International Journal of Economics, Commerce and Management United Kingdom Vol. IV, Issue 1, January 201

http://ijecm.co.uk/

Vol. IV, Issue 1, January 2016 ISSN 2348 0386

# THE EFFECTS OF PERCEIVED USEFULNESS AND SATISFACTION ON ACCEPTANCE OF PROCUREMENT PRACTICES

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## Abstract

This study investigated the influence of perceive usefulness and satisfaction on procurement practices. The study had three specific objectives comprising of: 1. to determine the relationship between perceived usefulness and acceptance of procurement practices; 2. to investigate the relationship between satisfaction and acceptance of procurement practices; and 3. to examine the extent to which perceived usefulness interact with satisfaction to predict acceptance of procurement practices. Some hypotheses were developed which informed the adoption and utilization of a quantitative approach to research by conducting a survey with 300 respondents. Questionnaires on a Likert scale were used to collect responses from respondents. The results were analyzed using bivariate correlation and regressions to determine the level of influence of perceive usefulness and satisfaction on procurement practices. The study found that perceive usefulness accounted for the procurement practices suggesting that firms engage in good procurement practice if they think it has some benefits. Similarly, satisfaction also was found to explaining the practices of procurement. The study conclude that good procurement practices will adopted and implemented only when organizations think it is useful and provides some level of satisfaction.

Keywords: Perceive usefulness, Procurement Practices, Acceptance of Procurement Practices, Perceive Satisfaction, Public Procurement act of Ghana, Purchasing



#### INTRODUCTION

Procurement involves purchasing planning, standards determination, specification development, supplier research and selection, value analysis, financing, price negotiation, making the purchase, supply contract administration, inventory control and stores and disposal and other related functions (Business Dictionary, 2012). Public procurement is the process by which organizations acquire goods and services using public funds. It includes planning, inviting offers, awarding contracts and managing contracts (Adu, 2011). Procurement is the act of obtaining or buying goods, services or works. It involves purchase planning, value analysis, price negotiation; inventory control among others. Procurement is an integral part of organizational life. Nelson and Millet (2001) advanced that the majority of organizational spending consists of purchasing.

Procurement practices that are satisfactory and useful generally derived their intended benefits. As indicated by Monczka et al. (1998) satisfactory procurement practices lead to three major benefits: (1) cost savings, (2) impact on quality, and (3) contribution to technology development. The management of supplier relationships should be tailored to those values that are in line with the overall business value strategy (Treacy & Wiersema, 1993). The outcomes of relationships may range from cost savings through joint product development. Once the focus (output) is decided, the appropriate relationship can be developed (Cousins, 2002). Obviously, not all suppliers are to be dealt with in the same way. This development places purchasing managers for the task of developing and executing a set of differentiated supplier strategies. Effective procurement practices therefore require selection of strategies that are appropriate to the prevailing circumstances.

Everything taken together and anchored on Bailey, Farmers and Jessop (2005) philosophy – which endeavors on fostering procurement functions operational effectiveness and efficiency. In sub-Saharan Africa, including Ghana, procurement function has not been given the required attention and recognition despite the effort by partners like the World Bank, the International Trade Organization, the United Nations Conference on Trade and Development, the World Trade Organization, and the United Nations Conference on Trade and Development, the World Trade Organization and others (Gattiker & Carter, 2010). This could be deliberate or sheer ignorance on the value the procurement function could contribute to any organization. In most developing countries, the procurement function is transitioning from a clerical non-strategic unit to an effective socio-economic unit that is able to influence decisions and add value (Hidding, 2001).



Developing countries in one way or another have reformed their public procurement regulations. The reforms have not been limited to regulations only, included public procurement process, methods, procurement organizational structure, and the workforce. Nonetheless, most developing countries are facing a problem of rapid changes in procurement requirements. The changes are impacting pressure on how the procurement function performs its internal and external processes and procedures in order to achieve its objectives (Huang et al., 2011). The ability to realize procurement goals is influenced by internal forces and external forces. Interactions between various elements, professionalism, staffing levels and budget resources, organizational structure whether centralized or decentralized, procurement regulations, rules, guidelines, and internal control policies, all need attention and influence the performance of the procurement function (Kim & Netessine, 2013).

In addition, the process of procurement is faced by the challenges imposed by a variety of environment factors (external factors) such as market, legal environment, political environment, organizational and socio-economic environmental factors. Despite the progress made in the public sector procurement processes, there is little to say about the private sector (Walker & Harland, 2008). It is also important to note that the procurement Act does not directly address sustainable procurement and the factors affecting it in specific industries such as the dairy industry (Leksmono et al., 2006). One of the basic rules of procurement is that in the end, it is important to think in terms of the total cost of the process and products. This includes not only the purchase price, but also time and resources that are expended in the pursuit of commodities (Lardenoije et al., 2005).

Many procurement activities suffer from neglect, lack of direction, poor coordination, lack of open competition and transparency, differing levels of corruption and most importantly not having a cadre of trained and qualified procurement specialist, who are competent to conduct and manage such procurements, in a professional timely and cost effective manner. Inflexible and bureaucratic systems of procurement contribute to unacceptable contract delays, increased costs, the potential for manipulation of contract awards and lack of fair competition, all of which influence the procurement processes and performance negatively (Ngugi & Mugo, 2014). The acceptance of procurement system is an important first step to its utilization. Social scientists have indicated that, understanding why individuals accept or reject systems has proven to be one of the most challenging issues in systems research (Doll et al., 1998). To this extent, the need for understanding how and why system has or has not been adopted is important for managers and providers alike.

