

EFFECTS OF STRATEGIC PURCHASING ON ORGANIZATION  
PERFORMANCE: A CASE OF BROTHER FLOUR AND BISCUIT  
FACTORY ADAMA.

*A Thesis Submitted to the School of Graduate Studies of Jimma University in  
Partial Fulfillment of the Requirements for the Award of the Degree of Master of  
Business Administration (MBA)*

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JIMMA UNIVERSITY

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EFFECTES OF STRATEGIC PURCHASING ON ORGANIZATION  
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Under the guidance of  
Zinashbizu Lema (Ph.D.)

AND

Miss. Tigist Waqtole (MBA)



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## DECLARATION

I declare that thesis titled “**The Effect of strategic purchasing on organization Performance in case of brother flour and biscuit factory ADAMA**” is my original work, prepared under the guidance of my advisors: Zinashbizu Lema (Ph.D.) and. Tigist Waqtole (MBA). All foundations of material used for the thesis have been accordingly acknowledged. I further settle that the thesis has not been submitted either in part or in full to any other higher learning institutions for the purpose of earning any degree.

Researcher’s Name

Signature

Date

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## CERTIFICATE

This is to certify that the thesis entitled: *“The Effect of strategic purchasing on organization Performance in case of brother flour and biscuit factory ADAMA”* submitted to JIMMA University for the award of the Degree in Masters of Business Administration (MBA) and is a record of valuable research work carried out by Miss. Sara Hailu Shanko, under our guidance and supervision.

Therefore, we hereby declare that no part of this thesis has been submitted to any other universities or institutions for the award of any degree or diploma.

Name of Main Advisor

Signature

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Name of Co Advisor

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## ABSTRACT

*The aim of the study to examine the effect of Strategic purchasing on organization performance in brother flour and biscuit factory Adama. Target group of the respondent are manager, purchasing officer, finance and administrative and purchasing employee. Interview designed to describe the purchasing practice and questionnaire was designed to collect the data on the independent variable (purchasing skill, collaborative supplier relation and interaction, cost management, supply base management and organization performance. The study was used explanatory and descriptive research design and both primary and secondary data was used to conduct this study. Collected data by using census and analyzed by SPSS 20 Version. Descriptive and explanatory statistics was used to analyze the data and 93 closed ended questioner distributed and 82(88%) were collected. Besides, in descriptive by using frequency, percentage, mean and standard deviation and the study revealed that majority of the respondents feel agreed on strategic purchasing elements of the organization. Inferential statistical methods like correlation analysis was used to assess the relationship between strategic purchasing and organization performance, multiple linear regression analysis also was employed to examine the influence of strategic purchasing on organization performance by using primary data collected through five scale Likert questionnaires. Based on the findings of the study, process of purchasing are long and has some problem on purchasing practice .other finding are all factors of organization performance have a positive and statistically significant correlation with organization performance The multiple linear regression analysis (R<sup>2</sup>) implies that about 60.8% shows that strategic purchasing elements determine the variation of organization performance of brother flour and biscuit factory ADAMA. Also, the regression result revealed that all explanatory variables have a significant effect on organization performance. This indicated that strategic purchasing elements determine organization performance of brother flour and biscuit factory ADAMA. Therefore, reduce unnecessary redundant process and make it clear process, make it clear format of purchasing, Brother flour and biscuit factory ADAMA should continuous strategic purchasing elements appropriately and continuously as an indispensable tool to improve and maintain sustainable organization performance.*

**Key words;** - *strategic purchasing, purchasing skill, supply base management collaborative supplier relation and interaction; cost management, organization performance*

## **Acronyms and Abbreviations**

CM = cost management

CSR = collaborative supplier relation and interaction

OP = organizational Performance

PS = purchasing skill

SBM = supply base management

SPSS = Statistical Package for Social Science

# CHAPTER ONE

## INTRODUCTION

This chapter contains: background of the study, statement of the problem, objective of the study, significance of the study, scope of the study, and organization of the study.

### 1.1 Back ground of the study

Purchasing is one part of the critical and strategic function for every organization with the potential to contribute positively to the success of the operational activity. Purchasing is the process of acquiring goods and services to accomplish organizational goals (Carr and Smeltzer, 1999). It became more and more integrated and covered the involvement of purchasing in a product, process, and supplier selection and contracting (Dobber *et al.*, 2008). Purchasing as an important functional activity in operations acknowledged as being a key factor for business survival (Malik and Kumar, 2014).

Every organization (business and non-business organization) attempts to set standards in the purchasing process. The process is different from organization to organization. Purchasing function with business strategy is essential, (Benito, 2007) the activity of purchasing is important to ensure that required items are obtained in a timely manner and at reasonable costs. Traditionally, purchasing was seen as a merely supportive and supplementary operational activity, with little significance on a firm's performance (Carter 1997). Now a day strategic purchasing conveys a rather reactive strategy of purchasing where focus on the transaction rather than on relationships and also more on operational or tactical level rather than on strategic one (Kenneth & Lysons, 2006). Strategic purchasing is the process of planning, implementing, evaluating, and controlling strategic and operating purchasing decisions for directing all activities of the purchasing function toward opportunities consistent with the firm's capabilities to achieve long term goals (Carr and Smeltzer, 1999).

Strategic purchasing proactive and long-term focuses and its main tools are able to achieve competitiveness. Currently, the competition of business environments is more focused on the operational activity of the firm. To become flexible and product innovation, time to market, cost-saving and to fulfill the need for customer demand (Úbeda, Alsua and Carrasco, 2014).

Now a day, strategic purchasing is one of the foremost discussed topics of business development. Purchasing has played a more important role in the strategy of the firm. It creates value through input provision services and facilities in order to produce the products and maintain the manufacturing facility. The operation process needs different inputs that can be gain by way of purchasing and creating relationships with the supplier (Hughes, J 2007). Purchasing managers are required to know the purchasing objectives, which then leads them to develop purchasing strategies based on costs, quality, delivery, and flexibility (Ateş, van Raaij, and Wynstra, 2018).

Purchasing skills contribute to developing effective and innovative strategies which help companies to ensure cost-saving (Schütz 2019), it enables firms to establish product and service supply strategies and management to enhance their overall companies strategies (Carr *et al.*, 2002; Feisel, Hartmann, and Schober, 2010), Leading to enhancing firm competitive position and sustainable performance (Carr and Smeltzer, 1999). Individual knowledge and skills becoming more valuable when integrated with other resources (Hitt et al., 2001). Purchasing activities have been shown to contribute to and critically influence the performance of firms (Chen, Paulraj and Lado, 2004; Hendricks, and Singhal, 2003; Zsidisin, Ellram, and Ogden, 2003).

According to Terpend, Krause, and Dooley, (2011) the Factors of strategic purchasing are Core competence, benchmark, supplies partnership, and interaction contract agreements, and value chain analysis as well as cost. This is the guideline of strategic purchasing in an organization. These actors have affected the delivery, speed, quality of the services and products, product development of line, the financial capability of the firm (Carr, and Pearson., 2002). These all factors affect positively and negatively the performance of an organization.

Strategic purchasing is focused on, cost management, collaborative interaction, and relationship and supply base management. Collaborative supplier relations and interaction ( Chen et al., 2005; Cullen et al., 2005; Leenders et al., 2002) are made on trust, mutuality, information exchange, and communication with suppliers ( Danese, 2013). This relationship is mainly one that affects the performance of the organization. Purchasers' relations with suppliers are important for competitive advantages; examples of these include cost reduction and quality improvements (Liker, and Choi, 2004). Supplier bases are optimization or determine numbers of suppliers,

purchasing continuous improvements its maintenance and staying suppliers for effective managements and developments of supplier base ( Melnyk et al., 2009). Cost management is part of purchasing strategy and influences other manufacturing performance as a whole. In general, the above way of strategic purchasing affects the performance of the organization positively or negatively (Luzzini, Caniato, and Ronchi, 2012).

There are a few papers (Audi, 2014; Thruлогachantar, and Zailani, 2010) theoretically and empirically analyze the contribution of strategic purchasing to manufacturing performance. Farah (2016) strategic purchasing has positive effects on the performance of the organization. In manufacturing organizations, purchasing strategies should focus on recognizing and developing sources for both high quality and low-cost raw materials and following up too quickly arranging win-win favorable business deals ( Alafi, 2014).

Although many countries have adopted the name and elements of strategic purchasing, reviews find that no country has systematically and successfully incorporated all elements (K, Greer 2018).Based on the above paragraph the purpose of this study to investigate the effects of strategic purchasing on organizational performance a case of brother flour and biscuit factory. The research was motivated to undertake this study due to the research on organization to address the observed problem in relation with the organizational performance.

## **1.2 Statement of the problem**

Strategic purchasing is strategically concerned with the direction and scope of the long-term activity performed by the organization to obtain a competitive advantage and to improve performance, in terms of quality, cost, cycle time, new product developments, delivery speed and dependability, and customization responsiveness of the organization performance (Dobber *et al.*, 2008). Strategic purchasing means considering the purchasing function to be equally important with other basic functions within the organization such as operations, finance, and marketing (McIvor et al. 1997).

In the world, now day strategic purchasing is the main activity in an organization and focused on current uncertain business environments to a key value-adding function to support and sustain the firm's successful performance. The presence of strategic purchasing within the organization has enabled the company to acquire the resources (Audi, 2014), It is the main way of improving organizational performance and increases profitability by minimizing costs. Strategic purchasing

focused on cost management, to improve the cost performance of the firm by depending on the strategic partners to achieve competitive advantages. In addition; the purchasing process and procedures of purchasing not set clearly and its long process, but process is a continuous improvement function so these are highly linked with the financial and non-financial performance of the organization.

According to Farah, (2016) manufacturing firms in the past decay great emphasis on the closed systems or their focus on the internal systems of the organization as a whole, now day the systems of the organization structure is more focused on the open systems and great interaction with an external organization such as with supplier and customer. The interactions of the organization with external environments impact the performance of an organization. According to Thruogachantar, and Zailani, (2010) purchasing is a key supportive activity in the manufacturing process to create value through the purchase of inputs, services, and facilities needed to produce a firm's product and sometimes key up the maintenance of manufacturing facilities. A firm used strategic purchasing to acquire raw materials, spare parts, and inputs for the process and maintain the manufacturing activities. The success of this activity depends on the capabilities of the organization's interaction with customers and suppliers.

According to Giunipero *et al.*, (2006) in the current business environment strategy purchasing has rapidly changed and affects the overall activity of the firm, it enables to change the cost control and negotiation. Strategic purchasing as one of the core elements enables an organization to equip well in order to strong competition. For a long time, firms have ignored and underestimated the power of purchasing and the function of strategic purchasing is less attention in the organization to supply base management and purchasing (Seshadri, 2001). The successfulness of strategic purchasing activity and performance is depending on the professional skill of purchasing personnel (Choa, et al 2018), personnel not using scientific purchasing tools. Purchasing personnel is lacking appropriate skills and knowledge (Trent, & Monczka, 2003). So, it's better to formulate and implement strategic purchasing in a scientific manner. Because personnel skill is highly related to the performance of the organization.

Purchasing skills and knowledge of employees able to control organizational performance. It plays an important role for a company to acquire goods and services. Purchasing skills are closely related to good knowledge of products, buyers, suppliers, and markets. Multi-



dimensional knowledge and skills such as technical knowledge, interpersonal, analytical, and managerial skills in good purchasing are considered key capabilities to obtain quick, cheap, quality products and services (Choa, et al 2019). Purchasing skills are considered as firm intangible resources which have great impacts on firm performance (Karttunen, 2018). Purchasing personnel is lacking appropriate skills and knowledge for the area which affects the function of purchasing. The activity of purchasing is highly related to the performance of the organization.

According to Pressey (2007) mostly strategic purchasing is applicable in organizations to select the best suppliers' firms evaluated in different dimensions (financial and technical capability, organizational culture, and strategy) and it's considered scientific criteria selection. But for most organizations are before starting the contract with the suppliers, not be considered the financial capability of the firms, this is affecting the relationship and as well performance.

According to Saenz, and Revilla (2014) purchasing has a vital role to develop and redefine the relationship with the supply base. It's enabling to establish long-term relationships and stable relations with a selected supply base based on mutual, trust, joint planning, and development time and successful the firm can increase performance. In an organization, there is no Supplier assessment before doing business and starting contracts with suppliers without a Full understanding of Suppliers' Capability.

There are studies conducted by different scholars in the subject, Thruлогachantar, and Zailani, (2010) undertaken a study on the effect of strategic purchasing on manufacturing performances to select four industrial groups by using simple random sampling, Alafi, (2014) undertaken study on the effect of strategic purchasing on manufacturing performances is selected four industrial estates across Malaysia, Farah, (2016) undertaken study on the effect of strategic purchasing on manufacturing performances to validity measurements of strategic purchasing to selected industrial states for local manufacturing firms in Malaysia, Semuel, Siagian, and Arnius, (2018), undertaken study on the mediating role of strategic purchasing on performance through negotiation strategy and buyer-supplier relationship used structural equation model and analysis by partial list square by PLS software, **But**, to the best knowledge of the researcher, there is no study previously conducted on this issue in Brother Flour and biscuit factory ADAMA. The variable of the study adopted Kiser (1976) and later transformed by Janda, (2001) the study

examined the interaction between the constructs of cost management, supplier base management, purchasing skill, and collaborative supplier interaction on the performance of the organization. Expected to provide its own contribution by having conceptual and empirical evidence on the effect of strategic purchasing on organization performance.

(Seshadri and, Mishra 2004; Thruilogachantar, and Zailani 2010; Alafi, 2014; Farah, 2016) undertaken a study on the effect of strategic purchasing on manufacturing performance in industry zone Malaysia and across. As researcher review papers are done on this area the respondents for each category do not represent the actual scenario of strategic purchasing, because the respondents are for different countries and for different types of business. The present researcher needs to study selected firm brother flour and biscuit factory ADAMA. The researcher needs to assess and show the purchasing strategy of the factory and factors for the performance of the organization. Identify the area that needs to improve and formalize the strategic purchasing to improve performance to compete in business environments.

Even if studies have been done on strategic purchasing effects on manufacturing performance, there is a time and geographical gap. Most of the previous researches are conducted abroad, mostly in Malaysia and it is before 2018. The current study addresses the local scenario taking brother flour and biscuit factory ADAMA as a sample study area in 2021.

According to (Seshadri and, Mishra 2004; Thruilogachantar, and Zailani, 2010; Alafi, 2014; Farah, 2016) those researchers are using simple random sampling, used quantitative and explanatory research design and collected data from different countries. The present researcher collected data from one organization, by using census methods and from some specific groups and used both types of research design.

