

**Assessment on the Impact of Supply Chain Management practice on
Organizational Performance in the case of Horizon Addis Tyre S.C**



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DECLARATION

This research under the title **“Assessment on the Impact of Supply Chain Management practice on Organizational Performance in the case of Horizon Addis Tyre S.C “** is My original work and has never been presented in any other university or college for the award of degree in any other university.

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Acronyms/ Abbreviations

ATC- Addis Tyre Share Company

COMESA- Common Market for East and South Africa

HATSC- Horizon Addis Tyre Share Company

ISO-International Standard Organization

JIT –Just in Time

PLC- Private Limited Company

ROI- Return on Investment

S.C- Share Company

SC - Supply Chain

SCM-Supply Chain Management

SPSS - Statistical Package for the Social Sciences

SSP- Strategic Supplier Partnership

OP-organizational performance

ABSTRACT

Since supply chain management is currently used as a computation tool between businesses, this research was conducted to assess the impact of supply chain management practice on organizational performance on the case company Horizon Addis tyre S.C. To conduct this research the research has three objectives these are to investigate the supply chain management practice of horizon Addis Tyre S.C ,To assess the impact of supply chain management practice on the case company's performance and To identify factors that need to be considered to improve the organization's performance in relation to supply chain management and supply chain management was constructed by five constructs namely strategic supplier partnership, customer relation ,level of information sharing, quality of information sharing and internal lean practice .The research is descriptive in its type the data was collected by distributing questioner to the employees of the company by using purposive sampling technique .The data was analyzed using frequency ,mean ,Pearson correlation and regression and the findings was presented by table and the major findings was that the case company implements almost all supply chain practice in great extent and one of them in moderate extent, from the finding supply chain management have positive relationship with organizational performance. This research is only on the case of Horizon Addis tyre S.C and future research should consider other business organizations.

Key words: *supply chain management,organizational performance*

CHAPTER ONE

INTRODUCTION

This section addressed the background of the study, statement of the problem, research question, research objectives, and significance of the study, scope of the study, limitation of the study, definition of terms and organization of the study.

1.1 Background Of The Study

In today's highly competitive business environment every organization whether profit oriented or not has its own mission to achieve for organizations to meet their goals. Their first focus is to fulfill their customers' needs and expectations.

One of the most relevant evolution's of modern business management is that companies compete as networks of partners, rather than as single autonomous companies. Traditionally composed of suppliers, manufacturers, wholesalers, and customers, these partners form a network of relationships that is known as a supply chain. Closely related to supply chain is the concept of supply chain management which emerged from the natural intuition that adequate management of supply chain products, information, and funds will improve supply chain competitiveness and profitability (Chopra and Meindl, 2001). Christopher (1998) defined supply chain management as:

"The management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole"(Christopher, 1998) .

The foundation of supply chain management is underscored in this definition in that supply chain management focuses on the optimization of system wide performance, not the narrow interests of single partners.

Despite the supply chain management's goal being straightforward, decision making in order to design, plan, and operate a supply chain in an efficient manner remains challenging. One main concern is that centralized decision settings in a supply chain, are not always present in supply networks (Reiner, 2005).

If the blocs and alliances between countries are old, the forms and methods have evolved, diversified and extended to companies, to form giant multinational companies, through horizontal and vertical integration (Shoghari and Abdallah, 2016).

As a result, the concept of supply chain emerged and the information and communication technology revolution facilitated the process of integration between the scattered company entities throughout the world, as well as the integration between independent companies that operate within one supply chain (Shoghari and Abdallah,2016).

Furthermore, among the administrative foundations that the supply chain has altered is the form of relationship with the customer and suppliers, where its administration moved towards more cooperation and coordination for the formation of the supply chain, and a part of the data and information (that was considered one of the peculiarities of the company) moved to exchange with customers and suppliers, and the responsibility of inventory control moved to their suppliers. The concept of the project resource planning system spread to the project resource planning system, which includes suppliers and customers. With the intensification of competition, supply chain started taking into account the competition through the relationship management between suppliers, dealers and customers in a way that aims at overcoming the competitors, and this competition requires from managers a speed in the decision making, to avoid facing problems and seizing opportunities, and since the final consumer of the commodity is the customer who will supply the profit for the company, it has become necessary to examine the impact of the management elements of the supply chain on the organization performance, to see the points that are positive on organizations' performance, thereby increase sales and profits of the company and avoid policies that adversely affect on the decline of organizations' performance(Shoghari and Abdallah,2016).

The significance of supply chain has begun after the scientific revolution, which had a big role in all walks of life, including management. In the light of the scientific revolution, and with the great technological development, the interest in the supply chain has become a necessity, where supply chain management processes became an important element in the company's efficiency and effectiveness. There is no doubt that the supply chain in the organization deals with the most delicate stages within the institution that intervene directly in the product configuration, so its role is the most prominent in the production, sale, making profit, and achieving continuity through customer service that keeps the market share of the institution (Shoghari and Abdallah,2016).

Organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals (Yamin *et al.*, 1999). The short-term objectives of SCM are primarily to enhance production performance, while long-term objectives are to increase market share and profits for all members of the supply chain (Tan *et al.*, 1998). Li *et al.* (2006) stated that any organizational initiative, including supply chain management, should ultimately lead to enhanced organizational performance.

The case company has relationship with upper stream (suppliers) particularly for getting raw materials like Natural rubber, Synthetic rubber, carbon black, Silica, plasticizers, sulfur, wires nylon and different chemicals which helps in the process of the production.

The case company also has strong relation with downstream (customer). The company supplies its products for organizations e.g. Guna and other distributors, and final users.

Supply chain consists of the whole activities associated with products and services movement from raw material stage to final products which are consumable by customers. This movement includes financial and information flow as well as material flow. In other words, supply chain is a network consisting of downstream and upstream organizations which are involved in different processes and activities that create value for end customers in the form of products or services (Christopher, 1998).

Therefore, the researcher is intended to test the framework identifying the relationships among SCM practices, and organizational performance of the case company.

1.1.1 Back ground of the company

The production of tyres in Ethiopia goes back to 1972, when Addis Tyre S.C. (ATC) the first of its kind in the country, was established with a yearly production capacity of 60,000 tyres and 45,000 tubes and a total labor force of 260 people. Major inputs and raw materials for tyre manufacturing are imported from Malaysia, India, China, Indonesia, Egypt and Europe. Natural Rubber is one of the major inputs. After subsequent joint venture formation between Addis Tyre S.C. (Government Owned) and the Slovakian renowned tyre manufacturer, MATADOR Addis .S.C was established in June 2004 and the operation commenced in July 2004 with the hybrid trade name MATADOR-Addis Tyre S.C. However, due to shift in business focus, MATADOR-Addis Tyre S.C. transferred its share to Continental AG on October 23, 2007. Continental AG, the world known German tyre manufacturer company, has bought all Matador holding companies in Slovakia, Russia and Ethiopia. Due to lack of concentration of continental AG, there was no significant progress on the commitment of MATADOR-Addis Tyre S.C. in terms of upgrading the existing Bias tyre technology and commencement of Truck Radial tyre production. Continental AG rather preferred to sale its share to a potential strong national investor who can discharge all joint venture obligations. It was then, that the dedicated and committed investor for the development of Ethiopia, Sheikh Mohammed H. Al- Amoudi, decided to buy the share of Continental AG through one of his group companies Horizon Plantation P.L.C. in January 2011. Since the ownership transfer the name of the company changed to Horizon Addis Tyre S. C. and currently the Horizon plantation P.L.C owns 100% share of the company.

The future perspective of horizon Addis Tyre S.C. thus includes, among others, of improving quality and performance of existing nylon products, introducing new product category especially light truck and truck radial tyres. Innovation in manufacturing practices for higher productivity and consistent quality products and developing technical know- how are in the immediate programs of the company. With improvement in production capacity, horizon Addis Tyre S.C. would like to also tap existing market potentials of COMESA which could generate commensurate foreign currency for the country. To realize the company's visions in the short term, it is planned to implement light truck radial tyre expansion project with a capacity of about 200,000 tyres annually by the end of year 2015. A technical Assistance Agreement has been

signed with continental AG that will enable Horizon Addis Tyre S.C. to acquire technology know how and capacity building of making 15” & 16” light truck radial tyres. Moreover, Bajaj tyre, Farm tyre, OTR tyre and Industry tyre manufacturing projects are under implementation. The project study for the manufacturing of truck and bus radial tyres is also presently under final stage. The company has created job opportunity to date, for 760 workers while the number will increase to 850 with the implementation of the envisaged project.

