ASSESSMENT OF FACTORS AFFECTING SUPPLIER PERFORMANCE USER COMPANY EMPLOYEES PERSPECTIVE THE CASE OF POPULATION SERVICES INTERNATIONAL ETHIOPIA

A THESIS SUBMITED TO THE SCHOOL OF COMMERCE ADDIS ABABA UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF ARTS IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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Approved By Examining Board

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External examiner	**Signature**

Declaration

I hereby declare that this study entitled 'Assessment of Factors Affecting Supplier Performance; User Company Employees Perspective: The Case of Population Services International Ethiopia' is my own work. All information in this document has been obtained and presented in accordance with academic rules and ethical conduct.

Student researcher	**signature**	**Date**
Desalegn Mhiret	_____	_____

Letter of Certification

This is to certify that Desalegn Mhiret has carried out his research work on the topic entitled 'Assessment of Factors Affecting Supplier Performance; User Company Employees Perspective: The Case of Population Services International Ethiopia' as a partial fulfillment of the requirement of Masters of Arts Degree in Logistics and Supply Chain Management. This study fulfills requirement to obtain academic degree from the university.

Advisor	**signature**	**Date**
Tariku Jebena (PhD)	_____	_____

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List of Acronyms

CIPS	-	Chartered institution of procurement and supply
CRM	-	Customer relationship management
HR	-	Human resource
INGO	-	International Non-Governmental organizations
KPIs	-	key performance indicators
NGO	-	Non-Governmental organizations
PSI	-	Population Services International
PSI/E	-	Population Services International Ethiopia
SCM	-	Supply Chain Management
SMEs	-	Small and Medium Enterprises
SRM	-	Supplier Relationship Management
SPSS	-	Statistical Package for Social Science
USAID	-	The united agency for international development

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Abstract

Supplier performance is one of a core supply chain activity that is influenced by different factors. The purpose of this study is to assess the factors affecting supplier performance; user company employees perspective of Population services international/Ethiopia (PSI/E) using the three supplier performance factors (supplier selection, supplier relationship and supplier evaluation) with supplier performance. A descriptive and explanatory research design was used to assess the relationship between supplier performance and the three factors of supplier performance. By implementing both simple random and purposive sampling from a total of 100 employees based in the organization head office, 67 employees were selected. Structured questionnaire was used as a research tool for collecting data. From the total questionnaires distributed 60 were returned. The collected data was analyzed using both descriptive statistics and inferential statistics such as correlation and linear regression. Based on the findings of the study, supplier selection and supplier evaluation have significant relationship and affect supplier performance while, supplier relationship has relationship but with insignificant influence on supplier performance. Therefore, PSI/E needs to give due attention for supplier selection and supplier relationship as if it wants to get best boost supplier performance. Based on these findings, the study also recommends points that should be considered regarding the factors affecting supplier performance.

Keywords: Supplier selection, supplier relationship, supplier evaluation and supplier performance

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Chapter One

Introduction

1.1 Background of the Study

One of the major and difficult tasks for many organizations is selecting and administering the right source/supplier. The role of purchasing in supply management has received and continues to receive increasing attention as the years go" (Kepher, Evans, & Shalle, 2015). "Purchasing enhances efficiency and competitiveness among other benefits, but to realize these benefits it is imperative to select and maintain competent suppliers" (Samson & Jonathan, 2013).

Ethiopia also lacks the health care infrastructure to disseminate resources to curb its major health challenges malaria, HIV/AIDS and child mortality. Ethiopia's three doctors for every 100,000 citizens equates to Washington, D.C., having only 17 doctors. This acute shortage especially in rural areas, where 85% of the population lives is a barrier that leaves many Ethiopians chronically underserved;

PSI's core values are a belief in markets and market mechanisms to contribute to sustained improvements in the lives of the poor. In order to achieve the core organization value, procurement plays a major role in providing the necessary inputs at the right time, in the right place, from the right source and with right price.

The best performing suppliers are those who offer products or services that match or exceed the needs of the buying organizations. This however is influenced by several gaps of performance, which can bring excellence in performance, if realized in time and corrected. Interest in having the best performing supplier has grown rapidly over past several years, and continues to grow due to different factors. First, in recent years it has become clear that companies have been able to boost supplier motivation to increase performance as much as practically possible. Many of these companies are discovering the magnitude of competitiveness that can be achieved by ensuring the best performance from the suppliers more effectively and efficiently. They use this to measure, analyze, and manage the performance of a supplier in an effort to cut costs, alleviate risks, and drive

continuous improvement. The ultimate intent being to identify potential issues and their root causes so that they can be resolved to everyone's benefit as early as possible. However, this cannot be realized unless the organization has learnt the gaps existing in the supplier performance as well as the causative factors (Kabinga, 2014).

According Kabinga (2014) the factors affecting supplier performance include supplier selection, supplier relationship and supplier evaluation. Thus, the purpose of this study is to assess factors affecting supplier performance; users company employees' perspective in PSI/E.

1. 2 Statement of the Problem

During last decade, researchers usually focused on Supply Chain Management (SCM) issues in profit organizations. Research objectives may include adding value, reducing cost, or slashing response time in various parties involved in the manufacturing supply chain. However, very few studies were attempted in non-profit organizations. An extremely scarce number of research papers focused on SCM in the academia (Habib, 2011).

According to Habib (2011) a profit organization attempts to maximize profits, whereas a non-profit organization considers monetary returns of less importance. Their major objectives may include improved literacy rate, better quality of life, equal opportunities for all genders or races, etc. The revenues gained by a non-profit organization would be used primarily to balance the expenditure of the organization. PSI/E is one of such non-profit international organizations which are working to help people lead heather life with social marketing.

Non-Governmental organizations (INGOs) play an important countries economy in bridging the gap and in meeting the social needs of the society. The aspect of strategic procurement capability comes in handy to validate how funds in NGOs are used in the sourcing process. Procurement capabilities if well exploited align performance to the organizations' goals and objectives (Kalei & Mumbi, 2016).

There is need for humanitarian organization to adopt best supply chain management that will meet the overall strategy which is to achieve value for money and to develop world class procurement systems and ensure quality and timely supplies to beneficiaries (Ngoto & Kagiri, 2016).

Projects implemented by NGO's involve the use of donor funds to achieve specific objectives for the benefit of the public (Ngoto & Kagiri, 2016). Similarly PSI/E has been getting money from donors for its projects implementation to address its objectives. Based on previous studies strategic supplier alliance have been tested to be a key element which support the organization performance in several INGO`s. Proper supplier selection plays a very critical role in enhancing performance. The output given from the findings indicate that there is a significant positive relationship between the elements of organization performance namely; Risk management, Supplier relationship Management, Strategic souring, Technology (Kalei & Mumbi, 2016). And hence, PSI/E has been working with different suppliers to get required goods and services for project implementation and operational activities.

The research tried to assess factors affecting supplier performance from user company employees' perspective in case of PSI/E by analyzing independent and dependent variables and tried to identify the significance of interdependencies and their relationship with supplier performance.

1.3 Basic Research Questions

This study tried to address the following research questions:

i. How does supplier selection affect supplier performance?

ii. How do supplier relationships affect supplier performance?

iii. How does supplier evaluation affect supplier performance?

1.4 Objectives of the Study

1.4.1 General Objective:

The general objective of the study is to assess factors affecting suppliers' performance from users' company employee perspective in the Population services International Ethiopia.

1.4.2 Specific Objectives:

The specific objectives of the study are:

a) To study the relationship between of supplier selection on supplier performance
b) To study the relationship between of supplier relationship on supplier performance
c) To study the relationship between supplier evaluation on supplier performance

1.5 Significance of the Study

The study will benefit PSI/E in identifying the factors affecting supplier performance. To this effect it can help user department sand procurement function understand what strategies to formulate and work towards selecting and evaluating suppliers as to get the best from its suppliers involved in supplying programmatic and operational inputs. This research can also serve as an input for other researches and scholars such as: academicians, policy makers, consultants and some other bodies who would like to conduct further researches on related fields.

