

Original Paper

The Science of Public Procurement and Administration.

International Public Procurement Conference

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Abstract

This paper reviewed Benon C. Basheka book's chapter on the Science of Public Procurement and Administration published by International Public Procurement Conference in 2013. The objective of the review was to expand on the origin of procurement, highlight the areas that make public procurement discipline to be an art or science and make recommendations for policy makers and researchers. The author found that public procurement is still at its infant stage with little known theory though it has a close relationship with public administration. Although public procurement has existed from the time man started trade, procurement was chaotic and disorganized since there was nothing unethical or illegal about receiving kickbacks from contractors. The author also found that, procurement had no regulations until 1792 when US Congress passed procurement legislation. The major procurement between 300 B.C-3000 B.C was construction of roads, bridges, railway networks and supplies of foodstuffs, army uniforms and fighting equipments. The study also reveals procurement as a blend of art and science because it is both a theoretical field and an area of practice. The theoretical field (art) is concerned with the teaching or academic study while the practice (science) deals with the day to day activities of procuring and disposing entities. The author, therefore recommends scholars to conduct empirical studies among procurement researchers, lecturers and practitioners in relation to the field procurement should belong to so as to have consensus on procurement field/discipline as it was done with procurement meaning. Finally, since there is no consensus between public and private procurement agenda; it means procurement is not a pure science but it is an art and science.

Keywords

Public Procurement, art or science, kickbacks, discipline

1. Introduction

Benon C. Basheka's book chapter on the Science of Public Procurement and Administration has ignited academic debate to researchers and post graduate students during case discussions and presentations. With the observed forum discussions and research seminars, the debates whether procurement is an art or science does not end without a mention of public administration. Thus public procurement seems to have a close relationship with public administration. Flynn and Paul (2014) observed that public procurement resides on the periphery of management science. The field of public procurement therefore, is at its infant stage with little known theory. Chick and Handfield (2014) have revealed that procurement is relatively new profession with little interest as it appeared to require little/no skill to perform the functions as compared to other business and management professions like marketing, finance and human resource management. Basheka (2013) emphasized that public procurement theory must be concerned with the origin of the function within government; cover the theory of legislation for public procurement research and the role of various institutions and actors in that effort. Although procurement publications started to increase in the early 1990s, the publication of the first procurement textbooks by England (1970), Lee and Dobler (1971) and Bailey and Farmer (1977) gave the foundation stones of procurement as academic subject (Chick & Handfield, 2014). Contributing to the same debate, Basheka (2013) acknowledges that, there is poverty of procurement content which has partly contributed to eventual neglect in public administration research. Flynn and Paul (2014) assert that procurement research is focused on organizational level aspects more than regulatory policy issues or public buyers with more studies emanating from the North American and European regions. This assertion holds because in Uganda and other African countries most of procurement authors are the people who had a hand in public procurement reforms capacity development and training in their respective countries or scholars from law, economics, business, engineering, defense and health (Flynn & Paul, 2014; Basheka, 2013). Therefore, although public procurement is a key in the delivery of services to the citizens; its explicit elaboration on whether procurement is an "*Art*" or "*Science*" is still lacking. Thus, the main objectives of this study are to examine and explain the evolution of public procurement, analyzed literature on procurement field, draw conclusions and recommendations from the findings.

2. Evolution of Public Procurement

Purchasing is a function that has probably existed since organized trading commenced (Callender & Mathews, 2000). Thai (2001) adds that the history of procurement is long. According to the existing literature, the development of the silk trade between China and Greek colony started during the 8th Century (800 B.C.) as reported by Fuwei (1996); while the contractual issues associated with supporting the Roman Army in Spain was reported as early as 300 B.C. (Livy, 1966 cited by Callender & Mathews, 2000; Grimm & Thai, 2000). More evidence of procurement history is in Syria where the earliest procurement order was written on a red clay tablet from between 2400 and 2800 B.C. (Thai, 2001;