Products and Services of the Company with average production volume/designed and achieved capacities of services:

| Products | Designed production volume capacity |
|---|--|
| Two and Three wheelers Tyres..... | 87, 984 |
| Industrial Tyres..... | 6,552 |
| Construction and Agricultural Tyres | 8,736 |
| Passenger Vehicles Bias and Radial Tyres..... | 208,728 |
| Light Trucks Bias and Radial Tyres..... | 342,888 |
| Truck & Bus Tyres..... | 63,648 |

The company’s vision Being a leading brand in Ethiopia, HATSC secures and ensures 60% market share in the local market and 10% of its production volume to the COMESA region in year 2025 and in its mission HATSC develops and manufactures all types of bias and radial tyres which are perfectly compatible to Ethiopia and COMESA region; by utilizing skillful and experienced professionals and by investing in the state of the art technology from world reputable companies; where Quality, safety, fair price, accessibility and money back guaranty are pillars of our management philosophy.

Horizon Addis Tyre S.C. is committed to produce best quality tyres by meeting customer’s as well as applicable statutory and regulatory requirement. The top management is committed to establish, implement and continue to maintain a quality management system that complies with the requirement of ISO 9001:2008.

The quality policy is thus directed towards achieving the following objectives,

- Achieving customer satisfaction on an ongoing basis

- Alleviating problems that could hamper quality and productivity
- Continual improvement of products and processes through the development and review of quality objectives. They are committed to meeting the expectations of their customers, provide a safe and healthy working environment that will foster teamwork, creativity, competence and encourage an attitude of 'Do the right thing the first time and all the time' by everyone.

Horizon Addis Tyre S. C. sets annual company level and departmental quality objectives for effective operation and efficient resource utilization that enable it to meet even to exceed customers' expectations in all aspects.

Horizon Addis Tyre Share Company is committed to manage environmental impact as an integral part of its operations.

It is their strategy to assure the environmental integrity of their processes and facilities at all times. The company will do so by adhering to the following principles:

1. Compliance

To commit themselves to comply with all applicable environmental laws and regulations and other requirements to which the organization subscribes by implementing environmental management system in accordance with ISO14001:2004.

2. Prevention of Pollution & Risk Reduction

The company shall prevent pollution by conducting operations in an environmental friendly manner, shall minimize resource consumption & waste generations by applying the principles of reduce, reuse and recycle in all their processes. The company shall also continually reduce risk to employees, community and the environment.

3. Continual Improvement

The company shall continually improve their environmental performance by establishing objectives & targets and by continuously measuring their progress.

4. Communication

The commitments and efforts shall be communicated to employees, customers, stake holders and the concerned public.

5. Promote Awareness

The commit themselves to train, educate and inform their employees about environmental aspects related to their work and promote environmental responsibility among them.

The study was conducted on Horizon Addis Tyre S.C which is located in Addis Ababa Ethiopia Akaki kality sub city Debrezeit road. Horizon Addis Tyre company creates job opportunity for about 773 employees and it is the only tyre manufacturing company in the country.

1.2 Statement of the Problem

Effective supply chain management practices in organizations require total understanding of the day to day transactions to collaborate trade chain and the practices enabling SCM facilities and direct organizational performance.

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

Likewise Horizon Addis Tyre S.C faced with some problems while practicing/implementing the supply chain management with respect to organizations' performance. The major problems that currently face the company are first, there was high price based competition in the tyre market the reason behind that is ,there were a number of tyres that imported by different importer which provided to the market at low price because the products were produced at low cost by foreign companies which have long time experience and the other reason is that the company has three outlets and 28 distributors. All the distributors who worked by commission as a result they sell products at different price. Second there was problem to meet immediate demands, the other problem observed was because of attitude towards domestically produced products there were a question of durability (quality) by customer. This and other problems compromised or mitigated with efficient and effective supply chain management system. This study attempted to assess the impact of supply chain management on Horizon Addis S.C's performance.

1.3 Research Questions

The purpose of this research was to assess the impact of supply chain management practice on performance in the case of Horizon Addis Tyre S.C. Therefore, the following research questions are answered by the study :

1. How does Horizon Addis tire company practice Supply chain management?
2. What impact does supply chain management have on the performance of the case company?
3. What are the factors that need to be considered to improve the company's performance in relation to supply chain management in the case company?

1.4 Research Objective

1.4.1.General Objectives of the Study

The general objective of this research was to assess the impact of supply chain management practice on organizational performance in the case of Horizon Addis Tyre S.C.

1.4.2. Specific objectives

The specific objective of this research was:-

- To investigate the supply chain management practice of horizon Addis Tyre S.C.
- To assess the impact of supply chain management practice on the case company's performance.
- To identify factors that need to be considered to improve the organization's performance in relation to supply chain management.

1.5 Significance Of The Study

The ultimate goal of any business establishment was to remain in business profitably through production and sale of products or services. Without optimal profit a business/firm cannot survive.

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

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

Specifically, this study had the following main significance s:-Help to better understand the processes of SCM practices in related with the company under consideration, Help to identify bottlenecks, waste, problems and improvement opportunities in the supply chain process of the company, help to identify which SCM practice (s) is more contributing for success of organizational performance of the company, Use as a guideline to facilitate a more open and transparent communication and cooperation among supply chain partners of the company, Contribute to narrow the gap in the literature on the generalization of the relationship between SCM practices and performance and Help future researchers who are willing to conduct study on this topic.

1.6 Scope of the Study

SCM encompasses vast areas of managerial practices. However, it was difficult and unmanageable to conduct the study in all areas that summarizes SCM in terms of time, finance, and research manageability. Therefore, the scope of this study delimited to SCM practices and firm performance of Horizon Addis Tyre S.C. The subject scope of this study was also delimited to the company's point of reference towards strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice. In terms of the company's performance the study was delimited to organizations performance (market share, return on investment (ROI), the growth of market the growth of sales, the growth of ROI, profit margin on sales, overall competitive position).The area of the study was also delimited to the case company Addis Ababa branch only.

1.7 Limitation Of The Study

Among the major limitation the research was face lack of Cooperation of the respondents and their commitment to completely fill the questionnaires. The other limitation that the study was conducted on the organization sides which uncover the other stakeholders such as government (government regulation on industries) and this factor limited the outcome of the research. Since, it was difficult to cover entire domain of supply chain just in one study. The research sample didn't incorporate all the supply chain participants namely the suppliers and customers due to time constrained so that it couldn't be applied to the complete chain of the company under investigation. On the other hand constructs of SCM are not only limited to SCM practices selected in this study. Therefore it was not representing all constructs that could explain SCM practices.

1.8 Definition of Terms

Supply chain: is all inter-linked resources and activities needed to create and deliver products and services to customers.

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

Strategic supplier partnership: The long-term relationship between the organization and its suppliers. It is designed to leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits.

Customer relationship: The entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction.

Level of information sharing: The extent to which critical and proprietary information is communicated to one's supply chain partner.

Quality of information sharing: Refers to the accuracy, timeliness, adequacy, and credibility of information exchanged.

Organizational Performance: -Organizational performance refers to how well an organization meets its financial goals and market criteria.

Internal lean practice:-refers to practice towards decreasing waste and demand management.

The case company: -Horizon Addis Tyre S.C

1.9 Organization Of The Study

The research paper was organized into five chapters: Chapter one deals with the introduction part consisting of background of the study, statement of the problem, research questions, research objectives, significance of the study, scope of the study, limitation of the study and definition of terms. The second chapter discussed the review of related literature about the subject matter, in chapter three was focus on research methodologies chapter four was contained data analysis interpretation and discussions of the result. Finally chapters five was covered conclusions and recommendations.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

This chapter presents a review of studies that have been done in the past. The specific areas Covered include the theoretical literature review, Empirical Literature Review and conceptual framework.

2.1 Theoretical Literature Review

A theoretical framework can be defined as a collection of interrelated ideas based on theories. It is a reasoned set of prepositions which are derived and supported by data or evidence. This section provided the theoretical framework.