Based on the review of the prior research, there is a population gap. The previous researcher includes the manager and purchasing officers. Not include finance directors, administrative staff, and all purchasing employee. The current study target group are manager, purchasing officers, finance directors, and administrative and all employee purchasing departments.

The previous researcher focused only on the element of strategic purchasing, not consider the skill and knowledge of purchasing personnel, the current researcher addresses the impacts the purchasing skill and knowledge on the performance, and describe the purchasing practice of the

organization by using interview and secondary data analysis. The researcher describes purchasing process of the factory.

### **1.3 Research question**

1. What is strategic purchasing practice in organization?
2. What is the factor of strategic purchasing on organization performance?
3. what level the strategic purchasing factors of the firm affect the performance

### **1.4 Objective of the study**

The study has both general and specific objectives

#### **1.4.1 General objective**

The general objective of this study was to examine the effects of strategic purchasing on organizational performance in case of brother flour and biscuit factory in ADAMA

#### **1.4.2 Specific objectives**

The Specific objectives of this study were as the following;

1. To assess strategic purchasing practice and determine current organizational performance of the organization
2. To identify strategic purchasing factors affecting organizational performance of brother flour and biscuit factory
3. To examine to what level the strategic purchasing factors of the firm affect organizational performance

### **1.5 Significance of the study**

The study has significance to brother flour and biscuit factory ADAMA to understand the best strategic purchasing practices that are applicable on contribution and implementation towards organization performance, to be serving as a knowledge the base for a comprehensive look into the gaps in strategic purchasing, Moreover, the study assisted the factory to establish and apply more appropriate and suitable purchasing strategy to increase the performance of the firm, obtain competitive advantage and cope with the dynamic business environment.

This study benefits the government for making policy decisions whose overall objectives are to reduce bottlenecks in organization performance at the same time accelerate the rate of growth in the business operation and take advantage of the improved way of purchasing strategy

The study was significant to scholars and researchers in gaining knowledge on how strategic purchasing affects organizations. The finding of the study also has provided a reference source for further researcher in this area.

### **1.6 Scope of the study**

The study was not be designed on all organization in Ethiopia or in Oromia National Regional State, but limited brother flour and biscuit factory ADAMA, even it cannot investigate all employees of the factory, Because of all employee of factory not aware of area of purchasing. Limited to investigate the effect of strategic purchasing on organization performance. In order to get better information, the target populations of the study are managers, finance director and administrative, purchasing officer and all employees under purchasing department found in organization.

Additionally, the independents that variables are delimited to strategic purchasing are a way of purchasing skill, collaborative supply relation and interaction, cost management, and supply base management. The research methodology uses census, quantitative and qualitative approach, and data were collected from respondents by using questionnaire and interview. Lastly, the study was be analyzed by using descriptive and inferential statistical techniques.

### **1.7 limitation of the study**

This study was not totally free from limitation, Shortage of time allocated to research project was one of difficulty problem faced the researcher. This research is limited only to a specific organization. Even though some of its ideas can be used to describe other situations, this study cannot be used to generalize any other research. The research limited on the four strategic purchasing elements (independent variables), purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management but there would be other variables which can have effect on organization performance.

## **1.8 Organization of the Study**

This research has five chapters. Chapter one: constitutes the research background, statement of the problem, the objective of the study, the significance of the study, the scope of the study, and organization of the study. Chapter two: Review of Literature: This chapter deals with the review of literature. The literature survey includes theoretical and empirical studies as well as the conceptual framework. All theories tending to support this study is incorporates in the review of the literature. Chapter three: Research Methodology: It deals with research design and methodology, specifically, it incorporates; data types, sources of data, the study population, methods of data collection, data collection procedures, methods of data analysis, validity and reliability of the survey instrument & ethical consideration. Chapter four contains research findings, analysis, and interpretations. Finally, chapter Five presents a summary of major findings, conclusions, and recommendations.

# **CHAPTER TWO**

## **2. REVIEW OF RELATED LITRATURE**

This chapter provides the review of related literature on the effect of strategy purchasing on organization performance as presented by various researchers' scholars and authors. The chapters also provide theories that support and represent the study.

### **2.1 Theoretical review**

#### **2.1.1 Purchasing**

Defined as, "Getting the right item, at the right price, at the right quality and quantity, and at the right time, from the right source. Although all this is true, that old definition doesn't cover to days. Emphasizing this more traditional role of purchasing, the strategic relevance of cost management practices in purchasing has been rising in the past decade due to the growing amounts of outsourcing and global sourcing (Trautmann, 2009; Zsidisin, Ellram and Ogden, 2003). Some author purchasing limit to the process of buying: learning of the need, locating and selecting a supplier, negotiating price and other pertinent terms, and following up to ensure delivery and payment (P. Fraser Johnson p 26). Traditionally Cost management and cost reduction are traditionally argued to be the most prevalent priorities in purchasing (Carter, 1996; Zsidisin, Ellram, and Ogden, 2003)

Traditionally purchasing are focused been on reducing costs and creating efficiencies, with the increasingly strategic role of purchasing and supplier management, buying firms consider additional competitive priorities such as innovation and sustainability in their purchasing strategies (Handfield *et al.*, 2009 ; Krause, Vachon and Klassen, 2009 ; Pagell and Wasserman, 2010).

According to Thruлогachantar and Zailani, (2011) Purchasing is strategic weapon, centered on its ability to achieve goals of the organization purchasing function contribute significantly in manufacturing performance through interfaced in quality improvement and innovation in new product development .

### **2.1.2 Importance of purchasing**

The importance of purchasing “a 1 percent saving in purchasing is equal to a 10 percent increase in sales” in early 1980s (Baier, Hartmann and Moser, 2007) and generating cost savings and increasing efficiencies in firms is self-evident (Zsidisin, Ellram and Ogden, 2003) but its strategic role, for instance in relation to contributing to innovations, has become more prominent only in the past decade (Baier, Hartmann and Moser, 2007).

### **2.1.3 Procedures of purchasing**

A purchasing proceeding usually begins with an investigation of new suppliers can be made for renegotiating contracts with existing suppliers. The general cycle of activities in purchasing most operating materials and suppliers is fairly standardized. The following steps constitute the typical purchasing procedures (Baily et al. (2005). The first step in the purchasing process is to organize a purchase requisition; this serves as a motivator for the buyer to start shopping. A description of the material, quantity, and due date should all be included in the request, as well as an estimated unit cost, a date, and an approved signature. The second procedure is buy request verification, which is carried out by the purchasing department (Forke, and Hershauer 2000). As soon as the need has been established and precisely describe, the buyer begins an investigation of the market to identify potential source of supply. Preparation of purchase order is the fourth procedure once a supplier has been selected the purchasing department prepares and issues a serially numbered purchase order. Follow up also called expediting, purchasing bears full responsibility for and order until the material is received and accepted (Dobber *et al.*, 2008).

Important orders with key delivery dates should receive aggressive follow-up attention when there is a reasonable probability that the supplier will not stay on schedule. The next procedure is receiving and inspection, and the supplier ships supplies with a packing slip that lists and specifies the contents of the shipments.

This packing slip, together with his or her copy of the purchase order, is used by the receiving clerk to ensure that the correct material has been received. Payment is the following procedure, and the major action here is receiving the report and invoice. The purchaser determines whether the quantity and kind of items ordered were received by comparing the receiving report to the purchase order. Then by comparing the invoice with the purchase order and received. Evaluating

the purchasing performance is the final purchasing procedure and Purchasers need to evaluate whether the materials purchase from the supplier have satisfied the need of the users and Fulfill each task satisfactorily with minimum of time, effort and proper work (Dobler, 1996).

#### **2.1.4 The Purchasing Process**

The purchasing process is traditionally organized in a cycle, with each step necessitating the exchange of data and numerous permissions in order to proceed. Every company will have its own special touches, but in general, the purchase process follows a well-defined sequence of actions.

The organization recognizes and documents a need for goods or services to solve a specific problem in the first purchasing step, Needs Analysis. The procurement team defines the requirement to be met and collaborates with others to figure out the best way to meet it.

The second is Purchase Requisition to Purchase Order, which involves an individual, team, or department needing products or services submitting a purchase requisition to the purchasing department or purchasing manager. The purchase requisition comprises all of the information needed to procure the commodities or services. Purchase requests that fall below budget criteria are converted to purchase orders automatically (Humphreys et al., 2004).

Approved- purchase orders are sent to accounting to ensure that funds are available in the proper budget to cover the desired goods and services. Requests for Proposal – Purchasing officers who gain budget approval return to the procurement department, where they are utilized to prepare requests for proposal, which are then sent out to vendors to elicit bids. Contract Negotiation and Approval -The vendor with the winning bid is then awarded a contract, which is further refined before signing to ensure optimal terms and conditions and to ensure a mutually satisfactory arrangement for both parties. Shipping and Receiving-The supplier delivers the goods or services within the agreed-upon timeframe. Once they've been received (in the case of goods) or performed (in the case of services), the purchaser carefully reviews the goods and services to ensure they've received what was promised, and notifies the vendor of any issues.

Three-Way Matching -A cornerstone of spend management, three-way-matching is the comparison of shipping documents/packing slips with the original purchase order and the invoice issued by the supplier. This comparison is used to ensure all the information related to the transaction is accurate. Invoice Approval and Payment-Successfully matched orders are



approved for payment. Once approved, payment is issued to the vendor. Ideally, such payments are made with the goal of capturing early payment discounts and other incentives while avoiding late payment fees. Accounting Records Update-Completed orders are recorded in the company's books, and all documents related to the transaction are securely stored in a centralized location.

### **2.1. 5, Evolution of strategic purchasing**

During the 1970's purchasing departments had a "more administrative than strategic" (Carter, 1996). It used to be a department solely handling buying orders for other divisions with its main aim to achieve maximum price reductions (Gadde and Hakansson, 1994). Even top management did not realize the importance of purchasing and its contribution to a firm's performance and regarded it as playing a passive role within the firm (Carter, 1996).

The idea of strategic purchasing began to emerge in the 1980s. But historically top management tended to view purchasing as having a passive role in the business organization (Ammer, 1989). During the 1980s a connection between organizational strategy and a company's performance was established. A previously operational and unimportant activity was now recognized as being tactical (Chen et.al 2004). But during the 1980s, purchasing began to hear that it was important to become involved in the corporate strategic planning process (Spekman and Hill, 1980).

By the 1990s, both academics and managers were giving much more attention to strategic purchasing. Articles were written that indicated how the purchasing process could be linked to corporate strategic planning (Watts et al., 1992) and the importance of purchasing involvement in strategic planning was often mentioned (Freeman and Cavinato, 1990; Pearson and Gritzmacher, 1990)

### **2. 1.6 Concepts of strategic purchasing**

As cited (Albert Kofi Assiamah; Court et al 1997), strategic purchasing "is the development of ways of approaching and interacting with the supply-market, taking account of not only the present situation but also how it might develop in the future". He explained further that, strategic purchasing is based on the belief that, the buyers can determine and change the supply-market within which they function. Strategic purchasing is a good corporate strategy to effectively buy products and services with a focus on quality, timely delivery, and a minimized price in order to help the company reach its objectives (Carr and Pearson, 2002).

Strategic purchasing as a tool for firm's competitiveness has a positive effect on the overall performance of the organization (Chen, Paulraj and Lado, 2005). Strategic purchasing by contrast looks at how the purchasing of goods and services, including outsourcing of entire processes, can deliver better long-term shareholder value. It involves reducing the supplier base, co-operative negotiation with suppliers, quality interaction with suppliers, and developing long-term relationships with the best suppliers (Hakanen, Schaufeli and Ahola, 2008). Nevertheless, these Strategic purchasing behaviors are linked to better purchasing performance (Zsidisin, Ellram and Ogden, 2003).

Strategic purchasing has two types that are :- **tendering processes**, which could help to obtain cheap, quality, quick and reliable product delivery; (Son *et al.*, 2019) and focusing company procurement from suppliers with whom the corporate has **good partner relationships** (Yoon and Moon 2019) to establishing long term mutual partnerships with a supplying company in order to reduce transaction costs.

Strategic purchasing plan are long term plan that contain; select and evaluate suppliers (Humphreys et al., 2004), reducing supplier lead time, develop closer relationship with supplier (Cullen et.al 2005; Petersen et al., 2005), improving post-purchase liaison - cost reduction, process improvement and warranty coverage (Monczka et.al.2016)

### **2.1.7 Purchasing and purchasing strategy**

**Strategy** is an action plan designed to permit the achievement of selected goals and objectives and if well-developed will connect the organization to the environment as part of the long-term planning process. Leenders and Fearon, (2008) According to him, "an overall purchasing strategy is made up of sub -strategies, each of which is developed by using all available information in the formulation of a plan directed at the achievement of a specific purpose".

Purchasing strategy therefore, from the point of (Court et al 1997; Carr and Pearson 1999), is concerned with identifying, selecting and implementing an overall change program designed to place the purchasing process at the heart of a business so enabling it to make the maximum contribution to corporate profitability while gaining a commercial competitive edge.

The author was also of the opinion that, purchasing strategy “is the foundation on which strategic purchasing is based”. Thus, purchasing strategy may be regarded as the foundation stone of strategic purchasing. Purchasing takes place in many diverse undertakings in both private and public organizations. The term purchasing is widely used in the private industry, while many public sector undertakings such as local authorities and district and regional health authorities use the term supplies (Lysons 2005). According to Court et al (1997), purchasing is “the process by which a company (or other organization) contracts with third parties to obtain the goods and services required to fulfill its business objectives in the most timely and cost-effective manner”

### **2.1.8 Strategic purchasing and purchasing strategy**

Strategic importance of purchasing has been acknowledged in recent years; Strategic purchasing is an integrated part of a company’s plan to reach its objectives. Strategic purchasing is a good corporate strategy to effectively buy products and services with a focus on quality, timely delivery, and a minimized price in order to help the company reach its objectives (Carr *et al.*, 2002).

According to Raaij and Wynstra, (2017) Purchasing managers are required to know the purchasing objectives, which then lead them to develop purchasing strategies based on costs, quality, delivery, and flexibility. Strategic purchasing involves developing a formal purchasing plan, reviewing and adjusting the plan to ensure the corporate entity reaches its goals (Carr *et al.*, 2002).

## **2.2. Elements of strategy purchasing**

Kiser (1976) and later transformed by (Janda, 2001). Kiser (1976) study offer six purchasing strategies such as negotiation, developing and maintaining good relations with suppliers, sourcing, developing suppliers, protecting the cost structure of company and minimizing cost (Janda, 2001) Development of these elements in purchasing strategies creates path for manufacturing excellence performance through manufacturing priorities with key focus on quality, cost, delivery, and innovation (Narasimhan and Das, 2001).

