

# The Influence of Procurement Practices on Project Outcomes and Competitive Edge

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## Abstract

The purpose of procurement management in governmental organizations is to ensure that all goods and services purchased by public institutions are done in a harmonized procedure and in a way that ensures a careful, economic and efficient use of public resources. It is also to ensure that transactions are devoid of corruption, but are done in fairly, plainly and in a transparent manner and by encouraging competition among local players. However, in a lot of government organizations, the public procurement process is sheltered with concealment, incompetence and bribery (Nyakundi, et al., 2012). Studies have shown that there are procurement operational lapses that are leading to poor service delivery and consumer dissatisfaction which have become a global challenge, (OECS), April 2013. Procurement management in many organizations rarely seems satisfactory to the community and donors. Several studies have been conducted in the field of donor funding but focused on different aspects other than procurement management and performance of governmental organizations in project implementation. Asfaw (2009) studied the relationship that exists between organizations' performance. Kebede (2012) studied factors affecting the implementation of donor funded projects. On the other hand, Girma (2000) researched on the effect of aid on economic growth of recipient countries. Studies on procurement management on project remains scanty hence this study seeks to assess procurement management on project at CBE. The researcher wishes to investigate how procurement management is executed at CBE. In Ethiopia, previous studies have not concentrated on the assessment of procurement management on project performance at CBE. This thesis uses CBE as a case study as Ethiopian scenario portrays lack of literature on this front. The researcher aims to contribute this to the emerging literature.

**Keywords:** Green Procurement, Procurement System, Competitive Advantage and Company Performance, Technological Innovation

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## 1.0 INTRODUCTION

Procurement plays a key role for performance improvement & the attainment of organizational objectives by providing right quality of inputs for users at the right time and cost. In the procurement industry, developing a solid working relationship with vendors are the important key to ensuring that the business runs smoothly. Procurement is one of the basic functions common to all organizations, both private and public. Public procurement systems are central to the effectiveness of development expenditure. Budgets get translated into services

largely through the governments' purchases of goods, services and works. It is estimated that 18.42% of the world's GDP is spent through public procurement (Mahmoud, 2010).

Procurement is becoming an issue of public attention and debate, and continues to be subjected to reforms, restructuring, rules and regulations. Procurement refers to the acquisition of goods, services and works by a procuring entity using funds. Even though several Organizations in Ethiopia are taking steps to refine their procurement systems, the process is largely still shrouded by secrecy, inefficiency, corruption and under cutting. In all such cases, huge amounts of resources are wasted. The principal reason for the enactment of the Procurement Act was to have a legal regime that weeds out inefficiencies in the procurement process, remove patterns of abuse, and the failure of the public purchaser to obtain adequate value in return for the expenditure of public funds.

Procurement is a process of acquiring goods or services to fulfill needs. Procurement is a functional group (i.e., a formal entity on the organizational chart) as well as a functional activity (i.e., buying goods and services) (Monczka et al., 2009). According to Waters (2004), it begins when an agency has identified a need and decided on its procurement requirement. However, the procurement process for every need is different. Some procurements are big, others small. Some are complex, while most are routine. Some procurements carry high risks, while others have only minimal or perhaps no risks at all. Some procurement requires a major long-term commitment from both the buyer and the seller, while other commodities are immediately available for purchase in the open market, including on-line or e-commerce buys (Fleming, 2003). As Srivastava (2017) described Procurement is securing the products, raw materials, and services needed by production, distribution and service organizations at the right time, the right price, the right place, the right quality and in the right quantity.

Project Implementation has been given different meanings in literature. For instance, Chan (2007) defined it as the system that represents the organizational structure adopted by clients for the implementation of project processes and eventual operations of the project. Any given project performance is highly influenced by the type of project procurement method used to deliver the project. Consequently, project clients often seek to select the best method that can help to achieve better project results. Different forms of project performance exist from which clients can choose. There are terms of allocation of activities, sequencing, process and procedure and organization approach in project performance. The methods give a strong relationship with project performance outcome specifically time, cost and quality.

Yet these processes pose difficulties to clients, partly due to the complex task involved in trading –off various numerous factors that underpin the selection process. Moenaar et al., (2009) defined procurement methods as a comprehensive process by which designers, constructors, and various consultants provide services for design and construction to deliver a complete project to the client. The success or failure of project implementation depends on the interrelated and sequential effectiveness and efficiency. Poor performance of projects has been on the rise caused by the complex nature of procurement selection and their subsequent management that poses great difficulties to clients.

There are several stalled development projects and actual procurement expenditure is normally higher than budgeted. Procurement is management function that ensures identification, sourcing, access and management of the external resources that an organization needs or may need to fulfil its strategic objectives. Procurement exists to explore supply market opportunities and implement resourcing strategies that deliver the best possible supply outcome to the organization, its stake holders and customers. Procurement applies the science and art of external resource and supply management through a body of knowledge interpreted by competent practitioners and professionals (Australasia, 2014).

Tebele and Jowah (2014) explain that for effective management of projects, the project manager should have an understanding of the structure and culture of the organisation in which the project is embedded. Project procurement involves obtaining all of the services and materials that are needed for a project. Managing this process is essential to ensure that all of the necessary services and materials are selected and obtained by a specific deadline. Emmett and Crocker (2013) agree, signifying procurement as an essential stage of project execution to ensure that project deliverables and objectives will result in the meeting of stakeholder expectations;

this cannot be achieved without calculated procurement processes. Without having a manager in place for this process, you can purchase the wrong materials, accidentally have the materials delivered on the wrong date, or choose the wrong service providers.

### **1.1 Statement of the problem**

The purpose of procurement management in governmental organizations is to ensure that all goods and services purchased by public institutions are done in a harmonized procedure and in a way that ensures a careful, economic and efficient use of public resources. It is also to ensure that transactions are devoid of corruption, but are done in fairly, plainly and in a transparent manner and by encouraging competition among local players. However, in a lot of government organizations, the public procurement process is sheltered with concealment, incompetence and bribery (Nyakundi, et al., 2012). Studies have shown that there are procurement operational lapses that are leading to poor service delivery and consumer dissatisfaction which have become a global challenge, (OECS), April 2013. Procurement management in many organizations rarely seems satisfactory to the community and donors. Several studies have been conducted in the field of donor funding but focused on different aspects other than procurement management and performance of governmental organizations in project implementation.

Asfaw (2009) studied the relationship that exists between organizations' performance. Kebede (2012) studied factors affecting the implementation of donor funded projects. On the other hand, Girma (2000) researched on the effect of aid on economic growth of recipient countries. Studies on procurement management on project remains scanty hence this study seeks to access procurement management on project at CBE. The researcher wishes to investigate how procurement management is executed at CBE. In Ethiopia, previous studies have not concentrated on the assessment of procurement management on project performance at CBE. This thesis uses CBE as a case study as Ethiopian scenario portrays lack of literature on this front. The researcher aims to contribute this to the emerging literature.

Procurement comprises all activities and processes involved in acquiring needed goods and services from external parties. This may include everything from office supplies, furniture, and facilities to heavy equipment, consulting services, and testing and training. Properly managing all procurement activities not only keeps business operations running smoothly, it also saves money, time, and resources. Procurement management ensures that all items and services are 3 properly acquired so that projects and processes can proceed efficiently and successfully. In short, proper procurement management is imperative for avoiding costly delays and errors (Mekdes, 2019).

Accordingly, CBE is trying to achieve its vision on becoming World-Class Commercial Bank in 2025 by providing quality banking service, expanding its accessibility by constructing new buildings (branches) and maintaining the existing building. However, 2019/20 annual performance report (2020) indicated that most of the projects performed in the year were behind the plan that the bank set to accomplish. Different researcher has conducted research in the similar topic to assess the procurement process of projects and companies/organization. Though regarding to CBE, few researchers like Freweyni (2019) and Banchamlak (2014) have assessed the effect of procurement management practice on the project performance and purchase practice and its challenges respectively. However, the researcher did not emphasize whether the bank is performing its procurement process according to its procurement procedure manual or standards set by different literatures. Therefore, this study will try to assess the procurement management practice of organization in accordance with both its procurement manual and also the theoretical aspect of the knowledge area of procurement activities to fill the above stated gap

Procurement is one of the basic functions common to all organizations, both private and public. Procurement and supply management involves buying the goods and services that enable an organisation to operate in a profitable and ethical manner. Dealing with suppliers without any method of assessment can create irregularities in product specifications and bad experiences. Good communication is extremely necessary for many aspects of the business. Procurement management is a way to more efficiently and productively handle the process of sourcing, requisitioning, ordering, expediting, inspecting and reconciliation of procurement. There is a failure to manage procurement processes effectively can have a significant negative

impact on organizations. Unable to determine internal needs will be a challenge in formulating a strategy for the future. An organization cannot transform this into direction and requirements with no target sets for what needs to be procured.

According to Baily, Farmer, Croker, Jessop, and Jones (2015) project execution is worth nothing without an unimpeachable set of procurement processes. To implement procurements are first identified during the planning phase of the project. The researcher main reason to conduct this research is to identify procurement practice or procedure that provides the framework for project performance. Time and serious attention are devoted towards the establishment of a procurement system that to be suitable for a particular project. A procurement method that is used for a particular project is expected to achieve the objectives of the project in terms of cost, time and quality but this has not been the case at INSA. Time and cost overrun have been a major problem confronting at INSA projects and all attempts that have been made so far have not been able to yield the expected results. These problem of procurement practices adopted at INSA have raises serious concern from the project stakeholders and the government organizations as a whole.

The aim of the study is to explore the effect of procurement practices on project performance at INSA. For the past ten years, INSA has encountered challenges, such as procurement procedures issues, supplier-related issues, foreign procurement practices and procurement method issues on project performance success drastically decline. Therefore, the researcher try to fill this gap by identify the effect of procurement practice on project performance at Information network security agency (INSA). Despite the important role playing by procurement in Ethiopia supporting in developing the economy, it is not given much attention by the government, and other stakeholders who participate in the procurement process such as suppliers, Commercial banks, customs authority, and customs clearing agents, insurance companies, and transportation companies. This study has a benefit the organization to learn from the strengths and weaknesses of procurement process on project performance and to take corrective action.