2.1.1 Definition and history of Supply Chain Management Practice

Before the term supply chain was coined, the term used for management and movement of Product and services was logistics. The development of logistics was originally undertaken by the military in ancient times (Britannica, 1994). Therefore Supply Chain Management is driven from logistics concept. The term supply chain management was coined in, 1982 by Keith Oliver, a management consultant at Booz Allen Hamilton (Cortada, 2001). Oliver used the term to develop a vision for tearing down functional silos that separated production, marketing, and distribution. As Cortada stated the concept was enlarged upon efficiency and mutual benefits associated with information sharing and decision coordinating to up and down a supply chain. A supply chain is simply sequentially connected organizations and activities involved in creating and making a product available.

According to (Dawe Lu,2011) Supply chain is defined as a group of inter- connected participating companies that add value to a stream of transformed inputs from their sources of origin to the end products or services that are demanded by designated end-consumer.

Supply chain management is simply and ultimately the business management, whatever it may be in its specific context, which is perceived and enacted from the relevant Supply chain perspective (Dawe Lu, 2011).

The objective of SCM is to maximize the overall value generated minimize the cost, and effective and timely distribution of products needed by ultimate customers.

Supply chain profitability in abstract is one of the objectives, which means profit sharing among partner organizations. Profitability due to low cost to all partners creates value to customers. Value is created by means of same or higher quality in lesser costs as compared to competitor's products. Supply chain responsiveness is another most sought supply chain objective. Responding to wide range of customers' demand, short lead times and wide ranges of products in appropriate cost creates value to customers (Gupta & Sahay, 2007).

2.1.2 Drivers of Supply Chain Development and main initiatives

In today's global economy, companies face increasing pressure to reduce costs while maintaining production and quality levels to deliver results to the customers. Handfield, (2002) summarized the basic drivers for SC development as: Ever increasing customer demand in terms of product and service cost, quality, delivery, technology, and cycle time brought by global competition.

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

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

2.1.3 Key Components of Supply Chain Management

(Johnson and Pyke, 2000) as cited by (Assefa Balda, 2011) identified twelve areas of SCM, from their own experience of teaching and researching supply chain management, from analysis of syllabus and research papers on supply chain, and from their discussions with managers.

These twelve categories they identified and defined are: location, transportation and logistics, inventory and forecasting, marketing and channel restructuring, sourcing and supplier management, information and electronic mediated environments, product design and new product introduction, service and after sales support, reverse logistics and green issues,

outsourcing and strategic alliances, metrics and incentives, and global issues. So that when anyone think about SCM should have to consider these issues.

2.1.4 SCM practice

SCM practices have been defined as a set of activities undertaken in an organization to promote effective management of its supply chain. (Donlon , 1996) describes the latest evolution of SCM practices, which include supplier partnership, out sourcing, cycle time compression, continuous process flow, and information technology sharing. (Tan et al, 1998) use purchasing, quality, and customer relations to represent SCM practices, in their empirical study. (Alvarado and Kotzab,2001) include in their list of SCM practices concentration on core competencies, use of inter organizational systems and elimination of excess inventory levels by postponing customization toward the end of the supply chain. (Tan et al, 1998) identify six aspects of SCM practice through factor analysis: supply chain integration, information sharing, supply chain characteristics, customer service management, geographical proximity and JIT capability. (Chen and Paulraj, 2004) use supplier base reduction, long-term relationship, communication, cross-functional teams and supplier involvement to measure buyer supplier relationships(Min and Mentzer,2004) identify the concept SCM as including agreed vision and goals, information sharing, risk and award sharing, cooperation, process integration, long-term relationship and agreed supply chain leadership.(Langley et al.,2006) identified five characteristics of supply chain management Inventory visibility managing the flow and level of inventory is a central focus of supply chain management and major performance metric to gauge success , Pull systems Another important characteristic of effective inventory management is to attempt to pull it through the supply chain in response to demand as opposed to pushing out inventory in advance of demand, which tends to inflate inventory levels and lead to obsolete inventory and lower inventory turnover, Cost efficiency or lowering cost is an important objective of supply chain management this cost is to be considered at the end of supply chain which is called landed cost, Information Managing the flow of information is a key factor for both efficiency and effectiveness in the supply chain with the key characteristic of sharing information up and down the supply chain related to the flow and demand requirements. If information is shared, it can be potentially available on a real-time basis. Customer Service, among one of the supply chain characteristics, customer service is a very important attribute of successful supply chain. In the final analysis, success of today's global supply chain is the value that they add for their ultimate customers in terms of the supply chain's landed cost/price and the related services that are provided. Customer service has three recognized levels from supply chain perspective, these are; reliability, on time

delivery and accurately filled orders. According to him, reliability, on time delivery and accuracy of order fulfillment are the most three dimensions of customer service to be filled by supply chain members.

Thus the literature portrays SCM practices from a variety of different perspectives with a common goal of ultimately improving organizational performance. In reviewing and consolidating the literature, five distinctive dimensions, including strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and internal lean practice are selected for measuring SCM practice. The five constructs cover upstream (strategic supplier partnership) and downstream (customer relationship) sides of a supply chain, information flow across a supply chain (level of information sharing and quality of information sharing), and internal supply chain process (internal lean practice). It should be pointed out that even though the above dimensions capture the major aspects of SCM practice, they cannot be considered complete. Other factors, such as geographical proximity, cross-functional teams, logistics integration, agreed vision and goals, and agreed supply chain leadership are also identified in the literature. Though these factors are of great interest, they are not included due to the concerns regarding the length of the survey. The present study, therefore, proposes SCM practices as a multidimensional concept.

2.1.4.1 Strategic Supplier Integration

Supplier integration is defined as “The long-term relationship between the organization and its suppliers. It is designed to leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits” .

Supplier integration characterized by various aspects and activities such as information sharing, coordination, trust, shared technology, integrated processes, long-term contracts, assisting suppliers to improve production processes, fostering quality improvements, investing in supplier’s assets, including suppliers in new product development, improving supplier’s overall capabilities, risk and reward sharing, and shared gains from development efforts (Dyer et al, 1998; Bahjat. et.al,2014). As such, integration results in improved decision making, enhanced knowledge sharing, aligned capabilities, built learning routines, and increased performance of SC partners .Trust enhances the degree of commitment between the two parties, reduces transactional costs, improves cooperation, enhances the satisfaction of the two parties, decreases the formal contracts, and reduces conflicts (Bahjat. et.al, 2014).

A strategic partnership emphasizes direct, long-term association and encourages mutual planning and problem solving efforts. Such strategic partnerships are entered into to promote shared benefits among the parties and ongoing participation in one or more key strategic areas such as technology, products, and markets . Strategic partnerships with suppliers enable organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products. Suppliers participating early in the product-design process can offer more cost effective design choices, help select the best components and technologies, and help in design assessment . Strategically aligned organizations can work closely together and eliminate wasteful time and effort . An effective supplier partnership can be a critical component of a leading edge supply chain (Karim and Rafiee, 2014).

2.1.4.2 Customer Relationship (CR)

Supplier and customer relationship is defined as a set of firms' activities in managing its relationships with customers and suppliers to improve customer satisfaction and synchronize supply chain activities with suppliers, leverage suppliers' capacity to deliver superior products to customers. This is due to the ultimate objective of SCM is to deliver products to the satisfaction of end customers (Tan, 2001)as cited by (Assefa Balda,2011).

The growth of mass customization & personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival (Wines, 1996)as cited by (AssefaBalda, 2011).

The customer relationships include the complete range of practices that are employed for the purpose of managing customer complaints, building long term relationships with customers & improving customer satisfaction (Tan et al. 1998; Claycomb et al. 1999)as cited by (Assefa Balda,2011).

Close customer relationship allows a company to be more responsive in fulfilling customers' demand and differentiate its product from competitors, sustain customer loyalty, & dramatically extend the value it provides to its customer through improving customer satisfaction by

proactively seeking customers' needs and requirements. The ability to build a close relationship with customers will bring companies in to a long lasting competitive edge (Bowersox et. al, 1999).

SCM suggests that firms need to integrate with their suppliers and customers to achieve both financial and non-financial growth objectives (Tan, 2001) as cited by (Assefa Balda, 2011). Comprises the entire array of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction. Someone consider customer relationship management as an important component of SCM practices, as pointed out by them, committed relationships are the most sustainable advantage because of their inherent barriers to competition. The growth of mass customization and personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival. Good relationships with supply chain members, including customers, are needed for successful implementation of SCM programs. Close customer relationship allows an organization to differentiate its product from competitors, sustain customer loyalty, and dramatically extend the value it provides to its customers (Karimi And Rafiee, 2014) .