Grimm & Thai, 2000). The first order was for the purchase of 50 jars of fragrant smooth oil for 600 small weights in grain (Coe, 1989 as cited by Thai, 2001). Furthermore, the construction of the Pyramid-Building in Egypt in 3000 B.C is another way procurement manifested itself (Basheka, 2013; Thai, 2001; Grimm & Thai, 2000). Sumerian societies erected sophisticated public buildings where the need to source was generated by demand for glass and other products that were not available locally. However, many organizations ignored the importance of purchasing at their peril for instance there was great tendency to belittle purchasing and treat it in a negligent and offhand manner. Keeney (2007) reinforced the evidence that, most of the goods and services needed by government were supplied by Commissioners or Commissaries, who received a commission on what they bought for the militia or other administrative units since there were no professional procurement officials.

In the United States, the roots of procurement system lie in England, as does much of the rest of the U.S. legal system. The English colonists brought with them English common law, and with it, the English system of military procurement (Keeney, 2007). In the mid-eighteenth century, a British field army was responsible for obtaining its supplies locally. The Commissary General was responsible for the acquisition of foodstuffs and related items, while the Quartermaster General was responsible for transportation, construction, and other supplies. However, at the time, procurement was based on trial and error as a result; a Secret Committee of Trade was established in 1775s during the English trade embargo to be responsible for military supply (Keeney, 2007; Nuxoll, 2006). During the period, there was nothing unethical or illegal about receiving kickbacks from contractors. According to (Siri, 2005; Miller, 1992) as cited by Keeney (2007); authors reported that, kickbacks were the expected means of compensation for civil servants in a position of the Royal Navy Clerk, which is equivalent to a modern Contracting Officer since it was unpaid position in government job in London. These irregularities gave birth to the first procurement legislation in 1792 passed by the US Congress. The act authorized the Departments of War and Treasury to contract on behalf of the nation (Keeney, 2007; Callender & Mathews, 2000).

Similarly, Japan made its first tender announcement in 1678 for the construction of a bridge at Reiganjima and Minamikayabacho in *Edo* and repair work of trunk road in *Edo* (Isohata, 2009). Keeney (2007) reported that, early procurement in the Civil War was disorganized and chaotic. Agents from Washington and Richmond, Union and Confederate states, and private individuals on both sides all tried to purchase the same goods, thus driving prices up and quality down (Keeney, 2007; Nagle, 1999). In some cases, agents used public money to finance private ventures and only pay the money back if the private investment was successful leading to gross financial loss of tax payers' money. This practice shows that procurement is still in its relative infancy and has not yet reached its intellectual maturity.

From 1798 into the new nineteenth century, many now-familiar contracting practices came into being. The first requirements contracts were put in place to address the difficulties of supplying troops on the Western frontier. The distances involved, over bad roads or no roads, with dangers from wild animals,

bandits, and hostile Native Americans, made troop supply very expensive (Keeney, 2007). By 1900, there were few separate and distinct procurement departments; and the United States continental congress became the first to appoint procurement commissaries. In 1950s and 1960s, procurement continued to gain stature as the techniques for performing the function became more refined and as the number of trained professionals increased. In 1980s and early 1990s procurement began to evolve and several books and articles on procurement were published (Chick & Handfield, 2014) to promote procurement as an important business function and academic field of study. During the time some people portray procurement as a passive, reactive and tactical service while others portrayed it as an advanced, integrative and strategic function. In other related literature, the discussion of procurement practices and concerns were tailored to specific industries in technical trade publications (Keeney, 2007; Chick & Handfield, 2014). With introduction of major public bodies and intergovernmental organizations, such as United Nations, procurement became well-recognized though procurement agents were basically order-placing clerical personnel serving in a staff-support position. Chick and Handfield (2014) studies noted that procurement plays a key role in the management of supplier relationships.

However, in 1990s, procurement management had assumed a position in organizational development and management. Consistent with Chick and Handfield (2014), rightly opines that, companies are increasingly improving their knowledge and competence in procurement. In other words, procurement management had become responsible for acquiring the right materials, services, and technology from the right source, at the right time, in the right quantity (Thai, 2001). Procurement management became more integrated into the overall corporate strategy and a broad-based transformation of the business function was ignited, fueled strongly by the development of supply management software solutions, which help automate the source-to-settle process.

