IMPROVING COMPETITIVENESS OF SMALL AND MEDIUM MANUFACTURING ENTERPRISES THROUGH SUPPLY CHAIN MANAGEMENT: A CASE OF LEATHER PRODUCTS MANUFACTURING ENTERPRISE IN HAWASSA CITY

MSc THESIS

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HAWASSA UNIVERSITY, HAWASSA, ETHIOPIA

AUGUST, 2021

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THESIS SUBMITTED TO
HAWASSA UNIVERSITY
FACULTY OF MANUFACTURING ENGINEERING, DEPARTMENT OF INDUSTRIAL ENGINEERING,
COLLEGE/INSTITUTE OF TECHNOLOGY, SCHOOL OF GRADUATE STUDIES, HAWASSA UNIVERSITY,
HAWASSA, ETHIOPIA

IN PARTILAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
DEGREE OF MASTERS OF SCIENCE

"INDUSTRIAL ENGINEERING AND LOGISTIC MANAGEMENTS"

AUGUST, 2021

ADVISORS' APPROVAL SHEET

SCHOOL OF GRADUATE STUDIES

HAWASSA UNIVERSITY

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This is to certify that the thesis entitled "Improving competitiveness of small and medium manufacturing enterprises through supply chain management: A case of leather products manufacturing enterprise in Hawassa city" submitted in partial fulfillment of the requirements for the degree of Master's with specialization in Industrial engineering and Logistic Management, the Graduate Program of the Department of Industrial engineering, and has been carried out by Tamirat Yohannes Id. No. GPIELMR/009/11, under my/our supervision. Therefore I/we recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the department.

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We, the undersigned, members of the Board of Examiners of the final open defense by Tamirat Yohannes have read and evaluated his/her thesis entitled "Improving competitiveness of small and medium manufacturing enterprises through supply chain management: A case of leather products manufacturing enterprise in Hawassa city" and examined the candidate. This is, therefore, to certify that the thesis has been accepted in partial fulfillment of the requirements for the degree

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ACKNOWLEDGEMENT

Above all, I give thanks and glory to the almighty God for giving me strength to overcome the difficulties that I have faced on the way to execution of this study.

Next I would like to express my deep appreciation to my thesis advisor Dr.–Ing. Fasika Bete Georgise and to my co-advisor Mr. Temesgen for providing advice and encouragement. Also I would like to thank all small and medium leather products manufacturing enterprises managements and members, Hawassa city small and medium manufacturing enterprises administration office about their support in this research study while collecting data developing.

Finally, I would like to give special thanks to my father Yohannes Gondalo and my mother Aregash Gebre, and also special thanks to my love friend Hiwot Belayneh for their support to follow and enable me to complete this study.

If I have missed mentioning anyone, I hope I will be forgiven.

Tamirat Yohannes

AUGUST, 2021

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ABBREVIATIONS

SCM	Supply chain management
SCMP	Supply chain management practice
SMEs	Small and medium enterprises
SMLPME	Small and medium leather products manufacturing enterprises
SCMIWGS	Supply chain management incorporate with government support
CSCMI	Challenges for implementing supply chain managements
CFIPSCM	Level of Challenges for Implementing and practicing SCM
LACPCV	Level of applying competitive priority to customer value
LIDI	Leather Industry Development Institute
SSA	Sub-Saharan Africa
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
GTP	Growth and Transformation Plan
MSE	Micro and small enterprise
SMWE	Small and Medium Waving Enterprises
SCI	Supply Chain Integration
ERP	Enterprise Resource Planning
EDI	Electronic Data Interchange
IDS	Industrial Development Strategy
SIHDE	Small industries and handicrafts development enterprise
FMSBEDO	Federal Micro and Small Business Enterprises Development Organization
GOE	The government of Ethiopia

MSME	Micro small and medium enterprise
MOUDHC	Ministry of Urban Development and Housing Construction
SPSS *V 26*	Statistical Package for the Social Sciences version 26
FDI	Foreign direct investment
COMPME	Competitiveness manufacturing Enterprises

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ABSTRACT

Small and medium leather products manufacturing enterprises are one of the enterprises provides expectation for the government to achieve target as one of the competitive sector in current market for economic growth, employment generation and building an industrial economy. In the different the enterprises has recorded very stagnant level of competitiveness with dynamic current market cause of gap on practicing supply chain managements. In order to conduct this research, questionnaire was developed and distributed for 132 respondents in eleven leather products manufacturing enterprises those work on different department and level. All the questionnaires were collected by using schedule data collection method; beside the questioner interview and detail observation also conducted with experts to supports the findings from the questionnaire. Then the collected data was analyzed using IBM SPSS 26; in both descriptive and inferential statics. Regarding the descriptive statistic and inferential statistics results the finding shows; the current supply chain management practice level of the leather products manufacturing enterprise is medium, this indicate its influence on their competitiveness. Regarding the correlation, all the independent variables are positively and significantly correlated with dependent variable with a significant level of less than 1%. As per the regression analysis output result the coefficients of four predictor variables are statistically significant at less than one percent (P<.001). Therefore, the purpose of this study is to propose ways to improve the competitiveness of small and medium leather products manufacturing enterprises through Supply Chain management and applying competitive priority on operation. Finally the study proposed adoptable SCM framework and recommended the manufacturing enterprises are using supply chain management practices and applying competitive priority to customer value and need with the proper support and guidance of governments in order to improve their competitiveness.

Keywords: Supply chain management practice, competitive priority, Governments support

CHAPTER ONE

INTRODUCTION

1.1 Back ground

Nowadays, Supply Chains Management (SCM) applications increase rapidly. Advantages in costs, flexibility, customer satisfaction, speed and economy of time which are provided by this system are among the reasons of why it becomes widespread. The Supply Chain Management (SCM) has different aspects. It has its derivations in a number of fields such as purchasing, logistics and operations. Given its nature, it requires for cross boundary management to deal with an internal cooperation within the organization, in addition to external inter organizational integration. Many descriptions have been applied to explain the term SCM. For example,

Supply chain management is the management of the flow of goods and services and includes all processes that transform raw materials into final products. It involves the active streamlining of a business's supply-side activities to maximize customer value and gain a competitive advantage in the marketplace (James, 2021).

Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies (Ellram et al., 2019).

The Supply Chain Management Professionals' Council (2009) asserts that Supply Chain Management (SCM) includes the designing and management of all activities involved in sourcing and purchasing, transformation, and all logistics management activities. Principally, it also includes coordination and partnership with network partners, which can be suppliers, mediators, third party service providers and customers.

Supply chain management in small and medium-sized enterprises is aimed at ensuring both short and long term effectiveness and efficiency of enterprises. Traditional approach to

management of small and medium-sized enterprises is associated with overstocking and providing excessive capacity as a means of protection against demand variability. Owing to the possibility of rapid and major changes in the marketplace, this approach presents a great risk with potential adverse effects. A fast response to the demand variability requires efficient solutions for all elements that constitute the supply chain: demand management, planning, procurement, warehousing, production, transport and distribution. For these very reasons, there is a need to address the issue of supply chain optimization, in as much since every organizational system wants to utilize the synergistic effect of a whole and be as efficient and effective as possible (Sorak & Dragic, 2013).

Small and Medium Enterprises (SMEs) have played and continue to play significant roles in the growth, development and industrialization of developing countries. Accordingly, most developing countries have formulated and implemented a wide variety of SME development strategies in order to support the growth of the sector, thereby transforming economies and generating substantial employment opportunities.

With increased urban population dynamics of Sub-Saharan Africa (SSA), the importance of SMEs is also growing. In SSA, given the rapid rural-urban migration and deficiency to absorb this migration, SMEs have become important urban economic activities particularly in providing urban employment. In similar fashion, in cities and towns of Ethiopia, SMEs and the informal sector are the predominant income generating activities and thus they have a significant contribution to local economic development and used as the basic means of survival (Gebre Egiziabher and Demeke, 2004).

The SME sector in Ethiopia is taken as an instrument in bringing about economic transition by effectively using the skill and talent of the people particularly women and youth without demanding high-level training, much capital and sophisticated technology. The Small and Medium Enterprises informal and Small Manufacturing Enterprise sector (SMEs) contributed value added of Birr 8.3 million in 1996. Based on the 1992/93 data, this figure constitutes about 3.4% of the GDP, 33% of the industrial sector's contribution and 52% of the manufacturing sector's contribution to the GDP of the same year (Gebrehiwot, 2006). The development of the sector in Ethiopia is believed to be the major source of employment and income generation for a wider group of the society in general and urban youth in particular.

In line with the above, the Ethiopian government has historically supported the growth of Small and Medium manufacturing Enterprises (SMEs), especially growth oriented businesses, through various policy interventions. For instance, the government formulated a national Micro and Small Enterprises Development and Promotion Strategy in 1997 (revised in 2011) to create an enabling environment for the sector. Furthermore, SMEs were placed at the heart of the first industrial policy strategy in 2002. Similarly, within the framework of the government's 5 year economic development plans, including PASDEP (Plan for Accelerated and Sustained Development to End Poverty), GTP (Growth and Transformation Plan) I and GTP II, the expansion and development of SMEs has systematically been a key strategic priority.

The Government of Ethiopia identified growth-oriented SMEs based on their potential for job creation, poverty reduction, local raw material utilization and ease of transformation to medium and large scale businesses in a short period of time. Accordingly, SMEs engaged in manufacturing (metal, leather, textile, wood work, agro processing), construction (contractors and construction material producers), urban agriculture (dairy, cattle fattening, poultry, beekeeping and animal food production), trade (wholesale and retail) and services (hotel, tourism, solid waste collection, etc.) are considered as growth-oriented SMEs (World Bank, 2015)

According to the National MSE development Strategy and the Development Bank of Ethiopia SMEs are defined by number of employees and net worth. It is also important to note that SMEs are defined differently depending on whether they operate in the industrial/manufacturing sector.

Table 1.1**:** Classification of SMEs According to the National MSE development Strategy and the Development Bank of Ethiopia (Tajudn et al, 2019).

	Small manufacturing enterprise	**Medium manufacturing enterprise**
Economic sector	Manufacturing	Manufacturing
Employees	6-30	31-100
Capital	100,001-1,500,000	1,500,000 – 20,000,000
No. of enterprise in Hawassa city	261	61

1.2 Statement of problem

As a developing country, Ethiopia stands to show significant role in Small and medium enterprises in the creation of employment opportunity and generation of income for quite large proportion of population (Hagos and Yared, 2012). According to Kasongo (2021), the small and medium manufacturing sector in developing country in case of Zambia appreciates good supply chain management practices, but does not practice it, the study discovered that the sector has not established long term relationships with its customers and suppliers, the sector was found to face several challenges which threaten its long term growth and survival, the most worrying challenges being the lack of financial resources, failure to practice continuous quality improvement, low integration of process technologies and forecasting challenges, and finally suggest that when implementing SCM practices deliver a number of benefits to the SMEs. According to Nkwabi (2019), large enterprises in Tanzania have been able to successfully implement SCM, it is different in small and medium enterprises as they are faced with several constraints that hinder the effective implementation of SCM, Variables such as technological difficulties, poor coordination with the supplier's, lack of government support, resources, funds, access to markets and top management support, issues in information sharing, inventory management, poor SCM knowledge and unskilled workforce all affect the SCM implementation in SMEs, accordingly the implementation practice of SCM on SMEs is to provide right product to the right customers at the right cost, right time, right quality and right quantity.

From the researcher observation and interview on small and medium leather products manufacturing enterprises in the case of Hawassa city supply chains are not well developed. The small and medium leather products manufacturing enterprises faced problems that hinder their competitiveness in the market. According to this, the major challenges are the supplier and customer relationship is not well developed, therefore the level of relationship with vendor has not well coordinated between seller and buyer relation, and also they have great problem on information sharing and cooperation about each other's inventory, sales forecasting, production planning, and delivery status, and also challenges on market information and skill gap on employees using technology, the only way of product advertising applied on SMLPMEs are walking with sample products to promote them to potential

customers, selling through other established retailers, displaying products at the shop, sometimes also participate at the market bazaars so this is need improvement in current competitive market. As SMEs is important growth engines in Hawassa city and as well as in Ethiopia, therefore, a great potential can be desired to develop Hawassa city small and medium leather products manufacturing enterprise through SCM. Therefore the existing poor practice in managing the SC in the small and medium leather products manufacturing enterprise led the researcher to undertake this study.

1.2.1 Research question

To guide the study towards the attainment of its objectives the following research questions were developed.

- How was the current SCM practice of small and medium leather products manufacturing enterprise in Hawassa city?
- What are the gaps within existing supply chain size of small and medium leather products manufacturing enterprise in Hawassa city?
- Which model is applicable and adaptable that facilitates for applicable Supply Chain Management practice to Hawassa city small and medium leather products manufacturing enterprises?

1.3 Objectives

1.3.1 General objective

The general objective is to propose adaptable framework model that improve the competitiveness of small and medium leather products manufacturing enterprises through supply chain management.

1.3.2 Specific objective

To fulfill the general objective, the following specific objectives have been set, specifically the study will seek:

- To investigate the current SCM practice of Hawassa city small and medium leather products manufacturing enterprises by broad reliable and valid survey questionnaires distributed to SMLPMEs.
- To identify the gap within the current supply chain dimensions of SMLPMEs by statistical analyzing the survey questionnaires developed.
- To investigate model that facilitate applicable Supply Chain Management practice to Hawassa city small and medium leather products manufacturing enterprises by reviewing relevant literature of the same field.

1.4. Scope and Limitation

1.4.1. Scope of the study

The aim of this thesis is to focus on the Hawassa city small and medium leather products manufacturing enterprises supply chain management practice implementation level and extent of applying competitive priority to customer value during process by checking uncertainty in order to improve their competitiveness.

1.4.2. Limitations

There were some limitations hindering the completion of the thesis work. Some of the challenges faced while conducting the thesis are:

- Some small and medium manufacturing enterprises are not willing to give data, taking long time to respond, Limitation of understanding some specific questions and fear of workers to openly and freely to fill the questionnaires.
- The current COVID 19 situation has also restricted the researcher to conduct focus group discussion.

1.5 Significance of the study

The significance of this research is to propose a solution to problems related to supply chain management in small and medium leather products manufacturing enterprises. Solving the problem of small and medium leather products manufacturing enterprise had great impact on economic benefit like job creation, income generation, increase profitability and market share. It can address the gap associated with supply chain management practice of small and medium leather products manufacturing enterprises. Therefore, solving the problem of the sector by implementing supply chain management practice will improve their competitiveness

1.6 Organization of the thesis

The thesis were organized into six chapters: the introduction part dealing with back ground of the study, the research problem, and objectives of the study presented in Chapter 1. The review of previous studies which became the basis for this thesis is presented in Chapter 2. The research procedures and activities under taken, focusing on namely the study's research design, questionnaire design, data collection, observation and data processing of the study presented in chapter 3. Analyzed results and discussion of the study presented in chapter 4. Proposed framework discussed in chapter 5 and finally conclusions and recommendation presented in chapter 6.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a discussion on various past studies which have been conducted in the area of SMEs Supply Chain Management. It supports the candidate in to find gap on past related studies and deciding the line of action to complete the research work. Keeping in view this fact, a review of existing literature in respect to improving competitiveness of small and medium manufacturing enterprises through supply chain management was made by the researcher in the following manner:

2.1 Supply chain management

Many studies in SCM have been conducted to identify the SCM concept; as a result, many definitions have appeared along with the development in the cognition of this term. For instance, SCM is illustrated as the systemic and strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain (Afande et.al, 2015); SCM is also defined as the coordination of production, inventory, location, and transportation among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served (Afande et al., 2015); Although there is no general accepted concept of SCM among researches, all the definitions have one common objective, namely, bringing the benefit for all the members (supplier, intermediaries, third party service providers, and customers) of the supply chain. Supply chain management (SCM) is an area of increasing importance among enterprises and of growing academic interest (Mentzer and Gundlach, 2010). It is based on the concept of firms as part of multiple organizations oriented to the provision of goods and services for the final customer (Lambert and Cooper, 2000). From this perspective, several studies have verified that integration and collaboration in the supply chain can provide important benefits to the companies involved. Among these benefits are added value, the creation of efficiencies and client satisfaction, which are represented by the reduction in inventories, improvements in service delivery and quality and shorter product development cycles (Chow et al, 2008).

Based on Bozarth et al (2013); Hannagan (2008) and Taylor (2005) all maintain that improving supply chain operations is imperative to the survival of an organization as it helps in enhancing its key business process to increase productivity, efficiency and maintain quality while also minimizing risks and cost. Furthermore (Slack et al. 2011) adds that improving business processes should be at the core of an organization's operations and supply chain management as performance levels of most processes tend to decrease over a period.

2.2 Role of supply chain management to Small and medium enterprises

The main emphasis of SCM is to provide right product to the right customers at the right cost, right time, right quality and right quantity (Basher, 2010). Meanwhile, the short term planned goal of SCM is to reduce cycle time and inventory and thus increasing productivity, whereas the long term goal is to enhance profits through market share and customer satisfaction (Tan, 2002). Quantified benefits of SCM include lower supply chain costs, overall productivity, inventory reduction, forecast accuracy, delivery performance, fulfilment cycle time and fill rates (Mohanty and Deshmukh, 2005).

A SMEs study in Merseyside, United Kingdom revealed the perceived benefits of SCM to SMEs. The potential benefits include increased customer service and responsiveness, improved supply chain communication, risk reduction, reduced product development cycle time processes, reduction in duplication of inter-organizational processes, inventory reduction and improvement in electronic trading (Meehan and Muir, 2008). In another study involving SMEs manufacturing companies in Turkey, found that the execution of SCM practices could deliver benefits to SMEs in terms of reduced inventory level, reduced lead time in production, increased flexibility, forecasting accuracy, cost saving and accurate resource planning (Koh *et al*., 2007).