For this research purpose, customer relationship is conceptualized from the literature review and practicability in Ethiopia as the way of building long term relation with customers through creating customer loyalty, reducing defect products, improving customer services, reducing price/cost and managing customer complaints .

2.1.4.3 Level and quality of Information sharing

Information sharing has two aspects quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies. Level (quantity spect) of information sharing refers to the extent to which critical and proprietary information is communicated to one's supply chain partner. Shared information can vary from strategic to tactical in nature and from information about logistics activities to general market and customer information. Many researchers have suggested that the key to the seamless supply chain is making available undistorted and up-to-date marketing data at every node within the

supply chain. By taking the data available and sharing it with other parties within the supply chain, information can be used as a source of competitive advantage. Sharing of information is one of five building blocks that characterize a solid supply chain relationship. According to Stein and Sweat as cited in (Karim and Rafiee, 2014), supply chain partners who exchange information regularly are able to work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker (Karim and Rafiee, 2014). In this study, information sharing in supply chain is conceptualized as the extent of sharing business knowledge formally or informally with supply chain partners. Also it is associated with the amount of information shared among supply chain partners in downstream and upstream side of the supply chain and also the information intensity.

Quality of information sharing includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged. While information sharing is important, the significance of its impact on SCM depends on what information is shared, when and how it is shared, and with whom. Literature is replete with example of the dysfunctional effects of inaccurate/delayed information, as information moves along the supply chain. Divergent interests and opportunistic behavior of supply chain partners, and informational asymmetries across supply chain affect the quality of information. It has been suggested that organizations will deliberately distort information that can potentially reach not only their competitors, but also their own suppliers and customers. It appears that there is a built in reluctance within organizations to give away more than minimal information since information disclosure is perceived as a loss of power. Given these predispositions, ensuring the quality of the shared information becomes a critical aspect of effective SCM. Organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion (Li et.al, 2006). Therefore, for the purpose of the study, information quality is conceptualized as accuracy, timeliness, adequacy, information exchanged reliability and completeness.

2.1.4.4 Internal lean practice

According to Vonderembs e et al. (2006) , “a lean supply chain employs continuous improvement efforts that focus on eliminating waste or non-value steps along the chain. It is supported by the reduction of setup times to allow for the economic production of small quantities; thereby achieving cost reduction, flexibility and internal responsiveness. It does not have the ability to

mass customize and be adaptable easily to future market requirements.” This type of supply chain is essentially based on the lean principles, which advocates the reengineering of business processes to remove all non-value added activity, generally ascribed as the source of waste in the system.

Lean manufacturing emphasizes the optimization across organization and supply bases not just the functional silos. It promotes close partnership relations with the first tier suppliers and other strategic partners in the distribution channel it created the tiered supply base structure. The waste between the organizations often ignored in the past has been identified as key improvement area. All in all the lean system has also transformed the supply chain management to lean supply management (Dawe Lu, 2011).

According to literatures building and maintaining a lean supply chain, revolves around two main areas i.e. waste management and demand management. Demand management is providing products when demanded while waste management is elimination of process, activities or anything else that does not add value to customers.

2.1.4.4.1 Waste Management

The focus of the lean concept is to eliminate all waste i.e. all activities that do not add value. Waste can be measured in time, inventory and unnecessary costs. Value added activities are those that contribute to efficiently placing the final product at the customer. The supply chain and the inventory contained in the chain should flow. Any activity that stops the flow should create value. Any activity that touches inventory should create value. Lean concept can be easily applied in relatively stable and therefore predictable environment where the requirements (demands) of customers are similar (Barac & Milovanovic, 2006).

There are seven basic types of waste that were defined by Toyota managers. Such systematization can be applied in any company, for any process and it is the basis of lean concept enterprise without waste. The basic types of waste that were identified by Toyota managers are Overproduction Simply put, overproduction is to manufacture an item before it is actually required. Overproduction is highly costly to a manufacturing plant because it prohibits the smooth flow of materials and actually degrades quality and productivity. Overproduction

manufacturing is referred to as “Just in Case.” This creates excessive lead times, results in high storage costs, and makes it difficult to detect defects. The simple solution to overproduction is turning off the tap this requires a lot of courage because the problems that overproduction is hiding will be revealed. The concept is to schedule and produce only what can be immediately sold/ shipped and improve machine changeover/set-up capability. The second waste identified is waiting whenever goods are not moving or being processed, the waste of waiting occurs. The third waste identified was Transporting; transporting product between processes is a cost incursion which adds no value to the product. Excessive movement and handling cause damage and are an opportunity for quality to deteriorate. The fourth waste is Inappropriate Processing many organizations use expensive high precision equipment where simpler tools would be sufficient. This often results in poor plant layout because preceding or subsequent operations are located far apart. In addition they encourage high asset utilization (over -production with minimal changeovers) in order to recover the high cost of this equipment. The fifth waste identified was Unnecessary Inventory Work in Progress (WIP) is a direct result of overproduction and waiting. Excess inventory tends to hide problems on the plant floor, which must be identified and resolved in order to improve operating performance. The six waste identified was Unnecessary / Excess Motion This waste is related to ergonomics and is seen in all instances of bending, stretching, walking, lifting, and reaching. These are also health and safety issues, which in today’s litigious society are becoming more of a problem for organizations. The seventh waste identified was Defects Having a direct impact to the bottom line, quality defects resulting in rework or scrap are a tremendous cost to organizations. Associated costs include quarantining inventory, re-inspecting, rescheduling, and capacity loss. In the latest edition of the Lean Manufacturing classic Lean Thinking, Underutilization of Employees has been added as an eighth waste to original seven wastes (Harish and Selvam, 2015).

2.1.4.4.2 Demand Management

One of the key principles of Lean is to move to a ‘pull system’, in which products or services are pulled (work initiated, services performed, products delivered) only when requested by the final customer. In its purest form, such a system would be developed using data from the point of sale and conveyed upstream to all members of the supply chain, from point to point, without a change

in the volume. End user requirements for the finished product, however, would typically be meaningless to an upstream supplier, who may provide only a fraction of the materials included and most probably does not understand how their materials contribute to the end-product structure. Therefore, suppliers at each level of the process must receive their downstream customer's demand signal and convert it to something usable) to their upstream partners. This can be difficult to accomplish, especially when choosing to work in a virtually real-time manner. A Lean supply chain will work to have products pulled through the channel using customer demand from the point of sale in real time (Manrodt & Vitasek, 2008). Therefore, for the purpose of this research internal lean practice is conceptualized as waste reduction, continuous quality improvement and demand management.

2.1.5 Organizational performance

Organizational performance refers to how well an organization achieves its market oriented goals as well as its financial goals. The short term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long term objectives are to increase market share and profits for all members of the supply chain. Financial metrics have served as a tool for comparing organizations and evaluating an organization's behavior over time. Any organizational initiative, including supply chain management, should ultimately lead to enhanced organizational performance. A number of prior studies have measured organizational performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position (Karim and Rafiee, 2014). In line with the above literature, the same items and including competitive advantage price/ cost, quality, delivery and time to market as dimensions of competitive advantage to measure will be adopted to measure over all organizational performance.

2.2 Empirical Literature Review

Certain previous researchers have devoted deal of attention to the relationship of supply chain management practices and certain aspects of organizational performance from different perspective/dimensions of overall supply chain. Some of these researches findings are discussed as follow.

Lenny *et al.* (2007) conducted study on the impact of supply chain management practices on performance of Small and Micro Enterprises in Turkey. Based on exploratory factor analysis, researchers were grouped SCM practices in two factors: outsourcing and multi-suppliers, and strategic collaboration and lean practices. The results indicate that both factors of strategic collaboration and lean practices and outsourcing and multi-suppliers have direct positive and significant impact on operational performance. In contrast, both significant impact on operational performance and outsourcing and multi-suppliers do not have a significant and direct impact on SCM-related organizational performance. Also, as the direct relationship between the two performance-constructs was found significant, both factors of SCM practices have an indirect and significant positive effect on organizational performance through operational.

(Li et al, 2006) conducted study on the impact of supply chain management practice on competitive advantage and organizational performance by collecting data from 190 organizations by developing five dimensions of SCM practice(strategic supplier partnership, customer relationship level of information sharing, quality of information sharing and postpone mental and the research test the relationships between SCM practice competitive advantage and organizational performance and the result indicate that higher levels of SCM practices can lead to enhanced competitive. advantage and improved organizational performance and competitive advantage can have a direct and positive impact on organizational performance and from the five dimensions developed postponement have not be a strong indicator or SCM practice compared to the other four dimension.

