Addis Ababa University

College of Business and Economics

School of commerce Department of Logistics and Supply Chain Management

The Effect of Supply Chain Management Practice on Organizational Performance in the case of Nefas Silk Paint Factory

By: Befekadu Mitiku

A Research Thesis Submitted to Addis Ababa University School of commerce in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Arts in Logistics and Supply Chain Management

Research Advisor: Tesfaye Belay (Assistant Professor)

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ADDIS ABABA UNIVERSITY COLLEGE OF COMMERCE

SCHOOL OF GRADUATE STUDIES

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STATEMENT OF CERTIFICATION

This is to certify that Befekadu Mitiku has carried out his research work entitled: “The Effect of Supply Chain Management Practice on Organizational Performance in the case of Nefas Silk Paint Factory”. It is his original work and is suitable for submission for the award of Degree of Master of Arts in Logistics and Supply Chain Management.

_____

Advisor: Tesfaye Belay (Assistant Professor)

Date: June 2023.

DECLARATION

I hereby declare that The Effect of Supply Chain Management Practice on Organizational Performance in the case of Nefas Silk Paint Factory is fully the work of Befekadu Mitiku. I did the research independently with the guidance and support of the research advisor, Tesfaye Belay (Ass. Prof.).

Source of the referenced materials are referenced or are listed in the acknowledgements together with the nature and the scope of their contribution.

This study has not been submitted for award of any Degree or Diploma Program. This research is made in partial fulfillment of the requirements for the award of the Degree of Master of Arts in Logistics and Supply Chain Management.

Declared by:

Name**: Befekadu Mitiku**

Signature**:**_____

Date**: June 2023**

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ACRONYMS

AT- Agency theory

CRM-Customer relation management

CT-Critical theory

DV- Dependent Variable

EFY- Ethiopian fiscal year

ISO-International Standard Organization

IT- Institutional theory

IV- Independent Variable

JIT –Just in Time

LIS-Level of information sharing

NSPF- Nefas Silk Paint Factory

NT-Network theory

OP-organizational performance

PLC- Private Limited Company

QIS-Quality of information sharing

RBV-Resource-based view

RDT- Resource dependence theory

ROI- Return on Investment

SC- Supply Chain

SCA-Socio-cognitive approach

SCM-Supply Chain Management

SCMP-Supply Chain Management Practice

SCT-Strategic choice theory

SPSS - Statistical Package for the Social Sciences

SSP- Strategic Supplier Partnership

ST- Systems theory **,**

TCE-Transaction cost economics**,**

TECT- Transaction Econmics Cost Theory

TVET- Technical and vocational education and training

VIF- Variance inflation factor

ABSTRACT

Supply chain managent practice effective engagement is crucial for businesses to succeed. Business to business competition is now changed to supply chain management competition. This study has tried to assess supply chain management practice and its effect on organizational performnace of Nefas Silk Paint Factory. The research had three specific objective. These are: (1) Assess the effect of practicing supply chain management in organizational performance; (2) Identify the relationship between SCM practice and organizational performance in the case company context; and (3) Reflect how organizational performance be improved in Nefas Silk paint factory by practicing SCM. In this regard, supply chain management four constructs/ dimensions, namely strategic supplier partnership, customer relation ,level of information sharing, and quality of information sharing were used as independent variable. The four supply chain management dimensions correlation with the dependent varialbe organizational performance was analyzed. The research is descriptive in its type, and the data was collected by distributing questionner 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 were presented by table and the major findings were that the case company implements supply chain management practice highly and strategic supplier partnership and customer relationship pracitce of the company needs improvement; as they are implemented in medium level. What is more, the findings show postive correlation and relationship between the four supply chain management practice dimensions and organizational performance. As there are different dimension of supply chain management, and there are differnet contexts, and nature of business, effect of supply chain management praccitce can also be researched on other businesses collectively and individually.

Key words : Supply chain Management, Supply chain Management practice, Organizational Performance, Supply chain managemenr dimensions/constructs, Strategic Supplier partnership, Customer Relationship, Level of Information Sharing, Quality of Information Sharing

CHAPTER ONE
INTRODUCTION

1.1 Background of the study

In the case of Nefas Silk paint factory, this study sought to assess the effect management of supply chain practice has on organizational performance. Supply chain management requires proper attention because it inextricably contributes to an organization's ability to compete.

Businesses find it difficult to compete in the thriving international markets of today. In this regard, firms need be aware of the necessity of managing the practice of supply chain which enhance their performance as well as their counterparts in the chain and boosts the harmonization of a joint better achievement (Cook, Heizer, & Sengupte, 2011).

Competitive advantage and enhanced organizational performance can come to effect if effective supply chain management (SCM) prevails. The traditional business to business competition has now shifted to competition between supply chains (S. Li et al. 2006). Concomitantly, Globalization, volatile customer demand, technological advancement has made business competition harsh (Koh, S. et al.2007).

An organization and supply chain members who adopt SCM practices can get the advantage of minimized inventory, swift cycle time, enhanced productivity, low cost of supply chain, and enhanced market share. These benefits collectively, will bring competitive advantage and will increase profits for all entities in the supply chain (Elmuti, 2002).

Supply chain involves a wide range of independent parties which have a stake in the chain. Companies need to integrate their business activity to cultivate more from a healthy and sustainable relationship (Chopra and Meindl, 2001).

There are several academic definitions available when we search for the meaning of SCM. To improve the effectiveness of the organization and the entire supply chain, Chong et al. (2011) describe SCM as the universal, tactical harmonization of the antiquated business tasks within a firm and across enterprises within the supply chain.

SCM is the effectual collective tactics, aimed at bringing together the different parties like sellers, producers, wholesalers, and clienteles for uplifting the continuing activities of the stakeholders in a dependable and effective business model, a particular business organization and the supply chain are included (Chopra and Meindl, 2001). S. Koh et al. (2007).

1.2 Background of NEFAS SILK PAINTS FACTORY

In 1967 G.C, Nefas Silk Paint Factory emerged as paint manufacturing industry in Ethiopia by the name Mega Paints Factory. In 1992 G.C. the factory nationalized with a new name Tseday. It was administered by the back then Ethiopian Chemical Corporation for 15 years. At the time of the transitional Government in the EPRDF era, the factory was privatized with acquisition cost of ETB 73,582,218.00 on May 5, 2016 and changed its name back to Nefas Silk Paint Factory (NSPF).

NSPF produces a variety of paints, including water-based and oil-based paints. The company also produces quartz, adhesives, antirust, varnishes, and other products that are related to these. NSPF can produce 60 million liters of paint annually. More than 1500 different types of paints and related paint products can also be produced by it. The plant has three production locations in the Amhara Region, Oromia, and Addis Ababa. (2020 Nefas Silk Paint Factory).

1.3 Problem Statement

One of the interior and exterior finishing material paint is mostly seen as a luxury. However, following the increasing number of constructions in the country, paint demand is increasing. Real Estate, office and business buildings, Malls, Roads, and different construction are widely carried out in Addis Ababa and in all larger and lesser cities of the country. Following the increased construction, finishing material demand is also high.

Supply chain management is essential for gaining a competitive edge. Additionally, a company's efficiency and effectiveness are aided by a perfect strategic supplier alliance, positive customer relationships, a corporate strategy focused on meeting client needs, and a high level and high quality of information exchange.

Customers demand and the changing business environment, technological enhancement, information handling and sharing needs more attention and focus now than ever. This is due to

the fast change in the business environment in terms of strong competition, technological advancement, and volatile customer need.

In the network of value creation to the final product user or customer, there are different units engaged in the chain. The focal firm in the chain, engages with its partners in the supply chain to secure sustainable provision of resources and information aiming at meeting effective management of enterprises in the chain and the flow of materials (Lau and Lee, 2000).

Nefas Silk paint factory uses ERP system called SAGE 300 to coordinate its internal units like Marketing, Purchasing, Production and Quality control. It has sales outlets in Addis Ababa and in the regions, which are interconnected by this IT system. However, when this system is down due internet connection, they use manual system like communicating via telephone, and by paper-based communications (Interview, April 7, 2023).

NSPF tries to execute its work by annual plan. This plan is made by the Board and is cascaded to the departments. In this regard, NSPF have not met any of its target sales plan for the past couple of years, as all the plans' targets were put high (Interview, April 7, 2023).

Currently, the factory is facing number of competitors in the market. Market competition is getting tough. New entry companies compete with low price and try to win large market share. (Interview, April ,7 2023).

The major NSPF customer are building Materials shops in Addis Ababa and in the Regions. These customers complain about not getting enough products, not being consulted, or requested of their demand of paints. Distribution wise, some customers don't get NSPF product for their shops even though they are at the same route of NSPF distribution line. This is mainly in the regional offices (Interview, April 7, 2023).

Regarding customer relationship, NSPF used to have different promotional activities like having customer day, where it collects comment on its products and services. Despite its benefits harvested, this campaign is discontinued. NSPF is no more doing these activities, as it believes its products are more preferred by customer than competitors. In addition, it believes that it has no market problem (Interview, April 7, 2023). Despite these, there are new

companies joining the market with less price and try to widen their reach. In this regard, it is time for NSPF to review its management of supply chain practice and enactment.

Contrariwise, NSPF for its raw material and other input requirement, has developed preferred supplier list, with which the ERP software is integrated. Suppliers of raw material performance is evaluated annually. Suppliers visit NSPF on there on schedule, but NSPF has not development a mechanism for regular meeting with its suppliers. What is more, NSPF calls on the suppliers only when it faces problem with the materials it purchased. Supplier are not seen as partners. Accordingly, this can be taken as signs of strategic supplier partnership not exercised properly. Whenever supplier fails to meet NSPF requirement on the material, in terms of quality, specification requirement, it is neither supported nor consulted to amend the default. Other prequalified suppliers from the supplier list will be contacted for supply. Suppliers are not seen as partners but only as suppliers. (Interview, March 2023).

This investigation was motivated by the flaws in NSPF supply chain management practices. Additionally, the purpose of this study, which is titled "The Effect of Supply Chain Management Practice on organizational Performance of NSPF", is to examine the company's performance as assessed by the four supply chain performance characteristics and demonstrate the effect of supply chain management practices. These include strategic supplier partnership, customer relationships, level of information sharing, and quality of sharing of information.

As finishing material part of the construction industry, paint manufacturing sector has not been given due attention. Paint is mostly seen as a luxury, and not given attention. As a result, there is a dearth of study on the management of supply chain practices that include strategic supplier partnerships, customer relationships, and the level and quality of information sharing.

Strategic suppliers handling and communication needs to be reviewed to endure and stand out competition in the market. In addition, customer relationship and information management are not to the expected level of standard. It is observed that Nefas Silk paint factory is somehow outsmarted with some of its products by competitors. What is more, information handling and sharing with customers and suppliers is not flawless which is hampering efficient and effective customer and partners' management.

1.4 Research Questions

This research is targeted at answering the questions below. This will be of benefit to the organization in addressing its supply chain management practice gaps to harness positive performance outcome.

1. Is strategic supplier relationship, customer relationships, and the level and quality of information sharing all affect how well the NSPF performs.?
2. What feature does management of supply chain practice in NSPF has as gaged by interaction with customers, level and quality of information sharing, and strategic supplier partnerships?
3. How can performance of NSPF be improved mirrored by its supply chain management practice?

1.5 Research Objective

1.5.1 General Objectives of the Study

The main goal of this study is to evaluate supply chain management practices and their effect on Nefas Silk Paint Factory's organizational performance.

1.5.2 Specific objectives

The specific objectives are:

1.5.2.1 Assess the effect of practicing supply chain management in organizational performance

1.5.2.2 Identify the relationship between SCM practice and organizational performance in the case company context.

1.5.2.3 Reflect how organizational performance be improved in Nefas Silk paint factory by practicing SCM

1.6 Significance of the Study

The management of the supply chain in the paint business has not been sufficiently studied, according to the researcher's examination of the literature. Considering this, the research is meant to add to the literature in this regard. In addition, the paint industry is one significant economic gear contributing to the construction industry. Identifying the supply chain management practice gaps, will help NSPF to rectify and widen, keep its market share.

Conversely, if NSPF management of supply chain practice is at its best, it shall be shared to supply chain in the industry in general for betterment of the whole sector.

As part of input providers, factories who produce paint contribute noteworthy role in the growth of the construction industry in Ethiopia. Newly built buildings need paint for their final interior and external design. What is more, paint is needed to renovate old houses, buildings, different metal, and not metal materials. To continually have the benefit of paint in the construction industry, effective supply chain management practice puts immense contribution to the performance of firms. What is more, this research will help the case company to see the gaps and positive aspects of its current supply chain practice to keep its business momentum, perform effectively and efficiently by increasing profit and cost minimized.

The operation of a firm depends on the management of the supply chain practice. Parties involved in the supply chain make separate contributions towards the objective of meeting customer demand. A company's main goals should be to maximize profit, increase ROI significantly, and increase market share. In this sense, it would be beneficial to learn more about the management of supply chain practices in terms of strategic supplier partnerships, customer relationships, and the level and quality of information exchange. These aspects of supply chain management play a big part in how well any organization performs.