1.6 Scope of the Study

The scope of the study is PSI/E, it lacks wholeness due to it lacks input from other stockholders of the supply chain. It will not represent all NGOs and other sectors. In addition the study is focusing only on the factors affecting supplier performance with user employee perspective; it doesn't cover other supply chain aspects

1.7 Limitation of the Study

The study is limited to Populations Services International Ethiopia (PSI/E) head office, Addis Ababa, due to Scarcity of time and money to distribute and collect questionnaires to PSI/E suppliers and regional offices physically and lack of adopting technological advancements like filling online questioners/survey. At the head office, all users company employees who are getting procurement of goods and services through procurement department were involved in responding to distributed questionnaires except lower level staffs like security guards, office attendants etc. which are believed represented by their supervisors in respective departments.

As the study focus is on assessing factors affecting supplier performance it only considered issues of supplier selection, supplier relationship, and supplier evaluation and supplier performance. The study also used desk review of all related organization documents which are believed relevant for this study.

1.8 Definitions of Concepts

1.8.1 Conceptual Definitions

Supplier selection: is a complex multi criteria decision making process, in which decision makers have to deal with the optimization of conflicting objectives such as quality, cost and delivery time (Khan, Jayant, & Kumar, 2015).

Supplier relationship: is the process that defines how a company interacts with its suppliers. As the name suggests, this is a mirror image of customer relationship management (CRM) (Mettler & Rohner, 2009)

Supplier Evaluation: is the process of evaluating the supplier's process and performance. The performance is monitored along aiming at the cost of reduction, risk mitigation and driving continuous performance (Hassan, Hajar, Roslan, & Jaafar, 2015).

Supplier performance: is a supply chain activity done by suppliers and affected by factors including supplier selection, supplier relationship and supplier evaluation (Kabinga, 2014).

Procurement: is a functional group as well as a functional activity and performs many activities to ensure value to the organization such as supplier identification and selection, buying, negotiation and contracting, supply market research, supplier measurement and improvement, and purchasing systems development, (Andreasen, 2012).

1.8.2 Operational Definitions

Supplier selection: Supplier selection is the process by which firms identify, evaluate, and contract with suppliers by deploying resources expecting significant benefits from contracting with suppliers offering high value.

Supplier relationship: is an approach to connect the different interests with. That is used to create ownership of the relationship, drive effective communication and align strategic objectives.

Supplier evaluation: the process of evaluating and approving potential suppliers by quantitative assessment to ensure a portfolio of best suppliers is available for use.

Supplier performance: is the accomplishment of supplier with in accordance to agreed contract with respect of delivering as per the given specification, delivery time and other terms and conditions specified in a given award or contract.

1.9 Organization of the Study

Generally the paper is organized into five chapters. The first chapter presents background of the study, followed by organizational profile, statement of the problem, basic research questions, objective and significance of the study, scope of the study, limitation of the study, definition of concepts and lastly organization of the study. The second chapter deals with theoretical and empirical literature review in which related reviews were presented and conceptual frame work of the study. The third chapter is a research

methodology which includes research design, research approach, Sampling technique and sampling size, source and instrument of data collection, data analysis methods, description of constructs of the study and their measurement and ethical consideration. The fourth chapter presented data analysis, result and discussion. The fifth and the last chapter contains summary of findings, conclusion and recommendation and suggestions for future studies.

Chapter Two

Review of Related Literatures

2.1 Theoretical Reviews

Having a clear Buyer supplier integration is important in an organization has been found to positively affect procurement performance. Evidence have shown that Supplier Training in Procurement performance positively affect procurement performance in organizations (Kepher et al., 2015). These authors concluded that, Procurement performance is enhanced by involving supplier right from inception of a product thereby training them on the quality standards required which involves collaborating with the said customers through information sharing, mutual investments and shared technology, integrating systems with those of organization suppliers and having a long term relationship with the suppliers. All these would be a means of managing suppliers and as result procurement performance is enhanced. Organizations should consider working hand in hand with key suppliers to enable mutually beneficial outcome that enhance performance.

Supplier Performance measurement was also an important evaluative tool which further aided the identification of suppliers and determined the relationship with former and current suppliers (Lemke, 2000).

The role of purchasing in supply management has received and continues to receive increasing attention as the years go by. Purchasing enhances efficiency and competitiveness among other benefits but to realize these benefits, it is imperative to select and maintain competent suppliers (Samson & Jonathan, 2013).

In general, there is a positive relationship between supplier performance and the factors such as supplier selection, supplier relationship and supplier evaluation (Kabinga, 2014). Each of these factors will be discussed as follows:

2.1.2 Supplier Selection

A supplier selection decision inherently is a multi-criterion problem. It is a decision of strategic importance to companies. The nature of this decision usually is complex and unstructured. The objective of supplier selection is to identify suppliers with the highest potential for meeting a firm's needs consistently and at an acceptable cost (Kahraman, Cebeci, & Ulukan, 2003). Supplier selection is a complex multi criteria decision making process, in which decision makers have to deal with the optimization of conflicting objectives such as quality, cost and delivery time (Khan et al., 2015). Thus, Supplier selection and evaluation represents one of the significant roles of purchasing and supply management functions (Khan et al., 2015).

Rainer and Christian (2005) explained that an ideal supplier is defined by the procuring enterprise which fixes the ideal scores (e.g. the best performing suppliers in the market) of every relevant criteria. The rating team should consist of several departments of the enterprise (procurement, production, controlling, etc.) as cited by (Samson & Jonathan, 2013)

Supplier selection process becomes increasingly important in today's complex environment; The decision criteria include Cost, Delivery, Quality, Supplier's profile, and Service (Khan et al., 2015), (Khakbaz, Ghapanchi, & Tavana, 2010).

Supplier selection from a global point of view encompasses the myriad activities used to evaluate the capabilities of potential suppliers and then to select them to configure a buyer's supply chain for long-term competitive advantage. Supplier selection is critical as firms become more and more dependent on their suppliers; the capabilities of those suppliers serve as key resources in the development of the buyer's own capabilities and performance (Manyega, 2015).

Suppliers should be selected based on the company's core process requirements and standardized selection criteria. A buyer company should desires to work with supplier companies that have strong management processes and effective methods of developing

their workforce to continuously improve. Supplier selection is based upon criteria that are vital to a particular process and indicative of future success of both the buyer and the supplier. The criteria should be weighted and some attributes made more important for one process team than another (Kabinga, 2014).

According to Samson and Jonathan (2013), Supplier selection is widely recognized as the most important responsibility of the purchasing function because the organization's suppliers can affect the price, quality, delivery reliability and availability of the organizations products. Supplier selection is one of the most important decision making problems, since selecting the right suppliers significantly reduces the purchasing costs and improves corporate competitiveness.

To build more effective relationship with suppliers, organizations are using supplier selection criteria to strengthen the selection process (Kahraman et al., 2003).

Many researchers reported that alternative selection criteria are not always independent and may influence each other. The interdependencies among the criteria may have an effect in decision making process of selecting suppliers for a company. There are a number of key characteristics that a buyer should look for when identifying and short listing possible or performing suppliers. Good suppliers should be able to demonstrate that they can offer you the following benefits: Reliability, Quality, Value for money, have strong service and clear communication, have financial security. If the buyer wants reliability and quality from suppliers, it will have to decide how much it is willing to pay for the supplies and the balance he wants to strike between cost, reliability, quality and service (Kabinga, 2014).

The rapid evolution of information technology and global competition has drastically increased organizational awareness and responsiveness to customer needs. The constant pressure for customer satisfaction and competitive advantage has forced organizations to search for effective supplier selection strategies. The purpose of supplier selection is to determine the optimal supplier who can offer the best products or services for the customer. Effective supplier evaluation and selection strategies can directly impact supply

chain performance resulting in organizational productivity and profitability (Khakbaz et al., 2010).