### **2.2. 1 Effective cost managements**

Strategic cost management is an externally focused process of analyzing costs in terms of the overall value chain. Cost analysis can be used to measure and improve cost performance by

focusing attention on specific cost elements. Cost management systems can be designed that depend on strategic partnering to achieve competitive advantage. Cost management is a major opportunity area for strong supply leadership and management. Cost management is a continuous improvement process. The focus is essentially on applying tools and techniques to sustain cost savings year over year. Supply leaders and managers must develop a cost culture rather than a price culture with multiple internal stakeholders and externally with suppliers. Cost management should be part of the standard operating procedure in every supply management organization (P. Jonso et al 2016).

### **2.2.1.1 Cost management tools and techniques**

Cost management techniques are addressed in this section: total cost of ownership, target pricing, Total Cost of Ownership; -the purchaser should estimate the total cost of ownership before selecting a supplier. Broadly defined, total cost of ownership for noncapital goods acquisition includes all relevant costs; a total cost approach requires the cooperation of engineering, quality, manufacturing, and supply to coordinate requirements such as specifications and tolerances that affect the supply decision. Early supplier involvement also is essential to ensure cost-effectiveness.

Target cost pricing; - Target pricing focuses the attention of everyone in the organization on designing costs out of products and services rather than on eliminating costs after production has begun or services have been delivered. Basically, in target pricing, the organization establishes the price at which it plans to sell its finished product, then subtracts out its normal operating profit, leaving the target cost that the organization seeks. The target cost is then further subdivided into appropriate cost sectors, such as manufacturing process, overhead, materials, and services. Supply becomes responsible for working with suppliers to achieve the materials and services target.

Every single percentage saving in purchasing cost can significantly contribute in saving half point in sales (Janda, 2001). This benefit contribution in purchasing function required focus on total cost managements as part of purchasing strategy influencing manufacturing performance. Total cost of ownership fundamental for strategic cost managements (Zsidisin, and Ellram, 2003).

## **2.2.2 Collaborative supplier relation and interaction**

The key element in purchasing strategy is to build collaborative relationship. Supporting element of buyer supplier collaboration as cultural element is made of trust, mutuality, information exchange, openness and communication (Carr and Pearson, 1999), Collaborative relationships demand for trust and commitment for long-term cooperation in addition to willingness to share risks (Humphreys, Li and Chan, 2004). Commitment and trust have been developed through effective communication. Collaboration is a very broad and encompassing term and when it is put in the context of the supply chain it needs yet further clarification. Barratt, (2016) has cited that many authors when talking about collaboration cite mutuality of benefit, rewards and risk sharing together with the exchange of information as the foundation of the collaboration.

Traditionally, purchasing was considered as a clerical function, where the relationships between suppliers and buyers tended to be adversarial but nowadays, many organizations are moving towards a more collaborative approach (Humphreys, Li and Chan, 2004).

Collaborative approach able to improve relationship efficiency between suppliers and buyers. Both sides communicate with each other and find possible improvements towards their relationship's maturity. Not every relationship is the same and it can be very different from one to another. So far there are not so many fixed frameworks for supplier relationship assessment though many discussions about it have been developed (Johnsen, et. al 2016).

### **2.2.2.1 Supplier relation**

Supplier development has also been acknowledged to be a critical element of collaborative buyer-supplier relationships and has been identified to play a critical role in improving a supplier's capabilities and performance (Krause, 1999; Krause et al., 2000) Supplier Relationships are essential in the process of strategic purchasing. Traditionally, purchase department tends to spread risks by choosing many suppliers for an item and let them compete against each other to attain cost deduction. Lately, fewer suppliers and strategic partnerships are emphasized thanks to their great collaborative benefits (Johnsen, et. al 2016).

Traditionally suppliers' assessments processes are operation perspectives, that similar to customer feedback of supplier. Organization review suppliers fulfill and perform during partnership and it will be submitted to the suppliers' feedback to improve their services. It's

focused on one-way approaches of buyers. However, suppliers' relationship of suppliers remained two parties to take part in reflective and evaluation process to the relationship. Generally, supplier relationship is it has big challenge, mutual communication and under performance from suppliers (Phan, 2016).

#### **2.2.2.2 Bases of supplier relation and interaction**

**Trust;** - An important factor in the positive interactions between supplier and buyer in purchasing is trust. (Gao *et al.*, 2008) explain the essence of trust in business: "mutual trusting behaviors and bilateral perceptions of trustworthiness must exist for a relationship to become stable and long lasting (Anderson *et al.*, 2014; Smith and Barclay, 1997)". In trusting relationships every party in the supply network has mutual confidence in the other members' capabilities and action (Handfield *et al.*, 2009). Mutual trust between buyer and supplier is necessary for a good relation. Literature suggests that, regardless of the level of analysis, trusting parties must be vulnerable to some extent for trust to become operational (Doney, Cannon and Hobbs, 1997; Gao *et al.*, 2008) designed a decision making influence model for purchasers where 3 factors influence the trust of the buyer in the supplier; perceived commitment, perceived supplier trust and perceived supplier dependence. The three are relational factors, which are building up out of their previous relationship.

Communication- can be defined as "the formal as well as informal sharing of meaningful and timely information between firms"(Anderson and Weitz, 1992),in (Morgan and Hunt, 1994).Communication is not only directly important for supplier development but also indirectly, via trust. Communication enhances trust by assisting in resolving conflicts and the alignment of expectations and perceptions. Also, high levels of trust improve communication between two parties. As communication is an important concept to take into account in a relation with a supplier, internal there should also be a good coordination (Hughes & Weiss 2009).

**Long-term commitment & Relation-specific Investments;** commitment can be an important driver or barrier for supplier development. A lack of commitment and frequently changing suppliers will not create a long-term buyer-supplier relationship. Long-term commitment can be demonstrated in many different ways. One of those is a long-term contract,

which is mentioned previously in this chapter. Another way to show commitment is via firm specific investments (Humphreys, et al, 2004) state that relation specific investments show a direct involvement of the buying company in the development of the supplier. ‘‘Relation-specific investments could make suppliers more willing to make customized items for customers, allow both parties to communicate more efficiently and hence result in shortened product development cycles and reduced procurement costs’’ (Dyer, and Singh, 1998) in Humphreys et al., 2004). Associated with long-term commitment, is also risk for the supplier and buyer because it requires resources and time that will not pay-off immediately.

**Shared Strategic Goals & Mutual benefits;** when a buying firm selects a supplier, the goal is that both parties have the same expectations of the cooperation/collaboration and the future growth and performance. Humphreys et al. (2004) argue that a close strategic match should be constructed between the buyer and supplier that grow capabilities and performance of both parties. Suppliers with improve capabilities and performance can serve the buying firm in many ways like cost advantages and improved quality. Supplier development is a process where mutual recognition is required. Supplier recognition can serve in 2 ways. First of all, it could be used as a motivational tool where suppliers improve their status in the market and therefore create new opportunities. Finally, ‘‘supplier recognition may mark the culmination of the supplier development effort with a particular supplier’’ (Krause, and Ellram, 1997).

### **2.2.2.3 Levels of supplier relationship**

Social capital reduces conflicts and enhances collaborative behavior through the creating a shared vision, trust and social ties. Consequently, they can lead to both operational and, more important, to strategic benefits for organizations. (Villena, et al.,2011).

**Long term adaptation-** e g Risk and reward sharing, Strategy alignment and sustainability compliance

**Short term exchange** - e.g. Good and money and Information / knowledge

**Relationship atmosphere** - Trust, Power / dependency and Cooperative and mutuality

The interaction model divides transactions in short- and long-term and highlights the importance of long-term adaptations for the buyer-supplier relationship. However, it only distinguishes between relationship lengths, but it does not describe and classify buyer-supplier relationships in

detail. On top of that, not all short- and long-term suppliers are the same or equally important to the buying firm (Johnsen et al., 2016).

#### **2.2.2.4 Classification of the buyer and supplier relationship**

This framework creates a stronger and deeper understanding of relationships between the buyer and suppliers, which is vital for effectively managing them. The four C's can be divided into 2 groups.

##### 1. Transactional relationship (counterproductive relationships & competitive relationships)

**Competitive relations** are win -lose relationships. Buyer and supplier only focus on their own profitability and compete for existing value instead of creating new value (Trent 2007). States that most buyer-supplier relationships should be competitive.

**Counterproductive** relationships are characterized by a lose -lose situation, where buyer and supplier are working against each other. These relationships are highlighted by short-term focus, conflict and nobody takes responsibility for whatever happens in the relationship. "This scenario not only fails to create new value, it is detrimental to short and longer-term success" (Trent, 2007,)

##### 2. Collaborative relationships (cooperative relationships & collaborative relationships)

Two win-win relationships: cooperative relationships and collaborative relationships are characterized by close interaction between buyer-supplier, long-term focus (long-term contracts) and there is a culture of open information sharing. There is a continuous interaction between buyer and supplier about how to improve performance (e.g., quality, costs, packaging and inventory management) (Trent, 2007).

According to, Mohanty & Gahan (2012) said that the buyer supplier relationship should be based on trust, power and dependency, capacity and capability of suppliers as well as their two-way communications. A better relationship between two parties will benefit both sides regarding profitability not only in the short-term but also long-term.

#### **2.2.3 Supply base managements**

"**Supply base** is a definition of the part of supply network which is actively managed and controlled by the buying company" (Choi & Krause, 2006). This means that the focal



organization manage, controls and buy from the suppliers on the supply side, including both suppliers directly and indirectly linked to the focal organization.

Thus, in order for organization to have an effective management and continuous development of its base, they must maintain the right number of suppliers. (Handfield *et al.*, 2009) outline that supply base optimization will contribute in cost, quality, delivery and information sharing improvement between buyer and supplier. Supply base optimization will be a continuous process which identifies the best suppliers in terms of number and quality.

To manage and control the suppliers the focal company, contracts must be concluded with the suppliers about purchasing products, components, raw materials and services. According to (Choi and Krause, 2006) the complexity of the supply base is an important managerial aspect,

**Dimensions of the supply base managements**, the number of suppliers in the supply base. Degree of differentiation among these suppliers and Level of relationships among the suppliers. (Choi and Krause, 2006) Say Buying organization focused on the supply base complexity dimensions. Complexity and decomposition of the supply has major impacts on the focal organization and affected highest of the costs, degree of the supply risks, supply responsiveness and degree of focal organization perceived the supply innovation (Johnsen et al, 2016). The supply base includes the number of suppliers where a focal organization buys from and the degree the characteristics suppliers differ with respect to the focal organization. Furthermore it is necessary that the focal organization reduces and optimizes the number of suppliers and buys higher quantities from only a few suppliers in order to reduce necessary (negotiation) costs and to be competitive (Choi and Krause, 2006)

### **2.2.3.1 Supplier selection**

The required number of suppliers and the degree suppliers differ from each other, the organization needs to decide on which criteria it will select the suppliers. These criteria are used to reinforce and improve the selection process (Vonderembse, and tracey1999).

According to Xia and Wu, (2007) however (Sarkis and Talluri, 2002; Ming-lang, Hsiang, and Lan, 2009) stated that selection of suppliers mainly based on the trade-off between the price, costs, quality and speed of delivery Price, costs, quality and delivery performance of Suppliers. In the modern approach different researcher not be agree the selection of the supplier criteria are

traditional way in the focal organization. In modern approaches that also keep the dynamic and competitive environment in account are needed. Cost or quality is no longer acceptable, current trend that leading organizations are mainly focusing on long-term relationship with only one key or few suppliers create an increase in dependency on those suppliers. These factors should be evaluated even more carefully before the buying company can select a suitable supplier (Minglang, Hsiang, and Lan, 2009)

### **2.2.3.2 Criteria of the supplier selection**

The criteria formulated by Kahraman, Cebeci, and Ulukan (2003) and Saunders (1994) formulated supplier selection criteria make use from both the traditional and modern, it is good starting point to evaluate different suppliers. These criteria are as follow:

**Financial:** The financial stability and strong economic performance in the past is needed for every form of partnership, especially long-term and trustful relationships. This way continuity and reliability of the partnership is secured and performance standards, the quality and the delivery of goods can be maintained.

**Organizational culture and strategy:** both parties able to share the same values and views towards the future. They perceive mutual trust and there is a strategic fit between both the focal organization and the supplier. Besides the degree of education & training, safety records, working environment for employees, supplier infrastructure, location of facility and legal circumstances are fields where the buying organization will look into as well. Especially in a global market where the suppliers around the world differ quite significantly on these matters. Furthermore, the global market is controlled by the international laws and regulations.

**Technical capabilities:** The suppliers should have the capabilities to provide a continuous and consistently flow of products, components and services according to the agreed level of quality, quantity, price and delivery. Furthermore, the ability of the supplier to meet the necessary future improvements, design changes and the speed in development are important aspect of the technical criteria. In case of a new purchase an ability to develop innovative and unique technology could be a criterion as well.

**Support resource:** The supplier its resources need to be adequate to support product or service development production and delivery. Criteria need to consider the supplier its

facilities, information systems and provisions for education and training. When considering international suppliers, a firm needs to carefully examine the industrial infrastructure that supports the supplier. With international suppliers, a firm also needs to establish appropriate mechanisms to handle financial transactions and product deliveries, as well as any related legal or regulatory matters ( Apostolova *et al.*, 2015).

#### **2.2.4 Purchasing skills**

Skills represent an ability obtained through practice or knowledge (Kolchin, and Giunipero, 1999). Skills that employees possess have been well-recognized as an important determinant of a firm's performance (Kolchin, and Giunipero, 1999). Purchasing skills are viewed as being critical in meeting a business's goals and ultimately rely upon the ability level of the purchasing manager (Carr and Smeltzer, 2002)

Purchasing skills play an important role for a company to acquire goods and services. Purchasing skills are closely related to good knowledge of products, buyers, suppliers and markets. Multi-dimensional knowledge and skills such as technical knowledge, interpersonal, analytical and managerial skills in good purchasing are considered key capabilities to obtain quick, cheap, quality products and services ( Cho *et al.*, 2019).

Purchasing skills are generally assessed based on product knowledge, combined with an ability to obtain and process information necessary for application to current market situations. The top ten skills included: communication; customer focus; an ability to make decisions; negotiations; analytical; conflict resolution; problem solving; persuasion; computer literacy, and leadership (Down and Liedtka 1994).

