



**THE EFFECTS OF SUPPLIER RELATIONSHIP MANAGEMENT ON  
PROCUREMENT PERFORMANCE OF THE ETHIOPIAN  
PHARMACEUTICALS SUPPLY SERVICE**

**By  
Walta Tekle Embaye  
(GSE/1569/12)**

**A Thesis Proposal Submitted to the Graduate Studies of the Addis Ababa  
University School of Commerce in Partial Fulfillment for the Requirements of  
the Degree of Masters of Arts in Logistics and Supply Chain Management**

**Advisor: Shiferaw Mitiku (Ph.D.)**

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**Addis Ababa, Ethiopia**

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Walta Tekle (BBME)

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Addis Ababa, Ethiopia  
June 2022

## **DECLARATION**

I, signatory declares that this thesis (The Effects of Supplier Relationship Management on Procurement Performance of Ethiopian Pharmaceuticals Supply Service) is my original work. It has not been submitted for a degree at any other institution, and all of the materials used in this research have been properly acknowledged.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Walta Tekle Embaye

This research project has been submitted with my authority as the university Advisor;

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Shiferaw Mitiku (Ph.D.)

Asst. Professor –Addis Ababa University, School of Commerce

**Addis Ababa University**  
**School of Graduate Studies**

This is to certify that Walta Tekle's thesis, "*The Effects of Supplier Relationship Management on Procurement Performance of The Ethiopian Pharmaceuticals Supply Service,*" has been submitted in partial fulfillment of the requirements for the Master of Arts in Logistics and Supply Chain Management degree. It complies with the university's regulations and satisfies the acceptable standards for originality and quality.

**Signed by the Examining Committee:**

Examiner: Bogale Alemu (Ph.D.)    Signature  \_\_\_\_\_ Date \_\_\_\_\_

Examiner: Busha Temesgen (Ph.D.)    Signature \_\_\_\_\_ Date \_\_\_\_\_

Advisor: Shiferaw Mitiku (Ph.D.)    Signature \_\_\_\_\_ Date \_\_\_\_\_

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## **Abbreviation and Acronyms**

CMD: Contract Management Directorate

DDG: Deputy Director General

EFDA: Ethiopian Food and Drug Authority

FMOH: Federal Ministry of Health

EPSS: Ethiopian Pharmaceutical Supply Service

FPPA: Federal Public Procurement and Property Administration Agency

PFSA: Pharmaceuticals Fund and Supply Agency

PEC: Procurement Endorsing Committee

EPSS: Ethiopian Pharmaceuticals Supply Service

NEG: Negotiation

PSTP: Pharmaceuticals Supply Transformation Plan

PO: Purchase Order

P.P: Procurement Performance

QMSD: Quantification and Market Shaping Directorate

SH.Inform: Sharing of Information

SRM: Supplier Relationship Management

SPE: Supplier Performance Evaluation

S.Training: Supplier training

S.Eval: Supplier Evaluation

TMD: Tender Management Directorate

UNDP/CIPS: United Nations Development Program/Chartered Institute of Procurement and Supply

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## **ABSTRACT**

The study's overall goal was to assess the effect of supplier relationship management on procurement performance in EPSS. The study was carried out using an explanatory research design. The population studied was EPSS in bound logistic (Quantification and market-shaping directorate, tender management directorate, and contract management directorate), and the population was studied using a census method rather than sampling. A questionnaire was used to obtain primary data and 100 people completed and returned the questionnaires out of a total of 100. Data was analyzed in both descriptive and inferential ways.

The researcher computed and tested Pearson Correlation Coefficient. Between supplier performance evaluation and trust, respectively, and procurement performance, there is a positive and extremely strong relation to the extent of ( $r=.814$  &  $r=.814$ ). Supplier training and information sharing have a positive and strong relation with procurement performance to the extent ( $r=.766$  &  $r=.700$ ). There is a modest and positive relation between negotiation and procurement performance to the extent of  $r= 0.36$ , and all variables were statistically significant at the 1% level ( $p=0.000$ ,  $0.01$ ). After performing a multiple linear regression analysis, it was discovered that the model as a whole was significant and that 88.4 percent of the variance in procurement performance could be explained by the independent variables, as indicated by the coefficient of determination represented by an adjusted R-squared.

Further, the researcher concludes that supplier training, supplier performance evaluation, information sharing and trust were the most factors affecting procurement performance with statistical significance level of  $0.000$ , ( $p < 0.01$ ).

The researcher recommends EPSS and other organizations to show a greater commitment to SRM by putting in place mechanisms to track, evaluate, and appraise performance at a strategic level in order to improve procurement performance. The researcher also suggests that additional research be done on how to apply and exercise supplier relationship management in EPSS as well as the difficulties that it presents.

***Keywords: Procurement Performance, Supplier Relationship Management, Supplier Training, Supplier Performance Evaluation, Information Sharing, Negotitin, Trust***

# CHAPTER ONE

## 1. INTRODUCTION

*This chapter describes the study's background, beginning with a description of supplier relationship management and procurement, followed by a statement of the problem, study objectives, research questions, significance, and scope.*

### 1.1. Background of the Study

Supplier relationship management is a method of identifying and managing all interactions with major suppliers in order to maximize the value of the relationship for both sides. Supplier management is the relationship developed between a buyer and a supplier, which is determined by the criticality of the goods or services being purchased and provided to your organization.

Supplier relationship management is a business process that establishes a framework for developing and maintaining supplier relationships. Supplier Relationship Management came into life in 1983 when McKinsey consultant Peter Kraljic called for corporate buyers to grow more proactive in supply management. He claimed that purchasers should attempt to understand how their categories affect a company's risk and profitability and then create supplier management tactics to satisfy that need. Because of the inherent volatility in the global supply chain environment, SRM has become critical in the buyer-supplier dyad (Zhang and Cao, 2018). Changes in demand patterns, inflationary pressures, currency fluctuations, and governmental policies, to name a few, all contribute to supply uncertainty. Most firms are at risk from supply chain flaws, especially those that do not see the value of supplier relationship management (SRM) (Akintoye, *et. al*, 2013). Rather than pursuing the biggest short-term gain in each transaction, suppliers and their customer organizations strive to collaborate closely for long-term mutual benefit (Shin, *et. al*, 2014). These connections necessitate a new degree of trust and commitment that has hitherto been lacking. Suppliers are motivated to share their manufacturing, engineering, and transportation skills with the organization because of the trust and commitment described above. To be able to develop open and honest connections with their suppliers, supplier relationship managers must process strong personal values such as trust, secrecy, and professionalism in order to drive innovation and seek a competitive advantage.

Procurement is the act of obtaining something, whether it is tangible or intangible. Procurement describes the entire process from identifying the need to the delivery of the goods or services.

Procurement, as an important component of the business, makes a significant contribution to an organization's performance, especially when new technologies such as integration are implemented. This, however, cannot be accomplished without maintaining positive connections with suppliers.

Ethiopia is the most populated and developing country in East Africa, but it has not yet produced results to match its potential. To improve performance and contribute more to the country's GDP, the manufacturing industry and supply agency must put in more effort. Suppliers have a significant impact on the operation of a supply agency.

## **1.2. Background of the Organization**

It is a legal entity established by the government of the Federal Democratic Republic of Ethiopia (FDRE) to ensure the continuous supply of pharmaceuticals to the general populace at a reasonable cost. The Pharmaceuticals Fund and Supply Agency (PFSA) was established in September 2007 by Proclamation No. 553/2007 as part of the implementation of the Pharmaceutical Logistic Master Plan, with the goals of enabling public health institutions to supply quality assured essential pharmaceuticals to the public at affordable prices in a sustainable manner, and to play a complementary role in developmental efforts for health service expansion and strengthening by ensuring enhanced and sustainable pharmaceutical supply. (Taken from [www.EPSA.gov.et](http://www.EPSA.gov.et), posted on 29 October, 2019). It centrally procures medications from throughout the world and distributes them to all health facilities as needed through its 19 branches. The agency's headquarters are on Arbegnoch Street, in front of St. Paul Millennium Hospital, Addis Ketema Sub City Addis Ababa. The agency is under pressure to shorten procurement lead time while maintaining an affordable price and a sustainable supply of pharmaceuticals due to increased market demand.

## **1.3. Statement of the Problem**

According to EPSS International Conference (2021) the annual procurement volume Ethiopian Pharmaceuticals Supply Service is estimated to be worth US\$ 425million with a growth rate of 19.8 percent per annum. It has been asserted that EPSS facing stock out of products due to extended procurement lead time, low capacity of local suppliers, delays in delivery, and poor contract administration according to EPSS Annual Report (2018). To improve performance, EPSS's must re-look at their supplier relationship management to ensure value for money, minimize procurement lead time, reduce cost and ensure quality standards and flexibility.

However, despite the adoption of supplier relationship management during procurement of goods,

the performance of EPSS's remains poor. In addition, EPSS faces diverse challenges associated with products without EFDA registration, products without suppliers and contract management practices. According to EPSS international conference, (September 2021) EPSS is procuring 1020 line items of pharmaceuticals products and 582 (74%) of the total item have EFDA registered suppliers. 211 (29%) of the total item have no active suppliers. According to (EPSS international conference, September 2021) 13 percent of the purchase orders are being extended their LC and this makes delays on the delivery of the product.

As procurement of pharmaceutical products especially medical equipment is complex, there are difficulties on the development of specification and leads to clarification on the bid documents, As a result, vendors must adhere to a time schedule in order to have enough time to prepare and submit their bids or offers. Supplier selection is the process of comparing suppliers' offers to the tender document's specifications and requirements in order to determine the best value for money. Based on the interview I made estimating the evaluation time for each tender has yet to be defined, making it difficult to manage the tender's lead time and affecting procurement efficiency. Product registration certificate is one of the most evaluation criteria during bid evaluation. According to EPSSs bid document section three evaluation methodology, products with EFDA registration get first priority form product without EFDA registration. This methodology restricted the competition of suppliers and incur additional cost of the products.

EPSSs procurement officer's claims that because of suppliers does not understand well the bid document and does not get trainings from EPSSs how to bid, they fail to offer their products accordingly. (Taken from quick assessment EPSS procurement officers). To improve performance, EPSSs have frequently been revising their need identification process, sourcing process and Contract administration processes. However, despite the adoption of supplier relationship management, procurement performance in EPSS has not been improving.

Several surveys have been carried out in EPSS concerning supplier relationship management, buyer – supplier relations and risk management of the organizations. For example, Kidist Fikadu (2018) carried out a study on the effect of strategic supplier relationship management on supply chain performance within EPSS; and Teketel Ahadu (2021), studied on the effect of buyer supplier relationship on procurement performance within EPSS. Nevertheless, these studies were carried out in the supplier relationship management traits; trust, suppliers training, supplier performance evaluation, sharing of information, and negotiation. In addition, these studies did not show how

supplier relationship management affects procurement performance. This research hence examined the effects of Supplier relationship management on the performance of procurement in EPSS.

#### **1.4. Research Objective:**

The objective of this study is to analyze the effect of supplier relationship management on procurement performance in Ethiopian Pharmaceuticals Supply Service.

##### **1.4.1. Specific Objective:**

- i. To assess supplier relationship management practices in EPSS
- ii. To analyze the effect of supplier training on procurement performance of EPSS.
- iii. To evaluate the effect of supplier performance evaluation on procurement performance of EPSS.
- iv. To evaluate the effect of information sharing on procurement performance of EPSS.
- v. To evaluate the effect of negotiation on procurement performance of EPSS.
- vi. To analyze the effect of trust on procurement performance of EPSS.
- vii. To measure procurement performance of EPSS

#### **1.5. Research Question**

The study intended to answer the following research questions:

- i. What are the practices of supplier relationship management in EPSS?
- ii. What are the effects of trust on procurement performance at Ethiopian Pharmaceuticals Supply Service?
- iii. What are the effects of supplier training on procurement performance at Ethiopian Pharmaceuticals Supply Service?
- iv. What are the effect of supplier performance evaluation on procurement performance at Ethiopian Pharmaceuticals Supply Service?
- v. What are the effects of sharing of information on procurement performance at Ethiopian Pharmaceuticals Supply Service?
- vi. What are the effect of negotiation on procurement performance?
- vii. What are the measurements of procurement performance in Ethiopian Pharmaceuticals Supply Service?

#### **1.6. Limitation of the Study**

Empirical research on the impact of supplier relationship management on procurement

performance was not conducted in EPSS and the research was based on the findings of other organizations' experiences, as well as information from the literature. Another drawback of this study was not incorporating EPSS's suppliers when analyzing the impact of supplier relationship management (supplier training, supplier performance evaluation, information sharing, negotiation, and trust). The inability to add EPSS's suppliers due to a lack of time and resources. Furthermore, the researcher encountered a variety of challenges during the investigation, including a lack of knowledge to respond to the questioner honestly and immediately, as well as a lack of time to do the study.

### **1.7. Scope of the Study**

Pharmaceutical selection, quantification, procurement, inventory management, and distribution are the main tasks of the Ethiopian Pharmaceuticals Supply Service. The research was carried out in the agency's headquarters (Addis ketema sub city, Addis Ababa), which is the only location where pharmaceuticals goods are procured. The Agency was founded with the goal of providing life-saving pharmaceuticals to the public in a sustainable manner; its main role is pharmaceutical logistics. Hence, the research was limited to evaluating the implications of supplier relationship management on procurement performance at Ethiopia's pharmaceutical supply service. Moreover, this study only focused on three departments: quantification and market-shaping, tender administration, and contract management.