In Africa, most governments that had just attained independence operated their procurement management through scattered and un-clear laws and regulations (Odhiambo & Kamau, 2003). The reforms in Africa and other developing countries were results of joint efforts with various development partners like the World Bank, International Monetary Fund (IMF) and World Trade Organisation's (WTO) Agreement on Government Procurement (GPA)/Procurement Directives like EU Directives and North America Free Trade Agreements. Since conditions were varying from country to country; developing countries were not to meet all the international requirements (Agaba & Shipman, 2007). Basheka and Kabatereine (2013) assert that, the intention of such effort (reform) was to allegedly create systems which are more robust in responding to the changing circumstances and meeting the desired goals. The authors assertions rhythms well with Hunja (2003) who early revealed that, the aim of the reform programmes in many developing countries was to establish a strong and well-functioning procurement system that is govern by clear legal and institutional frameworks to avoid financial leakages in government entities. To reform public procurement therefore is to have a second look at the existing public procurement systems then response to internal and external drivers (Basheka &

Kabatereine, 2013) so as to improve service delivery, financial management, promote regional integration and local firms by ensuring equity in procurement, and respond to donor pressure and political environment. Literature has shown that several developing countries reformed their procurement to meet the donors funding conditions. For example Uganda, Ghana, South Africa, Tunisia and Kenya created procurement regulatory bodies which are responsible for ensuring compliance with the new procurement legislations and policy; maintain consistency in policy and legal interpretation and implementation across some or all tiers of government; and responsible for coordinating procurement training in early 2000s (Komakech, 2016; Elegbe, 2015; Basheka & Kabatereine, 2013; Agaba & Shipman, 2007; Odhiambo & Kamau, 2003) except South Africa, whose procurement regulation can be traced to the desire of the post-apartheid government in 1995. The aim of South Africa procurement reform was to promote good governance and achieve specified socio-economic objectives (Elegbe, 2015).

In Uganda, the body responsible for public procurement is Public Procurement and Disposal of Public Assets Authority (PPDA); while Kenya has Public Procurement and Disposal Act (PPDA) which created the Public Procurement Oversight Authority (PPOA), the Public Procurement Oversight Advisory Board and the Procurement Administrative Review Board; Public Procurement Oversight Group for Ghana; South Africa created the Office of the Chief Procurement Officer (“OCPO”) and Tunisia has five different institutions created to manage public procurement (The Office of Prime Ministry, the High Committee of Public Procurement, the National Monitoring Office for Public Procurement, the Follow-up and Investigations Committee, and the Committee for Amicable Settlement of Disputes). The major objectives of these regulatory bodies are to ensure that public procurement is conducted in a transparent, accountable and efficient way so as to encourage competition and achieve value for money. This analysis is in agreement with Mawuko et al. (2013) study which emphasized that, procurement reforms in Africa have to some extent brought modernity, transparency, competition and fairness in the procurement process. Despite, the countries interest in reforming public procurement as a mechanism of promoting competition, transparency and accountability so as to achieve value for money; there has been little to promote procurement as an important business function and academic field of study in many countries unlike United States and UK having more than 50 universities having procurement/supply management curriculum (Chick & Handfield, 2014). In the next section, the researcher provides the understanding of public procurement field (an art or science or both) which previous studies have not addressed.

3. Research Methodology

This article used a qualitative research paradigm and conceptual analysis techniques. The analysis involves speculating about connections that have yet to be confirmed with intervention research or descriptive studies. Furner (2004) further adds that, Conceptual analysis is a technique that treats

concepts as classes of objects, events, properties, or relationships. The technique involves precisely defining the meaning of a given concept by identifying and specifying the conditions under which any entity or phenomenon is (or could be) classified under the concept in question. Therefore, the researcher used conceptual analysis to get better understanding of procurement evolution, public procurement, and knowledge of procurement as an Art or Science in the academic study. Series of on-line literature search using key words such as procurement theory, procurement discipline, procurement field, the art and science of procurement, and procurement as art or science was conducted to answer the research problem. The search engine yields forty three different sources of which only 12 (28%) were relevant to the study. The major sources of the literature were from publications from the procurement forums, online journals/textbooks and international conference proceedings on procurement/supply chain management.