Purchasing professionals are expected to have specific training and are relied upon to provide a more in-depth analysis of sourcing decisions (Smeltzer ,1998). With increased skill and knowledge, purchasing professionals are more knowledgeable of supply market trends and the needs and desires of internal customers (Young, and Varble, 1997). In addition, through advanced training, purchasing professionals may be aware of new tools and techniques designed to increase the effectiveness and efficiency of their supply bases. The specialized knowledge may also be viewed as a scarce resource that improves political power within the organization ( Davenport et al., 1992).

## **2.3 Organization performance**

According to Chen et al., ( 2004) performances of the organization are measure by financial and operational performance. Financial performance is measured by looking operating performance of the organization. Efficient of the business organization can be measured by using operation performance, which means operation performance more directly on the effectiveness and efficiency of the business organization (Ya'kob and Jusoh, 2016).

According to Vij & Bedi, (2016), said business performance are measured by subjective and objective. Objective part is measured based on the secondary data such as financial ratio obtained directly from a regular financial report issued by management. While subjective assessment involves the evaluation using the primary data obtained from respondent through a questionnaire.

Mostly organizational performance is measured; Effectiveness refers to the extent to which the organization is achieving the outcome. **Efficiency** refers to the ratio of relevant outputs to relevant inputs and can include costs, steps in a process or time.

Organizational performance not only focusing on the financial indicators alone been exposed to the critics that other non-financial indicator which contribute towards organization performance been neglected and will only lead to short-term thinking. The competition in manufacturing industry might be within the radius of supply chain competence which consists of purchasing strategy. Performance of the manufacturing are measured in the in terms of quality, cost of production and rework, innovation , finish goods delivery and in addition consider the inventory level of work in production goods (Narasimhan, and Das, 2001; Farah, 2016).

## **2.4 Strategic purchasing and performance of the organization**

Defining appropriate purchasing strategies is important for firms, as strategies guide practices and processes and impact performance (Baier et al., 2008). Although the emphasis of purchasing has traditionally been on reducing costs and creating efficiencies, with the increasingly strategic role of purchasing and supplier management, buying firms consider additional competitive priorities such as innovation and sustainability in their purchasing strategies (Handfield et al. 1999 ; Krause et al. 2009 ; Pagell et al. 2010 ) . Surely, these competitive priorities differ at not only the overall purchasing function level but also the purchase category level (Luzzini et al.

2012; Terpend et al. 2011). For instance, although firms can focus exclusively on lower costs when purchasing office supplies, on-time delivery and availability might be more important in the purchase of spare parts. Alternatively, for a component with key functionalities for the final customer, the focus might be on innovation, which requires the purchasing function to invest in the development of collaborative relationships with innovative suppliers.

According to Carr & Pearson, (2002) strategic purchasing within organization is it have great roles for the decision-making process, strategic purchasing are the main tools for improving organizational performance and increase the profits by the cost reduction methods. In know a day strategic purchasing in the organization enables the organization to acquire the resources in fulfilling customer needs, (Audi, 2014).

Rossetti & Choi., (2005) said that favorable organization performance would be achieved with the presence of strategic purchasing function in the organization. Functions of purchasing are able to determine the effectiveness and efficiency of the organizational performance. That means the purchasing function are high contribution on the manufacturing performance through interfaced in quality improvement and innovation in new product development, (Narasimhan, and Das, 2001) added that purchasing function contribute substantial impact on manufacturing quality, delivery, and cost beside research and development on new product introduction and redesigning.

## **2.5 Empirical literature review**

The objective of this section is to present the empirical works done by various scholars within the country and across the world in connection with the relationship among strategy purchasing and organizational performance

Seshadri, (2001) Conducted research to establish link between the four purchasing strategy and purchasing performance. The results indicate purchasing managers increase effectiveness and efficiency of their purchasing efforts by cooperative negotiation with small base of suppliers and by establishing collaborative long-term oriented relationship with them, revealing the impression ability of the purchasing function to enhance shareholder value.

Study done by Assiamah, (2009) Conducted research to investigate impact of strategic purchasing on organization profit in Ghana Telecom Company. The purpose of this research is to describe how strategic purchasing impact on profitability. The researcher used qualitative research designed collected both primary and secondary data in order to fulfill the purpose of the paper. the conclusion of the study strategic purchasing approach to buying include multiple sourcing, short-term contracting and competitive bidding as a measure towards increasing its profitability by being able to source at the lowest cost, and having other sourcing alternatives, which leads to cost reduction.

Lawsona, et.al (2009) conducted research to examining the effects of strategic purchasing on a firm's inter-organizational supply management practices and performance. The purpose of this paper is to examine the effect of strategic purchasing on the supply management practices of socialization, supplier integration and supplier responsiveness, together with relationship performance. Used a structural equation model is used to test the theoretical framework. The finding of the study Strategic purchasing was found to have an indirect, significant effect on improving buyer performance, acting through supplier integration. Strategic purchasing also had a significant effect on the use of socialization mechanisms, but not on supplier responsiveness.

Guez, (2009) Investigate the Effect of strategic purchasing on supplier development and performance. Purpose of the study to introduce strategic purchasing and supplier developments have potential contribute to the success of relationship marketing efforts. Finding of the study

there is significant evidence to support the hypothesized model in strategic purchasing direct effect on supplier development practice and purchasing performance. Indirect impact on purchasing performance mediating through supplier development.

Thruhogachantar and Zailani, (2010) Conducted research is to validate a new measure for Purchasing Strategies in manufacturing industry Located in Malaysian major industrial zone. Finding of this study elements of strategic purchasing are very appropriate for measuring purchasing strategies. Correlation analysis result that purchasing strategies is more associated with manufacturing performance.

Thruhogachantar and Zailani, (2011) Conducted research to investigate relationship between purchasing strategy and organizational performance in Malaysia. Analyzes importance of purchasing strategies contribution on manufacturing performance, understanding purchasing function as key component in organizations. The study found that purchasing strategies significant positive impact on manufacturing performance. Contain the competitive priorities of the firms in term of quality, cost, cycle time, new product introduction time line, delivery speed and dependability.

Alafi, (2014) study on effects of purchasing strategy on manufacturing performance Jordanian qualifying industry zone. Aim of the study are improve manufacturing performance by determine strategic purchasing. The study examines 4 Jordanian industrial estates across the country using random sampling by using websites of qualified industry zone, the researcher found that buyer and supplier relation and negotiation strategy have higher positive and lower positive impacts on performance respectively. The results conclude strategic purchasing has significant positive impacts on manufacturing performance of Middle Eastern export manufacturing.

Farah, (2016) Conducted a study which aimed at studying the relation between the purchasing strategies and manufacturing performance in Malaysia. The results obtained reveal that purchasing strategies significant positive impact on manufacturing performance. The results are concluded strategic purchasing as navigator for excellent performance in current volatile market condition.

Gahan & mohanty, (2017), in their study on the buyer supplier relationship in manufacturing industry in India; the survey data on Likert scale of 78 experienced buyers on buyer supplier

relationship was analyzed. Descriptive statistic and Redit used for data analysis. To validate the data for Redit analysis Kruskal-Wallis test was conducted. The study found out that the Buyer supplier relationship largely depends upon four major aspects. They are strategic requirements of the organization, supplier performance, mode of operation and personal factors.

Semuel, et.al, (2018) conducted research to examine the mediating role of strategic purchasing on performance through negotiation strategy and buyer-supplier relationship. The findings of this research provided that buyer-supplier relationship and negotiation strategy mediate effect of strategic purchasing on organization performance. Strategic purchasing likewise influences organization performance directly. Negotiation strategy and buyer-supplier relationship influence organization performance and negotiation strategy have a more significant impact on organization performance than has the buyer-supplier relationship.

Eldin, et.al, (2019) conducted research to examine the effect of procurement practice on organizational performance in service sector. The research is explanatory research design, used structured questioner and semi structure interviews. Finding the results and findings are subject to be generalized to any educational service, as the researcher used the regression model fitted for the effect of Procurement Practices; Customer Orientation, Strategic Supplier Partnership, Information Sharing, Adoption of information technology, Reverse Logistics, Knowledge Management on organizational Performance.

Chepng'etich, et.al, (2020)the study to investigate the influence of strategic supplier relationship on the performance of the devolved system of government in Kenya; mainly the study adopted a cross-sectional survey design using both quantitative and qualitative approaches. In the study stratified random sampling technique has been used. Data was collected by using questionnaires. Descriptive and inferential statistics were used aided by Statistical Packages for Social Sciences version 24 to compute percentages of respondents' answers. Hypothesis testing was carried using multiple regression analysis and standard F tests. The finding of the research shows the existence of a positive and significant relationship between strategic supplier relationship and performance of devolved systems of government.

Marques Belo, et.al, (2020), Purpose of the study is Mediation Effects of Purchasing Strategy and Supplier Integration on the Relations between Purchasing Skills and Corporate Performance 105 restaurants in Dili. Data collected by using questioner and analysis SMART-PLS 3.0 partial



least square method. The findings revealed that purchasing skills had no significant impacts on corporate performance, while supplier integration fully mediated the relationship between purchasing strategy and corporate performance. By contrast, strategic purchasing has no significant impact on the relationship between purchasing skills and corporate performance.

**Fantazy, Mukerji and Francis,** Conducted research to examine the sequential relationships among the six factors: the strategic purchasing to supply chain capabilities in terms of (bilateral communications and information sharing, supplier relationships and involvement, and the number of partners and level of trust and organization financial performance and nonfinancial performance. A finding of the study has a significant positive effect on supply chain capabilities, and the supply chain capabilities have a strong positive effect on financial performance. However, strategic purchasing and supply chain capabilities have moderate effects on non-financial performance and strong effect on Financial Performance.

## 2.6 Conceptual frame work

In this study four elements of strategic purchasing (purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management) which are independent variables and organizational performance the dependent variable considered.

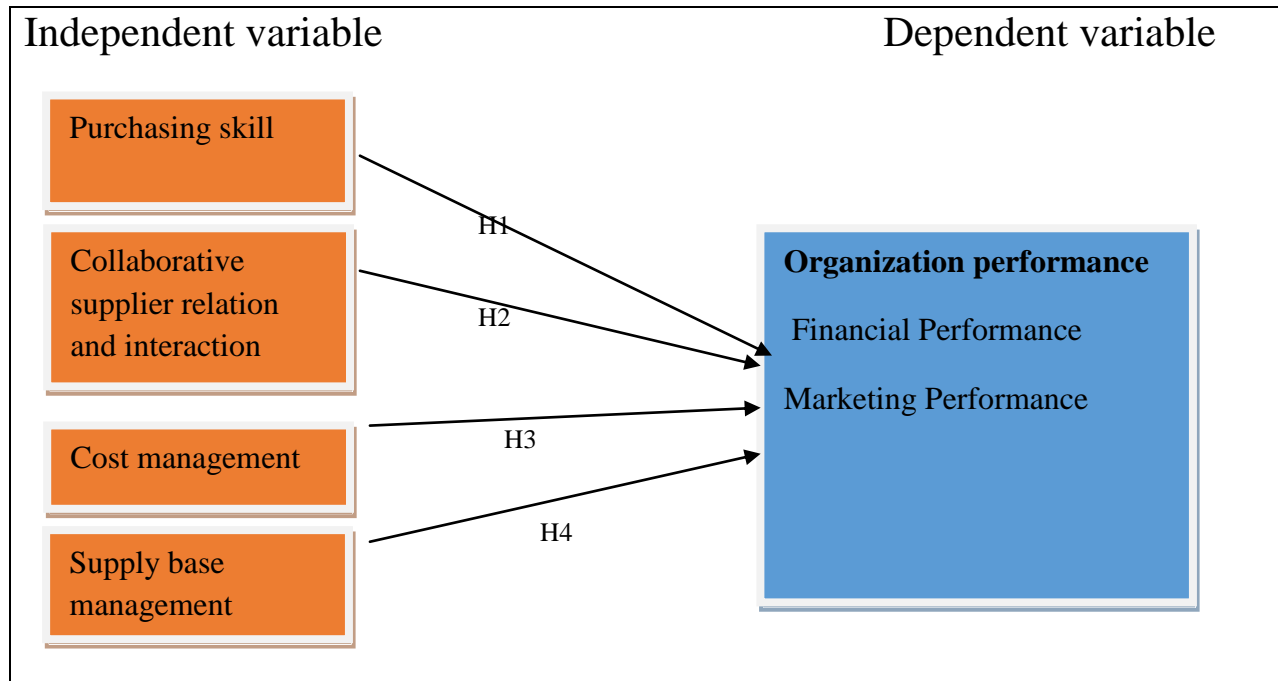


Figure 1: conceptual frame work

Source; Adopted Janda and Seshadri (2001) and own construct, (2021)

As a functional area in the firm, it is important to improve the performance of the function by employing highly skilled employees in order to improve the performance of the firm (Carr 2002). The following hypotheses are proposed to test this relationship.

### **Ha1: Purchasing skills significantly affect organization Performance**

Collaborative relationship and interaction components such as communication, trust, cooperation and adaptation have significant positive relationship with manufacturing performance elements such as quality, cost and delivery ( Fynes et al., 2005). Good relationships with suppliers add to firm's financial performance (Thrulogachantar and Zailani, 2010), the following hypotheses are proposed to test this relationship.

### **Ha2 Collaborative supplier relation and interaction significantly affect organization Performance.**

Buyer will have information and understanding of cost breakdown information by supplier interaction and its created strategic alliance with key suppliers to focus on cost drive eliminate hidden costs. Ellram, (2001) considering supplier cost are costing tools to assist firms in reducing overall manufacturing costs. The following hypotheses are proposed to test this relationship.

**Ha3: cost management significantly affects organization Performance**

Supply base contribute to performance improvement and in addition add value to buyer supplier relationship ( Monczka *et al.*, 2004). supplier selection criteria and supplier involvement are positively correlated with manufacturing performance (Tracey and Tan,2001). The following hypotheses are proposed to test this relationship.

**Ha4: supplier base management significantly affects organization Performance**

# **CHAPTER THREE**

## **3 RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Research design**

The study employed Cross-sectional research type. This helps to study within a particular time frame and helps the researcher to estimate the prevalence of an outcome and acquire an overall view of the research objective.

The researcher uses explanatory and descriptive research designs. According to Mugenda (2003) explanatory research approach uses to examine the effect of one variable on another which is to establish a cause and effect relationship. Under this study, the explanatory research approach shows the effects of strategic purchasing on organization performance. Descriptive used to describe purchasing practice of organization and characteristics of a population or phenomenon being study.