Bianchi et al. (2010) stated that commitment is vital for developing importer performance in developing countries. Hariharan et al. (2017) suggest that trust among the supply chain members is the most important aspect of improving the supply chain performance. Kumar et al. (2012) is of the opinion that SMEs may be developed with the focus on product differentiation strategies, product customization strategies, Just in Time approach, quality

improvement in continuous basis, and implication of technology to lessen lead time in a range of processes.

According to Tassew (2019) study the ways of enhancement for the level growth of Small and Medium Waving Enterprises (SMWE) found in Addis Ababa Ethiopia through Supply Chain Integration (SCI); additionally the study shows the government supports role on the enterprises growth level in terms of SCI. Regarding the descriptive statistic finding shows; the current integration level of the enterprise (both internally and externally with their supplier and customers) is very weak and the major factors are lack of trust and collaboration between supply chain actors, so many small transaction in the whole supply chain, lack of top management commitment, poor communication and information sharing, and not have awareness about supply chain integration. Regarding the correlation, it is possible to conclude that there is a strong and positive relationship among the three supply chain integration dimensions and also the dimensions (SCI as whole) with governments support has a strong and positive relation with enterprise growth.

According to Syedmosa (2012), a supply chain framework model that enables SMEs to improve their SCM performance and to have a sustainable business growth in Dynamic environment.

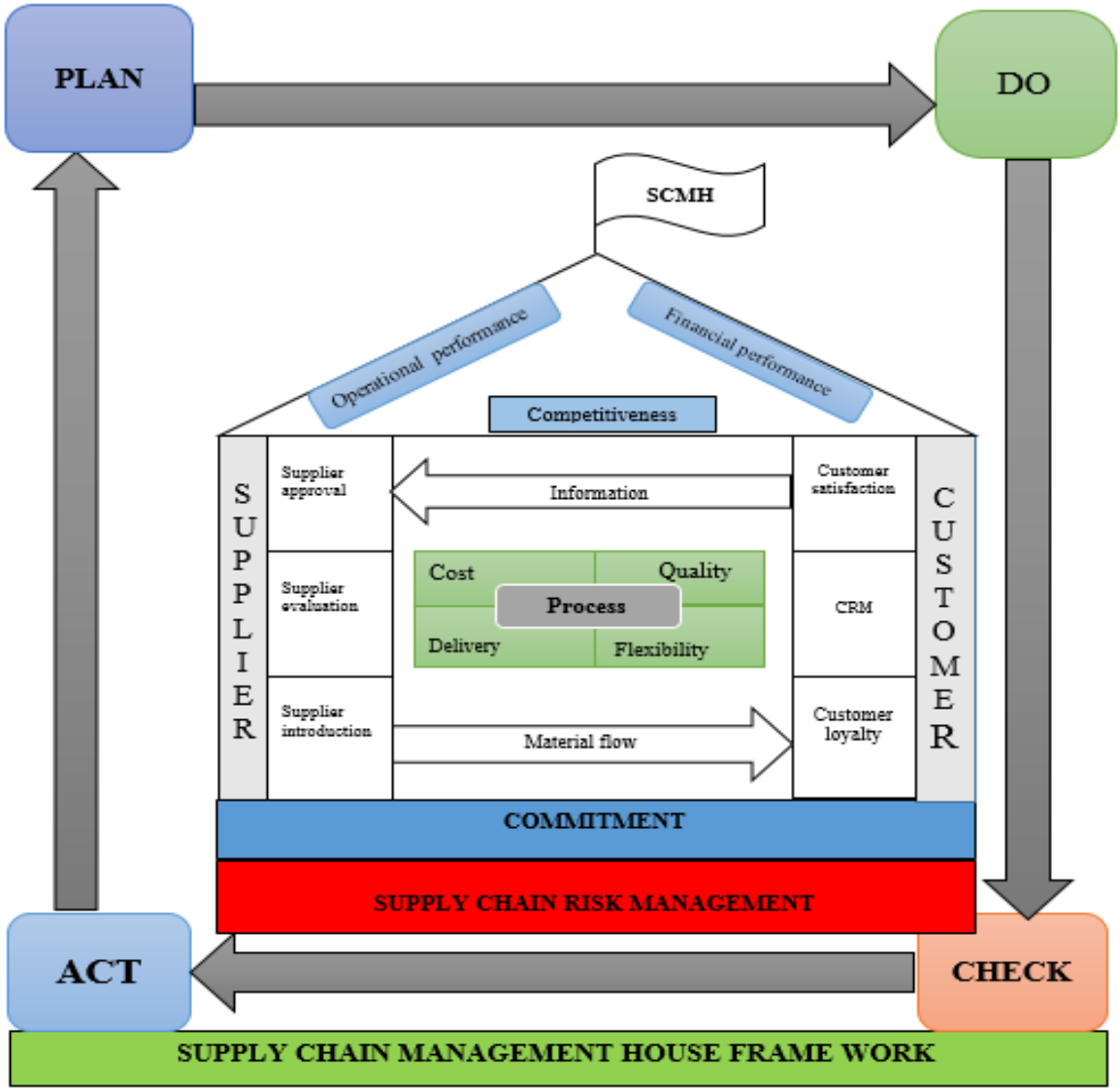


Figure 2.1: Supply chain framework model, (Syedmosa, 2012).

The extent of SCM variables outcome on implementing effective supply chain management on SMEs in Tanzania. Such variables are technological difficulties, poor coordination with the supplier's lack of government support, resources, funds, access to markets and top management support, issues in information sharing, inventory management, poor SCM knowledge and unskilled workforce all affect the SCM implementation in SMEs (Nkwabi, 2019).

The state that there has been a massive surge of interest in supply chain management (SCM) due to its innovation approach to business and competitive advantage. Large companies are

well recognized the benefits of SCM, but small and medium enterprises (SMEs) are lagging behind in appreciating how integrated supply chain drives remarkable changes in business processes and work with positive results in better quality services, cost reduction and efficiency. Their case study area on SMEs in Malaysia, have insufficient knowledge on SCM and they underestimate the potential benefits of SCM (Thoo et al., 2012).

2.3 Small and medium size enterprises

There is neither a simple nor a single definition of an SME yet there are certain features which are used to define them. The defining features of SMEs are the size of the labor force and turnover, while assets and equity are also used as criteria. In general, SMEs are defined by a number of factors and criteria such as location, size, age, structure, and organization, number of employees, sales volume or worth of assets. However, in dimension, most researchers and authors used both the quantitative and qualitative methods to define SMEs. In terms of the quantitative criteria, the number of employees is the most frequently used yardstick to determine the size of a SME in several countries

In developing countries, SMEs continue to play a critical role in their country's industrialization program through the strengthening of both forward and backward industrial linkages. They are not only providing job opportunities, but also, acting as suppliers of goods and services to large organizations, and any lack of their product quality could adversely affect the competitive ability of the larger organizations (Thakkar et al., 2008).

The conditions of MSMEs in Ethiopia , their contribution to employment creation, income generation, poverty alleviation, contributions to the local, regional and national GDP, stimulating entrepreneurial climate and the challenges and opportunities in the design, implementations, marketing opportunities, linkages, financial sources, dynamics, survival and policy landscape. Based on this study, the major obstacles of MSMEs in Ethiopia are the question of sustainability, lack of credit, weak market linkage, insufficient training, weak human resources development schemes, dependency on government and spoon-feeding mentality, oscillations in government policies, price variations, weak links and poor market and product development strategies (Weldeslassie et al, 2019).

The challenges of financing growth oriented Micro and Small enterprises (MSEs) in Hawassa city. The major sources of finance for startup and expansion of MSEs are personal saving, microfinance, money from family or friends, iqub and very less from banks. Micro finance institutions attach high importance to collateral, guarantee and capital rather than financial information as criteria to extend loan. It is possible to point out that more than half of the surveyed MSEs had not received credit and from those who accessed credit majority complains loan size insufficiency. The collateral, loan term, interest rate, disbursement of loans on time and other problems together are mainly challenges of MSE s financing and growth and also Lack of competition in financial institutions limits the access to finance (Birhanu, 2015).

The factor determining the growth of Micro and Small-Scale Enterprise on metal, wood processing, brocket production sector and other enterprise on Hawassa City are capital change, capital change is significantly determined by explanatory variable like age of respondent, sex of respondent, government motivation, educational level, financial access, and adequate infrastructure (Degefu 2018) .

The factors that affect the performance of SMEs in Bench Maji, Sheka, and Kefa zone particular to manufacturing, trade and service sector. The study suggests that small and medium enterprise managers, directors, and all stakeholders should not only be concerned about internal structures and policies, but also must consider the external environment together to improve their performance (Gemechu & Teklemariam, 2016).

According to Fredu and Edris (2016) study the demand and supply issues relating to Small and Medium Enterprises (SMEs) access to finance in Ethiopia indicate that banks and MFIs engagement in financing SMEs in Ethiopia is limited. The demand side findings and analysis revealed that access to finance is significantly influenced by the age of the firm, firm's previous engagement with banks, experience of the manager and whether firms are managed by the owner (owner-manager) or not. In a similar way, SMEs specific factors such as poor financial records of SMEs, lack of adequate collateral, SMEs poor management of risks, and informalities of SMES are the major obstacles underlined by banks and MFIs to their engagement with SMEs. In general, young firms who do not have adequate managerial and operation experience, and those with inadequate collateral are highly credit constrained.

2.4 Key success factors of supply chain management

Numerous research papers have attempted to identify the key success factors of SCM which are Enterprise Resource Planning (ERP) systems and Electronic Data Interchange (EDI). Bauer (2000) mentions that there are four success factors in the automotive industry which are social and business cultures, technology infrastructure, physical facilities of suppliers and internal hierarchy structure. Wagner et al. (2003) is of the view that large scale companies can easily implement e-business and EDI systems compared to SMEs. On other hand, SMEs continue to face challenges for practicing EDI system due to financial constraints.

The critical success factors (CSFs) for the successful implementation of supply chain management in auto components manufacturing units Small Medium Enterprises (SMEs), in Coimbatore district are involvement of top management, collaboration with supply chain partners, information sharing, use of sophisticated technologies, less rigid production system, improvement in competitive priorities, long term goals, product differentiation, innovation as well as inventory Management, are identified for a successful execution of SCM in SMEs. The result also shows that SMEs should focus more on product differentiation, innovation and inventory management (Hariharan et al. 2019).

2.5 Key decisions in Supply Chain Management

Lambert and Cooper (2000) distinguish three key decisions in SCM. The conceptual framework emphasizes the interrelated nature of SCM and the need to proceed through several steps to design and successfully manage a supply chain. Each step is directly related to the supply chain objectives, i.e. the degree to which a supply chain fulfils end user requirements concerning the key performance indicators at any point in time, and at what total cost.

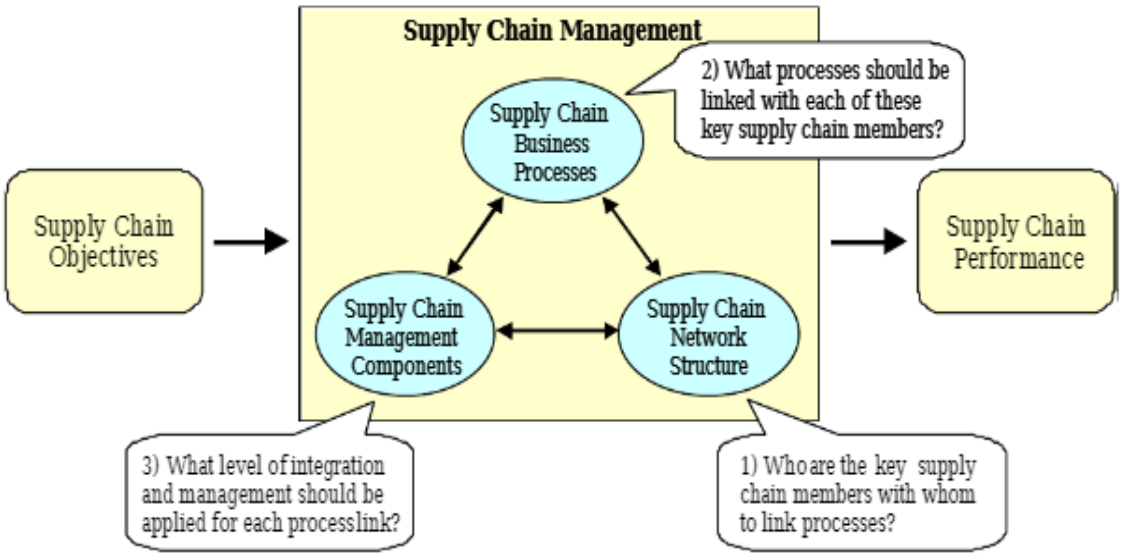


Figure 2.2: Key decisions in SCM (adapted from Lambert and Cooper, 2000)

Supply chain participants should start with jointly identifying order winners and satisfiers for the supply chain, because these provide the intended direction of control actions to improve supply chain performance. We will now discuss the three key decisions in more detail.

1. **Who are the key supply chain members with whom to link processes?**

The first step in analyzing and redesigning a supply chain is to determine the organizations that are part of the supply chain under investigation. For most manufacturers, the supply chain looks less like a pipeline or chain than an uprooted tree, where the branches and roots are the extensive network of customers and suppliers. The question is how many of and how intensive these branches and roots need to be managed. Management will need to choose the level of partnership appropriate for each particular supply chain member knowing that firm capabilities in time and effort are limited (Lambert & Cooper, 2000). With some suppliers partnerships are required since the raw materials they deliver are crucial; others are less important and only have to be monitored. The key is to sort out which members are critical to the success of the company and the supply chain in line with the supply chain objectives and, thus, should be allocated managerial attention and resources.

2. What processes should be linked with each key member?

Successful SCM requires a change from managing individual business processes within one organization to integrating activities over organization's into key supply chain processes. Lambert and Cooper (2000) have identified eight key business processes that could be integrated with the key members in the supply chain. It is usually not necessary to integrate all processes; e.g. if the order winner is responsiveness focus should be on order fulfilment, whereas if the order winner is innovation focus should be on joint product development.

Table 2.1 Business processes that could be integrated in the supply chain (Lambert and Cooper, 2000).

Business process	**General description**
Customer relationship managements	Specifying service level agreements with key customer
Customer service managements	Providing the customer with real time information on promised shipping dates and product availability through interfaces with the organizations production and distribution operation
Demand managements	Balancing the customers requirement's with the firms supply capabilities
Order fulfilment	Delivering product and meeting customers need dates
Manufacturing flow managements	Pulling product through the plant based on customer needs
Procurements	Developing strategic plans with suppliers to support the manufacturing flow management process and developments of new products
Product development and commercialization	Customers and suppliers must be integrated into the product development process in order to reduce time to market
Returns process	Aligning process to realize an efficient return of re-usable items

3. What level of integration and management should be applied to each process linkage?

The literature on business process reengineering and SCM suggests numerous possible components that must receive managerial attention when managing supply relationships. Lambert and Cooper (2000) distinguish two groups of management components. The first is

the physical and technical group, which includes the most visible, tangible, measurable and easy to change components. The second group, the managerial and behavioral components, defines the organizational behavior and influences how the physical and technical management components can be implemented. If the managerial and behavioral components are not aligned to drive and reinforce an organizational behavior supportive to the supply chain objectives and operations, then the supply chain will likely be less competitive and profitable. If one or more components in the physical and technical group are changed, then management components in the managerial and behavioral group likewise may have to be readjusted. Especially the managerial and behavioral components are well known obstacles to SCM as they might hinder the development of trust, commitment and openness between supply chain members.

2.6 Supply chain management practice

SMEs' management is simple. It is governed by one or a few people. Resources like men, machines, materials and money are easily controlled by a higher authority. Their support is very crucial for diversity training, collaboration with suppliers and customers for quick responsive supply chain (Ganesan et al. (2005). The major accountability of the higher authorities is to give adequate monetary support and development of resources for creating an affluent working system. Thus, a psychological support is crucial for the successful execution of SCM.

SMEs implement SCM practices including sourcing, manufacturing and distributing their products to the end customer in order to achieve long term regular orders (Katunzi and Zheng, 2010). Thakkar et al. (2008) examined 77 research papers on supply chain integration, supply chain strategy and planning, and supply chain implementation. They concluded that SMEs that survive the competition have the ability to deliver more to their customers at a lower cost, in less time and with fewer defects. Some SMEs understand the benefits of SCM practices such as collaboration, leading them to focus on value-added activities, clearer strategy development and cooperation among network members to enhance competency. However, several SMEs view supply chain as an endeavor to satisfy customers through significant IT investment, and thus as a worthless effort (Thakkar et al., 2011).

Survival and growth of SMEs may depend on how SMEs effectively allocate resources through their strategic focus, and secure better negotiation terms through improvement of their chain relationship position. In describing business practices in the context of supply chains, these two dimensions highlight key characteristics of SMEs. With their obvious size constraints, SMEs must carefully position themselves as product or service component providers or producers. SMEs acting as suppliers are more likely to offer product components, but if they are on the distribution side of distributions, they are more likely to offer service components to their larger partners. To continue as viable competitors, SMEs must be able to meet order qualifier standards (i.e. quality and delivery). Frequently, order winning criteria are low costs for mature manufacturing industries and innovative elements in product and service offerings for knowledge-intensive industries. Here, "low cost" refers to "the extent of ability to produce goods and services at competitive rates". Firms with a "low cost" focus tend to produce components for mature products; consequently their market potential may not be growing. On the other hand, firms with a "value added" orientation show strengths in their capability to design and deliver product or service components to meet changing customer requirements, with more likelihood of market growth. "Value added" refers to "the extent of value creation potential with the products and services offered to customers". High value add SMEs are able to create a larger value potential with their products and services, but low value add SMEs have relatively less capability to create value potential i.e. revenue enhancement for products and services they offer.