## **1.2 Significance of the Study**

The significance of the study can be seen from different perspectives. The study aims to benefit the policy makers, managers of manufacturing organizations, researchers and academic community. First, the findings of this study is to add on to the existing research in the area of supply chain collaboration and information technology being implemented by organizations in the manufacturing sector. The study findings is to contribute to the relatively untouched areas linking supply chain collaboration, organizational responsiveness and information technology in the manufacturing sector. The results of the study is also going to be useful to researchers and academicians as it will acts as a source of reference for future studies. The results of this study is also going to be valuable to policymakers. The study will provide important implications for IOS planning. Proper IOS use and planning for supply chain management is becoming more important, however, IOS planning is still in its infancy, Specifically, a socio-technical approach.

The important managerial implication is that this study will help managers understand that successful supply chain collaboration needs the support of both technical and social factors. This demands a shift in the mind set of supply chain systems from a technology-focused or low-level integration to a more holistic one. Therefore, the potential benefits of cooperation, coordination, and supply or buyer base rationalization may be realized because the necessary technological and organizational changes to improve coordination of product flow are being widely or rapidly adopted.

## **1.3 Overview of Research Methodology**

This research basically investigates procurement practices and project performance effect on competitive advantage. The study is to use explanatory research design to determine the link that exists between the research constructs. For the thesis, the research is to use a survey technique. Surveys are important when the large sample sizes are taken into consideration. For surveys, questionnaires are commonly employed, although other methods such as organized and

in-depth interviews, content analysis, and observation could also be utilized (Tate, Ellram and Dooley, 2012). For data collecting, the study will use a quantitative approach.

In answering the research questions set out in this study, the quantitative research method and the purposive sampling technique to select respondents will be employed. These respondents are directly with in the supply chain activities or in the information technology department of the company. Primary data only will be collected for analysis for this particular study using open ended questionnaires. After that, the data will be translated to an Excel file and then into the SPSS software for additional analysis. The analysis will be broken down into several categories to assess the respondents' and firms' backgrounds. In addition, descriptive and inferential statistics will be used to describe the relationship between the research's major variables.

#### **1.4 Scope of the Study**

The aim of this study is on procurement practices, project performance and competitive advantage

, Geographically, the study is limited to SMEs in Kumasi in the Ashanti region of Ghana. In term of conceptual scope of this study, the study defines public procurement is the acquisition of goods, works and services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations, or individuals, generally via a contract, as proposed by PPA Module (2007).

Again, this study defines competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. These attributes can include access to natural resources, such as high grade ores or inexpensive power, or access to highly trained and skilled personnel human resources, as proposed by Damle (2018). Finally, project management in this study refers to project management performance as measurement against the traditional gauges of performance such as completing project within time, cost, and meeting scope and quality as proposed by Cooke-Davies (2002).

## **2.0 LITERATURE REVIEW**

This presents a review of literature pertaining to the research variables. This chapter presents the literature review on the moderating role of project performance on the relationship between procurement practice and competitive advantage. The aspects covered included the conceptual review which provides definitions and explanation of the concepts of the study namely; Procurement Practices, Project Performance and Competitive Advantage; theoretical and empirical review in respect of the research variables is presented. The chapter concludes on a conceptual framework of the study.

### **2.2 Conceptual Review**

According to Brondizio et al. (2014), conceptual review refers to a review of the definitions of the concepts in the study. Concepts under this study are Procurement Practices, Project Performance and Competitive Advantage. The definitions of these concepts are presented in the sub section below.

#### **2.2.1 Public Procurement**

Public procurement has to do with how Tax Payers' money is spent by Public Entities to procure works, goods and services (Walker & Brammer, 2009). According to the Ghana Public Procurement Act, 2003 (Act 663), public procurement is the acquisition of goods, works and services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations, or individuals, generally via a contract (PPA Module, 2007). Public procurement covers the supply in public institutions and agencies as well as publicly owned entities and is characterized by taxes which represent a major source of funds.

Arrowsmith (2010) posits that public procurement refers to the government activity of purchasing the goods and services needed to perform its functions. According to Odhiambo and Kamau (2003), public procurement is broadly defined as the purchasing, hiring or obtaining by any contractual means, goods, construction works and services by the public sector. It involves the purchase of commodities and contracting of construction works and services if such acquisition is effected with resources from state budgets, local authority budgets, state foundation funds, domestic loans or foreign loans guaranteed by the state, foreign aid and revenue received from the economic activity of state(Liu et al., 2019).

Procurement in government is a process seeking to obtain services, goods and works in conformity with applicable laws and regulations. It is the process by which Government and public sector institutions buy inputs for vital public sector investments in physical infrastructure and for strengthening institutional human capacities which lay the foundation for national development. Procurement takes many forms(Driscoll et al., 2010). It encompasses the acquisition of goods, real property, capital equipment, built assets and services. Procurement costs in many Ministries and Departments are substantial, consuming scarce resources of tightly constrained Government budgets. Quality, timeliness, and appropriateness of the procured inputs largely determine whether the public investment will succeed. Efficient public procurement system is therefore vital for achieving Value for Money and hence accelerated growth and development of the country(Flynn, 2016).

### **2.2.2 Procurement Practices**

Procurement is a common business-related function to acquire goods, services, equipment, raw materials from various suppliers. Since ancient times purchasing was an expression of demand-supply relationships which developed reflecting various changes that happened in societies' life and needs. The Chartered Institute of Purchasing and Supply (CIPS) emphasizes that today "procurement describes all those processes concerned with developing and implementing strategies to manage an organisation's spend portfolio in such a way as to contribute to the organization's overall goals and to maximize the value released and/or minimize the total cost of ownership"(Driscoll et al., 2010).

Green public procurement plays an important role in protecting environment, achieving sustainable development, establishing a government image, guiding public green consumption, and enhancing innovation. Sustainable procurement is defined as 'a process whereby organizations meet their needs for goods, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment'(Mosgaard, 2014). Socially responsible purchasing practices impact on all aspects of the supply chain, including suppliers, employees and customers. The five common aspects of sustainable procurement practices include concern for the environment, diversity, philanthropy, human rights, and the safety implications of products and services(Balfors & Faith-ell, 2009).

### **2.2.4 Competitive Advantage**

A competitive advantage exists when the firm is able to deliver the same benefits as competitors but at a lower cost (cost advantage), or deliver benefits that exceed those of competing products (differentiation advantage). Competitive advantage is a theory that seeks to address some of the criticisms of comparative advantage. Competitive advantage theory suggests that states and businesses should pursue policies that create high-quality goods to sell at high prices in the market(Ma, 2000). Porter (1995) emphasizes productivity growth as the focus of national strategies. Competitive advantage rests on the notion that cheap labor is ubiquitous and natural resources are not necessary for a good economy.

Competitive advantage is necessary for satisfied customers who will receive higher value in delivered products for higher income what the owners request from management and such requirements can be fulfilled with organization of production, higher application and as low as possible production costs (Ranko, Berislav, and Antun, 2008). Barney (1991) suggested that the resources that are scarce and valuable at the same time can create competitive advantage, and if these resources are also difficult to duplicate, substitute and hard to deliver, they can sustain

the advantage. Competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. These attributes can include access to natural resources, such as high grade ores or inexpensive power, or access to highly trained and skilled personnel human resources(Damle, 2018).

Differentiation strategy is usually developed around many characteristics such as product quality, technology and innovativeness, reliability, brand image, firm reputation, durability, and customer service, which must be difficult for rivals to imitate (Mose, 2010). A firm implementing a differentiation strategy is able to achieve a competitive advantage over its rivals because of its ability to create entry barriers to potential entrants by building customer and brand loyalty through quality offerings, advertising and marketing techniques. Thus, a firm that implements a differentiation strategy enjoys the benefit of price-inelastic demand for its product or service. In addition, Barney (1991) emphasized the ability of firms to establish entry obstruction in order to prevent imitation from its competitors and take advantage of their resource for the purpose of sustaining the international competitive advantage. In this paper is going to probe the internal factors of managerial action to gain competitive advantage. Discussion about the technology and innovation, human resources, organizational structure resources factors to see how they contribute to the competitive advantage and the relationships in between(Christensen, 2001).

## **2.2.5 Sources of competitive advantage**

### **2.2.5.1 Technology and innovation for competitive advantage.**

The term innovation has a commercial aspect different from scientific research. Innovation has a very important role in economic development of countries, because innovative companies, through commercializing their research and development results, are creating new and non-existent value. Furthermore, these same companies are getting an important share of the newly created value. By this way, they are mainly creating wealth for themselves, for their country and for the world. Innovation includes both product / service and process innovations(Barney, 1994). Product innovations are products that are perceived to be new by either the producer or the customer; the latter includes both end-users and distributors. Process innovation refers to new processes which either reduce the cost of production or enable the production of new products (Harmsen, Grunert, and Declerck, 2000). In spite of the increasing importance of innovation and the role played by technological capabilities in a firm's growth trajectory, little is known how technological innovation in different organizations is driven by their technology strategy, the plan that guides the accumulation and deployment of technological resources and capabilities (Coff, 2003).

That is, the most innovative firms engage in a continual search for better products, services, and ways of doing things. They try to continuously upgrade their internal capabilities and other resources. Aggregate innovative capacity of a nation is derived from the collective innovative capacity of its firms. The more innovative firms a nation has, the stronger that nation's competitive advantage. Innovation also promotes productivity, the value of the output produced by a unit of labour or capital. The more productive a company is, the more efficiently it uses its resources. The more productive the firms in a nation are, the more efficiently the nation uses its resources (Knight, 2007). Innovation and entrepreneurial activity are the engines of long-run economic growth. Often, entrepreneurs first commercialize innovative new products and processes, and entrepreneurial activity provides much of dynamism in an economy. For example, the economy of the United States has benefited greatly from a high level of entrepreneurial activity, which has resulted in rapid innovation in products and processes.