2.1.3 Supplier Relationship

Supplier relationship management is the process that defines how a company interacts with its suppliers. As the name suggests, this is a mirror image of customer relationship management (CRM) (Mettler & Rohner, 2009).

According to Szwejczewski, Goffin and Lemke (2005) the objectives of buyer supplier relationships have been focused on quality Enhancements, delivery on time, and especially, cost reduction. The whole art of supplier relationship management from a supply perspective is to bring both sides into an effective working relationship.

The short-term objectives of Supplier Relationship Management (SRM) are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain. Supplier relationship management should ultimately lead to enhanced organizational performance. In an increasing competitive marketplace, firms are seeking new methods of enhancing competitive advantage. Today, purchasing is becoming a strategic function and a key factor in competitive positioning. With consolidation of firms within industries, supplier relationships are becoming more critical in the future. Firms have realized that collaborative business relationships improve a firm's ability to respond to the new business environment by allowing them to focus on their core businesses and reduce costs in business processes. (SRM) plays an important role in the reduction of costs and the optimization of performance in industrial enterprises (Maraka, Kibet, & Mike, 2015).

Companies are inclined to work with different suppliers in different ways. It is important that the relationship with suppliers satisfies their company needs. As cited by Quesada, Gazo and Sanchez (2008), Hines (2004) mentioned that in commodity products, it is common to find an adversarial relationship mainly based on price between buyer and supplier. This type of relationship with suppliers does not allow for cost reduction in the

supply chain. It may be beneficial to network the supplier, to develop partnerships and alliances that will benefit both partners. This could be based on production, personal, and or symbolic networking that will turn on strategic alliances, allowing the information sharing, risk sharing, obtaining mutual benefits and coordinating plans, permitting the improvement of the supply chain.

According to Maraka, Kibet and Mike (2015) Supplier Relationship Management (SRM) is a comprehensive approach to managing an organization's interactions with the firms that supply the products and services it uses and plays an important role in the reduction of costs and the optimization of performance in industrial enterprises. They mentioned that it is understood as the sourcing policy-based design of strategic and operational procurement processes as well as the configuration of the supplier management.

Collaborative efforts or supplier relationships produce best results when both buyer and seller support each other to ensure that each party gets their value. There are less delays and the provision of services is more direct and straight forward (Maraka et al., 2015).

Khakbaz, Ghapanchi and Tavana (2010) in their study " Effects of Supplier Relationship Management on the Performance of Organizations in Selected Sugar Companies in Western Kenya" encouraged organizations invest more of supplier relationships so that they could positively influence organizational performance to the level that met company expectations.

According to Irene (2013) today, buyer-supplier relationships have become "strategic" and the process of relationship development is accelerated as firms strive to create relationships to achieve their goals. An important phenomenon related to buyer-seller relationships is that many buyers are developing single source suppliers because of the pressure to increase quality, reduce inventory, develop just-in-time systems, and decrease time to market. The ultimate goal in developing these capabilities is to reduce costs. High levels of trust, two-way information sharing, direct assistance, long-term contracts, formal evaluation of supplier performance, and involvement in new product development are key factors for successful supplier relationship (Grace & George, 2014).

Many organizations see supplier relationship management as a process focused on monitoring
the performance of their suppliers rather than as a collaborative, two-way relationship that can
deliver value for both parties. A good relationship is all about engaging proactively with most strategic suppliers to capture innovation, jointly develop new products and services, improve the efficiency of your operations and speed up your time to market requires a much broader and more relationship based approach. A culture of collaboration must be fostered across the supply chain, and suppliers viewed as a source of competitive advantage, rather than cost. Properly managed supplier relationships can contribute to enterprise innovation and growth, while a poorly managed supply base will drive up costs and slow new product initiatives. Good supplier relationship then represents an opportunity to improve the accuracy and speed of buyer-supplier transactions, while improving collaborative working s to the benefit of parties, driving continuous improvement (Kabinga, 2014).

According to Al-abdallah, Abdallah and Hamdan (2014) Supplier relationship management (SRM) is an important perspective for manufacturing firms to ensure the supply of reliable and frequent deliveries in today's dynamic and competitive environment. For such relationship to be effective and long-term, it has to be beneficial for all parties, the buying and the supplier firms.

Supplier Relationship Management (SRM) is a comprehensive approach to managing an organization’s interactions with the firms that supply the products and services it uses and it understood as the sourcing policy-based design of strategic and operational procurement processes as well as the configuration of the supplier management. SRM plays an important role in the reduction of costs and the optimization of performance in organizations (Abdalla, 2015).

Supplier relationships can either make or break an organization's ability to service customers responsibly and reliably while maintaining cost effectiveness and managing their property effectively (Roushdy, Mohamed, Hesham, Elzarka, & Hafez, 2015).

Supplier Relationship Management (SRM) needs intensive management of supplier relationships to reduce costs for both the buyer and supplier and increase supplier performance (Chenoweth, Moore, Cox, Mele, & Sollinger, 2012).

According to Shin, Collier and Wilson (2000) Proctor & Gamble, P&G strengthened its leadership position in the consumer package goods industry by excelling at supply chain management. P&G has generated more than US$325 million in supply chain savings by using Continuous Replenishment Program and Efficient Customer Response.

Globalization and fast changing business s are putting organizations under tremendous pressure to constantly improve product or process quality, delivery index, performance, and responsiveness along with reducing costs. The need to improve on supplier-buyer relations is becoming more apparent in the quest to achieve operational excellence (C, Rambo, & Oyugi, 2015).

2.1.4 Supplier Evaluation

Supplier evaluation is the process of evaluating the supplier's process and s performance. The performance is monitored along aiming at the cost of reduction, risk mitigation and driving continuous performance (Hassan et al., 2015). According to Maraka, Kibet and Mike (2015) supplier evaluation includes measures of quality, cost, delivery and flexibility which are used to know well a supplier is doing.

By evaluating supplier performance organizations hope to identify suppliers with exceptional performance or developmental needs, improve supplier communication, reduce risk and manage the partnership based on analysis of reported data (Maraka et al., 2015).

According to Kabinga (2014) in supply chain management, buyer-supplier relationships are critical to the success of the strategic goals of a company. In order for a buyer to keep track of these relationships and assess supplier performance an evaluation process must be in place. Supplier evaluation processes can be informal or formal. Supplier performance evaluations can provide both objective and subjective rating of the buyer supplier relationship. These evaluations can come in a variety of formats. If used correctly, these supplier evaluation matrices can become an important tool in determining a good supplier performance in the long term success of a company.

According to Khakbaz, Ghapanchi and Tavana (2010) measures such as transportation and purchasing costs, vendors' product quality, delivery, and capacity proposed for supplier evaluation and selection.

Despite the increased interest and attention, most supplier evaluation models consider suppliers as independent entities with no relation or interaction with other entities in the supply chain. The inadequate treatment of supplier interrelationships and interactions with respect to both value and resource utilization is one of the most important limitations of the present supplier selection research (Khakbaz et al., 2010).

Measuring the performance of suppliers is vital for ensuring a well operated supply chain. The goal of supplier evaluation should be supplier performance improvement and by simply measuring performance has a positive effect; supplier evaluation can be most effective when it leads to continuous improvement activities and actual supplier performance improvement. The performance and past history of the suppliers help in taking decisions for its selection, as a result selecting the right supplier helps in getting more improved quality (Roushdy et al., 2015).

Supplier evaluation is located at the end of the purchasing process but is however essential for buying firms in controlling and monitoring their suppliers. Evaluation is used to see if a supplier performs according to the agreements or "preliminary assessment of potential new suppliers" The last few years, the importance of supplier evaluation

increased due to globalization, changing in the preference of buyers and the complexity of buying decisions (Apostolova, Kroon, Richter, & Zimmer, 2015)

The most mostly used supplier performance measurement criteria which are mentioned by different authors quality, price, delivery performance and services and followed by financial strength, lead-time, technical ability, flexibility, production capacity, development, management attitude, fill rate and geographic location (Hassan et al., 2015).