Nefas Silk paint factory is company which has a long tenure in the paint industry. It is the oldest and largest paint manufacturer. NSPF has been in the business from 1967 G.C in the production of paints and related products focused on customers need. Conducting this research is believed to reveal the good experience acquired by the company to other entities in different industry. What is more, it helps NSPF to strength its positive SCM practices and rectify its defects to secure sustainable business.

This analysis further aids in identifying the company's supply chain practices' gaps for future correction. What is more, in this era of globalization, businesses need to modernize and review their old way of doing business. That is to stay competitive and harness the best out of their business, their supply chain practice must be reviewed and updated. Accordingly, this study will help the company in the review and gap identification.

The construction industry requires the input of the company, and further the management may consider this study for their managerial decision to improve their management of supply chain practice. The company may use this paper to see the gaps in its supply chain practice to minimize its cost and conduct its supply chain practice more efficiently and effectively This study may be used by another research works as well.

Nowadays, management of supply chain practice is emerging as necessity and an evitable input to compete and sustain businesses worldwide. Effective management of supply chain practice in a lesser and big organization are providing immense benefits. The activity of an organization as a whole and the activities of other organizations in the supply chain are both impacted by supply chain management. Accordingly, management of the firm need to work on management of supply chain practice to advance the organization towards being prominent in the market (Koh, S. et al. 2007).

Supply chain (SC) different enterprise like suppliers, manufacturers, distributors, and retailers get in a network to work collaboratively. Supply Chain also involves processes wherein several different organizations or the supply chain stakeholder work together in value chain. In addition, it also entails their interaction such as to obtain resources, to change it to finished goods, and provision of these final product to clients or users (Ivanov D. et. al. 2019)

The goal of addressing a customer demand brings together a group of independent organization. Value is added to the goods and services distinctly and/or all together in the endeavor of addressing customer need (Lu, D. 2011).

1.7 Scope of the Study

From a conceptual standpoint, this article exclusively concentrates on the effect of supply chain management practices on NSPF-specific organizational performance. Only the following management of supply chain practice dimensions considered in the study: strategic supplier partnerships, customer relationships, and the level and quality of information exchange.

Various academics have established several additional aspects of supply chain practice. However, the researcher conquers that the level and quality of information sharing, customer relationships, and strategic supplier partnerships effectively reflect the factory's supply chain

management practices and aid in identifying organizational performance gaps. These variables were therefore chosen for this study.

Geographically, although NSPF has branches in different regions of the country, this study only covers Addis Ababa branches :(Sales outlets, manufacturing sites), and the head office. This is considering the financial and time it may take encompassing all the firm branches in the country. Nefas Silk paint factory departments namely Administration and human resource, marketing, purchasing, finance, production, and quality control, are covered in the study. Even though NSPF has branch in other parts of the country, the study only focused Addis Ababa branch and the head office.

The study's focus was solely on supply chain management practices and business organizational performance as measured by SCMP dimensions. The study used the SCMP dimensions as an independent variable and the organizational performance of the company as a dependent variable. The study concurrently assessed the performance of the business in terms of its market share, sales, profit margin on sales, return on investment, and overall competitive position.

1.8 Limitation of the Study

There was some limitation of the study regarding data collection. Some of NSPF staff were not cooperative to give information nor fill questionnaire. Another drawback is that the study concentrated on the company's supply chain management from the company side. It would have been more comprehensive if the SCM side included suppliers, and other stakeholders of the supply chain to give more vivid picture of SCM practice of NSPF. This was mainly due to the time and cost issue if all the SCM entities covered in the research. Due to time and financial limitations, entities of the supply chain players, like NSPF suppliers and customers, were not considered when sampling. As a result, the conclusion might not be applicable to the entire supply chain of the organization under scrutiny.

Contrariwise, all dimension of SCM not addressed in this study. Only selected SCM dimensions are considered. Therefore, the study could not be taken as representing all constructs of SCM which could explain SCM practices.

Prospective studies in the field may broaden the scope of supply chain management practice by considering factors that are not discussed in this study, such as closeness to suppliers, JIT/lean capacity, cross-functional coordination, logistics integration, and supply chain leadership that is widely accepted.

1.9 Definition of Terms

Supply chain the processes that take place from the collection of resources through to the delivery of the finished good to the customer are referred to as the supply chain. It also refers to the company's internal and external operations that support the value chain so that goods may be produced, and services can be rendered to customers (Cox et al., 1995).

Supply chain management incorporates all activities of manufacturing and provision of finished goods or service. This involves the interactions of firms which provide resources to focal organizations and the relationship of customer's customer aimed at expediting a slicker provision and access of material, information, and money through the network (Rhonda R. et al., 1999).

Supply chain management practice According to Koh, S. et al. (2007), it is a collection of actions made by an organization to support efficient supply chain management.

Strategic Supplier partnership is a sustained partnership between the company and its suppliers (S. Li et al. 2006).

Customer relationship management Businesses use a variety of procedures, plans, and tools collectively referred to as customer relationship management (CRM) to track, manage, and analyses customer interactions and data over the course of the customer lifecycle. To optimize client retention and boost sales, it is important to improve customer interactions. (W. Chai et al. & Chai, 2020).

Level of information sharing is exchange of essential information at the right level across supply chain partners is necessary to suit the firm's needs in terms of being sufficiently detailed, timely, and frequent. (Johansson, 2012).

Quality of information sharing information shared on supply chain can be termed as quality information, when consists of timeliness, accuracy, credibility, adequacy, and credibility (Moberg et al., 2002; Monczka et al., 1998).

Organizational Performance is used to describe how successfully an organization achieves both its financial and market-oriented goals. While SCM's long-term objectives are to increase market share and profitability for all supply chain players, its short-term objectives are primarily to increase productivity, decrease inventory, and shorten cycle times. Financial metrics have been applied as a comparison tool and to evaluate an organization's evolution over time. Any organizational effort, including supply chain management, should ultimately result in increased organizational performance.

Various indicators, such as return on investment (ROI), market share, profit margin from sales, increase in ROI, sales, market share, and overall competitive position, have been used in previous studies to assess the performance of organizations. The same questions utilized in this study to assess organizational performance.to make a business more responsive to a changing environment than its competitors to gain an advantage for the business (Flynn et al., 2010).

1.10 Organization of the Paper

There are five chapters in this research report. The introduction section is included in Chapter one. It comprises the background of the study, the problem statement, the research questions, the aims, the significance, the scope, and the constraints, as well as a list of key words and details on the way the work is structured. The second chapter includes a review of the relevant literature, which is divided into theoretical and empirical sections. The research conceptual framework and hypotheses are also included in chapter two. The third chapter presents the study technique, which covers the research approach, design, population and sampling method, data source and type, data collection equipment and methods, and data analysis. The study's findings are presented and discussed in chapter four. Chapter five concludes with an overview of the main findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical literature review

This section discusses the theoretical foundations of the inquiry. The study's focus is; how supply chain management practice affects NSPF organizational performance. The terms supply chain, supply chain management, supply chain management practice, and organizational performance as it relates to supply chain management practice defined and discussed. We'll also go into detail about the research's dependent and independent variables. Strategic supplier partnerships, customer relationships, information exchange level and quality are all independent variables in this study. Organizational performance is a dependent variable, while the ROI, sales, profit margin on sales, and overall competitive position are its components.

2.1.1 Definitions and concepts of supply chain, supply chain management, supply chain management practice, and organizational performance

2.1.1.1 Supply chain

A supply chain is a collection of linked procedures that extends from the acquisition of raw materials to the consumption of the finished product, according to Cox et al. (1995). These procedures allow the value chain to create products and provide services to clients. It can also be described as a group of independent businesses cooperating to meet a demand for a service from customers. SC includes growing and expanding the value chain network. To fulfil the goals of effective supplier management and the flow of parts, the organizations in SC are interconnected through exchanging resources and information (Lau and Lee, 2000).

Supply chains are made up of several business organizations that are connected during the design, manufacture, and delivery of a good or service to the consumer. Each company in the chain depends on the supply chain to function and achieve its corporate goal. The supply chain is a network of organizations. Every company is a part of at least one supply chain and has a responsibility within each of them. (Hugos, 2003).

2.1.1.2 Supply chain management

Supply chain management (SCM) includes the planning and coordinating of supply chain activities to improve the long-term performance of both the individual businesses and the supply chain (Chopra and Meindl, 2001).

The decisions a company can make and the way it can compete in its markets are significantly influenced by how efficient its supply chain is. If a company wants to serve a wide customer base and compete on price, its supply chain better be cost-optimized. If a company wants to serve a market segment and compete on convenience and customer service, it would be better to have a supply chain that is responsively optimized (Hugos, 2003).

2.1.1.3 Supply chain management practice

S. Li et al. (2006) defined supply chain management practices as a group of internal duties carried out within an organization for effective supply chain management. It is a strategy used by organizations to meet customer needs by efficiently coordinating and integrating supply, demand, and relationships between each entity at the lowest possible cost (Hamid, Abdelsalam, and Ibrahim, Siddig. 2014).

Different academics create different supply chain management practice dimensions. The SCMP modern method includes outsourcing, quick cycle times, sustainability of process flow, degree and quality of information sharing, customer relationships, and strategic supplier partnerships.

2.1.1.4 **Supply Chain Management Practice Dimensions**

Different scholars have developed and theorized SCM practice dimensions. The commonly mentioned dimensions are listed as follows:

Donlon (1996) • Supplier partnership • Outsourcing • Cycle time compression • Continuous process flow • Information technology sharing	**Tan et al. (1998)** • Purchasing • Quality • Customer relations	**Alvarado and Kotzab (2001)** • Concentration on core competencies • Use of inter-organizational systems (e.g., EDI) • Elimination of excess inventory levels
Tan et al. (2001) • Supply chain integration • Information sharing • Supply chain characteristics • Customer service management • Geographical proximity • JIT capability	**Ulusoy (2003)** • Logistics • Supplier relations • Customer relations • Production	**Chen and Paulraj (2004)** • Supplier base reduction • Long-term relationship • Communication • Cross-functional teams • Supplier involvement
Min and Mentzer (2004) • Agreed vision and goals • Information sharing • Risk and award sharing • Cooperation • Process integration • Long term relationship • Agreed supply chain leadership	**Li et al. (2005)** • Strategic supplier partnership • Customer relationship • Information sharing • Information quality • Internal lean practices • Postponement	**Burgess et al. (2006)** • Leadership • Intra-organizational relationships • Inter-organizational relationships • Logistics • Process improvement orientation • Information systems • Business results and outcomes

Table 1: Dimensions of SCM practices (Source: Koh, S. et al. 2007)

Customer relationship management, the level and quality of information sharing, and strategic supplier alliances are all aspects of supply chain management practices that should be considered (S. Li et al. 2006; Abdi, M. R., et al. 2017).

Out of the other SCMP dimensions, only the strategic supplier partnership, customer relationship management, level, and quality of information exchange were used in this study. These factors are considered when displaying an organization's SCMP. Additionally, it takes a lot of time and money to address additional SCMP dimensions.

2.1.1.4.1 Strategic supplier partnership (SSP)

A strategic supplier partnership is focused on the relationship between a firm and its suppliers (Koh, S. et al., 2007). To maintain a healthy supply base, businesses develop partnerships with their suppliers. Supply base management is an issue of strategic supplier partnerships. It focuses on how businesses use the capabilities, processes, and technologies of their suppliers to improve supply chain performance and gain a competitive advantage as well as how internal organizations coordinate the functions of manufacturing, logistics, materials, distribution, and transportation (Hamid, Abdelsalam, and Ibrahim, Siddig. 2014).

Supply chain management, according to (Mentzer, JT 2001), is concerned with the participation in supply chain partner companies' planning and strategy for coordinating their supply networks. This is so because supply chain management involves coordinating all the chain's organizations. Coordinating efforts across all internal and external corporate functions is another requirement for organizations.

2.1.1.4.2 Customer relation management (CRM)

The goal of a business organization is to address the need of their customer. In this regard, organizations need to understand, what their customer current and future need is. They need also continually meet customers need and work hard to exceed their expectations. Customer relationship management, which is a practice in supply chain management, can aid in the performance of the chain (Hamid, Abdelsalam, & Ibrahim, Siddig. 2014).

Nowadays customer demand is volatile and technological advancement coupled with globalization has made business competition hard. In this regard, organizations need give due attention on their customer relationship management and supply chain management practices.

According to (Vrijhoef, Ruben & Koskela, Lauri. 2000) customer relationship management is to do with continues organizational activity of the marketing and service strategy. Customer need is identified and interpreted by the organization, and it is needed to coordinate the different process and technology. Customer satisfaction enhancement requires ongoing efforts to improve products and services are being made to increase consumer satisfaction and loyalty.

2.1.1.4.3 Level of information sharing (LIS)

Sharing information refers to disseminating knowledge that is beneficial to organizations, people, or systems. Four key questions should be addressed by organizations in order to improve the outcomes of information sharing: We ask what to share, who to share it with, how to share, and when to share it first. Reducing redundancy, lowering expenses, and improving responses are all made possible by the quality of the answers. The terms "Information Sharing," "Knowledge Sharing," and "Information Integration" are all interchangeable. In a supply chain, there are many different types of information, including logistical, business, strategic, and tactical data (Lotfi, Z., et al. 2013).