User acceptance of procurement system or practices is influenced by a myriad of factors. Scholars have reported that, people make an effort to use a system because the system



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is enjoyable or satisfactory and offers external rewards (Deci et al., 1996). The rewards relate to technology based factors like perceived enjoyment and perceived attractiveness (Van der Heijden, 2004), personal factors like personal innovativeness (Agawam & Prasad, 1999), or interpersonal factors like trust (Gefen, et al., 2003). Although it is known that individuals expend effort due to both intrinsic and extrinsic motivation, less thought is given to an individual's intrinsic reasons for accepting computer technology (Igbaria & Livari, 1996). Following from the above, the present study seeks to investigate empirically, the extent to which perceived usefulness and satisfaction with procurement practices influence acceptance of procurement practices.

#### **Problem Statement**

According to scholars, procurement of goods and services take over 50% of firm's business turnover. This is done to ensure that firms achieve sustainable competitive advantage (Bailey et al., 2005; Hines, 2004). Also, apparent from reviewed literature, firms by their virtue of being heavily involved in different procurement arrangements with third parties popularly known as suppliers have over the years strove to remain 'agile' and 'responsive' to changing demand and supply market pressures (Bailey et al., 2005; Lysons & Farrington, 2006; Hines, 2004; Mentzer, 2004), to ensure effective and efficient supplying of business requirements broadly classified as goods and services.

Many researchers argue that firms' are under immense pressure to either 'shape up' their procurement practices and protocols or risk 'shaping out'. As a result, there is continued interest in study of procurement practices performance and importance in influencing business performance (Bailey et al, 2005; Hines 2004; Van Weele, 2005). Indeed, different firms because of their different settings and contexts have varying perceptions of the performance and importance of procurement practices. Over the years, several research findings seeking to explore implications of procurement practices in buyer and supplier firms' business performance (Hines, 2004; Lysons & Farrington, 2006). Essentially, over the year's procurement organization has become integral to businesses success stories (Narasimhan et al, 2008). The effectiveness and efficacy of procurement has been emphasized as relevant factors in influencing the behavior of transacting parties in buyer-supplier relational exchange (Jap, 2001; Zsidsin & Ellram, 2003).

According to Whittington (2006), a 'practice' is concerned with the 'how; question, which relates to the way procurement activities are instituted. As such, it does not only go beneath organization-level processes to investigate what goes on inside organizations; it also goes above these processes to interrogate how the procurement practices originate from a wider



business environment outside the firm. Against this backdrop, Whittington (2006), further distinguish between the two types of practices as essentially, what procurement people 'engage with' or as 'what they do'. According to Whittington (2006), procurement activities in a firm rely on some wider context. Central to this context are the institutionalized and organizational practices, which procurement people engage in order to carry out their business of sourcing and procuring goods and services required by the business. Inevitably, there is a range of concepts which apply to different types of procurement practices such as institutional processes and procedures, guiding principles, company values, norms or scripted behaviors (Barley & Tolbert, 1997). Essentially, while these constructs of procurement practices are common across organizations, however, there are also specific organizational routines, the 'repetitive', recognizable patterns of interdependent actions carried out by multiple actors (Feldman & Pentland, 2003) that equally guide procurement practices in particular organizations. The passage of the procurement law and institutionalization of procurement processes in Ghana ushered in a new era of procurement practices in Ghana. However, there is a general outcry regarding procurement practices in Ghana.

Against this backdrop, the researchers think that some questions remain unanswered. In the first place, when people perceive something to be useful and also satisfied with it, they tend to accept it. Procurement practices in Ghana remain a major challenge for most firms. It is not clear as to which procedure is being used in assigning contracts to people. Plethora of literature on procurement practices exist, however, very little is reported on perceived usefulness, satisfaction and acceptance of procurement practices. In view of this, the present study seeks to determine the extent to which perceived usefulness and satisfaction of procurement practices affect acceptance of procurement practices in Ghana

## Research Objectives

- 1. To determine the relationship between perceived usefulness and acceptance of procurement practices.
- 2. To determine the relationship between satisfaction and acceptance of procurement practices.
- 3. To examine the extent to which perceived usefulness interact with satisfaction to predict acceptance of procurement practices.

## Statement of Hypotheses

1. Perceived usefulness of procurement practices will significantly and positively predict acceptance of procurement practices.

- 2. Satisfaction with procurement practices will significantly and positively predict acceptance of procurement practices.
- 3. Perceived usefulness will significantly interact with satisfaction to predict acceptance of procurement practices.

#### An Overview of the Procurement Act in Ghana

Prior to the emergence of the Public Financial Management Reform Programme commenced in 1996 in Ghana, procurement was guided by some many different rules. This created a chaotic situation for government officials as they sometimes struggled to identify which rules to follow, due to lack of existing policy framework for public procurement, lack of existing institutional arrangement, and the absence of a central body for procurement (Suleiman, 2010). Desirous of having a procurement framework, in 1999, the Public Procurement Oversight Group was formed to design and coordinate the reform. This group was also formed to oversee the improvement of the countries public financial health. "While the reform activity was on going, many shortcomings and organizational weaknesses were identified in the country's procurement system (Osaafo-Maafo, 2003).

