenges are and their relationship with the performance of Ethiopian Marble Processing Enterprise.

1.3. Basic Research Questions

The study primarily addressed the practices and challenges of SCM in Ethiopian Marble processing enterprise and more specifically focused on the following research questions.

- What is the supply chain management practice of the case enterprise in light of the measuring dimensions?
- What are the challenges in implementing SCM practices?
- What is the relationship between SCM practices and organizational performance?

1.4. Objectives of study

1.4.1. General Objective of the Study

The general objective of the study was to examine supply chain management practices and challenges and their relationship with organizational performance of EMPE in light of the measuring dimensions.

1.4.2. Specific Objective

Specific objectives of the study were:

- To assess the supply chain management practice of the case enterprise in light of the measuring dimensions.
- To examine the challenges in implementing SCM practices.
- To investigate the relationship between SCM practices and organizational performance.

1.5. Significances of the study

One of the core activities in a business enterprise is having a well-developed supply chain management practice. The ultimate success or failure of an enterprise depends on its supply chain management system.

The study was therefore, intended to help the enterprise management to redirect their attention to this highly essential function. Assessing the practices of supply chain management and organizational performance in this complex and dynamic business world is believed to have the following importance to the academicians, researchers, corporate managers, policy makers and generally for business practitioners, and specifically for the case enterprise. Specifically, this study has the following main significances:

- ✓ Help to better understand the processes of SCM practices related with the enterprise under consideration.
- ✓ Help to identify problems and improvement opportunities in the supply chain process of the enterprise.
- ✓ Help to identify which SCM practice (s) is more contributing for success of operational and organizational performance of the enterprise.
- ✓ Shows internal and external factors that affect the supply chain management in the enterprise.
- ✓ Help future researchers who are willing to conduct study on this topic.

1.6. Scope & limitations 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 short, 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 in terms of time,

finance, and research manageability. Therefore, the scope of this study was delimited to SCM practices and firm performance of one selected marble processing firm in terms of topic.

The scope of this study was also delimited to the enterprise's point of reference towards strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice. In terms of firm performance the study was delimited to organizational performances (which incorporate market share, return on investment, the growth of sales, growth in return on investment, profit margin on sales).

The area of the study was also limited to the case enterprise i.e., Ethiopian Marble Processing Enterprise.

It is difficult to cover entire domain of supply chain just in one study. The research sample didn't incorporate all the SC participants namely: the external suppliers and customers due to time constraint so that it couldn't be generalized/applied to the complete SC of the enterprise.

On the other hand constructs of SCM were not only limited to SCM practices selected in this study. Therefore it doesn't represent all constructs that could explain SCM practices.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This part of the study address relevant conceptual issues, theoretical framework and empirical review related to the topic of the study. It includes historical development, concepts and definition such as supply chain management, SCM practices, challenges and organizational performance by focusing on previous research in this area and present reviewed literature relevant to this study.

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, 1994). 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.

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 (2002) 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. Concepts of Supply Chain Management

The traditional understanding of supply chain management is to leverage the supply chain to achieve the lowest initial purchase prices while assuring supply. Typical characteristics include: multiple partners; partner evaluations based on purchase price; cost-based information bases; arm's-length negotiations; formal short-term contracts; and centralized purchasing. Operating under these conditions encourages fierce competition among suppliers, often requiring playing one supplier against the others, and uses rewards or punishment based on performance. The fundamental assumption in this environment is that trading partners are interchangeable and that they will take advantage if they become too important. In addition, there is a belief that maximum competition, under the discipline of a free market, promotes a healthy and vigorous supply base which is predicated on the "survival of the fittest" (Robert, 1998).

The term SCM was first used in the 1980s and as such is a relatively new discipline within management theory with tools and concepts still being developed. According to Tan et al. (2002) in last few years the concept of SCM has received increasing attention from academicians, consultants, and business managers alike. Furthermore, Li et al.(2006) identified as many organizations have begun to recognize that SCM is the key to building sustainable competitive edge for their products and/or services in an increasingly crowded marketplace. As Burgess et al. (2006) and Harland et al. (2006) described, the academic debate over the last 20 or more years contributed to develop the SCM understanding and its relevance to firm strategy.

However, the concept of SCM has been considered from different points of view in different bodies of literature such as purchasing and supply management, logistics and transportation, operations management, marketing, organizational theory, and management information systems (Croom et al. 2000). Various theories have offered various insights on specific aspects or perspectives of SCM, such as industrial organization and associated transaction cost analysis (Ellram, 1990), resource-based theory and its extension relational view theory (Rugtusanatham, 2003), competitive strategy (Porter, 1985), and social–political perspective (Stem and Reve, 1980). In addition those academic debates over the last years also produced a fragmented literature, lacking commonly accepted frameworks and clear constructs, undermining knowledge advancement (Burgess et al, 2006; and Harland et al. 2006).

Even though different things contribute for differences on the concepts of SCM, different researchers tried to describe the concepts of SCM as follows. Ellram and Cooper (1990) identified SCM as an integrating philosophy to manage the total flow of a distribution channel from supplier to the ultimate customer. Whereas Robinson and Kalakota (2000) view the supply chain quite simply as a “process umbrella” under which products are developed and delivered to customers. From a structural viewpoint, they argue, the supply chain refers to the complex network of relationships that organizations maintain with trading partners to source, manufacture and deliver products. As Li et al. (2006) described SCM is a concept which its goal is to integrate both information and material flows seamlessly across the supply chain as an effective competitive weapon. Li et al. (2006) also stated that SCM applies to show the collaborative relationships of members of different echelons of the supply chain and refers to common and agreed practices performed jointly by two or more organizations. In addition, according to Arawati (2011) SCM includes managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customer.

Generally, the SCM concept used in the research assume that firms set up alliances with members of the same chain (i.e., upward stream and downward stream) to improve its

organizational performance revealed by superior business and operational performance of all chain members.

2.4. Definitions of Supply Chain Management

About definitions of SCM, many definitions have also been used to explain the term. The frequency with which the term SCM is used in today's environment would suggest that it is a well understood concept accompanied by an accepted set of managerial practices. However, definitions of and approaches to SCM vary substantially from organization to organization because it is influenced by many different fields and researchers in the area of SCM. Tan et al. (2002) defines SCM as the simultaneous integration of customer requirements, internal requirements and upstream supplier performance. Council of Logistics Management (CLM) defines SCM as the systemic, strategic coordination of the traditional business functions and tactics across these businesses functions within a particular organization and across businesses within the supply chain for the purposes of improving the long-term performance of the individual organizations and the supply chain as a whole. SCM has been defined to explicitly recognize the strategic nature of coordination between trading partners and to explain the dual purpose of SCM: to improve the performance of an individual organization, and to improve the performance of the whole supply chain (Li et al. 2006).

Supply chain by Christopher (1998) defined as a network of various organizations involved both through upstream and downstream linkages in different kinds of activities and processes. Meanwhile, Adebayo (2012) summed up the many definitions of SCM by various authors and researchers as 'the task of integrating organizational units along a supply chain and coordinating materials, information and financial flows in order to fulfill (ultimate) customer demands with the aim of improving competitiveness of the supply chain as a whole'. Thus, in the end produce value whether in the form of products or services to the end user.