(Janatabadiet *al.*, 2013) conduct study on the impact of supply chain management on the relationship between enterprise resource planning system and organizational performance the objective of this study was to investigate the enterprise resource planning adoption and its influence on organizational performance through supply chain management. The data required

for this research was collected from 174 companies in Malaysia through prepared surveys. And from the data collected the research found out that there exist a positive effect of enterprise resource planning on the supply chain which ultimately result in improved overall performance of the studied organizations.

(Mustefa,2014) conduct study on the supply chain management practices and firm performance in case of awash tannery P.L.C. in Ethiopia according to this research the was collected from employees of awash tannery company and the research. Conceptualizes and develops five dimensions of SCM practice(strategic supplier partnership, customer relationship, level of information sharing quality ,quality of information sharing and internal lean practice) and it test the relationship between SCM practices operational performance and organizational performance and the research found out that there is strong relationship between SCM practices operational performance and organizational performance and shows that SCM practice have an influence both on operational performance and organizational performance and it finds out that operational performance has also an influence on organizational performance.

(Yap and Tan,2012) conduct study on the effect of service supply chain management practices on the public health care organizational performance in Malaysia in this study a total of five dimensions of service supply chain management practice where used to study the effect of supply chain management on organization performance from these information and technology management demand management, customer relationship management, supplier relationship management capacity and resource management where found to have significant and positive direct relationship with organizational performance and alliance network was found to have the mediation effect on the direct relationship.

(Mwilu, 2013) also conduct a study on supply chain management practices and performance among public research institutions in Kenya. One of the objectives of this study was to determine the impact of SCM practice on the performance of research institutions in Kenya and to evaluate the challenges faced by public research institutions in Kenya. And to evaluate the challenges faced by public research institutions in Kenya while adopting SCM. by developing seven dimensions of SCM practices from these the research finds out that three variables namely logistics lean suppliers and information technology were found to have strong statistically significant relationships with performance. The other three variables namely green supply chain

practices, long term supplier relationships and out sourcing were found to have weak relationships which were not statistically significant.

In General, as we have seen from the above literatures to assess the impact of supply chain management on organization performers there is no single measurement (dimension). Despite the increase of empirical research in the last few years important differences in research design undermine comparability lack of consensus about and definition and dimension of the SCM construct use of different units of analysis and different approaches to performance measurement.

2.3 Conceptual Framework

The various elements discussed under this heading include supply chain management (Strategic supplier integration, Customer relationship, Level and quality of information sharing and Internal lean practice) and organizational performance. Below is the model of the literature review:

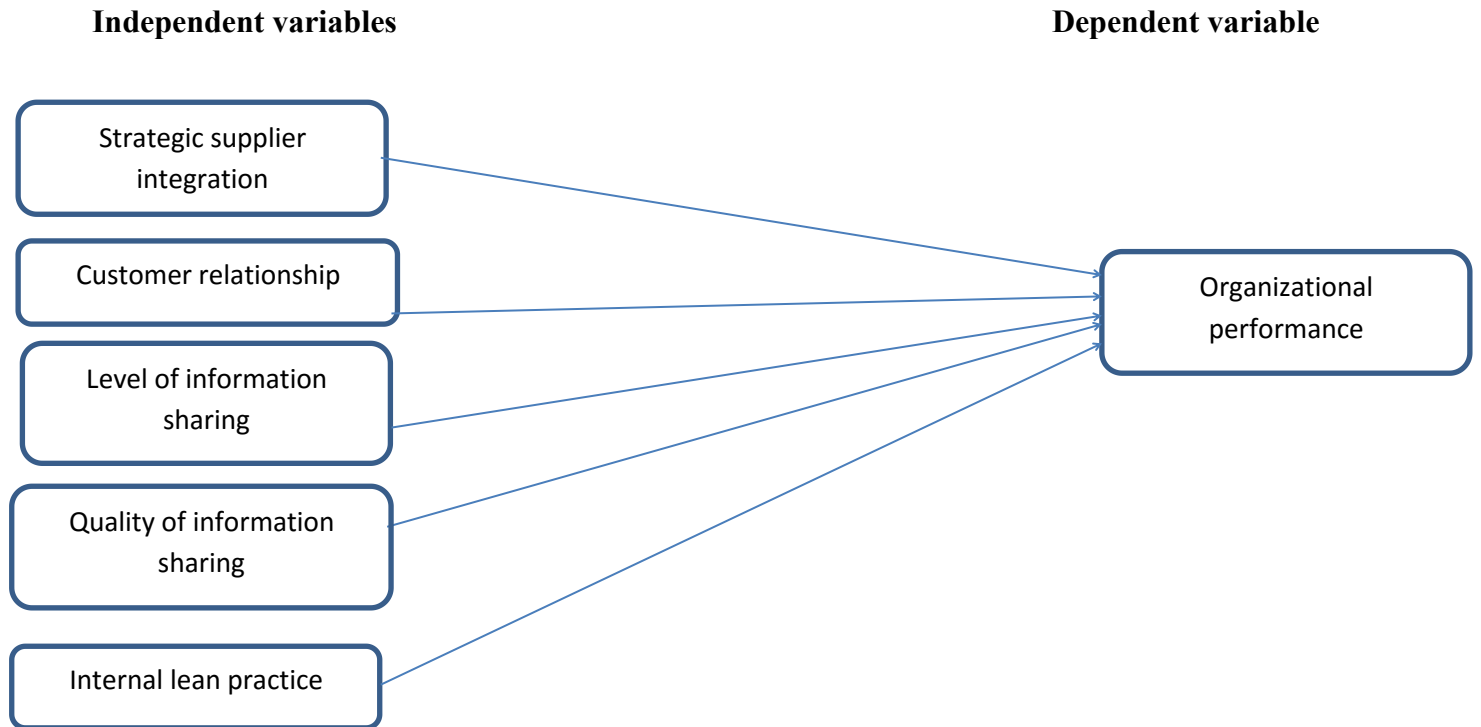


Figure 2.1 conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This part describes the methodologies that was used in this study it include description of study Area, research approach, research design, target population and sample, data source and types, data collection procedure, ethical consideration and data analysis techniques along with an appropriate justification associated with each approach.

3.1 Research Approach

The three approach that were commonly implemented in a research are quantitative, qualitative and mixed, where one of them is not better than the others, all of this depends on how the researcher want to do a research of study(Creswell, 2005). Creswell (2005) asserted that quantitative research is a type of educational research in which the researcher decides what to study, asks specific, narrow questions, and collects numeric (numbered) data from participants, analyzes these numbers using statistics, and conducts the inquiry in an unbiased, objective manner. Variables can be defined as attributes or characteristics of individuals, groups, or sub-groups of individuals (Creswell, 2009).Quantitative method is a study involving analysis of data and information that are descriptive in nature and qualified (Sekaran, 2003). Quantitative approach is one in which the investigator primarily uses post positive claims for developing knowledge, i.e., cause and effect relationship between known variables of interest or it employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data (Creswell, 2009). Therefore, in terms of approach, this research employed mixed approach while conducting the study.

3.2 Research Design

This study was to investigate the impact of SCM practices on organizational performance based on fundamental theories, principles and management philosophies that are supposed to be effective parameters just to evaluate the actual impact of the case company. Therefore, the researcher preferred to use descriptive research type, which helps to use both qualitative and quantitative data analysis.

The researcher used the Cross-sectional field survey design to assess the relationship between SCM practices and organizational performance of Horizon Addis Tyre S.C. In the cross-sectional field survey, independent and dependent variables were measured at the same point in time by using a single questionnaire. In addition the study was also said to be associational in design because there was the intent to establish the relationship between dependent and independent variables.

3.3 Target Population And Sample

3.3.1.Target population

The population of the study was employees who work in Horizon Addis S.C and who have college diploma and above this is because to get employees who have better organizational knowledge. The case company had 773 employees Out of this 399 were not target population due to education level and out of concerned departments the remaining 374 were target population.

3.3.2. Sampling

The selection of the respondents' was carried out by using non probability sampling particularly purposive sampling. From the target population the sample was selected by using Carvalho's sample size determination.