These shortcomings included the absence of a comprehensive public procurement policy, and the lack of a comprehensive legal regime to safeguard the integrity of the public procurement system. These were the main problems that government faced while conducting the reform. Others were the absence of a central body with the technological and managerial expertise and competence to develop a coherent public procurement policy. In 2003, the Government of Ghana put together the main public procurement guidelines currently used in Ghana and established these guidelines to deal with the shortcomings and limitations inherent in the somewhat disjointed procurement guidelines and rules. This act was officially accepted and implemented to replace the many different rules that guided procurement activities.

The Public Procurement Act 2003, (Act 663) which was a proactive measure to give the procurement landscape in Ghana a facelift "provided a comprehensive framework for developing and strengthening procurement institutions and operational processes in the context of poverty reduction, private sector development, good governance and anti-corruption" (Ghana Trust Law). This act is supported by standard tender documents. The act has also put in place appropriate administrative and institutional arrangements to look over the procurement system. Despite the implementation of the procurement Act, there are still serious problems in procurement practice in Ghana. Why are there many problems despite the availability of a regulatory framework? This is because the public procurement bill was intended to promote the



use of public procurement for the development of the nation, and also synchronize the application of procurement rules with the international rules.

#### **Perceived Usefulness**

Human judgment about the usefulness of procurement practices and processes is usually subjective. However, when people perceive a particular activity, practice or process to be useful, they tend to perceive it as worthwhile and therefore more likely to utilize that activity or practice. Scholars have indicated that perceived usefulness measures a person's believe that using a particular system would enhance his or performance (Davis, 1989). Irrespective of the culture, perceived usefulness of a system was more important in influencing believability and trust of a system. According to Davis et al (1992) perceived usefulness refers to consumers' perception regarding the outcome of the experience. Similarly, Mathwick et al (2001) defined perceived usefulness as the extent to which a person deems a particular system to boost his or her job performance.

In Ghana, the promulgation of procurement laws and the subsequent establishment of procurement authority to superintendent procurement activities has brought about some level of sanity as far as procurement is concerned. Hitherto, procurement activities were clouded with uncertainties and irregularities. Generally, Public Procurement in Ghana has been noted, as at 2011, to utilize about 80% of national tax revenue after personal emolument. This implies that much of the country's national tax revenue is spent on procurement which makes it an area that needs some form of special attention. This figure has been constant over the years. This figure does represent close to 24% of total imports, between 50% - 70% of the non-personnel budget and about 17% of the country's Gross Domestic Product (GDP) (Zaney, 2011).

Considering the many positive contributions that effective procurement has had in other industries or sectors of the economy like manufacturing, various sectors in Ghana may well benefit from improving the efficiency of procurement practices. The procurement process has been noted to have enhanced trust, judicious use of resources, and general coordination of the various segments of the manufacturing process (Jarousse, 2011). Some of the benefits for the manufacturing industry include getting the advantage of dealing with a single organisation through a single point of contact, lower cost of production when the accurate specifications are given, and it enhances communication. The healthcare sector has been identified as having a complex structure with multiple stakeholders in the whole supply chain (Jarousse, 2011; Perry 2001).



#### Perceived Satisfaction

In the context of this research, perceived satisfaction of procurement practices refers to the positive feelings people have about the procurement process and all aspects of procurement activities. In motivation literature, satisfaction could be intrinsic or extrinsic. Researchers acknowledge that intrinsic motivation is the pleasure and satisfaction one gains from performing behavior (Doll & Ajzen, 1992). When a person is intrinsically motivated, he or she act for the fun or challenge entailed rather because of external prods, pressures, or rewards (Ryan & Deci, 2000). Intrinsic motivation is also conceptualize as a person's subjective feelings of joy, elation, pleasure, and positive holistic experience which play a crucial role in explaining user acceptance and usage behaviour of procurement processes (Saadé et al., 2008). Both perceived usefulness and satisfaction have been found to be predictors of acceptance of a system or intention to behave in a certain way.

For example, researchers reported that perceived usefulness and enjoyment have significant impact on student intention to use web-based learning systems (Saadé et al., 2008). Perceived enjoyment is similar to perceived satisfaction because perceived enjoyment refers to the extent to which the activity of using a system or product is perceived to be enjoyable in its own right. Research shows that perceived enjoyment was a significant predictor of acceptance of a system (Wang et al., 2010). Inferring from this, it can be concluded that individuals who are high in perceived satisfaction of the procurement process are more likely to exhibit a higher level of behavioural intention to accept the existing procurement practices than individuals who are low in perceived satisfaction (Wang et al., 2010).

Similarly, it has been reported that individuals who are more intrinsically motivated may use a system for the enjoyment they find in the activity and, since they enjoy the process, they may tend to underestimate its difficulty, challenge and find it easier to use or follow (Venkatesh, Speier, & Morris, 2002).

#### **Effective Procurement**

Procurement is an integral part of the government and private businesses. Simply, procurement refers to the act of providing goods, services or awarding work assignments by a state body, organization, institution or some other legal person regarded as a procuring entity in the manner and under the conditions prescribed by a nation's law (Public Procurement Board-PPB, 2003). Tender- a formal document in which the proposals and requirements of work to be done are set out (Republic of Ghana, 2006) is an essential component of a procurement process. The tender process contributes to the transparency and effectiveness of the procurement process because tendering allows the buyer an institution, private businessman or woman or government to set



out her requirements and suppliers to propose their offers and to show how they intend to meet the requirements set by the buyer. In Ghana, the procurement process is governed by the Procurement Act which seeks to ensure efficiency, effectiveness, accountability and transparency in the conduct, execution and conclusion of procurement activity. The main objectives of procurement include but not limited to supplying organizations with stable flow of goods and services, aiding in efficient and effective purchasing and ethically obtaining the best value for money. In addition, managing stock, enabling the service provider offer their best service at a low cost and at the same time protecting the government cost structure are some of the objectives of procurement (Barly, 1994).