To exchange intelligence successfully and efficiently with supply chain partners, an organization must be able to communicate information. Sharing of information encompasses both information quality and level. Supply chain management practice necessitates both quality and level of information. Information sharing is the foundation for communication and collaboration between supply chain parties. To establish a successful supply chain, information sharing must be efficient (Muhammad, et al. 2019) (Hamid, Abdelsalam & Ibrahim, Siddig. 2014).

When essential and confidential information is transmitted to supply chain partners, it is referred to as the level of information sharing (Monczkal et al., 1998). Systems in the supply chain, according to Lee, H.L. (2002), connect with one another via exchanging information. Information sharing in the supply chain has improved thanks to technology, the internet, and e-commerce (Zailani and Rajagopal, 2005).

Strategic, tactical, and operational levels are the several sorts of information sharing that take place within an organization. Additionally, information sharing can cover everything from market and customer-related information to the flow of goods in logistics (Mentzer et al.,

2000). Sharing information with other supply chain participants can improve organizational performance, according to prior study. Organizational performance is positively impacted by the level of information exchange (Johes, 1998; Novack et al., 1995); (Li et al., 2006; Wijetunge, 2017).

There are different platforms for information sharing in the supply chain. Supply chain partners can access Internet, Intranet, and Extranet which are different in terms of giving access, users, and information. Organizations therefore need to be careful on using these platforms as the information exchange and access shall be managed differently. Confidential business information shall not be shared on a platform where anyone can access. Therefore, depending on the nature of information, and the parties involved, the use and choice can be made (Hamid, Abdelsalam & Ibrahim, Siddig. 2014).

Since the Internet uses a public network, anyone can utilize it. There is no designated user or open access to the material on the internet. However, the information on the Internet is dispersed because of the irregular format and varied content. The Intranet, in contrast, is a private network created within an organization using Internet technologies; the information on it is confidential and only accessible to those who work for the organization (Zailani. Rajagopal, 2005).

2.1.1.4.4 Quality of information sharing (QIS)

The information shared on supply chain can be termed as quality information, when consists of timeliness, accuracy, credibility, and adequacy (Monczka et al., 1998; Moberg et al., 2002). QIS plays a vital role on the effectiveness of supply chain management practice. Every information shared contributes to the outcome of a satisfied customer. From need identification and customer relationship management (CRM), to product design, raw material acquisition, manufacturing, inventory management and marketing, transportation and distribution, quality of information is of great importance. Quality of information distorted can affect the whole supply chain management negatively.

2.1.1.5 Organizational performance

Businesses have varying missions, visions, and goals. Every action taken must support the organization's target objective. Organizational performance refers to all daily tasks that are carried out with the intention of running a profitable company. Market orientation and financial performance can be used to define and assess organizational performance.

Only the organizational performance of the case company's business evaluated since the study's focus is on how supply chain management practices affect the performance of Nefas Silk Paint factory. These indicators, in accordance with the study, accurately reflect the supply chain management procedures used by the organization.

Yamin et al. (1999) assert that an organization's effectiveness is determined by how successfully it achieves both its financial and market-oriented goals. While short-term SCM goals largely concentrate on enhancing production performance, long-term SCM goals include increasing market share and earnings for all supply chain players (Tan et al., 1998). According to Li et al. (2006), the end goal of every organizational endeavor, including supply chain management, should be increased organizational performance.

2.1.2 Supply chain Management theories.

According to Mensing (2013), there are several theories that are relevant to supply chain management, including institutional theory (IT), network theory (NT), resource dependence theory (RDT), resource-based view (RBV), transaction cost economics (TCE), agency theory (AT), systems theory (ST), strategic choice theory (SCT), socio-cognitive approach (SCA), and critical theory (CT). There are other theories as well. The following theories were chosen because they provide close theoretical understanding and context for the supply chain management practice characteristics that were previously covered.

2.1.2.1 Resource dependency theory (RDT)

Supply management determines business success or failure. There are different literatures in this regard on supply management. One of these theories is the resource dependency theory, which states: there are four crucial supply management decision-making factors. These choices include whether to make or buy something, which sourcing technique to use for each category,

how to create a supply pool, and how to negotiate and sign contracts (Mensing, L. 2013). Organizations are required to make decisions to manage their supply. The decision made must be careful as it may lead the organization to high dependency on other organizations for supply and be dominated.

Resource need brings organizations to come together, and the resource have organization have power over the resource not have. Power and resource dependence are directly linked. Organizations deter from being dependent on other organization for their supply. However according to resource dependency theory, to obtain resources, an organization like a business enterprise must deal with other actors and organizations in its surroundings. Organizations must, on the one hand, be able to depend on their supply without uncertainty (Davis, G. F., Cobb, and J. 2010).

Due to the need to focus on core activity, firms are tending to outsource non-core activities. The supply management of firms is more managed by strategic partnership and alliance.

> The rapid escalation in outsourcing activities across diverse industries has led to the increased recognition and implementation of strategic supply management, which specifically focuses on the strategic management of inter organizational relationships. (Paulraj, A. 2007).

Organization's relationship is required to be on a win-win terms rather than one organization being dependent to the other. This is where the strategic supply management comes in. organizations need the relationship and cannot leave without interacting with their business environment (Mensing, L. 2013).

Survival of organizations depends on the acquisition and maintenance of their supply. An organization cannot survive without interacting with its environment. In this regard, organizations need to identify the critical resource they need to run their business. In addition, they need to know what external variable influence the acquisition of resources. (Pfeffer & Salancik, 2003, p.2) (Dill, 1981, p 758, Nienhueser, 2008, p. 12).

2.1.2.2 Agency Theory (AT)

The concept of agency theory is used to describe and address problems in the relationship between business owners and their agents (Kopp, C.2021). In this study, the principal is Nefas Silk Paint factory, whereas its suppliers are the agents. Therefore, the agency theory shall be viewed from the relationship of Nefas Silk Paint factory with its suppliers.

A principal and an agent share risk when they start their relationship. Both entities to get into the relationship, need to have similar objectives (Bendickson, J. et al. 2016). Agency theory is about the relationship of principal and agent. In addition, when firms undertake agency relationship, their tendency of risk handling might include divergent corporate objectives or levels of risk aversion. A principal and an agent could also have varying degrees of risk tolerance.

In agency undertaking the principal shares risk with the agent towards fulfilling a common goal. Agency theory is all about sharing risk and giving responsibility to the agent toward achieving organizational goal. This cooperative behavior is expected to have the effects that the principal has described (Barnard, 1938). The concern that a too zealous agent might act against the best interests of the principal out of self-interest, however, lies at the heart of the agency problem (Burnham, 1941). According to the primary, this mismatch modifies the agency costs and raises questions (Fama, 1980).

At the start of the principal-agent relationship, the principal is made aware of the agency fees in full. However, when the agent disobeys the terms of the contract, the principal feels as though additional risk has been assumed. The first agency concern (namely, modifications to risk sharing) therefore manifests. The second agency issue is intimately related to the first. According to agency theory, employees are more likely to adopt the desired behaviors of the principals when they have equity in the company (Fama & Jensen, 1983). Further suggesting that when the activities are outcome-based, the agent is more likely to behave in the principal's best interests as Eisenhardt (1989) asserted.

Agents will, however, be more motivated to act in their own best interests if they notice an injustice. Because of the agent's self-interest, the principle finds it challenging to control the agent's behavior due to knowledge asymmetries. As a result, it becomes challenging to assess

the results (Anderson, 1985), which raises a new problem with agent behavior monitoring. Given the nature of the two agency problems, governance tools are needed to assist align risk and monitor agent behavior.

According to Bendickson, J., et al. (2016), there are two approaches to agency theory: principal-agent research and positivist agency theory. Principal-agent research has identified two potential agency problems: risk-sharing and agent oversight. The two problems are linked because a divergence in risk-sharing makes it challenging for the principal to monitor agent behavior due to information asymmetries. The change in risk-sharing, whether real or perceived, makes it difficult for the principal and agent to enter a flawless contract. Positive agency theory, according to (Eisenhardt, 1989) focuses on the essential control mechanisms that keep agents from acting selfishly.

2.1.2.3 Transaction cost economics (TCE)

The goal of transaction cost economics is to clarify why some markets contain many organizations while other sectors are dominated by a few number of extremely large organizations, or hierarchies. Oliver E. Williamson, the field's most influential researcher and recipient of the 2009 Nobel Prize in Economic Sciences, drew up a historical case that explains how an economy based on numerous small transactions changed into one based on massive hierarchies that transact among themselves and absorb individuals. Given that such hierarchies predominate in today's economy, organizational advances that characterize it are a more effective approach to structure economic connections. There are four basic components to transaction cost economics:

1. Because of its uncertainty and unpredictable nature, the globe.
2. Small numbers negotiating and asset specificity make ending economic interactions expensive for the parties involved.
3. The amount of information that people can gather and understand, and consequently, the number of possibilities from which they can select, is constrained. As a result, constrained rationality rather than pure rationality serves as the foundation for economic exchanges.
4. The inherent opportunism of people in commercial connections makes long-term contractual enforcement challenging.

These four elements work together to produce friction (i.e., transaction costs) in the market and make it challenging to contract for low prices. The capitalist strategy entails acquiring consumers and suppliers to integrate at all levels of the supply chain. Variations in how the four factors affect different economic linkages determine the level of industry concentration or lack thereof.

According to transaction cost economics, the modern large corporation is a representation of the authority relationship taking the place of contractual agreements. Large hierarchies allow business owners to maintain behavioral control without the need for complex contracts by using organizational methods like incentives, coercion, and monitoring.

According to TCE, market governances are ineffective and fail when exchanges take place in settings with a lot of uncertainty and few possible partners, where provider opportunism is unaffected by competitive dynamics (Williamson, 1985). In certain circumstances, one partner tends to favor tighter connections out of self-interest.

2.2 Empirical Literature Review

Prior research on the impact of supply chain management procedures on organizational performance have concentrated on aspects of the practice. Additionally, studies on the NSPF have been done with an emphasis on leadership and factors that affect employees' attitudes. However, no studies have been conducted to examine in what ways do supply chain management techniques affect NSPF performance. Few of the studies are discussed here.

An investigation into how supply chain management techniques affect competitive advantage in Jordanian manufacturing enterprises was conducted by Baqleh, L. A., and Alateeq, M. M. in 2023. The study focused on the moderating effect of big data analytics on the relationship between SCMP and competitive advantage. The researchers gathered information from 156 Jordanian manufacturing enterprises using a quantitative methodology. Additionally, the study's hypotheses were tested using hierarchical linear multiple regression and an SPSS approach. The outcomes showed that supply chain management strategies significantly improved competitive advantage. However, their findings indicated a strong correlation between information quality (IQ) and information sharing (ISh) in terms of advantage over rivals. Contrarily, it was discovered that customer relationship management (CRM) and strategic supplier partnerships (SSP) had little influence.

Research on the impact of supply chain management practices on the performance of small and medium-sized businesses in developing countries was conducted by Chileshe, M., and Phiri, J. in A Case of Agro-Dealers in Zambia (2022). The target audience for this study was small and medium-sized agro-dealers in Lusaka, and a predetermined sample size of 151 was chosen. Through a competitive analysis of priorities, the researchers attempted to determine how adopting supply chain management practices affected corporate performance. The upstream or downstream ends of the supply chain, or perhaps one or two SCM features or viewpoints, are typically the focus of current theoretical and empirical SCM study. This revealed a research gap that needs to be filled by looking at both the downstream and upstream sides of the supply chain and linking such activities to both competitive advantage and organizational success.

(M. Al-Zaqeba, H. A. Al-Khawaja, and I. H. Jebril, 2022) examined how supply chain management affected COVID-19's competitive advantage. The goal of the study is to determine how talent management practices affect supply chain and competitive advantage

considering COVID-19. In the context of Jordanian industrial businesses, the researchers employed a survey questionnaire that was built using information about supply chains.

In Karu, Nigeria, researchers (Anaja, O. E., & Bagobiri, Y. E. 2022) examined how supply chain management affected the organizational performance of a few fast-moving consumer items. The supply chain's upstream or downstream ends, or maybe one or two SCM characteristics or viewpoints, are often the subject of recent theoretical and empirical studies on SCM. By examining both the downstream and upstream sides of the supply chain and connecting such activities to both competitive advantage and organizational performance, this has shown a research gap that needs to be filled. The study made use of primary data and a survey research design. Strategic supplier partnerships, customer relationship management, and information exchange were found to have the strongest statistically significant relationships with and effects on organizational performance.

Mwilu (2013) did study on supply chain management performance and practices at Kenyan public research institutions. Two objectives of this study were to ascertain 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 SCM implementation in Kenya's public research institutions. According to the study, performance was strongly statistically associated with three factors: logistics, lean suppliers, and information technology. Seven elements of SCM practices were defined by the researcher. Outsourcing, green supply chain practices, and long-term supplier agreements were found to have modest, non-statistically significant correlations.

How enterprise resource planning systems and organizational effectiveness are related to supply chain management is examined by (Janatabadi et al., 2013). This study's goal was to investigate how supply chain management was used to implement enterprise resource planning and how it affected organizational performance. Through prepared surveys, the 174 Malaysian companies that provided the information needed for this study were contacted. And based on the information gathered, the study concluded that enterprise resource planning has a favorable impact on the supply chain, which eventually leads to enhanced overall performance of the organizations under study.