### **2.2.5.2 Human resources for competitive advantage**

Human resources are a term used to describe the individuals who comprise the workforce of an organization, although it is also applied in labour economics to, for example, business sectors or even whole nations. Firms can develop this competitive advantage only by creating value in a way that is difficult for competitors to imitate. Traditional sources of competitive advantage such as financial and natural resources, technology and economies of scale can be used to create value. However, the resource-based argument is that these sources are

increasingly accessible and easy to imitate. Thus they are less significant for competitive advantage especially in comparison to a complex social structure such as an employment system. If that is so, human resource policies and practices may be an especially important source of sustained competitive advantage (Christensen, 2001).

Within the best practices approach to strategic HRM, the first practice, internal career opportunities, refers to the organizational preference for hiring primarily from within. Second, training systems refers to whether organizations provide extensive training opportunities for their employees or whether they depend on selection and socialization processes to obtain required skills. Third, appraisals are conceptualized in terms of outcome-based performance ratings and the extent to which subordinate views are taken into account in these ratings. Fourth, employment security reflects the degree to which employees feel secure about continued employment in their jobs. Although formalized employment security is generally on the decline, organizations may have either an implicit or an explicit policy. Fifth, employee participation, both in terms of taking part in decision making and having opportunities to communicate suggestions for improvement, has emerged as a strategic HRM practice.

Sixth, job description refers to the extent jobs are tightly and clearly defined so that employees know what is expected of them. Finally, profit sharing reflects the concern for overall organizational performance on a sustainable basis (Renukappa et al., 2016). Ulrich and Yeung (1989) argue that the future HR professional will need four basic competencies to become partners in the strategic management process. These include business competence, professional and technical knowledge, integration competence and ability to manage change. Human Resources seeks to achieve this by aligning the supply of skilled and qualified individuals and the capabilities of the current workforce, with the organization's ongoing and future business plans and requirements to maximize return on investment and secure future survival and success. In ensuring such objectives are achieved, the human resource function purpose in this context is to implement the organization's human resource requirements effectively but also pragmatically, taking account of legal, ethical and as far as is practical in a manner that retains the support and respect of the workforce (Sijabat et al., 2021).

### **2.2.5 Project Performance**

Project performance and project management performance are distinct and different. Project performance is evaluated against the project objectives whereas project management performance is measured against the traditional gauges of performance such as completing project within time, cost, and meeting scope and quality (Cooke-Davies, 2002). Project management performance and success are related concepts and treated as such in this study. Jugdev and Müller (2005), based on extensive research, found that definition of project success transitioned over a period from a narrow focus of completing it within time, cost, and scope to expanding the focus by including stakeholder requirements.

Successful projects create new opportunities such as gaining market share, eliminating threat of substitution, and creating competitive advantage. Likewise, selecting project that aligns with strategic vision of the organization will have the support of senior management, resources available, and thus, likely to succeed. Dedicated resource availability and resource management are factors that will have significant influence in project selection and success. Projects that improve organizational processes will promote productivity and efficiency within organizations. As a result, organization can reduce overhead and maintain a lean organizational structure. Successful management of projects in current challenging business environments requires, appropriate tools, techniques and processes, and sophisticated people skills. These people skills focus on fostering a climate of active participation and minimal dysfunctional conflict (Thamhain, 2000), which implies an environment of trust, transparency, consistent processes, and clarity in communications. Though all or some of the traditional effectiveness measures of projects such as scope (includes quality), schedule, and cost may not be achieved at the desired levels, a project may still be considered successful.

A project team may concede that the project is successful while the client may consider it otherwise (Rad and Levin, 2002). Consequently, success factors are different for different stakeholders. Rad and Levin (2004) contend that some organizations use formal cost estimating



and control for major projects only, which makes it necessary to monitor and measure project performance by other means. The project success is ensured only when the project team has harmony and synergy among the team members. It is important to measure benefits of the project at the team level in terms of motivation of team members, opportunities for improving employee skills and career development. The diversity and different perspectives of project team members would also benefit project execution.

### **2.3 Theory Review**

Theory is central to the scholarly credentials of any discipline (Ketchen & Hult, 2011). It is the review of theories that support the propositions of a research. Theoretical principles, constructions, concepts, and tenants make form the theoretical framework (Grant & Osanloo, 2014). Theory enables us to organise our thoughts and knowledge, formalise our predictions, generate coherent explanations of real world phenomena, develop hypotheses, and integrate knowledge (Hambrick, 2007; Miller, 2007). ). Three theories provided the foundation of the proposition of the study. These are, the Institutional Theory and Resource Based View Theory (RBV).

#### **2.3.1 Institutional Theory**

Obanda (1987) propounded that institutional theory is the customary method which is used to scrutinize components of government purchasing. Cultural-cognitive and regulative elements are the basic compositions of institutions that, together with accompanying activities and resources throws more light on life (Kondra & Hurst, 2009). Furthermore, Scott (2000) elucidates the three pillars of institutions as normative, regulatory and cultural-cognitive. The normative refers to norms (ways of behaving) and canons (requirement), shared responsibility being the basis of acquiescence. The regulatory underscores the practice of instructions, decrees and sanctions as implementation process, with decorum as basis for acquiescence.

The cultural-cognitive rests on mutual comprehension. This concept is imperative in relation to the enactment of sustainable procurement policy and practice in service sector organisations. This is a matter of organizational philosophy and the magnitude to which the predominant environment in an organisation is supportive of sustainable and/or of change in general. In other sense, this aspect includes the extent to which there is support for sustainable procurement at strategic organizational level and the degree to which organizational practices and hierarchy accelerate or impedes sustainable procurement (Rolfstam, 2012)

#### **Resource Based View Theory (RBV)**

This study is grounded in the RBV, a basic framework for understanding the conditions under which firms are able to gain sustained competitive advantage and for explaining why different firms in the same industry have different levels of performance over time. The fundamental principle of the RBV is that the basis for a firm's competitive advantage lies primarily in the application of the unique combination of valuable resources at the firm's disposal (Grant, 2001). A firm's resources consist of all assets, both tangible and intangible, that permit the firm to devise and apply value-enhancing strategies. The RBV is based on two underlying assertions, that of resource heterogeneity and of resource immobility, which are connected to sustained competitive advantage through the proposition that, if a firm possesses a resource that is valuable and otherwise unavailable to other competing firms, that resource can be a source of competitive advantage. While resources serve as the basic unit for analysing firms' competitive advantage, previous studies tend to employ business capability to analyse a firm's competitive advantage (Murugi et al., 2016; Powell et al., 1997).

Business capabilities are rooted in business processes and can be regarded as complex bundles of skills and accumulated knowledge which enable the activities in a business process to be carried out (Boampong-ohemeng et al., 2015). Moreover, in considering the complementarity between different business capabilities, previous studies in RBV also suggested that a business capability can sometimes be much more valuable when combined with other business capabilities (Zhu 2004). The results of combining different capabilities allow firms to

exploit their resources more effectively and enable them to develop sustained competitive advantage with an increased protection from imitation.

The resource-based view (RBV) of the firm, founded on ideas developed by Penrose (1959), suggested that what was really more important than industry structure was the resources possessed by the firm, deployed by the manager, and used and further developed by the organization. However, resources or assets had to be defined by the competitive context: how else was a resource valuable except in a context? It was this primal definition of a resource or asset that caused a problem. The problem was whether the RBV suffered from circularity, or was a tautology, i.e., that resources led to strategy and competitive advantage, which in turn defined relevant competitive structures, which in turn what an asset or resource was, and so on.

The way out of the circularity is to see all of this not cross-sectionally, but as a dynamic, longitudinal process (Porter, 1991) where the issue comes down to initial conditions and the role of the entrepreneur and innovation in start-up of the firm. The RBV of the firm holds that there are key assets that give rise to competitive advantage. These assets may be structural in the sense of industry and competitive position of the firm, but are much more likely to be in these assets held and developed by the firm. An important issue has been raised about just why these internal assets cannot be duplicated by others with the result that competitive advantage cannot be built or sustained. The past decade has seen interesting discussions of this problem (e.g., Rumelt, 1991; Barney, 1986). The resolution of this issue seems to lie in how assets are both created and viewed. While the theory is still developing, it is becoming ever more clear that the assets that matter are not those elemental ones that are easily duplicated by all firms, but rather those that are built hierarchically out of elemental assets and might be labeled compound assets. A great deal, because it is the very issues raised above that Jay and Ed have tackled for us in this special issue. The work they have put together for us here shows the current level of discourse and challenges facing the field as it continues to unravel the complexity of content, process, and firm performance in a competitive context itself ever (Rolfstam, 2012).

## **2.4 Empirical Review**

According to Brondizio et al. (2014). Empirical research is defined as any research where conclusions of the study is strictly drawn from concretely empirical evidence, and therefore verifiable evidence.

### **2.4.1 The influence of procurement practice**

Liu et al.(2019) studied green public procurement practices in local governments: This study uses the life-cycle model to classify Chinese local governments related to Green Procurement practices (GPP), and thus develops a comparative research framework. Econometric method was used to process survey data collected from 166 Chinese procurement officials. The results show that, for local governments at GPP introduction stage, their adoption of GPP is positively associated with officials' full awareness of GPP regulations and official documents, officials' full awareness of GPP guidelines and procurement lists, and wide coverage of GPP subsidy policy. For local governments at GPP growth stage, improving GPP performance is positively associated with officials' full awareness of guidelines and lists, and wide coverage of GPP subsidy policy, while it is negatively associated with low administrative level. The research framework and empirical results enrich the current knowledge of GPP practices in local governments and have strong practical significance.

Mcmurray et al. (2014) Sustainable procurement in Malaysian organizations: Practices, barriers and opportunities. This brought the total number of mail outs to 450 public and private sector procurement directors/managers. The results showed there is a significant variation in the adoption of sustainable procurement across the sectors with the private sector registering significantly higher levels of Sustainable practices than their public counter parts. Lack of awareness posed the most significant barrier to sustainable procurement implementation regardless of organizations or sectors whilst improved working conditions, an organization's image, and organizational efficiency and transparency provided optimal opportunities for implementing sustainable procurement practices. Finally this study identified the two new

factors of religion and sense of humanity as influencing an employee's engagement in sustainable procurement practices.