#### **Procurement Method and Process**

Central to the procurement are laws governing purchasing activities. For example, procurement decisions are influenced by the purchase value or threshold values of each purchase activities. However, these differ depending on the nature of goods, services and works involved. Against this backdrop, all procurements above the threshold values are guided by procurement directives which dictates that the good or service to be procure be advertised in the Supplement to the Official Journal for public tenders. According to the procurement directives of Ghana, minor purchases are subject to "direct procurement"; these purchases do not have to be publicly advertised. Despite this, principles of market competition suggest that, direct procurement should not be repeated, and purchases should not be distributed into smaller components to avoid exceeding the threshold values. The Procurement Act of Ghana is applicable to some sectors of the Ghanaian economy and not others. For example, even though the Public Procurement Act is important in the educational sector especially for schools to procure food stuff and stationery on regular basis, the value of these items individually usually do not fall under the threshold value of the different procurement methods namely the national competitive tendering, request for quotation and restricted tendering. It is clear from the above that procurement in Ghana is still at the infancy stage (Verhage et al., 2002).

## EMPIRICAL LITERATURE

Extant literature on procurement practices exist, however, the focus of the present study differs from what has been investigated globally and locally. Procurement permeates in almost every aspect of an organization. According to Van Weele (2006), an important link exists between procurement process, efficiency, effectiveness and procurement performance. Procurement performance begins with purchasing efficiency and effectiveness which is a more proactive approach to attain set performance rather than reactive (Van Weele, 2006).



Within the context of procurement, transparency and accountability are essential for effectiveness. One factor that drives transparency and accountability is appropriate recording of procurement procedures (Chimwani, Iravo & Tirimba, 2014). Thurston (2002) posits that records are critical to the operations of any organization and most importantly to the procurement process. The relevance of appropriate record keeping in procurement processes is contingent on the fact that over-reliance on human memory alone is detrimental to an effectiveness procurement (cited in Chimwani et al., 2014).

According to Thurston (2002), procurement strives on accurate and accessible recordstamper-free, original, and reliable information that reveals institutional memory for effective procurement decision making. Effective procurement should comply strictly with documentation, recording, minuting and filing requirements. The documentation of procurement information should be orderly, accessible and under clean conditions. Subsequently, sound record management system has been associated with reduced vulnerability to legal challenge on financial loss and promotes efficiency in terms of human and space resources through greater coordination of the information use, maintenance and control (Thurston, 2002; cited in Chimwani, et al., 2014). The effectiveness of procurement practices lies in effective policies and procedures. For example, Jones and George (2009) indicated that bureaucratic control mechanism which constitutes a comprehensive system of formal rules, regulations and standard operating procedures (SOPs) shapes and regulates the behaviour of divisions, functions and individuals within the ambit of procurement units.

Against this backdrop, these bureaucratic controls have been found to allow employees to perform their procurement activities efficiently and effectively. Similarly, some researchers argued that the procurement landscape has changed significantly, requiring change in procurement procedures and approaches. Thus, traditional procurement procedures were supposed to give way to modern approaches to guarantee an effective procurement process (Moncska, Handfield, Guinipero & Patternson, 2010). Accordingly, these researchers advanced that procurement procedures provide guidance that employees follow in performing activities, put constraints on behaviour and show how the procurement function should work to achieve strategic objectives (Moncska et al., 2010). In another study, the effect of rules on procurement fraud and corruption was examined with the focus on specific European legislation-Procurement Directive 2004/18. Specifically, the coordination of procedures for the award of contracts for public works, public supply and public services by public bodies within all EU Member States was examined.



Fraud risk in public procurement was operationalized as insider-driven specifications, low visibility of procurement processes, and ample opportunities for renegotiation of terms. The study revealed that risks may be increased by innovative procurement practices that have the effect of extending the manoeuvring between tenderers and public bodies, such as competitive dialogue (Dorn, Levi & White, 2008).

Eynon (2007) utilized factor analysis in a study which sought to understand current business-to-business e-procurement practices by describing the success factors and challenges to its implementation in the corporate setting. The outcome revealed three e-procurement success factors: supplier and contract management; end-user behavior and e-procurement business processes; and information and e-procurement infrastructure. Similarly, three factors were identified with respect to challenge-to-implementation of e-procurement practices. These factors were: lack of system integration and standardization issues; immaturity of e-procurement based market services and end-user resistance; and maverick buying and difficulty in integrating e-commerce with other systems. This study shows that technology is vital in ensuring effective procurement practices, and that there are clear procedural and human faceted behavioral components which are integral to the whole procurement process.

A study was also conducted within the local government set-up to determine perceived procurement best practices. The study drew upon secondary data to arrive at its conclusion. It was observed that perceived best public procurement practice may well, in the short-term, be inappropriate and perhaps delay economic recovery. The study suggested that more radical short-term procurement strategic interventions were set out and justified as accelerating the economic recovery (Gordon, 2009). Some other studies have put employees at the Centre of procurement, stressing that effective procurement practices is influenced by the quality and ability of staff in the organization (Saunders, 1997). Similarly, the organizational structures and operation of planning control systems were found to be essential in the whole procurement process (Saunders, 1997). Strategic plans should include information on the acquisition, development, use and reward of human assets. Plans need to take into account the current state of development of the procurement function and the strategic direction in which its state might change. Multi-skilling provides employees with a variety of skills and should be developed extensively.