Table 3.1 Carvalho's sample size determination

Source: Carvalho (1984)

| Population Size | Small | Medium | Large |
|-----------------|-------|--------|-------|
| 51-90 | 5 | 13 | 20 |
| 91-150 | 8 | 20 | 32 |
| 151-280 | 13 | 32 | 50 |
| 281-500 | 20 | 50 | 80 |
| 501-1200 | 32 | 80 | 125 |
| 1201-3200 | 50 | 125 | 200 |
| 3201-10000 | 80 | 200 | 315 |
| 10001-35000 | 125 | 315 | 500 |
| 32001-150000 | 200 | 500 | 800 |

By referring the above table for this study the target population is 374 employees out of these 50 samples were taken from Marketing, Sales, Purchasing, Production process planning department, Product industrialization and quality assurance department.

3.4. Data Sources And Types

The researcher was used primary and secondary data for the entire analysis of this study. The information was gathered through questionnaire which is developed by other researchers (Mustefa, 2014) & (Mwilu, 2013), and modified to this research context. From the selected sample of respondents/ employees of Horizon Addis tyre S.C the data collected through questionnaires were used as primary data, and journal articles, written documents, Internet web sites, and document reports from Horizon Addis Tyre S.C was referred and used as secondary sources.

3.5. Data Collection Procedures

There are two sources of data namely, primary and secondary source. In this research both primary and secondary sources of data was utilized through Questionnaires from the selected sample of respondents/ employees of Horizon Addis tyre S.C.

The primary data was collected through questionnaire which is distributed to employees of the company.

Questionnaire: close ended questionnaire in a 5 point likert scales was used to collect data from the sample respondents. The questionnaire had 5 rating scales ranging from 1- very low to 5- very high and some open ended questions were also used to collect data. Data gathered through questionnaires were simple and clear to analyses and it will allow for tabulation of responses and quantitatively analyzes certain factors. Furthermore it is time efficient for both the respondents and researcher. The questionnaire was structured in such a way that it includes all relevant parts of and information to clearly inform the respondents.

3.6 Data Analysis

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

3.6.1 Quantitative Data Analysis

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

3.6.2 Qualitative Data Analysis

The data collected by open ended was analyzed qualitatively by synthesizing the data.

3.7 validity and reliability

3.7.1 Validity

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

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

3.7.2 Reliability

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

| Variables | Reliability Cronbach's alpha |
|--------------|------------------------------|
| SCM practice | 0.92 |
| OP | 0.87 |

Source: research 2017

Table 3.2 Reliability Cronbach's alpha

3.8 Ethical Consideration

Research in business/tyre industry was found to be very boring. In the country where the importance of research was still unidentified, the researcher expect to suffer a lot to convince the importance of this research to improve business. Even in some managers and employees were not quite positive to handle questionnaires. However it is research ethics to gather necessary information with patience till the researcher concluded everything that he/she needs from respondents. All information that were collected from the respondents were treated with confidentiality without disclosure of the respondents' identity. Moreover, no information was modified or changed, hence information gotten was present as collected and all the literatures collected for the purpose of this study was appreciated in the reference list.

CHAPTER FOUR

DATA ANALYSIS INTERPRETATION AND DISCUSSIONS

INTRODUCTION

In this chapter data that were collected to examine the relationship between organizational performance and SCM practice are interpreted and analyzed using SPSS (version 20). The data was collected by using the questionnaire that were developed in five scale ranging from five to one where 1 strongly disagree ,2 disagree ,3 neutral,4 agree and 5 strongly agree. A total of 50 questionnaires were distributed to employees of Horizon Addis and 43(86 %) were obtained valid and used for analysis. This chapter mainly contains data analysis interpretation and discussion.

4.1. General Information

4.1.1 Educational qualification

The study sought to find the level of education of the respondent the response were as the table below

| | | Educational level | |
|--|---------------------|-------------------|---------|
| | | Frequency | Percent |
| | COLLEGE DIPLOMA | 4 | 9.3 |
| | MA/MSC/MBA OR ABOVE | 7 | 16.3 |
| | FIRST DEGREE | 32 | 74.4 |
| | Total | 43 | 100.0 |

Source: research 2017

Table 4.1 analysis of education level of the respondent

From the table above among the respondent (9.3%) have college diploma (16.30%) have MA/MSC/MBA or above education level and 32(74.40%) have first Degree.

4.1.2 The Position Of The Respondent In The Organization

The study sought to find the position of the respondents in the organization the responses were as the table below.

| | | FREQUENCY | PERCENT |
|-------|--------------------|-----------|---------|
| Valid | DEPARTMENT MANAGER | 4 | 9.3 |
| | DIVISION HEAD | 20 | 46.5 |
| | SENIOR OFFICER | 9 | 20.9 |
| | OTHER | 10 | 23.3 |
| | Total | 43 | 100.0 |

Source: research data 2017

Table 4.2 analysis of the respondents' position in the organization

From the table above among the respondent 4(9.3%) of them are department manager 20(46.50%) of them are division head 9(20.9%) of the respondent are senior officer and the remaining 10(23.30%) are on the position like supervisor.

4.1.3 Respondents Length of service in the organization

The study sought to find the level of experience of the respondent the response were as the table below

| | | Frequency | Percent |
|-------|-------------------|-----------|---------|
| Valid | 1-2 YEAR | 6 | 14.0 |
| | 3-4 YEARS | 9 | 20.9 |
| | 5 YEARS AND ABOVE | 28 | 65.1 |
| | Total | 43 | 100.0 |

Source: research data 2017

Table 4.3 Analysis of length of service of respondent

From the table above among the respondents 6(14%) of them stay 1-2 year in the organization, 9(20.90%) of them stay 3-4 years and 28(65.10%) stay more than 5 year in the organization.

4.2. Extent of SCM practices implement in the case organization

25 questions which help to gather information about the extent of supply chain management practice which are grouped into strategies supplier partnership customer relationship level and quality of information sharing and internal learn practice was distributed to the employees of the case company and the result gained was summarized in the table below.

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--|----|---------|---------|------|----------------|
| Your company considers quality as number one criterion in selecting suppliers. | 43 | 3 | 5 | 4.63 | .655 |
| Your company regularly solves problems jointly with your suppliers. | 43 | 3 | 5 | 4.35 | .686 |
| Your company has been helping your suppliers to improve their product quality. | 43 | 2 | 5 | 3.98 | .831 |
| Your company includes your key suppliers in your planning and goal setting activities. | 43 | 3 | 5 | 3.86 | .675 |
| Your company frequently interact with customers to set reliability, responsiveness, and others | 43 | 4 | 5 | 4.44 | .502 |
| Your company frequently measure and evaluate customer satisfaction. | 43 | 3 | 5 | 4.30 | .708 |
| Your company frequently determines future customer expectations. | 43 | 3 | 5 | 4.16 | .688 |
| Your company facilitates customers' ability to seek assistance from them. | 43 | 2 | 5 | 3.88 | .981 |
| Your company periodically evaluates the importance of your relationship with your customers. | 43 | 2 | 5 | 3.98 | .740 |
| The company informs trading partners in advance of changing needs. | 43 | 3 | 5 | 4.00 | .816 |
| Your company's trading partners share proprietary information with Your company. | 43 | 3 | 5 | 3.81 | .732 |
| Your company's trading partners keep you fully informed about issues that affect Your company's business | 42 | 1 | 6 | 3.69 | .950 |
| Your company's trading partners share business knowledge of core business processes with Your company's. | 43 | 2 | 6 | 3.91 | .921 |
| Your company's and Your company's trading partners exchange information that helps establishment of business planning. | 43 | 2 | 5 | 3.88 | .793 |

| | | | | | |
|--|----|---|---|------|-------|
| Exchange of information with Your company's partners (formal or informally) is frequent. | 43 | 3 | 6 | 4.05 | .688 |
| Information exchange between Your company's trading partners and Your company's is timely. | 43 | 2 | 7 | 3.70 | .989 |
| Information exchange between Your company's trading partners and Your company's is accurate. | 43 | 2 | 5 | 3.72 | .854 |
| Information exchange between Your company's trading partners and Your company's is complete. | 43 | 2 | 5 | 3.70 | .832 |
| Information exchange between Your company's trading partners and Your company's is adequate | 43 | 2 | 5 | 3.67 | .865 |
| Information exchange between Your company's trading partners and Your company's is reliable. | 43 | 2 | 5 | 3.77 | .751 |
| your organization strives to reduce time wastage in operation | 43 | 3 | 5 | 4.51 | .592 |
| Your organization has continuous quality improvement programs. | 43 | 3 | 5 | 4.60 | .541 |
| Your organization produces only what has been ordered by customers (pull production system). | 43 | 1 | 5 | 3.19 | 1.239 |
| Your organization pushes suppliers for shorter lead times. | 43 | 2 | 5 | 4.00 | .816 |
| The organization streamlines ordering recovering and paperwork | 43 | 2 | 5 | 3.84 | .843 |