Yap and Tan (2012) conducted research on how Malaysian public health care organizations performed in relation to service supply chain management practices. Five features of service supply chain management practices were used to investigate the effect of supply chain management on organizational performance. The five areas that the researchers used were information and technology management, demand management, customer relationship management, supplier relationship management, capacity management, and resource management. It was discovered that the alliance network had a mediating effect on the direct relationship, which had a significant and positive direct link with organizational performance.

Research on the impact of supply chain management techniques on the effectiveness of Small and Micro Enterprises in Turkey was done by Lenny et al. in 2007. The researchers used exploratory factor analysis. They separated SCM techniques into two groups: outsourcing and numerous suppliers, and strategic collaboration and lean techniques. They concluded that strategic collaboration, lean practices, outsourcing, and the utilization of numerous suppliers had a direct and significant impact on operational performance. On the other hand, as it relates to SCM, outsourcing and the usage of several suppliers have little to no direct and meaningful impact on organizational performance. Additionally, both components of SCM practices have a favorable, indirect, and significant impact on organizational performance because there is a strong direct relationship between the two performance-constructs.

Li et al. (2006) studied the effects of supply chain management practices on competitive advantage and organizational performance by collecting data from 190 organizations and developing five dimensions of SCM practice (strategic supplier partnership, customer relationship level of information sharing, quality of information sharing, and postponement). The study looked at the connections between competitive advantage and organizational success in SCM practices. Postponement has not been as effective a predictor of SCM practice as the other four of the five characteristics that were developed. Organizational performance, however, can directly and favorably be impacted by improved organizational performance and competitive advantage.

In the case of Ethiopia's Awash Tannery Plc, (Mustefa, 2014) performed study on supply chain management strategies and company performance. Using information gathered from Awash Tannery employees, the research constructs and conceptualizes five aspects of SCM practice (strategic supplier partnership, customer relationship, degree and quality of information

exchange, and internal lean practice). The researcher investigated how SCM practices affected operational and organizational performance. The research's findings indicate that there is a strong connection between SCM practices and operational and organizational success. In addition, the study shows how SCM practice influences organizational and operational performance and how operational performance affects organizational performance.

Based on an analysis of the empirical literature and SCM views, researchers have different SCM practice dimensions. However, the SCM practices that were embraced most were customer relationship management, exchange of information level and quality, and strategic supplier relationships. Internal integration and delay placed second in the analysis of the effects of supply chain management practices on organizational performance. When one organization adopts a supply chain management practice generally while another just utilizes it occasionally or not at all, this indicates that different organizations place varying values on certain practices. The empirical literatures demonstrate that there are multiple factors at play in the relationship between supply chain management practices and organizational performance. This results from the numerous academia created.

Numerous research has been conducted on supply chain management, which is still being studied today. However, there is still disagreement among researchers over the definition and dimensions of the SCM and SCMP. Previous studies have developed and applied several analytical units and performance measurement methodologies.

2.3 Research framework

This section provides the research study conceptual framework. Supply chain management practice expressed in: Organizational performance is significantly influenced by the level and quality of information sharing, customer relationships, and strategic supplier partnerships.

The association between supply chain management practice dimensions and organizational performance is the research hypothesis. Accordingly, the conceptual research approach for this study is follows:

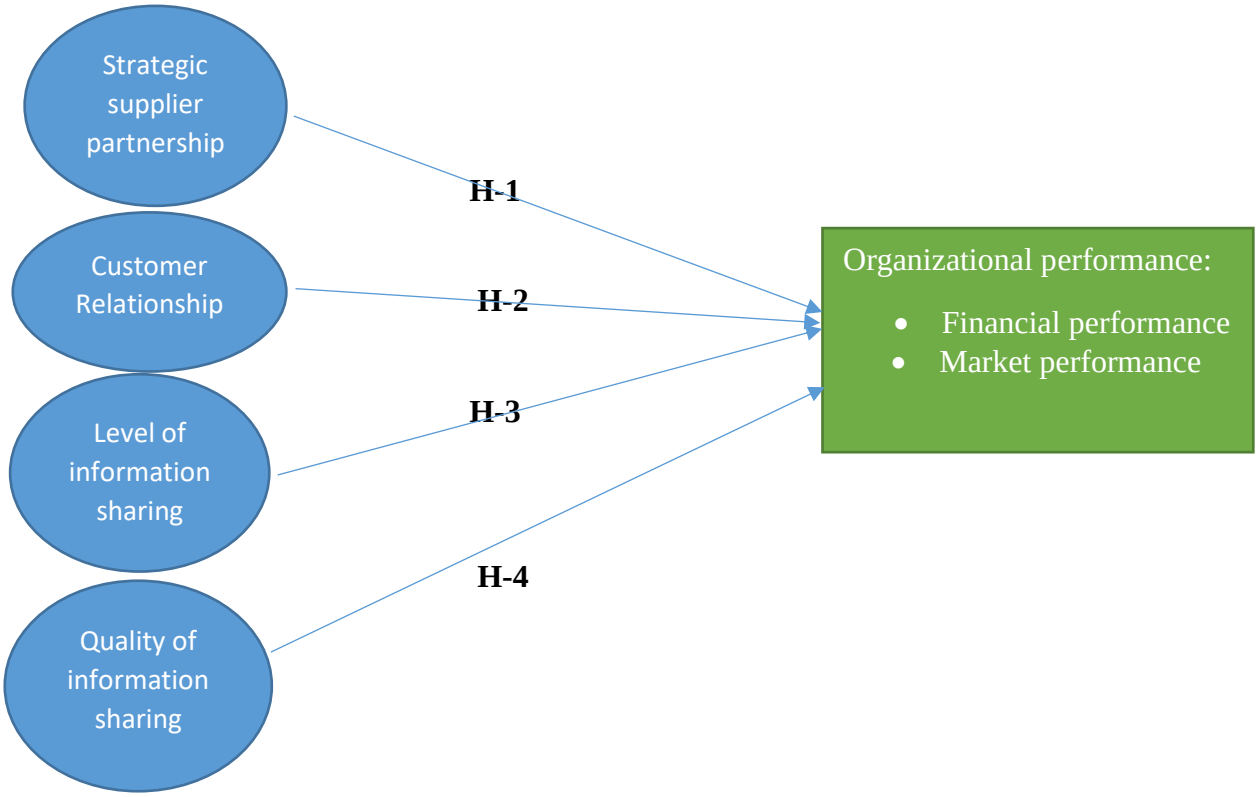


Figure 1: Conceptual Framework

2.4 Hypothesis

The SCM paradigm developed for this study contends that SCM practices have a direct impact on an organization's overall financial and marketing success. According to Prasad S. and Tata J. (2000), SCM practices are expected to improve an organization's market share, return on investment, and overall competitive position. It has been suggested, for instance, that

collaborations with significant suppliers might increase an organization's financial success. Advanced plant design and logistical ties to suppliers are associated with higher performance (De Toni A, Nassimbeni G. 2000). The performance of organizations has also been proven to significantly improve because of customer relationship practices (Tan KC, Kannan VR, Handfield RB 1998). More information sharing translates into cheaper overall costs, higher order fulfilment rates, and shorter order cycle times.

The effects of SCM practice on the bottom line have been demonstrated by actual cases. A recent study found that the top companies hold 50% to 85% less inventory than their competitors and have a 40% to 65% faster cash-to-cash cycle than standard companies (Sheridan JH. 1998). The following hypotheses tested in this investigation considering the aforementioned:

H-1: Strategic supplier partnership has a significant effect on organizational performance.
H-0: Strategic supplier partnership has no significant effect on organizational performance

H-2: Customer relationship has a significant effect on organizational performance.
H-0: Customer relationship has no significant effect on organizational performance.

H-3: Level of information sharing has a significant effect on organizational performance.
H-0: Level of information sharing has no significant effect on organizational performance.

H-4: Quality of information sharing has a significant effect on organizational performance.
H-0: Quality of information sharing has no significant effect on organizational performance.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 General Overview of the Study Area

The oldest and largest paint factory in Ethiopia is Nefas Silk Paints Factory. It has been making paints and associated items for its clients since 1967. Paints for walls, metallic objects, and wood, as well as varnishes, antirust, Industrial paints, board paints, automobile paints, glues, and traffic and road markings, and other products are produced by NSPF.

In 1967 G.C. Nefas Silk Paints Factory (NSPF) was first founded as a private firm by the name Mega Paints Factory. Later, when Derg came to power, it was nationalized and given the name Tseday before being converted to Nefas Silk Paints Factory. It was administered by the back then Ethiopian Chemical Corporation for 15 years. At the time of the transitional Government in the EPRDF era, the factory was privatized with acquisition cost of ETB 73,582,218.00 on May 5, 2016. Since then, the factory is growing in infrastructure, sales and production, human resource, and Logistics. Following privatization, NSPF launched new product lines and saw more than 1,000-fold increase in production and sales. NSPF has received an ISO certification ISO 9001 2015 (NSPF, 2020).

Oil-based and water-based paints are produced by Nefas Silk Paints Factory. Regularly, each comes in over 53 different hue variations. In addition to these two fundamental kinds, it also manufactures quartz, glues, rust-preventative varnishes, and related products. More than 1500 different types of paint and items linked to paint are produced there, with an annual production capacity of 60 million liters of paint. The plant exports paint to Somaliland and targets the East African market in addition to the local market (NSPF, 2020).

At the Mexico Sales, Summit, Jemo, and Hawassa Offices, the latest Automatic Colorant Dispensing Machine has been installed by Nefas Silk Paints. The machine creates more than 1250 different colors and is outfitted with the most recent paint technology. Within three minutes, a customer can order and receive their preferred color. Nefas Silk Kokeb (Oil-based paint for metallic objects, wood, walls, etc.) and Nefas Silk Super (for interior and exterior walls) are the products that are now produced by the machine.

Orders for Quartz paint from Addis Ababa Housing Development totaling more than 55 million Birr were successfully supplied by NSPF in just six months in 2006 EFY. In 10 of Ethiopia's largest cities, NSPF has created sales offices. These locations only cater to wholesale clients. The market share of has significantly expanded since these distribution centers opened. The following branches are located throughout the nation: branches in Bahir Dar, Gonder, Jimma, Shashemene, Mekelle, Dessie, Debre Markos, Dire Dawa, Wolayta, Nekemt, and Hawassa. In Addis Ababa and other key cities in Ethiopia, they intend to open more branches.

Nefas Silk Super is a plastic emulsion wall paint that can be used on both indoor and exterior walls and is washable. Currently, NSPF produces any color the customer requests in addition to more than 50 colors in a basic base. These packaging units are available for Nefas Silk Super: Drum, 2 Liter, 3.5 Liter, and Gallon. Flat Coats, Golden Paints, Antirust Swimming Pool Paints, Lacquer Thinner, and Floor Paints. MICA: Nefas Silk mica paint is a five-year-long, weatherproof wall treatment that provides protection and beauty. Mica paint is a thick, reliable, and long-lasting paint. GLUE is produced by Nefas Silk Paints for use in wood, paper, and other products.

3.2 Research Approach

There are three different sorts of research methodologies: mixed, quantitative, and qualitative (Creswell 2014). This study used a hybrid methodology, using both quantitative and qualitative data at the same time. Because either quantitative or qualitative data by themselves cannot fully address the study issues, thus a hybrid strategy is employed.

The two types, quantitative and qualitative research methods were used in this study. When using a quantitative method, data must be generated in a quantitative format that can withstand in-depth quantitative examination. In the qualitative method, which deals with the subjective assessment of attitudes, opinions, and behavior, focus group techniques and semi-structured interviews used. The study also implemented a quantitative technique, which is used to look at how factors relate to one another. These variables can be measured, frequently using instruments, to allow statistical analysis of numbered data.

3.3 Research Design

The study's objective is to ascertain how NSPF's organizational performance is impacted by supply chain management practices. The study focused on the four SCM practices that have been chosen, especially the strategic supplier partnership, customer relationship, information sharing level, and information sharing quality elements.

In order assess real effect of SCMP on the case company, the study relies on SCM theories and principles that are meant to serve as useful benchmarks. The research is descriptive in form as determined by the case firm and the type of data collected. As a result, analysis of both qualitative and quantitative data done. Because descriptive research is important for precisely characterizing the variables under observation within a given sample and for summarizing the data collected in the research study, it was employed for this study. In addition, it has evaluated and describe how the case company's supply chain management practices affect its organizational performance.

To evaluate the connection between SCMP and organizational performance of NSPF, the study has employed a cross-sectional field survey design. Using a single questionnaire, factors that are independent and dependent assessed concurrently in the research.

3.4 Unit of analysis

Employees of the NSPF who are randomly chosen from the purchasing and property administration, marketing, human resource development and administration, finance, sales, production, and quality control departments serve as the units of analysis for this study.

3.5 Variables of the study

3.5.1 The dependent variable

The dependent variable for this study is the NSPF's organizational performance. The organization's ability to grow market share, revenue, ROI, and profit margin on sales used to demonstrate this.