Training is beneficial and generates more than the equivalent cost in payback. To further the goals of value-based management, all employees need broad and continuous education and training. Education, training and professional development should be skill, process oriented and continuous (Saunders, 1997). Leenders, Fearon, Flynn, and Johnson (2002) noted that the large number of items, huge monetary volume involved, need for an audit trail, severe



consequences of poor performance, and the potential contribution to effective organizational operations associated with the procurement function are five major reasons for developing a sound, professionally managed procurement system. They further argue that qualifications are crucial for value-based management which requires employees to assess and improve processes while contributing to team performance. In addition, qualifications enhance staff ability to perform, enabling them to make better decisions, work as a team, and adapt to change, while increasing efficiency, quality, productivity and job satisfaction. Training is often for improving immediate work while education develops people for the long term. To enable individuals to create value consistently, both education and training are needed.

Cousins (2003), stressed that with the ever increasing popularity of purchasing partnership philosophy, organizations must take a closer look at the educational levels of procurement staff. With procurement's perceived movement from a clerical service to a strategic business function, the calibre of staff in terms of training, education and skills must increase to fulfill its strategic potential. The author asserted that employees need to learn new skills for improving work performance. Procurement comprises a wide range of supply chain processes such as management of value analysis processes, supplier negotiations and quality certification; and supply market research as well as early supplier involvement in processes such as development of specifications and purchase of inbound transportation. This calls for higher professional skills for enhanced performance. Baily et al. (2005) propounded that knowledge of the mission, the existence of top-down objectives with related performance measures, and process guidelines link individual or group performance to the firm's goals and expectations of upper management require good qualifications. The use of teams, cross-functional managers, broad process and linkage-oriented job responsibilities, and extensive information systems enable individuals to balance conflicting objectives and improve processes.

Professional qualifications are the fulcrum around which performance turns. Without well-motivated, able and well trained staff, even the more brilliantly conceived plans and strategies can fail. A motivated team whose members work for and with each other can beat a team of less motivated people even if they are greater in talent. To improve procurement performance, it is essential to understand the roles that are to be performed, the standards to be achieved and how performance is evaluated. Understanding is what allows an employee to become an innovator, initiative taker, and creative problem solver in addition to being a good performer on the job, (Goetsch & Davis, 2006). They list benefits of training as improved productivity, quality, safety and health, communication and better teamwork. The value-based procurement management paradigm requires a rethinking of the management of human resources. Education must cross necessary boundaries and motivate procurement team



performance. However, simply possessing knowledge is less important than applying it. Attention should be moved to skills of doing jobs and demonstrating competences.

Sriram and Stump (2004) reckoned that enterprise resource planning (ERP) systems are essential for supporting internal information sharing. Externally, inter-organizational information systems (IOIS) constituting automated information systems shared by various firms can be used to support information-sharing with customers and suppliers. ICT contributes to improved communications patterns, increased demand for coordination of joint activities and new organizational structures through its ability to store transmit and process information and speed up inter-organizational activities. Organizations have huge amounts of raw procurement data but are poor at converting same into market knowledge. They should strive to find trends, patterns and connections in data in order to inform and improve competitive procurement performance.

Alt and Puschmann (2005) opined that procurement systems have long been supported by ICT. With the implementation of ERP systems in the 1990s, EDI connections with suppliers were established through automation of delivery schedules by linking user materials management system with supplier systems. ICT enables organizations to decentralize operational procurement processes and centralize strategic ones due to higher transparency. Prior to e-procurement, strategic procurement often dealt with routine tasks such as individual transactions. Strategic aspects were frequently neglected, with the buyer having little influence over the choice of suppliers and purchased products. Internet technologies facilitate faster and more efficient operational procurement processes enabling managers to concentrate on strategic tasks. Bovis (2005) contended that there is a dimension to information that enables supply and demand to be matched in multiple markets, often with tailored products, in evershorter time frames.

This enables suppliers to react in real-time to market changes. ICT serves as the connection between various stages of the system, allowing them to coordinate and maximize total supply profitability. It is crucial to the daily operation of each stage in the procurement process. Kim and Rogers (2005) asserted that studies have examined business-to-business (B2B) transactions on different operational performance dimensions such as inventory cost, cycle time, and manufacturer flexibility. Rapid growth of importance of ICT application is a testimony to its impact on improving procurement performance. This is achieved through Internet, Intranet and Extranet. However, organizations must make a trade-off between efficiency and responsiveness. Bowersox, Closs and Cooper (2007) argued that ICT provides the means for collecting relevant demand data, developing a common database and providing a means for transmitting order information.



The global setting includes higher cultural distance and geographical complexity, lower behaviour transparency and social difficulties in bonding between procurement channel partners. Thus, ICT could be more effective procurement performance coordination and control mechanism than personal face-to-face interaction in international exchange relationships. Studies on procurement in the small and medium-sized enterprises (SMEs) have been reported. Specifically, researchers examined the relationship between the size of firms and public sector tendering and reported that "size, measured by employee number, significantly influences small and medium-sized enterprises' (SMEs) tendering resources, behaviour and success" (Flynn, McKevitt & Davis, 2013). Other researchers also investigated how availability of resources as perceived by companies influence SME involvement in the biding process (Karjalainen & Kemppainen, 2008).

The study involved 203 Finish SMEs. Specifically, Karjalainen and Kemppainen (2008) observed that companies facing a lack of IT, legal, administrative and supply capacities are less likely to become public sector suppliers. Thus, the perceived lack of legal and administrative resources prevented SMEs from participating in public procurement tenders, and micro-firms were shown to be more vulnerable to the lack of resources.