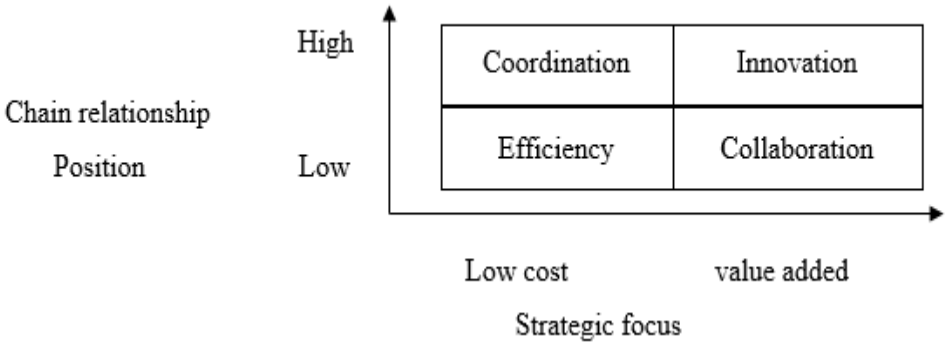


Figure 2.3: Value added chain relationship position model, Adapted from Levi et al. (2001)

2.6.1 Supplier and Customer Relationship

Supplier and customer relationship is defined as a set of firms' activities in managing its relationships with customers and suppliers to improve customer satisfaction and synchronize supply chain activities with suppliers, leverage suppliers' capability to deliver superior products to customers (Lazarevic, et al., 2007). Stank et al. (2001) disclosed that industry leaders increasingly build competencies to integrate with suppliers and customers and find that these competencies lead them to supply chain excellence.

2.6.2 Internal Operation

Agreeing to Assefa (2011), an enterprise's internal operations are the basis for developing a competitive advantage before embarking into external integrations. Poor internal operations can lead to failure in coordinating with external partners.

In this research, internal operations refer to all activities related to small and medium manufacturing enterprise processing systems of the case company. SCM requires flexibility in the processing system in order to respond to market changes. This means that a processing system must be able to perform rapid changeover in both order pattern and mass customization (Lambert and Cooper, 2000).

2.6.3 Information Sharing

According to Dempsey (2018), "the effective SCM requires not only the integration of material flows but also the integration of information flows in the supply chain". Information sharing is an important aspect in achieving seamless integration in a supply chain (Lee, 2000). Cross-functional integration and inter-organizational integration require the visibility of information across the supply chain. Poor information sharing between partners in a supply chain results in poor coordination that will lead to many serious problems such as high inventory levels, inaccurate forecasts, low resource utilization, and high production costs (Lee and Whang, 2000).

The empirical findings from Narasimhan and Nair (2005) revealed that information sharing can increase the operational synergy amongst supply chain partners. The type of shared information can vary from strategic to operational information and from consumer and market

information to logistics information. The impact of information sharing on SCM depends on what information is shared, quality of shared information, and companies' capability in using and translating the information into a supply chain strategy and operational activities (Lee and Whang, 2000).

2.6.4. Information Technology

The effective use of IT provides companies with competitive advantage. In SCM, IT is highly regarded as a major enabler in achieving effective SCM (Lazarevic, et al., 2007). The implementation of IT allows companies to increase communication and coordination of various value adding activities with their partners and between functions within their own operations. In addition, advance development of the Internet technology offers significant opportunities for cost reduction, increasing flexibility, increasing response time, and improving customer services (Lazarevic, et al., 2007).

Assefa (2011) found IT as a strong predictor for logistics integration. Other studies warn that the benefit of IT in SCM do not come from the capabilities of IT itself. Instead, the significant benefits come from the combination of its application with corporate strategy and the nature of relationship between companies.

2.6.5. Provide training

Successful implementation of SCM concept largely depends on human assets of organizations (Bowersox et al., 2000). Managing supply chain actually involves the interaction between human behavior, IT, and infrastructure. Effective SCM requires managers to have an understanding of supply chain dynamic and an ability to use information based tools. Lee and Whang (2000) contend that information visibility throughout a supply chain will not bring significant impact if companies do not have capabilities to utilize the information in effective ways. Hence, manufacturing enterprises need to consider the skill requirements and education when integrating their value-adding activities with their partners (Lazarevic, et al., 2007).

2.7 Supply Chain Management for Competitive Advantage

The research shows that competitive advantage comes primarily from process or skills that are difficult to copy, manufactured goods or service differentiation, or lower costs. In fact, supply chain management and integration may provide one of the last sources of such a competitive

advantage as product standardization and commoditization gravitate competition toward price, and sources of differentiation become more difficult to establish (Power, 2004). The savings come from better management of a company's activities and assets, resulting in lower costs, better products and service, and for competitive advantage. This is shows the advantages of supply chain management for the company. Therefore, effective management of supply chain management is creating competitive advantage for the organization.

According to Quynh and Hoang Huy (2018) state that, especially the subject of SCM practices and their impacts on firm performance of small and medium enterprises (SMEs) in Vietnam. Therefore, their study on the impact of supply chain management practices (SCMPs) on firm performance of SMEs through firm competitive advantages. Their findings showed that customer relationship (CR) and quality of information sharing (IQ) impact on firm performance at 0.01% significance level while the level of information sharing impacts on firm performance at 10% significance level, and strategic supplier partnership impacts on firm performance insignificantly. Moreover, they also found that customer relationship and quality of information sharing influence firm competitive advantage at 0.01% significance level, while strategic supplier partnership and the quality of information sharing impact on firm competitive advantage at 5% significance level. Competitive advantages impact significantly positively on firm performance at significance level of 0.001%. Their findings imply that SMEs in Vietnam should manage customer relationship well and increase the level of information quality to improve competitive advantage in order to gain high performance.

2.7.1 Understanding Market requirements for competitive advantage

Different market requirements can apply to the same product, depending on how the manufacturing company chooses to compete on the market. There is thus a need to first identify relevant market requirements and then to clarify the impact these market requirements should have on the level of interaction. Consider for example a fairly simple leather products that most people have experience of bag. The product characteristics for bag are easily agreed upon; it is clearly solid, not perishable and long service life time. The market requirements on the other hand might differ greatly due to using new brand design bags have short service life time, depending on which market it is intended for. If the purpose of buying leather bag is to get some leather bag in manufacturing and different shopping area with

different service purpose, the relevant requirements may be that modifying the design of bag by following changeable customer need, the leather bag should be available in an appropriate volume at a store close to the office (shelf availability). The price per bag could then be of less concern.

The leather bag should then be delivered at the right time to the right customer in the right quantity and the quality of the leather bag must fulfill certain requirements. The available suppliers will also compete with pricing. The market requirements could be maintained quality, delivery precision, and price. This type of diverging market requirements can be found for most products that have more than one field of application or compete in more than one market.

2.7.1.1 Competitive priorities

Several authors have identified competitive priorities as a set of goals for manufacturing which are used to align the business strategy and market requirements with the manufacturing task. To identify the relevant market requirements, market aspects such as target segment, product life-cycle phase, competition, and rules and regulations must be taken into consideration. These market aspects will affect which market requirements apply and consequently which competitive priorities are relevant.

These five competitive priorities have later been empirically supported by different authors. Each competitive priority can be broken down into a number of dimensions.

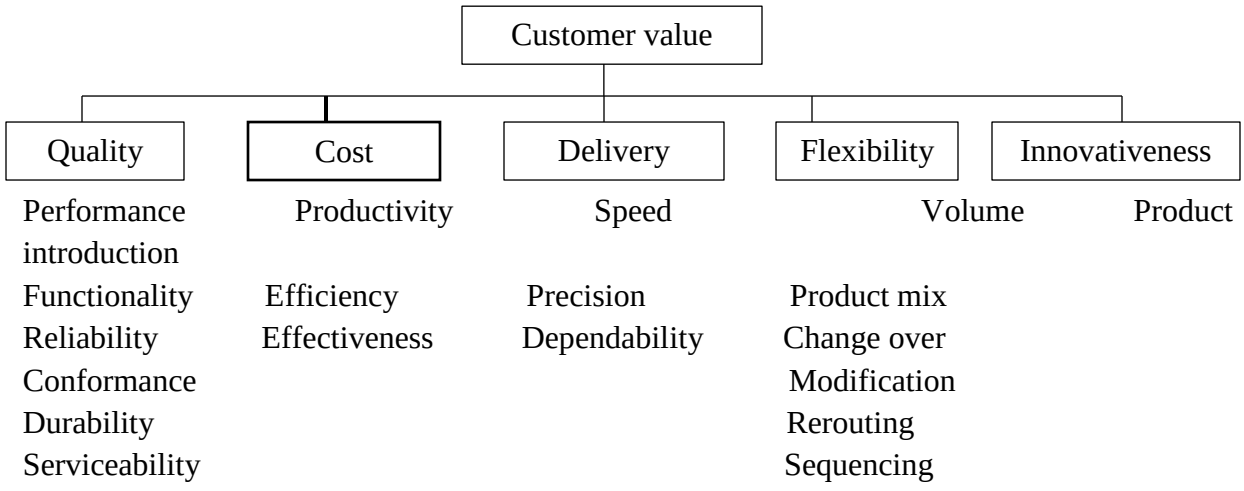


Figure 2.4: Dimensions of competitive priority

Ahmedova (2015), the rapid technological change and market globalization have a great impact on business competitive environment and create new possibilities for reinforcing the development of small and medium sized enterprises (SMEs). Enterprise (company) level factors for their competitiveness.

- expenses or expenditure raw material costs, labour costs, storage costs, cost of capital
- technologies: technological processes, products, investment in research and development, owned patents
- quality of processes: production processes, level of automation, level of incoming resource utilization
- flexibility: a new product development and production-switching time, length of the production cycle
- product quality: product mix, price, design, consumer satisfaction
- distribution: new markets for the existing products, timeliness of supply
- innovation: successful introduction of new products to the market, time for the development of new products, company culture
- marketing: reputation, brands, stimulation of sales
- human resources: remuneration, training, career development

The competition is the activate force of any market economies. Under modern fashionable conditions, competition is influential for the business development, while competitiveness is the most important condition for overall business prosperity. The area of small and medium enterprises, having extraordinary potential for flexible adaptation to the economic circumstances in the country is of major significance for the national economic development. (Ahmedova, 2015)

2.8 Challenges of Supply Chain Management

Current supply chains are growing in complexity due to several factors. Customers are demanding innovative products at the right time and at a reasonable price. This creates challenges for companies since creating both responsive and cost-effective supply chains are

critically difficult (Berrios, 2014). Most SCM related-problems mainly occur from uncertainties and an inability to co-ordinate several activities and partners (Turban et al, 2004).

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. Assefa (2011) identified three major sources of uncertainty: manufacturing, demand and supply uncertainty:

2.8.1.1. Manufacturing uncertainty

Machine breakdowns that lead to the delay of production, poor process design that causes a bottleneck in production of poor quality, are the manufacturing variables accounting for the late delivery and reduction in customer satisfaction (Assefa, 2011).

2.8.1.2. Demand uncertainty

Demand uncertainty is expressed in questions such as: what will my customers order? How many products should we have in stock? And will the supplier deliver the requested goods on time and according to the demanded specifications? Demand uncertainties are recognized to have a major impact on the processing function and propagates throughout the network and leads to inefficient processing and non-value adding activities. (Patil, 2012).

Since all production plans rely on a demand forecast or a demand plan as an input, demand uncertainty is the largest source of uncertainty. (Patil, 2012). Irregular orders from inconsistent customers may easily mislead manufacturers to make wrong forecasts, which cause excess inventory or insufficient supply (Assefa, 2011).

2.8.1.3. 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. Assefa (2011) stated that 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, and

customers' general confidence. 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. Adequate and timely supply is a pre-requisite for producers' and suppliers' value creation, making it possible for processor to reach their service level targets and allowing the supplier to stay in business.

2.9 Over view of small and medium enterprises

2.9.1. Small and medium enterprises in Ethiopia

Ethiopian government has recognized the contribution of the informal sector. It has been recognized and pay attention to the promotion and development of small and medium scale manufacturing enterprise. They are important vehicles to address the challenges of unemployment, economic growth of the country. It has been 75 years since the Federal Small and Medium Manufacturing Industries Development Agency was established as an institution. The agency has been referred by different names since its establishment. In 1941/42 it was founded as Her Majesty Etege Menen Handcraft School. In 1976/77 it was re-established as small industries and handicrafts development enterprise (SIHDE) In 1991/92 it was named small industries and handcraft development enterprise (SIHDE) and was structured which facilitated smooth operation until 1997/98. 1997/98 it was established by regulation No. 33/1998 of the Ministry of Councils as Federal Micro and Small Business Enterprises Development Organization (FMSBEDO), (Federal Small and Medium Manufacturing Industry Development Agency, 2011).

Accordingly, to the institutions that have been referred as handicraft and cottage industries for a long time were recognized as small and micro enterprises since the year 1997/98.As of 2010/11 it was re-established as Federal Micro and Small Enterprises Development Agency by Regulation No. 201/2003 of the Council of Ministers and have been referred with this name for 5 years and operated by adopting clearly defined strategy and support frameworks of the sector, (Federal Small and Medium Manufacturing Industry Development Agency, 2011).

With the view of expanding the changes realized in the second growth and transformation plan and become basis for the industry sector, the small manufacturing sector which has been implemented under the micro and small enterprises, was incorporated with the medium

manufacturing sector by Regulation No. 373/2016 of the Council of Ministers and the organization was established under the name the Federal Small and Medium Manufacturing Industry Development Agency, (Federal Small and Medium Manufacturing Industry Development Agency, 2011).

Like every other countries the government of Ethiopia (GoE) set a definition for micro small and medium enterprise (MSME) and Ministry of Urban Development and Housing Construction (MoUDHC), 2016. The first definition used in 2005 only consider paid up capital of the enterprise, then GoE revised it after identifying the previous definition limitations in 2010, Table 2.2 shows the revised definition of MSME.

Table 2.2: Definition of MSME in Ethiopia (MSME and MoUDHC, 2016)

Sector	**Micro**		**Small**		**Medium**		**Remark**
	No of employee	Paid up capital(birr)	No of employee	Paid up capital(birr)	No of employee	Paid up capital(birr)	
Industry(manufacturing, construction, mining)	≤5	100,000	6-30	100,001-1.5 mill	31-100	1.5mil l-20mill	The no of employee include enterprise owners and family members
Service(retail trade, transport, hotel, tourism, information technology and maintenance services	≤5	50,000	6-30	50,001-500,000	31-100	500,001-7.5mill	

The government support MSMEs based on their importance for the country's economy; accordingly the growth oriented enterprises get a maximum support from the government. As indicated in Table 2.3 the manufacturing enterprises can be a driver for achieving the strategic goal. The sector is not only to reduce poverty in urban areas through employment generation but also serve as a foundation for the creation of entrepreneurs and basis for industrial development, therefore the government provide strong support for these sector.

Table 2.3: Growth oriented MSE sectors, their selection criteria and government support (Konjit, 2011)

Sector	Sub sector	Support	Selection criteria of the sectors
Manufacturing	• metal and engineering • textile and garment • leather products • wood work products • agro processing • handicraft products	• working premises with least price • product display center with least price • technical and business management training • business development services • market linkage • exhibition and trade fair organization • access to technology	• large market size for their products • employment absorption capacity • short period of return over investment • local raw material utilization • high role for poverty reduction • opportunity to transform to medium and large scale industry • opportunity to export their product
Construction	• contractor • building material production • traditional way of mining extraction		
Urban agriculture	• cattle fattening, poultry farm and animal food preparation • honey production • forestry		
Trade	• domestic product whole sale and retail trade		
service	• solid waste collection and recycling • maintenance		

2.9.2 Small and medium manufacturing enterprise in Hawassa city

In the Industrial Development Strategy (IDS) of Ethiopia drafted in 2010, the government set a strategic goal to ultimately deliver agriculture-led industrialization, export promotion and development and expansion of labor intensive industries, a large part of which is the MSME development. SME development is the prior focus area of government of Ethiopia, since they play a leading role in creating employment, increasing income, added value and provide foundation for industrialization. With regards the manufacturing sector takes the lion share by fulfilling this achievement. According to Hawassa city Small and medium Enterprises

Development Agency 2012 report there are 261 small and 61 Medium manufacturing Enterprises registered in different sub-cities.

2.9.2.1 Small and Medium manufacturing enterprise in each Hawassa sub city

As indicated in table 2.4 Information part contains number of enterprise, sub city and their respective level. So SMEs in Hawassa city engaged in manufacturing (metal, leather, textile, wood work, agro processing), construction (contractors and construction material producers), urban agriculture (dairy, cattle fattening, poultry, beekeeping and animal food production), trade (wholesale and retail) and services (hotel, tourism, solid waste collection, etc.)

Table 2.4: Number of all currently functional SME, (Hawassa city small and medium enterprise administration office report 2012/13).

Sub city	**Number of Small enterprise**	**Number of medium enterprise**	**Total number**
Tabor	67	19	86
Addis ketema	35	2	37
Menhariya	56	26	82
Mehal ketema	22	-	22
Misrak	14	-	14
Hayik Dar	10	6	16
Bahil aderash	27	1	28
Tula	28	2	30

2.9.3 Small and medium leather products manufacturing enterprises in Hawassa city

The Leather Sector presents many opportunities to the Ethiopian Economy ranging from employment generation, export earnings, contribution to Government revenue and other multiplier contributions to the rest of the Economy. The growth of the Leather Sector will contribute significantly to the transformation of the Ethiopian economy. As per Ethiopia Central Statistics Agency (2015) statistics, the leather industry was estimated to have 72 large and formal enterprises: 33 tanneries, 17 shoe manufactures, 3 gloves makers, and 19 leather

and leather goods industries. There are however several hundreds of MSMEs operating in markets and backyards manufacturing an assortment of footwear, leather goods and garments.