3.5.2 The Independent variables

In this investigation, the following independent elements are looked at: collaborations with strategic suppliers: Strategic supplier partnerships: this typically refers to a company's capacity

to develop partnerships with other businesses, use criteria to choose suppliers, inform them, and include a few significant vendors in the planning. Second, customer relationship: this includes regular customer engagement, gauging and analyzing customer happiness, and figuring out what the consumer expects in the future. Thirdly, the level of information sharing: this includes communicating with trading partners on a regular basis about changing demands, sharing confidential information continuously, and exchanging business knowledge of key business procedures. The final factor is information quality, which includes the currency, accuracy, sufficiency, credibility, and timeliness of information exchanged between trading partners.

3.5 Population and Sample

3.5.1 Target population

Employees of the Nefas Silk Paint Factory who possess a TVET+ Certificate or higher make up the study's population. This is thought to aid the study by providing knowledgeable information from staff members who are familiar with the company. Data gathering that assisted in addressing the study questions done using a purposeful sample size determination. To find the cases, people, or groups most suitable to respond to the research questions, purposeful sampling is employed.

3.5.2 Sampling

Purposive sampling used to pick the respondents through nonprobability sampling. Purposive sampling is used as it helps to identify the cases, individuals, or communities best suited to answer the research questions. Using Carvalho's sample size calculation, a sample chosen from the target population. Samples taken from Purchasing and Property Administration, Marketing, Human Resource development and Administration, Finance, Marketing, Sales, Production, and Quality Control Department.

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

Table 2: Carvalho Sample size determination (Source: Carvalho, J. 1984)

Nefas silk paint factory business domain is extended to plastic bucket manufacturing, Agri-products (Pulses and Oilseeds) export and the company has recently started coffee export. However, this research done only on Nefas Silk Paint Factory section located in Addis Ababa.

According to the factory's Administration and Human resource development directorate, the total number of employees of Nefas Silk Paint Factory is **914** (data of January 30, 2014 E.C**).** Therefore, the research sample size in line with Carvalho sample size determination is 80. The reason why sample of 80 taken is to get an average number of representative sample respondents. Furthermore, sample size 80 compared to the small 32, and the larger 125 comparatively is less costly and time consuming in the data analysis and interpretation.

To conduct the research, the study done by Purposive sampling technique. It employed to different departments as a stratum, which are key informants of the study subject matter.

3.6 Data Sources and Types

The full analysis of this study was conducted using data that are both primary and secondary. The questionnaire employed to gather data for the study was created by other researchers (Ayalew, B. 2018, and Desalegn, B. (2017). The questionnaire is adjusted for this research setting. As secondary sources, journal articles, written documents, information from the internet, and document reports from Nefas Silk Paint Factory were consulted and used in

addition to the data collected through questionnaires from the selected sample of respondents/employees of Nefas Silk Paint Factory.

3.7 Data Collection Procedures

Data from primary sources was gathered through focus group interviews, questionnaires, and observations. secondary data gathered from the examination of many documents.

Surveys of a chosen sample of respondents/employees of the Nefas Silk Paint facility served as the primary and secondary data sources for this study. The supportive information gathered via observation and interviews. Each respondent received a questionnaire from the researcher. The questionnaire was sent to some of the respondents who are very busy at work, and an appointment was set up to collect the surveys. The researcher distributed the questionnaire to respondents based on their availability and followed up for any requests for clarification. The questionnaire was filled out with the help of the respondents, who also provided a response. The questionnaire is also used by the researcher to keep track of the entire data collection process.

There are open and close ended questions in the questionnaire. The close ended questions have a 5-point Likert scales. and 5 rating scales ranging from 1- very low to 5- very high. In addition, there are some open-ended questions used to collect data.

3.8 Data Analysis

Both qualitative and quantitative methodologies were used to analyze and evaluate the acquired data. Qualitative analysis was done on the data gathered by open-ended questions. Using SPSS Version 20, to demonstrate the influence of independent variables on the dependent variable, the responses to closed-ended questionnaires were quantitatively examined using mean, frequency, Pearson correlation, and regression analysis. Tables and bar charts are used to better analyze the data. To determine whether there were any variations in the responses, ANOVA was also performed. Multiple regression estimate was also carried out to evaluate the relative influence of independent factors on the dependent variable.

Six assumptions were analyzed by SPSS Version 20. The assumptions were:

1. The relationship between the independent variable and dependent variable is linear
2. There is no multi collinearity in the data
3. The value of residuals is independent
4. The variance of the residuals is constant
5. The value of the residuals is normally distributed
6. There are not influential case biasing the model.

3.8.1 Quantitative Data Analysis

The researcher has checked the completeness of the data by employing sanity checks on the reply of the questionnaires. The questionnaires which are found complete then checked for analysis by coding the answer and all the data entered and SPSS Version 20 was used to analyze. A descriptive statistic with mean and frequency was employed to analyze the overall data and investigate supply chain management practices. To ascertain how supply chain management practices impacted the organizational performance of the case company, Pearson correlation and a regression model were also used.

3.8.2 Qualitative Data Analysis

By combining the data, the open-ended questionnaire data were qualitatively analyzed.

3.8.3 Data validity and reliability

3.8.3.1 Validity

Targeting dependent and independent factors, the questionnaire includes both closed- and open-ended questions. The survey was adapted to ensure that the questions were representative, they were based on the data acquired throughout the literature research. Consistency in the way the questions are administered further ensures content validity. The researcher individually distributed each questionnaire to the individuals. For clarity and understanding, the questions were written in plain language, and there are detailed instructions on how to complete the responses.

When filling out the surveys in front of the researcher, every respondent was there. This is carried out to stop respondents from entrusting others to complete the questionnaires on their behalf.

3.8.3.2 Reliability

A measurement tool (questionnaire) is considered dependable if it yields repeatable results. When the same subject of the study is measured repeatedly using the same instrument and a trustworthy data collection questionnaire, the results are consistent. Reliability is the consistency with which an instrument measures the constructions it is designed to measure.

When a second study is conducted using the same research methodologies, the reproducibility of study findings is referred to as reliability. (Ritchie and Lewis, 2003). This implies that the measure (data collection instruments) must yield the same result when used again, or a different researcher must receive a comparable result while using the same measuring equipment (Saunders et al., 2007).

Regarding internal consistency, the Cronbach's Alpha is found to be .877, which is Good. This indicates acceptable internal consistency of the variables.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.877	.730	5

Source: Own calculation using the SPSS version 20 software

Table 3: Reliability Statistics

The below table from SPSS Version 20 Item-Total Statistics table shows the "Cronbach's Alpha if Item Deleted" in the last column. Accordingly, result of Cronbach's alpha decreases if a certain item had been eliminated from the scale. As a result, we did not delete any item.

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Strategic Supplier Partnership	15.0299	5.848	.748	.	.844
Customer Relationship	14.8806	5.107	.679	.	.863
Level of Information Sharing	15.0299	5.848	.748	.	.844
Quality of Information Sharing	14.8806	5.107	.679	.	.863
Organizational Performance	15.0448	5.862	.778	.	.840

Source: Own calculation using the SPSS version 20 software

Table 4: Item-Total Statistics

The researcher is willing to provide a copy of the study paper before it is made public, if necessary and requested by the organization. Additionally, it was made clear to everyone involved in the data collection process that the research was being done in the academic context.

CHAPTER FOUR

DATA ANALYSIS INTERPRETATION AND DISCUSSIONS

4.1 INTRODUCTION

The study's interpretation of the data gathered through questionnaires presented in this section. The association between organizational performance and SCM practice is analyzed and investigated using SPSS version 20. Employees at the Nefas Silk Paint Factory were given a total of 80 questionnaires; 67 (or 8.8%) of those were completed, returned, and were therefore valid for analysis. The presentation of the data analysis, interpretation, and discussion is provided below.

4.2 General Information

4.2.1 Educational qualification

From the questionnaire data, the respondent level of education is summarized in the table below

Educational Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	College Diploma	10	14.9	14.9	14.9
	First Degree	30	44.8	44.8	59.7
	MA/MSC/MBA or above	21	31.3	31.3	91.0
	Other (TVET +)	6	9.0	9.0	100.0
	Total	67	100.0	100.0	

Source: Own calculation using the SPSS version 20 software

Table 7: Analysis of Educational qualification of respondents

Out of the 67 respondent, there were 6 (9.0%) TVET + education level employees of NSPF. Respondents with college diploma are 10(14.96%), and respondents with First degree holders from the 67 respondents are 30(44.8%). There are also employees with MA/MSC/MBA or above education level, and they account 21(31.3%). Accordingly, the majority of the respondents are first degree holders and MA/MSC/MBA or Above accounts the second in quantity.

4.2.2 Work Position of respondent in the Organization

The respondent's work position is important factor affecting the data collection. Accordingly, the respondent's work position in the organization is summarized in the below table.

Your Position in the Organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Department Manager	10	14.9	14.9	14.9
	Division Head	9	13.4	13.4	28.4
	Senior Officer	7	10.4	10.4	38.8
	Officer	29	43.3	43.3	82.1
	Other	12	17.9	17.9	100.0
	Total	67	100.0	100.0	

Source: Own calculation using the SPSS version 20 software

Table 8: Analysis of the respondents' positon in the organization

Out of the 67 respondents 9(13.4%) are division heads, and 10(14.9%) of them are department managers. Whereas 7(10.4%) of the respondent are Senior officers. 29(43.3%) are employees working in positions of an Officer. 12(17.9%) are working in other positions of support activity to the organization.

4.2.3 Respondents Tenure of service in the organization

The tenure of the employees is analyzed in the below table.

How long have you worked in NSPF?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3 years	21	31.3	31.3	31.3
	3 to 6 years	20	29.9	29.9	61.2
	7 to 10 years	16	23.9	23.9	85.1
	10 years and above	10	14.9	14.9	100.0
	Total	67	100.0	100.0	

Source: Own calculation using the SPSS version 20 software

Table 9: Analysis of length of service of respondents

Ten (14.9%) respondents identified themselves as longer-tenured employees, or those who had worked for the organization for more than ten years. 16 responders (23.9%) have 7 to 10 years of service. Out of the 67 replies, 20 employees' service years, or 29.9%, fell between

three and six years. The remaining 21 respondents, or 31.3% of NSPF employees, have fewer than three years of employment history.

4.3 Normality Test

Since parametric testing assumes that the data are normal as a basic premise, many statistical tests demand that the data's normality be established. The assumption made by parametric analysis is that data are roughly regularly distributed. The normality test determines if the input data and any supporting statistical hypotheses for any estimation procedures used in the study are adequate.

Continuous data with a normal distribution are necessary for parameter estimation. Running descriptive statistics to obtain skewness and kurtosis is a typical way to check for normalcy. According to (Hair, et al., 1998), skewness and kurtosis should be between +2 and -2 when the data are regularly distributed.

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Strategic Supplier Partnership	67	2.00	5.00	3.6866	.60825	-1.386	.293	1.576	.578
Customer Relationship	67	2.00	5.00	3.8358	.84561	-.761	.293	.298	.578
Level of Information Sharing	67	2.00	5.00	3.6866	.60825	-1.386	.293	1.576	.578
Quality of Information Sharing	67	2.00	5.00	3.8358	.84561	-.761	.293	.298	.578
Organizational Performance	67	2.00	4.00	3.6716	.58745	-1.633	.293	1.687	.578
Valid N (list wise)	67								

Source: Own calculation using the SPSS version 20 software

Table 5: Descriptive Statistics

The descriptive statistics table above displays the findings of the normality test performed using SPSS version 20. There were five different factors examined in all, including the dependent

variable. Considering this, all 5 of the study's variables -- skewness and kurtosis -- were determined to fall within the range of +2 to -2. The input data are therefore assumed to be regularly distributed.

4.4 Multicollinearity test

Multi collinearity is a term used to describe the situation when predictor variables strongly correlate with one another. This is a problem since it will lead to conflicting results and erroneous inferences because the regression model won't be able to consistently relate the variation in the outcome variable to the appropriate predictor variable. You may check for multi collinearity using the correlation coefficients and the values of the variance inflation factor (VIF).

It is not allowed to have coefficients with magnitudes of 0.80 or greater. Predictors will have a strong correlation if they are multicollinear. However, utilizing Variance Inflation Factor (VIF) values is a simpler technique to examine multi collinearity. Excluding an independent variable is a solution if the data are multicollinear. (1999 in Gujirati).