Supplier relationship management is a coexisting issue in procurement performance that identifies all interactions with major suppliers. Depending on the nature of their requirements and structure, organizations may have varied supplier profiles, as a result, supplier relationship management may differ from one organization to the next.

### **1.8. Delimitation of the Study:**

All interactions with significant suppliers are tracked using supplier relationship management. This study, on the other hand, looks at the effects of supplier training, supplier performance evaluation, information sharing, negotiation, and trust on procurement performance. As a result, this analysis does not cover interactions with suppliers that are not included above. The purpose of this study was to assess and analyze the impact of supplier relationship management on procurement performance in EPSS's head office, focusing on the QMSD, TMD, and CMD. The survey focuses on all professional employers at EPSS who are involved in the procurement process directly or indirectly.

### **1.9. Significance of the Study:**

EPSS works to enable public health institutions to supply quality assured essential pharmaceuticals product at affordable prices in a sustainable manner. This research aid EPSS and other organizations' management, particularly procurement managers, in gaining a better knowledge of supplier relationship management and its value to service delivery.

Better supplier relationship management strategies address stock-out of products, reliability, high costs, extended procurement lead time, and flexibility among others. The study enables Ethiopian Pharmaceuticals Supply Service to adopt better supplier relationship management solutions and further improve its performance. Organizations, firms, and institutions among others involved in the supply chain was find the information from these study findings useful for decision-making related to the supply chain. This study was assist the government, regulators, and other partners in easing the pressures that manufacturing enterprises face from their suppliers.

Future researchers and academicians benefit from the findings, which were designed to add to existing knowledge while also serving as a reference point. Furthermore, the study suggests areas for future research that future academics and academicians can learn more about.

In order to generalize the findings, academics might do additional research on supplier relationship management on the supply chain performance of various sectors in the county.

### **1.10. Definition of Terms/ Operational Terms**

**Agency:** According to this study it represents Ethiopian Pharmaceuticals Supply Service.

**Bids or offers:** Vendor documents prepared/proposed in response to the buyer's bidding documents and presented to the buyer (FPPA, 2010).

**Pharmaceuticals:** a substance or mixture of substance used to prevent, diagnose, ameliorate, and treat diseases and malformations. This include medical equipment, medical supplies, laboratory reagent and Laboratory chemicals (FDRE Proclamation No 553/2007).

**Pharmaceuticals procurement:** - is the acquisition of pharmaceuticals through any contractual means (FPPA, 2011).

**Supplier relationship management:** - is the relationship established between a suppliers and buyer, attempt to the importance of the goods or services being acquired and supplied to the firm, determine the type of relationship you should seek to establish with the suppliers. (CIPS 2020)

**Procurement:** the Process of acquisition of goods services and works (FPPPA, 2010).

**Procurement performance:** Procurement performance is an outcome of the effectiveness and

efficiency of policies and procedures adopted by the firm from identifying the need, to the delivery of the goods. (Per Aungusta, 2020)

### **1.11. Organizations of the Study**

This study was organized into five chapters. The first chapter cover background of the study with a special focus on supplier relationship management in general, a statement of the problem, basic research questions, objectives of the study, significance of the study, limitation of the study, and the scope of the study and definition of terms. The second chapter covers a related theoretical, conceptual, and empirical literature review about supplier relationship management. Theoretical literature, which has been authored by various scholars and organizations, discusses the overall notion and veracity of supplier relationship management difficulties. The empirical literature has articulated various findings and evidence gathered by various scholars. The methodology of the study is covered in the third chapter, which includes and describes the study area, research approach, research design, study population and sample, data source and type, data collection procedure, data analysis, validity and reliability tests, and ethical considerations. The fourth chapter was go over the results and discussion. The fifth chapter was include a summary of findings, conclusion, and recommendation. Finally, at the end of the thesis, there was a bibliography (reference) and an annex.

## **CHAPTER TWO**

### **2. REVIEW OF RELATED LITERATURE**

*This chapter contains theoretical and empirical literature evaluations with the conceptual framework of the take a look at. Theoretical literature assessment offers with ideas and distinct factors at the consequences of supplier relationship management on procurement overall performance like trust, supplier training, supplier performance evaluation and feedback, sharing of information, and negotiation in detail while the empirical literature review discusses how associated literature across the world defined the consequences of supplier relationship management on procurement performance practice. The conceptual framework of the study in the last part of this chapter shows the general roadmap of the whole study.*

#### **2.1. Theoretical Literature Review**

##### **2.1.1. Supplier Relationship Management**

Supplier relationship management (SRM) is that the systematic approach to evaluating vendors that offer goods, materials, associate in nursing services to an organization, determining every supplier' contribution to the success, and developing methods to boost their performance. Because of the intense global market rivalry, firms are encouraged to create strategic long-term relationships with their suppliers in order to achieve more efficient and effective performance and a higher competitive advantage (Tseng, 2014). The SRM procedure was created to allow businesses to communicate with their suppliers (Hong, *et al.*, 2005). The SRM discipline helps in determining the value that each supplier delivers, as well as which ones are the most crucial to the business's continuity and success. It also allows managers to develop stronger relationships with suppliers depending on the relevance of each one.

According to Lee, S (2002), SRM is a discipline of working cooperatively with suppliers who are critical to an organization's performance in order to maximize the relationship's potential value. SRM is concerned with establishing two-way, mutually beneficial partnerships with the most strategic suppliers in order to achieve higher levels of innovation and competitive advantage than would be possible if they operated independently.

Developing and maintaining mutually beneficial partnerships with suppliers has become critical to a company's capacity to stay competitive in the market, particularly in uncertain circumstances

like those seen in developing economies (Zhang and Cao, 2018; Prajogo *et al*, 2012).

Gartner, Inc. (2001, p.2) SRM refers to a set of strategies and methodologies for connecting with suppliers of products and services that are critical to a company's success. SRM establishes closer ties with potential suppliers in order to realize and uncover new value while also lowering risk.

SRM is "the process of engaging in activities of setting up. Creating and enhancing value within partnerships through developing, stabilizing, and dissolving ties with in-suppliers, as well as observing out-suppliers." By means of (Moeller, Fassnach t& Klose, 2006)

The ability to co-create value with important suppliers requires cross-functional, collaborative relationships (Enz and Lambert, 2012). Key indicators can be utilized to boost performance (Kim *et al.*, 2010) and align attitudes by sharing information with suppliers (So and Sun, 2010). (Giannakis, 2007). Increased supplier integration leads to better performance (Frohlich and Westbrook, 2001; Rosenzweig *et al.*, 2003).

In general, a buying firm that excels at understanding and incorporating supplier perspectives into development initiatives was have the greatest ability to influence and encourage suppliers through development activities, maximizing the relationship's performance and value potential (Ramsay and Wagner, 2009; Schiele and Krummaker, 2011).

#### **2.1.1.1. Supplier Training**

Buyer-supported training refers to supplier development programs that receive backing from customers. According to the literature, customers support their suppliers in a variety of ways, with some buyers providing more support than others. The right type of training may subsequently lead to an improvement in supplier performance, which would drive more buyer-supported training. Buyer may send one or more of his workers or a group of employees to train the supplier, or he may invite a group of suppliers who are experiencing the same difficulty to train at his own company (Ambrose *et al*, 2008).

Buyers have a good understanding of the training that a supplier could require, but as technology advances, the buyer no longer has a complete understanding of all of the technology that is involved or coming. As a result, it's critical for suppliers who want to improve their capabilities to have access to the training they need, which may or may not be given by their buyers. Suppliers who have access to buyer-supported training may find that their training requirements change over time as their capabilities grow (Nadia *et al*, 2011).

### **2.1.1.2. Supplier Performance Evaluation**

Supplier evaluation, according to Gordon (2008), is the process of approving and evaluating potential suppliers using quantitative methodologies in order to ensure that the best class of suppliers is accessible to deliver products and services to an organization. Supplier assessment, according to Hald and Ellegaard (2011), is "the process of evaluating the efficiency and effectiveness of supplier action." This indicates that supplier performance evaluation is a method of quantifying a supplier's ability to produce according to the buyer's expectations, and the buying institution conducts the evaluation to encourage the supplier's behavior.

Gustafsson and Karlsson (2012), mentioned delivery of goods and services is another measure of success in supply chain management, and it is referred to as a "driver of customer satisfaction" because it directly deals with customers. On-time delivery, delivery-to-request date, delivery-to-commit date, and order fill lead-time are some of the delivery metrics. The contract should include factual and objective information about the supplier's performance, such as lead times from order, quality standards met, pricing compliance, and anything else, according to Islam and Tamzidul (2016).

### **2.1.1.3. Sharing of Information**

Uncertainty is a prominent problem among procurement members because it causes a divergence between the information supplied and the information needed for decision-making in businesses. Uncertainty, defined as a state of restricted knowledge in which it is impossible to precisely predict possible future outcomes with certainty (Hubbard, 2010), provides fertile ground for the bullwhip effect to flourish.

If enterprises are to perform at their best, information exchange, collaboration, and connectivity are required across organizations that participate in procurement (Sanders *et al.*, 2011; Tokar *et al.*, Buying businesses, being open systems, must accept and encourage information sharing in order to increase visibility throughout the chain, minimize uncertainty, remove opportunistic behavior among chain members, and lower costs (Pandey *et al.*, 2010).

In the marketplace, information is a primary source of competitive advantage. Knowledge sharing across the supply chain has been identified as a driver of improving procurement competitiveness through collaborative connections (Cheng *et al.*, 2008). One of the SD activities is communication, which may be thought of as the glue that holds diverse parties' partnerships together (Lawson *et al.*, 2009).

Decent procurement information system today is designed to dramatically minimize the effort and time required to accomplish purchasing transactions (Emmett & Crocker, 2016). Users can discover an item in an electronic catalog, generate a requisition, route the order requisition for approval, construct and transmit the order to vendors, and automate the invoicing and payment process using the core elements of procurement information system techniques (Buchholz & Appelfeller, 2013).

#### **2.1.1.4. Negotiation**

According to CIPS (2011), negotiation is a critical skill for purchasing and supply management professionals. Baker and McKenzie (2017) found that contract negotiations in public institutions have a significant impact on an organization's performance in China.

According to Manso (2015), the use of post Tender Negotiation (PTN) technique in public sector procurements in the United Kingdom (UK) is restricted. The UK's Office for Government Commerce (OGC) and the European Union (EU) are among those who advocate these restrictions, citing ethical concerns. Furthermore, the performance of public institutions is influenced by negotiation objectives, negotiation communication, negotiation team design, and the negotiation process as a component of contract negotiation.

Perks and Oosthuizen (2013) found that supplier relationship strategies and best negotiation tactics had a substantial impact on organizational performance in a study done in South Africa. However, there were disparities between large and small-medium-sized organizations in terms of the importance of best supplier negotiation tactics and techniques for ensuring long-term supplier relationships.

According to Ayantoyinbo and Oguntola (2018), appropriate negotiation is a procurement approach that is strong at the University of Redeemer in Nigeria and has a significant impact on the achievement of procurement goals.

#### **2.1.1.5. Trust**

Trust is defined in the framework as a set of reasonable and equitable expectations. Trust is created over time through an exchange partner's constant and predictable actions, according to so and Sculli (2002). Frequent exchange of confidential information and face-to-face interaction may help to build trust (G. N. Nyaga, J. M. Whipple and D. F. Lynch, 2010). On both a professional and personal level, trust refers to a person's business credibility as well as his or her reputation for trustworthiness.

The supplier's reputation for honesty has a significant impact on its credibility in the marketplace, and satisfied credibility leads to increased confidence. As the number of transactions and individual investments rises, buyer reliance in business partnerships grows as a result of trust. On the other hand, several other sources (e.g., Gillespie & Dietz, 2009; Hassan & Semerciöz, 2010; Sahay, 2003) argue that trust is built on a system that respects the right to disagree and accepts differences between organizations or individuals at all levels, whether peer to peer, internally or externally. The cooperative actions of the consumer and supplier relationship are influenced by trust (P. K. Humphreys, W. L. Li and L. Y. Chan, 2004).

Customers and suppliers are more likely to focus on the long-term benefits of a partnership when they are trusted, which increases performance outcomes (Capaldo & Ripa, 2009; Serro & Dalcol, 2010).

It should be noted, however, that the trust theory is more complicated than explained here, and it affects the formation and development of all forms of commercial partnerships. Stakeholders in procurement agreements can concentrate on other issues since they know that the people they're working with will protect their interests and not engage in activities that are harmful to their business (Bachmann & Inkpen, 2011; SimchiLevi, Kaminsky & Simchi Levi, 2002; Tomkins, 2001). Trust is described as one party's assumption that the other will fulfill their duties in a relationship (Dagger & O'Brien, 2010; Hines, 2004; Nguyen & Rose, 2009).

### **2.1.2. Procurement Performance**

Procurement performance refers to the efficiency and effectiveness of the procurement function in obtaining goods and services in order to shift from being reactive to proactive in order to achieve predetermined performance standards in an institution (MacDuffie & Helper, 2007). A company's procurement performance offers various advantages, including cost savings, shorter lead times, policy adherence, and compliance with procurement requirements.