The key elements of supply chain and its management from these definitions are therefore, the upstream parties, the downstream parties and the integration of all the

organizations involved, together with the internal function of an organization itself. The upstream parties, as being described by Handfield and Nichols (1999) consists of an organization's functions, processes and network of suppliers while the downstream function on the other hand concerns the distribution channels, processes and functions where the product passes through to the end customer. Where external downstream and upstream functions are concerned, the managers involved in each upstream and downstream supplier and functions are responsible in making sure that the deliveries of products and services are done as scheduled to their destinations. If there are cases where delays are inevitable, the managers are to ensure that the impact of the delays to the supply chain and the value it carries will be minimal.

In general, regarding the definition of SCM, the researcher conceptualize it as the strategic coordination of the traditional business functions (i.e., coordinating the firm/organization with the supplier and customer) and the tactics across these businesses functions within a particular organization and across businesses within the supply chain for the purposes of improving short-term and long-term performance of the individual organizations and the supply chain as a whole.

2.5. Supply Chain Management Practices

SCM practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. SCM practices are multidimensional which affect the performance of partners in the supply chain. These SCM practices were seen and discussed by different researchers from different perspectives. Donlon (1996) describes the latest evolution of SCM practices, which include supplier partnership, outsourcing, cycle time compression, continuous process flow, and information technology sharing. SCM practices are multidimensional which affect the performance of partners in the supply chain. Tan et al. (1998) use purchasing, quality, and customer relations to represent SCM practices, in their empirical study. Alvarado and Kotzab (2001) include in their list of SCM practices concentration on core competencies, use of inter-organizational systems such as elimination of excess inventory levels by postponing customization toward the end of the supply chain. Tan et al. (2002) identify six aspects of

SCM practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity, and just in time capability. According to Muhammad (2004) this variable refers to several activities or practices related to operational function of firms. It is used to measure the SCM adoption and its level practices. Related practices are divided into six dimensions namely strategic supplier partnership, customer relations practices, information sharing, information quality, lean system and postponement.

Chen and Paulraj (2004) presented SCM framework/practice that encompassed three dimensions: supply network structure, characterized by strong linkages between members, low levels of vertical integration, non-power based relationships; long-term relationships, managed with effective communication, cross functional teams, and early supplier involvement in crucial projects, planning processes; and logistics integration. Min and Mentzer (2004) identified the practices of SCM as including agreed vision and goals, information sharing, risk and award sharing, cooperation, process integration, long-term relationship and agreed supply chain leadership.

Arawati (2011) identified SCM dimensions as its encompasses: Strategic Supplier Partnership, developing trust and collaboration among supply chain partners as well as customers; Lean Production, is associated with continuous pursuit of improving the processes, a philosophy of eliminating all non-value adding activities and reducing waste within an organization; Postponement Concept, Postponement involves the process of delaying final product configuration until the actual order requirement is specified by the customer. Keeping products in semi-finished would allow more flexibility and customization in completing the final products and also enables a company to respond more quickly to market demand and New Technology and Innovation, New technology and innovation refers to the application of the latest scientific or engineering discoveries to the design of operations and production processes in SCM .Thus the literature reveals SCM practices from a variety of different perspectives with a common goal of ultimately improving organizational performance.

In reviewing and consolidating the literature, five dimensions, including strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice, are selected for measuring SCM practice. The five constructs cover upstream (strategic supplier partnership) and downstream (customer relationship) sides of a supply chain, information flow across a supply chain (level of information sharing and quality of information sharing), and internal lean practice (waste minimization). It should be pointed out that even though the above dimensions capture the major aspects of SCM practice, they cannot be considered complete. Other factors, such as geographical proximity, structural aspect (Tan et al.2002), cross-functional teams, logistics integration (Chen and Pauraj, 2004), agreed vision and goals, and agreed supply chain leadership (Min and Mentzer, 2004) are also identified in the literature. Though these factors are of great interest, they are not included due to the concerns regarding the length of the survey and the parsimony of measurement instruments. The study, therefore, proposes SCM practices as a multi-dimensional concept.

2.5.1. Strategic Supplier Partnership

It is defined as the long term relationship between the organization and its suppliers. It is designed to leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits (Balsmeier and Voisin, 1996; Stuart, 1997; Noble, 1997; Monczka et al. 1998; Sheridan, 1998). A Strategic partnership emphasizes direct relationship and long-term and encourages mutual planning and efforts to resolve problem. Supplier and organizations can work together more closely and eliminate useless time and effort. Effective partnerships with suppliers can be critical factor to guide supply chain management (Li et al.2006). Sandikiglu and zehir (2010) also stated that in strategic supplier partnership, suppliers play more direct role in an organization's quality performance.

Through close bonded relationships, supply chain partners are more willing to share risks and reward and be able to maintain the relationship over a longer period of time (Lascelles and Dale, 1989; Landros and Moncza, 1989). It is designed to leverage the strategic and operational capabilities of individual participating organizations to help

them achieve significant ongoing benefits (Noble, 1997 and Sheridan, 1998). Such strategic partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more key strategic areas such as core raw materials, technology, products, and markets (Yoshino and Rangan, 1995).

Strategic partnerships with suppliers enable organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products. Suppliers participating early in the product-design process can offer more cost effective design choices, help select the best components and technologies, and help in design assessment (Tan et al. 2002). Strategically aligned organizations can work closely together and eliminate wasteful time and effort (Balsmeier and Voisin, 1996). An effective supplier partnership can be a critical component of a leading edge supply chain (Noble, 1997). The main objective of strategic partnerships with suppliers is increasing the functional capability desired supplier (Rosenzweig, 2003). Therefore, strategically managed long-term relationship with supplier has positive impact on a firm's supplier performance (Cooper and Ellram, 1993).

2.5.2. Customer Relationship

It encompasses the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction (Tan et al. 1998, and Claycomb et al. 1999).

Noble (1997) and Tan et al. (1998) consider customer relationship management as an important component of SCM practices. As pointed out by Day (2000) committed relationships are the most sustainable advantage because of their essential barriers to competition. Focusing and maintaining the customer relationship will enable the organizations to be more responsive towards customers' needs and will result creating greater customer loyalty, repeat purchase and willing to pay premium prices for high quality product (Carr and Pearson, 1999).

Customer relationship management is an important component of supply chain management practices (Noble, 1997). The growth of mass customization and personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival (Wines, 1996). Close customer relationship allows an organization to differentiate its product from competitors, sustain customer loyalty, and dramatically extend the value it provides to its customers (Magretta, 1998).

As discussed in Niknia (2007), the main customer relationship goals are identifying new business opportunities, reduce missed opportunities, reducing customer defection, creating customer loyalty, improve customer service, improve organization appearance, reduce costs, and increase revenue. For this research purpose, customer relationship is conceptualized from the literature review and practicability in Ethiopia as the way of building long-term relation with customers through creating customer loyalty, reducing defect products, improving customer services, reducing price/cost, managing customer complaints and working on improving customer satisfaction.

2.5.3. Information Sharing

Information sharing has two aspects: quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies (Monckza et al. 1998; Moberg et al. 2002). Level (quantity aspect) of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner (Mockza et al. 1998).

2.5.3.1. Level of Information Sharing

Information sharing refers to ability of enterprises to share knowledge and information with supply chain partners with effective and efficient manner. Information sharing in interactive system of supply chain includes information between direct partners and all network of supply chain. For effective and efficient use by partners is needed sharing information. The level of information sharing is closely linked with accountability and efficiency (Rahmanseresht and Afsar, 2008).

Furthermore, Alireza et al. (2011) stated integration and coordination across supply chain can be well provided through information sharing. Lalonde (1998) considers sharing of information as one of five building blocks that characterize a solid supply chain relationship. According to Stein and Sweat (1998), supply chain partners who exchange information regularly are able to work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker.