#### METHODOLOGY

Correlational research design was utilized to investigate the relationship between the independent variables (perceived usefulness and satisfaction) and dependent variable (acceptance of procurement practices). This design is appropriate because the study is not seeking to determine cause-effect association, but just the kind of relationship that exist between the variables. The study was quantitative in nature with questionnaire as the primary data collection instrument. Also, the analysis was descriptive and inferential in nature. For instance, descriptive statistics such as means and standard deviations was computed to summarize the data. In addition, regression analysis was performed to determine the predictive relationship between the variables.

The estimated population of Tamale Metropolis is 450,000. The population will comprise individuals, businesses and institutions that utilize the procurement process in Ghana. Thus, contractors, institutions and private individuals were involved in this study. A total of 300 participants were selected for the study. The sample comprised of individuals and institutions. Non-probability sampling method was adapted. Specifically, purposive sampling method will be used.

This method of sampling was appropriate because the researchers seek to identify people and institutions who have utilized the procurement process before. Questionnaire was



used to collect data on the study variables. The questionnaire was self-designed by the researchers based on the research objectives. The questionnaire was partitioned into three sections. Section A had detail information on demographic variables such as sex, job position, type of business, level of education etc of the participants. Section B contained measures of perceived usefulness of procurement practices. A questionnaire based on a 5-point Likert response format was developed based on literature for this purpose. Thus, responses ranged from strongly agree (5) to strongly disagree (1). Also, section C contained items on measures of satisfaction with procurement practices. The items was anchored on a 5-point Likert response format with responses ranging from strongly agree (5) to strongly disagree (1). Data collected was screened, coded and entered into statistical software to facilitate the analysis. The Statistical Package for Social Science (SPSS) was used to facilitate the analysis. The hypotheses in the study were tested using multiple regression tests. Thus, the contribution of each of the independent variables (i.e. perceived usefulness and satisfaction) on the dependent variable (acceptance of procurement practices) was determined.

## EMPIRICAL RESULTS AND DISCUSSION

The analysis below provides empirical findings with respect to the hypothesized relationships. Here two streams were highlighted. The first stream would present results on demographic distribution of the sample drawn in the study with emphasis on sex, job position, employment type, level of education, and tenure. The last stream would present results on the hypothesized relationships.

## Analysis of Demographic Variables

## Sex distribution of Respondents

The study comprised both male and female respondents. Result in Table 1 shows the distribution in terms of frequency and percent of male and female respondents in the study.

Variables	Frequency	Percent (%)
Male	173	57.7
Female	127	42.3
Total	300	100.0

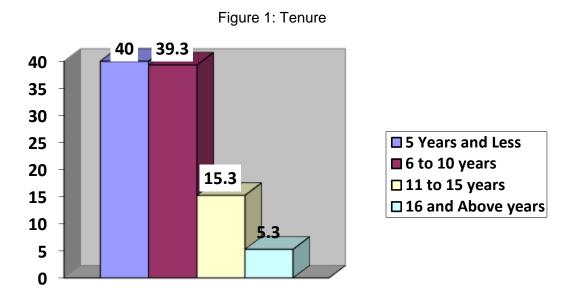
Table 1: Sex Distribution of Respondents

As shown in Table 1, the study was dominated by male respondents (57.7%) while 42.3 percent were female respondents.



## Tenure

Data was also gathered on number of years the individual had worked in his/her current organization or has been working as a self-employed person. Results can be found in



The result in Figure 1 indicates that 40 percent of the respondents have been working in their current organization for 5 years or less; 39.3 percent have been working between 6 and 10 years while others have been working between 11 and 15years (15.3%). Finally, 5.3 percent indicated that they have been working for 16years and more in their current organization or as self-employed persons.

## Job Position of Respondents

Job position was conceptualized as either manager or non-manager. Results on the number of managers and non-managers sampled in this study can be found in Table 2.

Variables	Frequency	Percent (%)	
Manager	81	27	
Non-manager	219	73	
Total	300	100	

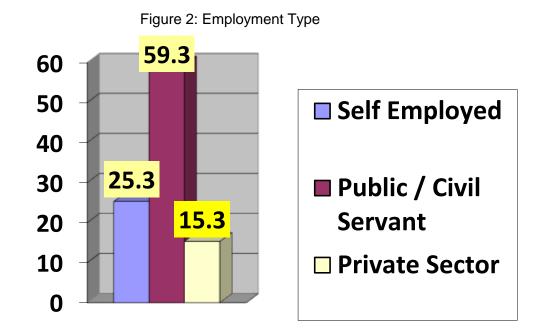
Table 2: Job Position of Respondents

The empirical evidence on job position shows that, the majority of respondents were in the nonmanagerial ranks in their organization (73%) with only 27 percent in the managerial ranks.



# **Employment Type**

Data on type of employment was solicited from the respondents. It was clear that employment type varied from self-employment to private sector employee. The distribution of respondents along these dimensions is presented in Figure 2.



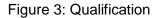
As shown in Figure 2, the majority of respondents (59.3%) indicated that they were either public/civil servant; 25.3 percent indicated that they were managing their own business; and 15.3 percent said they were employees in a private sector organization. In short, the data was heterogeneous, drawing views on respondents from self-employed individuals, public/civil servants, and private sector employees.