Procurement activities are linked to an organization's financial performance, as seen by cost savings (Lee, & Ansari, 2005). This can be broken down into effects on turnover, gross profit, efficiency, total costs, and the equity of the company. All of these categories are directly related to how supplier ratings are managed and used for the organization's benefit (Chen, 2011). When procurement affects a company's competitive edge, it's important to pay attention to how it's done. This refers to situations in which material prices fluctuate on a short-term basis, acquired items are subject to innovation, or end-product competition is fierce (Larson, & Kulchitsky, 2010). Choosing

the right supplier, product, or subcontractor, according to Handfield *et al.*, (2008), is critical to the potential expansion of turnover.

The sales volume is influenced by how the company's brand is viewed in the market. Because of a positive brand image, a consumer may believe they are obtaining a better product (Lascelles & Dale, 2010). This implies that the provider can have a beneficial influence on the buyer's decision. It's critical not to overlook the importance of word-of-mouth marketing. It's a deciding element in whether or not your product is picked over a competitor's (McKone, Schroeder & Cua, 2011). The increase in gross profit can be attributed to cost cutting and greater turnover (Ferring & Plank, 2007).

Poor procurement performance contributes to the procurement function's increasing inefficiencies, costs, and competitiveness. Poor procurement performance, according to Barsemoi, Mwangagi, and Asienyo (2014), contributes to a decrease in profitability in the private sector, and thus is a major impediment to the realization of organizational growth because it causes delays in delivery, low quality goods and services, and an increase in defects. Poor procurement performance occurs in both the commercial and public sectors due to a failure to embrace e-procurement, the use of traditional procurement techniques, and a lack of coordination of procurement activities between the requisitioning and procurement departments.

. In order to develop an efficient approach for monitoring procurement performance, specific indicators must be developed. Efficiency in the procurement process, assessed in terms of transaction costs and time, is one of the metrics of procurement performance. Another indicator or measurement of procurement performance is quality of the goods and services

#### **a) Procurement Lead Time**

According to Chopra Sunil, Meindl Peter (2016) lead time represents the average time from when purchase request is issued to when the product reaches the customer. Lead time uncertainty needs to be controlled appropriately so as not to increase total costs and decrease customer service levels by Hong Zhen, Lee CKM, Zhang Linda (2018). Also according to Ho Chin Fu, Tai Yi Ming, Chi Yen Ping (2018), the high disparity in implementation time also increases the difficulty in planning procurement. For efficient production, it is necessary to accurately estimate lead times and deliver on time to avoid delivery delays that can lead to stock shortages and thus disrupt production, thereby increasing total costs and lost revenue.

### **b) Product Quality**

Raturi and Evans (2004) and Xu, Leung and Yan (2013) believe that the consumer has the final say on quality, meaning that quality efforts are not solely focused on meeting specifications techniques, minimizing defects and variations, but also on the reliability of the products when they reach the consumer.

A product is anything that can be offered to satisfy a need by Kotler, P. & Armstrong, G. (2008). A product is a producer's knowledge of something that can be marketed to satisfy a need Tjiptono, F. (2015). A product is anything that can be observed, liked, and purchased to satisfy a need.). Product quality is the set of product characteristics that contribute to satisfying predetermined needs. Garvin, D. (2007). Product quality is the consumer's assessment of the product's performance. Product quality is the set of available features and characteristics of a product designed based on their ability to satisfy and requirements Pham, T. A. & Nguyen, T. H. (2016). Product quality includes, performance, reliability, durability, and attractiveness

### **c) Cost**

Cost is the value of money spent to obtain a benefit from a product or service Kotler, P. and Armstrong, G. (2008). Cost is the item's monetary value Alma, B. (2009). Cost is defined as the value released by a consumer to obtain a benefit for a product whose value is determined by bargaining Hussein, U. (2002). Tjiptono, F. (2015) treats price as a sacrifice in monetary and other forms in monetary (tax costs, delivery) and non-monetary forms. Cost is a very important factor for customer satisfaction because the consumer was estimate the value of a product or service and make a purchasing decision based on the price Kaura, V., Prasad, C. S. ET Sharman, S. (2015). Stanto, W. J. (2010). Price indicators include affordable prices, price competitiveness, match the price with the quality of the product, and the price is in line with the benefits of the product.

### **d) Agility**

Al Humdan et al., 2020; Lee et al., 2015; Nandi et al., 2021; Tallon & Pinsonneault, 2011): Defined agility as a firm ability to meet time and speed requirements in the delivery of products and services. Agility is a measure of a supplier's ability to recognize and respond to environmental possibilities and risks.

Today Procurement agility has received a lot of attention. The gap between procurement agility and information processing theory was resolved by Russell and Swanson (2019). Bridging trending technology with agile methods can lead to information processing, demand sensing, and

procurement agility at the corporate level. Ivanov (2020) proposed a new notation that combines agility, resilience, and sustainability. He stated that viable procurement might assist businesses in redesigning and recovering their operations during a global pandemic such as COVID-19.

To seize market opportunities, generate synergy, and achieve competitive advantages, companies develop strategic alliances, partnerships, and joint ventures with partners. Suppliers benefit from partnering agility in the following ways: (i) leveraging partners' knowledge, competencies, resources, and value proposition; (ii) involving agile partners and sub-suppliers at upstream and downstream; and (iii) collaborating with key and powerful suppliers (Al Humdan et al., 2020; Nandi et al., 2021; Sambamurthy et al., 2003).

## **2.2. Empirical Literature Review**

### **2.2.1. The Effect of Supplier Relationship Management on Procurement Performance**

In Kenya, Wangeci (2013) looked into the supplier relationship management and supply chain performance of the alcoholic beverage business. The study's specific objectives were to determine the breadth of SRM in the alcoholic beverage industry, the impact of SRM on supply chain performance in Kenya's alcoholic beverage industry, and the challenges of SRM implementation in Kenya's alcoholic beverage industry. According to the findings, companies in the alcoholic beverage industry are forming collaborative connections with their suppliers in order to improve procurement performance.

Oduro *et al.* (2020) studied supplier relationship management and overall hospital performance in a booming economy. The observation used a comparative research design and respondents who were 205 from public and private hospitals in Ghana and clearly observed that adaptation, atmosphere, trust, cooperation and trust had a positive and contributes significantly to the overall performance of private hospitals in Ghana.

#### **2.2.1.1. The Effect of Supplier Training on Procurement Performance**

The effect of supplier training on buyer performance was explored by Yegon, Lagat, and Kosgei (2015). The cause-and-effect link between supplier training and buyer performance was investigated using an explanatory research approach. Both descriptive and inferential statistics were used to assess the data collected from respondents (correlation analysis and multiple regressions). The study discovered that both technical and financial help had a favorable impact on buyer performance. As a result, it was prudent to conclude that supplier technical and financial

support have a beneficial impact on buyer performance. This indicates that if a company invests in supplier development to improve buyer performance in the short and long term, the company's efforts to develop suppliers was of tremendous importance to the company.

Kadir *et al.* (2011) conducted a case study on patterns of supplier learning in the Malaysian automotive industry. Supplier training programs support the development of a supplier's skills, usually with the help of a customer. Supplier development is influenced by the supplier's interests and how they investigate themselves in order to improve their skills. Despite the fact that local suppliers receive assistance from their buyers, this assistance is insufficient to develop supplier capabilities. As a result, examining the environment that delivers buyer-support training could aid in identifying aspects that suppliers themselves believe are vital for their capability development. Direct supplier participation initiatives, such as buyer site visits to supplier plants and training/education of supplier personnel, were found to be critical in improving supplier performance by Krause *et al.* (2010). Customers was invest in training and education, according to Nagati and Rebolledo (2013), therefore strategic suppliers are appropriate for training and education.

Forker and Hershauer (2010) looked into the link between supplier development techniques and customer, supplier, and supplier quality performance. They came to the conclusion that quality control and supplier development programs were critical aspects in ensuring mutual satisfaction between buyers and suppliers.

### **2.2.1.2. The Effect of Supplier Performance Evaluation on Procurement Performance**

Chemjor (2015) researched supplier evaluation and procurement performance in Kenyan parastatals. The study had three specific goals: to establish the criteria used for supplier evaluation in Kenyan parastatals, to learn about the challenges of implementing supplier evaluation in Kenyan parastatals, and to figure out the relationship between supplier evaluation and procurement performance in Kenyan parastatals. According to the findings, parastatals in Kenya select suppliers based on the following criteria: quality of the supplier's services, financial position of the supplier, flexibility of the supplier, supplier efficiency in service delivery, supplier charges, constitution and PPOA guidelines, information sharing between the organization and the supplier, supplier technical capability, supplier profile, ability of the supplier to share confidential information, and experience of the supplier.

In Nairobi, Kenya, Kamenya (2014) conducted a study on supplier evaluation and performance of large food and beverage manufacturing enterprises. The study had three goals: develop supplier assessment standards, define performance thresholds, and examine the relationship between supplier evaluation and performance. Since it was a census, the study addressed all 46 food and beverage companies that were all sampled. The findings demonstrate that food and beverage companies assess their vendors and there is a positive correlation between supplier evaluation and performance.

Supply chain strategy based supplier evaluation-an integrated framework was studied by Hemalatha, Babu, Rao, and Venkatasubbaiah (2015). In today's highly competitive corporate market, the study found that evaluating suppliers based on manufacturing strategy is the primary function of the purchasing department. In a lean manufacturing strategy, cost is the market winner, thus companies focus on reducing waste and lowering costs.

Carr and Pearson (2011) looked into the relationship between supplier evaluation implementation and a company's financial performance. They discovered evidence of a link between successful supplier communication and a company's financial performance in their empirical investigation.

### **2.2.1.3. The Effect of Sharing of Information on Procurement Performance**

Eriksson and Westerberg (2013) investigated the adoption and performance of procurement information systems among commercial banks in the United Kingdom. The study used a descriptive research approach, with data obtained from procurement managers at commercial banks in the United Kingdom via a standardized questionnaire. The data was analyzed using frequencies, percentages, mean scores, and the t test. It was discovered that the procurement information system's unified transaction tracking allows for full reporting on requisitions, items acquired, order processes, and payments made. Implementation of e-tendering accounts for 86.7 percent of performance across UK commercial banks.

Rebecca (2016) did a study in Sweden with the goal of determining the impact of procurement information systems on organizational performance. Deductive and inductive techniques, as well as descriptive statistics, were employed to examine the questionnaire. It was discovered that procurement information systems send out automatic signals when more products from the stockroom need to be placed on the shelf, as well as assisting in the automatic reordering of stock from the main warehouse at the proper moment.

On the role of procurement information systems on organizational performance in Turkey,

Kennedy and Deeter-Schmelz (2014) employed a deductive qualitative data analysis technique to analyze the primary data acquired from unstructured interviews. Procurement information systems have been proven to help firms better understand a potential supplier's culture by increasing transparency and offering a clearer framework for how an organization would sell its goods or services. The deployment of procurement information systems and its impact on the performance of selected telecommunication firms in Rwanda were the topic of Min and Galle (2015).

#### **2.2.1.4. The Effect of Negotiation on Procurement Performance**

Wilson and Putnam (2016) investigated negotiating interaction goals in the United Kingdom. The study discovered that negotiators' interaction goals are organized inside a scheme that vary in two ways: the level of abstraction (local, regional, global) and type of interaction (relational, instrumental and identity). The study discovered that analyzing the purpose could reveal how negotiation environments influence outcomes and methods, as well as how negotiators build skill. Goals emphasis emphasizes that negotiators engage consciously but with "bounded rationality," that they constantly manage contradictory aims, and that they portray negotiation actions that are driven by interaction goals, but that these goals are continually reframed.

In Taiwan, Mein and Wilson (2011) investigated the impact of interaction goals on negotiation strategies and outcomes. These objectives included terms for after-sales service and maintenance, payment costs and terms, monetary value, delivery time, and quality requirements. The study used a descriptive research design and discovered that when negotiators placed a higher value on competitive goals, they used more distributive persuasion and lesser information' priority exchange methods, which reduced their counterparts' profit; the bargainers' competitive goals also caused their counterparts to use lesser information' priority exchange methods, which hampered their profit.

#### **2.2.1.5. The Effect of Trust on Procurement Performance**

Tangus (2015) investigated the impact of supplier relationship management practices on manufacturing business performance in Kenya's Kisumu County. According to her findings, trust is a crucial aspect in fostering supply chain commitment. She also discovered that having a high level of trust increases the likelihood of a successful supply chain. As transaction expenses (verification, inspections, and certifications of their trade partners) rise, a lack of confidence among supply chain partners often leads to inefficient and ineffective performance.

According to Krause and Hand field (2007), there are three categories of trust: Competence trust:

when a supplier thinks that the buying firm can deliver on its promises. Contractual trust is the assumption that the purchasing entity will fulfill its obligations. And goodwill trust: the confidence that the buying firm will not take unfair advantage of the situation and will always act in the best interests of both parties. Furthermore, developing trust should not be just the responsibility of the purchasing firm. In his study of relationship management and organizational performance, Saleemi (2002) concluded that trust is also important and beneficial to the supplier firm, which must work to establish, extend, and maintain the buying firm's trust, especially when such trust can lead to more benefits for the supplier. It also came to the conclusion that, although being a costly, tough, and time-consuming process, creating trust leads to strong, successful, and long-term buyer-seller partnerships.

### 2.3. Conceptual Framework of the Study

A conceptual framework is a short description of the phenomenon under investigation, along with a graphical or visual representation of the study's primary variables (Mugenda, 2009). It is used to give a preferred approach to a concept or notion, or to suggest possible courses of action. The link between independent factors and dependent variables is the study's conceptual framework.