Raymond (2008) investigated benchmarking in public procurement. The case study of Sri-Lanka has been used very effectively to discuss the experiences of developing countries. It is revealed that reform solutions within government procurement systems must include measures that address issues of accountability, transparency, value for money, a professional work force and ethics. Poor procurement practices hinder sustainable development and negatively impact upon economic growth. Therefore, developing countries need to recognise the importance of the technique of benchmarking to improve the public procurement process. The major limitation of this study is that it relies solely only on the experience of Sri-Lanka. Perhaps including the experiences of other developing countries such as India, Bangladesh and Indonesia could increase the transference of findings of Sri-Lanka to these countries as well.

Badu (2010) explored corruption practices in public procurement of infrastructural projects in Ghana. Drawing extensively on existing literature and published data, the methodology adopted for the paper consisted of multi-stage critical review of pertinent literature; review of 2007 Annual Report of the Public Procurement Authority and review of the Public Procurement Act, 2003 (Act 663). The study assumes value-laden axiological philosophy, where the values and experiences of the authors provided the basis for the discussion. Conflict of interest, bribery, embezzlement, kickbacks, tender manipulation and fraud are observed corruption practices in the Ghanaian infrastructure projects delivery system. The severity of corruption practices have intensified the search for more innovative means of delivering infrastructure projects that will achieve value for money. In the pursuit to control corruption practices, this would require constitution of a sound procurement system and pro-social equity policies that would foster good governance, corporate social responsibility, transparency, accountability, judicious public expenditure and national progress. The Public Procurement Act 2003 (Act 663) is observed to proffer solutions for these underlying constructs but not without challenges.

#### **2.4.2 Role of Project Performance**

Demirkesen & Ozorhon (2017) assessed the impact of integration management on construction project management performance. The proposed components of integration management are the development of a project charter, knowledge integration, process integration, staff integration, supply chain integration, and integration of changes; whereas the dimensions of project management performance are time, cost, quality, safety, and client satisfaction. A questionnaire was designed and administered to construction professionals and data from 121 projects was analyzed using structural equation modelling. The data was analyzed by using software, called SPSS AMOS.

The findings of the research indicate that integration management has a strong impact on project management performance. The study contributes to the project management body of knowledge in that it develops a conceptual framework consisting of specific components for integration management, reveals the impact of integration management on performance, and proposes several tools and strategies for enabling effective integration along the project life cycle. Industry practitioners may benefit from the framework developed by considering the components proposed and following strategies recommended for construction phases.

Meng (2012) examined the effect of relationship management on project performance in construction. Based on the empirical data collected from the questionnaire survey, a series of statistical analyses are made using the Statistical Products and Services Solution (SPSS). The analysis reveals that the deterioration of the relationship between project parties may increase the likelihood of poor performance. Poor performance can be effectively reduced by improving some aspects of the relationship. The adoption of supply chain collaboration and partnering helps to solve the performance problems, in which a long-term collaboration is more favourable for performance improvement than a short-term collaboration. In addition to the questionnaire survey, a series of industrial experts are interviewed to provide a deeper insight into the effect of relationship management on project performance.

Anantatmula (2019) examined Strategies for Enhancing Project Performance. The fuzzy computer-based ISM was employed for collection and interpretation of data with 221 respect to the factors identified and their non-uniform application across organizations. Then structured personal interviews were used to gather data to understand relations among these factors in order to develop a project performance enhancement model. The model was developed employing the interpretive structural modeling (ISM) methodology and was used to determine relations among these factors that influence project 16 performance. This study helped to analyze underlying interactions among these factors. Further, it also provided a systemic view of project management to make strategic decisions for enhancing project performance.

#### **2.4.2 The influence of Competitive Advantage**

Singh et al.(2007) investigated the relating Organised Retail Supply Chain Management Practices, Competitive Advantage And Organisational Performance using SPSS software and factor analysis was done using principal component analysis for supply chain practices. For this purpose corrected item-to-total correlation and Cronbach's alpha statistics were used . subject to structural equation modelling analysis using AMOS 4.0 version to test and validate confirmatory factor model . The data for- analysis was collected from top Onon-livestock organised retailplayers operating in-Punjab, Haryana, Chandigarh, New Delhi and, Gurgaon in India. The relationships among supply chain practices, competitive advantage, and organisational performance, are tested in the proposed framework using structural equation modelling. The results indicate that Indian retailers know that competitive advantage has high impact on SCP but they fail in matching supply chain practices, competitive advantage and, organisational performance.

Tai (2013) reviewed Competitive advantage impacts of direct procurement management capabilities and Web-based direct procurement system. This study adopts a resource-based view to investigate the impact of direct procurement management capabilities and information technology capabilities derived from Web-based direct procurement systems on competitive advantage. A sample of 128 manufacturing firms in Taiwan with an experience of participating in government-subsidised e-business development projects is surveyed, with resulting data subject to partial least squares analysis to investigate main and interaction effects. The results show that, as hypothesised, process efficiency capability and coordination capability contribute significantly to competitive advantage, but IT capabilities derived from Web-based direct procurement systems per se are not significantly associated with competitive advantage. However, IT capabilities are found to play important roles in reinforcing direct procurement management capabilities.

Renukappa et al.(2016) investigated Sustainable procurement strategies for competitive advantage: an empirical study. In order to achieve this aim, a mixed research methodological approach was adopted to collect and analyse data. The findings are based primarily on quantitative data obtained from 53 completed postal questionnaires and semi-structured interviews with 17 professionals from 12 UK construction organisations. As revealed by this study, sustainable procurement is becoming increasingly important in the UK construction sector. The paper concludes that the process of integrating sustainable procurement initiatives into existing business models is often a complex issue. Therefore, there is an urgent need to explore the drivers and impediments associated with the successful integration of sustainable procurement initiatives into existing construction business models. It is also suggested that there is a need for cross-sector collaboration to capture and share best and worst practices relating to sustainable procurement strategies.

#### **2.5 Conceptual Framework**

The conceptual framework is the researcher's description of the relationship that exist between the constructs of the study. The conceptual framework provides an integrated approach to a subject under investigation (Karnani, 2010). The researcher proposes that, the relationship between Procurement Practice, Project Performance and Competitive Advantage. This proposition is present in figure 2.1 below

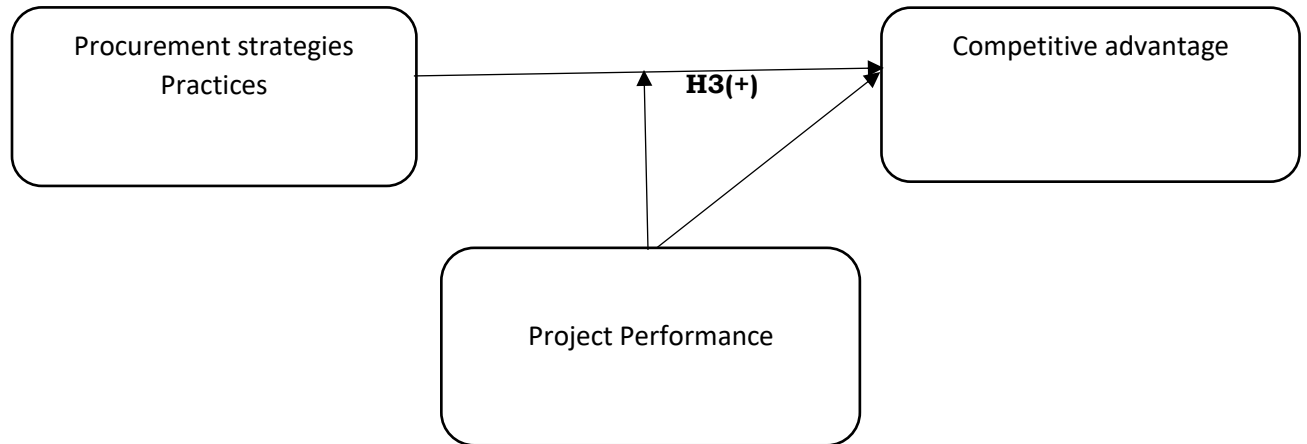


Figure 2.1: Conceptual Framework  
Author's Compilation (2022)

### 2.5.1 Procurement Practice and Project Performance

Socially responsible purchasing practices impact on all aspects of the supply chain, including suppliers, employees and customers. Sustainable procurement practice is “a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment”.. Organizations need to adopt socially and environmentally responsible purchasing practices which have impacts on all aspects of the supply chain, including suppliers, employees, and customers (Mettler et al., 2009), with aims to reduce the environmental and social impact of their own and their suppliers' activities, goods, and services. Brammer and Walker (2016) developed two new dimensions of sustainable procurement practices: buying locally and buying from small suppliers.

In addressing Sustainable practices, this study adopts the design and packaging of products, purchasing from small and local suppliers, products' potential for recycling or reuse, safety, labor rights, carbon reductions in the movement of products to facilities, operational excellence, product innovation, leadership, willingness of suppliers to commit to waste reduction goals, religion, and culture as dimensions of project performance. The existing literature also reported that sustainable procurement is based on the belief that organizations can improve working environment (including health and safety), compliance, efficiency, transparency, and reduce the use of natural resources.

*H1 There is a positive and significant relationship between Procurement Practice and Project Performance*

### 2.5.2 Project Performance and Competitive Advantage

A competitive advantage exists when the firm is able to deliver the same benefits as competitors but at a lower cost (cost advantage), or deliver benefits that exceed those of competing products (differentiation advantage). Competitive advantage is a theory that seeks to address some of the criticisms of comparative advantage. Competitive advantage theory suggests that states and businesses should pursue policies that create high-quality goods to sell at high prices in the market. Barney (1991) suggested that the resources that are scarce and valuable at the same time can create competitive advantage, and if these resources are also difficult to duplicate, substitute and hard to deliver, they can sustain the advantage.

Competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. Project Management is a social construct. Bagchi (1996) classified metrics for competitiveness of organisations as time, quality, cost, efficiency, and diagnostic measures. The firms should focus on profit maximisation, and cost reduction (manufacturing, operating, and quality) to improve financial performance.

The firm's ability to share and integrate knowledge is identified as a key to success. Interest in the competitive consequences of organizational phenomena has grown significantly over the last several years. In practice however, project schedules are still used as the sole project performance measure in some firms (Montabon & Pagell, 2016).