Accordingly now in Hawassa city there are ten small and one medium leather product manufacturing enterprises. Shoes, jackets, belts, bags, gun holders, wallet, purse, Key chains, Bags for notebooks, equipment needed for beneficiaries are the products of the manufacturing enterprises.

Table 2.5: Current status of small and one medium leather product manufacturing enterprises in Hawassa city (Source: Hawassa city small and medium enterprise administration office report 2012/13)

S.No	Name of enterprise	Year of establishment (E.C)	No of members during establishment	Current		Startup capital (Birr)	Current capital (Birr)	Level	Address/ sub-city
				member	employee				
1	Mihur	2006	3	3	5	5000	122400	small	tabor
2	Michy	2005	2	2	4	4000	165400	small	tabor
3	Fale	2007	2	2	3	5000	120000	small	tabor
4	Yibeltal	2003	5	5	7	60000	422205	small	Addis Ketema
5	Abrishna betesebu	2001	5	5	8	60000	700000	small	Addis Ketema
6	Ethio	2008	5	5	7	5000	140000	small	Addis Ketema
7	Menor betesfa	2006	3	3	2	1000	105000	small	Menhariya
8	Teradeo	1997	4	4	26	31000	1600000	medium	Hayik dar
9	Lebshna betesebu	2008	5	5	10	4000	120000	small	Hayik dar
10	Fire le ediget	2004	4	4	11	10000	612860	small	Hayik dar
11	Konjo	2008	5	5	6	10000	250000	small	Bahil

									aderash
Total				132					

2.10 Research gaps

From the review the researcher discovers that, those articles published related with supply chain management for SMLPMEs and SMLPMEs in case of Ethiopian small and medium manufacturing enterprise indicates, there is a huge space to conduct a research on the application of supply chain management on SMLPMEs. The main reason is a luck of expertise and resources in SMEs but there is no indication how to solve this problems. In addition to this, most of the available literatures on this case area use a supply chain management (SCM) to enhance manufacturing enterprise operational performance measures like market performance, operational performance, business performance and financial performance etc. And also literatures on contribution, challenges, development and employee perception on small and medium manufacturing enterprise. However, in this study the researcher uses supply chain management to enhance the overall competitiveness of Small and medium leather product manufacturing enterprise, by including additional performance measures, those are affecting the growth of Small and medium leather products manufacturing enterprises and also in order to solve the limitation of small and medium leather products manufacturing enterprise towards implementing SCM.

CHAPTER THREE
METHODOLOGY

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. (Irny and Rose, 2005) A methodology does not set out to provide solutions it is, therefore, not the same thing as a method. Instead, it offers the theoretical underpinning for understanding which method, set of methods or best practices which can be applied to specific case, for example, to analyze a specific result .

This section provides an overview of the study's research approach which lays within the mixed methods strategies. The chapter discusses procedures and activities under taken, focusing on namely the study's research design, questionnaire design, data collection, observation, data processing and analysis.

3.1 Research design

Research design is the plan for fulfilling research objectives and replying research questions (John et al., 2007). In other words, it is a master plan specifying the methods and procedures for collecting and analyzing the needed information. The same authors discusses three types of research design, namely exploratory (emphasizes discovery of ideas and insights), descriptive (concerned with determining the frequency with which an event occurs or relationship between variables) and explanatory (concerned with determining the cause and effect relationships).

To attain the research objectives of this paper, the researcher followed the following research strategies such as literature review, survey of the questionnaire, interview, and observation. The research were carried out by applying a combination of both qualitative and quantitative research approaches and also use benchmarking from exemplary small and medium manufacturing enterprise companies to introduce their best growth practice. In this study, a combination of qualitative and quantitative approaches of doing research are applied, The qualitative method is used to analyze non numerical data in the form of literature and images

drawn from observations, interviews, questionnaires and document that are gathered from small and medium leather products manufacturing enterprises , expertise's those are provides support for SMEs. And the quantitative method is used to collect and analyze both primary and secondary numerical data by using statistical techniques that gathered from SMLPMEs, expertise's those are provides support for SMLPMEs. Using both techniques aids the researcher to reinforce its research findings by avoiding their respective difficulties. Therefore, to this research semi-structured interview is used for qualitative data collection and analysis, questionnaire survey is distributed for the quantitative methods. Moreover, literature review and practical observations are used to strengthen the research strategy technique. Then this study describes and critically assesses how improving competitiveness of small and medium leather products manufacturing enterprise through supply chain management practice for increasing overall manufacturing capacity of enterprises.

3.2 Data collection

3.2.1 Sources of data

The study employed both primary and secondary sources of data collection. As a primary source interviews, questionnaires, and observation were used from SMLPMEs and as a secondary sources relevant books, journals, articles and reports were used to show additional and relevant direction to collect the data.

3.2.1.1 Primary sources

In order to realize the target, the study used well designed questionnaire as best instrument. This was completed by employer and employee those who works in different position and department of the small and medium leather products manufacturing enterprises and also making interviews for all working department and from expertise who working in different government offices and those are supports SMEs and observing their operation of manufacturing enterprises.

- **Questionnaire**

It is a very popular data collection mechanism, when the research requires unbiased thought of the respondents. In order to communicate easily with the respondents the questionnaire was prepared in both languages English and Amharic. The questionnaire had two parts (Likert

scale and fill in the blanks). That is one closed-ended types of questions (five-point Likert scale) and open-ended (fill in the blank) were included. Open ended questions were prepared to collect ways of relation, opinions, views and suggestions between supply chain actors from respondents. Data gathered through questionnaire are simple and clear to analyze and it allows for tabulation of responses. The items in the Likert scale were measured using 5-point scale ranging from 'poor' (1) to 'very good' (5). Furthermore, it is time efficient for both the respondents and the researcher. The questionnaire was structured in such a way that it includes all relevant parts of and information to clearly inform the respondents. All the parts of questionnaires (Likert scale and fill in the blanks) were filled by Manager, Finance manager, Selling department, Purchasing department, Quality control and Operator (sewing by machine and by using hand).

Table 3.1: Questionnaire respondent's back ground

Current position in the enterprises	**Frequency**	**Educational back ground**	**Service level (years)**
Manager	11	Level 3-degree	2-10
Finance manger	9	12-level 3/ Diploma	1-3
Selling department	14	Diploma	2 and 4
Purchasing department	22	Diploma - degree	2-10
Quality control	20	10 – level 3	1-6
Operator (sewing by machine and by using hand)	56	8 – level 3	1-5

- **Interview**

In order to obtain sufficient information, the researcher has used personal interview from each department (senior worker in that department) of the leather product manufacturing enterprise. Research issues like awareness, challenges, practices of SCM, strategic view and logical justifications of the manufacturing enterprises were addressed through interview which is difficult to obtain through questionnaire in as much detailed as required.

- **Observation**

This is used when the information required is sought after by way of investigator's own direct observation without asking from the respondent. Data related to the production such as overall production process as a whole were be collected by this method. Observation is selected as a tool because if it is done accurately, it avoids subjective bias. Moreover, the information obtained under this method relates to what is currently happening and it is not complicated by either the past behavior or future intentions or attitudes.

3.2.1.2 Sample population

In this study the target populations is Small and medium leather products manufacturing enterprises working in Hawassa city. According to Hawassa city small and medium enterprise administration office data there are ten small and one medium leather products manufacturing enterprises. Therefore the target population is 132 due to this survey are taken from those all 132 workers of leather products manufacturing enterprises because of small size of population and all workers have almost approached skill on supply chain management.

3.2.1.3 Secondary sources

As a secondary sources relevant books, journals, articles and reports were used to review to make the study successful, to show additional and relevant direction to collect the data.

3.3 Study variables

- **Dependent variable**

Competitiveness of Small and Medium leather products manufacturing Enterprises

- **Independent variables**

a) supply chain management practice (customer and supplier relationship management, Internal operation management, Information sharing, Adapting and using technology, providing training) and

b) level of applying competitive priority to customer value (quality, cost, delivery, flexibility, innovativeness) by understanding the market requirements

c) supply chain management practice incorporation with government support

d) understanding challenges for implementing and practicing SCM

3.4 Data analysis

After primary and secondary data are collected and summarized in reduced format, it is analyzed in accordance with the objective of the research.

- To analyze the data collected by questionnaire from the small and medium leather products manufacturing enterprises, descriptive analysis was used, which represent and interpret the Data by using tables. It is also display the collected data in a concise and meaningful way, to show the respondents position towards Supply Chain management practice activities, level of applying competitive priority to customer value by Understanding market requirements and challenges for implementing and practicing SCM.
- To analysis the level of supply chain management practice, level of applying competitive priority to customer value of the enterprises understanding the market requirements and level existing challenges for implementing and practicing SCM by mean and percentage were used and presented.
- To determine the strength of each elements of supply chain management practice (Strategic customer relation management and supplier relationship management, Internal operation management, Information sharing, Adapting and using technology, providing training), level of applying competitive priority to customer value (quality, cost, delivery, flexibility, innovativeness) by understanding the market requirements and impact of challenges for implementing and practicing SCM on small and medium leather products manufacturing enterprise competitiveness and relate it with governments support and manufacturing Enterprise competitiveness Bi-variate Correlation test was done with IBM SPSS *v26* (Statistical Package for the Social Sciences) software. In order to test the correlation Spearman correlation coefficient was selected, Because of the data specific characteristic and data size (small data size).
- To fit the model and to predict values of the dependent variable from independent variables regression analysis also done.

3.5 Data validity and reliability

3.5.1 Validity

Validity explains how well the collected data covers the actual area of investigation (Ghauri and Gronhaug, 2005). Validity is foremost on the mind of those developing measures and that genuine scientific measurement is foremost in the minds of those who seek valid outcomes from assessment. According to (Roberta Heale and Alison Twycross, 2015) There are three types of evidence that can be used to demonstrate a research instrument has construct validity:

- ♣ Homogeneity: meaning that the instrument measures one construct.
- ♣ Convergence: this occurs when the instrument measures concepts similar to that of other instruments. Although if there are no similar instruments available this will not be possible to do.
- ♣ Theory evidence: this is evident when behavior is similar to theoretical propositions of the construct measured in the instrument.

To ensure the validity of the questionnaire, both the questioner and semi structured interview question were presented for research advisors, for their valuable comment and suggestion. Finally certain adjustments were made on the structure, concepts, and wordings of the questions, to improve its clarity. Construct validity is assured by rearranging the questions according the comments of the respondents in order to keep the flow of questions**.** With this regard, the questioner translated in to Amharic language to remove any ambiguity to respondents.

3.5.2 Reliability

Reliability concerns the degree to which a measurement of a phenomenon provides stable and consist result. The most commonly used internal consistency measure is the Cronbach Alpha coefficient. It is observed as the most appropriate measure of reliability when making use of Likert scales and No absolute rules exist for internal consistencies, however most agree on a minimum internal consistency coefficient of 0.70 (Whitley, 2002 and Robinson, 2009). Therefore, the researcher applied Cronbach's alpha to check the consistent of each questionnaire.

Table 3.2: Cronbach's alpha results of supply chain management and improving competitiveness measures (Source: Survey questionnaire Cronbach's Alpha value reliability test in SPSS)

Reliability Statistics			
1	Supply chain management practice	Cronbach's Alpha	N of Items
	Supplier relationship management	0.931	8
	customer relationship management	0.931	8
	Information sharing	0.806	8
	Internal operation	0.851	5
	Using and adapting technology	0.792	3
	Training practice	0.760	6
2	applying competitive priority to customer value by Understanding market requirements	0.760	6
3	Challenges of SCM Implementation	0.850	4
4	Competitiveness	1.000	2
	Over all	**0.977**	**50**

As shown in Table 3.2 the Cronbach's Alpha value each variables and overall content of the questioner is statistically reliable.

CHAPTER FOUR
RESULT AND DISCUSSIONS

4.1 Introduction

Under this chapter the data analysis result and discussion were carried out based on the collected questioner, interview and observed study. The primary data were collected through Amharic questionnaire from 132 respondents who are working in the enterprise in different department of small and medium leather products manufacturing enterprises.

4.2 Data analysis and Interpretation of the survey

4.2.1 Analysis and interpretation of supplier relationship management

In small and medium leather products manufacturing enterprises the supply problem is a critical issue. The sector use its raw material from local market but managing the relationship between supplier and leather products manufacturing enterprises is moderate.

Table 4.1: Summary of Respondent's view about level of supplier relationship management of leather products manufacturing enterprises (Source: survey output)

1. supplier relationship management										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Aver age (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**Mode**	**Sta. dev**
1.1	The level of cooperativeness in relationship with most important supplier	freq	24	60	48	0	0	3.81	4.00	.718
		%	18.2	45.5	36.4	0	0			
1.2	The level of joint product planning with major suppliers	freq	36	0	96	0	0	3.54	3.00	.894
		%	27.3	0	72.7	0	0			
1.3	Occurrences of meeting with supplier	freq	36	48	48	0	0	3.90	3.00	.795
		%	27.3	36.4	36.4	0	0			
1.4	Acceptation and implementation of supplier improvement suggestions	freq	0	24	84	24	0	3.00	3.00	.605
		%	0	18.2	63.6	18.2	0			
1.5	The degree to regularly solve problems jointly with	freq	72	60	0	0	0	4.54	5.00	.499

	suppliers	%	54.5	45.5	0	0	0			
1.6	Extent of transparent information about each other's inventory, sales forecasting, production planning, order tracking, tracing and delivery status with suppliers.	freq	0	36	12	60	24	2.45	2.00	1.08
		%	0	27.3	9.1	45.5	18.2			
1.7	You have effective communications with your suppliers on production capacity, production schedule, quality consideration and new product development or design change.	freq	0	36	72	24	0	3.09	3.00	.670
		%	0	27.3	54.5	18.2	0			
1.8	You have long term relationships with your suppliers	freq	0	36	96	0	0	3.27	3.00	.447
		%	0	27.3	72.7	0	0			

Table 4.1 above indicates the extent of relationship that exists between suppliers and the leather products manufacturing enterprises. Accordingly, the group mean of suppliers and leather products manufacturing enterprises relationship is 3.45 which is average or/and moderate level of relationship with respect to the overall measures taken into consideration. Specifically, the level of cooperativeness in relationship with most important supplier, the shown mean value is 3.81. This mean value not implies the overall suppliers and the leather products manufacturing enterprises is good relationship particularly, on strict delivery on fulfillment requirement. In the different the level of transparent information about each other's inventory, sales forecasting, production planning, order tracking, tracing and delivery status with supplier is placed at 2.45, this indicates, managing the relationship between enterprises and their suppliers has not pass beyond seller and buyer relation, and also they have poor transparent information about each other's inventory, sales forecasting, production planning, order tracking and delivery status. The left over dimensions of supplier relationship managements; the level of joint product planning with major suppliers placed at, Occurrences of meeting with supplier placed at 3.9, Acceptation and implementation of supplier improvement suggestions placed at 3, The degree to regularly solve problems jointly with suppliers placed at 4.54, level of effective communications with your suppliers on production

capacity, production schedule, quality consideration and new product development or design change placed at 3.09, level of long term relationships with your suppliers is 3.27.

Each enterprises have got all raw materials from local market especially from Merkato Addis Ababa. Each enterprises buy raw material at different time with respect to their market and customer demand on their products. This is also with high travel costs and availability of working capital. Consequently have restricted long term relationship. This and the survey analysis clearly confirm that the sector do have a supply chain problem and have a medium level Supplier relationship managements were applied in small and medium leather products manufacturing enterprises in Hawassa city.

4.2.2 Analysis and Interpretation of customer relationship management

Customer relationship management is the key element in today SCM practices implementation in any organization. For this study the most commonly famous characteristics of manufacturing enterprises and customers relationships managements are: The strictness of major customers delivery fulfillment requirement, Level of compliance with most important customers delivery on time requirement, The level of cooperativeness in your relationship with most important customer, The level of joint product planning with most important Customers, A process to manage customer dissatisfaction returns, The degree to regularly solve problems jointly with customers, extent of partnership with your customers by receive feedback and provide quick response to your customer about quality, delivery and service satisfaction and share technical information with each other to make joint decision if required, extent of long term relationships with your customers

Table 4.2: Summary of Respondent's view about level of customer relationship management of leather products manufacturing enterprises (Source: survey output)

2. Customer relationship management										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Aver age (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
2.1	The strictness of major customers delivery fulfillment requirement	freq	0	36	72	24	0	3.09	3.00	.670
		%	0	27.3	54.5	18.2	0			

2.2	Level of compliance with most important customers delivery on time requirement	freq	36	0	96	0	0	3.54	3.00	.894
		%	27.3	0	72.7	0	0			
2.3	The level of cooperativeness in your relationship with most important customer	freq	36	48	48	0	0	3.90	3.00[a]	.795
		%	27.3	36.4	36.4	0	0			
2.4	The level of joint product planning with most important Customers	freq	0	24	84	24	0	3.00	3.00	.605
		%	0	18.2	63.6	18.2	0			
2.5	A process to manage customer dissatisfaction returns	freq	0	36	12	60	24	2.45	2.00	1.07
		%	0	27.3	9.1	45.5	18.2			
2.6	The degree to regularly solve problems jointly with customers	freq	72	60	0	0	0	4.54	5.00	.499
		%	54.5	45.5	0	0	0			
2.7	Extent of partnership with your customers by receive feedback and provide quick response to your customer about quality, delivery and service satisfaction and share technical information with each other to make joint decision if required.	freq	24	60	48	0	0	3.81	4.00	.718
		%	18.2	45.5	36.4	0	0			
2.8	You have long term relationships with your customers	freq	0	36	96	0	0	3.27	3.00	.447
		%	0	27.3	72.7	0	0			

As indicated in table 4.2 the enterprises' have mean value 4.54 placed at the degree to regularly solve problems jointly with customers and it's the highest mark among other dimensions of customer relationship managements. The next mark is level of cooperativeness in relationship with most important customer, its mean value is 3.90.