### **RESEARCH APPROACH**

This study used quantitative and qualitative data; the quantitative research approach basically provides facts and figures about phenomena and involves statistical analysis (Ticehurst, 2000). Under the quantitative research method of data collection, a standard questionnaire with modifications to fit the context of the study was used to collect data for this study. The questionnaire is a data collection instrument that used to collect data from the respondents through quantitatively and use the measure with numbers. The results of qualitative methods are more descriptive of the current organization practice and to support the quantitative result.

### **3.2 Source and types of data**

Data collection involves gathering relevant and important data use for conducting particular research work. It is the basis for acquiring data. The study collected data from two sources; primary source obtained selected employees in the Brother and biscuit factory (manager, purchasing officer and employee, finance director and administrative) because it's have known and understanding about purchasing activity of the organization, whereas the secondary source

of data collected from different sources like, organization reports and manual, library books and internet, previous studies, and journal articles.

### **3.3 Target population**

The target populations of the study are managers, chief purchaser officer, finance director and administrative, purchasing department employees. The total number of target populations is 93 ( manager , purchasing officer and employee , finance director and administrative). So, the researcher was conducted a census survey. If the target population is less than 100 it is important to use census methods. Conducting a census survey to increase the data reliability and representativeness.

### **3.4 Data collection methods**

The study used a Questionnaire and interview, interview designee for managers and purchasing officers. The questionnaire is a major method of collecting a large amount of data from a sample population in an economical way ( Cooper & Schinder 2006).The questionnaire was designed in a way that the respondents were able to understand and answer the questions faster. The questioner has four parts, part one to gather data on the demographic information of participants; part II interview question for employee, part III collects data for the independent variable, and the last one for the dependent variable. To gather data five-point Likert scale (5-Strongly Agreed, 4- Agree, 3 – neutral, 2- Disagree, 1- Strongly Disagree). Purchasing skill , Effective cost managements questioner respectively adopted from (Cho *et al.*, 2019) (Janda and Seshadri 2001) 6 questioners. Supply Base Management and Collaborative Relationship and Interaction 6, 6 questioners respectively adapted from (Janda and Seshadri 2001; Chiag *et al.*, 2004; Kannan and Tan 2003) organization Performance 5 questioner adapted from ( Das and Narasimhan 2000). The interview method used for qualitative research methods and find answers to the “why” “what” and “how” questions.

### **3.5 Method of data presentation and Data analysis**

The collected data were first checked for its consistency, completeness, missing, and other errors before the entry process. The data coding makes ready the complete and correct questionnaire for analyzing process. A data entry template was organized and data entered into the appropriately designed program for analysis. Data were Feld into SPSS (statistical package for social science)

to analyze collected data for easy analysis. Sorting and coding of data and both descriptive statistics and inferential statics were used in data analysis. The results were summarized and presented by charts, graphs, and tables after analysis and computation of the data. The descriptive analysis technique uses to analyze the data by using, percentage, mean and standard deviation. The study also uses the inferential analysis technique Pearson correlation to analyze the relationship between strategic purchasing and organization performance. Pearson correlation analyzed uses to establish whether there exists a significant association between strategic purchasing and organization performance in the Brother Flour and biscuit factory Adama.

### **3.6 Model specification**

Multiple linear regression analyses are a major statistical tool for predicting the unknown value of something a variable from the known value of two or more variables. It is about finding a relationship between variables and forming a model. Because the study is explanatory and has one dependent variable and more than two independent variables and the dependent variable is a continuous variable (Tranmer et.al 2020).

The model was developed using four explanatory variables or predictors, which have influences on organization performance. Multiple linear regression models used since model specification help to observe the effect of each independent variable on a dependent variable.

The Mathematical Model of multiple regressions below can be used to determine the quantitative relationship between the variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where Y = organizational performance

$\beta_0$  = Constant

$\beta_1$ -  $\beta_4$  = Coefficient of independent variables

X = Independent variables

$\epsilon$  = Error term of the model

Table 3.1: Model specification of variables

S.No	Predictor variable(x)	Beta Coefficient	Predictor x-value assigned
1	Purchasing skill	$\beta_1$	X <sub>1</sub>
2	Collaborative supplier relation and interaction	$\beta_2$	X <sub>2</sub>
3	cost management	$\beta_3$	X <sub>3</sub>
4	Supply base management	$\beta_4$	X <sub>4</sub>

Source; Research survey, (2021)

### 3.6.1. Definition and Measurement of Variables

Even though it is difficult to skim thorough all research works in this area of interest, a few researchers have used limited sometimes similar variables. Based on the review of those researchers work, the strength of the variables, availability of data and fitness to a specific model, accordingly, the following variables are selected and included in the study.

#### 3.6.1.1. Dependent variable

**Organization'** an organization is an organized group of individual with a specific purpose.

**Performance** is the process or action of performing a function or task. We perceived it regarding how successfully the person carries out that function.

According to business dictionary .com, **organization performance** is “an analysis of a company’s performance compared to its goals and objectives”

#### 3.6.1.2. Independent variables

**Strategic purchasing** - is a good corporate strategy to effectively buy products and services with a focus on quality, timely delivery, and a minimized price in order to help the company reach its objectives (Carr and Pearson, 2002).

**Purchasing skill**- Purchasing skills are closely related to good knowledge of products, buyers, suppliers and markets.

**Collaborative supplier relation and interaction** - relation between two party mutuality of benefit, rewards and risk sharing together with the exchange of information as the foundation of the collaboration.

**Cost management** - cost management is an externally focused process of analyzing costs in terms of the overall value chain.

**Supply Base Management (SBM)** is a systematic dynamic **approach** for strategically managing the whole **supply base** which might include current suppliers, minor suppliers and potential

suppliers (Melnyk et al., 2009) they must maintain the right number of suppliers. Identifies the best suppliers in terms of number and quality.

### 3.7 Reliability and validity test

Reliability is the degree to which a measurement is consistent with similar results over time. That is, the tendency to obtain the same results if the measure was to be repeated by using the same subjects under the same conditions (Siniscalco, 2005). Measurements that lack reliability also lack validity. Reliable measurements show stability when tests are repeated with similar outcomes (Ojo, 2003).

Reliability of the research instrument involves the consistency of the result obtained with the instrument and if the instrument gives similar, close or the same result if the study is repeated under the same assumptions (Osuagwu, 2006). For Cronbach's alpha test; this is relating each measurement item with the other measurement item so as to obtain the average inter relationship for all the paired associations. Cronbach's alpha method of reliability is for measuring the reliability of this research work (Ojo, 2003). The literature reveals that acceptable reliability should fall between 0.70 and above, however 0.60 may be acceptable. A high value of Cronbach's alpha test means that the stability, reliability and certainty of the instrument used in measurement is very assured (Singh & Masuku, 2014). Reliability of the instrument was enhanced through a pilot study conducted in firm by randomly selected Respondents. For the pilot study the research taken 27% of the sample size which means 27% of 93 are 25 employees of firm was taken to the pilot study. A Score above 0.7 will accepted.

**Table 3.2** Measure of internal consistency-Cronbach's alpha

Dimension	No_of item	Cronbach's Alpha	Remark
<b>Purchasing skill</b>	6	0.762	Reliable
<b>Collaborative supplier relation and interaction</b>	6	0.837	Reliable
<b>Cost management</b>	6	0.806	Reliable
<b>Supply base management</b>	6	0.802	Reliable
<b>Organizational performance</b>	5	0.809	Reliable
<b>Entire Cronbach's alpha</b>	29	0.813	Reliable



Source: Research survey, (2021)

As shown above in the table 3.2, all dimensions Cronbach's alpha is above the cut of point 0.7. The lowest Cronbach's alpha registered is 0.762 (purchasing skill) and the highest is 0.837 (collaborative supplier relation and interaction). Therefore, it can be inferred that all measures are internally consistent. Accordingly, the questionnaires were distributed to sample respondents.

## **Validity**

According to Bhattacharjee (2012), validity refers to the extent to which a measure adequately represents the underlying construct that it is supposed to measure. In other words, it measures how well a set of variables or items measures a single, one-dimensional latent aspect of individuals (Prasad, 2016). Validity concerns the degree to which a question measures what it was intended to measure (and not something else). Siniscalco, (2005) the validity of the questionnaires was checked with the advisors, experts of the field and based on the test the relationship between the measure and the underlying trait is accurate.

## **3.8 Ethical Considerations**

In this study ethical issues considered which include seeking permission, keeping privacy, and keeping the secret of the respondents during the data collection period. In addition to this, the researcher is raise awareness about the purpose of the study to the respondents and ensures voluntary participation, as it is only for academic purposes only. To protect the research participants, the researcher were careful to be driven by general research ethics.

# CHAPTER FOUR

## 4. RESULT AND DISCUSSION

The collected data has been analyzed and interpreted under this chapter; it presents the sample profile firstly, followed by descriptive statistics of the using percentage, frequency distribution, mean and standard deviation. Pearson correlation analysis conducted to show the relationship between the variables. Finally, the result of multiple linear regression analysis is conducted to test the hypothesized model and the results are interpreted.

### 4.1. Response rate

The researcher distributed 93 copies of the questionnaire to the respondents. Out of 93 questionnaires distributed, 82 of which are 88% are filled and returned. This indicates that the response rate is acceptable and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting rate of 70% and over is excellent.

Table 4.1: Response Rate of the Questionnaire

<b>Category</b>	<b>Questioner distributed</b>	<b>Questioner response</b>	<b>Response rate (%)</b>
manager	7	5	5
Head of finance and administrative	18	15	18
Purchasing officer	16	14	17
Purchasing employee	52	48	58
<b>Total</b>	<b>93</b>	<b>82</b>	<b>88</b>

Source; Research survey, (2021)

## 4.2 Demographic Descriptions

This section discusses the respondent's gender, age, work position, year of experience, educational level. These social attributes are relevant to the study since they enabled the respondent to provide information that is valid, reliable and relevant to the study.

Table 4.2 Backgrounds of the respondent

			Percentage %	Frequency
Item no 1	Gender	Male	67.1 %	55
		Female	32.9 %	27
		Total	100 %	<b>82</b>
Item no 2	Age	20-30	6.1 %	5
		31-40	46.3 %	38
		41-50	36.6 %	30
		Above 51	11 %	9
		Total	100 %	<b>82</b>
Item no 3	Education qualification	Certificates	8.5%	7
		diploma holders,	18.3%	15
		degree holders	62.2%	51
		Masters holder	11%	9
		Total	100%	<b>82</b>
Item no 4	Work position	Manager	7.3%	6
		Finance director and administrative	14.6%	12
		Purchasing officer	20.3%	17
		Purchasing employee	57.3%	47
		Total	100%	<b>82</b>
Item no 5	Year of experience	< 2	17.1%	14
		3-5	35.4%	29
		>5	47.6%	39
		Total	100%	<b>82</b>

As per table 4.2, item no 1 the demographic profile of the respondents is described as follows indicates 67.1 % of respondents were male while the remaining 32.9% were female. This shows that the majority of the employees of the factory are male while the remaining was female. This indicates the factory not encourage females to participate.

According to table 4.2 , item no 2 above, the higher frequency of age group of the respondents accounted within the ranges of 31-40 years as 38(46.3%) of the total respondents. Age 20-30 years reported as 5(6.1%). The age between 41-50 years reported as 30 (36.6%) and Age above

50 years was reported as 9(11%). All most majority of the age of employees 31-50 (83 %). This result indicates most of the employees young and adult, the factory has good manpower, it has good understand of purchasing strategy and able to achieving purchasing activity.

As the above table 4.2, item no 3 indicated that 51(62.2%) of the respondents are first degree holders, 15 (18.3%) of the respondents are diploma holders, 9 (11.0%) of the respondents are master holders, 7(8.50%) of the respondents are certificates. So, the majority of the respondents are bachelor's degree holders. This implies the factory hiring qualified employees and the employee has good understanding of purchasing strategy than certification and diploma qualification of employee.

As table 4.2 above, item no 4 the working position of the respondents are, 47 (57.3%) of the respondents are found in purchasing employee, where 17 (20.7%) of the respondents are working in purchasing officer, were 12(14.6%) of the respondents are work on the head of finance and administer and the remaining 6(7.3%) of the respondents found in the management position. So, the result indicate that majority of the respondents were working in purchasing. This indicates most of the respondents it has a good understanding of the purchasing area so it is important for the reliability of data.

The above table 4.2, item no 5 indicated that 39(47.6%) of the respondent above five years, 29(35.4%) of the respondents from three- five years, 14 (17.1%) of the respondents are less than three years. As per the result, near to 50% of the respondent have more than 5 years of experience. This indicates the respondents it has experience for all purchasing activities, and activities of purchasing are done by an experienced employee.

## **4.3 Qualitative analyses**

### **4.3.1 What are the procedures of purchasing?**

According to interview result from purchasing officer and managers, purchasing procedures in the factory start with the recognition of the needed materials for an item by the head of the department within the factory (operation finance, marketing, engineering, etc...) the need may be satisfied by a transfer of materials from the factory's warehouse.

The purchasing officer pointed out that, once the need becomes recognized, it would be accurately described. The head of the purchasing department often makes sure that the personnel at purchasing department have a comprehensive knowledge of the materials and their function in the organization.

The purchasing officer explained that the next step in the purchasing procedure is the selection of suppliers for the requisition. During the selection of the various suppliers to supply the requisition needed brother flour and biscuit factory, personal interviews, financial stability, etc. by the purchasing personnel is checked to help select the appropriate suppliers. According to the purchasing officer, during the selection process, price, quality, delivery and speed etc. performance is a major consideration and that the method of determining price is direct negotiation.

Purchasing officer presents the purchase order to the selected supplier and restricted to sign and place purchase orders that commit brother flour and biscuit factory to the expenditure of funds. The supplier delivers the item to the store. The purchasing personnel make a follow up to ensure that the supplier has received the order; finance prepares the Money for payment, manager makes the payment Purchased items shall be dispatched to users.

#### **4.3.2 What is the Process of purchasing?**

According to the factory manual, The purchasing process of the factory, include; identify the required items, proper selection of suppliers, ascertainment of delivery, inspection of documents on incoming shipments to ensure quantity and quality compliance, development of procedures etc. in order to develop an effective communication with top management and ensure a complete appraisal of the performance of the purchasing function.

#### **4.3.3 What are the challenge and problem of purchasing in your organization?**

In food industry quality and safety-critical and checked strictly. In brother flour and biscuit factory challenge is no common supplier selection criteria .It have two main challenge are mutual communication and under-performance from suppliers. Secondly, communication between suppliers especially for some supplier is still an area to be improved

The purchasing staff is responsible for a number of duties one of this is making a well-established relationship with suppliers, so that the quality of the purchased items will be retained. The forms of purchasing that are filled by different departments (finance, marketing, operation etc.) are not filled properly, as a result the purchaser misunderstood the departments order and the purchased item might not be as intended. According to the factory manual, the purchasing process in the factory, include; proper selection of suppliers, ascertainment of delivery, an inspection of documents on incoming shipments to ensure quantity and quality compliance, development of procedures, etc. in order to develop an effective communication with top management and ensure a complete appraisal of the performance of the purchasing function.