Source: research data 2017

Table 4.4 analysis of the extent of SCM practice implementation

From the table above all SCM practices have been adapted to great extent (mean lies between 3.51 and 5) in the company consider quality as number one criteria in selecting supplier (mean 4.63) ,the company solves problems regularly with its suppliers(mean,4.35) ,the company helps their suppliers to improve their product quality (mean 3.98), the company includes the key suppliers in their planning and goal setting activity(mean 3.86), the company interact with customers to set reliability responsiveness and others(mean 4.44) ,the company frequently measure and evaluate customer satisfaction (mean 4.30) ,the company determines future customer expectation (mean 4.16), the company facilitates customers' ability to seek assistance from the organization (Mean 3.88), the company periodically evaluates the importance their relationship with their customer (mean 3.98), the company informs trading partners in advance of changing needs (mean 4.00), the company trading partners share proprietary information with

their company (mean 3.81) ,the company's trading partners share business knowledge of core business process with their company (mean 3.91) ,the company's trading partners keep them fully informed about issues that affect their company business (mean 3.69) ,the company and its trading partners exchange information that helps establishment of business planning(mean 3.88) ,the company exchange information with their trading partner frequently (mean 4.05), the organization strives to reduce time wastage in operation (mean 4.51),the company exchange information between their company's trading partners and their company's reliable (mean 3.77), the organization has continuous quality improvement programs (mean 4.60),the organization pushes suppliers for shorter lead times(mean 4.00), the organization stream lines ordering recovering and other paper work from its suppliers (mean 3.84), the information exchange between the company and its trading partners is timely (mean 3.70) ,information exchange between company and its trading partners is accurate (mean 3.72), information exchange between the company and its trading partner is complete (mean 3.70) ,information exchange between the company and its trading partners is adequate (mean 3.67, but the company practice supply chain management in moderately(the mean is between 2.51 and 3.50)the organization produces only what has been ordered by customers (pull production system)(mean 3.19).

These finding indicate that the case company implements almost all of supply chain management practices in great extent and one implemented in moderate level and there is no SCM practiced that lacks implementation this shows as the company is in very good position in implementing supply chain management practices.

4.3. Correlation analysis

4.3.1. Correlation analysis between constructs of SCM practices and organizational performance

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

Correlation is one of the most common forms of data analysis both because it can provide an analysis that stands on its own, and also because it underlies many other analyses, and can be a

good way to support conclusions after primary analyses have been completed. Correlations are a measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicate that there is little or no linear relationship. The sign of a correlation coefficient describes the type of relationship between the variables being correlated. A positive correlation coefficient indicates that there is a positive linear relationship between the variables: as one variable increases in value, so does the other.

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

| Strength of association | Coefficient, r | |
|-------------------------|----------------|---------------|
| | Positive | Negative |
| Small | 0.1 to 0.3 | -0.1 to -0.3 |
| Medium | 0.3 to 0.5 | -0.3 to -0.5 |
| Large | 0.5 to 1.00 | -0.5 to -1.00 |

Table 4.5 correlation coefficient

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

| | | STRATEGIC SUPPLIER PARTENERSHIP | CUSTOMER RELATION | LEVEL OF INFORMATION SHARING | QUALITY OF INFORMATION SHARING | INTERNAL LEAN PRACTICE | ORGANIZATIONAL PERFORMANCE |
|--|------------------------|---------------------------------------|----------------------|------------------------------------|--------------------------------------|---------------------------|-------------------------------|
| STRATEGIC SUPPLIER PARTENERSHIP | Pearson Correlation | 1 | .685** | .555** | .776** | .699** | .237 |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 | .126 |
| CUSTOMER RELATION | Pearson Correlation | .685** | 1 | .565** | .790** | .503** | .344* |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .001 | .024 |
| LEVEL OF INFORMATION SHARING | Pearson Correlation | .555** | .565** | 1 | .665** | .680** | .482** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 | .001 |
| QUALITY OF INFORMATION SHARING | Pearson Correlation | .776** | .790** | .665** | 1 | .705** | .474** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 | .001 |
| INTERNAL LEAN PRACTICE | Pearson Correlation | .699** | .503** | .680** | .705** | 1 | .303* |
| | Sig. (2-tailed) | .000 | .001 | .000 | .000 | | .049 |
| ORGANIZATIO NAL PERFORMANC E | Pearson Correlation | .237 | .344* | .482** | .474** | .303* | 1 |
| | Sig. (2-tailed) | .126 | .024 | .001 | .001 | .049 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | |

Source: research 2017

Table 4.6 correlations between constructs of SCM and OP

The results of the correlation matrix between each constructs and organizational performance analyzed as follow.

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

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

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

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

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

4.3.2 Correlation between SCM practice and organizational performance

Pearson correlation test was conducted between SCM practices and the results are shown in table below.

| Correlations | | | |
|--|---------------------|--------|----------------------------|
| | | SCM | ORGANIZATIONAL PERFORMANCE |
| SCM | Pearson Correlation | 1 | .440** |
| | Sig. (2-tailed) | | .003 |
| ORGANIZATIONAL PERFORMANCE | Pearson Correlation | .440** | 1 |
| | Sig. (2-tailed) | .003 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

Source: research 2017

Table 4.7 correlation between SCM and OP

As it is shown in the table, there is positive correlation between organizational performance and supply chain management with correlation coefficient of 0.44 and significance value of 0.003 which shows us internal lean practice organizational performance have positive relation which is statistically significant at the 0.01 significance level.

4.4 Regression Analysis

4.4.1 Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .911 ^a | .831 | .505 | .317 |

a. Predictor: SCM practice

Source: research data 2017

Table 4.8 Model summary

From the table above, the coefficient of determination was found to be 0.831 indicating that SCM practices account for 83.1% of the variability in performance. This suggests that 16.9% of the variation is not explained by supply chain management practice.

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|----|-------------|-------|-------------------|
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 3.354 | 5 | .671 | 3.694 | .008 ^b |
| | Residual | 6.720 | 37 | .182 | | |
| | Total | 10.074 | 42 | | | |

a. Dependent Variable: ORGANIZATIONAL PERFORMANCE

Source: research data 2017

Table 4.9 Anova

The significance level is 0.008 which is less than 0 .01. This indicates that the model was statistically significant at the 1% level of significance.

4.4.2 Multicollinearity test of the independent variable

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

a. Dependent Variable: organizational performance

Source: research 2017

Table 4.10 Multicollinearity test of the independent variable

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

4.5 Analysis of open ended questions

From the open ended questions, majority of the respondent did not give response to the open ended questions but from the response given majority of them describes the major problem of their supply chain management are

- ❖ Importers of tyre (high competition).
- ❖ Shortage of input material.
- ❖ They fall to meet immediate demand.
- ❖ Shortage of foreign currency, B/c the raw materials are come from abroad.
- ❖ Lack of distribution centers.

Regarding the question about the company's future about supply chain management and aspect of SCM in full package, According to the respondents their plan is to increase the number of their distributors and to establish minimum stock.

4.6 Discussions of the Results

The objective of this research was to assess the impact of supply chain management on organizational performance in the case company Horizon Addis tyre S.C this was because most of literatures indicate that implementing supply chain management have positive relation with organizational performance so since Horizon Addis tyre S.C.is the only tyre manufacturing company in the country so this research try to understand that does supply chain management have the same impact as other producer companies and as we see from the above findings .

According to the finding the case company implements almost all supply chain practices in great extent but it implement pull production system in moderate extent.

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

And also the supply chain management (cumulative summery of all the constructs) have positive relation with organizational performance with correlation coefficient of (0.44).

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter presents summary of findings which are organized as the research objective, conclusions that are drawn from the findings and recommendations based on the findings.