Although the use of project schedules is still a good practice for some companies, for other companies the use of project schedules as the sole project performance measure can result in industrial projects falling behind schedule and coming in over-budget. evaluate project performance primarily through cost and schedule performance measures. Measuring project performance allows for the creation of incentives that likely will yield higher performance. In order to improve the evaluation of project performance at FM&T the company decided to participate in a research project focused on designing a new evaluation system that would enable managers to audit a project and determine where improvements could be made (Mwau, 2019).

Recent research pertaining to the implementation and use of performance management systems has identified the most severe problems organizations encounter as being lack of top management commitment; performance management getting a low priority or its use being abandoned after a change in management; not having a performance management culture; management putting a low priority on implementation; and people not seeing enough benefit from performance management.

*H2 There is a positive relation between Project Performance and Competitive Advantage*

### **2.5.3 Project Performance influence on the relationship between Procurement Practice and Competitive Advantage**

Previous studies have suggested that one of the major goals of managing direct procurement is to improve direct procurement efficiency. To achieve this improvement, firms not only refine their internal procurement processes, but also streamline procurement transactions with their direct material suppliers. In refining internal procurement processes, firms focus on developing capacity to improve the alignment between procurement and business requirements. In streamlining procurement transactions, firms focus on developing the capacity to minimise transaction times and costs (Akinradewo et al., 2022).

For example, firms develop the capacity to shorten direct materials purchasing times and reduce transaction errors, sourcing costs and administrative tasks associated with monitoring and controlling procurement transactions. We argue that a firm can improve coordination with direct material suppliers through superior coordination capability, consisting of a capacity to build better coordination mechanisms with direct material suppliers, coupled with a capacity to build better information sharing mechanisms. coordination capability may be employed as a strategic asset in creating competitive advantage, since it satisfies the conditions of value, heterogeneity, inimitability and immobility.

Being able to build effective information sharing mechanisms and coordination mechanisms in managing direct procurement makes it possible to cope with market changes (i.e. value), while the ability to implement information sharing and coordination mechanisms to coordinate the activities of direct material suppliers is certainly not equally distributed in the market (i.e. heterogeneity). At the same time, coordination capability is complex and accumulated over time (i.e. inimitability) and it is developed based on the development of trust and commitment between trading firms (i.e. immobility). Web-enabled direct procurement can help firms to improve the timeliness and accuracy of their transaction information, allowing them to better plan and manage their production operations and inventory levels (Fearon and Philip 2005; Harrigan et al. 2008; Smart 2010).

These process-level improvements will result in lower costs, higher productivity and streamlined processes and extend to both purchasing firms and their suppliers. On the purchasing side, Web-based direct procurement systems enable buyers to electronically manage their direct procurement processes and to reengineer their internal processes, resulting in benefits such as reduced transaction errors, sourcing costs and administrative tasks associated with monitoring and controlling direct procurement processes. consistent processes are effective because they reduce the amount of rework that occurs during the project life-cycle.

*H3 Project Performance positively influences the relationship between Procurement Practice and Competitive Advantage*

### **3.0 RESEARCH METHODOLOGY**

Research methodology is a detailed procedure used to answer the research questions; it includes a description of research design, sampling techniques, instrumentation and data analysis techniques (Oso & Onen, 2009). This chapter presents the methodology employed for the study. It provides an in-depth description of the research approach adopted for this study, the research design and strategy, study population, sample size and sampling techniques. It also discusses the mode of data collection, operationalization of the construct, method of data analysis, type and sources of data, ethical considerations and profile of the study organization.

#### **3.2 Research Design**

Rahi (2017) defines research design as a plan and structure that allows a researcher to investigate into a research problem and question for the purpose of discovering available solutions or answers. Also, Abutabenjeh & Jaradat (2018) define a research design as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings”. There are primarily three research designs; exploratory, explanatory and descriptive designs. Exploratory research designs are used when a researcher wants to gain a broad understanding of a topic rather than test a specific hypothesis. This type of research is frequently used at the start of a research project to aid in the development of more specific hypotheses and research designs.

Exploratory research frequently employs qualitative methods such as interviews, focus groups, and observation to identify patterns and themes in data. Explanatory research design, also known as causal research design, is a type of research design used to test and explain cause-and-effect relationships. This type of research frequently employs quantitative methods such as experiments and surveys to test hypotheses about the relationship between variables. A descriptive research design is a research method for describing and comprehending the characteristics of a population or phenomenon. It is used to describe in detail a specific event, situation, or group of people. Descriptive research is frequently used to collect data via observation, surveys, or interviews. In this study the researcher adopted a descriptive research design to achieve its goal.

This is because descriptive research design can use a wide variety of research methods to investigate one or more variables (Palinkas et al., 2015). Also, a descriptive design was adopted in this study in order to help the researcher answer the question what is the moderating role of SC innovation in the relationship between SCM practices and performance of firms. Simply, the study adopted this design to help researcher in understanding the research problem more efficiently with the sue of several research variables.

#### **3.3 Population of the study**

According to Majid (2018), population is referred to as the theoretically specified aggregation of study elements which encompasses all subjects of interest. A research population is a group of people or things that a researcher wants to study. It is the entire group of people, animals, or things that share the characteristics that the researcher wishes to investigate. Specific characteristics such as age, gender, occupation, location, or any other relevant criteria can be used to define the population. The goal of the study is to draw conclusions or inferences about the population based on the sample data collected. It should be noted that population can be either finite or infinite. For the purpose of this study, the target population consists of all managers from respective industries. The study selects managers of SMEs.

#### **3.4 Sampling Technique and Sample Size**

Sampling is a statistical procedure dealing with the selection of the individual observation. It helps us to make statistical inferences about the sample selected (Taherdoost, 2016). Sample size measures the number of individual samples measured or observations used in a survey or experiment. Sampling methods are classified as either probability or non-

probability. In probability samples, each member of the population has a known non-zero probability of being selected (Taherdoost, 2016). Probability methods include random sampling, systematic sampling, and stratified sampling.

In non-probability sampling, members are selected from the population in some non-random manner. These included convenience sampling, judgment/purposive sampling, quota sampling, and snowball sampling (Palinkas et al., 2015). The study adopted the use of convenience sampling method. Convenience sampling is a method of collecting samples by taking samples that are conveniently located around a location. Convenience sampling involves using respondents who are “convenient” to the researcher.

The reason for adopting this method is because in convenience sampling there is no pattern whatsoever in acquiring respondents, they may be recruited merely asking people who are present and willing to aid the purpose of the study. Managers of businesses were recruited in getting responses for the study. Sample size is a direct count of the number of samples measured or observations being made. The number of individuals you should include in your sample depends on various factors, including the size and variability of the population and your research design manipulation (Abutabenjeh & Jaradat, 2018). There are different sample size calculators and formulas depending on what you want to achieve with statistical analysis. In calculating the sample size from the entire population, the researcher resorted to the standard formula. The study sampled 100 respective firms using 2 responses from each firm. Therefore, the study used 200 responses from participants in management positions in the respective firms.

### **3.5 Sources and Type of Data**

The primary data sources are generally original data collected and analyzed by the researcher from the field in the process of the research work. Primary data for this study was collected from the responses of management of organizations within the context of the study (Majid, 2018). This study used primary data from survey. The study used primary data that was collected through self-administered questionnaires containing closed questions.

### **3.5 Data Collection Method**

The facts and figures which can be numerically measured are studied in statistics. Numerical measures of same characteristics are known as observation and collection of observations is termed as data. Data are collected by individual research workers or by organizations through sample surveys or experiments, keeping in view the objectives of the study. The data collected may be primary and secondary sources. Mujere (2016) believes that data collection should be objective, systematic and repeatable. Related data sources such as statistical and non-statistical sources can be given. The questionnaire was designed on a seven-point Likert type scale and administered through a drop and pick method. Instrumentation involves not only the selection or design of the instruments but also the conditions under which the instruments will be administered (Rahi, 2017).

The common data collection instruments used in this research is questionnaire. In this study, the researcher used self-administered questionnaire for collecting data from respondents. The questionnaire was divided into four sections. The study was conducted through questionnaires, using a 7-point Likert scale from 1 = Strongly Disagree to 7 = Strongly agree. The questionnaire containing Likert-scaled items (7-point scale) has been drafted in English. The items in the questionnaire were taken from previous research to increase the validity of the study as seen in the table below;

### **3.6 Data Analysis**

Data analysis is the method of reviewing, cleaning, converting and modelling data with the objective of finding valuable information, proposing conclusions and supporting decision-making (Zikmund et al., 2010). As stated by Williams (2011), there are several means of analysing data: utilising statistical software, data mining, descriptive, exploratory, confirmatory data analysis and many others. The study analysed the data through quantitative means. Before the quantitative analysis, data collected was sorted, edited, coded and entered in the software. The analytical instrument for this study was the Statistical Package for Social Science (SPSS) version



23 software. This software has been widely used by researchers as a data analysis technique. Findings were presented using tables. Structural equation modelling (SEM) was employed in the data analysis.

This is due to the fact that SEM can test the causal direct and indirect relationship between the research variables (Byrne, 2010). To adequately analyse the data collected to achieve reliable findings, the study utilized both descriptive and inferential analysis techniques. The study adopted a 2-tailed Pearson correlation analysis to determine the significant relationship between the variables. The study used mean and standard deviation analysis to give descriptive meanings to the data collected. Regression were the inferential analysis performed to deduce meaning from the data collected.

### 3.7 Reliability and Validity of the Data Collection Instrument

Reliability and validity are concepts used to evaluate the quality of research. They indicated how well a method, technique or test measured something. Reliability is about the consistency of a measure, and validity is about the accuracy of a measure. It's important to consider reliability and validity when you are creating your research design, planning your methods, and writing up your results, especially in quantitative research. Reliability and validity are closely related, but they mean different things. A measurement can be reliable without being valid. However, if a measurement is valid, it is usually also reliable. Model fit was used to assess the reliability of each scale. For each of the item scales, factor analysis was used to reduce the total number of items to manageable factor. To obtain useful results, the methods you use to collect your data must be valid: the research must be measuring what it claims to measure. This ensures that your discussion of the data and the conclusions you draw are also valid. Confirmatory factor analysis (CFA) was used to test for the validity of constructs.