Effective use of relevant and timely information by all the functional elements in the supply chain is considered as a competitive factor and distinctive (Ahmadi, 2005). Failures can occur in case of information delays, shortage or distortion across the supply chain (Power, 2005). In this study supply chain information sharing is associated with the amount of information shared among supply chain partners in downstream and upstream side of the supply chain and also the information intensity. In this study, information sharing in supply chain is conceptualized as the extent of sharing business knowledge formally or informally with supply chain partners. Also it is associated with the amount of information shared among supply chain partners in downstream and upstream side of the supply chain and also the information intensity.

2.5.3.2. Quality of Information Sharing

Quality of information sharing includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged (Moberg et al. 2002; Monckza et al. 2002). While information sharing is important, the significance of its impact on SCM depends on what information is shared, when and how it is shared, and with whom (Chizzo, 1998; Holmberg, 2000). It appears that there is a built in reluctance within organizations to give away more than minimal information (Berry et al. 1994) since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM (Feldmann and Muller, 2003).

Based on Li et al. (2005) organization needs to review their information as a strategic asset and ensure that the information flows with minimum delay and distortion. In addition, Li et al. (2005) also notes that information shared must be accurate so that the

best SCM solution will be obtain. Effective use of relevant and timely information by all the functional elements in the supply chain is considered as a competitive factor and distinctive (Ahmadi, 2005).

While information sharing is important, the significance of its impact on SCM depends on information by all functional elements within the supply chain as a key competitive and distinguishing factor. The empirical findings of Childhouse and Towill (2003) reveal that simplified material flow, including streamlining and making highly visible all information flow throughout the chain, is the key to an integrated and effective supply chain. Providing and transforms raw material to a product or service and delivers it to the customer is activities that is done in the supply chain. Overall planning of supply and demand, raw material procurement, production planning, inventory control, warehousing, distribution of products and management of information is activities in the supply chain.

Hence manufacturing organization in the supply chain should be able to consider inventory demand and according to the number products in stock identified a fraction number the product and do production planning. The work of Tan et al. (1998) in which most of the indicators of information quality is adopted, does not incorporate completeness as the indicators of information quality which is the key for quality of information in reality of the case organization.

Therefore, for the purpose of the study, information quality is conceptualized as accuracy, timeliness, adequacy, information exchanged reliability and completeness.

2.5.4. Internal Lean Practices

Another supply chain management practices is the use of internal lean practices. Internal lean practices refer to consume less system resources uses with the same speed mass production and offers greater variety to customers. In other way James and Jones (2003), internal lean practices as Lean production associated with continuous pursuit of improving the processes, a philosophy of eliminating all non-value adding activities and reducing waste within an organization.

One of the fundamental ideas in internal lean practices is removed surplus (Hassanzadeh and Jafarian, 2010). The most famous of internal lean practices can be mentioned timely and lean produce. Production of lean and timely is production system that its aims are to optimize processes and production process by reducing waste and other inefficient factors (White, 1993).

Internal lean practices understanding for the study is waste elimination regarding to setup time, continuous improvement and just in time.

2.6. Performance Impact of Supply Chain Management Practice

Previous studies suggest that effective SCM practices have a direct impact on the overall financial and marketing performance of an organization (Prasad and Tata 2000; Shin et al. 2000). Indeed, SCM practices is expected to increase an organization's market share, return on investment and improve overall competitive positions. For instance, Tan et al. (1998) asserted that customer relations and purchasing practices impact the effectiveness of SCM strategy and lead to financial and market performance.

Froehlich and Westbrook (2001), on the other hand suggested that companies with broader supply chain integrations with suppliers and customers showed the largest performance improvement in business achievements.

2.7. Organizational Performance

Organizational performance refers to how well an organization meets its financial goals and market criteria (Li et al. 2006; Koh et al. 2007). In general, organizational performance can be measured from both financial and non-financial criteria (Demirbag et al. 2006). The measures of financial goals include profit, return on investment, sales growth, business performance, and organization effectiveness (Venkatraman & Ramanujam, 1986). On the other hand, the measures of non-financial criteria are innovation performance and market share (Demirbag et al. 2006), quality improvement, innovativeness and resource planning (York and Miree, 2004). Organizational performance is also being studied from the perspective of SCM organizational performance which includes increased sales, organization-wide coordination and supply chain integration (Koh et al. 2007; Petrovic-Lazarevic, Sohal & Baihaiqi, 2007).

Operational and organizational performance dimensions may also include innovation and R&D performance (Prajogo & Sohal, 2003; Singh & Smith, 2004).

Many empirical studies have examined the relationship between supply chain management (SCM) and organizational performance (Zacharia et al. 2009; Chong et al. 2010; Lee et al. 2011; Wong & Wong, 2011). The relevant items adapted to measure organizational performance includes higher sales, higher accuracy in costing, and improved coordination between departments, improved coordination with suppliers, and improved coordination with customers (Koh et al., 2007). Some other measures that are related to organizational financial performance may include return on investment, market share, and profit margin on sales, growth of return on investment, growth of sales, and growth of market share to measure organizational performance (Wong & Wong, 2011). Petrovic-Lazarevic et al. (2007) use measures such as lead time, inventory turnover, product return, sales level, cost reduction and meeting customers' requirements to measure the operational performance.

In line with the above literature, the same items will be adopted to measure organizational performance in this study. Market share, return on investment, the growth of market share, the growth of sales, growth in return on investment, and profit margin on sales adapted as organizational performance measures in this study.

2.8. Challenges of Supply Chain Management

Most SCM related-problems mainly occur from uncertainties and an inability to coordinate several activities and partners (Turban et al. 2000). Fawcett (2001) identified top ten barriers to supply chain management these are: inadequate information sharing, poor/conflicting measurements, inconsistent operating goals, in 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 synchronized material movement where all parts of the supply chain have access to the information at the same time (Waters, 2003).

2.8.1. 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.

2.8.2. Bullwhip Effect

Another barrier that different companies have been facing in their supply chain is 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.

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.
- Necessity to have capacity far exceeding average demand.
- High transportation costs.
- Poor customer service due to stock outs.

2.9. Empirical Research Studies

According Shah et al. (2002), much of the current theoretical/ empirical research in SCM focuses on only the upstream or downstream side of the supply chain, or certain aspects/perspectives of SCM. However, there are certain previous researchers have devoted deal of attention to the relationship of supply chain management practice(s) and certain aspects of overall organizational performance from different perspective/dimensions or overall supply chain. Some of these researches finding are discussed as follows:

Moslem (2013) conducted research on impact of supply chain management practices on competitive advantage in manufacturing companies of Khuzestan province (Iran) by using strategic partnerships with supplier, customer relationship, information sharing, quality of information sharing and internal lean practices as independent variables affecting the competitive advantage. The result from this study was indicates as there is relationships between SCM practices and competitive advantage.

Supply Chain Management, Product Quality and Business Performance in case of Malaysian manufacturing companies conducted by Arawati (2011) and the study specifically investigates relationships between SCM, product quality and business performance and these associations are analyzed and the result demonstrates that SCM dimensions namely 'lean production', 'new- technology and innovation', 'strategic supplier partnership' and 'postponement concept' appear to be of primary importance and exhibit significant effects on product quality and business performance.

Adebayo (2012) conducted study on SCM Practices in Nigeria Today: Impact on SCM Performance. The SCM practices considered in this paper were namely strategic supplier partnership, customer relations practices, information sharing, information quality and postponement. This paper provides empirical justification for five key dimensions of SCM practices identified and describes the relationship among SCM practices and SCM performance as well as the impact of these practices on SCM performance. The study thus showed that SCM practices definitely impacts SCM performance.