5.2 SUMMARY OF FINDINGS

The study was directed by three specific objectives these are to investigate the supply chain management practice of horizon Addis TyreS.c, to assess the impact of supply chain management practice on organizational performance of the case company and to identify factors that need to be considered to improve the organizations performance in relation to supply chain and the following were the findings obtained from the data analysis regarding the supply chain management practice the finding indicate that the case company implements almost all of supply chain management practices namely the company considers quality as number one criterion in selecting suppliers, the company regularly solves problems jointly with their suppliers, the company has been helping their suppliers to improve their product quality, the company includes their key suppliers in their planning and goal setting activities, the company frequently interact with customers to set reliability, responsiveness, and others, the company frequently measure and evaluate customer satisfaction, the company frequently determines future customer expectations, The company facilitates customers' ability to seek assistance from them, The company periodically evaluates the importance of your relationship with their customers, Information exchange between the company's trading partners and the company's is reliable, the organization strives to reduce time wastage in operation ,the organization has continuous quality improvement programs, The organization strives to reduce time wastage in operation, the organization has continuous quality improvement programs. The organization pushes suppliers for shorter lead times, the organization streamlines ordering recovering and other paper work from its suppliers the information exchange between the company and its trading partners is

timely ,information exchange between company and its trading partners is accurate , information exchange between the company and its trading partner is complete ,information exchange between the company and its trading partners is adequate .

Regarding the impact of supply chain management on organizational performance of the case company from the finding, all supply chain constructs namely strategic supplier partnership, customer relation, quality of information sharing,level of information sharing, internal lean practice have positive statistically significant relationship with organizational performance And organization performance have positive relationship with SCM (which is the cumulative summery of the constrictors).

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

5.3 CONCLUSIONS

From the findings the following conclusions were drawn

First the case company has adopted almost all of supply chain practice in great extent and some namely the organization produces only what has been ordered by customers (pull production system) to a moderate extent.

The second conclusion drawn is that all the constructs of supply chain management namely customer relation, level and quality of information sharing and internal lean practice have strong significant and positive relationship with the case companies performance and strategic supply partnership have positive relationship with the case company's organizational performance.

The third conclusion drawn was there are some cases that need improvement in the case company these are implementing the strategic supplier partnership and implementing pull production system.

5.4 RECOMMENDATION

From the above conclusions the following recommendations were arrive at

Horizon Addis Tyre S.C should strengthen their supply chain management by improving those practices that currently practiced at moderate level namely, the organization produces only what has been ordered by customers (pull production system).

Second the company should have to more strengthen the supply chain management practices strategic supplier partnership.

5.5 SUGGESTIONS FOR FURTHER STUDY

Even if this study has limitation the following suggestion for future study were arrived at

This study is used only one case company that is Horizon Addis Tyre S.C and the finding was as described above .But the impact of supply chain management on organization performance maybe influenced by contextual factors such as the type of industry, the size of organization etc...

It's interesting to see the impact of supply chain management on organizational performance in other company case.

And also it is interesting to see the impact of supply chain management practice on organizational profitability or on the level of customer satisfaction.

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Appendix

ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

QUESTIONNAIRE

This study is being carried out on the title “**Assessment on the Impact of Supply Chain Management on Organizational Performance in the case of Horizon Addis Tyre S.C**”in partial fulfillment of the Award of a Master of Art Degree in Logistics and Supply Chain Management. Any information you present will be kept absolutely confidential and will be used only for academic purpose. Your cooperation and on time response will be highly appreciated.

General Instructions

- There is no need of writing your name
- Where answer options are available please tick (✓) in the appropriate box for part one

Contact Address

If you have any question, please contact me with the following address (Mobile: 09-10-01-87-43) and e-mail dbanchiyirgu@yahoo.com

PART I: Demographic Information

1. Educational Qualification

College diploma

first Degree

MA/MSC/MBA or above

2. Your position in the organization

1. Department manager

2. Division head

3. Senior officer

4. Officer

5. Other _____

3. How long have you been employee of Horizon Addis Tyre S.C?

1. Less than 1 year

3. 3 – 4 years

2. 1– 2 years

4. 5 years and above

PART II: In Relation to Supply chain management practice of Horizon Addis Tyre Company.

Please circle the appropriate number to indicate the extent to which you agree or disagree with each statement. With 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 =agree, 5 = strongly agree.

| Strategic supplier partnership: | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| 1. Your company considers quality as number one criterion in selecting suppliers. | 1 | 2 | 3 | 4 | 5 |
| 2. Your company regularly solves problems jointly with your suppliers. | 1 | 2 | 3 | 4 | 5 |
| 3. Your company has been helping your suppliers to improve their product quality. | 1 | 2 | 3 | 4 | 5 |
| 4. Your company includes your key suppliers in your planning and goal setting activities. | 1 | 2 | 3 | 4 | 5 |
| Customer relationship: | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 1. Your company frequently interact with customers to set reliability, responsiveness, and others | 1 | 2 | 3 | 4 | 5 |
| 2. Your company frequently measure and evaluate customer satisfaction. | 1 | 2 | 3 | 4 | 5 |
| 3. Your company frequently determines | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| future customer expectations. | | | | | |
| 4. Your company facilitates customers' ability to seek assistance from us. | 1 | 2 | 3 | 4 | 5 |
| 5. Your company periodically evaluates the importance of your relationship with your customers. | 1 | 2 | 3 | 4 | 5 |
| Level of information sharing: | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 1. The company informs trading partners in advance of changing needs. | 1 | 2 | 3 | 4 | 5 |
| 2. Your company's trading partners share proprietary information with Your company. | 1 | 2 | 3 | 4 | 5 |
| 3. Your company's trading partners keep you fully informed about issues that affect Your company's business | 1 | 2 | 3 | 4 | 5 |
| 4. Your company's trading partners share business knowledge of core business processes with Your company's. | 1 | 2 | 3 | 4 | 5 |
| 5. Your company's and Your company's trading partners exchange information that helps establishment of business planning. | 1 | 2 | 3 | 4 | 5 |
| 6. Exchange of information with Your company's partners (formal or informally) is frequent. | 1 | 2 | 3 | 4 | 5 |
| 7. Information exchange between Your | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|--------------------------|-----------------|----------------|--------------|-----------------------|
| company's trading partners and Your company's is timely. | | | | | |
| Quality of information sharing: | | | | | |
| 1. Information exchange between Your company's trading partners and Your company's is accurate. | 1 | 2 | 3 | 4 | 5 |
| 2. Information exchange between Your company's trading partners and Your company's is complete. | 1 | 2 | 3 | 4 | 5 |
| 3. Information exchange between Your company's trading partners and Your company's is adequate | 1 | 2 | 3 | 4 | 5 |
| 4. Information exchange between Your company's trading partners and Your company's is reliable. | 1 | 2 | 3 | 4 | 5 |
| Internal lean practice: | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 1.your organization strives to reduce time wastage in operation | 1 | 2 | 3 | 4 | 5 |
| 2. Your organization has continuous quality improvement programs. | 1 | 2 | 3 | 4 | 5 |
| 3. Your organization produces only what has been ordered by customers (pull production system). | 1 | 2 | 3 | 4 | 5 |
| 4. Your organization pushes suppliers for shorter lead times. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 5. Your organization streamlines ordering recovering and other paper work from its suppliers. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

1. What look like supply chain management practice of your company?

2. Is there any problem in the process of practicing supply chain management in your company?

YES NO

3. If the answer for the above question is yes what are they?

4. What is your company's future plan about supply chain management?

PART III: Related to level of organizational performance

Regarding level of organizational performance, please circle appropriate number which best indicate your firm's performance. The item scales are five-point Likert scales with 1 = significant decrease, 2 = decrease, 3=same as before, 4=increase, 5=significant increase.

| Organizational performance: how well an organization achieves its Market-oriented goals as well as its financial goals in the past five years. | Significantly decrease | Decrease | Same as before | Increase | Significantly increase |
|---|-------------------------------|-----------------|-----------------------|-----------------|-------------------------------|
| 1. Market share. | 1 | 2 | 3 | 4 | 5 |
| 2. Return on investment. | 1 | 2 | 3 | 4 | 5 |
| 3. The growth of market share. | 1 | 2 | 3 | 4 | 5 |
| 4. The growth of sales. | 1 | 2 | 3 | 4 | 5 |
| 5. Growth in return on investment. | 1 | 2 | 3 | 4 | 5 |
| 6. Profit margin on sales. | 1 | 2 | 3 | 4 | 5 |
| 7. Overall competitive position | 1 | 2 | 3 | 4 | 5 |

If any comment you well come:-----

THANK YOU!!!