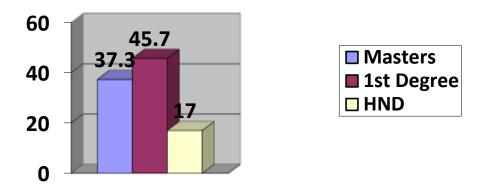
# Highest Level of Education of Respondents

Highest educational qualification of respondents varied along three main dimensions: master's degree; first degree and higher national diploma (HND) certificate holders. The distribution of respondents along these three dimensions is presented in Figure 3.

Analysis of highest educational qualification showed that, 45.7 percent of the respondents had first degree qualification; 37.3 percent had master's level qualification, and 17 percent had HND qualification. In short, all the respondents in this study had appreciable level of education with the minimum qualification being HND.







#### **Descriptive Analysis**

Initial analysis was performed notably to ascertain whether the demographic factors related significantly to the main variables: perceived usefulness, perceived satisfaction, and acceptance of procurement. In view of this, bivariate correlation was performed. In addition, reliability coefficients as well as means and standard deviation values for the variables were computed. Results for the preliminary analyses are presented in Table 3.

Table 3: Descriptive Statistics, Bivariate Correlation and Reliability Coefficient
Values of Study Variables

Variables	Mean	SD	1	2	3	4	5	6	7	8
Sex										
bex			-							
Job position			072	-						
Tenure			119	* .119*	-					
Employment type			.018	.106*	026	-				
Highest educational qualification			.103*	.398*	<b>.</b> 041	046	-			
Perceived usefulness of procurement	16.79	3.10	.139*	• .017	204	• .129•	.261*	•_		
Acceptance of procurement practices	19.05	3.50	.026	158	•059	029	.046	.512	• _	
Perceived satisfaction with procurement	12.33	3.06	069	020	.112"	080	.107*	.315"	• .357•	• -

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

\*. Correlation is significant at the 0.05 level (1-tailed)

As shown in Table 3, sex related significantly to perceived usefulness of procurement practices (r = .139, p<.05) but insignificantly to acceptance of procurement practices (r = .026, p>.05) and

perceived satisfaction with procurement practices (r =-.069, p>.05). In addition, job position was found to relate significantly to acceptance of procurement practices (r =-.158, p<.05) but insignificantly to perceived usefulness of procurement practices (r=.017, p>.05) and perceived satisfaction with procurement practices (r=-.020, p>.05).

Further, tenure related significantly to perceived usefulness of procurement practices (r=-.204, p<.05) and perceived satisfaction with procurement practices (r=.112, p<.05) but insignificantly with acceptance with procurement practices (r=-.059, p>.05). Also, employment type related significantly only to perceived usefulness of procurement practices (r=.129, p<.05) but insignificantly with acceptance of procurement practices (r=-.029, p>.05) and perceived satisfaction with procurement practices (r=-.029, p>.05) and perceived satisfaction with procurement practices (r=-.080, p>.05). Finally, level of education related significantly to perceived usefulness of procurement practices (r=.261, p<.05) and perceived satisfaction with procurement practices (r=.107, p<.05) but insignificantly with acceptance of procurement practices (r=.261, p<.05) and perceived satisfaction with procurement practices (r=.107, p<.05) but insignificantly with acceptance of procurement practices (r=.261, p<.05) and perceived satisfaction with procurement practices (r=.107, p<.05) but insignificantly with acceptance of procurement practices (r=.261, p<.05) and perceived satisfaction with procurement practices (r=.107, p<.05) but insignificantly with acceptance of procurement practices (r=.046, p>.05).

## **Testing Hypotheses**

Hierarchical multiple regression was used to test the hypotheses. This test was found appropriate for the analysis because demographic variables were controlled for each of the hypotheses. In view of this, the demographic factors were entered in the first model, and the predictor was entered in the second model.

## Result for Testing of Hypothesis 1

H1: Perceived usefulness of procurement practices will significantly and positively predict acceptance of procurement practice

Perceived Usefu	liness and Acce	ptance of Procurement Practices
Variables	Model 1	Model 2
Sex	007	049
Job position	205**	154**
Tenure	041	.066
Employment type	003	084
Education	.130 <sup>*</sup>	039
Perceived usefulness		.556**
R <sup>2</sup>	.041	.305
$\Delta R^2$	.041	.264
F	2.498*	21.407**
	**n~ 01 *n~	: 05

 Table 4: Hierarchical Multiple Regression Results of the Predictive Relationship between

 Perceived Usefulness and Acceptance of Procurement Practices

The result in Table 4 indicates that perceived usefulness of procurement practices significantly and positively predicted acceptance of procurement practices after sex, job position, tenure, employment and level of education were controlled ( $\beta$ =.556, p<.05). In addition, perceived usefulness of procurement practices-acceptance of procurement practices model was significant [F (6, 293) = 21.407, p<.05] with perceived usefulness of procurement practices accounting for 26.4 percent of the variance in acceptance of procurement practices.

# **Result for Testing of Hypothesis 2**

H2: Satisfaction with procurement practices will significantly and positively predict acceptance of procurement practices

Table 5: Hierarchical Regression Results for the Predictive Relationship between Perceived

Variables	Model 1	Model 2	
Job position	210**	184**	
Education	.129*	.083	
Perceived satisfaction		.344**	
R2	.039	.156	
ΔR2	.039	.117	
F	6.041**	18.180**	
** 0/ * 05			

Satisfaction and Acceptance of Procurement Practices

\*\*p<.01 \*p<.05

The result in Table 5 indicates that perceived satisfaction with procurement practices significantly and positively predicted acceptance of procurement practices after job position and level of education were controlled ( $\beta$ =.344, p<.05). The perceived satisfaction with procurement practices-acceptance of procurement practices model was significant [F (3, 293) = 18.180, p<.05] with perceived satisfaction with procurement practices accounting for 11.7 percent of the variance in acceptance of procurement practices.