4. Results and Discussions

This section presents theoretical results on the convergence understanding of the public procurement as identified by the selected scholars.

4.1 What Is Public Procurement Field (Art, Science or both)?

United Nations Development Programme (2007) defines public procurement as; an overall process of acquiring goods, civil works and services which includes all functions from the identification of needs, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration through the end of a services' contract or the useful life of an asset. This implies that, public procurement is one of the many functions of the government that presents good potential for assisting government attain its numerous goals. According to Komakech (2016), public procurement is one of the governments most appropriate means to respond to the population needs in a way of not only to deliver public goods or services but also ensures value for money so as to improve their lives and living conditions. Although public procurement has agreed meaning with uniform process, methods, organizational structures in practice, public procurement as an academic field of study lacks a known home in most universities. The few public procurement courses remain with no clear home in most universities, unlike other disciplines like law, economics, sociology or political science; procurement also lacks common methodological agenda for engaging in scientific research (Thai, 2001; Basheka, 2013). Thus, public Procurement is now a subject claimed by many disciplines. Chick and Handfield (2014) observed that procurement is at the heart of supply chain management that focused on supplier relationships.

Basheka (2013) postulates that lack of an agreed upon locus and focus of public procurement research among the practitioners is too huge a gap to remain unattended to. The author adds that, scholars need to move away from the “art” to the “science” of public procurement; because public procurement cannot claim to be a science without firm theoretical knowledge to guide researchers on the appropriate “focus and locus” of its subject matter. An art presupposes human skills; and although it calls for

knowledge, its emphasis is upon practice rather than theory. A science is concerned with trained skill and presupposes knowledge acquired by study. Therefore, procurement is a blend of art and science combining business category and supply expert with leading technology, data analysis and associated value-based decision support capabilities. The attributes that qualifies procurement as art and science are discussed below:

Since science deals with systematic study of knowledge; procurement planning, reviewing specifications, preparing and analyzing bids, negotiating contracts, handling purchase orders, contract management and more is the science of procurement. Procurement follow a common process, but how it's carried out depend on circumstances at hand and is affected by many different factors (<https://www.bayt.com/en/specialties/q/144256/is-procurement-an-art-or-science/>). Sohini Kar a Business Analyst noted that procurement demands a broad skill set and stringent attention to detail. Bartolini (2016) noted that, procurement operation is composed of people with different skills, experiences, and motivations. However, the “*art*” of procurement is acquired mostly through experience. According to Bartolini (2016) procurement is an art because it involves the knowledge and insight from the humanities and the social and behavioral sciences; nuance and negotiation are critical to the craft. It is the knowledge of what to watch for in every step of the process to consistently get the best value on the right equipment and avoid costly mistakes. It's about knowing how to make the most of relationships with suppliers.

Furthermore, rules in science are considered to be so rigid and final of which procurement follow the same path. According to Thai in Basheka (2013), public procurement is a science because it consists of procurement laws and regulations, procurement organizational structure, procurement processes, procurement methods, procurement techniques and procurement professionalism and workforce which every public organization has to comply if it's to have a successful procurement of goods, services or works. In line with Bartolini (2016) procurement is a science because it deals with process and application and it studies and tests its results; quantitative analysis and precision are valuable tools of the trade. Therefore, to achieve procurement mastery in the age of innovation, procurement cadres must develop and balance the art (creative) and science (quantitative) capabilities of their organizations to deliver maximum value in support of enterprise goals and objectives.

Another factor that makes procurement to be categorized as an art and science is the procurement course establishment. In most universities offering procurement courses in the world, the course is housed in business faculties or business colleges while in some universities the course is under the faculty of social sciences and humanities. The Table below shows samples of the universities offering procurement courses and how they classify the course in the context of “science” or “art”.