2.1.5 Supplier Performance

Measurement of supplier performance is a step in the right direction. Focusing on critical suppliers or suppliers that constitute the largest portion of spending enables a company to identify and manage those performance issues that could have the most immediate and greatest impact on its operations and its perception in the market (Abdalla, 2015).

Every organization knows it should be assessing supplier performance. Most are deploying some sort of supplier performance measurement, whether it is a couple of rudimentary key performance indicators (KPIs) or more sophisticated data gathering and on-site assessment programs. According to Gordon (2005) few purchasing and quality professionals are likely to answer "yes" when asked whether they are satisfied with their supplier assessment capabilities and results.

When looking for successful supplier performance, it is important to emphasize relationship quality. Researchers such as Walter, Kaufman, and Palmatier, propose relationship quality as a "multi-factorial construct consisting of trust, satisfaction, and commitment." Steward, Wu, and Hartley (2010) consider factors such as product quality; responsiveness to requests for change; sales, service and/or technical support; total value received; and overall cost performance as a measurement of supply chain performance. They also found that "supplier performance is higher when the supply manager perceives trust and satisfaction on the part of the supplier's account executive" (Quesada et al., 2008).

Buying firms are developing cooperative, mutually beneficial relationships with suppliers and viewing suppliers as virtual extensions of their firm. In doing so, they have significantly increased their reliance on suppliers (Tan & Handfield, 1999).

2.2 Empirical Reviews

Kabinga (2014) found in his study "Factors affecting supplier performance in Small and Medium Enterprises (SMEs) in Kirinyaga County, Kenya" found that the relationship between factors affecting supplier performance and supplier performance yielding moderate regression coefficient (at 5 percent significance level), supplier selection s was 0.134, supplier performance criteria was 0.53, supplier relationship was 0.39 and supplier evaluation was 0.61, indicating a moderately positive correlation between the variables. He concluded there is a strong positive relationship between supplier selection, supplier performance criteria, supplier relationship, and supplier evaluation and supplier performance.

Based on previous studies strategic supplier alliance have been tested to be a key element which support the organization performance in several INGO`s. Proper supplier selection plays a very critical role in enhancing performance. The output given from the findings indicate that there is a significant positive relationship between the elements of organization performance namely; Risk management, Supplier relationship Management, Strategic souring, Technology (Kalei & Mumbi, 2016).

Ngoto (2016) in his study 'factors affecting supply chain management performance in international non-governmental organizations in Kenya' concluded that strategic supplier relationship with the international NGOs affect their supply chain management performance significantly. He also, concluded that information sharing affects supply chain management performance in the international NGOs in Kenya.

Gonzalez and Quesada (2004) found that supplier selection was the most influential supply management process for achieving product quality as cited by (Manyega, 2015). Successful supplier selection is a source for competitive advantage; they affect

competitive performance of public institutions positively if effectively selected (Manyega, 2015). Ngoto (2016) concluded that supplier relationship significantly affects supply chain performance.

Vonderembse and Tracey (1999) found a positive correlation between the factors of both supplier involvement and supplier performance and manufacturing performance. Furthermore, they concluded that this correlation has a positive effect on the buyer's performance as cited by (Roushdy et al., 2015). Companies which evaluate their suppliers found that they are having better visibility into supplier performance (Roushdy et al., 2015)

As cited by Shin, Collier and Wilson (2000), Carr and Pearson (1999), investigate the impact of 'strategic purchasing' on 'buyer–supplier relationships' found that strategically managed long-term relationships with key suppliers have a positive impact on the firm's financial performance.

Research has shown that if buyers do not measure supplier performance, decision making becomes inconsistent and performance decreases to mediocre levels (Dumond, 1994 in Johnsen et al., 2014) as cited by (Apostolova et al., 2015).

2.3 Conceptual frame work of the Study

The research conceptual framework is a conceptual model based on theoretical relationships among a number of factors that have been identified as important research issues. The theoretical framework supports the whole research. This conceptual framework is adopted from Kabinga (2014).

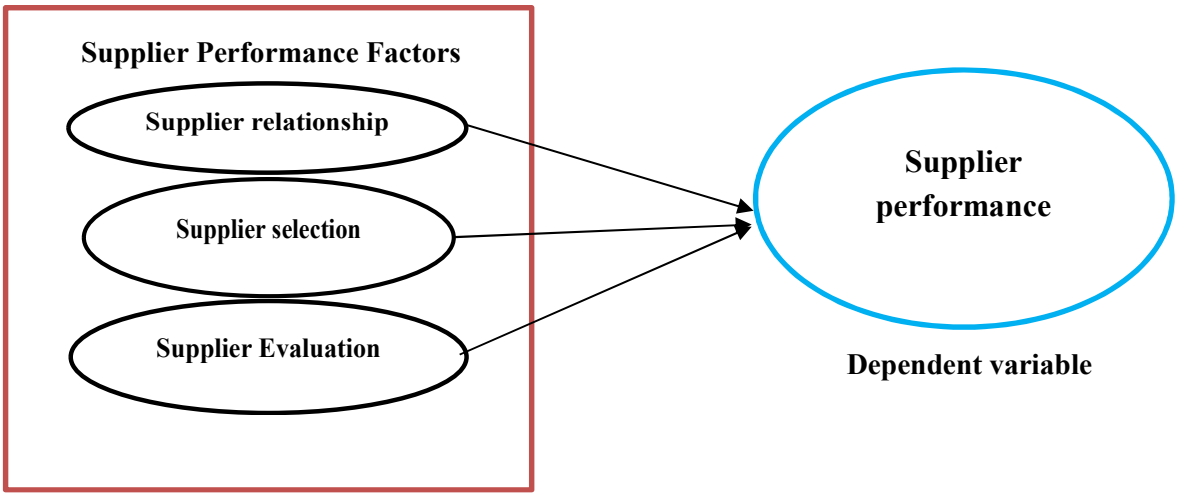

Figure 1: Conceptual framework

Source: adopted from Kabinga (2014)

According Kabinga (2014) the factors affecting supplier performance include supplier selection, supplier relationship and supplier evaluation. Hence, adopting this conceptual framework, the study tried to see the relationship and of these three factors and supplier performance (supplier selection, supplier relationship and supplier evaluation) with supplier performance. The study tried to show if these conceptual framework is applicable to PSI/E.

Chapter Three

Research Methodology

3.1 Introduction

This chapter deals with the methods that have been used in the research to come up with the findings of the study. The chapter includes research design, population of the study, sampling technique and sample size, methods of data collection, instruments of data collection, data analysis and presentation and ethical considerations.

3.2 Description of the Study Area

Founded in 2003, Populations Services International/Ethiopia (PSI/E) has developed national results-based programs for malaria, HIV/AIDS and child survival. These programs are creating realistic opportunities for both private and public sector partners to make long-term investments that help Ethiopia's most vulnerable lead healthier lives. Working in partnership with public and private sectors, PSI/E provides lifesaving products, clinical services and behavior change communications that empower Ethiopia's most vulnerable populations to lead healthier lives.

PSI/E is an affiliate of PSI which was founded in 1970 to improve reproductive health using commercial marketing strategies. For its first 15 years, PSI worked mostly in family planning (hence the name Population Services International). In 1985, it started promoting oral rehydration therapy. PSI's first HIV prevention project which promoted abstinence, fidelity and condoms began in 1988. PSI added malaria and safe water to its portfolio in the 1990s and tuberculosis in 2004.

Now the organization has 139 employees in its head office, Addis Ababa, regional offices based in Adama, Bahir Dar, Dessie, and Hawassa) and satellite offices at Dire Dawa, Gambela, Jimma and Mekelle. It has different projects funded by different donors such as MULU MARPs, Growth through Nutrition (GtN), Transform Wash all funded by USAID

and Adolescent 360 funded by Melinda and Gates foundation, and Child survival funded by an institutional donor, Proctor and Gamble.