#### Supplier Relationship Management

##### Practices

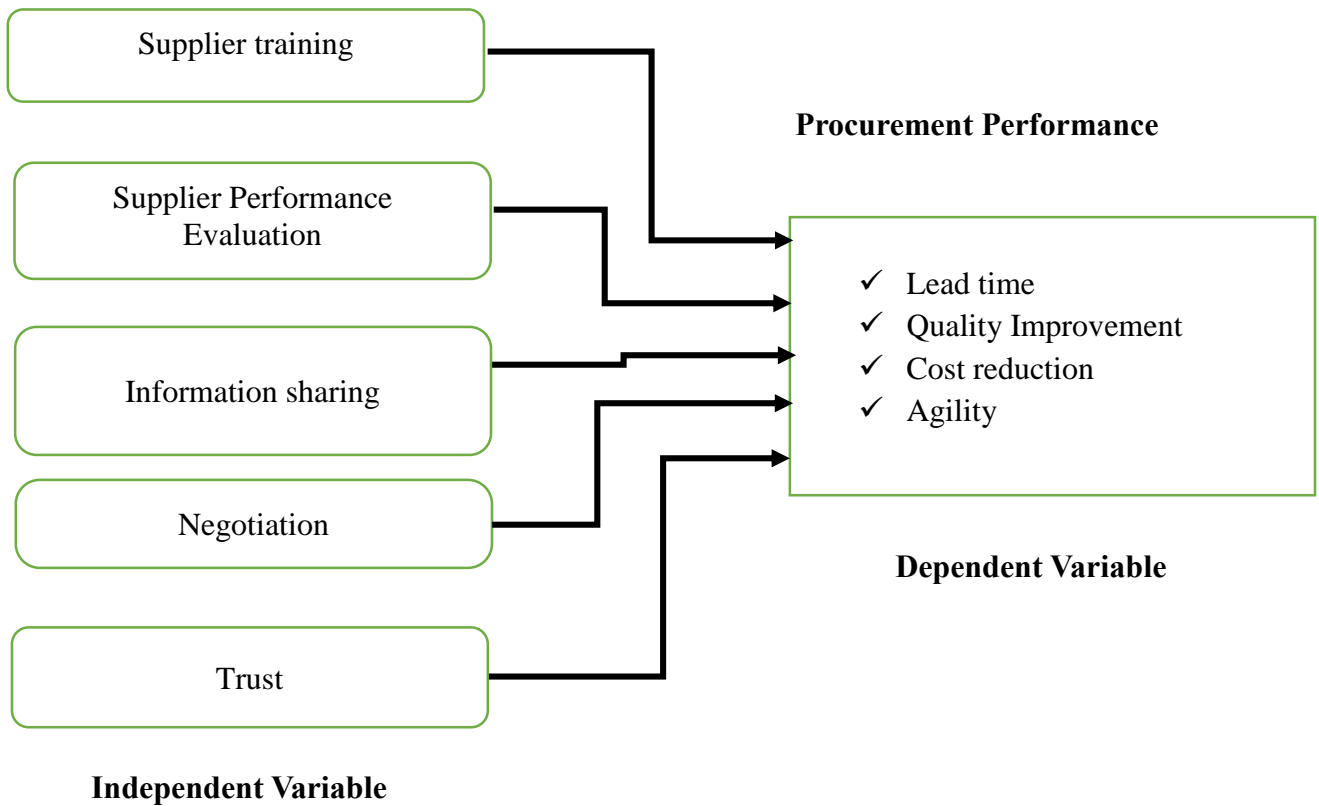


Figure 2 1: *Conceptual Framework*

## **2.4. Identified Literature Gap**

Overall, we can see that the SRM process models in the literature review have been developed in one way or another. These processes utilize most or all of the key elements of the strategic procurement process models described in the previous section, from supplier selection to supplier operations and development. Furthermore, all indicate that the operations of SRM should be iterative and cyclical with some essential steps. However, considering the relevant literature, the quality, cost reduction and timely delivery with correspond of trust, information sharing, supplier development, supplier evaluation, and strategic sourcing have not been clearly presented and discussed from an SRM perspective.

## **2.5. Summary of Hypotheses**

The following hypotheses were proposed and presented based on the evaluated prior literature and the study's purpose.

Hypothesis 1: Supplier training has a significant and favorable impact on the organization's procurement performance.

Hypothesis 2: Supplier performance evaluation practice has a significant and positive effect on the procurement performance of the organization.

Hypothesis 3: Information sharing practice has a significant and positive effect on the procurement performance of the organization.

Hypothesis 4: Negotiation practice has a significant and favorable impact on the organization's procurement performance.

Hypothesis 5: Trust practice has a significant and positive effect on the procurement performance of the organization.

## **CHAPTER THREE**

### **3. METHODOS OF THE STUDY**

*This chapter covers the following topics: study area description, research design, research approach, population and sample design, data source type, data collection procedure, data analysis and presentation method, validity and reliability test, and ethical consideration of the final paper.*

#### **3.1. Description of the Study Area**

This research was carried out in the Ethiopian Pharmaceutical Supply Service. The agency was founded in 2007 by proclamation number 553/2007, with the mission of providing economical and high-quality pharmaceuticals to all public health facilities in the country on a long-term basis. It has 19 branches across the country that supply drugs to more than 4,000 public health clinics.

The headquarters are in Addis Ketema Sub-City, Addis Ababa, immediately across from St. Pole Hospital. The agency is divided into three key sub-processes: quality management, inbound and outbound logistics. This research was focused on the impact of supplier relationship management on procurement performance. Therefore, the study was carried out in the inbound logistics unit with three functional directorates, Quantification & Market Shaping Directorate, Tender Management Directorate, and Contract Management Directorate performing the procurement starting with identifying the need and ending with contract management and review.

#### **3.2. Research Design**

(Kothari & Gang, 2014) defines research design as a plan for data collection, measurement, and analysis. (Cooper & Schinder, 2013) defines research design as a frame for identifying relationships among the study participants. There are three types of research design, exploratory (which emphasizes the discovery of new ideas and insights), descriptive which is concerned with determining the frequency with which an event occurs or the relationship between variables, and explanatory which is concerned with determining the cause and effect relationship (John, A.H., et al., 2007). This research used an explanatory and descriptive research design to see how supplier relationship management are practiced and affects procurement performance at the Ethiopian Pharmaceuticals Supply Service. The design is appropriate since it enables the collection of data from the responder via a questionnaire and hence its adoption for this study.

### 3.3. Research Approach

Quantitative research methods were used in the study. Self-administered questionnaires were used to acquire quantitative primary data. To accomplish the study's objectives, quantitative data were combined and analyzed.

### 3.4. Population and Sample Design

The study's target population was all EPSS employees who were directly or indirectly involved in the procurement process. According to Wanjau et. al. (2012) target population is the precise demographic about whom information is sought. The target populations were Quantification and Marketing Shaping Directorate, Tender Management Directorate, and Contract Management directorate.

To gather a sample of responders, a census sampling method was used. This method is ideal since it allowed respondents from all levels of the organization to participate in the study without prejudice (Kothari & Gang, 2014). This method is justified for this study because it gave all staff members within the directorate an equal chance to participate. The options for this technique allow the researcher to obtain detailed data. The table below shows target population and sample size for each respondent's category

Table 3. 1: Sampling frame

<b>Respondents category</b>	<b>Target Population</b>
Quantification and market shaping directorate	25
Tender management directorate	34
Contract management directorate	41
Total	100

### 3.5. Data Source and Type

Primary data was gathered using paper-based, self-administered survey questionnaires with closed-ended questions that were helpful in gathering quantitative information. The surveys, on the other hand, were adapted from (Moshari & Goncalves, 2015 & Kabra et al, 2015).

### 3.6. Data Collection Procedure

According to Kumar (2005), gathering information without the participants' knowledge and expressed willingness and informed consent is unethical. Therefore informed consent implies that respondents are fully aware of the type of information the researcher requires, why the information

is needed, how they are expected to participate in the study, and how the research was affect them directly or indirectly. It is critical that the consent be given voluntarily and without undue coercion. The researcher was receive an introductory letter from the college and was gather data from Ethiopian Pharmaceuticals Supply Service employees. Before collecting data, the researcher was directly administer the instrument. The researcher then selects the exact respondents and sends them questions to complete at their leisure but within the time constraints of the study. Primary data was collected through the questionnaires adopted and structure in Likert scale of 1 to 5, spanning from strongly disagree to strongly agree (Moshari & Goncalves, 2015 & Kabra et al, 2015).

### **3.7. Method of Data Analysis and Presentation**

Data were collected, processed, and presented using tables for ease of comprehension and narration. According to Kothari (2009), analysis entails computing specific indices or measurements as well as looking for patterns of relationships between data sets. It consists of quantitative statistics; systematically evaluating data in order to arrive at a helpful judgment and recommendation. Cooper and Schindler promote the use of descriptive statistics such as mean and standard deviation to present the many properties of data sets (2003). The data was sorted and coded before being entered into version 23 of the Statistical Packages for Social Sciences (SPSS). The relationship between supplier relationship management and procurement performance was demonstrated using descriptive statistics. Tables are used to present the findings. The extent to which the five independent variables interact was determined via correlation and regression analysis. The five independent variables of supplier training, supplier evaluation, sharing of information, negotiation, and trust were examined using regression analysis.

### **3.8. Validity and Reliability Test**

#### **3.8.1. Validity Test**

Validity implies the degree to which a question measures what it was intended to measure (Kothari, 2004). According to Malhotra (2010) a pilot test was conducted on two staff members from each directorate to validate the questionnaire by giving them a copy of the questionnaire as well as a copy of the research questions to observe how they react to the questionnaire. The results of the pilot study were then integrated into the main questionnaires.

#### **3.8.2. Reliability Test**

Reliability is the extent to which a variable or group of variables is consistent in what it is designed

to measure. This internal consistency is justified by the fact that all of the scale's individual items or indicators should be measuring the same construct and hence be highly inter-correlated.

Cronbach's alpha coefficient was calculated to test the reliability of the tool and the filled tools was checked manually for completeness and consistencies. According to Taber (2018), the Cronbach's alpha score for the questionnaire items is between 0.803 and 0.905, which is under the acceptable range. As a result, the instrument's reliability was accounted for by an overall Cronbach's alpha coefficient of 0.876, indicating that it was dependable (see Table 3.2)

Table 3. 2: The Cronbach alpha coefficient of the data collection tool administered in EPSA, Ethiopia, 2022

	Cronbach's Alpha	Number of items
Supplier Training	0.851	5
Supplier performance Evaluation	0.838	6
Information Sharing	0.867	9
Negotiation	0.905	7
Trust	0.838	7
Procurement Performance	0.803	22

### 3.9. Ethical Considerations

Supportive letters were provided to the quantification and market-shaping directorate, tender management directorate, and contract management directorate prior to the start of data collection to get authorization for data collection. All information and documents, including the questionnaire filled out by EPSS staff, were utilized responsibly and confidentially without distorting the respondents' original intent. To protect the respondents' privacy, the researcher instructed them not to write their names in the questionnaire. Respondents have the right to be safe from bodily or psychological harm, to be informed about all aspects of a research project, to maintain their privacy and confidentiality, and to withdraw from the study at any time.

## CHAPTER FOUR

### 4. RESULTS DISCUSSION, AND INTERPRETATION

*In this chapter, self-administered questionnaires are displayed in word, table, and figure formats. The study's overall response rate, demographic characteristics of respondents, analytical results of supplier relationship management practice, as well as procurement performance findings, are presented in-depth. The main findings of the study are compared with related literature and hypothesis test results are also covered.*

#### 4.1. Response Rate

A total of 100 questionnaires were issued to respondents, and 100 (100%) were returned and confirmed to be complete. The survey included responses from the EPSS central office's quantification and market-shaping directorate, tender management directorate, and contract management directorate, with 41 percent (41%) from CMD, 25 percent (25%) from QMSD, and 34 percent (34%) from TMD

#### 4.2. Demographic Characteristics of Respondents

In this section, demographic information from quantitative data respondents was provided in various formats based on their characteristics and applicability. Gender, age, current educational level, years of experience in EPSS, years of experience in other logistic organizations, current working position, and working directorate were among the few questions on the questionnaire that asked about respondents' personnel and educational backgrounds. (Refer to Table 4.1)

Table 4. 1: The socio demographic characteristics of respondents in EPSS, Ethiopia, 2022.

<b>Sex</b>		
	Frequency	Percent
Male	55	55.0
Female	45	45.0
<b>Age</b>		
	Frequency	Percent
30 or younger	46	46.0
31 - 35	34	34.0
36 - 45	18	18.0
Above 45	2	2.0
<b>Level of Education</b>		
	Frequency	Percent
College Diploma	4	4.0

First Degree	70	70.0
Second Degree & above	26	26.0
<b>Experience in EPSS</b>		
	Frequency	Percent
2 years or lower	20	20.0
3 - 5 years	38	38.0
6 -10 years	31	31.0
Above 10 years	11	11.0
<b>Experience in other logistic organization</b>		
	Frequency	Percent
1 years or lower	52	52.0
2 - 3 years	17	17.0
4 -5 years	9	9.0
Above 5 years	22	22.0
<b>Working directorate in EPSS</b>		
	Frequency	Percent
QMSD	25	25.0
TMD	34	34.0
CMD	41	41.0
<b>Working position in directorate</b>		
	Frequency	Percent
Director	3	3.0
Team Leader (coordinator)	14	14.0
Officer	75	75.0
Advisor	8	8.0

*Note: The category involves Quantification and market shaping directorate, Tender management directorate and Contract management directorate.*

*Source: own survey*

Gender: According to the distribution, 45 percent of the responders were female, while 55 percent were male. This indicates that the number of males and females is almost equal.