#### 4.4. Description of study variables

This part of the analysis–made based on survey questionnaires gathered from 82 respondents using a 5-point Likert scale. The study has four independent variables: purchasing skill, collaborative supplier relation and interaction, cost management and supply base management, performance as a dependent variable. The analysis employed by using mean and standard deviation.

Accordingly, the study applies mean and standard deviation as the best measures for analysis based on the mean range developed by (Al-Sayaad et al. 2006, cited in Bassam, 2013) of the following table:

**Table 2.2:** Five Scaled Likert Criterion

No	Mean range	Response option
1	1 to 1.80	Strongly disagree
2	1.8 to 2.6	Disagree
3	2.6 to 3.4	Neutral
4	3.4 to 4.20	Agree
5	4.2 to 5.00	Strongly agree

Source: (Al-Sayaad et al. 2006, as cited by Bassam, 2013).

Standard deviation is a widely used measurement of variability or diversity used in statistics and probability theory. It shows how much variation or "dispersion" there is from the average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values. The sample mean is to show the majority of respondents as best predictors of the population and hence to infer for others.

Table 4.3 Descriptions of purchasing skill

No	Purchasing skill	SD%	DA%	N%	A%	SA%	Mean	St.D
1	I work well with our suppliers.	5	11.5	25.5	43	15	3.72	1.149
2	I am able to maintain a positive relationship with our suppliers.	3	14	20	51	12	3.84	1.170
3	I am able to Adjust our business activities to meet purchasing plans.	8	20	24	29	19	3.2	0.955
4	I communicate well with our suppliers about products needed by our factory	4	11	18	47	20	3.98	1.042
5	I am able to identify purchasing problems and solve.	12	19	24	35	10	3.4	1.042
6	I am able to analyze purchasing options and their impact on our organization	9	16	14	41	20	3.80	1.149
	Average mean						3.65	1.08

Source research survey 2021

As shown from table 4.3 the average mean score of response of the respondents for purchasing skill is 3.65 and it is within the range of 3.4 and 4.2 it indicates that the respondents were agree.

This shows the employees' purchasing skills of factory are good. Based on the data collected from respondent results are show purchasing skill of the employee are good in the brother flour and biscuit factory ADAMA

Table 4.4 Descriptions of Collaborative supplier relation and interaction

<b>No</b>	<b>Collaborative supplier relation and interaction</b>	<b>SD %</b>	<b>DA%</b>	<b>N%</b>	<b>A%</b>	<b>SA%</b>	<b>Mean</b>	<b>St.D</b>
<b>1</b>	Retain the same supplier(s) for more than two years	4	15	20	39	22	3.85	1.008
<b>2</b>	Present strategic information to suppliers	9	19	17	34	21	3.94	1.04
<b>3</b>	Supplier willing to share confidential information	12	19	24	31	14	3.77	1.09
<b>4</b>	Knows the strength and weakness of our supplier	7	11	28	32	22	2.6	1.13
<b>5</b>	Perceives that our supplier is perfectly honest and truthful	4	21	20	39	16	3.94	.986
<b>6</b>	Feels our supplier as part of the business partner in this relationship	9	17	20	33	21	3.94	1.023
	<b>Average mean</b>						<b>3.66</b>	<b>1.03</b>

Source; Research survey, (2021)

As it can be seen from Table 4.4 Regarding Collaborative supplier relations and interaction average mean score of respondents is 3.66 and standard deviation 1.03, this Implies that respondents agree on the performance. This indicates organization it has a good relationship with the supplier of the factory and not be effectively know the strengths and weakness of suppliers



Table 4.5 Descriptions of Cost management

No	Cost management	SD%	DA%	N%	A%	SA%	Mean	St.D
1	Control of suppliers on price increases	7	21	18	36	18	3.89	1.1
2	Control internally on Order processing costs	9	14	12	41	24	4.09	.958
3	Provide target costing for suppliers to be meet	15	19	15	31	20	3.85	1.090
4	Minimize the storage and transportation cost	12	24	21	32	11	4.06	.937
5	Measurement on Supplier's ability to eliminate waste as cost reduction	4	12	19	40	25	3.84	1.170
6	Make or buy decision through cost measurement	8	19	20	31	22	4.11	.956
	Average mean						3.97	1.03

Source; Research survey, (2021)

As it can be seen table 4.5 finding on cost management the average mean and standard deviation 3.97 and 1.03 respectively. This implies respondents agree cost management of the factory are good and effectively manages and control cost system of the organization.

Table 4.6 Descriptions of Supply base management

No	Supply base management	SD%	DA%	N%	A%	SA%	Mean	St.D
1	Deal many suppliers for the item	6	18	28	28	20	3.9	1.151
2	Prefer to purchase from single source	8	14	28	31	19	4.1	.931
3	Purchase items from many suppliers in one location	10	20	18	36	16	3.9	1.117
4	Avoid supplier	12	19	14	43	12	3.7	1.120

	dependence							
5	Provide training support to suppliers' as part of supplier development	25	19	35	10	11	2.7	.975
6	Involve suppliers' on the new product development	15	18	23	30	14	3.4	1.079
	Average mean						3.62	1.07

Source; Research survey, (2021)

As it can be seen table 4.6 the averages mean of supply base management 3.32 and standard deviation 1.07, this indicates the factory has good supply management capability and has good supply network but the factory not gives train for suppliers

Table 4.7 Descriptions of organizational performance

No	Organizational performance	Mean	St.D
1	The company has been able to meet its cost reduction goals,	3.73	1.06
2	The company has been able to meet its quality improvement goals	3.78	1.187
3	The company has been able to meet its customization responsiveness goals,	3.82	1.268
4	The company has been able to meet its delivery goals in term of delivery speed and dependability	3.95	1.164
5	The company has been able to meet its manufacturing cycle time reduction goals	3.98	.940
	Average mean	3.85	1.09

Source; Research survey, (2021)

As able 4.7 shows, the average mean score of response of the respondents for the dependent variable organizational performance is **3.91** and it is within the range of 3.4 and 4.2 , its indicates

that the respondents are agree about the performance of organization perform well generally the performance of the organization are its good.

#### **4.5. Inferential analysis**

Inferential statistics is finding something about a population from a sample taken from that population (Marchal, & Wathen, 2006). Correlation refers to a synonym for association or the relationship between variables. It measures the degree to which two sets of data are related. A higher correlation value indicates a stronger relationship between both sets of data (Coetzee, 2003).

In this section Pearson's Product Moment Correlation Coefficient, multiple linear regression analyzed computed with the help of these statistical tools, conclusions are drawn with regard to the sample, and decisions are made with respect to the research hypothesis.

Person correlation coefficient analyzes the relationship between the variables, independent variables (purchasing skill, collaborative supplier relation, and interaction, supply base management, and cost management), and dependent variable organizational performance the multiple linear regression analysis the effects of independent variables (purchasing skill, collaborative supplier relation and interaction, supply base management and cost management) on dependent variable organization performance.

##### **4.5.1 The relationship between variables**

Inter-correlations coefficients ( $r$ ) were calculated by using Pearson's Product Moment. The output of the correlation matrix can be the correlation coefficient that lies between -1 and +1 within this framework, a correlation coefficient of +1 indicates a perfect positive relationship, and a correlation coefficient of -1 indicates a perfect negative relationship; whereas a coefficient of 0 indicates no linear relationship. Moreover, the two variables are causally related which means that one of the variables is independent and the other one is dependent; and a large number of independent causes are operating in both variables so as to produce a normal distribution (Kothari, 2004). Stating only the relationship is not enough as it may involve both dimensions from zero (negative, zero itself, or positive). Therefore, to know the strength and

type of correlation between variables, the following table is set as a rule of thumb for discussion of this study.

Table 4.8: Rule of Thumb for about the Strength of Correlation Coefficients

Range of Coefficient	Description of Strength
±.81 to ±1.00	Very strong positive (negative) correlation
±.61 to ±.80	Strong positive (negative) correlation
±.41 to ±.60	Moderate positive (negative) correlation
±.21 to ±.40	Weak positive (negative) correlation
±.00 to ±.20	None

Source: Bhattacharjee, (2012)

Table 4.9 Pearson correlation analysis result

Correlations							
Number			Purchasing skill	Collaborative supplier relation	Cost management	supplier base management	Organization performance
Item No 1	Purchasing skill	Pearson Correlation	1				
		Sig. (2-tailed)					
		N	82				
Item No 2	Collaborative supplier relation	Pearson Correlation	.706**	1			
		Sig. (2-tailed)	.000				
		N	82	82			
Item No 3	Cost management	Pearson Correlation	.530**	.539**	1		*
		Sig. (2-tailed)	.000	.000			
		N	82	82	82		
Item No 4	Supplier base management	Pearson Correlation	.573**	.518**	.524**	1	.
		Sig. (2-tailed)	.000	.000	.000		
		N	82	82	82	82	
Item No 5	Organization perform	Pearson Correlation	.548**	.642**	.543**	.701**	1
		Sig. (2-tailed)	.000	.000	.000	.000	

	ance	N	82	82	82	82	82
**.. Correlation is significant at the 0.01 level (2-tailed)							

Source; Research survey, (2021)

According to the above table 4.9, item number one there is a significant positive relationship between purchasing skill and organization performance ( $r=.548$   $p<0.01$ ). According to Bhattacharjee the magnitude of the correlation, there is a moderate and positive relationship between purchasing skill and organization performance. Hence, when the purchasing skill is high, organizational performance is also high. The findings of this study concur with (Carr and Smeltzer, 2002; Cho *et al.*, 2018) purchasing skill was strongly positively correlated with organizational performance.

According to the above table 4.9 item number two, there is a significant positive relationship between Collaborative supplier relation and interaction and organization performance ( $r = .642$   $p < 0.01$ ) according to Bhattacharjee the magnitude of the correlation, there is moderate and a positive relationship between collaborative supply relation and interaction and organization performance. The finding was consistent with (Thruлогachantar and Zailani, 2010; Farah 2016) the study found that there is a significant relationship between collaborative supplier relations and organizational performance

According to the above table 4.9, item number three, there is a significant positive relationship between cost management and organization performance ( $r=.543$   $p<0.01$ ). According to Bhattacharjee the magnitude of the correlation, there is moderate and positive relationship between cost management and organization performance. The findings of this study concur with (Zsidin and Ellram,2011) cost management was strongly positively correlated with organization performance.

According to the above table 4.9, item number four, there is a significant positive relationship between supply base management and organization performance ( $r=.701$   $p<0.01$ ). According to Bhattacharjee the magnitude of correlation, there is a strong positive relationship between supply base management and organization performance, because of the positive value for the correlation coefficient. When the supply base management is high, organization performance is also high. The study concurred with (Farah 2016) the study found that there is a significant relationship between supply base management and organization performance.

## **4.5.2 Regression Analysis of the Study**

The regression analysis is an inferential statistic used to see how far the dependent variable can be explained from the various independent variables. Under this study regression analysis is used to see how far the organization performance can be explained by the strategic purchasing elements i.e., purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management. To test the hypotheses set of the model, there is a need to find out if the independent variables are significant predictors of the dependent variables. Also, with regression analysis, it can be determined whether the independent variables explain a significant variation in the dependent variable, including whether a relationship exists That is, the strength of the relationship. In regression analysis, this is measured by Adjusted R and R<sup>2</sup> (Aiken, 2012). This study Employed is better multiple linear regressions.

### **4.5.2.1 Assumption Tests**

The multiple liner regression analysis assumption includes assumption of sample sizes , normality , multi- collinearity , homoscedasticity , linearity and independence of residuals and crucial to confirm them ( Olive 2017).

#### **Assumption 1- sample size**

The common rule of thumb floating about the sample size in standard linear regression is fifteen (15) cases of data per predictor (Field study, 2009). According to (Green, 1991 as cited in Field 2009) to test the overall model the recommended minimum sample size of  $N=50+8k$ , where k is the number of independent variables. Taking into account these four (4) number of independent variables in the present study;  $50+8(4) = 82$  which is less than observed respondents i.e.  $50+ 8(4) = 82 < 93$ . Based on the criteria, the respondents exceed the minimum to run the standard multiple linear regressions.

#### **Assumption 2 – Multi-collinearity of the variables**

According to Field study (2009) Multi-collinearity can be checked by correlation matrix and Variance Inflation Factors (VIF). A correlation matrix is used to ensure the correlation between independent variables (Explanatory variables) to identify the problem of Multi-collinearity. When two of the explanatory variables in a model are highly correlated we say that they are

collinear (Tranmer 2020). In other hands, correlation matrix computing a matrix of Pearson's bivariate correlations among all independent variables and the magnitude of the correlation coefficients. Whereas the Variance Inflation Factors (VIF) of the linear regression indicates the degree that the variances in the regression estimates are increased due to Multi-collinearity. As Hair et al. (2006) argued that correlation coefficient below 0.80 may not cause serious Multi-collinearity problem.

The result in table 4.9 above shows that, there is a correlation among the independent variables and the coefficient of correlation (r) ranged from .543 to .706 values. From those coefficients of correlations (r) the highest correlation is 0.706 and it is less than the stated standard by Hair et al. 2006 So, it can be concluded as there is no Multi-collinearity problem among the independent variables in the model.

Table 4.10: Collinearity Statistics

Independent variables (from)	Dependent variable (To)	multi-Collinearity Statistics	
		Tolerance	VIF
Purchasing skill	organization performance	.718	1.223
Collaborative supplier relation and interaction	organization performance	.555	1.803
Cost management	organization performance	.621	1.611
Supply base management	organization performance	.643	1.55

Source; Research survey, (2021)

- Dependent Variable: organization Performance
- Independent Variables: purchasing skill, collaborative supply relation and interaction cost management and supply base management

The Collinearity statistics shows Variance Inflation Factors (VIFs) ranged from 1.223 to 1.803 and tolerance values ranged from 0.555 to 0.718 as described in table 4.10 above,

As stated by Field (2005) the Variance Inflation Factors (VIF) of the linear regression indicated the degree that the variances in the regression estimates are increased due to Multi-collinearity and VIF values higher than 10.0 shows as there is Multi-collinearity problem. On the other hands, as stated by Pallant (2007) Tolerance is a statistical tool which indicates the variability of the specified independent variable from other independent variables in the model and it has no

Multi-collinearity problem if the tolerance is greater than 0.10 values. The results of Tolerance and VIF suggest that Multi-collinearity is not suspected between the independent variables because the values of Variance Inflation Factors (VIF) are below 10 while the tolerance values are above 0.10.