The remaining dimensions like; the strictness of major customers delivery fulfillment requirement, Level of compliance with most important customers delivery on time requirement, the level of joint product planning with most important Customers, a process to manage customer dissatisfaction returns, extent of partnership with customers by receive feedback and provide quick response to customer about quality, delivery and service satisfaction and share technical information with each other to make joint decision if required, extent of long term relationships with their customers scored mean value 3.09, 3.54, 3, 2.54,

3.81 and 3.27 respectively. Accordingly, the group mean value of leather products manufacturing enterprises relationship and customers is 3.45 which is average or/and moderate level of relationship with respect to the overall measures taken into consideration. Because most enterprises have no sales out late and even if Work sites is difficult to contact with their customer due to this they deliver their products for different customers and also to get market linkage with different NGOs require Department of Trade and Industry Office, which is responsible for majority of tasks related to SMEs from establishment, providing working and selling premises, market linkage support. This results and survey analysis clearly confirm that the manufacturing enterprise do have customer relationship problem.

4.2.3 Analysis and interpretation of Information sharing

Information sharing is an important feature in accomplishing perfect integration in a supply chain. Cross functional integration and inter organizational integration requires the visibility of information across the supply chain.

Table 4.3: Summary of Respondent's view about level of Information sharing of leather products manufacturing enterprises (Source: survey output)

3. Information sharing										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Average (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
3.1	The level of information sharing on production and sales forecast planning with suppliers	freq	0	36	12	60	24	2.45	2.00	1.07
		%	0	27.3	9.1	45.5	18.2			
3.2	Level of information sharing on production and sales forecast with customers	freq	0	36	12	60	24	2.45	2.00	1.07
		%	0	27.3	9.1	45.5	18.2			
3.3	Quality and adequacy of information flow through the supply chain	freq	0	60	60	12	0	3.36	3.00a	.645
		%	0	45.5	45.5	9.1	0			
3.4	The level of information sharing across functional areas of the organization.	freq	36	84	12	0	0	4.18	4.00	.577
		%	27.3	63.6	9.1	0	0			
3.5	The level of information sharing with suppliers on	freq	60	60	12	0	0	4.36	4.00a	.645

	inventory and quality of raw material	%	45.5	45.5	9.1	0	0			
3.6	The level of trust among your firm's supply chain members	freq	24	60	48	0	0	3.81	4.00	.718
		%	18.2	45.5	36.4	0	0			
3.7	The extent to share information about issues that affect our business	freq	24	60	48	0	0	3.81	4.00	.718
		%	18.2	45.5	36.4	0	0			
3.8	The level of timely information exchange between us and our trading partners	freq	0	24	72	36	0	2.90	3.00	.670
		%	0	18.2	54.5	27.3	0			

Table 4.3 above indicates, eight statements are identified by the researcher for the information sharing practices of the manufacturing enterprises to measure current performance. To measure the current practice the researcher used the mean value of each statements and group mean that can take a wide view for the information sharing of the leather products manufacturing enterprises with it's up and down stream supply chain partners.

In relation to the level of information sharing on production and sales forecast planning with suppliers and with customers is it was indicated by participants is a poor performance mean value of 2.45. In relation to the level of information sharing across functional areas of the organization and the level of information sharing with suppliers on inventory and quality of raw material is a good performance mean value of 4.18 and 4.36 respectively. So this indicate that most of their information focus on raw material and product quality but not on their operation, planning and forecast. The remaining dimensions like; Quality and adequacy of information flow through the supply chain the level of trust among your firm's supply chain members, the extent to share information about issues that affect our business, the level of timely information exchange between us and our trading partners have the mean value of 3.36, 3.81, 3.81 and 2.90 respectively. In the above table 4.3 the descriptive statistics summary for the information sharing practice on the leather products manufacturing enterprise respondents agreement level shown the information sharing practice performance level exist in medium level having over all mean value of 3.41. Accordingly this area also need improvement to be competitive with current market and this highly influencing the manufacturing enterprises supply chain performance.

4.2.4 Analysis and interpretation of internal operation

Managing Internal operation is the preliminary point to make the environment favorable for integration with the external partners.

Table 4.4: Summary of Respondent's view about the level of internal operation of leather products manufacturing enterprises (Source: survey output)

4. Internal operation										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Aver age (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
4.1	You have effective communications between different departments regarding a new product or process development program and other technical information like production, quality, design, process and delivery with each other quickly.	freq	24	60	48	0	0	3.81	4.00	.718
		%	18.2	45.5	36.4	0	0			
4.2	All departments in your enterprise collaborate with the enterprise's development program(s).	freq	36	0	96	0	0	3.54	3.00	.894
		%	27.3	0	72.3	0	0			
4.3	You share your sales forecast, production plan, production progress and stock level with your purchasing and marketing department (or with anyone involved in purchasing and sales activity).	freq	36	48	48	0	0	3.90	3.00a	.795
		%	27.3	36.4	36.4	0	0			
4.4	You share your mission, vision, goal and organizational culture with everyone in the enterprise	freq	0	24	84	24	0	3.00	3.00	.605
		%	0	18.2	63.6	18.2	0			
4.5	Your managers commitment to work together with other managers' and support everyone to work together to achieve your enterprises goal.	freq	72	60	0	0	0	4.54	5.00	.499
		%	54.5	45.5	0	0	0			

As indicated in table 4.4 the extent of managers commitment to work together with other managers' and support everyone to work together to achieve enterprises goal is about 4.54 mean value, level of sharing sales forecast, production plan, production progress and stock

level with their purchasing and marketing department (or with anyone involved in purchasing and sales activity) is about 3.90 mean value, extent of communications between different departments regarding a new product or process development program and other technical information like production, quality, design, process and delivery with each other quickly is about 3.81 mean value. The three dimensions of internal operation management are relatively on a good level and the remaining dimensions; level of collaboration with in all departments in your enterprise with the enterprise's development program(s) and extent of sharing manufacturing enterprise mission, vision, goal and organizational culture with everyone in the enterprise is relatively moderate and have the mean value of 3.54 and 3.0 respectively. The overall mean value is 3.76 which showed the level of internal operation management is approaching to good but it also need additional enhancement. Each leather products manufacturing enterprise has their own supplier, production style and individual customer, this might help each manufacturing enterprises to generate income and also these may need committed top managers of each manufacturing enterprises for taking their management's task (like planning, coordinating, controlling, market assessment etc.), due to this more expected as a manufacturing enterprise.

4.2.5 Analysis and interpretation of Using and adapting technology

The implementation of IT allows companies to increase communication and coordination of various value adding activities with their partners and between functions within their own operations.

Table 4.5: Summary of Respondent's view about the level of Using and adapting technology of leather products manufacturing enterprises (Source: survey output)

5. Using and adapting technology										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Aver age (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
5.1	Degree of stable procurement through network with major supplier	freq	0	36	84	12	0	3.18	3.00	.577
		%	0	27.3	63.6	9.1	0			
5.2	The level of IT-based order receiving from major customers	freq	0	0	48	84	0	2.36	2.00	.482
		%	0	0	36.4	63.6	0			

5.3	The level of adapting technology and machinery that help for operation and advertising for market	freq	0	24	48	60	0	2.72	2.00	.752
		%	0	18.2	36.4	45.5	0			

Table 4.5 above indicates, three statements are identified by the researcher for the using and adapting technology for information sharing practices of the manufacturing enterprise to measure current performance. To measure the current practice the researcher used the mean value of each statements and group mean that can take a broad assessment for the using and adapting technology for information practice of the leather products manufacturing enterprises with its supply chain partners. The manufacturing enterprises has with over all three statements it has poor performance. We saw it one by one; Degree of stable procurement through network with major supplier, the level of IT-based order receiving from major customers, the level of adapting technology and machinery that help for operation and product advertisement to the market mean value is 3.18, 2.36 and 2.72 respectively are the variables that contributed to low group mean has mean value of 2.75. Therefore, this can show that leather products manufacturing enterprises is not making market linkage system and other related process that needs technology to produce its products and share relevant information which will definitely reduce the competitiveness of the manufacturing enterprises and this externally highly influencing the manufacturing enterprises supply chain performance management. Based on the data collected both in questionnaire and interview they only use phone and need physical contact for taking order. So the level of using and adapting technology for information practices result, the existing System of the case enterprises supply chain cannot support effective SCM accomplishment for their competitiveness.

4.2.6 Analysis and interpretation of Training practice

Successful implementation of SCM concept largely depends on human assets of organizations (Bowersox et al., 2000). Managing supply chain actually involves the interaction between human behavior, IT, and infrastructure.

Table 4.6: Summary of Respondent's view about level of Training practice of leather products manufacturing enterprises (Source: survey output)

6. Training practice										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Average (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
6.1	Adequacy of training and development for management	freq	0	36	84	12	0	3.18	3.00	.577
		%	0	27.3	63.6	9.1	0			
6.2	Level of Employees training in supply chain management concepts	freq	0	0	48	84	0	2.36	2.00	.482
		%	0	0	36.4	63.6	0			
6.3	Provision of diversified skill training to employees	freq	0	24	48	60	0	2.72	2.00	.752
		%	0	18.2	36.4	45.5	0			
6.4	Capabilities of employees to utilize the training in effective ways	freq	24	24	84	0	0	3.54	3.00	.785
		%	18.2	18.2	63.6	0	0			
6.5	Level of providing training to downstream supply chain members	freq	0	12	96	24	0	2.90	3.00	.516
		%	0	9.1	72.7	18.2	0			
6.6	Level of providing training to upstream supply chain members	freq	0	48	84	0	0	3.36	3.00	.482
		%	0	36.4	63.6	0	0			

As indicated in table 4.6 the enterprises' have mean value 3.54 placed at Capabilities of employees to utilize the information in effective ways and it's the highest mark among other dimensions of the training practices. The next mark is Level of providing training to upstream supply chain members, its mean value is 3.36. This shows that the employee who works in manufacturing enterprises may have getting a chance they are ready to apply when we compare with other dimensions of training practices.

The remaining dimensions like; Adequacy of training and development for management, Level of Employees training in supply chain management concepts , Provision of diversified skill training to employees, Level of providing training to downstream supply chain members scored mean value 3.18, 2.36, 2.72 and 2.90 respectively. So from the above dimension Level of Employees training in supply chain management concepts score minimum or very poor value, this indicate the that leather products manufacturing enterprises employee have no concept about SCM. So the level of training practice result, the existing System of the manufacturing enterprises employee performance can support moderately effective SCM accomplishment for their competitiveness because they have over all mean value of 3.01.

4.2.7 Analysis and interpretation on government support

The level of government support for leather products manufacturing enterprise is about mean value of 1.81 and it indicates the government support is very less. Respondents were answered that the government support by cooperating supply chain management towards their enterprise is poor and very poor in order to be competitive with current market. Each respondents recommended more than two supports that aids them to improve their competitiveness. The respondents were answered that the government support by cooperating supply chain management towards your enterprise to be competitive with current market and need is poor and very poor and the respondents recommended some supports that aids them to improve their competitiveness; from survey output 80 respondents for Finance, 60 respondents for business or technical Training, 40 respondents for Business development service, 48 respondents for new process Technology, 120 respondents for Work premises, exhibition and sales outlet, 55 respondents for Market linkage,89 respondents for Raw material supply/ raw material supply linkage. NB. Respondents were select more than one support. So the overall analysis result indicate without government support it's difficult to achieve their competitiveness.

Table 4.7: Summary of Respondent's view about the level of government support to leather products manufacturing enterprises (Source: survey output)

7. Government support										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Average (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
7.1	Governments support your enterprise to have competitive with current market and need.	freq	0	0	24	60	48	1.81	2.00	.718
		%	0	0	18.2	45.5	36.4			

4.2.8 Analysis and interpretation of applying competitive priority to customer value by accepting market requirements

Competitive priorities as a set of goals for manufacturing which are used to align the business strategy and market requirements with the manufacturing task.

Table 4.8: Summary of Respondent's view about level applying competitive priority to customer value by accepting market requirements of leather products manufacturing enterprises (Source: survey output)

8. level applying competitive priority to customer value by accepting market requirements										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Average (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
8.1	Our on-time delivery performance is better than our competitors	freq	0	36	84	12	0	3.18	3.00	.577
		%	0	27.3	63.6	9.1	0			
8.2	Our product and service quality is better than our competitors	freq	0	0	48	84	0	2.36	2.00	.482
		%	0	0	36.4	63.6	0			
8.3	Our operating costs are lower than our competitors	freq	0	24	48	60	0	2.72	2.00	.752
		%	0	18.2	36.4	45.5	0			
8.4	Our firm's ability to adapt changes in the business environment quickly (Flexibility)	freq	24	24	84	0	0	3.54	3.00	.785
		%	18.2	18.2	63.6	0	0			
8.5	Customers are very satisfied with our supply chain capabilities	freq	0	12	96	24	0	2.90	3.00	.516
		%	0	9.1	72.7	18.2	0			
8.6	Level of creating innovative idea and applying market need base design change	freq	0	48	84	0	0	3.36	3.00	.482
		%	0	36.4	63.6	0	0			

Table 4.8 above indicates, six statements are identified by the researcher for the level of applying competitive priority to customer value of the manufacturing enterprises to measure current performance. To measure the current level the researcher used the mean value of each statements and group mean that can take a wide view for the information sharing of the leather products manufacturing enterprises. According to table 4.8 shown above, the respondents have rated the manufacturing enterprises as medium for its supply chain management performance to improve their competitiveness with mean score of 3.01. Regards to this, level on-time delivery performance in comparison with their competitor's, level of product and service quality in comparison with their competitors, extent of operating costs in

comparison with their competitors, their firm's ability to adapt changes in the business environment quickly (Flexibility), satisfaction level of Customers with their supply chain capabilities, Level of creating innovative idea and applying market need base design change have the mean value of 3.18, 2.36, 2.72, 3.54, 2.90 and 3.36 respectively. With regard to level of product and service quality in comparison with their competitors and extent of operating costs in comparison with their competitors, the enterprise performance was poor performance and the other three elements have shown medium performance of the manufacturing enterprises. This shows a lot assignment and continuous improvement for the leather products manufacturing enterprise on the level of applying competitive priority to customer value by accepting market requirements.

4.2.9 Analysis and interpretation on Challenges (uncertainty) for the Implementation of supply chain management

According to conceptual frameworks developed for this study is challenges of SCM that consists of uncertainties and bullwhip effect. To examine these, four variables were used.

Table 4.9: Summary of Respondent's view about level of Challenges of SCM Implementation of leather products manufacturing enterprises (Source: survey output)

9. Challenges of SCM Implementation										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Aver age (3)**	**Poor (2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
9.1	Manufacturing uncertainty like, breakdown of machineries, interruption of power, poor process design.	freq	0	24	72	36	0	2.90	3.00	.670
		%	0	18.2	54.5	27.3	0			
9.2	Irregular orders from inconsistent customers (Demand uncertainty)	freq	0	36	84	12	0	3.18	3.00	.577
		%	0	27.3	63.6	9.1	0			
9.3	Supplier inability to carry out the promise (supply uncertainty)	freq	0	0	48	84	0	2.36	2.00	.482
		%	0	0	36.4	63.6	0			
9.4	Customer demand fluctuation due to inaccurate information sharing (bullwhip effect)	freq	0	24	48	60	0	2.72	2.00	.752
		%	0	18.2	36.4	45.5	0			

As indicated in table 4.9 above, Irregular orders from inconsistent customers (Demand uncertainty) account maximum mean value of 3.18 implying that the manufacturing enterprises is challenged from Irregular orders from inconsistent customers. The rest three have low challenges (Manufacturing uncertainty like, breakdown of machineries, interruption of power, poor process design, Supplier inability to carry out the promise, Customer demand fluctuation due to inaccurate information sharing) have the mean value of 2.90, 2.36, and 2.72 respectively. Poor processing design that challenges the manufacturing enterprises processing activities because of lack of trained manpower. The overall challenge of SCM indicates average mean value of 2.79 meaning the manufacturing enterprises is challenged from inconsistent information sharing and other had low challenges of the manufacturing enterprises to implement SCM.

4.2.10 Analysis and interpretation of competitiveness

The competition is the generate force of any market economies. Under modern current conditions, competition is determinative for the business development, while competitiveness is the most important condition for overall business success. The area of small and medium enterprises (SMEs), having extraordinary potential for flexible adaptation to the economic circumstances in the country and changing market circumstances is of major significance for the national economic development.

Table 4.10: Summary of Respondent's view about the level of competitiveness manufacturing enterprises

10. Competitiveness										
S No	**Description**		**Very Good (5)**	**Good (4)**	**Average (3)**	**Poor(2)**	**Very poor (1)**	**mean**	**mode**	**Sta. dev**
10.1	Increasing level of your enterprises market share time to time	freq	0	0	48	84	0	2.36	2.00	0.48
		%	0	0	36.4	63.6	0			
10.2	Increasing level of your enterprises profitability time to time	freq	0	0	48	84	0	2.36	2.00	0.48
		%	0	0	36.4	63.6	0			

As indicated in table 4.10 above, increasing level of market share time to time and increasing level of profitability time to time of manufacturing enterprises having the mean value of 2.36 and 2.36 respectively. The average mean value is 2.36 (poor) this indicate manufacturing enterprises have facing great challenges on competition and also need improvements. According to interviews the reason is the way of market linkage, sales outlet and adapting current market situation according to flexible customer need which is influenced by imported fashioned products and design change this also need skilled man power for using technology for situational market need.