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.748	.554		4.956	.000		
	Level of Information Sharing	-.029	.148	-.026	-.193	.847	.863	1.158
	Quality of Information Sharing	.085	.107	.107	.801	.426	.863	1.158
a. Dependent Variable: Organizational Performance								

Source: Own calculation using the SPSS version 20 software

Table 6: Coefficients

4.5 Ethical Consideration

The data that is obtained from the NSPF is kept private. This is done to maintain the company's marketability. The identities of the people who fill out the questionnaire and the workers who participated in the survey are also always kept a secret. Respondents were informed of the nature, goal, and importance of the study during the data collection procedure. The survey

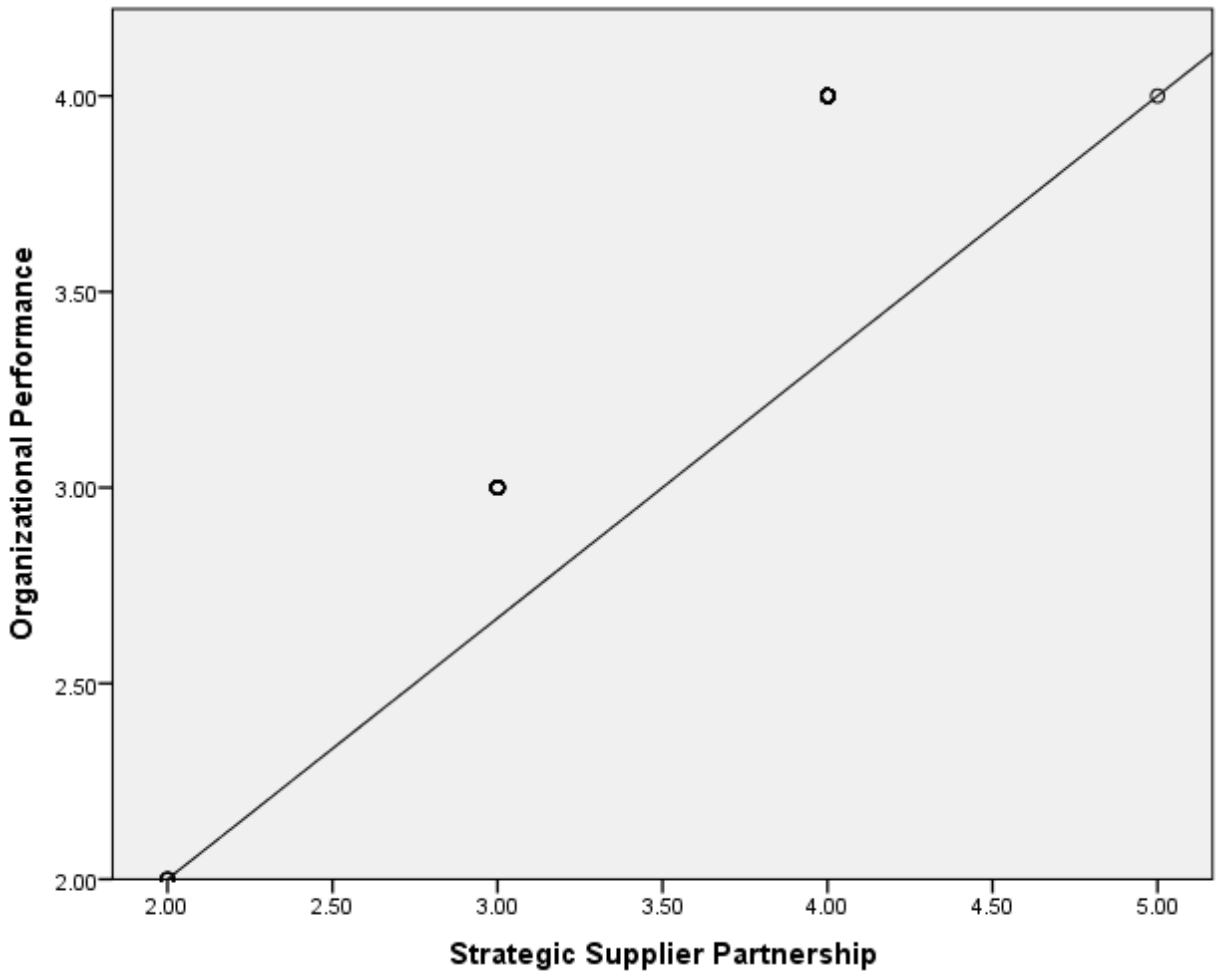
participants were informed that the activity will be carried out dependent on their willingness to participate.

4.6 Multiple Regression Assumption Test

4.6.1 Assumption one: The association of independent and dependent variables

It is crucial to ensure that the relationship between the independent and dependent variables in multiple regression can be represented by a straight line. This demonstrates the linearity of the relationship. One method of displaying the connection between each of our IVs and our DV is a graph by scatterplots.

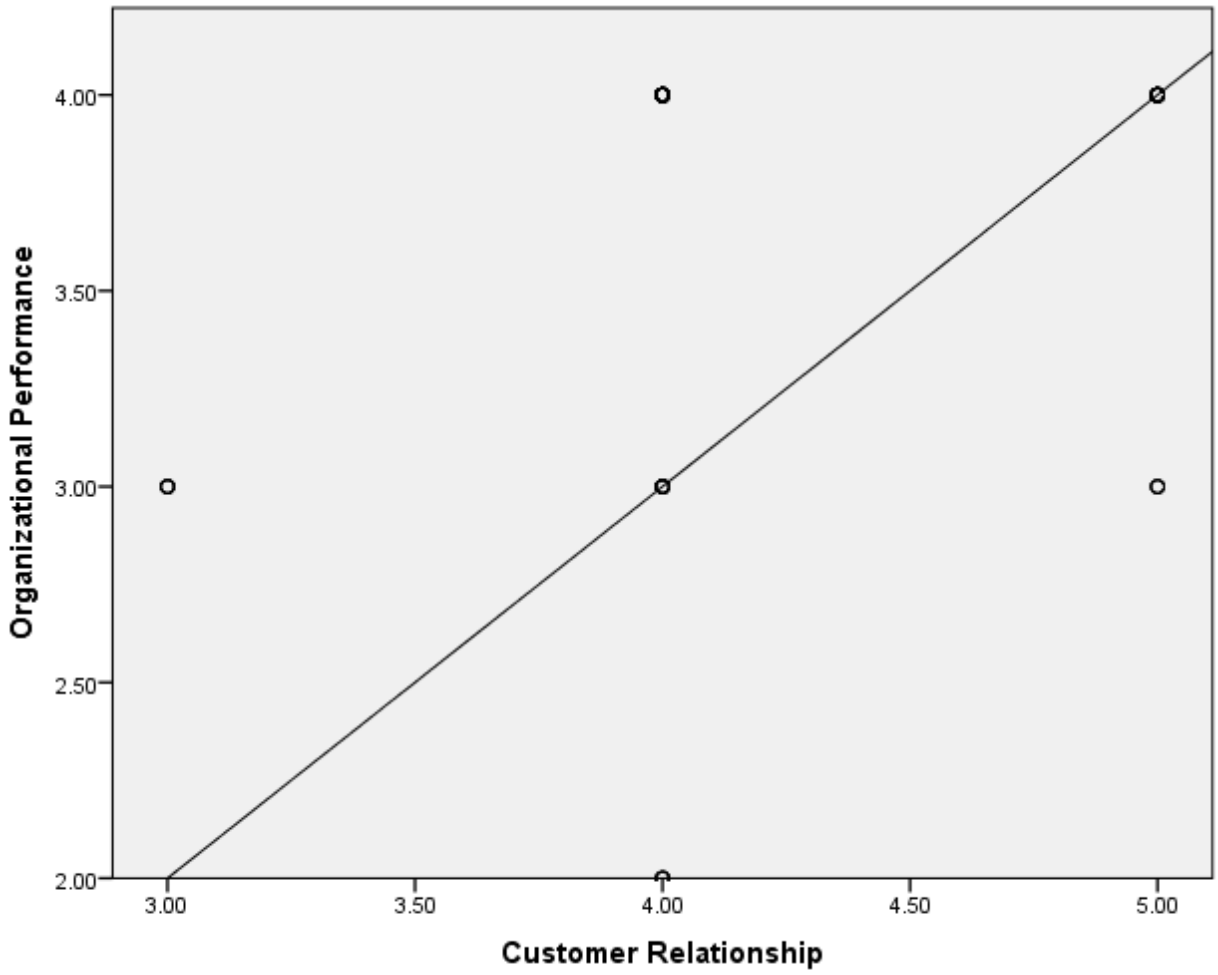
Graph 1: Organizational Performance and Strategic Supplier Partnership



Source: Own calculation using the SPSS version 20 software

The link between the independent variable Strategic Supplier Partnership and the dependent variable Organizational Performance is depicted by a straight line, as can be seen by looking at the scatterplot created by SPSS. This suggests that these variables have a linear relationship to one another.

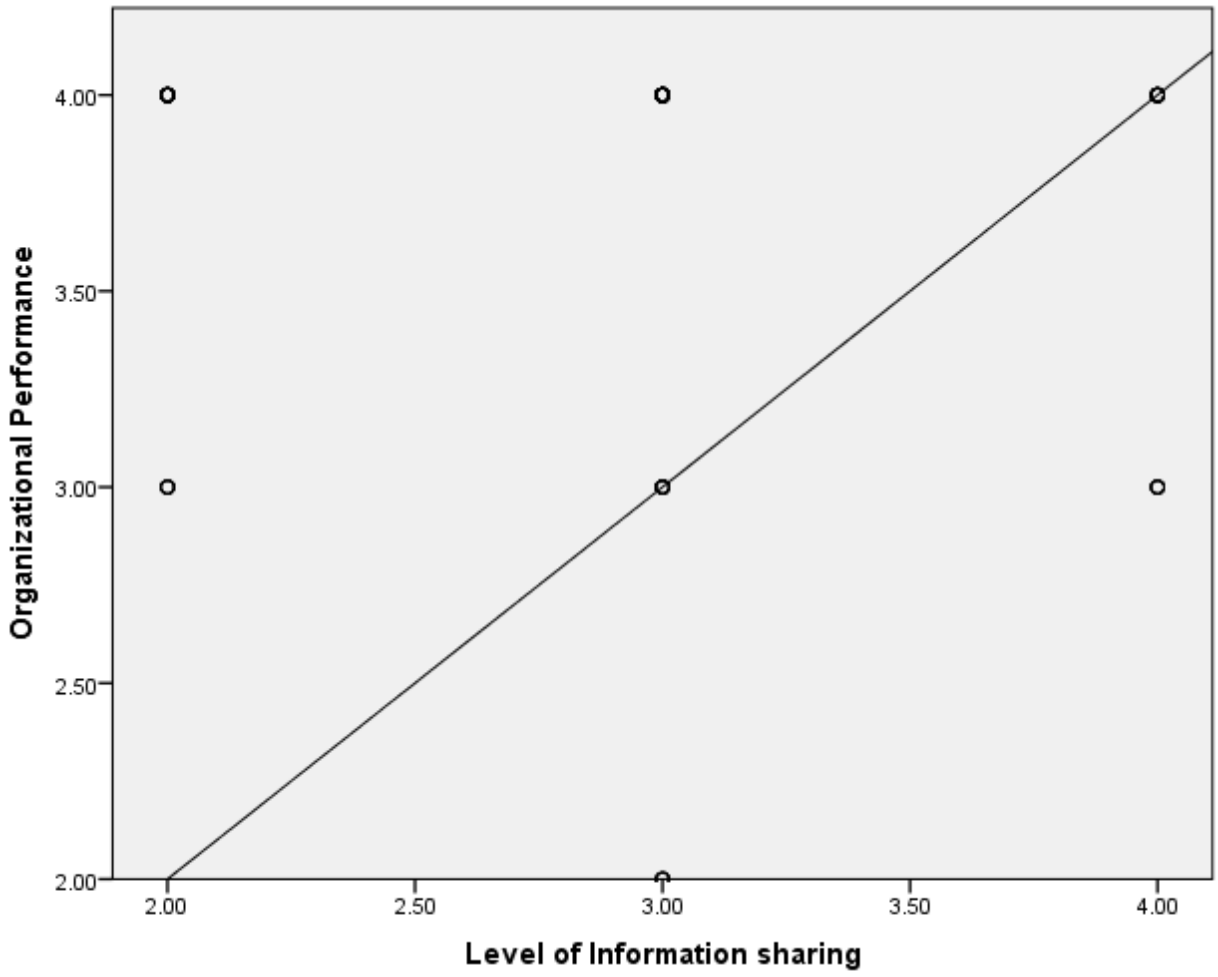
Graph 2: Customer Relationship and Organizational Performance



Source: Own calculation using the SPSS version 20 software

Looking at the SPSS-generated scatterplot, we can see that a straight line best describes the link between the independent variable Customer relationship and the dependent variable Organizational Performance. This suggests that there is a linear relationship between these variables.