Generally, from above literature reviews it can be easily understandable that the work on supply chain management measurements/ practices and its influences on different perspectives of the organization and overall supply chain partners increasing and yields good backgrounds. However, the relationship of SCM with performance cannot be regarded as conclusive (Cousins et al, 2006). Despite the increase of empirical research in the last few years, important differences in research design undermine comparability: lack of consensus about the definition and dimensionality of the SCM construct, use of different units of analysis, and different approaches to performance measurement.

2.10. Conceptual Framework

Based on overall review of related literature, the researcher has tried to extract the conceptual frame work of this study in three essential parts: SCM practices, challenges of SCM, and organizational performance. SCM practice is conceptualized as a five dimensional construct. As the diagrammatical expression of the conceptual framework indicates commonly known SCM practices namely: strategic supplier partnership, customer relationship, level of information sharing, quality of information and internal lean practices. SCM practices have an impact on organizational performance.

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.

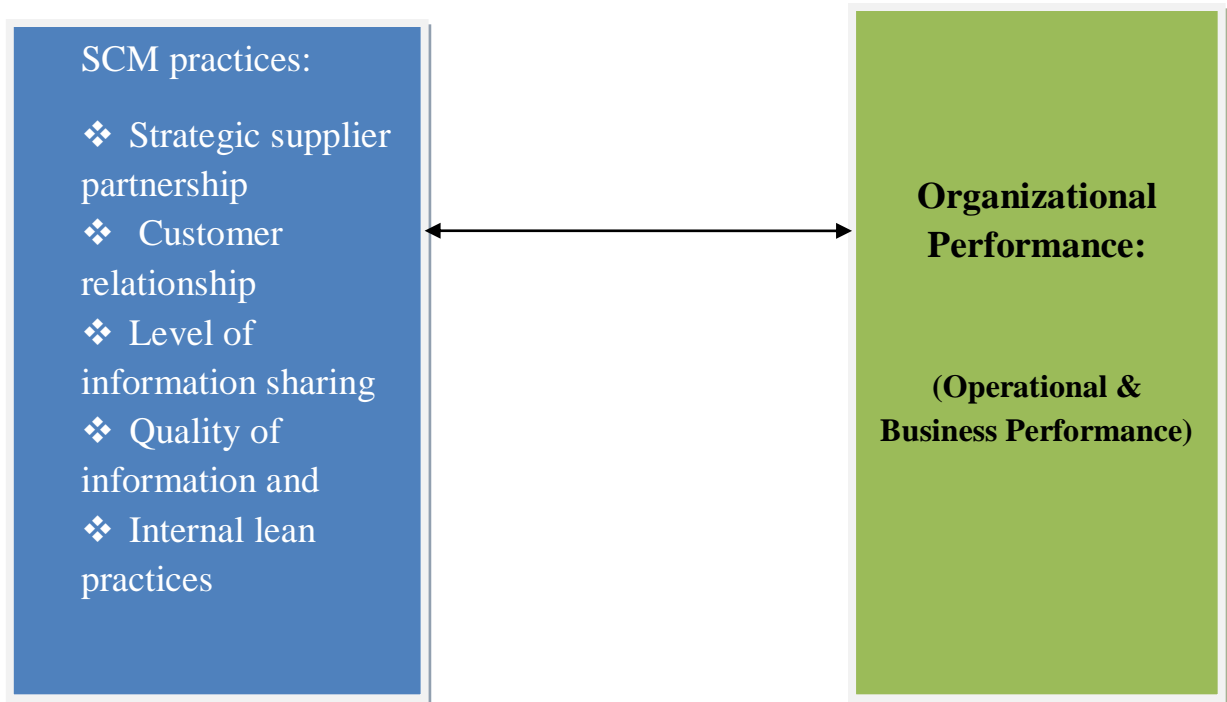


Fig 2.1 Conceptual frame work for the study

Source: adapted from Mutuerandu et al. (2014) and Li et al. (2006)

CHAPTER THREE

METHODS OF THE STUDY

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

3.1. Research Design & approach

This study was intended to examine SCM practices based on fundamental theories, principles and management philosophies that are supposed to be effective parameters just to evaluate the actual performance of the case company's key business activities. Accordingly, the case company's existing SCM practices and the challenges was evaluated. That means the purpose of this research is to find out the underlying facts and /or actual circumstances existing within the case company with regard to SCM practices and describing the facts. Therefore, the study preferred to use descriptive research design and mixed method of research approach which helped to use both qualitative and quantitative data analysis, descriptive research type in order to discuss the relationship between SCM and Organizational performance.

3.2. Sample and Sampling Technique

According to Hair et al. (2010), target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. Therefore, for this study, the target populations were employees of Ethiopian Marble Processing Enterprise, particularly those their education level is grade ten completed and above.

3.2.1. Sampling Techniques

For the purpose of this study, the researcher used probability sampling particularly stratified random sampling technique. The target populations for the study were classified into six strata based on the departments and section in the firm which is directly related with SC of the organization. Then the samples were selected from each stratum according

to their proportion to the total population. Since the information required for the study needs different people who have knowledge and awareness about different supply chain management practices/dimensions, and organizational performance of the firm, stratified random sampling technique was used to have the right proportion of people from every concerned department or section. The departments considered as strata, from which data were collected: production, commercial, HR and Administration, Finance and Technique departments.

3.2.3. Sample Size

Zikmund (2003); Malhortra and Peterson (2006) stated that, the larger the sample size of a research, the more accurate the data generated. However, due to time and financial limitations and the nature of the population, sample determination method developed by Carvalho (1984) was preferred to be used by researcher as a method to determine a sample size.

Table 3.1 Sample Size Determination

Population size	Sample size		
	Low	Medium	High
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1200	32	80	125
1201-3200	50	125	200
3201-10,000	80	200	315
10,001-35,000	125	315	500
35,001-150,000	200	500	800

Source: Carvalho (1984)

The total numbers of employees in Ethiopian Marble Processing Enterprise were 490 out of this about 131 employees were not target population due to they have no direct contact

with the concept of the study. Therefore, from the remaining 359 employees 50 were considered as a sample respondents as per the Carvalho's sample determination method, considering the heterogeneity of sample respondents on the basis of position within the organization. In addition to this an interview was held with management members of the enterprise.

3.3. Data Collection Tools

Basically there are two sources of data namely, primary and secondary source. The researcher used both primary and secondary sources of data through Questionnaires, interview, and literature review.

The primary data was conducted in the form of personal interviews with customer and department manager's (commerce, production, finance, human resource and technique) through questionnaires which were distributed to employees of the enterprise. As the secondary data; books, articles, journals, magazines, and brochures were reviewed.

On the other hand, the collection of relevant data, to validate the investigation demands appropriate and convenient techniques of data collection. Accordingly, in this study both questionnaire and interview were used together.

For the purpose of this study a quantitative methodology involving a close-ended questionnaire were used as the measuring instrument. The close-ended questionnaires can be administered to groups of people simultaneously, since they are less costly and less time consuming than other measuring instruments. The Likert-type scale method used a range of responses: 'strongly disagree', 'disagree', 'neutral', 'agree', and 'strongly agree', with a numeric value of 1-5, respectively. The usage of this particular scaling method ensured that the research study illustrated the ability to assess the responses and measure the responses quantifiably so that a pattern or trend may be produced in order to assess.

In addition to questionnaire to obtain sufficient information in this study personal interview was used for the management members of the case enterprise and customers.