Through its projects and Working in partnership with public and private sectors, PSI/E provides lifesaving products, clinical services and behavior change communications that empower Ethiopia's most vulnerable populations to lead healthier lives. It also distributes health commodities like condoms and water purifying and treatment chemicals such as WuhaAgar and P&G.

3.2 Research Design

Descriptive and explanatory research designs were used to assess the relationship between the dependent variable, supplier performance and the three factors affecting supplier performance. A descriptive research design determines and reports the way things are (Maraka et al., 2015). Moreover, Descriptive design is ideal as the study will be carried out in a limited geographical scope and hence is logistically easier and simpler to conduct considering the limitations of this study (Ngoto & Kagiri, 2016). Structured questionnaire was used to collect quantitative data from respondents. The approach of the study was quantitative method. Quantitative method was used for data's collected through close ended questionnaire. Generally, Descriptive research design was used as it had merits such a researcher having no control over the variables and only reported what was happening (Ngoto & Kagiri, 2016).

3.3 Research Approach

Quantitative research approaches is used in the study. This is because the study primarily focused on the data collected through questionnaires to give condensed pictures of the data by using SPSS. Accordingly, the collected data presented in to two parts, in the first part the study described the relationship between the dependent and independent variables using frequency and percentage. And in the second part the study tried to show the interdependence between the dependent and independent variables using explanatory research approaches such as regression and correlation analysis.

3.4 Unit of Analysis

The unit of analysis for this study is PSI/E and units of observation are the respondents identified in the target population.

3.5 Population and Sampling Techniques of the Study

3.5.1 Population of the Study

According to Hair et al. (2002, p.334) population can be defined as an identifiable total group of aggregation of elements (e.g. people, products, organizations, physical entities) that are of interest to the researcher and pertinent to the specified information problem as cited by (Gelana, 2016).

The target population of the study is PSI/E head office staff that based in Addis Ababa. The organization has 139 staff during the study. Among these staffs, 100 are based in Addis Ababa and the remaining are based in Adama, Bahir Dar, Dessie and Hawassa regional offices and Dire Dawa, Gambella, Mekelle and Jimma satellite offices. Therefore the researcher chosen to focus on the accessible population size which are 100 due to limited resource in terms of accessibility and money.

3.5.2 Sampling Technique and Sample Size

3.5.2.1 Sampling Technique

Both simple random sampling and purposive sampling techniques were used to select respondents from the target population. The researcher excluded lower level staff that may be challenged to fill the structured questioner as well as understanding the concept under study. Thus, staffs having at least diploma and that were assumed they have been getting procurement service of goods and services were included in the study through random sampling.

3.5.2.2 Sample Size

Sample size was determined considering the 100 head office staff employees only. Therefore, the sample size that was selected out of 100 total populations based up on

sampling technique of using the below formula. The sample size is calculated using the following formula Belcourt, Wright and Saks (2000):

$$n = \frac{N}{1 + Ne^2}$$

Where; n = sample size

N= Total Number of population

e = standard error used (0.5) or 95% confidence interval.

$$n = \frac{100}{1 + 0.5}$$

$$n = \frac{100}{1 + 0.5} = 66.6 \approx 67$$

Based on the above sampling technique 67 staffs was considered and questioner was distributed on purposive sampling as to exclude the lower level staff/employees, as mentioned in the sampling technique 3.4.1 above.

3.6 Sources of Data

The data for the study was obtained from both primary and secondary sources. Primary data was collected from respondents (PSI/E employees) which were chosen through purposive simple random sampling from the study population. The instruments engaged in order to collect primary data was structured questionnaires. Regarding secondary the main were documented company records, books, articles and journals and other similar printed material accessed from internet.

3.6.1 Data Collection Method

Draft questionnaire was modified from an already made questionnaires Gelana (2016), Kahraman et al., (2003) and Kabinga (2014) used in their studies. The primary questionnaire was pre-tested with academics and practitioners to check its content

validity. The questionnaire was divided into two main sections. Section I tries to gather general information about the respondents and Section II focuses on factors affecting supplier performance (supplier selection, supplier relationship and supplier evaluation) the independent variable supplier performance. On section II Respondents are requested to indicate their answer based on 5 point Likert (1= No importance to 5= Extreme importance and 1= Strongly Disagree to 5= strongly agree)

3.6.2 Procedure for Data Collection

A listing of target respondents (list of staff) with their detail position and department were obtained from HR department of the organization. After the respondents' willingness to participate in the research was confirmed the student researcher clarified the objectives of the study at the time distributing the questionnaire sample respondents. In order to avoid confusion and to make the administration ease, a close follow up was maintained during filling up of the questionnaire.

3.6.3 Data Quality Assurance, Data Management and Analysis

Statistical Package for Social Science (SPSS) version 24.0 was used to analyze and present the data. The descriptive statistical results will be presented by tables, frequency distributions and percentages to give a condensed picture of the data.

Descriptive analysis was computed to evaluate the demographic characteristic of the respondents and their position related to factors affecting supplier performance, supplier selection, and supplier relationship and supplier evaluation.

To check the strength of interdependencies between the three independent variables (supplier selection, supplier relationship and supplier evaluation) and supplier performance, correlation analysis was computed.

Finally, to check the relationship between the independent variables with the dependent variable, regression analysis was computed for all variables.

3.8 Description of Constructs of the Study and Their Measurement

The dependent and independent variables for the study has been identified. The Dependent variables is supplier performance and the independent variables are supplier selection, supplier relationship and supplier evaluation.

3.9 Ethical Consideration

The aim of this study was clearly described to concerned management officials and for the respondents before distribution of the research questionnaire and to ascertain the confidentiality of the respondents, on the questioner respondents was not required to fill out their names. In addition to this, any information collected via the instrument, publications and data's obtained from the company would never be used for any other purpose other than its academic intent. Overall, The procedure of involving the participants in the research has considered the basic principles of research ethics, so that the researcher committed himself and sought the consent of participants, respected the confidentiality and anonymity of the research respondents. The researcher also ensured voluntarily of the participating and independency and impartiality of the research.

3.10 Reliability Test

Cronbach's Alpha statistics using SPSS version 24.0 was applied to check the reliability of a set of questions designed to test 5-point Likert scale. "Since summated scales are an assembly of interrelated items designed to measure underlying constructs, it is very important to know whether the same set of items would elicit the same responses if the same questions are recast and re-administered to the same respondents Gelana (2016). Cronbach's alpha is one of the most frequently used, which is the degree of inter-correlations among the items that constitute a scale. Considering '0.7' as an acceptable reliability coefficient for Cronbach's Alpha approach, the higher the score, the more reliable the generated scale will be. The reliability statistic for the dependent and independent variables is presents as follows.

Reliability Statistics		
Variables	Cronbach's Alpha	No. of Items
Supplier selection	0.840	6
Supplier relationship	0.878	7
Supplier evaluation	0.701	4
Supplier performance	0.830	8

Source: Own survey result, 2017

Hence, the Cronbach's Alpha for all the variables is over 0.70 which indicates high overall internal consistency among the three independent variables and the dependent variable.

Chapter Four

Data Analysis, Results and Discussion

4.1. Introduction

Under this chapter the analysis and interpretation were carried out based on the data collected through questionnaire from the sample respondents who are believed to have direct work relationship with procurement to get purchase of goods or services. Moreover, it is believed they can understand the topic well.

The data was analyzed using Statistical Package for Social Science (SPSS Version 24). Based on the methodologies, research design and tools of the proposal the data was collected from a total of 60 respondents. From the total of 67 questionnaires distributed 60 were returned. Therefore, the collected 60 questionnaires were effectively used for analysis that shows the response rate of 89.55 percent. Data analysis, discussion and interpretation of the results are presented in the following.