Table 1. Shows Procurement Course Name in Selected Universities/Institutions & Host Department

S/N	Name of the University/Institute	Course Name	Host Department/College
1	Makerere University	Msc. Procurement & Supply Chain Management	College of Business & Management Sciences
2	Uganda Management Institute	Masters in Public Procurement	Department of Economics and Managerial Science
3	Jomo Kenyatta University of Agriculture & Technology	Msc. Procurement & Logistics	Post Graduate Programme
4	University of Salford	Msc. Procurement, Logistics & Supply Chain Management	Salford Business School
5	University of South Wales	Msc. Strategic Procurement & Management	Business Management
6	Plymouth University	Msc. International Procurement & Supply Chain Management	Plymouth Graduate School of Management

Source: Compiled by the Author from Institutional Website (September, 2016).

Therefore, the development of an academic field of public procurement needs to have a firm theoretical foundation that should have true hallmarks of a science. Hence, for procurement to be recognized as a discipline in academics there is need for academicians and practitioners to come with independent procurement theories other than applying management, social science and economic theories (Transaction Cost Theory, Principal Agency Theory, Institutional Theory, Game Theory, Organization Theory, Best Value Theory, and System Theory) in the procurement discipline which makes the course more integrated to several discipline hence wrong applications of the theories. Walker et al. (2006) study concludes that supply management/procurement will continue to embed itself in the Management discipline. Thus, public procurement should have stand alone faculty or department other than being housed in business schools or public administration departments.

The procurement procedures take a similar approach in most organizations which is the ideal aspect of science. However, public organizations tend to have some slight differences in the procurement as opposed to the private sector organizations for instance some of the key differences include:

- a) Private buying is generally in smaller quantities while public buying is generally in larger quantities.
- b) Private buying has a shorter procedure to follow while public buying follows a longer complex procedure.

- c) Private buying follows organization policies but in public buying, there are standard policies that every company should follow.
- d) Public buying is concerned with supporting values and services to the general population while private buying is profit oriented.

These differences is what Basheka (2013) calls for an urgent need to build consensus on the rules and procedures that must be followed universally for various methods of public procurement in both developed and developing countries. Since there is no consensus between public and private procurement agenda; it means procurement is not a pure science but its' an art and science.

5. Conclusion

Through the paper review, the researcher concludes that public procurement is an art and science because it's both a theoretical field and an area of practice. The theoretical field (art) is concerned with the teaching or academic study while the practice (science) deals with the day to day activities of procuring and disposing entities. Although some scholars have pointed out that public procurement is integrative in nature; because it borrows from other disciplines like public administration and quantitative methods; this alone is not enough in enabling our understanding of public procurement since some approaches, values and assumptions in public administration/management are treated differently. These knowledge gaps therefore open room for scholars to conduct empirical study among procurement researchers, lecturers and practitioners in relation to the field procurement should belong so as to have consensus as it was done with procurement meaning (procurement is about acquisition of goods/supplies, services and works).

6. Recommendations

There is need to ensure that procurement officials meet high professional standards for knowledge, practical implementation and integrity by providing a dedicated and regularly updated set of tools for instance sufficient staff in terms of numbers and skills; and recognition of public procurement as a specific profession.

There is need for public procurement scholars to agitate for procurement course to be named science as it's done in some universities and need for universalization of procedures so as to limit the challenges of; lack of agreement regarding the methods of studying public procurement and the conclusions arrived at; lack of ability to conduct experiments on the behavior of man in the public procurement process; and our lack of continuity in the development of public procurement research.

Finally, the author recommends that public procurement needs to be autonomous so that the functions are clearly defined and independent like Inspectorate of Government (IG), Uganda National Roads Authority (UNRA) and Uganda Investment Authority (UIA). This will reduce the misunderstanding of the roles between the Accounting Officer who could be having less procurement knowledge because of the academic background and the Procurement Head who has full knowledge of procurement and

sometimes more qualified than the Accounting Officer.

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