Research issues like awareness, practices of SCM, strategic view and logical justifications of the case enterprise were addressed through interviews which are difficult to obtain through questionnaire in as much detailed as required.

3.4. Validity and Reliability

3.4.1. Validity

To achieve validity questionnaires included a variety of questions on the knowledge of respondents. Questions were based on information gathered during the literature review to ensure that they were representative. Content validity was further ensured by consistency in administering the questionnaires. All questionnaires were distributed to subjects by the researcher personally. The questions were formulated in simple language for clarity and ease of understanding clear instructions were given to the subjects.

All the subjects were completed the questionnaires in the presence of the researcher. This was done to prevent subjects from giving questionnaires to complete on their behalf.

3.4.2. Reliability

As multiple items in all constructs were used the internal consistency (reliability) of SCM practices and organizational performance were assessed with Cronbach's alpha and the reliability of value for all constructs are all greater than 0.70 which are considered acceptable Summary of reliability of SCM practice and organizational performance is on the table below.

Table 3.2 Reliability Cronbach's alpha

Variables	Reliability Cronbach's alpha
SCM practice	0.92
OP	0.87

Source: Own Research 2017

3.5. Data Analysis Method

The collected data were analyzed by using both qualitative and quantitative techniques. The data collected by open ended questions were analyzed qualitatively by textual analysis based on predefined themes. Closed ended questionnaires were analyzed quantitatively data by using mean, standard deviation frequency, and Pearson correlation technique to show the effect of independent variables on the dependent variable by using SPSS (v 20) tool.

The data obtained through the questionnaires were first check for completeness. The questionnaires found correctly filled and fit for analysis was coded and all the data entered into statistical package for social sciences and analyzed using descriptive statistics. The descriptive statistics used included mean and frequency to analyze the general information to investigate the supply chain management practice and Pearson correlation and regression model was used to assess the relationship of supply chain management practice on the case enterprise's performance. These were then present using tables which was easier interpretation.

CHAPTER FOUR

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 challenges of SCM. Out of fifty (50) questionnaires distributed to respondents forty three (43) were returned (accepted). From the accepted responses all responses were found valid and used for the analysis. Thus, based on the responses obtained from the respondents data presentation and analysis were made as follows.

4.1. Background of the Respondents

The demographic profile of the sample respondents is presented and analyzed below. The purpose of assessing respondents' 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 Respondents' Gender

	Frequency	Percentage
Male	32	74.4
Female	11	26.6
Total	43	100

Gender frequency of the respondents shows that the numbers of male respondents were almost four times as female respondents. This is 74.4% of the respondents were male, while 26.6 % were female respondents.

The education qualification of respondents is shown in table 4.2. As it is indicated in the table, 37.2% hold a first degree. In the other way, 27.9% were diploma holder, while 11.6% of the respondents grade 12 completed. 23.5% hold second degree and above.

Table 4.2: Respondents' Educational level

	Frequency	Percentage
Grade 10 completed	-	-
Grade 12 completed	5	11.6
College diploma	12	27.9
First Degree	16	37.2
Second degree and above	10	23.5
Total	43	100

Table 4.3: Experience of Respondents

	Frequency	Percentage
For less than a year	7	16.2
2-5 years	29	67.4
Above 5 years	7	16.2
Total	43	100

The results of respondents' position are indicated in above table. The table demonstrates that 16.2 % of the respondents worked for less than a year, 67.4% worked for 2- 5 year, and 16.2% worked for greater than 5 year in the enterprise.

The results of respondents' position are indicated in table 4.4. The table demonstrates that 9.3% of the respondents are working in managerial position, 30.3% are working in division head, and 60.4% are working in non-managerial position.

Table 4.4: Position of the Respondents

	Frequency	Percentage
Managerial position	4	9.3
Division Head	13	30.3
Non Managerial position	26	60.4
Total	43	100

4.2. SCM Practices and Challenges

As it was briefly mentioned in the literature part of this study, the most common supply chain management practices are Strategies Supplier Partnership, customer relationship, information sharing, and internal lean practice (Perry and Sohal 2000; Lazarovic et al. 2007).

This study focused on the case enterprise's SCM practices from these four perspectives. For each practices different items were developed and measured based on their mean and group mean values.

4.2.1. Strategic Supplier Partnership

Suppliers participating early in the product-design process can offer more cost effective design choices, help select the best components and technologies, and help in design assessment. Strategically aligned organizations can work closely together and eliminate wasteful time and effort. An effective supplier partnership can be a critical component of a leading edge supply chain (Karim and Rafiee, 2014).

Table 4.5: Strategic Partnership

No	Strategic Supplier Partnership	N	Min	Max	Mean	Std. Dev.
1.	Your enterprise considers quality as number one criterion in selecting suppliers	43	3	5	3.13	.655
2.	Your enterprise regularly solves problems jointly with your suppliers.	43	3	5	2.55	.486
3.	Your enterprise has been helping your suppliers to improve their product quality.	43	2	5	2.98	.495
4.	Your enterprise has continuous improvement programs that include your key suppliers.	43	3	5	2.95	.491
5.	Your enterprise includes your key suppliers in your planning and goal setting activities	43	3	5	3.26	.675

From the table above strategic supplier partnership practices have been adapted to moderate extent (mean lies between 2.55 and 3.26) in the enterprise consider quality as number one criteria in selecting supplier (mean 3.13), the enterprise doesn't solve problems regularly with its suppliers (mean 2.55), the enterprise helps their suppliers to improve their product quality (mean 2.98), the enterprise has continuous improvement programs that include their key suppliers (mean 2.95), the enterprise includes the key suppliers in their planning and goal setting activity (mean 3.26). On the other hand the manager support that is important to establish strategic or long term relationship with suppliers, as their enterprise look seriously at its relationship with its suppliers and that they are working cooperatively with few of them who are willing to have memorandum of understanding.

Based on the above result the enterprise strategic supplier partnership is moderate with a group mean value 2.97. This also implies that the enterprise has a problem with working closely together with suppliers to eliminate wasteful time and effort. Besides it has been clearly seen from the manager that the enterprise is working with few of the suppliers. As a result the enterprise SCM couldn't be successful if the enterprise reach and address to its supplier appropriately.

4.2.2. Customer Relationship

Close customer relationship allows an enterprise 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. 1999).

Table 4.6: Customer Relationship

No	Customer relationship	N	Min	Max	Mean	Std. Dev.
1.	Your enterprise frequently interact with customers to set reliability, responsiveness, and others	43	3	5	3.44	.502
2.	Your enterprise frequently measure and evaluate customer satisfaction.	43	3	5	2.30	.408
3.	Your enterprise frequently determines future customer expectations.	43	3	5	3.16	.688
4.	Your enterprise facilitates customers' ability to seek assistance from them.	43	2	5	2.28	.401
5.	Your enterprise periodically evaluates the importance of your relationship with your customers.	43	2	5	2.78	.440

The enterprise interact with customers to set reliability responsiveness and others (mean 3.44), the enterprise doesn't frequently measure and evaluate customer satisfaction (mean 2.30), the enterprise moderately determines future customer expectation (mean 3.16), the enterprise has a problem in facilitating customers' ability to seek assistance from the organization (mean 2.28), the enterprise periodically evaluates the importance their relationship with their customer (mean 2.78).

According to the finding of the research it has been clearly seen that the enterprise customer relationship is poor with a group mean value of 2.79. From this it is possible to deduce that the enterprise customer relationship is poor. This means the enterprise lacks 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.

4.2.3. Information sharing

Information sharing has two aspects quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies.