4.2.11 Interpretation on Annual sales and purchasing plan

No one of the enterprises have annual sales and purchasing plan. Their main reasons are lack of awareness of the necessities of this to plans for their business, inconsistent relationship with customers (they don't know their customers annual need) and to perform a planned purchase there is a financial constraint and also a supply amount variety because of customer volume need.

4.3 Correlation Analysis and result Interpretation

The correlation coefficient is usually given the symbol *r* and it ranges from -1 to +1. A correlation coefficient quite close to 0, but either positive or negative, implies little or no relationship between the two variables. A correlation coefficient close to plus 1 means a positive relationship between the two variables, with increases in one of the variables being associated with increases in the other variable. A correlation coefficient close to -1 indicates a negative relationship between two variables, with an increase in one of the variables being associated with a decrease in the other variable. (Dr. Mohamed Ahmed Zaid, 2015).

Table 4.11 shows the correlation between dependent and independent variables. The dependent variable is Competitiveness manufacturing Enterprises (COMPME) (market share and profit) and independent variables are supply chain management practice (SCMP) (Strategic customer and supplier relationship management, Internal operation management, Information sharing, Adapting and using technology, providing training), level of applying competitive priority to customer value (LACPCV) (quality, cost, delivery, flexibility, innovativeness) by understanding the market requirements, supply chain management practice

incorporation with government support (SCMIWGS) and Level of Challenges for Implementing and practicing SCM(CFIPSCM).

Table 4.11: Correlation between variables (Source: survey output)

Spearman's rho		COMPME	SCMP	LACPCV	SCMIWGS	CFIPSCM
COMPME	Correlation coefficient	1.000				
SCMP	Correlation Coefficient	.839**	1.000			
LACPCV	Correlation Coefficient	.882**	.740**	1.000		
SCMIWGS	Correlation Coefficient	.839**	1.000**	.740**	1.000	
CFIPSCM	Correlation Coefficient	.647**	.705**	.874**	.705**	1.000
**.correlation is significant at the 0.01 level (2-tailed).						

As indicated in table 4.11 all the independent variables are positively and significantly correlated with competitiveness of manufacturing enterprises and even if the level of correlation varies from one another.

- **Correlation between SCMP and COMPME**

SCMP has a positive and significant relation with COMPME (.839**, P<.001). This is an indication that having/enhancing spread on supply chain management practice on small and medium leather products manufacturing enterprises will improve their competitiveness (with market share and profit). Managing Supply chain is a basic condition in every business therefore strengthens and managing relation with supplier and customers, smooth and clear flow of information, giving training for employee to encourage their skill and adapting technology and managing internal operation will assist to improve the overall business performance and its competitiveness.

- **Correlation between LACPCV and COMPME**

LACPCV has also a positive impact and significant relation to improve competitiveness (.882**, p<.001). Applying competitive priority to customer value (quality, cost, delivery, flexibility, innovativeness) by understanding the market requirements is used to align the business strategy and market requirements with the manufacturing task, this encourages their competitiveness. Focusing on customer value （on-time delivery performance, product and service quality, adapt changes in the business environment, minimum cost, creating

innovative idea and customer satisfaction) is become a mandatory criteria in order to survive and to be competitive in a business environment.

- **Correlation between SCMPIWGS and COMPME**

The relation between SCMIWGS and COMPME has also positive and strong relation (.839**, p<.001). Supply chain management practice incorporation with government support has great impact on manufacturing enterprises. Supply chain management deals with the management of materials, information and financial flows in a network consisting of suppliers, Manufacturers, distributors and customers. The manufacturing enterprises have in over all the level of implementing SCMP have medium level this results shows one of the challenges for improving their competitiveness and Clearly the government support contributes a lot for manufacturing enterprises' competitiveness but the difficulty is selection of proper support, each manufacturing enterprise have no long term supplier and customer relationship because they get raw material from different suppliers from Merkato Addis Ababa consequently this need government cooperation to avail the raw material in Hawassa city and the interviewees also mentioned that they need more support from the government. And the result proofs that low level Supply chain management practice incorporation with government support has great impact on manufacturing enterprises.

- **Correlation between CFIPSCM and COMPME**

Here also there relation between CFIPSCM and COMPME is positive and significant (.674**, P<.001). From the source interviewees most SCM related problems mainly occur in small and medium leather products manufacturing enterprises are uncertainties and an inability to co-ordinate several activities and partners. Under this identified three major sources of uncertainty: manufacturing uncertainty (Machine breakdowns that lead to the postponement of production, poor process design that causes a bottleneck in production of poor quality, are the manufacturing variables accounting for the late delivery and reduction in customer satisfaction), demand uncertainty (if uncertainty happen on those questions: what will my customers order?, How many products should we have in stock? And will the supplier deliver the requested goods on time and according to the demanded specifications? Which leads to inefficient processing and non-value adding activities. Irregular orders from inconsistent

customers may easily mislead manufacturers to make wrong forecasts, which cause excess inventory or insufficient supply) and supply 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, and customers' general confidence. from the interviewees almost all manufacturing enterprises have no regular order to their supplier because of irregular customer order and have no long term customer which buy their products due to this if they want, they go to Addis Ababa and buy the raw materials). And the result evidences show that major sources of uncertainty has great impact on small and medium leather products manufacturing enterprises.

4.4 Regression Analysis and Interpretation of result

Regression analysis is one of the most commonly used statistical techniques in social and behavioral sciences as well as in physical sciences which involves identifying and evaluating the relationship between a dependent variable and one or more independent variables, which are also called predictor or explanatory variables. It is particularly useful for assess and adjusting for confounding. Model of the relationship is hypothesized and estimates of the parameter values are used to develop an estimated regression equation. Various tests are then employed to determine if the model is satisfactory. If the model is deemed satisfactory, the estimated regression equation can be used to predict the value of the dependent variable given values for the independent variables (Ahmed Zaid, 2015).

Linear regression explores relationships that can be readily described by straight lines or their generalization to many dimensions. A surprisingly large number of problems can be solved by linear regression, and even more by means of transformation of the original variables that result in linear relationships among the transformed variables. When there is a single continuous dependent variable and a single independent variable, the analysis is called a simple linear regression analysis. This analysis assumes that there is a linear association between the two variables. Multiple regression is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable (Ahmed Zaid, 2015).

Independent variables are characteristics that can be measured directly; these variables are also called predictor or explanatory variables used to predict or to explain the behavior of the dependent variable. Dependent variable is a characteristic whose value depends on the values of independent variables (Ahmed Zaid, 2015).

So for this study Multiple Linear Regression Analysis is used. There are three major uses for Multiple Linear Regression Analysis: causal analysis, forecasting an effect, and trend forecasting. Other than correlation analysis, which focuses on the strength of the relationship between two or more variables, regression analysis assumes a dependence or causal relationship between one or more independent and one dependent variable.

Firstly, it might be used to identify the strength of the effect that the independent variables have on a dependent variable. Secondly, it can be used to forecast effects or impacts of changes. That is to say, multiple linear regression analysis helps us to understand how much the dependent variable will change when we change the independent variables. Thirdly, multiple linear regression analysis predicts trends and future values.

The hypotheses ***H1, H2, H3 and H4,*** also tested with regression analysis. The analysis result is shown below. (Source: survey output)

Variables Entered / Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	SCMP, SCMPIWGS[b], CSCMI, ACPTC	.	Enter
a. Dependent Variable: COMPTITIVENESS			
b. All requested variables entered.			

Here the dependent variable is Competitiveness manufacturing Enterprises (COMPME) and independent variables are supply chain management practice (SCMP), supply chain management practice incorporation with government support (SCMIWGS), Level of Challenges for Implementing and practicing SCM (CFIPSCM) and Level of applying competitive priority to customer value (LACPCV) by understanding the market requirements, And both are accepted for the analysis.

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.998[a]	.996	.996	.03149	2.475
a. Predictors: (Constant), SCMP, SCMPIWGS, CSCMI, ACPTC					
b. Dependent Variable: COMPTITIVENESS					

Source: survey output

The outputs of above table shows the model summary and overall fit statistics. We find that the adjusted R^2 of our model is 0.996 with the R^2 = .996. This means that the multiple linear regression of independent variables (SCMP, SCMPIWGS, CSCMI and ACPTC) explains 99.6% of the variance in the competitiveness. The Durbin -Watson d = 2.475 which is between the two critical values of $1.5 < d < 2.5$.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.419	4	7.605	7666.970	.000[b]
	Residual	.126	127	.001		
	Total	30.545	131			
a. Dependent Variable: COMPTITIVENESS						
b. Predictors: (Constant), ACPTC, CSCMI, SCMP, SCMPIWGS						

Source: survey output

The above table is the F-test, or ANOVA the F value is 7666.970 which is significant with p <.001. The F-Test is the test of significance of the multiple linear regression. The F-test has the null hypothesis that there is no linear relationship between the variables (in other words $R^2=0$). The F-test of or Model 1 is highly significant, thus we can assume that there is a linear relationship between the variables in our model.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.612	.059		-10.305	.000
	SCMP	4.138	.326	4.248	12.712	.000
	SCMPIWGS	-4.201	.349	-4.067	-12.045	.000
	CSCMI	-.331	.013	-.357	-24.644	.000
	ACPTC	1.308	.025	1.118	52.252	.000

a. Dependent Variable: COMPTITIVENESS

Source: survey output

As indicated in the output result the coefficients of four predictor variables (SCMP, SCMPIWGS, CSCMI and ACPTCCI) are statistically significant at less than one percent (P<.001); therefore the hypothesis generated with this factors will be accepted.

In summary, a possible write up could read as follows:

The investigated relationship between the competitiveness achieved on standardized tests and the four independent variables. The multiple linear regression analysis found that independent variables have relevant explanatory power. Together the estimated regression model (Competitiveness = -.612 + 4.248*SCMP - 4.067*SCMPIWGS -.357*CSCMI + 1.118*ACPTC) explains 99.6% of the variance in the competitiveness with an adjusted R^2 of 99.6%. The regression model is highly significant with $p < 0.001$ and $F = 7666.970$. The standard error of the estimate is .03149. Thus we can not only show a linear relationship between SCMP (positive), SCMPIWGS (negative) but has an impact on the enterprises' competitiveness as indicated in the correlation analysis, CSCMI (negative but this indicate positive impact on competitiveness), and ACPTC (positive), we can also conclude that for every additional Competitiveness achieved the Competitiveness will increase by approximately 4.2(SCMP), decrease by 4.0(SCMPIWGS) but this one has positive significant impact on correlation, decrease by 0.3(CSCMI) and increased by 1.1(ACPTC).

4.5 Observation Analysis

The Leather Sector presents many opportunities to the Ethiopian Economy ranging from employment generation, export earnings, contribution to Government revenue and other

multiplier contributions to the rest of the Economy. The growth of the Leather Sector will contribute significantly to the transformation of the Ethiopian economy by creating job, poverty reduction, and local raw material utilization.

Accordingly in Hawassa city there are ten small and one medium leather product manufacturing enterprises, the manufacturing enterprises have totally 132 workers on different departments. In the following sections researcher have further discussed of SMLPMEs in which operation is being used.

Inventory management

Inventory managements refers to the process of ordering, storing and using a company's inventory. This includes the management of raw materials, components and finished products, as well as warehousing and processing such items. Regarding to this on SMLPMEs input materials purchasing process based on the market situation, extent of customers need on their finished product. Most of their customers are individuals they get single products from the manufacturing enterprise and from some retailer because of weak position on Finding new markets and developing marketing strategies in accessing new markets. If they want input material they get simply from supplier because of their amount and size due to this, they don't want high storage of input material due to problem of manufacturing area size. On most of SMLPMEs high storage of final products on their production area because of their market finding system. The system is highly depend on sellout area, most of the manufacturing enterprises need support from the government to get their own shopping area, this is also one of the challenge SMLPMEs but in opposite to this current world business need using technology specially internet, they don't try to promote and sell their product by using online shopping. This is also one of the problem for their competitiveness.

Manufacturing process

Leather products manufacturing process involves the following sub processes:

Figure 4.1: Manufacturing process of SMLPMEs (Source: Survey observation)

1. Input raw materials used

The raw materials used by the leather products manufacturing enterprises are very common those are leather (finished leather), Lining (Polyester), lining fabric, lining paper, Interlining (Non-woven), Thread (Leather), Wad, Push Button, Cording, Stopper, Zipper, Glue, locks, buckles and cardboard.

2. Cardboard Pattern

First of all the card board is cut into different parts. These parts are joined into a prototype of the leather products. This helps in estimating the amount of leather required for the leather product's and gives an abstract overview of the end product.

3. Leather Cutting

After the prototype is approved, the leather is cut into identical pieces as that of step 2.

4. Stitching & Lining

These pieces of leather are than stitched together neatly. The inside is accustomed with the lining according to product type requirements. Requirements for zipping or locking are also fulfilled in this step.

5. Waxing & Polishing

The leather products are than waxed and polished into their desired color & look.

6. Quality Check

The quality control department thoroughly examines for minor defects. If needed the leather products is sent back to the production department for minor adjustments.

7. Product

The major products of the manufacturing enterprises are Shoes, jackets, belts, bags, gun holders, wallet, purse, Key chains, Bags for notebooks, equipment needed for beneficiaries are the products of the manufacturing enterprises.

Figure 4.2: Photos during observation on SMLPMEs

Supplier relationship

The establishment of a relationship and the formation of collaboration as well as co-operation with supplier are essential in the effective management of the supply chain. From researcher survey observation of SMLPMEs the level of relationship with vendor have a gap on their relation , and also they have great problem information sharing and co-operation about each other's inventory, sales forecasting, production planning, and order tracking and delivery status. In order to proven relationship the Internet has an important tool in bringing suppliers and buyers together. Internet can help firms to improve their relationships with vendors. The use of the Internet in several areas of their SCM in order to respond to an ever increasing competition is to poor extent. Further integration of the Internet in these areas can prove the efficiency of the operations of the SCM and improve their competition. Finished leather and other hand tool Materials suppliers are from Merkato Addis Ababa, which the only option for small and medium leather products manufacturing enterprises in the Hawassa city, where they

can buy directly. This have great impact on their competition and profitability of manufacturing enterprises because they buy directly from the supplier therefore this system need extra finance and time consuming.

Customer service management process

Customer Relationship Management concerns the relationship between the organization and its customers. Customer service is the source of customer information. It also provides the customer with real time information on scheduling and product availability through boundaries with the company's production and distribution operations. Successful organizations use the following steps to build customer relationships:

- ♣ determine mutually satisfying goals for organization and customer
- ♣ establish and maintain customer rapport
- ♣ produce positive feelings in the organization and the customers

Regarding to this the researcher found that most SMLPMEs have the gap on customer service management: on mutually satisfying goal of end customer, the information exchanges are still limited to traditional one like telephone and physical contact, the way on how to increase market linkage, product availability, had a little interaction to the improve the product and offering a variety of products with better quality and cost. Therefore the relationship with customers has a strategic issue for manufacturing enterprises. The interviewed senior worker from each department need to change their relationship with customers and understand their customers more for market success and competitiveness.

Promotion and marketing strategy

Small and medium leather product manufacturing enterprises are utilizing a range of different promotion strategies, including mobile-selling (walking with sample products to promote them to potential customers), selling through other established retailers, displaying products at the shop, sometimes also participate at the market bazaars. During the market assessment manufacturing enterprises were also supported to analyses their main competitors, their strengths and weaknesses, and their marketing strategies, to come up with ideas on how they can be more effective at promotion and marketing of their products.

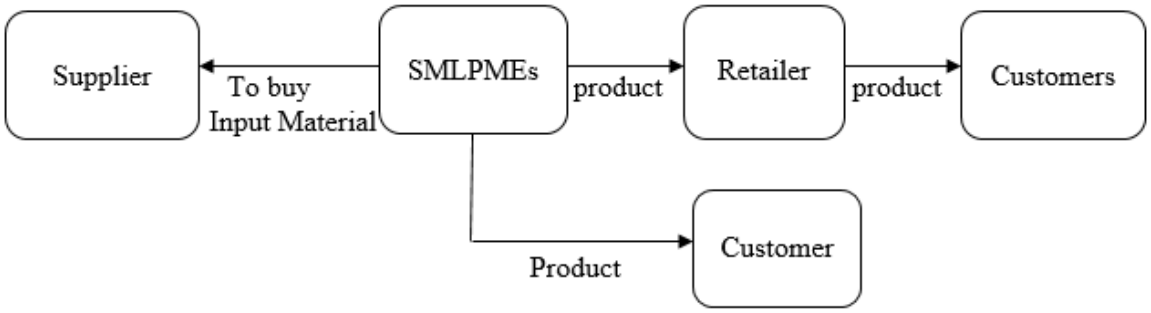


Figure 4.3: Supply chain Process flow of SMLPMEs (Source: SMLPMEs)

4.6 Interview Analysis

The interview results from respondent signify that the suppliers have no capacity problem, and they get the finished skin leather and other input material from supplier but the problem is the customer demand fluctuation from time to time and the way of product linkage with market. All respondent agreed that establishing strategic or long term relationship with suppliers is important to manufacturing enterprises because to allow for ideas and feedback between those, for the improvements of operations, stream lining the supply chain and reducing costs in addition to improving customer services. But in practice all SMLPMEs needs additional work. According to have training program & benchmark in order to make employees & managers competent, most of the manufacturing enterprises share their work practice each other and from modeled SMLPMEs with the schedule and support of government administrations. From the interview results all employees are committed for work and learning. The internal operation practices of like extent of manager commitment to work together with all workers, support everyone to work together to achieve manufacturing enterprises goal, sharing sales forecast, production plan, production progress and stock level with their all department is good and have organized in the way to facilitate smooth internal operation practice. The problems faced by the leather products manufacturing enterprises currently (related to supply chain management) the supplier and customer relationship is not well developed, also challenges on market information the only way of product advertising applied on SMLPMEs are walking with sample products to promote them to potential customers, selling through other established retailers, displaying products at the shop, sometimes also participate at the market bazaars. From interview response SMLPMEs none of them are used online shopping this may not need sellout place because most of them

recommend for sellout area. The problems on the demand side of the leather products manufacturing enterprises are demand fluctuation, the way of order and information sharing. And also most of the respondent agreed on products accessible to their customers both in quantity and quality.