### Assumption 3 – Normality test

Table 4.11 statistical Test of normality

<i>Independent variables</i>	<i>Descriptive</i>						<i>Test of normality</i>
	<i>Skewness</i>	<i>S.E</i>	<i>z-value</i>	<i>Kurtosis</i>	<i>S.E</i>	<i>z-value</i>	<i>Shapiro-wilk test Sign. value</i>
Purchasing skill	-0.178	0.266	-0.66	-0.264	0.526	-0.55	0.415
Collaborative supplier relation and interaction	-.177	0.266	-0.66	-0.244	0.526	-0.46	0.303
Cost management	-0.095	0.266	-0.35	-0.245	0.526	-0.46	0.253
Supply base management	-0.313	0.266	-1.17	-0.423	0.526	-0.80	0.209

Source; Research survey (2021)

### Statistical Test of normality

The Skewness and kurtosis measure should be as close to zero as possible in SPSS. In reality, however, data are often skewed and kurtic. A small departure from zero is therefore no problem, as long as the measures are not too large compare to their standard error. This will give us the z-value, which should be somewhere between -1.96 and +1.96 (Kent Lofgren 2020 from you tube). Based on this Skewness and kurtosis z-value of purchasing skill is -0.66 and -0.55, collaborative supplier relation and interaction -0.66 and -0.46, cost management -0.35 and -0.46, supply base management -1.17 and -0.80. The z-value for all independent variables is between -1.96 and +1.96. Therefore, it can conclude that the data are normally distributed.



The Shapiro-wilk test is a test of normality in frequentist statistics. It was published in 1965 by Samuel Sanford Shapiro and martin wilk. The Shapiro wilk test is a way to tell if a random sample comes from a normal distribution. The test gives w-value; small values ( $p < 0.05$ ) indicate the sample is not normally distributed. (Reject the null hypotheses that the operation is normally distributed if the p- values are greater than 0.05 (google.com, 2014).

Purchasing skill has Shapiro-wilk test p-value of 0.415, collaborative supplier relation and interaction has a p-value of 0.303, cost management has a p-value of 0.253, and supply base management has a p-value of 0.209. According to Samuel Sanford Shapiro and Martin wilk (1965) and ken Lofgren (2020), the smaller value of w ( $p < 0.05$ ) indicates the sample is not normally distributed and the null hypothesis is rejected. The Shapiro-wilk test p-value of the independent variables of the study is all greater than 0.05. Therefore, the study concludes that the data of the study are normally distributed. And fail to reject the null hypotheses ( $H_0$ : the sample data are not significantly different than a normal population).

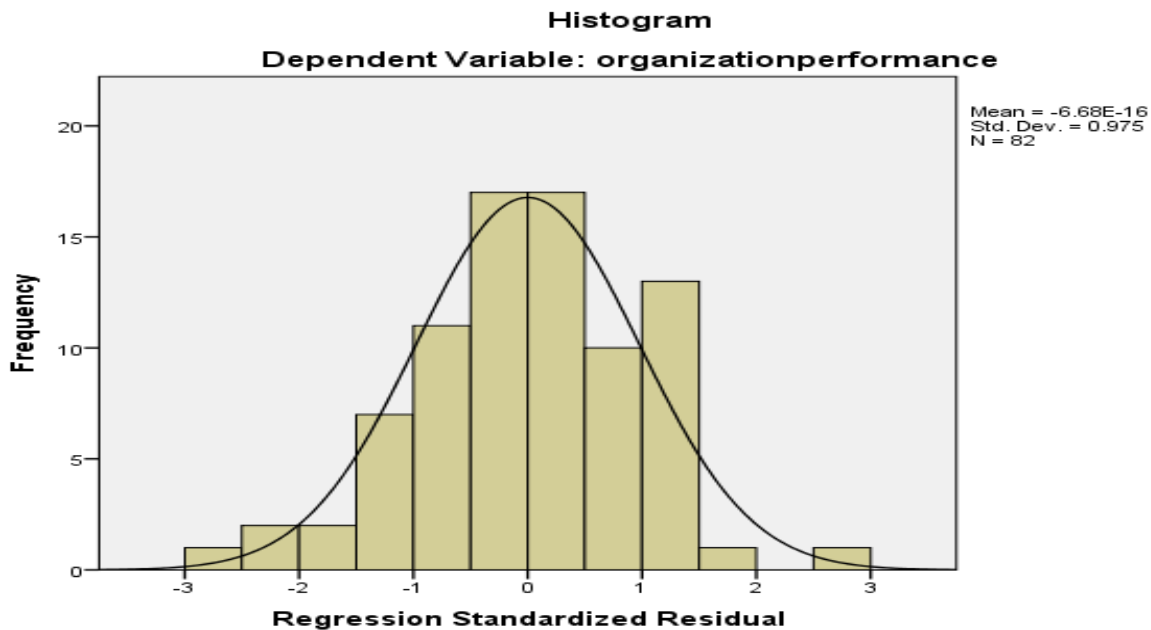
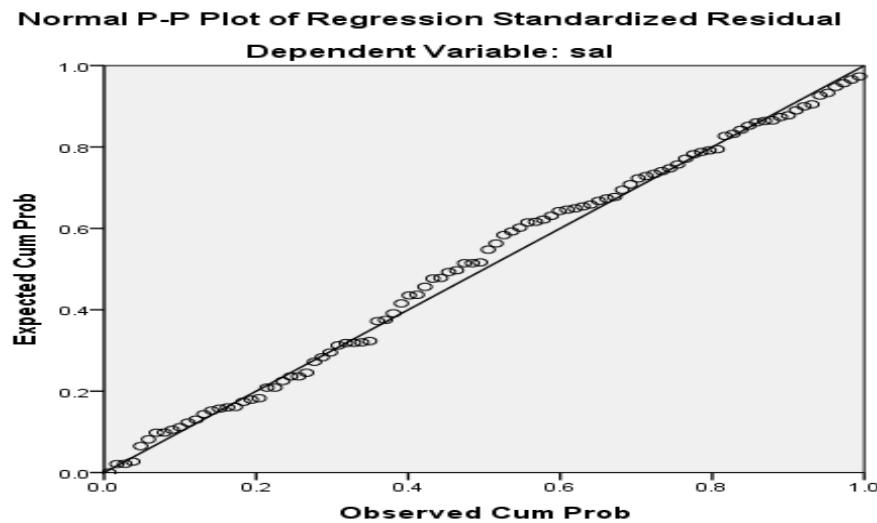


Figure 4.2: The regression model assumption of normality in the study

Source; Research survey, (2021)

#### Assumption 4 - Linearity Test

Linearity is most simply thought of as data that is a straight line when graphed. Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables. To determine whether the relationship between the independent variables; purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management and dependent variable, organizational performance is linear; by using plots of the regression residuals SPSS software. In the case of linearity, the residuals should have a straight-line relationship with predicted dependent variable scores ( Dobson, 2010)



**Figure 4.3:** The regression model assumption of linearity in the study

Source; Research survey, (2021)

As shown on figure 4.7 above, the change in the dependent variable is more of related to the change in the Independent Variables. Therefore, there is a linear relationship between the dependent variable and all independent variables

#### Assumption 5 - Heteroscedasticity Test

Heteroscedasticity means that the error variance around predicted scores is different for all predicted values under the study.it used to test the violation assumption of the regression analysis. On the other hand, the scatter points starting close to the regression line and going

further away. This would imply that for the smaller values of the independent variables and dependent variables we would have a better prediction for the bigger variables. According to advanced statistical methods (www.youtube.com), the type of heteroscedasticity model for this study is the Log-Log model. On the other hand, as the independent variables (purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management) increases, the dependent variable (organizational performance) will increase. Based on this model test, the homoscedasticity assumption is not violated.

Homoscedasticity assumption states that at each level of the independent variables, the variance of the residual terms should be constant. This just means that the residuals at each level of the independent variables should most likely have the same variance (homoscedasticity). The scatter plots of residuals against each of the independent variables and predicted dependent variables were used to check homoscedasticity of residuals. The scatter plots of the residuals against the predicted or dependent variable values look like a random array of dots evenly distributed around zero. Based on the regression model assumption of homoscedasticity test, the predicted variables under study have equal variance (Field, 2009). So that, there is no heteroscedasticity problem in the data.

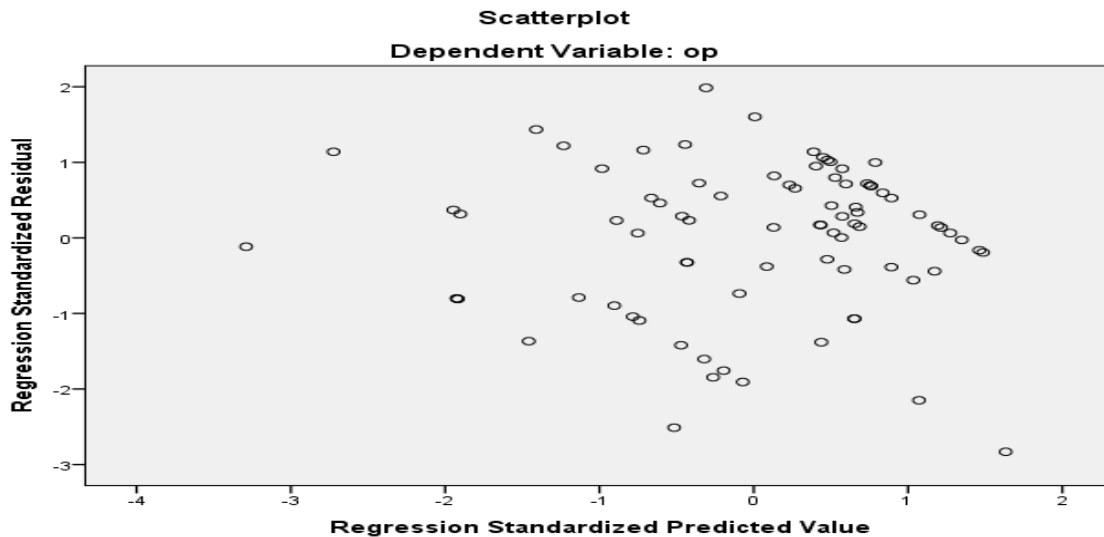


Figure 4.4: The regression model assumption of Heteroscedasticity in the study

Source; Research survey (2021)

### Assumption 6- Independence of Residuals

The last assumption for multiple regressions is the independence of residuals. The independence of the residuals can be measured by Durbin-Watson statistics. The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule, the residuals are independent (not correlated from one observation to the other one) if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50 (Muluadam, 2015). For this study table- 4.12 below, the output value of Durbin-Watson is 1.819; approximate to 2, indicating that there is no correlation among the residuals.

Table 4.12 Durbin-Watson Statistics for Independence of Residuals

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.780 <sup>a</sup>	.608	.587	.7521	1.819
a. Predictors: (Constant), purchasing skill, collaborative supplier relation and interaction, cost management and supply base management					
b. Dependent Variable: organizational performance					

Source; Research survey, (2021)

**Summary:** the above assumption per-model fitting test i.e. sample size, normality test, multi collinearity, homoscedasticity test, independence of residuals, and linearity test are found to be satisfactory to check the fitness of the model.

#### 4.5.3 Multiple linear Regression Analysis

Upon the end of the correlation analysis and different model tests ( sample size, homosedacity linearity, normality, Multi-collinearity, independent residual), regression analysis was track to find any relationship between the independent variables (strategic purchasing: purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management) and the dependent variable (organizational performance).

Table 4.13 model summery

<b>Model Summary<sup>b</sup></b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780 <sup>a</sup>	.608	.587	.7521
a. Predictors: (Constant), purchasing skill, collaborative supplier relation and interaction, cost management and supply base management				
b. Dependent Variable: organizational performance				

Source; Researcher survey, (2021)

From the above model summary table 4.13, the R-value is the correlation coefficient between independent variables purchasing skill, collaborative supplier relation and interaction, cost management and supply base management, and a dependent variable namely organizational performance. This means that there is a positive relationship between strategic purchasing and organizational performance. The figure is given as 0.780 which when converted to percentage is given as 78.00% which means that there is a strong relationship between strategic purchasing elements and organizational performance. In essence, strategically purchasing and better organizational performance goes hand in hand. This study concurs with (Alafi, 2014) study on effects of strategic purchasing on organizational performance which found that there is a strong positive correlation between purchasing and an organization's performance.

The R square is the coefficient of determination it shows that a change in the dependent variable can be accounted for by the independent variable. From the model summary table above the R square is given as 0.608 which when converted to percentage is given 60.8% which means that 60.8% change in the dependent variable is accounted for the independent variable. That is to say that strategy purchasing elements: purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management explain 60.8% effect of variation on organizational performance. This shows us there are other variables that accounted for the rest of the variation on organizational performance. In other words 39.2 percent of the variation in organization performance Explained by the variables that are not included in the model. Positivity and significance of all values show that the model summary is also significant and therefore gives logical support to the study model.

The value of adjusted R square i.e. .587 gives some idea of how well the model generalizes and ideally one would like its value to be the same, or very close to, the value of R square. In the present study, the difference between the values of R square and the adjusted R square is  $.608 - .587 = .021$  (about 2.1 percent).

Table 4.14; Results showing analysis of Variance (ANOVA) of Regression Analysis

ANOVA Results					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	67.69	4	16.69	29.47	<b>.000<sup>b</sup></b>
Residual	43.56	77	0.5662		
Total	111.25	81			

Source; Researcher survey, (2021)

F-ratio is a measure of how much the model has improved the prediction of the dependent variable (organization performance) compared to the level of inaccuracy of the model (Field, 2009). On the other hand, the P-value can explain the variation in the dependent variable. That is when the P-value is less than 0.05 the independent variables do a good work clarifying the variation in the dependent variable. Whereas, when the P-value is greater than 0.05 then, the independent variables do not explain the variation in the dependent variable. P-value is 0.000 ( $p < 0.05$ ). Strategic purchasing elements are good at explaining the variation in the dependent variable (organization performance).

Table 4.15; Coefficients of multiple liner regression

<b>Coefficients<sup>a</sup></b>					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.742	.238		11.517	.000
Purchasing skill	.107	.037	.256	2.889	.005
Collaborative supplier relation and interaction	.130	.039	.299	3.311	.001
Cost management	.098	.039	.226	2.536	.013
Supply base management	.120	.040	.280	2.994	.004
Dependent Variable: organizational performance					

Source; Research survey, (2021)

The Beta Coefficient (B) result shows the strength of the effect of each individual independent variable to the dependent variable (organization performance) as shown in table 4.15 above.