4.2.3.1. Level of information sharing

Sharing of information is one of five building blocks that characterize a solid supply chain relationship. According to Stein and Sweat as cited in (Karim and Rafiee, 2014), supply chain partners who exchange information regularly are able to work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker (Karim and Rafiee, 2014).

Table 4.7: Level of Information Sharing

No	Level of information sharing	N	Min	Max	Mean	Std. Dev.
1.	The enterprise informs trading partners in advance of changing needs.	43	2	5	2.30	.416
2.	Your enterprise's trading partners share proprietary information with Your enterprise.	43	3	5	3.01	.732
3.	Your enterprise's trading partners keep you fully informed about issues that affect Your enterprise's business	42	1	6	2.69	.250
4.	Your enterprise's trading partners share business knowledge of core business processes with Your enterprise's.	43	2	6	2.91	.321
5.	Your enterprises and Your enterprise's trading partners exchange information that helps establishment of business planning.	43	2	5	3.18	.793
6.	Exchange of information with Your enterprise's partners (formal or informally) is frequent.	43	3	6	3.05	.688
7.	You and your trading partners keep each other informed about events or changes that may affect the other partners	43	2	7	2.7	.209

The enterprise informs trading partners in advance of changing needs is poor (mean 2.3), the enterprise trading partners share proprietary information with their enterprise is

moderate (mean 3.01),the enterprise's trading partners keep them fully informed about issues that affect their enterprise business (mean 2.69), the enterprise's trading partners share business knowledge of core business process with their enterprise is poor (mean 2.91),the enterprise and its trading partners exchange information that helps establishment of business planning is moderate (mean 3.18),the enterprise exchange information with their trading partner frequently (mean 3.05), the enterprise and its trade partners keep informed about events and changes which may affect the other partners is poor (mean 2.7). This issue was also supported by the manager that there are some gaps in communicating and the enterprise is working hardly in establishing such information sharing.

This implies that the case enterprise has poor information sharing practice with its suppliers particularly on informing changing needs, fully informing about issues that affect the enterprise's business and keeping each other informed about events or changes that may affect the other partners. The overall effort of information sharing has a mean value of 2.83. The result was also supported by the managers that the information sharing is poor among trading partners.

4.2.3.2. Level of Information Quality

Information sharing is important; the significance of its impact on SCM depends on what information is shared, when and how it is shared, and with whom. Literature is replete with example of the dysfunctional effects of inaccurate/delayed information, as information moves along the supply chain. Divergent interests and opportunistic behavior of supply chain partners, and informational asymmetries across supply chain affect the quality of information. It has been suggested that organizations will deliberately distort information that can potentially reach not only their competitors, but also their own suppliers and customers. It appears that there is a built in reluctance within organizations to give away more than minimal information since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM. Organizations need to view their

information as a strategic asset and ensure that it flows with minimum delay and distortion (Li et al. 2006).

Table 4.8: Level of Information Quality

No	Level of information quality	N	Min	Max	Mean	Std. Dev.
1.	Information exchange between Your e enterprises' trading partners and Your enterprise's is timely.	43	2	5	2.70	.989
2.	Information exchanges between Your enterprises' trading partners and Your enterprise's is accurate.	43	2	5	3.02	.854
3.	Information exchange between Your enterprises's trading partners and Your enterprise's is complete.	43	2	5	3.0	.832
4.	Information exchange between Your enterprise's trading partners and Your enterprise's is adequate	43	2	5	2.67	.265
5.	Information exchange between Your enterprise's trading partners is reliable.	43	2	5	3.17	.751

The time of information exchange between the enterprise and its trading partners is poor (mean 2.70), accurate information exchange between enterprise and its trading partners is moderate (mean 3.02), complete information exchange between the enterprise and its trading partner is moderate (mean 3.0), adequate information exchange between the enterprise and its trading partners is poor (mean 2.67), information exchange between the enterprise's trading partners is reliable (mean 3.17).

From the above presented data, the researcher can conclude that the information sharing practice between EMPE and its customers is poor. This is based on the mean value obtained with respect to adequate information sharing which scored 2.67. Sharing adequate information with such suppliers would help the case enterprise and consolidate its supply power. So that, having poor relationship with such partners is a cause for poor information sharing practices which make the supply of the case enterprise 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.

The empirical study of Lazarovic 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 (21th) 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 2.91, with respect to these stated issues the result is not sufficient to create effectiveness and efficiency in SCM activities.

4.2.4. Internal lean practices

According to Vonderembs et al. (2006) a lean supply chain employs continuous improvement efforts that focus on eliminating waste or non-value steps along the chain. It is supported by the reduction of setup times to allow for the economic production of small quantities; thereby achieving cost reduction, flexibility and internal responsiveness.

Table 4.9: Internal Lean Practices

No	Internal lean practices	N	Min	Max	Mean	Std. Dev.
1.	Your enterprise reduces process set-up time (time required to prepare or refit equipment/workstation for production your firm has continuous quality improvement programs	43	3	5	4.51	.592
2.	Your enterprise produces only what is demanded by customers when needed	43	2	5	3.19	.541

The enterprise strives to reduce time wastage in operation (mean 4.51), the organization produces only what has been ordered by customers (mean 3.19). This implies the enterprise internal lean practice is good with group mean value of 3.35. As a result the

SCM of the case enterprise employs a continuous improvement effort that focuses on eliminating waste or non-value steps along the chain.

4.2.5. Challenges for SCM implementation

Most SCM related-problems mainly occur from uncertainties and an inability to coordinate several activities and partners (Turban et al. 2000).

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. Levi et al. (2003) states demand uncertainty as irregular orders from inconsistent customers may easily mislead manufacturers to make wrong forecasts, which cause excess inventory or insufficient supply.

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, which will result inefficient production or excessive inventory, low utilization of the distribution channel, necessity to have capacity far exceeding average demand, high transportation costs and poor customer service due to stock outs.

Table 4.10: Challenges for SCM Implementation

No	Challenges for SCM implementation	N	Min	Max	Mean	Std. Dev.
1.	Supply uncertainty (supplier inability to carry out the promise)	43	3	5	4.68	.592
2.	Institutional trust to share confidential data.	43	3	5	3.45	.612
3.	Willingness to share risks and benefits.	43	3	5	3.2	.543
4.	Inventory fluctuation due to inaccurate information sharing (bullwhip effect)	43	2	5	3.75	.72
5.	Manufacturing uncertainty like, breakdown of machineries, interruption of power, poor process design, etc	43	3	5	2.8	.
6.	Irregular orders from inconsistent customers (Demand uncertainty)	43	3	7	4.2	.551

As can be observed from the above table, the case enterprise supply chain has a challenge related to Supply uncertainty - supplier inability to carry out the promise (mean 4.68), Inventory fluctuation due to inaccurate information sharing (bullwhip effect) (mean 3.75), and Irregular orders from inconsistent customers (Demand uncertainty) (mean 4.2). From this it can be said that supplier inability to carry out the promise and irregular orders from inconsistent customers, as a result affect the overall process of SC. From the manager point of view there are situations that suppliers fail to keep their promise and fail to deliver supplies due to many reasons. Under such condition the enterprise pushes suppliers in order to convince and take the supplies

On the other hand, information sharing among the functional units of the case enterprise is also highly related with inventory fluctuation so that, even if its mean value approaches to poor it is not as such sufficient. This implies that poor information sharing (bullwhip effect) practice also affects overall operation.

These findings indicate that the case enterprise implements almost all of supply chain management practices in poor extent and others implemented in moderate level and there

is no SCM practices that lacks implementation this shows as the enterprise isn't in good position in implementing supply chain management practices.