### 3.8 Ethical Consideration

All research studies should consider ethics of participants and consider sensitivity of the issue. Gwimbi and Dirwai (2003) defined ethics as the acceptable moral principles developed by individuals or groups which govern the conduct of research with regard to sampled subjects, respondents and all stakeholders of the research process. In carrying out research it is the responsibility of the researcher to protect the respondents from harm and provide them with adequate information on the importance of the research and enable them to withdraw when they want to. Respondents were given an option to complete the questionnaire or decline. More time that is an additional one week was given to avoid rushing the subjects.

Anonymity refers to a situation when the researcher cannot link data to respondents. This is when privacy is respected and respondents' identities are kept anonymous. Justice is fair treatment of all respondents (Saunders, 2016). The researcher indicated clearly and stressed that the subjects were not supposed to write their names to maintain anonymity and confidentiality. Respondents voluntarily and willingly gave first-hand information on what is happening in their various businesses.

## 4.0 DATA ANALYSIS

This chapter presents the data analysis, discussion of the results. The chapter first considered the background of respondents followed by descriptive statistics, inferential analysis, hypothesis testing and findings and finally touched on the discussion of the results. In all, 160 questionnaires were administered to the respondents but 145 were received within the time frame representing 90.6%.

**Table 4.1 Respondents Background**

Profile	Categories	Frequency	Percentage
Age band (in years)	20-29 years	19	13.1
	30-39 years	53	36.5
	40-49 years	36	24.8

	50 years or more	37	25.5
	<b>Total</b>	<b>145</b>	<b>100</b>
<b>Gender</b>	Male	71	49.0
	Female	74	51.0
	<b>Total</b>	<b>145</b>	<b>100</b>
<b>Working experience Years</b>	1-5 years	17	11.7
	6-10 years	55	37.9
	11-15 years	16	11.0
	16-20 years	57	39.3
	<b>Total</b>	<b>145</b>	<b>100</b>
<b>Position in your company</b>	CEO	69	47.5
	Middle manager	44	30.3
	Supervisor	17	11.7
	Senior Staff	10	6.8
	junior Staff	5	3.4
	<b>Total</b>	145	100
<b>Level of education</b>	A level	47	32.4
	HND/Diploma	29	20.0
	Bachelor	35	24.1
	Masters	24	16.5
	PhD	10	6.9
	<b>Total</b>	145	100
<b>Type of your company:</b>	Private	96	66.2
	Public	49	33.7
<b>Type of production</b>	Manufacturer	72	49.6
	Service provider	42	28.9
	Research &Design	11	7.5
	Product designer	20	13.7
	<b>Total</b>	145	100
<b>Age of your firm</b>	1 to 5years	32	22.0
	6 to 10 years	47	32.4
	11 to 15 years	48	33.1
	16 to 20 years	14	9.6
	21 or more	10	6.8
	<b>Total</b>	145	100
<b>Number of employees</b>	1 to 9	18	12.4
	10 to 49	68	46.8
	50 to 249	59	40.6
	<b>Total</b>	145	100

Regarding the age band of the respondents, 19 of the respondents representing 13.1% were within the ages of 20-29 years, 53 of the respondents representing 36.5% were within the ages of 30-39 years, 36 of the respondents representing 24.8% were within the ages of 40-49 years and 37 of the respondents representing 25.5% were within the ages of 50 years or more. Concerning the gender of the respondents, 71 of the respondents representing 49.0% were male whereas 74 of the respondents representing 51.0% were female. The years of working experience for the respondents for the study, 17 of the respondents representing 11.7% have worked for about 1-5 years, 55 of the respondents representing 37.9% have worked for about 6-10 years, 16 of the respondents representing 11.0% have worked for about 11-15 years whereas 57 of the respondents representing 39.3% have worked for about 16-20 years.

Regarding the positions of the respondents for the study in their companies, 69 of the respondents representing 47.5% were chief executive officers, 44 of the respondents representing

30.3% were middle managers, 17 of the respondents representing 11.7% were supervisors, 10 of the respondents representing 6.8% were senior staffs whereas 5 of the respondents representing 3.4% were junior staff. The level of education of the respondents for the study, 47 of the respondents representing 32.4% were advance level graduates, 29 of the respondents representing 20.0% were Higher National Diploma and Diploma equivalent, 35 of the respondents representing 24.1% were bachelor's degree graduates, 24 of the respondents representing 16.5% were Masters graduates and 10 of the respondents representing 6.9% doctor of philosophy graduates. The issue of the type of their companies, 96 of the respondents representing 66.2% were in the private companies whereas 49 of the respondents representing 33.7% were in the public center.

Concerning the type of production, they are working in, 72 of the respondents representing 49.6% were in the Manufacturing companies, 42 of the respondents representing 28.9% were in the Service provider, 11 of the respondents representing 7.5% were in the Research & Design companies whereas 20 of the respondents representing 13.7% were in the Product designer companies. Age of their firms, 32 of the respondents representing 22.0% have existed for 1 to 5 years, 47 of the respondents representing 32.4% have existed for 6 to 10 years, 48 of the respondents representing 33.1% have existed for 11 to 15 years and 14 of the respondents representing 9.6% have existed for 16 to 20 years whereas 10 of the respondents representing 6.8% have existed for about 21 or more years. Regarding the number of employees, 18 of the respondents representing 12.4% have about 1 to 9 employees, 68 of the respondents representing 46.8% have about 10 to 49 employees and 59 of the respondents representing 40.6% have about 50 to 249 employees.

#### 4.2 Validity and Reliability

Validity refers to the extent to which a measure or set of measures correctly represent the constructs of the study (Bhattacharjee, 2012). Reliability is an assessment of degree of consistency between multiple measurements of the same variable. It is therefore concerned with whether alternative measurements at different times would reveal similar information. Variables differ in how well they could be measured-i.e. how much measurable information their measurement scale is able to provide.

There is some measurement error involved in every measurement, which determines the amount of information that can be obtained (Bhattacharjee, 2012). Reliability refers to the consistency and stability of a score from measurement scale as to whether the results in the survey could be duplicated in similar surveys (Bhattacharjee, 2012). Reliability is said to be particular important when latent variables are calculated from underlying item scales. Since these scales consist of a group of interrelated items designed to measure underlying constructs, it is important to establish whether the same set of items would extract the same responses if they were re-administered to the same sample group on more than one occasion. Variables derived from test instruments are only said to be reliable when it is clear that they elicit stable responses over multiple measurements of the instrument's surveys (Bhattacharjee, 2012).

Cornbrash's Alpha coefficient was used as a measure of internal consistency-reliability of the scale used in this study. Cronbach's Alpha is a measure of internal reliability for multi-item summated rating scales. Its values range 0 and 1, where the higher the score, the more reliable the scale. A coefficient reliability of 0.70 or higher indicated that the instrument used is reliable (Cronbach, 2004). Also, in order to analyze the data in relation to ascertain the validity threshold, the measurement of the response using Kaiser Mayer Olkin test to be certain that the data is acceptable to proceed to the inferential statistics to make fair and valid conclusions. Kaiser (1974) proposes that values above 0.5 are acceptable and appropriate. In a situation that the value is less than 0.5, then there is a need to collect additional data or reconsider which variable is to take into consideration. The table 4.2 presents the results on the reliability of the constructs.

**Table 4.2 Validity and Reliability Results**

Constructs	Cronbach's Alpha	Number of Items	KMO	Approx. Chi-Square
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Competitive Advantage	.924	12	.751	663.422
Procurement Strategies	.711	22	.643	752.531
Project performance	.822	10	.697	641.355

Source: Field Data, 2022

The construct Competitive Advantage recorded a Cronbach's Alpha of = .924; Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .751; Bartlett's Test of Sphericity Approx. Chi-Square = 663.422 were all within the acceptable threshold and items are deemed highly reliable. The construct Procurement Strategies recorded a Cronbach's Alpha of = .711; Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .643; Bartlett's Test of Sphericity Approx. Chi-Square = 752.531 were all within the acceptable threshold and items are deemed highly reliable. The construct Project performance a Cronbach's Alpha of = .822 Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .697 Bartlett's Test of Sphericity Approx. Chi-Square = 641.355 were all within the acceptable threshold and items are deemed highly reliable.

#### 4.3 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was used to confirm the measurement model after conducting Exploratory Factor Analysis (EFA) (Hair et al., 2010). The result from the EFA provided the underlying factor that best represents the data, together with their respective measuring items. CFA was carried out to test the goodness of fit of variables measuring the studies. Table 4.3 shows the measurement model of meaningful learning experience. After conducting none of the item was deletion.

**Table 4.3 Confirmatory Factor Analysis**

Competitive Advantage	Procurement Strategies	Project performance
.714	.841	.634
.738	.923	.725
.671	.732	.885
.578	.821	.681
.674	.723	.843
.721	.839	.822
.815	.839	.811
.782	.847	.742
.980	.837	.830
.821	.865	.814
.721	.859	
.831	.880	
	.847	
	.826	
	.911	
	.855	
	.734	
	.967	
	.911	
	.822	
	.633	
	.921	

#### 4.4 Correlations among the constructs

The correlation among the constructs was performed to ascertain the relationship of the variables for the study and the table 4.6 presents the results.

**Table 4.4 Correlations among the constructs**

Constructs		CA1	PS2	PP3
CA1	Pearson Correlation	1	.785**	.701**
	Sig. (1-tailed)		.000	.000
	Sum of Squares and Cross-products	246.938	180.924	163.069
	Covariance	1.715	1.256	1.132
	N	145	145	145
PS2	Pearson Correlation	.785**	1	.676**
	Sig. (1-tailed)	.000		.000
	Sum of Squares and Cross-products	180.924	215.352	146.862
	Covariance	1.256	1.495	1.020
	N	145	145	145
PP3	Pearson Correlation	.701**	.676**	1
	Sig. (1-tailed)	.000	.000	
	Sum of Squares and Cross-products	163.069	146.862	219.034
	Covariance	1.132	1.020	1.521
	N	145	145	145

**\*\*.** Correlation is significant at the 0.01 level (1-tailed).

**CA= Competitive Advantage; PS= Procurement Strategies; PP= Project performance**

The relationship between Competitive Advantage and Procurement Strategies, the Pearson Correlation coefficient of (.785\*\*); Sum of Squares and Cross-products of (180.924) and Covariance (1.256)  $p <$  value of (0.000) indicate that there is a positive and significant relationship between Competitive Advantage and Procurement Strategies. The relationship between Competitive Advantage and Project performance, the Pearson Correlation coefficient of (.701\*\*); Sum of Squares and Cross-products of (163.069) and Covariance (1.132)  $p <$  value of (0.000) indicate that there is a positive and significant relationship between Competitive Advantage and Project performance. The relationship between Procurement Strategies and Project performance, the Pearson Correlation coefficient of (.676\*\*); Sum of Squares and Cross-products of (146.862) and Covariance (1.020)  $p <$  value of (0.000) indicate that there is a positive and significant relationship between Procurement Strategies and Project performance.