Educational level: Table 4.1 shows that 26% of respondents have a master's degree or higher, 70% have a bachelor's degree, and 4% have a college diploma. Only 4% of the respondents had a college diploma, with the remaining 96 percent having graduated from university. As a result, the personnel at EPSS were well-educated and understood the queries, resulting in reliable outcomes.

Experience in EPSS: As shown in table 4.1, around 20% of respondents have 2 years or less of experience, 38% have 3-5 years of experience, 31% have 6-10 years of experience, and 11% have more than 10 years of experience in EPSS. This means that 42 percent of respondents have worked for EPSS for more than 6 years, while 38 have worked for EPSS for 3 to 5 years, and the number of years is sufficient to provide reliable information for the study.

Experience within other organizations: As shown in table 4.1, 52% of respondents had less than one year of experience, 17% had 2-3 years of experience, 9% had 4-5 years of experience, and 22% had more than 5 years of experience other than EPSS. This means that more than 31% of respondents have more than 4 years of experience in different logistic organizations, while 17% have 2-3 years of prior experience in different logistic organizations. This implies respondents are able to compare and understand the logistic organizations' challenges and provide credible information related to the study.

Working positions: Working positions: According to the EPSS in bound logistic employment distribution, 75% of responders were officers, 14% were team coordinators, and 8% were advisers

### 4.3. Descriptive Analysis

The respondents were asked to indicate whether they agreed or disagreed with the statement. The replies were based on a five-point Likert scale, with 5 indicating Strongly Agree, 4 indicating Agree, 3 indicating Neutral, 2 indicating Disagree, and 1 indicating Strongly Disagree. The range is computed by  $(5 - 1 = 4)$  and then divided by five since the biggest value of the scale  $(4 / 5 = 0.80)$  is used to define the lowest and maximum length of the 5-point Likert type scale. After that, the number 1, which is the lowest value on the scale, was added to determine the cell's maximum value. The length of the cells is determined in the usual fashion, with the mean score ranging from 1.00 to 1.79 being (very weakly practiced); 1.8 to 2.59 being (weakly practiced); 2.6 to 3.39 being (moderately practiced); 3.4 to 4.19 being (well practiced); and 4.2 to 5.00 being (highly practiced).

#### 4.3.1. Practices of Supplier Training

Table 4. 2: Descriptive statistics of the practice of supplier training with regard to procurement performance in EPSS, Ethiopia, 2022. N=100

Supplier training	Mean	Std. Deviation
EPSS's provide regular technical assistance for their suppliers to enable them to improve their product quality	2.63	.761
EPSS's provide regular technical assistance for their suppliers to enable them to improve their lead times.	2.48	.689
EPSS's provide regular technical assistance for their suppliers to prepare their bidding offer according to the bid document.	2.68	.695

EPSS's provide regular training and workshops for their suppliers to understand how tender evaluation is carried out.	2.88	.656
EPSS's provide regular technical assistance for their suppliers to prepare their Performa and commercial invoice, and bill of loading	3.11	.723
<b>Grand mean</b>	<b>2.76</b>	

*Source: own survey*

According to the responses to the questions under supplier training, the majority of respondents agreed that supplier training is moderately practiced, as stated in table 4.2 above statements that, 'EPSS provides regular technical assistance for their suppliers to enable them to improve their product quality; 'EPSS's provide regular technical assistance for their suppliers to prepare their bidding offer according to the bid document'; 'EPSS's provide regular training and workshops for their suppliers to understand how tender evaluation is carried out; and 'EPSS provides regular technical assistance for their suppliers to prepare their proforma invoice, commercial invoice, bill of loading according to EPSS requirement' in the mean of 2.63 with standard deviation 0.761; in the mean of 2.68 with standard deviation 0.695; in the of mean 2.88 with a standard deviation of 0.656; and in the mean of 3.11 with a standard deviation of 0.723 respectively.' Whereas, in the mean of 2.48 with a standard deviation of 0.689, the majority of respondents agreed that supplier training is poorly practiced to the statement that EPSS provides regular technical help for its suppliers to enable them to improve their lead times.

The overall mean and standard deviation (M=2.76, SD=0.42) indicated that supplier training was moderately practiced across the organization.

#### **4.3.2. Practices of Supplier Performance Evaluation**

Table 4. 3: Descriptive Statistics of the practice of supplier performance evaluation with regard to procurement performance in EPSS, Ethiopia, 2022. N=100

<b>Supplier Performance Evaluation</b>	<b>Mean</b>	<b>Std. Deviation</b>
EPSS's suppliers are selected based on evaluation of their financial health, Technological capability, geographical location	2.63	.825
EPSS and its supplier have joint performance measures that monitor each other's' activities	3.07	.573

EPSS's supplier performance evaluation method enable us to measure suppliers product/service quality	2.98	.791
EPSS's suppliers provide test certificate for every product for the order placed.	2.73	.815
EPSS's supplier performance evaluation method enable us to measure suppliers on-time delivery	2.39	.886
EPSS's supplier performance evaluation method enable us to measure the competitiveness of our suppliers' cost	3.03	.731
<b>Grand mean</b>	<b>2.80</b>	

*Source: own survey*

Responses to items under supplier performance evaluation suggest that the majority of respondents agreed to supplier performance evaluation is moderately practiced as the claims that are given in table 4.3 above statements that, 'EPSS's suppliers are selected based on evaluation of their financial health, Technological capability, geographical location'; 'EPSS and its supplier have joint performance measures that monitor each other's activities; 'EPSS's supplier performance evaluation method enable us to measure suppliers product/service quality; 'EPSS's suppliers provide test certificate for every product for the order placed'; and 'EPSS's supplier performance evaluation method enable us to measure the competitiveness of suppliers' cost' in the mean of 2.63 with standard deviation 0.825; in the mean of 3.07 with standard deviation 0.573; in the mean of 2.98 with standard deviation of 0.791; in the mean of 2.73 with standard deviation 0.815; in the mean 3.03 with standard deviation of 0.731 respectively. Whereas, the majority of respondents agreed with supplier performance evaluation is weakly practiced to the statements that, 'EPSS's supplier performance evaluation method enables to measure suppliers on-time delivery' in the mean of 2.39 with a standard deviation of 0.886.

The overall mean and standard deviation (M=2.8, SD=0.41) indicated that supplier performance evaluation was moderately practiced within the organization.

#### **4.3.3. Practices of Sharing of Information**

Table 4. 4: Descriptive Statistics of the practice of information sharing to procurement performance in EPSS, Ethiopia, 2022. N=100

<b>INFORMETION SHARING</b>	<b>Mean</b>	<b>Std. Deviation</b>
EPSS involve its suppliers and provide information on new product specification development.	2.49	.674
EPSS and its suppliers have mechanisms of information sharing to align benefits and risks	2.57	.728
EPSS share the costs with its suppliers and enables to meet the budget	2.97	.758
EPSS provide forecasts of demand related information to its suppliers	2.35	.845
EPSS provide Inventory levels related information to its suppliers	3.00	.841
EPSS receives order status information from its supplier	2.67	.682
The quality of information shared with EPSS's suppliers is complete	3.00	.765
The quality of information shared with EPSS's suppliers is reliable	2.96	.764
The quality of information shared with EPSS's suppliers is timely	2.78	.773
<b>Grand mean</b>	<b>2.754</b>	

*Source: own survey*

Responses to items under information sharing suggest that the majority of respondents agreed to information sharing is moderately practiced as the claims that are given in table 4.4 above statements that, 'EPSS share the costs with its suppliers and enables to meet the budget'; 'EPSS provide Inventory levels related information to its suppliers'; 'EPSS receives order status information from its supplier'; 'The quality of information shared with EPSS's suppliers is complete'; 'The quality of information shared with EPSS's suppliers is reliable'; and 'The quality of information shared with EPSS's suppliers is timely' in the mean of 2.97 with standard deviation 0.758; in the mean of 3.00 with standard deviation of 0.841; in the mean of 2.67 with standard deviation 0.682; in the mean 3.00 with standard deviation of 0.765; in the mean 2.96 with the standard deviation 0.765; in the mean 2.96 with the standard deviation of 0.764, and in the mean 2.77 with the standard deviation of 0.773 respectively. Whereas, the majority of respondents thought that information sharing is weakly practiced when it comes to the claims that 'EPSS involves its suppliers and provides information on new product specification development.';

‘EPSS and its suppliers have mechanisms of information sharing to align benefits and risks’: ‘EPSS provides forecasts of demand related information to its suppliers’ in the mean of 2.49 with the standard deviation of 0.674; in the mean of 2.57 with the standard deviation 0.728; and in the mean of 2.35 with the standard deviation of 0.845 respectively.

The overall mean and standard deviation (M=2.754, SD=0.404) indicated that information sharing was practiced moderately in the organization.

#### 4.3.4. Practices of Negotiation

Table 4. 5: Descriptive Statistics of the practice of negotiation to procurement performance in EPSS, Ethiopia, 2022. N=100

<b>Negotiation</b>	<b>Mean</b>	<b>Std. Deviation</b>
EPSS negotiation with its supplier creates values for both parties	2.78	0.905
EPSS’s supplier only thinks to win and make profit.	2.90	0.772
Negotiation with suppliers is committed by long-term contract, and discussions on how to improve cost, quality and other matters.	2.39	0.920
Negotiation with EPSS suppliers creates continuous and sustainable supply of products	2.77	0.802
Negotiation with EPSS suppliers brings update high quality products.	2.91	0.805
Negotiations with EPSS suppliers help in reducing the procuring costs as well as the transport costs.	2.74	0.787
Through negotiation EPSS is able to reach on better payment terms with its supplier	2.68	0.695
<b>Grand mean</b>	<b>2.74</b>	

*Source: own survey*

Responses to items under negotiation suggest that the majority of respondents agreed negotiation is moderately practiced as the claims that are given in table 4.5 above statements that, ‘EPSS negotiation with its supplier creates values for both parties’; ‘EPSS’s supplier only thinks to win and make a profit.’; ‘Negotiation with EPSS suppliers creates a continuous and sustainable supply

of products’; ‘Negotiation with EPSS suppliers brings updated high-quality products’; ‘Negotiations with EPSS suppliers help in reducing the procuring costs as well as the transport costs, and ‘Through negotiation EPSS is able to reach on better payment terms with its supplier’ In the mean of 2.78 with standard deviation 0.905; in the mean of 2.9 with a standard deviation of 0.772; in the mean 2.77 with a standard deviation of 0.802; in the mean 2.91 with the standard deviation 0.805; in the mean 2.74 with standard deviation 0.787, and in the mean 2.68 with the standard deviation of 0.695 respectively. In the mean of 2.39 with a standard deviation of 0.92, the majority of respondents believed that negotiation is poorly performed when it comes to the statement that "negotiation with suppliers is committed by a long-term contract, and discussions on how to improve cost, quality, and other concerns."

Negotiation was moderately practiced in the organization, according to the overall mean and standard deviation (M=2.74, SD=0.37).

#### 4.3.5. Practices of Trust

Table 4. 6: Descriptive Statistics of the practice of trust with regard to procurement performance in EPSS, Ethiopia, 2022. N=100

<b>Trust Practice</b>	<b>Mean</b>	<b>Std. Deviation</b>
In dealing with suppliers, EPSS is wasing to change assumptions to find more effective solutions.	2.95	.557
EPSS is open in dealing with supplier engagement	2.69	.800
The promises that EPSS makes to its suppliers is walk the talk	2.66	.714
EPSS has a good reputation when doing business with suppliers.	3.00	.765
EPSS has trust on suppliers legal documents submitted. (Technical compliance, Catalog, product certificate, and others)	2.96	.764
EPSS has trust on suppliers deliver high quality products.	2.76	.767
EPSS has trust on suppliers offer products at a competitive prices.	2.98	.635
<b>Grand mean</b>	<b>2.86</b>	

*Source: own survey*

Responses to items under trust suggest that the majority of respondents agreed trust is moderately practiced as the claims that are given in table table 4.6 above statements that, ‘EPSS is wasing to change assumptions to find more effective solutions’; ‘EPSS is open in dealing with supplier

engagement’; ‘EPSS promises are walk the talk’; ‘EPSS has a good reputation when doing business with its suppliers’; ‘EPSS has trust on suppliers legal documents’; EPSS has trust on suppliers deliver high quality products’; ‘EPSS has trust on suppliers offer products at a competitive prices’ In the mean of 2.95 with standard deviation 0.557; in the mean of 2.69 with standard deviation of 0.8; in the mean of 2.66 with standard divation0.714; in the mean 3.00 with standard deviation of 0.765; in the mean 2.96 with the standard deviation 0.764; in the mean 2.76 with standard deviation 0.767, and in the mean 2.98 with the standard deviation of 0.635 respectively.

With an overall mean and standard deviation of (M=2.86, SD=0.46), trust was occasionally exercised in the organization.