4.2. Demographic Data Presentation and Analysis

Observing the demographic trend or characteristics of the sample population before starting the data analysis is useful to make the analysis more meaningful for the reader. This part of the questionnaire requested information related to personal and demographic status of respondents.

The purpose of demographic analysis in this research is to describe the characteristics of the sample such as proportion of male and female in the sample, academic qualification of respondents and experience of respondents. Accordingly, these variables are summarized and described in the table below:

Table 1: Demographic Profile of the Respondents

Character	Category	Frequency	Percent
Gender	Male	36	60.00
	Female	24	40.00
	Total	60	100.00
Level of education	Diploma	7	11.67
	First Degree	22	36.67
	Master	31	51.67
	Total	60	100.00
Number of years stayed in the organization	Less than 2 years	22	36.67
	2- 5 years	24	40.00
	6- 10 years	13	21.67
	More than 11 years	1	1.67
	Total	60	100.00
Position in the organization	Managerial	22	36.67
	Non Managerial	38	63.33
	Total	60	100.00
Department	Support (HR, Finance, Logistics, procurement, Internal Auditor)	23	38.33
	Program (Transform wash, MULU MARPs, Child survival)	19	31.67
	Sales & Marketing	10	16.67
	Other	8	13.33
	Total	60	100.00

Source: Own survey result, 2017

The above table shows the gender distribution of respondents in PSI/E composed of 40 percent of female and 60 percent of male. 36.67 percent of the respondents indicated that they have work experience of less than 2 year while 40 percent of the respondents said they had experience of 2 to 5 years and also 21.67 percent of the respondents replied that they have work experience of 6 to10 years and 1.67 percent of the respondents replied that they have worked more than 11 years in the company. The results indicate that majority of the respondents have more than 2 years of work experience in the company.

The respondents were also asked to indicate their educational status and accordingly 11.70 percent of the respondents have Diploma, 36.70 percent of the respondents have first degree and the rest 51.70 percent have Masters. This indicates that majority of the company's work force is composed of well-educated employees and the number of Diploma holders in the company is insignificant.

When we look respondents in terms of position in the organization, 36.67 percent are managers and the rest 63.33 percent are non-mangers. On the other hand 38.33 percent are from support (HR, Finance, Logistics, Procurement and Internal Auditor), 31.67 percent from programs (Transform Wash, MULU MARPs, Child survival etc.), 16.67 percent from sales and marketing and 13.33 percent from others departments.

4.3 Descriptive Analysis of Factors affecting supplier performance

The mean or average is a measure of central tendency that offers a general picture of the data without unnecessarily covering one with each of the observations in the data set. The mean of respondents in each factors of supplier performance suggest that the average amount that each factor has positive or negative response of respondents. In this case, the mean of each item together with their respective factors overall mean/average mean/ was calculated in order to conclude the factors affecting supplier performance.

Accordingly, the mean scores have been computed for all the three supplier performance factors/independent variables/that includes supplier selection, supplier relationship and supplier evaluation and also the dependent variable supplier performance by equally weighting the mean scores of all the items under each factors. The average mean result of each supplier performance factor together with their respective variables is separately presented, analyzed and interpreted as follows.

4.3.1 Supplier Selection

Table 2: Mean value of supplier selection

Supplier selection	N	Mean	Std. Deviation
PSI/E selects its key (strategic) suppliers in enhancing its supplier relationship management	60	3.63	0.637
PSI/E categorize its suppliers by giving a high level of focus	60	3.87	0.676
PSI/E concentrates on supplier's resource, time and effort to select relevant strategic suppliers	60	3.45	0.872
PSI/E establish effective controlling system to align with supplier relationship	60	3.58	0.944
PSI/E continuously track the supply process (operation) with its suppliers	60	3.42	0.979
PSI/E continuously monitor and conduct regular review meetings with strategic supplier	60	2.97	0.863
Valid N (list wise)	60		

Source: Own survey result, 2017

Table 2 illustrates responses to all the six items of supplier selection showed respondents agreement that all the six items have relationship with supplier performance. Which are PSI/E selects its key (strategic) suppliers in enhancing its supplier relationship management, PSI/E categorize its suppliers by giving a high level of focus, PSI/E concentrates on supplier's resource, time and effort to select relevant strategic suppliers, PSI/E establishes effective controlling system to align supplier relationship, PSI/E continuously track the supply process (operation) with its suppliers and PSI/E continuously monitor and held regular review meetings with strategic supplier.

These items have a mean score of (M=3.63), (M=3.87), (M=3.45), (M=3.58), (M=3.42) and (M=3.42) respectively. As per the respondents' response, the analysis result showed that, PSI/E categorize its suppliers by giving a high level focus with the highest mean value of 3.87 and it continuously monitors and held review meetings regularly with strategic supplier with the least mean value of 2.97, which means PSI/E continuously monitor and conduct regular review meeting with strategic suppliers is given less

emphasis, giving high priority on categorizing its suppliers giving high level of focus compared to other items in supplier selection practice.

4.2 Supplier Relationship

Table3: Mean value of supplier relationship

The other factor affecting supplier performance is supplier relationship.

Supplier relationship	N	Mean	Std. Deviation
There exists clear understanding of each other's roles and responsibilities between PSI/E and its suppliers	60	3.77	0.767
There is a high level of commitment between PSI/E and its suppliers	60	3.6	0.785
Long-term relationships is maintained between PSI/E and its suppliers	60	3.32	0.892
There is a high level of trust between PSI/E and its suppliers	60	3.18	0.77
There is mutual information sharing between PSI/E and its suppliers	60	3.17	0.806
There is responsiveness towards each other's and needs between PSI/E and its suppliers	60	3.27	0.954
There is good communication between PSI/E and its suppliers	60	3.4	1.045
Valid N (list wise)	60		

Source: Own survey result, 2017

As per table 3, responses to all the seven items of supplier relationship showed respondents agreement that there exists clear understanding of each other's roles between PS/E and its suppliers, there is a high level of commitment between PSI/E and its suppliers, long-term relationships is maintained between PSI/E and its suppliers, there is a high level of trust between PSI/E and its suppliers, There is mutual information sharing between PSI/E and its suppliers, there is responsiveness towards each other's and needs between PSI/E and its suppliers, and there is good communication between PSI/E and its suppliers.

These items have a mean score of (M=3.77), (M=3.60), (M=3.32), (M=3.18), (M=3.17), (3.27) and (M=3.40) respectively. As per the respondents' response, there exists clear understanding of each other's roles between PSI/E and its suppliers with a mean value of 3.77. Compared to other items in PSI/E and its suppliers' relationship, there is mutual information sharing between PSI/E and its suppliers with a least mean value of 3.17. Which means, among these items which are important in having supplier relationship, less emphasis is given to sharing mutual information between suppliers and PSI/E. Overall, as per the respondents' response, PSI/E has a good relationship with its suppliers with average mean value above 2.5 for all items as shown in the table above.

4.3.3 Supplier Evaluation

Table 4: Mean value of supplier evaluation

Supplier evaluation	N	Mean	Std. Deviation
Have supplier evaluation system	60	3.53	0.929
Evaluates its key (strategic) suppliers in terms of Goods and Services quality	60	4.15	0.633
Evaluates suppliers in terms of meeting delivery deadlines (delivery reliability)	60	3.77	0.909
Evaluation results summary are communicated to respective suppliers	60	3.12	0.825
Valid N (list wise)	60		

Source: Own survey result, 2017

Table 4 indicates the average mean value with regard to having supplier evaluation system, evaluating key (strategic) suppliers in terms of Goods and Service quality, evaluating supplies in terms of meeting delivery deadlines (delivery reliability) and evaluating results summary are communicated to respective suppliers are (M=3.53), (M=4.15) (M=3.77) and (M=3.12) respectively. Based on the mean results for the items regarding supplier evaluation, the respondents agreed that PSI/E supplier evaluation practice leads to a good supplier performance.