4.7 Summary of Findings

According to the analysis and interpretation done in the previous section, summary of the findings is presented as follows.

- ♣ The manufacturing enterprises have a poor level competitiveness in terms of Increasing the level of market share time to time and Increasing level of profitability time to time
- ♣ The manufacturing Enterprises have a supply chain problem, the supply problem is a critical issue. Each enterprises buy raw material at different time with respect to their market and customer demand on their products this have great impact on their relationship and managing the relationship between supplier and leather products manufacturing enterprises in overall dimension's is moderate and this actually affects their competitiveness.
- ♣ According to one of the dimension of supplier relationship managements, the level of transparent information about each other's inventory, sales forecasting, production planning, order tracking and delivery status with supplier is placed at 2.45 mean value, this indicates, managing the relationship between enterprises and their suppliers has not pass beyond seller and buyer relation, and also they have poor transparent information about each other's inventory, sales forecasting, production planning, order tracking, and delivery status.
- ♣ From the survey source, the group mean value of leather products manufacturing enterprises relationship and customers is 3.45 which is average or/and moderate level of relationship with respect to the overall measures taken into consideration. Because most enterprises have no sales out late and even if Work sites is difficult to contact with their customer due to this they deliver their products for different customers and also to get market linkage with different NGOs require support of Department of

Trade and Industry Office and small and medium enterprise administration office, which is responsible for majority of tasks related to SMEs from establishment, providing working and selling premises, market linkage support. This results and survey analysis clearly confirm that the manufacturing enterprise do have customer relationship problem and needs improvements.

- The major practices of supply chain management that affect the competitiveness of SMLPMEs is internal operation managements. From this the three dimensions of internal operation management are relatively on a good level: managers commitment to work together and to achieve enterprises goal, level of sharing sales forecast, production plan, production progress and stock level with their purchasing and marketing department, extent of communications between different departments regarding a new product or process development program and other technical information like production, quality, design, process and delivery. and the remaining dimensions; level of collaboration with in all departments in your enterprise with the enterprise's development program(s) and extent of sharing manufacturing enterprise mission, vision, goal and organizational culture with everyone in the enterprise is relatively. The overall mean value is 3.76 which showed the level of internal operation management of SMLPMEs is approaching to good but it also need additional enhancement.
- From the descriptive statistics the information sharing practice on the leather products manufacturing enterprise respondent's agreement level shown the information sharing practice performance level exist in medium level having over all mean value of 3.41. Accordingly this area also need improvement to be competitive with current market and this highly influencing the manufacturing enterprises supply chain performance.
- Successful implementation of SCM concept largely depends on human assets of organizations. but from respondent answer the Level of Employees training in supply chain management concepts score minimum or very poor value, this indicate the that leather products manufacturing enterprises employee have no concept about SCM. the overall dimensions level of training practice result, the existing System of the SMLPMEs employee performance can support moderately the effective SCM

accomplishment for their competitiveness because they have over all mean value of 3.01.

- ♣ Using and adapting technology is a basic tool in the supply chain managements but the level of using and adapting technology for information practices result is poor, therefore the existing System of the small and medium leather products manufacturing enterprises supply chain can have minimum support for effective SCM accomplishment and for their competitiveness.
- ♣ Competitive priorities (quality, cost, delivery, flexibility, innovativeness) as a set of goals for manufacturing sector which are used to align the business strategy and market requirements. According to this the analysis have rated the leather products manufacturing enterprises as poor for its supply chain management performance to improve their competitiveness with mean score of 2.66. This shows a lot assignment and continuous improvement needed from the leather products manufacturing enterprise.
- ♣ From the statistical analysis results the overall existing challenge of SCM indicates average mean value of 2.79 meaning the manufacturing enterprises is challenged from inconsistent information sharing and other had low challenges of the manufacturing enterprises to implement SCM.
- ♣ All the independent variables (SCMP, SCMPIWGS, CSCMI and ACPTCCI) are positively and significantly correlated with dependent variable (SMLPMEs Competitiveness) with a significant level of less than 1%. Even if the correlation is positive and significant the significance level varies from variable to variable and this is proven by the regression analysis.
- ♣ As per the regression analysis output result the coefficients of four predictor variables (SCMP, SCMPIWGS, CSCMI and ACPTCCI) are statistically significant at less than one percent ($P<.001$). Therefore this factors could be accepted.
- ♣ The level of government support for leather products manufacturing enterprise is about mean value of 1.81 and this indicates the government support is very less. Respondents were answered that the government support by cooperating supply chain management towards their enterprise is poor and very poor in order to be competitive with current

market. Each respondents recommended more than two supports that aids them to improve their competitiveness.

- ♣ Most of the enterprises wants continuous government's support and on wrong way of understanding most of them relate their problem with government and even missed their responsibility regarding to SCM for the benefit of improving their competitiveness.
- ♣ The general finding shows that, the SMLPMEs competitiveness rate by using effective SCM is poor when it's compared with the present market need and highly competitive business environment.

CHAPTER FIVE
PROPOSED FRAMEWORK

5.1 Introduction

The previous chapter discussed the response of the field survey related to this research. After conducting intensive literature review the next step was data collection through questionnaire, interview and observation; then all the collected data was analyzed and interpreted. This chapter aims at proposed an adoptable SCM framework. The objective of the proposed framework is to help the SMEs to eliminate or reduce the gap with in supply chain and thus improve the competitiveness of small and medium leather products manufacturing enterprises. The framework was proposed based on literature review, other works in the same field, from the ground of supply chain position of SMLPMEs and the results of the field work study (survey) analysis clearly shows.

The current dynamic business environment is characterized by high complexity and severer competition mainly because of higher levels of manufacturing outsourcing, new technologies, and shorter product life cycles due to rapidly changing customer preferences. Supply Chain Continuous Improvement initiative emphasizes the creation of teams of suppliers, manufacturers and retail customers who share information to improve the performance and effectiveness of the whole chain and improve competitiveness. Supply Chain Continuous Improvement initiative enables the various links of the entire supply chain to work together in response to changing consumer needs and trends.

To improve the supply chain competence of small and medium leather products manufacturing enterprises in a dynamic market, a proposed SCM framework model that is believed to improve their competitiveness

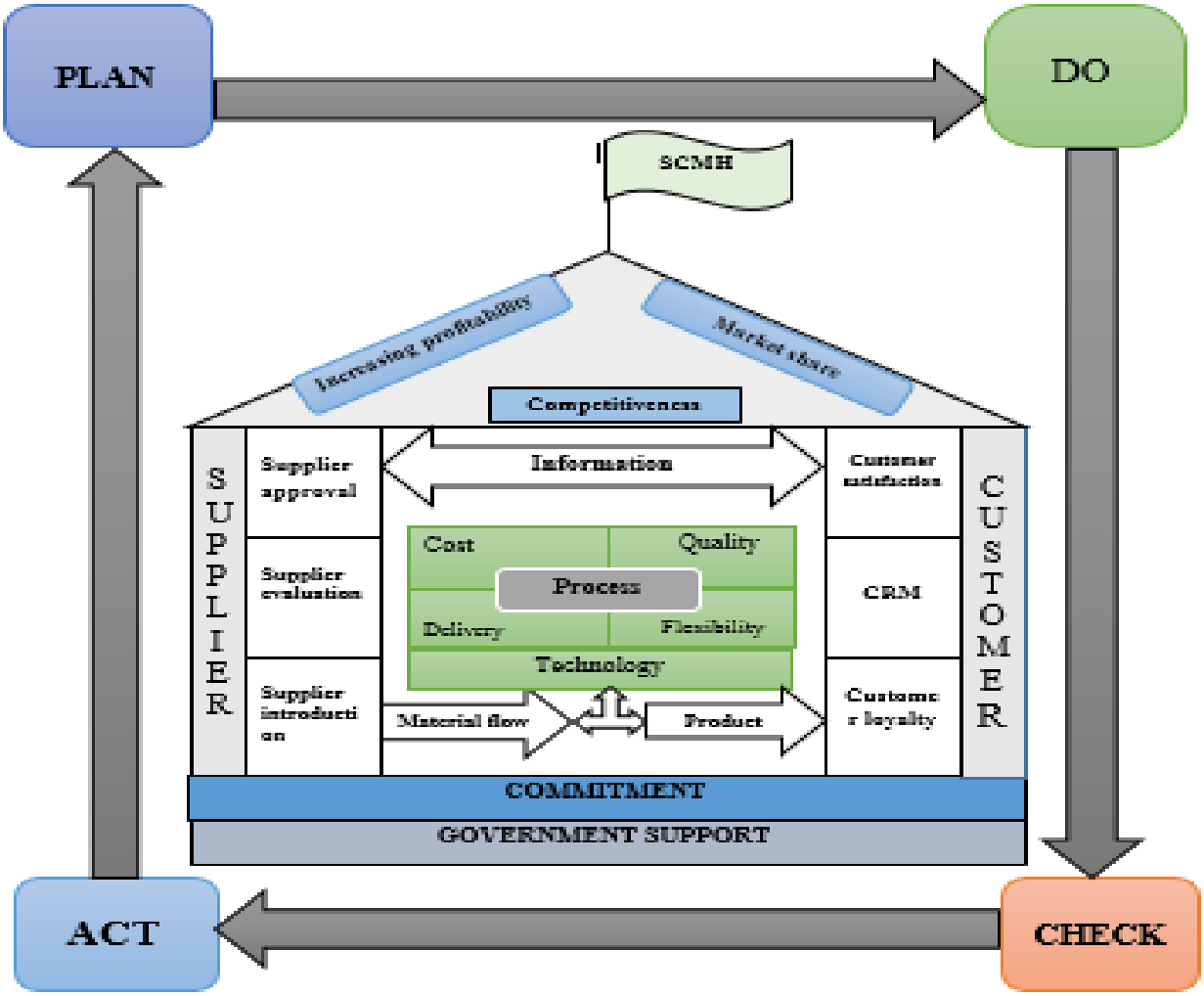


Figure 5.1: Proposed Supply Chain Management House Framework Model

5.2 Model description

The components of the proposed framework model are now described here under in detail. It starts with framework foundations, framework body followed by framework roof. Finally, the framework boundary is discussed.

1. Framework Model Foundation

The framework model foundation consists of two blocks. These are management commitment and the government support. The following section will discuss in detail about blocks.

Commitment

The top management of different supply chain members should, together, set directions for the operation of the supply chain and create a customer orientation, clear and visible values and high expectations for the supply chain. The top management should commit themselves to the development of the entire supply chain and should encourage participation, learning, innovation and creativity by all supply chain members. The top management should also commit themselves to maintaining and sustaining the relationship among the supply chain partners. The process of a quality values for the whole chain and the forming of cooperative goals among supply chain members are important tasks of the top management of each member in a supply chain.

For successful new management approach, the leadership must translate its commitment into a set of actions. These actions should be aimed at enhancing the ability to:

- ♣ compile and effectively analyze relevant information essential to the manufacturing enterprises (customer focus and supplier quality management);
- ♣ collect and make a better use of information flow between supply chain partners); and
- ♣ Ensure better application of manufacturing, and information technology for better chain performance.

Therefore, starting from material sourcing to delivering the products to the end users, the supply chain management practice (SCM) approach supported by management commitment can be effectively implemented in a manufacturing sector for achieving business excellence and competitiveness in a current market place.

Government Support

Government plays great role in the administration of small and medium enterprises in general. But from the statistical analysis the level of support is very poor which affect their competitiveness. The government provide different supports for enterprises their support decrease when they become small and medium enterprise because of most of the time government focus on supporting at micro level enterprises, and these SMEs face a lot of challenge getting advanced training, business development service, Financial support: loan and machine lease, technology transfer, customized training, Market linkage, shop outlet, raw

material supply linkage and networking with different NGO and government institution as a customer in order to increase their market share and to increase their products user. So the government have great role for leather products manufacturing enterprises to be competitive with current business by supporting above listed challenges that they faced. Therefore proposed methodical tool like supply chain management based on their current real problem for these small and medium leather products manufacturing enterprises will helps them by clearly showing what are basic support that they want from the government for their sustainability and competitiveness.

2. Framework Model Body

Supply chain management practices

Supply chain management in SMEs is an approach that helps the manufacturing enterprises to function in a more agile and cost effective manner by integrating the processes of various partners at all three levels strategic, tactical, and operational. Even though globalization has increased pressure on some SMEs to continually reduce their prices against their quality and services, SCM can improve the performance of SMEs and increase their profitability by enhancing their ability to obtain supplies of the right quality, at the right time, and at the most favored prices. The supply chain management practices problem is a badly behaved for SMLPMEs and their level of supply chain management practice is weak affects their competitiveness (Level of Supplier relationship management, level of customer relationship management, extent of Internal operation management, level of Information sharing, level of Adapting and using technology and level of providing training.) Both the analysis result of correlation and regression also proves the impact of supply chain management practices on SMLPMEs competitiveness and it's clearly indicated on the model.

To obtain an effective result from the model, manufacturing enterprise should focus and work on effective management between customer relationship and supplier relationship, carefully work on internal operation management, Develop the custom of Using and adapting technology is revolutionizing the rules of business, IT allows the SMLPMEs to increase communication and coordination of various value adding activities with their partners and between functions within their own operation. Therefore in order to use and adapt new

technology leather products manufacturing enterprises must need a skilled man power regarding a new product or process development program and other technical information like production, quality, design, process and delivery with each other quickly. Manufacturing enterprises are supposed to enhance skills and knowledge of employees. Continuous development and skill building activities demand are sources of competent employees and to achieve manufacturing enterprises goal.

Supplier Selection

Supplier selection criteria based on qualification is used to build profiles and find the matches who build the criteria. These criteria are quality, delivery, cost, and flexibility.

Supplier Evaluation

When new suppliers are selected the process for approving the supplier based on the pre-qualification criteria are implemented. The supplier performance is evaluated by purchasing department with respect to supplier's overall performance. Evaluation includes criteria addressing the supplier's capabilities regarding Quality, Supply management, long term relationship etc.

Customer satisfaction

Customer satisfaction concerning the business relation, price, quality, delivery lead time and flexibility.

CRM (Customer Relationship Management)

CRM has a role in attracting new customers, it has a lot to do with developing closer relationships with these customers to turn them into loyal customers to the manufacturing enterprises in long term. As such, CRM might mean attracting, maintaining and enhancing customer relationships.

Process of carefully work on competitive priority to customer value

Applying competitive priority to customer value by considering market requirements also another significant component which is highly affect the manufacturing enterprises competitiveness, this also confirmed by correlation and regression analysis. Therefore, the

enterprises should focus and work on the most common competitive priorities are Quality, Cost, Delivery performance, Flexibility, Innovativeness. To be able to provide the customer with the finished products at the right time without carrying excess inventory, the suppliers also have to deliver with precision, the distributor needs to be able to identify what the customer demands and to realize the difference between delivery speed (deliver as fast as possible) and delivery precision (deliver when agreed) is important improving the performance of delivery, Focus on product quality and service quality and differentiation , lowering Operating cost and product cost with good quality than their competitors, strengthening the ability to adapt changes in the business environment quickly (Flexibility), Satisfying customers on supply chain ability, focus the right market based on the quality and price of your products, build a network with local boutiques and fashion stores to display and sale on commission base, participate in different exhibition flea market organized by government and private sector, introduction of new products and processes, applying market need base design change and do online sales with different market place in order to have long term relationship with customers.

3. Framework Model Roof

Competitiveness

In scientific publications related to the issue of enterprise competitiveness there are noticeable differences of opinion as to the nature of this concept and yet there is currently no commonly accepted definition of it. The result of this, therefore, is a great disparity of views as regards the factors, methods for its assessment and the strategies for its enhancement. Some authors reduce or limit enterprise competitiveness to its product competitiveness. A number of authors claim that what determines the very nature of enterprise competitiveness is its efficiency and effectiveness. Return on assets, return on equity and the percentage change of market share also tend to be enlisted as important indicators of enterprise competitiveness. Enterprise competitiveness is its ability through continuous renewal and improvement to create and maintain sustainable competitive advantages, leading to higher economic performance over long periods and so on.

Therefore from existing situation like their low capital, gap on distributing products, small size of manufacturing area, have no structured relation with their retailers, due to this it is difficult to be competitive in their operational performance and financial performance, instead level of market share on environment and increasing level of profitability as a factor for Hawassa city small and medium leather products manufacturing enterprises for their competitiveness. Therefore researcher used both on framework model roof.

- ♣ level of market share: A competitive supply chain in the market might be characterized by efficient use of chain resources which would lead to lower product cost, better product quality, faster response and therefore eventually higher market share and
- ♣ increasing level of profitability: Implementation of SCM practices such as customer relationship, information sharing improve manufacturing enterprise profitability because it allow manufacturing enterprises to access valuable information which will enable them to differentiate its products from the competitors, and hence sustain customer loyalty.

4. Framework Model Boundary

Continuous Improvement

Continuous improvement is a popular concept which is used universally to improve manufacturing enterprises performance and competitiveness in business life. Many companies worldwide have used the concept in their business successfully. In order to improve organization continuously, W. Edwards Deming (1950) introduced Deming Cycle or Shew chart Cycle. These concepts form the basis of the Deming's PDCA virtuous cycle of improvement: - Plan: Identify an opportunity and plan for change, Do: Implement the change on a small scale on SMLPMEs, Check: Use data to analyze the results of the change and determine whether it made a difference on SMLPMEs**,** Act**:** standardize on a permanent basis to implement on all small and medium leather products manufacturing enterprises**.** PDCA provides a framework for the improvement of a process. It can guide the entire improvement mission, or to aid in developing specific projects based on identified target Improvement areas.