#### 4.4. Procurement Performance

Table 4. 7: Descriptive Statistics of procurement performance in EPSS, Ethiopia, 2022.N=100

<b>Procurement Performance</b>	<b>Mean</b>	<b>Std. Deviation</b>
The supplier relationship management practices of EPSS's helps to minimize average actual cycle time consistently and fulfill customers order on time	2.54	0.771
EPSS's relationship with its supplier minimized the average time associated with source processes: source cycle time, select supplier time and negotiation cycle time	1.75	0.783
The supplier relationship management practices of EPSS helped to minimize the average time associated with need identification and compilation.	1.69	0.706
The supplier relationship management practices of EPSS helped the procurement planning practice in order to complete all activities of procurement on time.	2.69	0.800
EPSS's relationship with its supplier minimized the average time associated with payment to suppliers and custom clearance	2.58	0.589
EPSS's relationship with its supplier enhanced percentage of orders which all of the items are received by customers in the quantities committed. All the quantities received by the customer match the order quantities.	1.88	0.782

EPSS's relationship with its supplier enhanced percentage of orders on time and accurate documentation supporting the order, including packing slips, bill of loading, invoices, etc.	2.54	0.771
EPSS's relationship with its supplier enhanced percentage of orders delivered in an undamaged state that meet specification, have the correct configuration, faultlessly installed and accepted by the customer	1.77	0.777
The supplier relationship management practices of EPSS helps to offer quality (right) product.	3.10	0.745
EPSS's relationship with its supplier enhances practices of predefined standards of for all goods and services procured	2.68	0.750
EPSS's relationship with its supplier helps to enhance cost to plan practice to achieve the cost-effectiveness of procurement.	2.61	0.803
The supplier relationship management practices of EPSS minimized supplier management cost: Material planning, planning procurement staff, supplier negotiation, and qualification costs.	2.26	0.860
EPSS's relationship with its supplier helps to minimize material acquisition cost: Bidding, quotations, ordering, receiving, and inspection costs.	1.77	0.737
EPSS's relationship with its supplier ensures cost to return practice to minimize the costs associated with returning products to the supplier.	2.39	0.886
EPSS's relationship with its supplier helps to minimize costs associated with deliver and/or install	3.09	0.753
EPSS's relationship with its supplier's enhanced mitigation cost practice to manage nonsystematic risks that arise from special cause variation within the procurement.	2.69	0.800
EPSS's relationship with its suppliers enhanced ability to respond to external influences: increases or decreases in demand	2.47	0.745
The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in quantity order	2.30	0.745
The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in time to delivery	1.71	.715

The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in delivery destination	3.03	.611
The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in freight/transport modality	3.06	.750
The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in products future	2.40	.829
<b>Grand mean</b>	2.409	

The majority of respondents agreed that procurement is moderately performed, based on their responses to the items under consideration that are given in table 4.7 above statements that ‘ The supplier relationship management practices of EPSS helped the procurement planning practice in order to complete all activities of procurement on time’; ‘ The supplier relationship management practices of EPSS helps to offer quality (right) product.’; ‘ EPSS's relationship with its supplier enhances practices of predefined standards of for all goods and services procured’; ‘EPSS's relationship with its supplier helps to enhance the cost to plan practice to achieve the cost-effectiveness of procurement.’; EPSS's relationship with its supplier helps to minimize costs associated with the delivery and/or installation’; EPSS's relationship with its supplier’s enhanced mitigation cost practice to manage nonsystematic risks that arise from special cause variation within the procurement’; ‘The supplier relationship management practices of EPSS helped the procurement practice to accommodate the change in delivery destination’; ‘The supplier relationship management practices of EPSS helped the procurement practice to accommodate the change in freight/transport modality’; In the mean of 2.69 with standard deviation 0.80; in the mean of 2.61 with a standard deviation of 0.803; in the mean of 3.09 with standard deviation 0.753; in the mean 2.69 with a standard deviation of 0.80; in the mean 3.03 with the standard deviation 0.611; and in the mean 3.06 with standard deviation 0.75 respectively. Besides the respondents agree that procurement performance is poorly performed when it comes to the statement that ‘The supplier relationship management practices of EPSS's helps to minimize average actual cycle time consistently and fulfill customers order on time’; ‘EPSS's relationship with its supplier minimized the average time associated with payment to suppliers and custom clearance’; ‘EPSS's relationship with its supplier enhanced percentage of orders which all of the items are received by customers in the quantities committed’; ‘EPSS's relationship with its supplier enhanced percentage of orders

on time and accurate documentation supporting the order, including packing slips, bill of loading, invoices'; 'The supplier relationship management practices of EPSS minimized supplier management cost: Material planning, planning procurement staff, supplier negotiation, and qualification costs'; 'EPSS's relationship with its supplier ensures cost to return practice to minimize the costs associated with returning products to the supplier'; EPSS's relationship with its suppliers enhanced ability to respond to external influences: increases or decreases in demand'; and 'The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in quantity order' in the mean of 2.58 with the standard deviation of 0.589; in the mean of 1.88 with the standard deviation of 0.782; in the mean of 0.254 with the standard deviation of 0.771; in the mean of 2.26 with the standard deviation of 0.86; in the mean of 2.39 with the standard deviation 0.886; in the mean of 2.47 with the standard deviation of 0.745; and in the mean of 2.30 with the standard deviation of 0.745 respectively. In contrast, the majority of respondents agreed that procurement performance is extremely poorly practiced in relation to the statements that, 'EPSS's relationship with its supplier minimized the average time associated with source processes: source cycle time, select supplier time and negotiation cycle time'; 'EPSS's relationship with its supplier enhanced percentage of orders delivered in an undamaged state that meet specification, have the correct configuration, faultlessly installed and accepted by the customer; 'EPSS's relationship with its supplier helps to minimize material acquisition cost: Bidding, quotations, ordering, receiving, and inspection costs'; and 'The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in time to delivery' in the mean of 1.75 with the standard deviation of 0.783; in the mean of 1.77 with the standard deviation of 0.77; with the mean of 1.77 with the standard deviation of 0.737; and in the mean of 1.71 with the standard deviation of 0.715 respectively.

Procurement indicators are performed poorly in the organization, with an overall mean and standard deviation of (M=2.49, SD=0.524).

#### **4.5. Analysis of the Effect of Supplier Relationship Management on Procurement Performance**

The measure of the linear relationship between two or more variables is a correlation. According to Kothari (2004), the value of 'r' for a coefficient of correlation is between 0 and 1. Positive r values imply a positive relationship between the two variables, whereas negative r values suggest a negative relationship. There is no correlation between the two variables if the 'r-value is zero.

The strength of the correlation, according to Evan (1996), can be defined by the absolute value of  $r$ , which ranges from 0.00-0.19 (un influential), 0.20- 0.39 (weakly influential), 0.40-0.59 (Moderate influential ), 0.60-0.79 (influential), and 0.80-1.00 (Very influential).

Table 4. 8: Correlation Analysis of supplier relationship practice to procurement performance in EPSS, Ethiopia, 2022. N=100

		S.Training	S.Evaln	SH.Inform	NEG	Trust	P.P
S.Training	Pearson Correlation	1					
	Sig. (2-tailed)						
S.Evaln	Pearson Correlation	.595**	1				
	Sig. (2-tailed)	.000					
SH.Inform	Pearson Correlation	.408**	.631**	1			
	Sig. (2-tailed)	.000	.000				
NEG	Pearson Correlation	.241*	.253*	.147	1		
	Sig. (2-tailed)	.016	.011	.144			
Trust	Pearson Correlation	.668**	.670**	.467**	.309**	1	
	Sig. (2-tailed)	.000	.000	.000	.002		
P.P	Pearson Correlation	.766**	.814**	.700**	.360**	.814**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	

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

To examine the relationship between the independent variables (Trust, Supplier training, Supplier performance evaluation, Information sharing and Negotiation) and Procurement performance, Pearson correlation coefficient was generated and tested (the dependent variable).

The result in table 4.8 above shows that supplier training has a positive and significant effect on procurement performance to extent of ( $r=0.766$ ) exists and was statistically significant at a 1% level ( $p=0.000$ ,  $<0.01$ ).

The result of supplier performance evaluation has a positive and high influence on procurement performance to extent of ( $r=0.814$ ) exists. It was also statistically significant at 1% ( $p=0.000$ ,  $<0.01$ ).

The results between information sharing and procurement performance in table 4.8 above show a positive and significant effect on procurement performance to extent of ( $r=0.700$ ) exists and statistically significant at 1% ( $p=0.000$ ,  $<0.01$ ).

The results between negotiation and procurement performance in table 4.8 above show a positive and weak influence on procurement performance to extent of ( $r = 0.36$ ) exists. The relationship was statistically significant at 1% level ( $p=0.009$ ,  $<0.01$ ).

The results between trust and procurement performance in table 4.8 above show a positive and high influence on procurement performance to extent of ( $r = 0.814$ ) exists. The relationship was statistically significant at 1% level ( $p=0.000$ ,  $<0.01$ ).

#### **4.5.1. Regression Analysis**

The researcher conducted regression analysis to figure out which variables had an impact on procurement performance. Regression can be used to determine which elements are most matters, which can be ignored, and how these factors interact. According to Gujarati (2004), it is necessary to examine whether the gathered data contradict some key assumptions of linear regression models before starting regression analysis.( see apendex II)

To examine the relationship between independent variables (supplier training, supplier performance evaluation, information sharing, negotiation, and trust) and the dependent variable (procurement performance), a multiple linear regression analysis was conducted.

Table 4. 9: model summary

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#### ***Model Summary<sup>b</sup>***

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 <sup>a</sup>	.890	.884	.1787740

a. Predictors: (Constant), Trust, Negotiation, Information sharing, Supplier training, Supplier performance evaluation

b. Dependent Variable: Procurement Performance

Source; own survey SPSS Regression output

Changes in the dependent variable can be explained to a certain extent by changes in the independent variables, according to the coefficient of determination.  $R^2$  is the proportion of the variance in the values of the dependent variable, procurement performance (Y), explained by all of the independent variables i.e. supplier training, supplier performance evaluation, information sharing, negotiation, and trust (X1, X2, X3, X4, X5) in the equation together; sometimes reported as adjusted  $R^2$  when a correction has been made to reflect the number of variables in the equation. Since it is multiple regression, the five independent variables analyzed (supplier training, supplier performance evaluation, information sharing, negotiation, and trust) and explain procurement performance by 88.4 percent, as measured by R square adjusted.

The results of the regression in table 4.11 show how supplier relationship management (independent variables) practices influence the procurement performance. R square adjusted was 0.884, indicating that 88.4% of the procurement performance is influenced by SRM and the remaining present is influenced by other factors.

Table 4. 10: Analysis of Variance

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.194	5	4.839	151.402	.000 <sup>b</sup>
	Residual	3.004	94	.032		
	Total	27.198	99			

a. Dependent Variable: P.P

b. Predictors: (Constant), Trust, NEG, SH.Inform, S.Training, S.Evaln

ANOVA test for the joint significant, which is given by the F statistic, is 151.402, and it is statistically significant (0.000, which is less than 0.01) at the 1% level of significance, as shown

in table 4.10. This means that EPSS procurement performance can be significantly predicted by supplier training, supplier performance evaluation, information sharing, negotiation, and trust.

Table 4. 11: Coefficients<sup>a</sup>

		Coefficients <sup>a</sup>					Collinearity	
		Unstandardized		Standardized			Statistics	
		Coefficients		Coefficients	t	Sig.	Tolerance	VIF
Model		B	Std. Error	Beta				
1	(Constant)	-1.785	.178		-10.026	.000		
	S.Training	.354	.060	.283	5.916	.000	.514	1.945
	S.Evaln	.314	.069	.246	4.520	.000	.398	2.511
	SH.Inform	.357	.057	.275	6.202	.000	.598	1.673
	NEG	.136	.051	.096	2.656	.009	.899	1.113
	Trust	.344	.060	.302	5.754	.000	.426	2.348

a. Dependent Variable: Procurement performance

The discussion of findings has been organized around each study objective and the conclusions drawn from the analysis. Ideally, it was expected that the relationship between the independent variable (Trust, Supplier training, Supplier performance evaluation, Information sharing, and Negotiation) and the dependent variable (Procurement performance) performance would be positive and significant.

The regression was: Procurement performance = -1.785 + 0.283\*Supplier training + 0.246\*Supplier performance evaluation + .275\*Sharing information + 0.096\*Negotiation + 0.302\*Trust + 0.05 error

The constant (Beta) value is simply the intercept of the model. It is the value of the (procurement performance) dependent variable when all the independent variables (supplier training, supplier performance evaluation, information sharing, negotiation, and trust) are equal to zero and the procurement performance would be -.911.

#### 4.5.2. Analysis of the Effect of Supplier Training on Procurement Performance

According to the correlation data (table 4.8), supplier training has a positive and significant effect

on EPSS procurement performance ( $r = 0.766$ ,  $\text{Sig} = .000$ ). This shows that increasing supplier training has a significant effect on EPSS procurement performance.

According to the data, supplier training has a significant impact on EPSS procurement performance ( $\beta_1=0.283$ ,  $p \text{ value} = 0.000$ ). The relation was considered significant since the  $p$  value of 0.000 was less than the significance level of 0.01. These findings supported Scott's (2003) assertion that supplier training and development is a critical component of improving procurement performance.

#### **4.5.3. Analysis of the Effect of Supplier Performance Evaluation on Procurement Performance**

Supplier performance evaluation has a positive and high significant effect on EPSS procurement performance ( $r = 0.814$ ,  $\text{Sig} = .000$ ), according to the correlation data (table 4.8). This demonstrates that improving supplier performance evaluation leads to a significant improvement in EPSS procurement performance.