4.3.4 Supplier Performance

Table 5: Mean value of supplier performance

Supplier performance	N	Mean	Std. Deviation
Project implementation problem due to required goods stock outs have decreased	60	3.23	0.593
The percent of on-time deliveries have increase	60	3.30	0.720
Goods and services have been delivered on a timely basis	60	3.13	0.650
Percent of goods rejected due to quality has been reduced	60	3.85	0.840
Delivered goods are of high quality	60	3.72	0.804
Payments for good and services become of the right price (best value for money)	60	3.68	0.854
Procurement processes lead time reduced	60	3.00	0.864
Delay in paying suppliers' decreased	60	2.78	1.195
Valid N (list wise)	60		

Source: Own survey result, 2017

As shown on table 5 respondents showed their agreement for all eight questions/items of supplier performance with a mean score of above 2.5. That means related to PSI/E suppliers performance; project implementation problem due to required goods stock outs have decreased, the percent of on-time deliveries have increase, goods and services have been delivered on a timely basis, percent of goods rejected due to quality has been reduced, delivered goods are of high quality, payments for goods and services become of the right price (best value for money), procurement processes lead time reduced, and delay in paying suppliers' decreased.

These items have a mean score of (M=3.23), (3.30), (M=3.13), (M=3.85), (M=3.72), (M=3.68), (M=3.00) and (2.78) respectively. As per the respondents' response, supplier performance has contributed in decreasing the percent of rejecting goods upon delivery

with mean the highest score of 3.85 among the items. On the other hand among the items in supplier performance, delay in paying suppliers' decreased is with least mean score of 2.78, which may be the area for improvement for PSI/E to keep the good supplier performance. Overall, PSI/E user employees agreed that the three factors affect the supplier performance.

4.3.5 Summary of the results of all the factors affecting Supplier Performance

Table 6: Summary of the factors affecting supplier performance

Item	N	Mean	Std. Deviation
Supplier selection	60	3.49	0.62458
Supplier relationship	60	3.39	0.65824
Supplier Evaluation	60	3.64	0.55876
Supplier Performance	60	3.34	0.56246
Valid N (listwise)	60		

Source: Own survey result, 2017

Table 6 shows the overall calculated mean scores of all the three suppler performance factors and supplier performance that we have discussed above. As per the respondents' response, the mean core for supplier selection, supplier relationship, supplier evaluation and supplier performance are 3.49, 3.39, 3.64 and 3.34 respectively. That is all are with a high mean score.

4.4 Correlation among the Dependent and Independent Variables

Under research investigation we are expected to understand concepts beyond the means and standard deviations of the dependent and independent variables so we need to know how one variable is related to another which comes with the concept of correlation. Hence, in this study Pearson Correlation Coefficient (r) was used to examine the relationship; between the three independent variables and the dependent variable by using a two-tailed test.

Table 7: Correlation

		Supplier selection	Supplier relationship	Supplier Evaluation	Supplier Performance
Supplier selection	Pearson Correlation	1	.651**	.463**	.583**
	Sig.(2-tailed)		0	0	0
	N	60	60	60	60
Supplier relationship	Pearson Correlation	.651**	1	.641**	.648**
	Sig.(2-tailed)	0		0	0
	N	60	60	60	60
Supplier Evaluation	Pearson Correlation	.463**	.641**	1	.747**
	Sig.(2-tailed)	0	0		0
	N	60	60	60	60
Supplier Performance	Pearson Correlation	.583**	.648**	.747**	1
	Sig. (2-tailed)	0	0	0	
	N	60	60	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Own survey result, 2017

Table 7 shows the correlation coefficient of the three factors affecting supplier performance where all are positively correlated with supplier performance of PSI/E within the range of 0.463 up to 0.747. All are significant at $p<0.01$ level. When we further look at into each factors with their coefficients which indicates the three independent variables: supplier selection (r=0.583), supplier relationship (r=0.648) and supplier evaluation (r=747). Hence, supplier selection, supplier relationship and supplier evaluation have a significant correlation with supplier performance.

4.5 Regression Analysis

This regression analysis is conducted to know how much dependent variable is explained by the independent variables. The regression was conducted between the three

independent variables such as supplier selection, supplier relationship and supplier evaluation and the dependent variable supplier performance.

Normality Test

Table 8: Skewness and Kurtosis

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Supplier selection	60	3.4861	0.62458	0.045	0.309	-0.233	0.608
Supplier relationship	60	3.3857	0.65824	0.783	0.309	-0.318	0.608
Supplier Evaluation	60	3.6417	0.55876	0.135	0.309	-0.614	0.608
Supplier Performance	60	3.3375	0.56246	0.317	0.309	-0.748	0.608
Valid N (listwise)	60						

Source: Own survey result, 2017

As we can see from the above descriptive table 8, Skewness and Kurtosis statics and test was done. As per the test result, it shows that the distribution is normal because Kurtosis and Skewness are in the range between -1 and +1,

Multi Collinearity Tests

Multi collinearity refers to the situation in which the independent/predictor variables are highly correlated. When independent variables are multi collinear, there is "overlap" or sharing of predictive power. HO (2006)

Table 9: Multi Collinearity test of independent variables

Model	Collinearity Statistics	
	Tolerance	VIF
Supplier selection	0.572	1.747
Supplier relationship	0.430	2.328
Supplier Evaluation	0.586	1.706

a. Dependent Variable: supplier performance

Source: Own survey result, 2017

The result in table 9 shows that the collinearity between independent variables has no series problem, since the value of tolerance for all independent variable is greater than 0.1 and all VIF is less than ten (VIF<10). Therefore, multi collinearity does not seem to be a problem for the variables.

Table 10: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799[a]	0.639	0.619	0.34699

a. Predictors: (Constant), Supplier Evaluation, Supplier selection, Supplier relationship
Source: Own survey result, 2017

The model summary shown on table 10 displays the significance and percentage of variation in supplier performance which is caused by independent variables (supplier selection, supplier evaluation and supplier relationship. According to Field (2009) the adjusted R square gives us some idea of how well our model generalizes and ideally we would like its value to be the same, or very close to, the value of R square. Multiple correlations R of +0.799 represent the combined correlation of all the independent variables. Adjusted R2 tells us that 61.9% of the variation in supplier performance can be explained by variation in the three independent variables taken together.

Table11: ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.923	3	3.974	33.01	.000[b]
	Residual	6.743	56	0.12		
	Total	18.666	59			

a. Dependent Variable: Supplier Performance

b. Predictors: (Constant), Supplier Evaluation, Supplier selection, supplier relationship

Source: Own survey result, 2017

In the ANOVA table 11 above, we have the F value of 33.01which is significant with $p<0.05$. This informs us that the three independent variables taken together as a set are significantly related to the dependent variable. The multiple correlations are therefore highly significant.

In order to see the contribution of factors that affect supplier performance, regression analysis of supplier performance factors were conducted. Table 12 below, provides the result of multiple regression analysis beta coefficient and significance.

Table 22: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.179	0.325		0.55	0.59
	Supplier selection	0.213	0.096	0.237	2.23	0.03
	Supplier relationship	0.124	0.105	0.145	1.18	0.24
	Supplier Evaluation	0.548	0.106	0.544	5.19	0

a. Dependent Variable: Supplier Performance

Source: Own survey result, 2017

The standardize beta value shows the number of standard deviations that the outcome will change as a result of one standard deviation change in predictor. The standard deviation units are directly comparable; therefore, they provide a better insight in to the importance of a predictor in the model. The large value of beta coefficient in an independent variable has the more important determinant in predicting the dependent variable. The standardize beta value for supplier evaluation factors is 0.544. This shows that, this variable has relatively strong degree of importance in affecting supplier performance than the other two factors. Similarly, the standardized beta value for supplier selection and supplier relationship is 0.237 and 0.145 respectively which shows both factors have slightly lower degree of importance than supplier evaluation. R-square value indicates the variance in the supplier performance as it is explained by independent variables. When we see the detail to what extent each independent variable influences the dependent variable:

supplier evaluation, supplier selection and supplier relationship were found to influence supplier performance in decreasing order.