4.3. Relationship between SCM & Organizational Performance

4.3.1. Correlation Analysis between SCM Practices and Organizational Performance

This section presents correlation analysis in relation to the objectives of the study and the relationship between supply chain management practices and organizational performance was investigated.

Correlation is one of the most common forms of data analysis both because it can provide an analysis that stands on its own, and also because it underlies many other analyses, and can be a good way to support conclusions after primary analyses have been completed. Correlations are a measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicate that there is little or no linear relationship. The sign of a correlation coefficient describes the type of relationship between the variables being correlated. A positive correlation coefficient indicates that there is a positive linear relationship between the variables: as one variable increases in value, so does the other.

According to Andy, (2006) the value and sign of the coefficient shows the strength of the association.

The correlation between construct of SCM practices with operational performance was run as seen in the table below.

Table 4.11: Correlations between Constructs of SCM and OP

		Strategic Supplier R/ship	Customer relation	Level of information sharing	Quality of information sharing	Internal lean practice	Organizational performance
Strategic supplier R/ship	Pearson correlation	1	.685**	.555**	.776**	.699**	.237
	Sig. (2 tailed)		.000	.000	.000	.000	.126
Customer relation	Pearson correlation	.685**	1	.565**	.790**	.503**	.344*
	Sig. (2 tailed)	.000		.000	.000	.001	.024
Level of information sharing	Pearson correlation	.555**	.565**	1	.665**	.680**	.482**
	Sig. (2 tailed)	.000	.000		.000	.000	.001
Quality of information sharing	Pearson correlation	.776**	.790**	.665**	1	.705**	.474**
	Sig. (2 tailed)	.000	.000	.000		.000	.001
Internal lean practice	Pearson correlation	.699**	.503**	.680**	.705**	1	.303*
	Sig. (2 tailed)	.000	.001	.000	.000		.049
Organizational performance	Pearson correlation	.237	.344*	.482**	.474**	.303*	1
	Sig. (2 tailed)	.126	.024	.001	.001	.049	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

The results of the correlation matrix between each constructs and organizational performance analyzed as follows:

As shown in the table there is positive correlation between strategic supplier partnership and organizational performance with correlation coefficient of 0.237 and the significance level of 0.126 which is greater than 0.05. It shows us strategic supplier partnership and organizational performance are positively correlated but strategic supplier partnership is not statistically significant at the 5% significance level.

The table above shows that there is medium positive relationship between customer relation and organizational performance with correlation coefficient of 0.344 and significance level of 0.024 less than 0.05 which shows us customer relation and organizational performance have medium positive correlation and it is statistically significant at the 5% significance level.

As the table above shows there is medium positive correlation between level of information sharing and organizational performance with correlation coefficient of 0.482 and significance level of 0.001 which is equal to 0.001. Which shows that level of information sharing have medium positive correlation with organizational performance which is statistically significant at the 0.001 significance level.

The above table also shows that quality of information sharing have medium positive correlation with organizational performance with correlation coefficient of 0.474 and significance level of 0.001 which is equal to 0.001 which shows us quality of information sharing and organizational performance have positive relation which is statistically significant at the 0.001 significance level.

As shown in the table above there is medium positive correlation between internal lean practice and organizational performance with correlation coefficient of 0.303 and significance level of 0.049 which less than 0.05 which shows us internal lean practice organizational performance have positive relation which is statistically significant at the 0.05 significance level.

4.3.2. Multi-Collinearity Test of the Independent Variable

Table 4.12: Multi-collinearity test of the independent variable

Model		Collinearity VIF	
		Tolerance	VIF
	Strategic supplier partnership	.416	2.402
	Customer relationship	.402	2.488
	Level and quality of information sharing	.311	3.221
	Internal lean practice	.495	2.021

a. Dependent Variable: organizational performance

Source: research 2017

The result in the above table show that the co-linearity between independent variables has no major problem, Since the value of tolerance for all independent variable is greater than 0.1 and all VIF is less than ten ($VIF < 10$).

4.4. Discussion of the Results

From the finding above all the constructs of supply chain management practices and challenges have positive relation with organizational performance of the case enterprise with a correlation coefficient strategic supplier partnership (0.237),customer relation (0.344), level of information sharing (0.482),quality of information sharing (0.474),internal lean practice (0.303),and it matches with other studies like (Mustefa,2014) which shows supply chain management have positive relation with organizational performance even if the significance level doesn't much and (Mwilu,2013). And also the supply chain management (cumulative summery of all the constructs) have positive relation with organizational performance with correlation coefficient of (0.44).

CHAPTER FIVE

SUMMARY, CONCLUSION ANDRECOMMENDATION

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

5.1. Summary of the Major Findings

The finding indicate that the case enterprise has problems regarding to strategic supplier partnership practice namely the enterprise fails regularly solving problems jointly with their suppliers, the enterprise has been helping poorly its suppliers to improve their product quality and the enterprise continuous improvement programs is poor in including its key suppliers. However, the enterprise moderately includes their key suppliers in their planning and goal setting activities and considers quality as number one criterion in selecting suppliers, the enterprise moderately interact with customers to set reliability, responsiveness, and others, the enterprise fails to measure and evaluate customer satisfaction, the enterprise moderately determines future customer expectations, the enterprise has poor facilitation customers' ability to seek assistance from them, the enterprise has poor periodical evaluation of importance of its relationship with its customers. Regarding to Information exchange between the enterprise's trading partners and the enterprise's is moderately reliable, the information exchange between the enterprise and its trading partners isn't timely, information exchange between enterprise and its trading partners is moderately accurate, information exchange between the enterprise and its trading partner is relatively complete, information exchange between the enterprise and its trading partners isn't adequate, the organization strives to reduce time wastage in operation, the enterprise has continuous quality improvement programs. The enterprise strives to reduce time wastage in operation, the enterprise has continuous quality improvement programs and the enterprise produces only what is demanded by customers when needed.

Among the possible challenges of SCM, manufacturing, supply and demand uncertainties appeared as the major headache of the case enterprise with mean values of 4.68, and 3.75 respectively. Inventory fluctuation due to inaccurate information (bullwhip) effect is also another challenge of the case enterprise.

Regarding the relationship of supply chain management on organizational performance of the case enterprise from the finding, all supply chain constructs namely strategic supplier partnership, customer relation, quality of information sharing, level of information sharing, and internal lean practice have positive statistically significant relationship with organizational performance. And organization performance has positive relationship with SCM.

Concerning the factors that need to be considered to improve the organizational performance in relation to supply chain management and from the finding we can understand that the factors that need to be considered to improve the organizations performance in relation to supply chain management is customer relation, internal lean practice and the level and quality of information sharing this is because it has positive relationship with large significance level with organizational performance of the case enterprise.

5.2. Conclusions

The purpose of this study was to assess the case enterprise supply chain management practices and challenges and how it relates with organizational performance. The practice and challenges of SCM were examined through variables such as strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice which are the ultimate goal of an effectively managed supply chain and to identify factors that need to be considered to improve the organizations performance in relation to supply chain and the following were the findings obtained from the data analysis with respect to the supply chain management practice. Based on the results of the study obtained and summary of findings the following conclusions were given.

The findings indicate that the case enterprise has problems regarding to strategic supplier partnership namely the enterprise fails regularly solving problems jointly with their suppliers, the enterprise has been helping poorly its suppliers to improve their product, and the enterprise continuous improvement programs is poor in including its key suppliers.