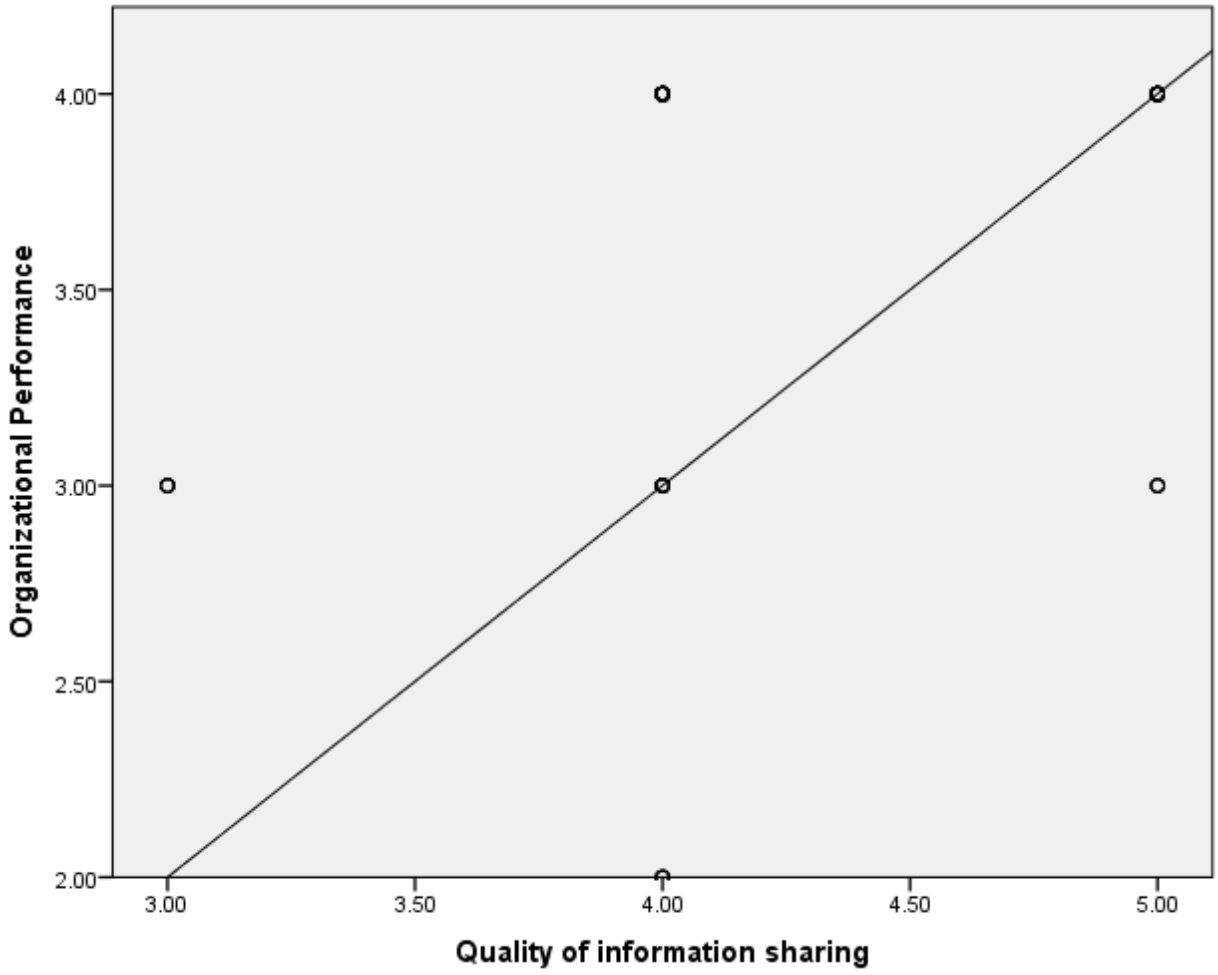
Graph 3: Level of Information Sharing and Organizational Performance



Source: Own calculation using the SPSS version 20 software

The relationship between the independent variable Level of Information Sharing and the dependent variable Organizational Performance is depicted by a straight line, as can be seen by looking at the scatterplot created by SPSS. This suggests that these variables have a linear relationship to one another.

Graph 4: Quality of Information Sharing and Organizational Performance



Source: Own calculation using the SPSS version 20 software

The relationship between the independent variable Level of Information Sharing and the dependent variable Organizational Performance is depicted by a straight line, as can be seen by looking at the scatterplot created by SPSS. This suggests that these variables have a linear relationship to one another.

The scatterplots discussed above all demonstrate that this presumption was true, and that the relationship is linear.

4.6.2 Assumption Two: There is no Multi collinearity in your Data

When two independent variables are very highly associated with one another, this is referred to as multi collinearity. The purpose of this supposition is to determine whether the predictors (or IVs) are not overly connected. Accordingly, the test can be made by computing Correlation

table. The below is the Correlation table computed for this study using SPSS Version 20 software. All collinearity is required to be less than 0.8. If it is above this, we need to withdraw one of our independent variable. However, in our case below, the assumption is met, and all collinearity figures are below 0.8.

Correlations						
		Organizational Performance	Strategic Supplier Partnership	Customer Relationship	Level of Information Sharing	Quality of Information sharing
Pearson Correlation	Organizational Performance	1.000	.338	-.087	.215	.121
	Strategic Supplier Partnership	.338	1.000	-.031	.063	.109
	Customer Relationship	-.087	-.031	1.000	-.010	.195
	Level of Information Sharing	.215	.063	-.010	1.000	.181
	Quality of Information sharing	.121	.109	.195	.181	1.000
Sig. (1-tailed)	Organizational Performance	.	.003	.242	.040	.165
	Strategic Supplier Partnership	.003	.	.402	.306	.190
	Customer Relationship	.242	.402	.	.467	.057
	Level of Information Sharing	.040	.306	.467	.	.071

	Quality of Information sharing	.165	.190	.057	.071	.
N	Organizational Performance	67	67	67	67	67
	Strategic Supplier Partnership	67	67	67	67	67
	Customer Relationship	67	67	67	67	67
	Level of Information Sharing	67	67	67	67	67
	Quality of Information sharing	67	67	67	67	67

Source: Own calculation using the SPSS version 20 software

Table 10: Correlation of Independent and Dependent variables

This assumption can also be verified by consulting the Coefficients Table. This is a more formal method of analyzing the low correlation between our independent variables. In this regard, the Variance Inflation Factor (VIF) and tolerance statistics can be used to assess the assumption. For the tolerance level to be greater than 0.2 and the VIF to be less than 10, this presupposition must be met. The VIF is less than 10 and the tolerance level is larger than 0.2, as shown in the Coefficient Model below. This presumption is therefore true.

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.139	.768		1.483	.143		
	Strategic Supplier Partnership	.401	.149	.316	2.693	.009	.984	1.017
	Customer Relationship	.166	.221	.089	.752	.455	.957	1.045
	Level of Information Sharing	.166	.109	.181	1.529	.131	.963	1.038
	Quality of Information sharing	.069	.117	.071	.584	.561	.918	1.090

4.7 Dependent Variable: Organizational Performance

Source: Own calculation using the SPSS version 20 software

Table 11: Collinearity Statistics (Tolerance and VIF)

4.6.3 Assumption Three: The value of the residuals is independent

This assumption can be checked by observing the Model summary box. The residuals independence or uncorrelated is subject to the Durbin-Watson statistical test. This assumption can be said is met if the value of Durbin-Watson is close to 2.

Model Summary [b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.652a	.621	.626	.43014	1.825
a. Predictors: (Constant), Quality of Information sharing, Strategic Supplier Partnership, Level of Information Sharing, Customer Relationship					
b. Dependent Variable: Organizational Performance					

Source: Own calculation using the SPSS version 20 software

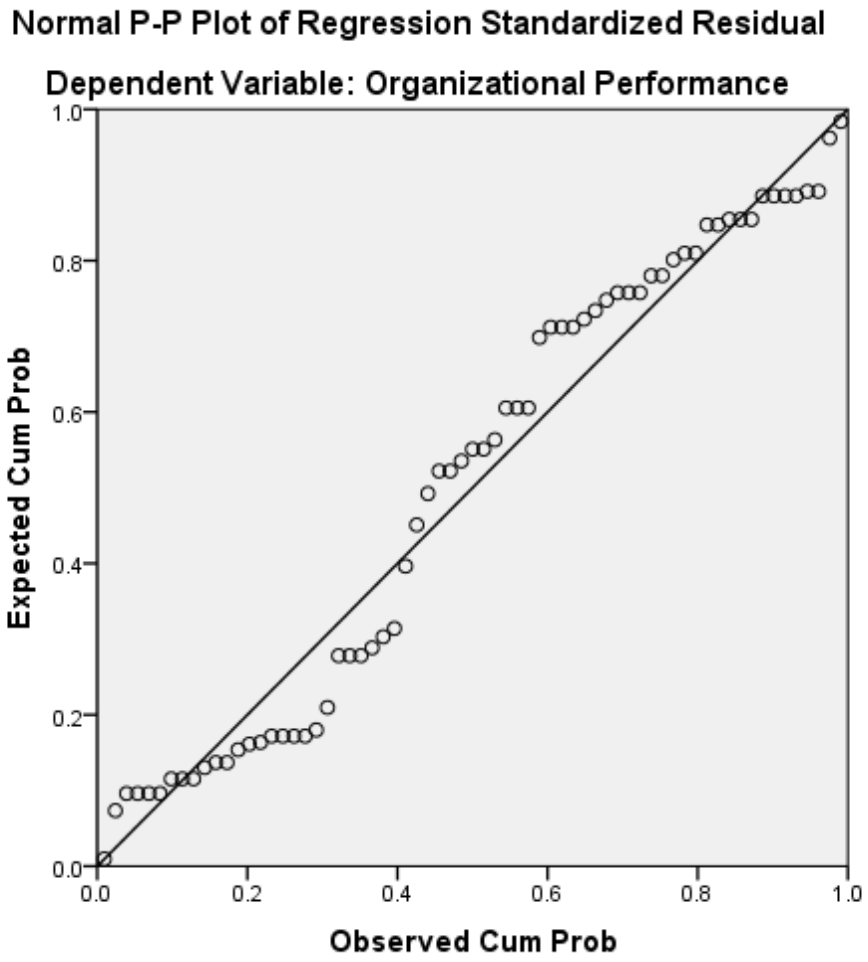
Table 12: Model Summary

The Durbin-Watson in our case is 1.825 which is closer to 2, this assumption is met.

4.6.4 Assumption Four: The variance of the residuals is constant

This assumption can be tested by observing the final graph of the output. This presumption, which states that the variance in the residuals (or amount of error in the model) is similar at each point of the model, is used to test for homoscedasticity in this context.

Graph 5: Normal P-P Plot of Regression Standardized Residual



Source: Own calculation using the SPSS version 20 software

The homoscedasticity assumption appears to have been met because there is no obvious funneling in our plot of the standardized residuals vs the standardized anticipated values.

4.6.5 Assumption Five: It follows a normal distribution for the residual values

The model's P-P plot can be used to confirm or disprove this supposition. The closer the dots are to the diagonal line, the more precisely normalized the residuals distribution is. As a result, the residuals in the graph above have a normal distribution. In other words, some of the dots

are close to the line and some are closer to it. Since there is no significant divergence, the assumption can be deemed true and met.

4.6.6 Assumption Six: There are no significant cases that would slant your model.

Finally, is the assumption which requires test of any cases influencing our model. This can be done by observing the Cook's Distance value. The value Cook's for each participant is required to be less than 1. In our case all the Cook's value for each participant met the requirement of being not more than one. Therefore, this assumption is met.

4.7 ANOVA and compiled statistics

The table below displays the study's descriptive statistics for the model variables. Four independent variables and one dependent variable were utilized in the study, and they are all accounted for in the model.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Strategic supplier partnership	67	2.00	5.00	3.6866	.60825
Customer Relationship	67	2.00	4.00	2.9701	.67353
Level of Information Sharing	67	2.00	5.00	3.6269	.91843
Quality of Information sharing	67	2.00	4.00	2.9701	.67353
Organizational Performance	67	2.00	4.00	3.6716	.58745
Valid N (list wise)	67				

Source: Own calculation using the SPSS version 20 software

Table 13: ANOVA and Compiled Statistics (Descriptive Statistics)

According to the table above, there are 67 participants in the study sample. Strategic supplier alliances and degrees of information exchange yield the greatest value. Comparable minimum values exist for the remaining variables. The data set's standard deviation is lowest for organizational performance, while its greatest values are for the variable's customer relationships, level of information sharing, and quality of information sharing.

It is possible to interpret the estimated model table in addition to the descriptive statistics. The R-square value, which demonstrates a model's ability to explain organizational performance, is shown in the table together with the Durbin Watson estimation outcome.

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.652[a]	.621	.626	.43014	1.825

a. Predictors: (Constant), Quality of Information sharing, Strategic Supplier Partnership, Level of Information Sharing, Customer Relationship

b. Dependent Variable: Organizational Performance

Source: Own calculation using the SPSS version 20 software

Table 14: Model Summary-Durbin-Watson

The table above displays the summary of the model. The model's R square value in this area is 62%. This shows that strategic supplier partnerships, customer relationships, level of information sharing, and quality of information sharing account for 62% of the variation in organizational performance of the NSPF.

The study also conducted an ANOVA analysis. In multiple linear regressions, the ANOVA table provides important details regarding the model's overall significance.

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.896	2	10.948	795.881	.000[b]
	Residual	.880	64	.014		
	Total	22.776	66			

a. Dependent Variable: Organizational Performance

b. Predictors: (Constant), Quality of information sharing, Strategic Supplier Partnership

Source: Own calculation using the SPSS version 20 software

Table 15: ANOVA

The null hypothesis, which states that incorporating all the independent variables under consideration in the model would not have significantly enhanced our ability to predict the dependent variable (Organizational Performance), would be rejected, has a p-value of =0.000 to 0.05, as seen in the above table. All explanatory factors are jointly significant, according to the ANOVA estimation result, as the p-value is less than 0.05. As a result, all the explanatory

variables in the model can be utilized to account for variations in organizational performance in the NSPF.

4.8 Estimation Result

The results of the investigation are displayed in the coefficients table below. Analyzing the outcomes is done using a linear regression model.