The findings also demonstrated that supplier performance evaluation has a high significant impact on EPSS's performance. ( $\beta_1=0.246$ ,  $p \text{ value} = 0.000$ ). The  $p$ -value of 0.000 was less than the significance level of 0.01 and hence the relation was declared significant. The findings are in line with those of Odhiambo (2015), who found a substantial relation between supplier performance evaluation and procurement performance.

#### **4.5.4. Analysis of the Effect of Information Sharing on Procurement Performance**

Information sharing has a favorable and significant effect on EPSS procurement performance ( $r = 0.70$ ,  $\text{Sig} = .000$ ), according to the correlation data (table 4.8). This demonstrates that increasing information sharing improves EPSS procurement performance significantly.

The findings also demonstrated that sharing information has a substantial impact on EPSS performance. ( $p \text{ value} = 0.000$ ,  $\beta_1 = 0.246$ ). Because the  $p$  value of 0.000 was less than the significant level of 0.01 the relation was declared significant. The findings support (Pandey et al., 2010) findings that buying firms, as open systems, must accept and encourage information exchange to improve visibility throughout the procurement process.

#### **4.5.5. Analysis of the Effect of Negotiation on Procurement Performance**

According to the findings (table 4.8) of the correlation, negotiation has a favorable and weak impact on EPSS procurement performance ( $r = 0.36$ ,  $\text{Sig} = .009$ ). This shows that increasing negotiation leads to a minor improvement in EPSS' procurement performance.

Negotiation has a minor impact on the performance of EPSS, according to the findings.  $\beta_1=0.096$ ,  $p=0.009$ ) Because the p value of 0.009 was less than the significant level of 0.01 for the relation, it was deemed significant. The findings support Carvalho, Manuel, and Filipe's (2018) conclusions that there is a strong relation between negotiation and procurement performance, which leads to better results.

#### 4.5.6. Analysis of the Effect of Trust on Procurement Performance

The outcomes of the correlation (table 4.8) revealed that trust has a positive and high significant impact on EPSS procurement performance ( $r = 0.814$ ,  $\text{Sig} = .000$ ). This demonstrates that an increase in trust leads to a highly significant improvement in EPSS procurement performance.

The findings also demonstrated that trust has a substantial impact on EPSS performance.  $p$  value= $0.000$ ,  $\beta_1=0.302$ ). Because the p-value of 0.000 was less than the significant level of 0.01 the relation was declared significant.

The findings conform to the findings of (Capaldo & Rippa, 2009; Serro & Dalcol, 2010) that customers and suppliers are more likely to focus on the long-term benefits of a partnership when they are trusted, which increases performance outcomes.

### 4.6. Hypothesis Testing

Table 4. 12: Hypothesis test

Hypothesis	P value	Decision
Hypothesis 1: Supplier training has a significant and favorable impact on the organization's procurement performance	.000	H1 accepted
Hypothesis 2: Supplier performance evaluation practice has a significant and positive effect on the procurement performance of the organization	.000	H1 accepted
Hypothesis 3: Information sharing practice has a significant and positive effect on the procurement performance of the organization.	.000	H1 accepted
Hypothesis 4: Negotiation practice has a significant and favorable impact on the organization's procurement performance.	.009	H1 accepted
Hypothesis 5: Trust practice has a significant and positive effect on the procurement performance of the organization.	.000	H1 accepted

## **CHAPTER FIVE**

### **5. SUMMARY, CONCLUSION AND RECOMMENDATION**

*The chapter covers five sections, these include an overview of the findings, the study's conclusion, the study's limitations, recommendations, and proposals for further research in an unexplored field.*

#### **5.1. Summary of Findings**

Based on the questionnaire collected from respondents and quantitative data, inferential statistics analysis was generated, and research findings are summarized and presented as follows:

Pearson correlation coefficient result revealed that procurement performance was associated positively with supplier training to an extent of  $r=0.766$  with a strong relationship and statistically significant at a 1% level. The multiple regression coefficient results for supplier training revealed that the amount of a unique variance a predictor (supplier training) accounts for was statistically significant at  $p=0.000$ ,  $p<0.01$ .

The Pearson correlation coefficient found that procurement performance was favorably associated with supplier performance evaluation to the tune of  $r=0.814$ , indicating a very strong relationship that was statistically significant at the 1% level. The proportion of unique variance accounted for by a predictor was statistically significant at  $p=0.000$ ,  $p<0.01$  in the multiple regression coefficient result for supplier performance evaluation.

The results of the Pearson correlation coefficient revealed that procurement performance was favorably connected with information sharing to the degree of  $r=0.70$ , indicating a strong association and statistical significance at the 1% level. The amount of a unique variance a predictor accounts for was statistically significant at  $p=0.000$ ,  $P<0.01$ , according to the multiple regression coefficient results for information sharing.

The results of the Pearson correlation coefficient revealed that procurement performance was favorably connected with negotiation to the degree of  $r=0.36$  with a weak association and statistically significant at the 1% level. The amount of unique variance accounted for by a predictor (Negotiation) was statistically significant at  $p=0.009$ ,  $P<0.01$ , according to the multiple regression coefficient result for negotiation.

The Pearson correlation coefficient found that procurement performance was positively associated with trust to the extent of  $r=0.814$  with a very strong relationship and statically significant at the 1% level. The proportion of unique variance accounted for by a predictor was statistically significant at  $p=0.000$ ,  $P<0.01$  in the multiple regression coefficient result for trust evaluation.

The R-squared adjusted coefficient of determination for multiple regression revealed that the independent variables supplier training, supplier performance evaluation, information sharing, negotiation, and trust collectively explained 88.4% of the variance in procurement performance, indicating that the practices and procurement performance were closely linked.

According to the regression coefficient table 4.13, increasing supplier training by one unit was result in 0.283 changes in procurement performance for every one unit of change. The study also discovered that a one-unit rise in supplier performance evaluation results in 0.246 changes in procurement performance for every one-unit change. According to the study, increasing information sharing by one unit was result in 0.275 changes in procurement performance for every one unit of change. According to the regression coefficient table 4.13, each unit increase in negotiation results in a 0.96 change in procurement performance. The study also discovered that for every one-unit increase in trust, 0.302 changes in procurement performance occur.

## **5.2 Conclusion**

The study's goal was to see how supplier relationship management affected procurement performance at EPSS in Ethiopia. Five variables were identified and adopted from kinds of literature, and accordingly. Supplier training was measured in terms of technical support provided by suppliers to enhance product quality, improve lead time, improve documentation quality, and increase their tendering understanding. Supplier performance was evaluated to see if suppliers were chosen based on financial capacity, technology, and geographic position, as well as the availability of joint performance metrics, whether suppliers are certified for their product, on-time product delivery, and cost competitiveness.

Information sharing was measured in terms involvement of suppliers, organizational structure, mechanism of information sharing, quality of information shared in terms of completeness, timing and reliability. Negotiation were measured in terms creating values, committed, continuous and sustainable supply, reducing procurement cost and flexibility of payment term. Information sharing was measured in terms of involvement of suppliers, organizational structure, mechanism

of information sharing, and quality of information shared in terms of completeness, timing, and reliability. Negotiation was measured in terms of creating values, committed, continuous and sustainable supply, reducing procurement costs, and flexibility of payment term. Trust was measured in terms of willingness to change assumptions, openness, walk the talk promises, and reputation.

In accordance with a research question, specific objectives, and the sort of relationship that exists between the independent and dependent variables. The researcher discovered a positive and robust association between the first independent variable, supplier training, at a statistically significant level using the Pearson correlation coefficient test.

At a statistically significant level, the second independent variable, supplier performance evaluation, and procurement performance have a positive and very strong relation.

At a statistically significant level, there is a robust and positive relation between the third independent variable information sharing and procurement performance. At a statistically significant level, there is a positive and weak relation between the fourth independent variable negotiation and procurement performance.

At a statistically significant level, there is a positive and very strong relation between the fifth independent variable, trust, and procurement performance.

To investigate the relation between independent variables and the dependent variable, the researcher used multiple regression analysis. The adjusted R square was 0.884, the R square 0.89, and the standard error was 0.178. The Adjusted R square was 0.884, indicating that the data was used to assess the relation between the independent variables and procurement performance, and the researcher came to the conclusion that the independent and dependent variables were strongly related. In accordance with the research questions and specific objectives, the study discovered that supplier training, supplier performance evaluation, information exchange, negotiation, and trust were significant at 0.01. ( $p < 0.01$ ).

### **5.3. Recommendations**

In view of the foregoing observations, the following recommendations are made: EPSS and other organizations should demonstrate a greater commitment to SRM.

Supplier training has a favorable and significant impact on EPSS procurement performance, the study suggests that senior procurement officers and procurement managers engage in supplier training methods such as developing a continuous training program and assisting suppliers.

As the study found that supplier performance evaluation has a positive and significant impact on EPSS procurement performance, the study recommends that supplier performance evaluation practices such as on-time delivery, price competitiveness, and product quality should be tracked by the procurement officer and the top management of EPSS embedded supplier performance evaluation system within the organization.

Furthermore, the study discovered that information sharing had an impact on the Ethiopian Pharmaceutical Supply Service's procurement performance. As a result of this research, the top management of EPSS should guarantee that their websites are updated on a regular basis and that timely communication is maintained in order to improve procurement performance.

According to the study Ethiopian Pharmaceutical Supply Service's procurement performance is influenced by negotiating objectives. As a result of this research, the top management of EPSS should guarantee that well-defined negotiation objectives are in place to ensure efficiency in the procurement and payment of products and services.

The study discovered that trust influenced the performance of Ethiopian pharmaceutical supply service procurement. As a result of this study, EPSS's senior management should ensure that reputability, keeping promises, and being transparent in transactions are utilized to guide trust in all interactions.

### **5.4. Further Research Directions**

The study found that five independent variables (supplier training, information sharing, supplier performance evaluation, negotiation, and trust) explained 88.4 percent of the variance in procurement performance in EPSS. As a result, the researcher suggests that additional research

shall be conducted on how to apply and exercise supplier relationship management in EPSS and the challenges that it presents.

The researcher suggests examining if these findings would be the same or different in other supply service sectors/clusters based on the five independent variables revealed in the study's impact on procurement performance in EPSS.

### **5.5. Limitation of the Study**

The study focused solely on Addis Ababa, Ethiopia's pharmaceutical supply agency head office. Because the independent variables of this study were limited to supplier training, supplier performance evaluation, information sharing, negotiation, and trust, the research cannot be applicable to all logistical organizations in Ethiopia.

In addition, this study did not include EPSS's supplier's perspectives on how the independent variable of supplier relationship management (supplier training, supplier performance evaluation, information sharing, negotiation, and trust) is practiced in EPSS.

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## ANNEX I: Questionaries

### **QUESTIONNAIRE “THE EFFECTS OF SUPPLIER RELATIONSHIP MANAGEMENT ON PROCUREMENT PERFORMANCE” (A CASE OF ETHIOPIAN PHARMACEUTICALS SUPPLY SERVICE)**

Greetings! I would appreciate your feedback on my questionnaire. This questionnaire is needed for the completion of my Post graduation in Master’s Degree in Logistics and Supply Chain Management on the topic ‘THE EFFECTS OF SUPPLIER RELATIONSHIP MANAGEMENT ON PROCUREMENT PERFORMANCE. All responses was remain confidential and secure. Thank you in advance for your valuable insight!

**Confidentiality:** The information you provide was not be disclosed to anyone. It was only be used for research and academic purpose.

**Voluntary Participation:** Your participation is voluntary and you can withdraw after having agreed to participate. You are free to refuse to answer any question asked in the questionnaire/interview guide. If you have any questions about this study, you can ask the principal investigator at the site or AAU, department of Logistics and supply chain management.

Name: Walta Tekle

Email Address: walta.tekle@gmail.com

**Consent to participate:** Agreed in this consent indicates that you understand what was expected of you and are wasing to participate in this study.

Read by Participant Interviewer

Agreed\_\_\_\_\_ Refused\_\_\_\_\_

## Part I: INQUIRY ON BACKGROUND INFORMATION

Please give information for the following inquiry (tick (✓) as appropriate)

1. Gender/Sex:

Female  Male

2. Age : Below 30  31 – 35  36 – 45  Above 45

3. Level of educational : College Diploma  First Degree  Second Degree  
and above

4. Years of experience in EPSS : Below 2 Years  3-5 Years  6 - 10 Years   
above 10 Years

5. Years of experience in other Logistics organizations: Below 1 Years  2- 3 Years   
4 - 5 Years  above 5 Years

6. In which department or Directorate are you working at EPSS?

Quantification and market shaping  Tender management

Contract management  other

7. The position you have in the team/directorate

Director  Team Leader  Officer  Advisor

**Part II: RATING QUESTIONS WITH A SCALE OF 1 – To 5.**

**Part II: SUPPLIER RELATIONSHIP MANAGEMENT PRACTICE**

This section of the questionnaire is designed to obtain information about your level of agreement with the assessment of supplier relationship management practice.

Please indicate ✓ to what extent you agree on the following statements under each category using **Five-point Likert scale** as given below.