The research finding also indicated that there are gaps in customer relationship in that the enterprise moderately interact with customers to set reliability, responsiveness, and others, the enterprise fails to measure and evaluate customer satisfaction, the enterprise has poor facilitation customers' ability to seek assistance from them, and the enterprise has poor periodical evaluation of importance of its relationship with its customers.

The research finding disclosed that there are problems in information sharing in the supply chain practice of the case enterprise, in that the enterprise has poor information sharing in addressing issues on time and adequately. Also the case enterprise information sharing is poor that informing advance of changing needs, fully informing issues that affect the operation of the enterprise and sharing knowledge with suppliers and partners.

Among the possible challenges of SCM, manufacturing, supply and demand uncertainties appeared as the major headache of the case enterprise with inventory fluctuation due to inaccurate information (bullwhip) effect is also another challenges of the case enterprise.

Finally, 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 EMPE with its customers and suppliers is not strong, in sharing changing needs, cooperativeness, joint product planning, is moderate. Therefore, these relationship shows as the relationship between EMPE's SC participants are traditional, that is buy-sale relationship. The researcher concludes that the great challenges that prohibits effective SCM of EMPE'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. Recommendation

On the basis of the findings and conclusions reached, the following recommendations were forwarded in order to improve the challenges and practices of Supply Chain Management of the case enterprise.

The enterprise should have to more strengthen its strategic supplier partnership. More importantly, the case enterprise 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 of the case enterprise. Because, this could help the case enterprise 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 resources.

The enterprise should frequently interact with customers and facilitate customers' ability to seek assistance from them, which will help the case enterprise to improve its customer relationship and eradicate negative customer perception towards the enterprise. The enterprise should also periodically evaluate the importance of its relationship with its customers in order to make sure that customers are satisfied.

The enterprise should improve its information sharing practice as information sharing is the tool 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. The enterprise should also make a culture of working closely with suppliers, partners and stakeholders for effective supply chain and for better competitive advantage.

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

Furthermore, the enterprise should look in to the most common problem that hamper the smooth functioning of SCM like: supplier uncertainty, demand uncertainty and bullwhip effect which are mostly resulted from irregular orders from inconsistent customers and inaccurate or distorted information flows. The enterprise can go up with such dynamic challenges through undertaking market research and effective flow of information for better supply chain result and better organizational performance.

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APPENDIX A

ST.MARY'S UNIVERSITY

GRADUATE SCHOOL OF BUSINESS

MASTERS OF BUSINESS ADMINISTRATION (GENERAL) QUESTIONNAIRE

Dear respondents, the purpose of this questionnaire is to gather data on the supply chain management practices and firm performance in the case company. The study is purely for academic purpose and thus not affects you in any case. So, your genuine and timely response is vital for success of the study. Therefore, I kindly request you to respond to each items of the question very carefully.

General Instructions

There is no need of writing your name

Where answer options are available please tick (√) in the appropriate box for part I and circle for your response to each statements of part II.

Contract Address

If you have any query, please do not hesitate to contact me and I am available as per your convenience at (Mobile: 0911- 62-72-10 or e-mail: tamiratwg@gmail.com)

Thank you for scarfing your precious time in advance!

PART I: Demographic Information

1. Gender Mail Female
2. Educational Qualification:
 Grade 10 completed Grade 12 Completed certificate
 College diploma first Degree Second Degree and above
3. Experience in the organization
 For less than a year
 2-5 Years above 5 years
4. Position
 Managerial position Division Head
 Non Managerial position

5. How long have you been working in your current position.

Less than 1 year 1-5 years 5-10 years

More than 1 year

Part II: Instruments for Supply Chain Management Practice Challenges and Organizational Performance

Section One: Supply Chain Management Practices

With regard to SCM practices of your enterprise, please circle the appropriate number to indicate the extent to which you agree or disagree with each statement. The item scales are five-point Likert type scales with 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5= strongly agree

Strategic supplies partnership		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	The enterprise considers quality as our number one criterion in selecting suppliers.					
2.	The enterprise regularly solves problems jointly with its suppliers.					
3.	The enterprise have been helping its suppliers to improve their product quality					
4.	The enterprise has continuous improvement programs that include its key suppliers.					
5.	The enterprise includes its key suppliers in our planning and goal-setting activities.					
Customer relationship:-						
1.	The enterprise frequently interacts with customers to set reliability, responsiveness, and other standards.					
2.	The enterprise frequently measure and evaluate customer satisfaction.					
3.	The enterprise frequently determine future					

	customer expectations					
4.	The enterprise facilitates customers' ability to seek assistance from us.					
5.	The enterprise periodically evaluates the importance of our relationship with our customers.					
Level of information sharing:						
1.	The enterprise informs trading partners in advance of changing needs.					
2.	The enterprise trading partners share proprietary information with the company.					
3.	The enterprise trading partners keep the enterprise fully informed about issues that affect our business.					
4.	The enterprise trading partners share business knowledge of core business processes with the enterprise					
5.	The enterprise and its trading partners exchange information that helps establishment of business planning.					
6.	Exchange of information with the enterprise partners (formal or informally) is frequent.					
7.	The enterprise and trading partners keep each other informed about events or changes that may affect the other partners					
Level of information quality:						
1.	Information exchange between the trading partners and the enterprise is timely.					

2.	Information exchange between the trading partners and the enterprise is accurate.					
3.	Information exchange between the trading partners and the enterprise is complete.					
4.	Information exchange between the trading partners and the enterprise is adequate					
5.	Information exchange between the trading partners and the enterprise is reliable.					
Internal lean practices:						
1.	The firm reduces process set-up time (time required to prepare or refit equipment/workstation for production Our firm has continuous quality improvement programs					
2.	The firm produces only what is demanded by customers when needed.					
Challenges for 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)					

Section Three: Organizational Performance

Regarding organization performance, please circle appropriate number which best indicate your firm's overall performance. The item scales are five-point likert scales with 1= significant decrease, 2=decrease, 3=same as before, 4=increases, and 5=significant increase.

Organizational Performance: how well an organization achieves its market-oriented goals as well as its financial goals in the past five years?	1	2	3	4	5
1. Market share.					
2. Return on investment.					
3. The growth of market share.					
4. The growth of sales.					
5. Growth in return on investment.					
6. Profit margin on Sales.					
7. Overall competitive position.					

If any comment you will come:

Thank you again very much!!!

APPENDIX B
ST.MARY'S UNIVERSITY
GRADUATE SCHOOL OF BUSINESS
MASTERS OF BUSINESS ADMINISTRATION
INTERVIEW QUESTIONS FOR MANAGERS OF EMPE

The purpose of this interview check list is in order to gather information from the managers of Ethiopian Marble Processing Enterprise Supply chain management practices and challenges.

The following check lists are designed as guidelines for the researcher. The checklist state the specific areas which the student researcher tries to find out and these checklist will give detail information about supply chain management practices and challenges undertaken by the case enterprise and questions that cannot answered by questionnaires.

1. How do you see supplier's capabilities? Are they permanent?
2. How do you evaluate the extent of information sharing practice between your enterprise and suppliers?
3. What about the extent of integration between your enterprise and suppliers?
4. Is there supplier's uncertainty? Sense of trust?
5. Do you think it is important to have strategic or long term relationship with suppliers?

DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Dr. Temesgen Belayneh. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or full to any other higher learning institution for the purpose of earning any degree.

Name _____ Signature _____

St. Mary's University, Addis Ababa

January, 2018

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a University advisor.

Advisor _____

Signature _____

St. Mary's University, Addis Ababa

January, 2018