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.139	.768		1.483	.143		
	Strategic Supplier Partnership	.401	.149	.316	2.693	.009	.984	1.017
	Customer Relationship	.166	.221	.089	.752	.004	.957	1.045
	Level of Information Sharing	.166	.109	.181	.529	.007	.963	1.038
	Quality of Information sharing	.069	.117	.071	.584	.003	.918	1.090
a. Dependent Variable: Organizational Performance								

Source: Own calculation using the SPSS version 20 software

Table 16: Estimation Result-Coefficients

The table displays the statistical importance of each independent variable's contribution to the multiple linear regression model. Information about the test's statistical significance is provided in the "Sig." column (also known as the p-value column). Customer relationships, level of information sharing, and quality of information sharing all significantly influence the model's capacity to forecast organizational performance, as shown in the table (i.e., the variables strategic supplier partnerships, customer relationships, level of information sharing, and quality of information sharing had a significant impact on organizational performance).

According to the coefficients of standardized estimation results, the Strategic Supplier Partnership has the highest beta coefficient of the four independent variables included in the model, which is (.316), indicating that it is more sensitive to affect NSPF organizational performance. Comparatively, the beta coefficient value for information sharing's quality is (.071). This finding indicates that the quality of information exchange has less of an impact on NSPF's organizational success. The beta coefficient values for the remaining independent variables, customer relationship and information sharing level, are (.089) and (.181), respectively. Both predicted variables have a significant impact on how well the NSPF organization performs in this regard.

4.9 Analysis of open-ended questions

Most respondents did not respond to the survey's open-ended inquiries, but of those that did, most of them described the main issues with their supply chain management as

- Shortage of input material.
- Information sharing between department
- Shortage of foreign currency to import raw materials (Chemicals in particular).
- Competitors who provide paint to the market with less price.

Respondents give their opinions in response to the question regarding the company's future in terms of supply chain management and SCM-related issues since their plan is to boost sales and produce more.

4.10 Discussions of the Results

The goal of the study was to assess the effect that supply chain management had on the NSPF case company's organizational performance. Since there aren't many studies on paint factories (MEASHO, T. 2017), the study was done to evaluate NSPF's SCMP on organizational performance because it's the oldest in the sector (Nefas Silk Paint Factory, 2020). Additionally, most academic studies show a favorable correlation between employing management of supply chain and organizational performance (S. Li et al. 2006) (Koh, S. et al.2007) (Elmuti, 2002) (Challener, C. 2005). Considering this, NSPF, a firm with a long history in the sector, the researcher launched this study to evaluate their SCMP considering changing business conditions. Therefore, the goal of this study was to comprehend how SCMP affects organizational performance. The outcomes were as presented above.

The instance company employs supply chain practices, as the findings show, but it must focus more on developing strategic supplier partnerships and customer relationships.

All supply chain management constructions are associated favorably with the organizational performance of the case company, according to the conclusion stated above.

With a correlation coefficient of 0.316 for strategic supplier partnerships, 0.89 for customer relations, 0.18 for level of information sharing, and 0.07 for quality of information sharing, all the supply chain management constructs have a positive relationship with organizational performance of the case company.

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

The study results based on the research objective reported in this part. Additionally, recommendations based on the findings are provided, along with inferences that were formed from them.

5.2 SUMMARY OF RESULTS

The primary objective of the study was to assess supply chain management practices and how they affected NSPF performance. The specific objectives were to review the SCMP as a whole and to ascertain the relationship between SCM practice and organizational success in the instance company. The goal of this study was to assess how SCM practices affected organizational performance.

The study used a sample of 67 people. Strategic supplier partnerships and organizational performance received the greatest values from the independent variables in the data set, and quality of information sharing had the largest standard deviation value. While organizational performance had the lowest. The model's R square value is 62%, which means that predictive factors account for 62% of the variation in NSPF's organizational performance. According to the table, the F-test has a p-value of 0.000, less than 0.05, indicating that all the predictor variables used in the model are collectively significant. In the table, the p-values for customer relationships (0.004<0.05), level of information sharing (0.007<0.05), and quality of information sharing (0.003<0.05) are all statistically significant, this outcome demonstrates that every independent variable is statistically significant, indicating a considerable effect on the NSPF's organizational performance.

All the study variables' variance inflation factors (VIFs) were less than 10, according to the data. This shows that the independent variables do not exhibit multiple collinearities. Strategic supplier partnership is shown to have the highest beta coefficient of (.316) among the four independent variables, indicating that it is more sensitive to effect NSPF organizational performance. Quality of information sharing has a comparatively lower value of beta

coefficient of (.071), which shows that it has less of an impact on influencing the organizational performance of NSPF when shared internally and with partners.

As a result, it is discovered that every independent variable has a considerable impact on NSPF's organizational success.

5.3 Response summary of open-ended questions

Most respondents did not respond to the open-ended questions from the survey, but of those that did, most of them described the main issues with their supply chain management as

- Shortage of input material.
- Information sharing between department
- Shortage of foreign currency to import raw materials (Chemicals in particular).
- Competitors who provide paint to the market with less price.

Respondents reply to the future of the organization in terms of supply chain management and other aspects of SCM, as their plan is to increase the product and increase sales.

5.4 CONCLUSIONS

To conclude, based on the outcomes of the research and the theoretical and empirical literature reviewed, the following closing remarks are drawn.

Competitive advantage and enhanced organizational performance can come to effect if effective supply chain management (SCM) prevails. The traditional business to business competition has now shifted to competition between supply chains (S. Li et al. 2006). Concomitantly, Globalization, volatile customer demand, technological advancement has made business competition harsh (Koh, S. et al.2007).

Adopting SCM practices allows organizations and supply chain participants to benefit from reduced inventory, quick cycle times, increased productivity, lower supply chain costs, and increased market share. In combination, these advantages will give all supply chain participants a competitive edge and boost their profits (Stank et al., 1999a; Sheridan, 1999; Li, Ragu-Nathan, Ragu-Nathan, & Subba Rao, 2006; Elmuti, 2002; Tan, 2002; Fawcett et al., 2008; Li, Ragu-Nathan, Ragu-Nathan, & Subba Rao, 2006).

In parallel, this study examines the connections between these SCM practices and organizational performance by focusing on four SCMP dimensions: strategic supplier partnerships, customer relationships, information sharing levels, and information sharing quality.

Under the name Mega Paints Factory, Nefas Silk Paints Factory (NSPF) was first founded as a private corporation in 1967 G.C. It was privatized with acquisition price of ETB 73,582,218.00 on May 5, 2016. NSPF is involved in paint manufacturing and sales to local consumers. NSPF interacts with its supply chain partners and different stakeholders to run its business effectively. Some of these parties are foreign companies for its raw material supply, banks, businesses that manufacture goods, ships, transistors, and customers. The effective engagement of NSPF with in the supply chain contributes to its success. What is more, SCMP plays a vital role to its competitive advantage as well as to it business success.

One of the reasons for this study's inception is the long history of NSPF in the sector as well as the dearth of research in the paint manufacturing sector. Due to the general environment,

research on the effects of SCMP on organizational performance was initiated. Considering this, the study used questionnaires to empirically test the framework identifying the relationships among SCM practices (strategic supplier partnership, customer relationship, information sharing, and quality of information sharing) as related to their effects on the company's organizational performance.

To measure the impact, the study included both closed- and open-ended questionnaires. The software application SPSS version 20 was used to analyze the questionnaire that was collected. Multiple regression estimate was performed to assess the implications of each independent variable's unilateral influence on the dependent variable, organizational performance.

Additionally, tables and bar charts are used to analyze the information gathered through the questionnaire. ANOVA was also performed to determine whether there were any variations in the respondents' responses.

The aim of the study was to evaluate how the NSPF's present supply chain management strategy impacted the organization's performance in terms of market share, ROI, sales growth, total profit, and overall competitiveness. Constants or independent components like customer relationships, information interchange, information quality, and strategic supplier alliances were employed to quantify their effects on the organizational performance of the Company.

Sixty-seven (67) employees, or a representative sample of the population, out of the total population of 914, were able to provide data.

The impact of supply chain features on organizational success has been investigated using multiple linear regressions. According to the estimation results, the four supply chain variables—strategic supplier alliances, client relationships, information sharing, and information sharing quality—each have a considerable impact on the organizational performance of the NSPF.

Organizational performance is significantly impacted by the NSPF's quality of information exchange. However, compared to other aspects, the impact on organizational success is considerably less significant.

The performance of NSPF's organization, according to the research, is significantly impacted by effective supply chain management. It is found that every supply chain element considered in this model has a statistically significant effect on the organizational performance of NSPF. The degree of influence is different from all other supply chain components considered in the model, though. Information sharing and strategic supplier partnerships are set up to have a significant impact on organizational performance. Although the effectiveness of information sharing is only somewhat influenced by its quality.

5.5 RECOMMENDATION

Following the conclusions above, and the case company, the literature reviewed, and the statistical analysis test result the following recommendations are extended.

1. This thesis has explored four SCM components, some of which may have both direct and indirect effects on the organizational performance of the subject organization. The SCM challenges in this supplier firm are linked to strategic supplier alliances, customer relationships, the level and quality of information sharing, as well as the independent variable organizational performance. It is possible to propose to the company that it should improve its supply chain planning and implementation, particularly about issues of creating a strategic supplier partnership and customer relationship. By defining criteria for supplier selection, working together with them to solve problems, and following up with important suppliers, the firm will be able to choose, negotiate effectively with, and improve its organizational performance. Involve important suppliers in the company's planning and new product development processes, sharing information with them to help them improve their products, and so on.

2. According to perceptions and responses from 67 employees who were selected from the four relevant departments (Procurement, Marketing & Sales, Finance and Administration, and Human Resource Management), not all the four constructs have equal influences (magnitude) on the SCM and organizational performance of NSPF. Despite this, it was possible to confirm that the company's management was aware of the need to give each of the SCM elements developed for considerable attention. Consequently, there will be an opportunity to address the SCM problems this firm is experiencing.

3. Information sharing about operations, business processes (including the supply chain), operations, planning and goal setting, and issues that have an impact on the organization's partners will have an impact on the supply chain management of NSPF. The business must also take the necessary measures to raise the standard of the supply chain information shared with customers, business partners, and internal clients to address these issues. When enhancing the NSPF's information development operations, the degree of information quality, which includes timely exchange of information,

accurate information, and full and appropriate information interchange with trading partners, must be taken into consideration. In a similar vein, strengthening customer relationships through routine customer interaction, measuring, and evaluating customer satisfaction, routinely determining future customer expectations, and periodically evaluating the relationship's importance has a greater impact on how well the NSPF organization performs.

4. In the end, the company's management must understand and endeavor to ensure that the previously described independent concepts have a beneficial impact on organizational performance. Additionally, the outcomes of these improvement activities will ultimately increase NSPF performance.

NSPF need to work on strategic supplier partnership in terms of engaging partner suppliers in the plan, helping and supporting strategic partner suppliers resolve their problem in addressing the need of NSPF. What is more, NSPF need to work on customer relationship. In the volatile business world, customer handling and relationship needs special attention. Having quality products alone does not guarantee business success. NSPF need to assess the market to seen and address what the market needs.

5.6 SUGGESTIONS FOR FURTHER STUDY

Examining how supply chain management practices affected NSPF's organizational performance was the goal of the study. Although it has limitations, future research could use this as a starting point and focus on different businesses. Future research may also focus on different industries. It's intriguing to observe how supply chain management affects organizational effectiveness in additional business cases.

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Appendix: Questionnaire

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

QUESTIONNAIRE

This study is to be carried out under the title "T**he Effect of Supply Chain Management practice on the performance of Nefas Silk paint factory** 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 confidential and will be used only for academic purpose. Your cooperation and on time response 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: 09-11192122) and E-mail: befekadumitiku@gmail.com

PART I: Demographic Information

1. Educational Qualification

- College diploma
- First Degree
- MA/MSC/MBA or above
- TVET+

2. Your position in the organization

1. Department manager ·
2. Division head ·
3. Senior officer ·
4. Officer ·
5. Other_____

3. How long have you worked in Nefas Silk Paint factory?

1. Less than 3 years ·
3. 7 – 10 years ·
2. 3– 6 years ·
4. 5 years and above ·

PART II: In Relation to Supply chain management practice of Nefas Silk Paint Factory.

Please write the appropriate number or put a tick mark in the box, 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.

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

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

	Quality of information sharing:	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
QIS 1	Information exchange between Your company's trading partners and Your company's is accurate.					
QIS 2	Information exchange between Your company's trading partners and Your company is complete.					
QIS 3	Information exchange between Your company's trading partners and Your company is adequate					
QIS 4	Information exchange between Your company's trading partners and Your company is reliable.					

1. How do you describe supply chain management practice of your company?

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2. Is there any problem in the process of practicing supply chain management in your company? YES ☐ NO ☐

3. If your answer for the above question is "yes", please list down the problems below.

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

PART III: Related organizational performance level

Regarding level of organizational performance, please circle appropriates 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.

Code	**Organizational performance:**	**Significantly decrease**	**Decrease**	**Same as before**	**Increase**	**Significantly increase**
	How well your organization achieves its Market-oriented goals as well as its financial goals in the past five years.					
OP 1	Market share.					
OP 2	Return on investment					
OP 3	The growth of market share					
OP 4	The growth of sales.					
OP 5	Return on investment (ROI) growth					
OP 6	Profit margin on sales					
OP 7	Overall competitive position					

If you have any comment you are welcome: ----------

THANK YOU