#### 4.5 Competitive Advantage

In determining the competitive advantage in the organizations for the study, literature was consulted and 12 items were adopted under three main indicators. The table 4.5 presents descriptive statistics results.

**Table 4.5 Competitive Advantage**

Items	Min	Max	Mean	SD
Our product prices give the organization competitive advantage.	1	5	4.36	.556

Our prices help to win and maintain our customers	1	5	4.20	.564
Product reliability is helping us to win competitive advantage.	1	5	4.21	.560
We offer products that are very durable.	1	5	4.20	.555
Timely delivery is helping us to maintain our customers.	1	5	4.22	.538
Dependable delivery is helping us to maintain our customers.	1	5	4.21	.554
Customized products are helping us to maintain our customers.	1	5	4.21	.551
Customers' product offerings are helping us to maintain our customers.	1	5	4.22	.538
Introduction of new products is helping us to maintain our customers.	1	5	4.23	.543
Lowest time-to-market below industry average.	1	5	4.21	.551
Fast product development is helping us to maintain our customers.	1	5	4.22	.541
Customer response time is helping us to maintain our customers.	1	5	4.23	.534

The (mean= 4.36; SD=.556) affirm that the organizations for the study product prices give them competitive advantage. The (mean= 4.20; SD= .564) affirm that the organizations for the study prices help them to win and maintain our customers. The (mean= 4.21; SD= .560) affirm that the organizations for the study product reliability is helping them to win competitive advantage. The (mean=4.20; SD=.555) affirm that the organizations for the study offer products that are very durable. The (mean=4.22; SD= .538) affirm that the organizations for the study ensuring of timely delivery is helping them to maintain their customers. The (mean= 4.21; SD= .554) affirm that the organizations for the study ensuring of dependable delivery is helping them to maintain their customers. The (mean= 4.21; SD= .551) affirm that the organizations for the study customization of products are helping them to maintain our customers. The (mean= 4.22; SD= .538) affirm that the organizations for the study customers' product offerings are helping them to maintain their customers.

The (mean=4.23; SD=.543) affirm that the organizations for the study introduction of new products is helping them to maintain their customers. The (mean= 4.21; SD= .551) affirm that the organizations for the study lowest time-to-market below industry average is helping them to achieve competitive advantage. The (mean= 4.22; SD= .541) affirm that the organizations for the study fast product development is helping them to maintain their customers. The (mean=

4.23; SD= .534) affirm that the organizations for the study customer response time is helping them to maintain their customers.

#### 4.6 Procurement Strategies

In determining procurement strategies in the organizations for the study, literature was consulted and 22 items were adopted under three main indicators. The table 4.6 presents descriptive statistics results.

**Table 4.6 Procurement Strategies**

Items	Min	Max	Mean	SD
we have Long-term plans directionally	1	2	4.39	.589
We engage in strategic planning	1	4	4.30	.882
We ensure competence development training	1	5	4.60	.536
We have support for purchasing functions	1	4	4.92	.807
Confidence to suppliers	2	4	4.15	.527
We ensure a strong relationship	1	5	4.20	.566
We ensure Fulfilling the request	1	5	4.25	.572
We achieve Raw material specifications	2	5	4.28	.567
We ensure Sharing information of business plan	2	5	4.26	.532
We achieve Product development cooperation	1	5	4.27	.580
We seek for win-win outcome	1	5	4.21	.571

We Reach mutual agreement on discussed issue	1	5	4.30	.583
We are powerful enough to ask supplier to readjust their pricing strategy	2	5	4.26	.521
We solicit ideas and suggestions	1	5	4.31	.586
We present strategic information to suppliers	1	5	4.27	.597
We involve vendors in product improvement	1	5	4.30	.583
We retain the same supplier(s) for more than two years	1	5	4.24	.557
We treat suppliers as our customers	1	5	4.23	.525
We Reduce inventory level by engaging supplier with JIT	1	5	4.20	.608
We monitor poor deliver performance by suppliers	1	5	4.22	.559
We request suppliers to provide the cost breakdown to analyze the cost drivers	2	5	4.25	.506
We achieve control of suppliers' on price increases	1	5	4.27	.595

The (mean= 4.39; SD= .589) affirm that the organizations for the study use long-term plans directionally as a procurement strategy. The (mean= 4.30; SD= .882) affirm that the organizations for the study do engage in strategic planning. The (mean=4.60; SD= .536) affirm that the organizations for the study ensure competence development training. The (mean=4.92; SD= .807) affirm that the organizations for the study have support for purchasing functions. The (mean= 4.15; SD=.527) affirm that the organizations for the study have develop confidence with their suppliers. The (mean=4.20; SD= .566) affirm that the organizations for the study ensure a strong relationship with their partners. The (mean= 4.25; SD=.572) affirm that the organizations for the study ensure fulfilling the request of their customers. The (mean= 4.28; SD=.567) affirm that the organizations for the study achieve raw material specifications of their customers. The (mean= 4.26; SD= .532) affirm that the organizations for the study ensure sharing information of business plan with their partners. The (mean=4.27; SD=.580) affirm that the organizations for the study achieve Product development cooperation with their partners. The (mean=4.21; SD=.571) affirm that the organizations for the study seek for win-win outcome with their partners. The (mean= 4.30; SD=.583) affirm that the organizations for the study reach mutual agreement on discussed issue with their partners. The (mean= 4.26; SD= .521) affirm that the organizations for the study are powerful enough to ask supplier to readjust their pricing strategy.

The (mean=4.31; SD= .586) affirm that the organizations for the study solicit ideas and suggestions from their partners. The (mean=4.27; SD= .597) affirm that the organizations for the study present strategic information to their suppliers. The (mean= 4.30; SD= .583) affirm that the organizations for the study have involved their vendors in product improvement. The (mean= 4.24; SD= .557) affirm that the organizations for the study do well to retain the same supplier(s) for more than two years. The (mean= 4.23; SD= .525) affirm that the organizations for the study treat suppliers as their customers. The (mean= 4.20; SD= .608) affirm that the organizations for the study have reduce inventory level by engaging supplier with Just In-Time (JIT). The (mean= 4.22; SD= .559) affirm that the organizations for the study We monitor poor deliver performance by suppliers. The (mean=4.25; SD= .506) affirm that the organizations for the study do request their suppliers to provide the cost breakdown to analyze their cost drivers. The (mean= 4.27; SD=.595) affirm that the organizations for the study do well to achieve control of suppliers on price increases. The organizations for the study have procurement strategies.

#### 4.7 Project performance

In determining the project performance in the organizations for the study, literature was consulted and 10 items were adopted under three main indicators. The table 4.7 presents descriptive statistics results.

**Table 4.7 Project performance**

Items	Min	Max	Mean	SD
Function according specification	1	5	4.23	.509
Expected quality is achieved	1	5	4.25	.544
High customer satisfaction	1	5	4.31	.532

Time schedule is minimized	1	5	4.25	.546
Within time schedule	1	5	4.28	.548
Within project budget	1	5	4.25	.579
Project cost is minimized	1	5	4.29	.533
Life cycle costs are minimized	1	5	4.23	.561
Negotiations are solved	1	5	4.25	.561
Good cooperation	1	5	4.25	.509

The (mean= 4.23; SD=.509) affirm that the organizations for the study do function according specification. The (mean= 4.25; SD= .544) affirm that the organizations for the study do well to ensure that their expected quality is achieved. The (mean= 4.31; SD= .532) affirm that the organizations for the study achieve high customer satisfaction. The (mean= 4.25; SD=.546) affirm that the organizations for the study do well to ensure that their time schedule is minimized. The (mean=4.28; SD= .548) affirm that the organizations for the study ensure that they operate within time schedule. The (mean=4.25; SD= .579) affirm that the organizations for the study operate within project budget. The (mean= 4.29; SD= .533) affirm that the organizations for the study project cost is well minimized. The (mean= 4.23; SD=.561) affirm that the organizations for the study life cycle costs are highly minimized. The (mean= 4.25; SD=.561) affirm that the organizations for the study negotiations are always solved. The (mean= 4.25; SD=.509) affirm that the organizations for the study have a good cooperation. The descriptive statistics indicate that the organizations for the study are achieving good project performance.

#### 4.8 The relationship between procurement strategies practices and competitive advantage

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.196 <sup>a</sup>	.038	.034	.867
ANOVA <sup>a</sup>				
Sum of Squares	df	Mean Square	F	Sig.
6.085	1	6.085	8.087	.005 <sup>b</sup>
Coefficients <sup>a</sup>				
Unstandardized Coefficients		Standardized Coefficients		
B	Std. Error	Beta	t	Sig.
.112	.040	.196	2.844	.005

The study examined the influence of procurement strategies practices on competitive advantage and the extent that influence of procurement strategies practices on competitive advantage, the R Square of .038 establishes that procurement practices can overall influence competitive advantage of about 4%. The variation of the 4% indicates that procurement strategies practices is a good predictor of achieving competitive advantage. The Standardized Coefficients (Beta=.196; t=2.844; p<=0.005) statistically indicate that procurement strategies practices have a positive and significant influence on competitive advantage.