## **Result for Testing of Hypothesis 3**

H3: perceived usefulness of procurement practices will relate significantly and positively to perceived satisfaction with procurement practices.



Table 6: Hierarchical Multiple Regression Results of the Predictive Relationship between

Variables	Model 1	Model 2	
Level of education	.110	.016	
Sex	069	100	
Tenure	.100	.173**	
Perceived usefulness		.360**	
R2	.028	.141	
ΔR2	.028	.114	
F	2.802*	12.127**	
** 04 * 05			

Perceived Usefulness and Perceived Satisfaction of Procurement Practices

\*\*p<.01 \*p<.05

The result in Table 6 suggests that perceived usefulness of procurement practices significantly and positively related to perceived satisfaction with procurement practices after level of education, sex and tenure were controlled statistically ( $\beta$ =.360, p<.05). In addition, perceived usefulness of procurement practices-perceived satisfaction model was significant [F (4, 295) = 12.127, p<.05] with perceived usefulness accounting for 11.4 percent of the variance in perceived satisfaction with procurement practices.

# **DISCUSSION OF FINDINGS**

# Relationship between Perceived Usefulness and Acceptance of Procurement Practices

As expected, the hypothesis that perceived usefulness of procurement practices will significantly and positively predict acceptance of procurement practices was supported. The present finding corroborated previous outcomes (Saadé et al., 2008; Wang et al., 2010; Venkatesh, Speier, & Morris, 2002).

Given that humans are rational by nature, it is expected that when they perceive something to be useful, they would exhibit positive reaction toward that thing. Overwhelming endorsement of this view was seen in scholarly research reports. For example, it has been reported that perceived usefulness and enjoyment have significant impact on student intention to use web-based learning systems (Saadé et al., 2008). Although, the present study used nonstudent sample, the sentiments expressed by workers in the Ghanaian business environment concerning acceptance of procurement practices were found to be driven by perceived usefulness of the system (e.g., procurement system). Similarly, Wang et al. (2010) indicated that perceived enjoyment was a strong factor in determining acceptance of a system. Finally, other researchers intimated that acceptance of a system was driven by intrinsic motivated, and that when people are intrinsically motivated, they tend to use a system and since they enjoy the



process, they may underestimate any difficulty or challenges associated with the system (Venkatesh et al., 2002).

# Relationship between Perceived Satisfaction of Procurement Practices and Acceptance of Procurement Practices

As expected, the hypothesis that satisfaction with procurement practices will significantly and positively predict acceptance of procurement practices was supported. This outcome is consistent with previous research reports (Wang et al., 2010). Reasonably, people tend to accept a system that produces beneficial outcomes. With respect to procurement practices, certainly, when people encounter a transparent and less bureaucratic system, then they are more likely to have confidence in the system.

As indicated by research, perceived usefulness and enjoyment of a system has significant effect on acceptance of the system (Saadé et al., 2008). Similarly, Wang et al. (2010) intimated that perceived enjoyment of a product or system was directly responsible for the acceptance of that system. However, it has been acknowledged that when people are intrinsically motivated to use a system they enjoy, and then they may underestimate its difficult, challenge and find it easier to use or follow (Venkatesh, Speier, & Morris, 2002). Despite this, it generally true that people tend to accept a system that satisfies their needs and wants.

#### POLICY IMPLICATIONS

A lot of scholarship have acknowledged the contribution of perceive usefulness to acceptance of good procurement practices with some arguments on satisfaction influencing good procurement practices. This study settled on the fact that procurement practice is influence by both perceives usefulness and satisfaction. Therefore, organizations who may consider implementing good procurement practice should consider the usefulness of the practice alongside the level of satisfaction of parties to the procurement practice. The study also acknowledges that both perceive usefulness and satisfaction together influence the adoption and practice of good procurement ideas. So, organizations could consider the two predictors of good procurement practice to facilitate the achievement of desirable outcomes.

The significance of this study could be viewed from two perspectives. Firstly, the practitioners (procurement officers), and the second is for future researchers. For practitioners, the study admonishes them to always consider the perceived usefulness and level of satisfaction of stakeholders before considering adopting any procurement practices. This according to the study findings any procurement practice will fail if the level of satisfaction is below stakeholder expectation and if stakeholders do not see any usefulness in the system.



# FURTHER RESEARCH

As a scope for future research, the study acknowledge some level of limitations with the current study which could be a result of several decisions taken on respondent selection to data collection and analysis of data. Therefore, the study suggest that future studies could use either a qualitative approach to explore the reasons why procurement practices are adopted and what account for the differences in successful implementation of procurement practices or a mix method to sought of see if there are any underlining reasons for adopting good procurement practices and to what extent do these reasons or factors informs the success of procurement plans.

# LIMITATIONS OF THE STUDY

The study is not without limitations. First, the correlational design which constitutes the appropriate design for the study only helps establish relationships between variables. Thus, this study would not be able to establish cause-effect relationships. Secondly, the study is limited to Tamale, Northern Ghana; therefore, the outcome of the study cannot be generalized to mean that is a general trend in Ghana as far as procurement practice is concerned. However, considering the variety of institutions sampled, one can conclude that it fairly represent procurement practices in Ghana.

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