**SCALE:**

**1** = Strongly Disagree;                      **2** = Disagree;    **3** = Neutral;  
**4** = Agree                      and                      **5** = Strongly Agree

<b>A. Supplier Training Practices</b>						
<b>No.</b>	<b>1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
ST1	EPSS's provide regular technical assistance for their suppliers to enable them to improve their product quality					
ST2	EPSS's provide regular technical assistance for their suppliers to enable them to improve their lead times.					
ST3	EPSS's provide regular technical assistance for their suppliers to prepare their bidding offer according to the bid document.					
ST4	EPSS's provide regular training and workshops for their suppliers to understand how tender evaluation is carried out.					
ST5	EPSS's provide regular technical assistance for their suppliers to prepare their Performa invoice, Commercial invoice, bill of loading according to EPSS requirement.					
<b>B. Supplier Performance Evaluations Practices</b>						
<b>No.</b>	<b>1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
S.P.E.1	EPSS's suppliers are selected based on evaluation of their financial health, technological capability, geographical location					

No.	1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree	1	2	3	4	5
S.P.E.2	EPSS and its supplier have joint performance measures that monitor each other's activities					
S.P.E.3	EPSS's supplier performance evaluation method enable us to measure our suppliers product/service quality					
S.P.E.4	EPSS's suppliers provide test certificate for every product for the order placed.					
S.P.E.5	EPSS's supplier performance evaluation method enable us to measure our suppliers on-time delivery					
S.P.E.6	EPSS's supplier performance evaluation method enable us to measure the competitiveness of our suppliers' cost					

### C. Information Sharing Practices

No.	1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree	1	2	3	4	5
SH.I.1	EPSS involve its suppliers and provide information on new product specification development.					
SH.I.2	EPSS and its suppliers have mechanisms of information sharing to align benefits and risks					
SH.I.3	EPSS share the costs with its suppliers and enables to meet the budget					
SH.I.4	EPSS provide forecasts of demand related information to its suppliers					
SH.I.5	EPSS provide Inventory levels related information to its suppliers					
SH.I.6	EPSS receives order status information from its supplier					
SH.I.7	The quality of information shared with EPSS's suppliers is complete					
SH.I.8	The quality of information shared with EPSS's suppliers is reliable					
SH.I.9	The quality of information shared with EPSS's suppliers is timely					

<b>D. Negotiation Practices</b>						
<b>No.</b>	<b>1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
NG.1	EPSS negotiation with its supplier creates values for both parties					
NG.2	Our supplier only thinks to win and make profit.					
NG.3	Negotiation with EPSS suppliers is committed by long-term contract, and discussions on how to improve cost, quality and other matters.					
NG.4	Negotiation with EPSS suppliers creates continuous and sustainable supply of products					
NG.5	Negotiation with EPSS suppliers brings update high quality products.					
NG.6	Negotiations with EPSS suppliers help in reducing the procuring costs as well as the transport costs.					
NG.7	Through negotiation EPSS is able to reach on better payment terms with its supplier					
<b>E. Trust practices</b>						
<b>No.</b>	<b>1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
T.1	In dealing with suppliers, EPSS is wasing to change assumptions to find more effective solutions.					
T.2	EPSS is open in dealing with supplier engagement					
T.3	The promises that EPSS makes to its suppliers is walk the talk					
T.4	EPSS has trust on suppliers legal documents submitted. (Technical compliance, Catalog, product certificate, and others)					
T.5	EPSS has trust on suppliers deliver high quality products.					
T.6	EPSS has trust on suppliers offer products at a competitive prices.					

### Part III: Procurement performance

This section of the questionnaire is designed to gather information on your level of agreement with the statement on the Procurement Performance: The Case of Ethiopian Pharmaceuticals Supply Service.

Please indicate ✓ to what extent you agree on the following statements under each category using **Five-point Likert scale** as given below.

#### SCALE:

**1** = Strongly Disagree;    **2** = Disagree;                      **3** = Neutral;  
**4** = Agree                      and                      **5** = Strongly Agree

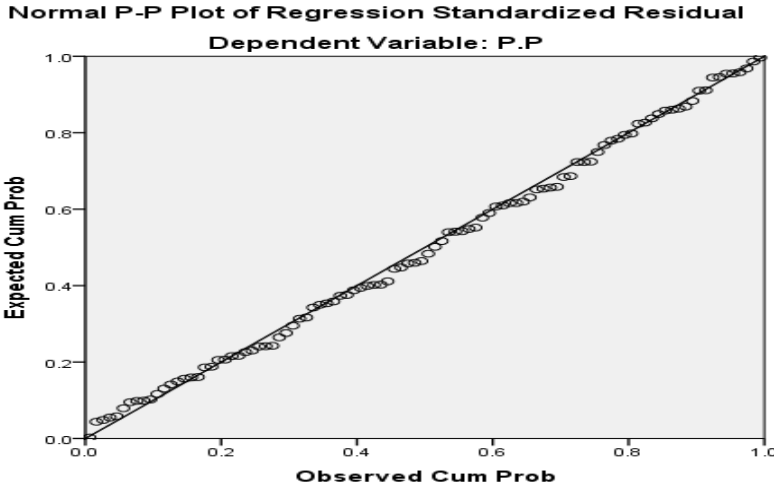
A. Procurement Lead Time						
No.	1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree	1	2	3	4	5
Pr.LT.1	The supplier relationship management practices of EPSS's helps to minimize average actual cycle time consistently and fulfill customer order on time					
Pr.LT.2	EPSS's relationship with its supplier minimized the average time associated with source processes: source cycle time, select supplier time and negotiation cycle time					
Pr.LT.3	The supplier relationship management practices of EPSS helped to minimize the average time associated with need identification and compilation.					
Pr.LT.4	The supplier relationship management practices of EPSS helped the procurement planning practice in order to complete all activities of procurement on time.					
Pr.LT.5	EPSS's relationship with its supplier minimized the average time associated with payment to suppliers and custom clearance					

<b>B. Procurement Quality</b>						
<b>No.</b>	<b>1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Pr.QT.1	EPSS's relationship with its supplier enhanced percentage of orders which all of the items are received by customers in the quantities committed. All the quantities received by the customer match the order quantities.					
Pr.QT.2	EPSS's relationship with its supplier enhanced percentage of orders on time and accurate documentation supporting the order, including packing slips, bill of loading, invoices, etc.					
Pr.QT.3	EPSS's relationship with its supplier enhanced percentage of orders delivered in an undamaged state that meet specification, have the correct configuration, faultlessly installed and accepted by the customer					
Pr.QT.4	The supplier relationship management practices of EPSS helps to offer quality (right) product.					
Pr.QT.5	EPSS's relationship with its supplier enhances practices of predefined standards of for all goods and services procured					
<b>C. Procurement Cost</b>						
<b>No.</b>	<b>1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Pr.C.1	EPSS's relationship with its supplier helps to enhance cost to plan practice to achieve the cost-effectiveness of procurement.					
Pr.C.2	The supplier relationship management practices of EPSS minimized supplier management cost: Material planning, planning procurement staff, supplier negotiation, and qualification costs.					
Pr.C.3	EPSS's relationship with its supplier helps to minimize material acquisition cost: Bidding, quotations, ordering, receiving, and inspection costs.					

No.	1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree	1	2	3	4	5
Pr.C.4	EPSS's relationship with its supplier ensures cost to return practice to minimize the costs associated with returning products to the supplier.					
Pr.C.5	EPSS's relationship with its supplier helps to minimize costs associated with deliver and/or install					
Pr.C.6	EPSS's relationship with its supplier's enhanced mitigation cost practice to manage nonsystematic risks that arise from special cause variation within the procurement.					
<b>D. Procurement Agility</b>						
Pr.AG.1	EPSS's relationship with its suppliers enhanced ability to respond to external influences: increases or decreases in demand					
Pr.AG.2	The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in quantity order					
Pr.AG.3	The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in time to delivery					
Pr.AG.4	The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in delivery destination					
Pr.AG.5	The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in freight/transport modality					
Pr.AG.6	The supplier relationship management practices of EPSS helped the procurement practice to accommodate change in products future					

**ANNEX II: SPSS Dataset Output**

*Figure 6. 1: P-P Plot*



*Figure 6. 2: Histogram*

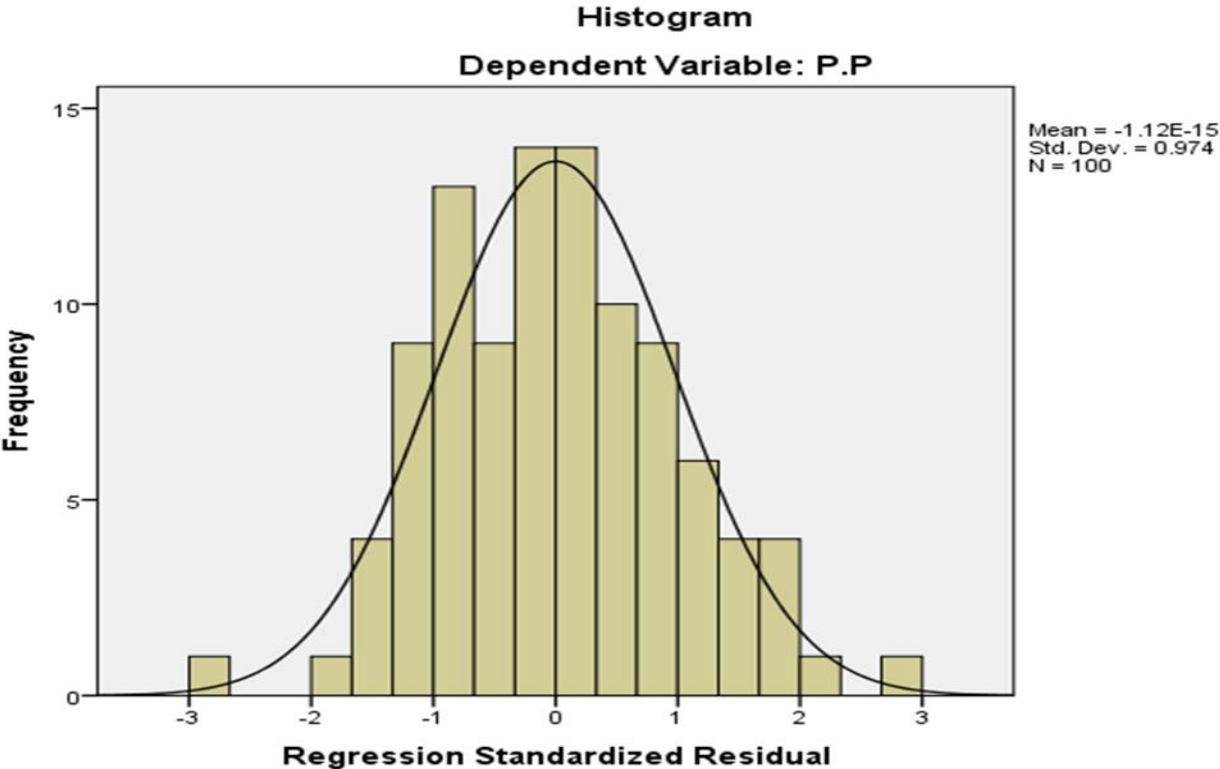


Figure 6. 3: Scatterplot

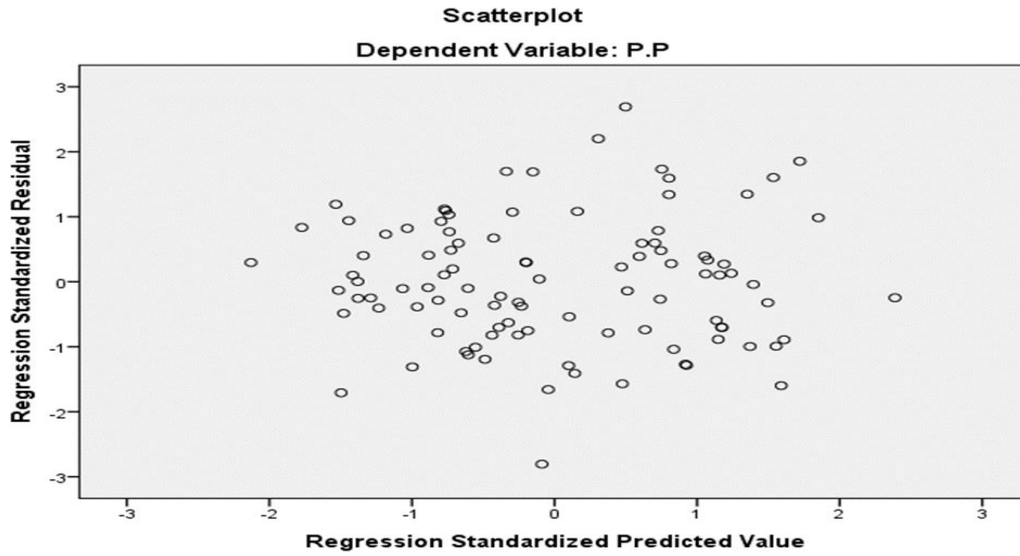


Table 6. 1: Normal distribution test

		Statistics						
		S.Training	S.Evaln	SH.Inform	NEG	Trust	P.P	
N	Valid	100	100	100	100	100	100	100
Skewness		.271	.018	.360	.360	.039	.241	
Std. Error of Skewness		.241	.241	.241	.241	.241	.241	
Kurtosis		-.081	-.874	-.424	-.108	-.783	-.845	
Std. Error of Kurtosis		.478	.478	.478	.478	.478	.478	

Table 6. 2: Multicollinearity Test

		Coefficients <sup>a</sup>		
Model	Sig.	Collinearity Statistics		
		Tolerance	VIF	
(Constant)	.000			
Supplier training	.000	.514	1.945	
Supplier performance evaln	.000	.398	2.511	
Information Sharing	.000	.598	1.673	
Negotiation	.009	.899	1.113	
Trust	.000	.426	2.348	

a. Dependent Variable: Procurement Performance