The coefficient table depicts significant regression coefficients, such as supplier evaluation and supplier selection are significant at $p<0.05$. That means, keeping supplier relationship and supplier evaluation constant, one unit of increase in supplier selection will increase supplier performance by 0.213 unit (with $P< 0.05$). On the other hand, keeping supplier selection and supplier evaluation constant, a one unit increase in supplier relationship will increase supplier performance by 0.124 unit (with $P> 0.05$), but, supplier relationship is not significant because $p>0.05$. This doesn't mean that the factor, supplier relationships not significant for having good supplier performance, but this result may happened due to small sample size.

Chapter Five

Summary, Conclusion and Recommendations

This chapter provides the summary of major findings, conclusions and recommendation of the study.

5.1 Summary of the Findings

In this study, the researcher looked for the factors affecting supplier performance from user company employee perspective in the case of Population Services International Ethiopia. The study showed the factors affecting the supplier performance with the intent of knowing the strength of the relationship of the factors in this particular case. In order to achieve these objectives, data were collected from the employees of the organization and processed in both descriptive and inferential statistics, specifically correlation and Regression analysis were made to know the level of relationship and the degree of its respectively. From the demographic characteristics of respondents 60 percent were male and the remaining 40 percent were female respondents. In relation to their qualification level, the respondents had a minimum of diploma in which we can infer that the respondents are educated and they understood better the subject in the discussion. Finally, when we came to the work experience of the respondents, 63.34 percent of the employees have greater than two years of work experience. The analysis result illustrates that the mean score values for supplier performance factors have high mean value (between3.39 and 3.49), which indicates the supplier performance factors have positive relationship. The mean score value for supplier performance is 3.34, which shows there is good supplier performance by PSI/E suppliers or they are performing well. The study also found a significant positive correlation among the three supplier performance affecting factors (supplier selection, supplier relationship and supplier evaluation) and supplier performance. So that when all the three independent variables increase the dependent variable also increases.

Furthermore, the value of regression analysis shows that supplier selection and supplier evaluation have statistically significant relationship with supplier performance. On the other hand, supplier relationship doesn't show significant influence on supplier performance.

5.2 Conclusion

In order to assess factors affecting supplier performance; users company employees in the case of PSI/E, three research questions were raised in regards to the organization related supplier selection, supplier relationship and supplier evaluation. Employees from the organization head office were asked to rate the company's position in regards to the three factors affecting supplier performance and based on the analysis; the three factors have positive relationship with supplier performance. Based on the correlation and regression analysis conducted to check the level of significance and relationship between the independent variables and the dependent variable, supplier selection and supplier evaluation have significant relationship and affect supplier performance while, supplier relationship has positive relationship with insignificant influence on supplier performance.

5.3 Recommendations

By relying on the study findings, the researcher suggests the following points as credible recommendations to the problem.

- As the analysis showed that supplier relationship has no significant on supplier performance, it doesn't mean it has no total. In today's business relationship organizations relay on suppliers, that requires good supplier relationship for mutual benefit of organizations and suppliers. Therefore, it is recommended that PSI/E to work on the following points to keep its supplier perform well by improving its relationship with its suppliers:

- Establishing a system to develop clear understanding of roles and responsibilities of PSI/E and its suppliers

- Improve the level of relationship commitment with its suppliers
- Work on maintaining long term relationship with its suppliers
- Develop mutual information sharing system with its suppliers
- Increase responsiveness towards each other's needs between PSI/E and its suppliers

These points will help in strengthening more the existing supplier performance to build significant improvement on supplier performance.

The study also recommends the following areas for further study;

- Studies related to supply chain in International NGOs has been showing some improvement. But, it is not as other sectors in comparison. Thus, would be helpful, if further studies be conducted to understand the SCM implementation in the INGO sector.
- This study is limited to PS/E employees' perspectives; it is recommended similar studies to be conducted including the supplier side perspective.

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Appendix

Questionnaires

Code _____

Addis Ababa University
School of Commerce
Master of Art in Logistics and Supply Chain Management

Dear Respondents,

This questionnaire is designed to study factors affecting supplier performance; user company employees perspective of Population Services International Ethiopia (PSI/E). The study is conducted in partial fulfillment of the requirements for the master's degree in Logistics and Supply Chain Management at Addis Ababa University.

Your response will form the major part of the data and the information you give will enable the researcher to critically analyze the factors affecting the supplier performance in relation to PSI/E.

Please answer all questions as per the given instructions. I promise that all information you provide would be strictly confidential and only be used for this study.

Please not that, no need to write your name.

Please put tick mark (✓), select or provide your own answers where applicable.

Thank you in advance for your unreserved cooperation to spend your valuable time to complete these questionnaires.

Name: Desalegn Mhiret MA Student at AAU, Telephone +251-911-97045, e-mail- dmhiret@gmail.com

Part I. General information

1.1. Gender

- ☐ Male
- ☐ Female

1.2.Level of education

- ☐ 10th complete
- ☐ First Degree
- ☐ Certificate
- ☐ Master
- ☐ Diploma
- ☐ PhD

1.3.Your position in the organization

- ☐ Managerial
- ☐ None managerial

1.4.How long have you been in the organization?

- ☐ Less than 2 years
- ☐ 6- 10 years
- ☐ 2- 5 years
- ☐ More than 11 years

1.5. Your department in the organization?

- ☐ Support (HR, Finance, Logistics, procurement, Internal Auditor)
- ☐ Program (Transform wash, MULU MARPs, Child survival, GtN, Ado 360)
- ☐ Sales &Marketing
- ☐ Other (Monitoring and evaluation, research etc.)

Part II: - Factors which are affecting supplier performance

The Following Statements relate to the effect of supplier selection, supplier relationship, and supplier evaluation on supplier performance. Please express your degree of agreement with the under listed statements

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, and 5= strongly agree

Part 1	**PSI/E supplier selection practice**	1	2	3	4	5
1.1	PSI/E selects its key (strategic) suppliers in enhancing its supplier relationship management					
1.2	PSI/E categorize its suppliers by giving a high level of focus					
1.3	PSI/E concentrates on supplier's resource, time and effort to select relevant strategic suppliers					
1.4	PSI/E establish effective controlling system to align with supplier relationship					
1.5	PSI/E continuously track the supply process (operation) with its suppliers					
1.6	PSI/E continuously monitor and conduct regular review meetings with strategic supplier					
Part 1	**PSI/E relationship with its suppliers**					
2.1	There exists clear understanding of each other's roles and responsibilities between PSI/E and its suppliers					
2.2	There is a high level of commitment between PSI/E and its suppliers					
2.3	Long-term relationships is maintained between PSI/E and its suppliers					
2.4	There is a high level of trust between PSI/E and its suppliers					
2.5	There is mutual information sharing between PSI/E and its suppliers					
2.6	There is responsiveness towards each other's needs between PSI/E and its suppliers					
2.7	There is good communication between PSI/E and its suppliers					
Part 3	**PSI/E supplier Evaluation practice**					
3.1	Have supplier evaluation practice					
3.2	Evaluates its key (strategic) suppliers in terms Goods and Services quality					
3.3	Evaluates suppliers in terms meeting delivery deadlines (delivery reliability)					
3.4	Evaluation results summary are communicated to respective suppliers					
Part 4	**PSI/E suppliers' performance**					

4.1	Project implementation problem due to required goods stock outs have decreased					
4.2	The percent of on-time deliveries have increase					
4.3	Goods and services have been delivered on a timely basis					
4.4	Percent of goods rejected due to quality has been reduced					
4.5	Delivered goods are of high quality					
4.6	Payments for goods and services become of the right price (best value for money)					
4.7	Procurement processes lead time reduced					
4.8	Delay in paying suppliers' decreased					

Thank You!