#### 4.9 Project performance and competitive advantage

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
2	.711 <sup>a</sup>	.505	.502	.411
ANOVA <sup>a</sup>				
Sum of Squares	df	Mean Square	F	Sig.
34.964	1	34.964	207.022	.000 <sup>b</sup>
Coefficients <sup>a</sup>				
Unstandardized Coefficients		Standardized Coefficients		



B	Std. Error	Beta	t	Sig.
.795	.055	.711	14.388	.000

The study examined the influence of project performance on competitive advantage and the extent that influence of project performance on competitive advantage, the R Square of .505 establishes that project performance can overall influence competitive advantage of about 51%. The variation of the 51% indicates that project performance is a strong predictor of achieving competitive advantage. The Standardized Coefficients (Beta=.711; t=14.388; p<=0.000) statistically indicate that project performance has a positive and significant influence on competitive advantage.

#### 4.10 The moderating effect of project performance

<b>Mode3 Summary</b>						
R	R-sq	MSE	F	df1	df2	p
.7319	.5357	.1600	77.3022	3.0000	201.0000	.0000
<b>Test(s) of highest order unconditional interaction(s):</b>						
	R2-chng	F	df1	df2	p	
	.0001	.0399	1.0000	.0000	.8419	
<b>Conditional Effect of the focal predictor at value of the moderators</b>						
	coeff	se	t	p	LLCI	ULCI
	.6116	.2402	2.5460	.0116	.1379	1.0853

The study examined the moderating effect of project performance in the relationship between procurement strategies and competitive advantage. The extent that project performance moderates the relationship between competitive advantage and procurement strategies, the R Square of .5357 establishes that project performance can overall moderate the relationship between competitive advantage and procurement strategies of about 54%. The variation of the 54% indicates that project performance is a strong predictor of achieving competitive advantage and procurement strategies. The conditional effect of the focal predictor at value of the moderators (se=.2402; t=2.546; p<=0.0116) statistically indicate that project performance positively and significant moderates the relationship between procurement strategies and competitive advantage.

#### 4.11 Hypothesis testing and findings

Hypothesis	Relationship	Beta	T	P<	Decision
H1	PS - -> CA	.196	2.844	.005	Supported
H2	PP - -> CA	.711	14.388	.000	Supported
H3	PP - -> CA*PS	.2402	2.5460	.0116	Supported

#### 4.12 Discussion of Results

The study examined the influence of procurement strategies practices on competitive advantage and the findings of the study statistically indicate that procurement strategies practices have a positive and significant influence on competitive advantage. Socially responsible purchasing practices impact on all aspects of the supply chain, including suppliers, employees and customers. Sustainable procurement practice is “a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment”.

Organizations need to adopt socially and environmentally responsible purchasing practices which have impacts on all aspects of the supply chain, including suppliers, employees, and customers (Mettler et al., 2009), with aims to reduce the environmental and social impact of their own and their suppliers' activities, goods, and services. Brammer and Walker (2016) developed two new dimensions of sustainable procurement practices: buying locally and buying from small suppliers. In addressing Sustainable practices, this study adopts the design and packaging of products, purchasing from small and local suppliers, products' potential for recycling or reuse, safety, labor rights, carbon reductions in the movement of products to facilities, operational excellence, product innovation, leadership, willingness of suppliers to commit to waste reduction goals, religion, and culture as dimensions of project performance.

The study examined the influence of project performance on competitive advantage and the findings of the study statistically indicate that project performance has a positive and significant influence on competitive advantage. A competitive advantage exists when the firm is able to deliver the same benefits as competitors but at a lower cost (cost advantage), or deliver benefits that exceed those of competing products (differentiation advantage). Competitive advantage is a theory that seeks to address some of the criticisms of comparative advantage. Competitive advantage theory suggests that states and businesses should pursue policies that create high-quality goods to sell at high prices in the market. Barney (1991) suggested that the resources that are scarce and valuable at the same time can create competitive advantage, and if these resources are also difficult to duplicate, substitute and hard to deliver, they can sustain the advantage. Competitive advantage occurs when an organization acquires or develops an attribute or combination of attributes that allows it to outperform its competitors. Project Management is a social construct.

Bagchi (1996) classified metrics for competitiveness of organisations as time, quality, cost, efficiency, and diagnostic measures. The firms should focus on profit maximisation, and cost reduction (manufacturing, operating, and quality) to improve financial performance. The firm's ability to share and integrate knowledge is identified as a key to success. Interest in the competitive consequences of organizational phenomena has grown significantly over the last several years. In practice however, project schedules are still used as the sole project performance measure in some firms (Montabon & Pagell, 2016). Although the use of project schedules is still a good practice for some companies, for other companies the use of project schedules as the sole project performance measure can result in industrial projects falling behind schedule and coming in over-budget. evaluate project performance primarily through cost and schedule performance measures.

The study examined the moderating effect of project performance in the relationship between procurement strategies and competitive advantage and the findings of the study statistically indicate that project performance positively and significant moderates the relationship between procurement strategies and competitive advantage. There is strong argument that a firm can improve coordination with direct material suppliers through superior coordination capability, consisting of a capacity to build better coordination mechanisms with direct material suppliers, coupled with a capacity to build better information sharing mechanisms. coordination capability may be employed as a strategic asset in creating competitive advantage, since it satisfies the conditions of value, heterogeneity, inimitability and immobility.

Being able to build effective information sharing mechanisms and coordination mechanisms in managing direct procurement makes it possible to cope with market changes (i.e. value), while the ability to implement information sharing and coordination mechanisms to coordinate the activities of direct material suppliers is certainly not equally distributed in the market (i.e. heterogeneity). At the same time, coordination capability is complex and accumulated over time (i.e. inimitability) and it is developed based on the development of trust and commitment between trading firms (i.e. immobility). Web-enabled direct procurement can help firms to improve the timeliness and accuracy of their transaction information, allowing them to better plan and manage their production operations and inventory levels (Fearon and Philip 2005; Harrigan et al. 2008; Smart 2010).

## 5.0 CONCLUSION

This presents the summary of findings, conclusion, recommendations and suggestions for future studies.

### 5.2 Summary of findings

**The relationship between procurement strategies practices and competitive advantage:** The study examined the influence of procurement strategies practices on competitive advantage and the extent that procurement strategies practices influence competitive advantage. The findings of the study established that procurement strategies practices can overall influence competitive advantage of about 4%. The Standardized Coefficients statistically indicate that procurement strategies practices have a positive and significant influence on competitive advantage.

**Project performance and competitive advantage:** The study examined the influence of project performance on competitive advantage and the extent that in which project performance influence competitive advantage. The findings of the study established that project performance can overall influence competitive advantage of about 51%. The Standardized Coefficients statistically indicate that project performance has a positive and significant influence on competitive advantage.

**The moderating effect of project performance:** The study examined the moderating effect of project performance in the relationship between procurement strategies and competitive advantage. The extent that project performance moderates the relationship between competitive advantage and procurement strategies, the findings of the study established that project performance can overall moderate the relationship between competitive advantage and procurement strategies of about 54%. The conditional effect of the focal predictor at value of the moderators statistically indicates that project performance positively and significant moderates the relationship between procurement strategies and competitive advantage.

**The relationship between Competitive Advantage and Procurement Strategies:** The relationship between Competitive Advantage and Procurement Strategies, the Pearson Correlation coefficient, Sum of Squares and Cross-products and Covariance indicate that there is a positive and significant relationship between Competitive Advantage and Procurement Strategies.

**The relationship between Competitive Advantage and Project performance:** The relationship between Competitive Advantage and Project performance, the Pearson Correlation coefficient, Sum of Squares and Cross-products, and Covariance indicate that there is a positive and significant relationship between Competitive Advantage and Project performance.

**The relationship between Procurement Strategies and Project performance:** The relationship between Procurement Strategies and Project performance, the Pearson Correlation coefficient, Sum of Squares and Cross-products, and Covariance indicate that there is a positive and significant relationship between Procurement Strategies and Project performance.

### 5.3 Conclusion

**The relationship between procurement strategies practices and competitive advantage:** The study examined the influence of procurement strategies practices on competitive advantage and the extent that procurement strategies practices influence competitive advantage. The findings of the study concluded that that procurement strategies practices have a positive and significant influence on competitive advantage.

**Project performance and competitive advantage:** The study examined the influence of project performance on competitive advantage and the extent that in which project performance influence competitive advantage. The findings of the study concluded that project performance has a positive and significant influence on competitive advantage.

**The moderating effect of project performance:** The study examined the moderating effect of project performance in the relationship between procurement strategies and competitive advantage. The extent that project performance moderates the relationship between competitive advantage and procurement strategies and the findings of the study concluded that project

performance positively and significant moderates the relationship between procurement strategies and competitive advantage.

**The relationship between Competitive Advantage and Procurement Strategies:** The relationship between Competitive Advantage and Procurement Strategies, the findings of the study concluded that there is a positive and significant relationship between Competitive Advantage and Procurement Strategies.

**The relationship between Competitive Advantage and Project performance:** The relationship between Competitive Advantage and Project performance, the findings of the study concluded that there is a positive and significant relationship between Competitive Advantage and Project performance.

**The relationship between Procurement Strategies and Project performance:** The relationship between Procurement Strategies and Project performance, the findings of the study concluded that there is a positive and significant relationship between Procurement Strategies and Project performance.

## 5.4 Recommendations

Organizations are to make sure that their product are highly reliable in order to help them to win competitive advantage. Companies that are committed of producing highly reliable product will have the competitive advantage therefore companies that may fail to achieve a reliably products will never gain a competitive. For this reason, companies are to make sure that their products are highly reliable to help them win competitive advantage.

Organizations are to also ensure that they offer products that are very durable so that they can gain competitive advantage in this global competition. Companies that may offer durable products can withstand global competition and also win competitive advantage. it is therefore very important for companies aiming to grow to make sure that their products are durable so that they withstand global competition and remain in market.

Companies are to ensure that they achieve timely delivery in order to help them to maintain their customers and also win new ones. Firms that are committed to timely delivery will win the trust of their customers and can then maintain them to also win new ones. Where a firm will not be able to deliver on timely manner, their customers may look for an alternative supplier that can deliver on time therefore in order for a firm to avert this happening, it is very important to be able to achieve timely delivery.

## 5.5 Suggestions for future study

A future study can look at the moderating effect of top management commitment in the relationship between supply chain coordination and project performance.

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