The Mathematical Model of multiple regressions below can be used to determine the quantitative relationship between the variables:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + E$$

Where: -

**Y** = organization performance,

$B_0 = 2.742$  (constant)

$B_1x_1 = 0.107$  (purchasing skill)

$B_2x_2 = 0.130$ (collaborative supplier relation and interaction)

$B_3x_3 = 0.098$ (cost management)

$B_4x_4 = 0.120$ (supply base management)

E= error term

Reliability coefficient = 95%

### **Keeping all other variables Constant;**

- When the purchasing skill of the person developed organizational performance will increase by 10.7%.
- When collaborative supplier relation and interaction increase organization performance increases by 13.0(percent).
- When cost management of organization increase organization performance increases by 12.0 (percent).
- When supply base management, of organization developed organization performance increases by 9.8(percent).

The model of organization performance can be written by including error term ( $\epsilon$ ) as:

**Organization performance** = 2.742 + .107 purchasing skill + .130 collaborative supplier relation and interaction + .098 cost management, + .120 supply base management

The constant value  $\beta_0 = 2.742$  implies that when other independent variable (purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management) are zero (unavailable) the dependent variable (organization performance) equal to 2.742 constant value.

Generally, based on the regression coefficient (B) results, all independent variables included under this study have a positive effect on organization performance (dependent variable) prediction keeping other factors constant.

### **Ha1 purchasing skills significantly affect organizational performance.**

The regression table above indicates, the purchasing skill has  $R^2$  value 0.30030 and P-value 0.005 ( $< 0.05$ ) which shows that 30% of the organization performance can be explained by purchasing skill. Based on the regression results of purchasing skill  $p=0.005$  ( $p<0.05$ ) it has significant positive effect on organization performance, the finding of this study concur with (Cho *et al.*, 2019) Purchasing skill were statistically significant effect on organization performance. Therefore, the alternative hypothesis regarding purchasing skill (**Ha<sub>1</sub>**) is failed to reject



**Ha2 collaborative supplier relation and interaction significantly affect organizational performance.**

Collaborative supplier relation and interaction has  $R^2$  value 0.41216 and P-value 0.001 ( $< 0.05$ ) which shows that 41.21% of the organization performance can be explained by collaborative supplier relation and interaction. Based on the regression results of collaborative supplier relation and interaction  $p=0.001$  ( $p<0.0$ ) it has significant positive effect on organization performance, the finding of this study concur with ( Alafi, 2014 ; samule,et,al 2018) collaborative supplier relation and interaction were statistically significant effect on organizational performance. Therefore, the hypothesis test of (**Ha<sub>2</sub>**) is failed to reject.

**Ha3 cost management significantly affects organizational performance.**

Cost management  $R^2$  value 0.2948 and P-value 0.013 ( $< 0.05$ ) which shows that 29.48% of the organization performance can be explained by cost management. Based on the regression results of cost management  $p=0.013$  ( $p<0.0$ ) it has significant positive effect on organization performance, the finding of this study concur with ( Schutz *et al.*, 2019). Cost management was statistically significant effect on organizational performance. Therefore, the hypothesis test of (**Ha<sub>3</sub>**) is failed to reject.

**Ha4 supply base management significantly affects organizational performance.** Based on the regression results of supply base management has  $R^2$  value 0.4914 shows that 49.14 % of the organization performance can be explained by supply base management and the remaining balance of 50.86% was due to unexplained variables,  $p=0.004$  ( $p<0.05$ ) it has significant positive effect on organization performance, The study was concur with (ThruLogachantar and Zailani, 2010) study which found that supply base management has a significant effect on organization performance. Therefore, the hypothesis test of (**Ha<sub>4</sub>**) is failed to reject.

Table 4.16 Summary of hypothesis test result

No	Hypothesis	Tool	Result
Ha1	purchasing skills significantly affect organizational performance	Regression	failed to reject
Ha2	Collaborative supplier relation and interaction significantly affect organizational performance	Regression	failed to reject
Ha3	Cost management significantly affect organizational performance	Regression	failed to reject
Ha4	Supply base management significantly affect organizational performance	Regression	failed to reject

Source; Research survey, (2021)

**Summary:** all Independent variable of the study (purchasing skills, Collaborative supplier relation and interaction, Cost management and Supply base management) Pearson correlation coefficient has a positive and statistically significant correlation with organizational performance.

The result indicates that the strategic purchasing elements (purchasing skills, Collaborative supplier relation and interaction, Cost management and Supply base management) have a positive and statistically significant effect on organizational performance of the factory.

# CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Conclusion reached, study recommendations and suggestion for further investigations were presented under this chapter.

### 5.1 Summary of Major Findings

Based on the results of the study the following summaries are made accordingly:

The main objective of the study was to investigate the effect of strategic purchasing on organization's performance.

All the independent variables (purchasing skill collaborative supplier relation and interaction, cost management and supply base management) have the mean and standard deviation score value of (3.95, 1.08), (3.89, 1.03), (3.97, 1.03), and (3.77, 1.07) respectively. The value of all independent variable similar so all variable similar effect on organization performance.

Also, the result of the Pearson correlation table 4.10 shows four independent variables i.e. (purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management are positive and statistically significant relationship with the dependent variable i.e. organization performance at 99 percent confidence level ( $P < 0.01$ ). The highest correlation is signified by purchasing skill ( $r = 0.548$ ), collaborative supplier relation and interaction ( $r = 0.642$ ), cost management ( $r = 0.543$ ), and supply base management ( $r = 0.701$ ).

Based on the finding of a graphical and statistical test of normality results the data was normally distributed.

Based on the examination of normality, linearity, homoscedasticity, and Multi collinearity tests there is no problem in assumption tests.

Based on the regression results 60.8% variations in organizational performance have been explained by the strategic purchasing element (independent variables) jointly. And based on the  $R^2$  values purchasing skill has 30%, collaborative supplier relation and interaction has 41.21%, effective cost management has 29.48%, and supply base management for goal has 49.14% explained organizational performance and the remaining due to other factors.

The Standardized beta coefficient value of purchasing skill is .256 which shows as purchasing skill increase by 1 standard deviation standardized purchasing skill predicted to result in 0.256 standard deviation increase in standardized organization performance holding constant the remaining variables. Also, when collaborative supplier relation and interaction increase by 1 standard deviation organization performance will increase 0.299 standard deviation holding constant the remaining variables. When cost management increase by 1 standard deviation organization performance will increase by 0.226 standard deviations constant the remaining variables. The same thing as supply base management increase by 1 standard deviation organization performance will increase by 0.28 standard deviation constant the remaining variables. Generally, when strategic purchasing increase by 1 standard deviation organization performance will increase by 0.78 standard deviation keeping other factors constant.

The Analysis of Variance (ANOVA) results of the regression between Independent variables and organization performance show the probability value of 0.000 ( $p < 0.05$ ) indicates the strategic purchasing is highly significant in predicting organization performance.

All the strategic purchasing elements, purchasing skill, collaborative supplier relation, and interaction, cost management and supply base management have a moderate positive effect and statistically significant on the organization's performance. The alternative hypothesis, **H<sub>a1</sub>**, **Ha2**, **Ha3** and **Ha4** failed to reject.

## 5.1 Conclusion

Based on the major findings of the study, the following conclusions are drawn:

Since the purchasing process is longer it makes the process delayed. The relationship between supplier and buyer challenges the purchasing process. The main reason for this is that, lack of similar criteria for supplier selection and this contribute for selecting the suppliers who doesn't fulfill the required quality. Moreover, due to lack of clarity when the departments fill purchasing form, the purchaser misunderstood the order and it result in purchasing wrong items or the items do not in line with the departments' request.

All independent variables: - purchasing skill, collaborative supplier relation, and interaction, cost management and supply base management have almost similar mean score and standard deviation value and positively correlated with organizational performance. So, that all the independent variables have a positive effect on the dependent variable (organization performance). Moreover, all the independent variables under study have a positive significant correlation one another.

The model satisfies the entire pre-model fitting assumptions test (i.e., sample size, normality of distribution, linearity, multi-collinearity of the variables, independence of residuals and homoscedasticity) of multiple regressions.

As far as the relative effects of individual elements of the independent variables on organizational performance is concerned, the result of multiple linear regression coefficient shows that Collaborative supplier relation and interaction has the highest beta value which indicates the most dominant effect in determining the variation of organization performance followed by Supply base management.

The factory not gives training to suppliers for supplier development and has no full understood the strength and weakness of all suppliers.

The findings of the study shows that that all strategic purchasing elements (purchasing skill, collaborative supplier relation and interaction, cost management, and supply base management) have a strong and statistically significant effect on organizational performance

## **5.2 Recommendation**

Based on the conclusion drawn from the findings of the study the following recommendations are forwarded.

Purchasing process and procedures of factory are long, recommended for purchasing officers to reduce the length of the purchasing process by avoiding unnecessary and redundant steps and to establishing systematic ways of fast and follow up of the purchasing process.

Department head and employee of each department not be communicate effectively, based on this reason department head not fill form of purchasing as employee requested, so the researcher recommended for department head of ( finance , marketing, operation , design and engineering etc.) clearly communicate for employee about purchasing item. Moreover, it's better to the employee able to identify requested material for department head clearly. For purchasing officer it's better to designing suitable and easy forms to item delivery on purchases.

The factory supplier selection criteria not similar/uniform, so that its better purchasing officer and manager prepare uniform selection criteria.

Employee purchasing skill has impact on performance of organization, the purchasing skill of the employee are good , so the researcher recommend for manager and purchasing officer provide training to sustained skill of employee and prepare rewarding system to improve skill of employee.

Collaborative supplier relation and interaction are important to get a sustainable raw material supply with lower cost, shorter lead time, and better quality and has role to enhance the performance. The relationship between supplier and factory are good, so, the researcher recommends to purchasing officer and manager to sustain the relation and interaction with supplier and tries to know more the strength and weakness of supplier by preparing evaluation criteria to suppliers.

Cost management highly affects organizational performance the cost management system of the factory are good so the researcher recommends to purchasing officer and finance director to sustaining the cost management activity effective manner.

Supply base management of factory is good, purchasing officer and manager is better to continue the activity, and it's better to create strong linkage with supplier. The factory did not give training to supplier to develop supplier development, so the purchasing officers better try to provide training support to suppliers<sup>2</sup> as part of supplier development.

### **5.3 future research suggestions**

The present study conducted in a private company. Hence, other researchers conducting on Public sector as well as incorporating more business sectors which expand the scope, in order to increase the accuracy and reliability of the data.

The results of the regression analysis indicated the strategic purchasing elements determine 60.8(percent) of the organizational performance of the organization which indicates there are other factors which can explain the variability of organizational performance. Hence, other researchers better to consider those factors.

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# **APPENDIX**

JIMMA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

MASTERS OF BUSINESS ADMINISTRATIVE

## REQUEST FOR RESEARCH DATA

Dear Respondents; This questionnaire is designed to collect data to carry out research.

Entitled effects of strategic purchasing on manufacturing performance in the case of the brother flour and biscuit factory ADAMA. The information that you offer with this questionnaire is used as primary data in this study which the researcher is conducting as partial fulfillment of the requirements for the Degree of Masters of Business Administration (MBA in JIMMA University. To research Fore Entitled, this research is to be evaluated in terms of its contribution to our understanding of strategic purchasing and its effect on employee performance. You provide any information in this questionnaire will be kept confidential and it will be used only for academic purposes.

Instruction:

There is no need for writing your name

In all cases where answer options are available please circle the appropriate choice answer

I would like to express my deep appreciation for your generous time, honest and prompt responses. You're faithful,

SARA HAILU SHANKO

Phone: 0920177607

## PART I: GENERAL INFORMATION

1. sex

A. Male

B. Female

2. Age

A. 20-30

C. 40-50

B. 30-40

**D.** above 50

3. What is your level of education?

A. Certificate

C. First degree

B. Diploma

**D.** Master degree

4. Current work position

A. manager

C. board of director

B. Head of finance and  
administrative

D. purchasing employee

5. Year of experience?

A. < 2year

B. 3-5 year

C. Above 5 years

**PART TWO:** interview question

1. What are the problem and challenge of purchasing practice?
2. What are purchasing procedures?
3. What is purchasing process?

**PART THREE:** For independent variable (strategic purchasing)

The following questions related to the strategic purchasing. Hence, read carefully and respond to each question. Put “√” Mark in the portion that best indicates your opinion to each question.

Where 5 Indicates “Strongly agree” 4 Indicates “Agree” 3 Indicate “Neutral” 2 indicates Disagree and 1 indicates “strongly disagree”.

	<b>Purchasing skill</b>	1	2	3	4	5
PS	I work well with our suppliers.					
	I am able to maintain a positive relationship with our suppliers.					
	I am able to adjust our business activities to meet purchasing plans.					
	I communicate well with our suppliers about products needed by our employees					
	I am very knowledgeable about product price levels in our market.					
	I am able to identify purchasing problems and solve.					
	I am able to analyze purchasing options and their impact on our company					
	<b>Collaborative supplier relation and interaction</b>					
CSR	Retain the same supplier(s) for more than two years					
	Present strategic information to suppliers					
	Supplier willing to share confidential information					
	Knows the strength and weakness of our supplier					
	Perceives that our supplier is perfectly honest and truthful					
	Feels our supplier as part of the business partner in this relationship					
	<b>Cost management</b>					
CM	Control of suppliers’ on price increases					

	Control internally on Order processing costs					
	Provide target costing for suppliers to be meet					
	Minimize the storage and transportation cost					
	Measurement on Supplier's ability to eliminate waste as cost reduction					
	Make or buy decision through cost measurement					
	<b>Supply base management</b>					
SBM	Deal many suppliers for the item					
	Prefer to purchase from single source					
	Purchase items from many suppliers in one location					
	Avoid supplier dependence					
	Provide training support to suppliers' as part of supplier development					
	Involve suppliers' on the new product development					

**PART FOUR:** For dependent variable (organization performance)

Organizational performance		1	2	3	4	5
Cost reduction	The company has been able to meet its cost reduction goals,					
Quality	The company has been able to meet its quality improvement goals					
Customization responsiveness	The company has been able to meet its customization responsiveness goals,					
Delivery speed	The company has been able to meet its delivery goals in term of delivery speed and dependability					
Cycle time reduction	The company has been able to meet its manufacturing cycle time reduction goals					

*THANKS FOR YOUR COOPERATION.*