Reasons for proposing a framework

The following reasons for proposing a framework to:

- ♣ show an overview and connect with a new visualization to manufacturing enterprises;
- ♣ provide valuable understandings into the manufacturing enterprises strengths and weaknesses;
- ♣ understand overall strategic position in the market place; and
- ♣ Support implementation and to improve the competitiveness.

A question, which arises then, is how one can describe a good framework that really suits the SMLPMEs. In general, the following criteria can be considered as a guide in proposing a good framework to suit the SMLPMEs characteristics

- ♣ organized and easily understood;
- ♣ simple in structure;
- ♣ having clear relations between the elements ;
- ♣ general enough to suit supply chain and competitiveness contexts;
- ♣ represent a road map for implementation;
- ♣ Implementable because this one is applicable in Saudi Arabian SMEs having same supply chain management practice gap on operation for the cause of competitiveness

Reason for not including Supply Chain Risk Management on this framework

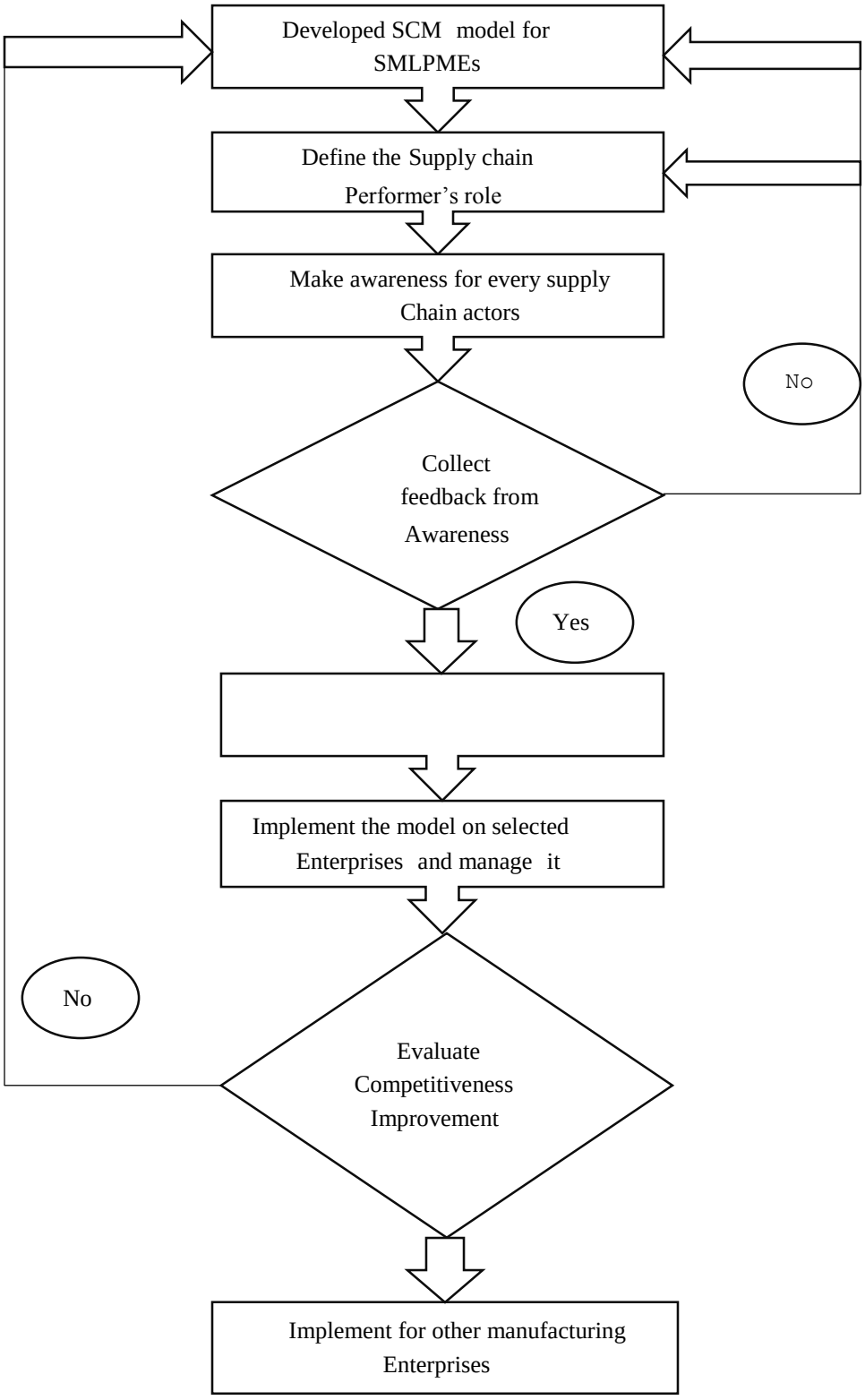
The term risk has proved challenging for academics and practitioners similar for over a century, leading to the conclusion that there are probably as many meanings as writers on the theme. The reason for this variety of descriptions reflects different academic and professional disciplines and variations in the specific settings, decision contexts and problems being addressed. Sitkin and Pablo (1992) reflect this in their generalized definition of risk as being 'the extent to which there is uncertainty about whether potentially significant. Therefore starting from this point of view uncertainty (Manufacturing uncertainty like, breakdown of machineries, interruption of power, poor process design, Irregular orders from inconsistent customers (Demand uncertainty) and Supplier inability to carry out the promise (supply uncertainty) analysis result from the questionnaire show that, minimum impact on SMLPMEs. Due to this supply chain risk management not included on this framework.

5.3 Model implementation procedure

After the development of the model there should be a way which shows how the model is implemented; so the researcher suggest some implementation procedures steps.

- The supply chain management there are so many actors, the company (enterprise), suppliers, customers, and other supportive bodies. In the case of the supportive bodies are government (Trade & Industry Offices, small and medium administration office), leather sectorial associations or NGOs etc. Therefore before implementation, the every performers role must be define. Now the supply chain management model used for mainly for SMLPMEs so the owners of this model are the leather products manufacturing enterprises but they might look some restrictions (money and expertise) during the beginning of implementation. However to solve this restrictions in advance the researcher suggests, the government to assist and evaluate the implementation till the SMLPMEs doing it by themselves.
- Make awareness about the developed model, the actor's role, the advantage and challenges of supply chain management. Doing this step will help the actors to come up in to the same agreement and understanding about the whole supply chain management practices.
- Collects feedback from the awareness creation and modify the model based on the feedback if necessary.
- Select four leather products manufacturing enterprise, arrange for training about the supply chain management, share others experience and arrange possible resources including finance.
- Implement the model on selected small and medium leather products manufacturing enterprise.
- Manage the implemented supply chain management on small and medium leather products manufacturing enterprise.

- Measure the competitiveness improvement of manufacturing enterprise; the evaluation is performed after the full implementation of all components of the model and this evaluation is performed by the government bodies.
- Evaluate the extent of improvement on their competitiveness, if it's not successful redesign the model and if it's successful then implement it for other manufacturing enterprises.



Source: own

Figure 5.2: Model Implementation procedure

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

This research aims on improving the competitiveness of small and medium leather product manufacturing enterprise through SCM and strengthening their competitive priority of customer value by considering market requirement. Generally, the small and medium leather products manufacturing enterprises position towards SCM is traditional in which there is a gap in significant indicators of SCMP. The implementation of supply chain management practices concept with government support leads the enterprises to improve their competitiveness. In addition, the findings provide further evidence for carefully working on competitive priority of customer value by considering market requirement is better for manufacturing enterprises competitiveness. Furthermore, the regression result shows that there is negative statistically significant indication on the relationship between supplier SCMPIWGS with SMLPMEs competitiveness. However, the correlation analysis and experts suggestion supports the significance of SCMPIWGS on the manufacturing enterprises competitiveness, therefore the researcher include the supply chain management incorporate with government for proposed adopted SCM framework model.

Additionally, the result shows that implementation of supply chain management practice for Small and Medium leather products manufacturing enterprises needs the hard work and commitment of manufacturing enterprises top management, employee and governments support to see the positive impact of supply chain management on manufacturing enterprises competitiveness. Therefore, manufacturing enterprises top management expected to consider supply chain management as a one of the basic concern in order to improve their competitiveness through market share and increasing the level of profit. The researcher also suggested to manufacturing enterprise top management and all employee of functional departments to focus on competitive priority of customer value to improve the competitiveness of small and medium leather products manufacturing enterprises.

6.2 Recommendation

Based on the study findings, it was confirmed that there is strong need for the implementation of SCM practices in small and medium leather products manufacturing enterprises to improve their competitiveness. Hence the researcher provided some recommendations that can easily be applicable to SMLPMEs as follows:

- ♣ SMLPMEs should involve main suppliers and customers in joint planning and problem solving activities as well as organizing continuous improvement programs and this also need thoughtful government support.
- ♣ Additionally, training programs should also be provided to all other workforce to ensure that they can put into consideration the SCM concept in greater detail, to enable them to properly implement it, since poor understand of the concept can hinder them from fully participating in the implementation SCM practices.
- ♣ It is recommended to use the proposed framework which help the SMEs to eliminate or reduce the gap with in supply chain and thus improve the competitiveness of small and medium leather products manufacturing enterprises through SCM.
- ♣ The adopted framework was proposed based on literature review, other works in the same field, and the results of the field work study. Consequently this model is proposed with the consideration of existing condition of SMLPMEs by collecting primary data from each enterprises.

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APPENDIX A

RESEARCH QUESTIONNAIRE

INSTITUTE OF TECHNOLOGY

FACULTY OF MANUFACTURING ENGINEERING

DEPARTMENT OF INDUSTRIAL ENGINEERING

MSc. IN INDUSTRIAL ENGINEERING AND LOGISTICS MANAGEMENT

Questionnaire to be distributed for leather products manufacturing Enterprises "Improving competitiveness of small and medium manufacturing enterprises through supply chain management: case of leather products manufacturing enterprise in Hawassa city**"**

Dear participants; My name is Tamirat Yohannes conducting a thesis entitled- "Improving competitiveness of small and medium manufacturing enterprises through supply chain management " for partial fulfillment of M.SC in industrial engineering and logistics management at Hawassa university institute of technology, Hawassa university. With sincerity I would like to extend my deep appreciation to your enterprise and respondents for the willingness and cooperation in undertaking this valuable research. I request your kind cooperation in answering the questions as truthfully as possible. For other questions pertaining to this study, please contact Hawassa University, Hawassa university institute of technology faculty of manufacturing engineering department of industrial engineering. The information obtained from this questionnaire will be kept confidential and will not be used for any other purposes.

NB:

- It is not necessary to write your name?
- Please try to address the entire question given below?
- for the closed ended questions use (√) mark for your choice in the given box

Thank you for your cooperation.

Name (optional): _____

Contact Address: _____

Current position in the enterprise: _____

Service year: _____

Educational background: Elementary High school Certificate Major: _____

Diploma Major: _____

Degree Major: _____

Masters Major: _____

PhD Major: _____

Others (Please specify): _____

1. General Information

This part of the questionnaire just tries to gather some general information about your Purchasing, supply, distribution and sales activities.

Name of enterprise: _____

Establishment year: _____

How Many members during establishment: _____

Number of existing members: _____

Startup capital of the enterprise: _____

Current capital of the enterprise: _____

What are your enterprise's product(s)? _____

_____

What are the main raw material/accessories and components used by your enterprise?

_____

Did your enterprise have a common raw material/accessories and component suppliers?

Yes ☐ No ☐

How many raw material/accessories and component suppliers do you have?

_____

Did your enterprise have a purchaser or purchasing department?

_____

Did you have common customer/buyer enterprises/ companies?

_____

Did your enterprise have a marketing manager or marketing department?

_____

Did your enterprise have annual sales plan?

_____

Please tick (√) the number that accurately reflects your manufacturing enterprise present supply chain management practice. (1) Very poor, (2) poor, (3) average, (4) good, (5) very good

2. Supplier relationship management

S No	Description	Very Good	Good	Avera ge	poor	Very poor
1	The level of cooperativeness in relationship with most important supplier					
2	The level of joint product planning with major suppliers					
3	Occurrences of meeting with supplier					
4	Acceptation and implementation of supplier improvement suggestions					
5	The degree to regularly solve problems jointly with suppliers					
6	You and your supplier have transparent information about each other's inventory, sales forecasting, production planning, order tracking and delivery status					
7	You have effective communications with your suppliers on production capacity, production schedule, quality consideration and new product development or design change.					
8	You have long term relationships with your suppliers					

3. Customer relationship management

S No	**Description**	**Very Good**	**Good**	**Aver age**	**poor**	**Very poor**
1	The strictness of major customers delivery fulfillment requirement					
2	Level of compliance with most important customers delivery on time requirement					

3	The level of cooperativeness in your relationship with most important customer					
4	The level of joint product planning with most important Customers					
5	A process to manage customer dissatisfaction returns					
6	The degree to regularly solve problems jointly with customers					
7	Extent of partnership with your customers by receive feedback and provide quick response to your customer about quality, delivery and service satisfaction and share technical information with each other to make joint decision if required.					
8	You have long term relationships with your customers					

4. Information sharing

S No	Description	Very Good	Good	Average	poor	Very poor
1	The level of information sharing on production and sales forecast planning with suppliers					
2	Level of information sharing on production and sales forecast with customers					
3	Quality and adequacy of information flow through the supply chain					
4	The level of information sharing across functional areas of the organization.					
5	The level of information sharing with suppliers on inventory and quality of raw material					
6	The level of trust among your firm's supply chain members					
7	The extent to share information about issues that affect our business					
8	The level of timely information exchange between us and our trading partners					

5. Internal operation management

S No	Description	Very Good	Good	Aver age	poor	Very poor
1	You have effective communications between different departments regarding a new product or process development program and other technical information like production, quality, design, process and delivery with each other quickly.					
2	All departments in your enterprise collaborate with the enterprise's development program(s).					
3	You share your sales forecast, production plan, production progress and stock level with your purchasing and marketing department (or with anyone involved in purchasing and sales activity).					
4	You share your mission, vision, goal and organizational culture with everyone in the enterprise					
5	Your managers commitment to work together with other managers' and support everyone to work together to achieve your enterprises goal.					

6. Using and adapting technology

S No	Description	Very Good	Good	Aver age	poor	Very poor
1	Degree of stable procurement through network with major supplier					
2	The level of IT-based order receiving from major customers					
3	The level of adapting technology and machinery that help for operation product advertising and market linkage					

7. Training practice

S No	Description	Very Good	Good	Aver age	poor	Very poor
1	Adequacy of training and development for management					
2	Level of Employees training in supply chain management concepts					
3	Provision of diversified skill training to employees					

4	Capabilities of employees to utilize the information in effective ways					
5	Level of providing training to downstream supply chain members					
6	Level of providing training to upstream supply chain members					

Please tick (√) the number that accurately reflects government support on your manufacturing enterprise. (1) Very poor, (2) poor, (3) average, (4) good, (5) very good

8. Government support

S No	Description	Very Good	Good	Average	poor	Very poor
1	Governments support your enterprise to have competitive with current market and need.					

If you are not agree with No 8 question, what kind of support you recommend

- Finance (lone or machinery) ☐
- Training (business or technical) ☐
- Business development service (BDS) ☐
- Technology (productive machinery, new process) ☐
- Work premises, display and sales outlet ☐
- Market linkage ☐
- Other _____

Please tick (√) the number that accurately reflects your manufacturing enterprise present Level applying competitive priority to customer value by accepting market requirements. (1) Very poor, (2) poor, (3) average, (4) good, (5) very good

9. Level applying competitive priority to customer value by accepting market requirements

S No	Description	Very Good	Good	Average	poor	Very poor
1	Our on-time delivery performance is better than our competitors					
2	Our product and service quality is better than our competitors					
3	Our operating costs are lower than our competitors					
4	Our firm's ability to adapt changes in the business environment quickly (Flexibility)					
5	Customers are very satisfied with our supply chain capabilities					
6	Level of creating innovative idea and applying market need base design change					

Please tick (√) the number that accurately reflects your manufacturing enterprise present challenges (uncertainty) for implementing SCM. (1) Very poor, (2) poor, (3) average, (4) good, (5) very good

10. Challenges of SCM Implementation

S No	Description	Very Good	Good	Average	poor	Very poor
1	Manufacturing uncertainty like, breakdown of machineries, interruption of power, poor process design					
2	Irregular orders from inconsistent customers (Demand uncertainty)					
3	Supplier inability to carry out the promise (supply uncertainty)					

Please tick (√) the number that accurately reflects your manufacturing enterprise Competitiveness. (1) Very poor, (2) poor, (3) average, (4) good, (5) very good

11. Competitiveness

S No	Description	Very Good	Good	Aver age	poor	Very poor
1	Increasing level of our market share time to time					
2	Increasing level of our profitability time to time					

APPENDIX B

List of interview questions for manufacturing enterprises

1. How do you see the suppliers' capability? Are they permanent?
2. Do you think that it is important to establish strategic or long term relationship with suppliers?
3. Does your company have training program & benchmark in order to make employees & managers competent?
4. How do you see the employees' commitment and initiation for work and learning? Are they committed and ready to learn?
5. How do you see the internal operation practices of your manufacturing enterprise? Is it organized in the way to facilitate smooth internal operation practice?
6. What are the problems faced by the leather products manufacturing enterprises currently (related to supply chain management)?
7. What are the problems on the demand side of the leather products manufacturing enterprises?
8. Do you make your products accessible for your customers both in quantity and quality?

If have suggestion, recommendation and comment; you are welcome. Thank you!!