

**Title:** The impact of Procurement Management Software in the Oil and Gas industries in Nigeria

**Subject:** Management

**Type of Paper:** Dissertation Proposal

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### **1.1 Introduction**

Procurement software is a program based on computers that permits an organization to automate the processes of buying materials and maintaining goods' inventory. The software program of procurement can generate purchase orders, implement the process of ordering online, match invoices to materials received, and pay all bills by electronic means.

However, in accordance with Gebauer and Segev (2000), direct procurement is most commonly performed activities in business. The procurement activity covers the process of producing completed goods from raw materials. More than 30 percent of income, is spent by several organizations to purchase goods and services. According to Nam (1998), about 20 percent of an organization's purchase makes 80% of the purchases' total value.

New oil & gas reserves are becoming more unmanageable and costly to fix. Exploration and production enterprises are increasingly cross-cultural, complex and speculative. Commodity prices and availability are volatile. Margins can be very high at times; they can be razor thin to nonexistent in others.

E-procurement receives its reputation through trends of people about employing the internet. E-procurements' transparency factor is anticipated to minimize corruption in projects, as an endeavor to attain good corporate governance.

### **1.2 Research Aim**

The basic aim of this study will assess and discuss the overall impact of Procurement management software in the Nigerian oil and gas industries.

### **1.3 Research Questions**

The principal questions of this study are:

- What is the importance of the use of Internet-based technologies, comprising e-procurement in the incorporation of supply chains?
- What strategies of procurement are cited to play a vital role into business success in Nigerian oil and gas industry?

- Which type of e-procurement software is more extensively employed in oil and gas industries?

#### **1.4 Research Objectives**

The main research objective of this study will assess the importance of the use of Internet-based technologies, comprising e-procurement in the incorporation of supply chains. In doing so, the researcher of this study will identify the strategies of procurement that are cited to play a vital role into business success in Nigerian oil and gas industry. The study will examine and address the types of e-procurement software that are more extensively employed in oil and gas industries. The rapport between the Nigerian oil and gas industry and the use of integrative e-procurement software applications will also be discussed.

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

During the last few decades, procurement has appeared and developed from a strategic activity focused principally on placing purchase orders to a more-strategic process in aid of the business. The overall function of procurement now operates successfully with users to comprehend basic needs and requirements, pick suppliers, and control the base of supply to meet needs. Most of the companies in the Fortune 500 have enforced, to changing degrees, programs of strategic sourcing that have focused, tangible cost savings, most often evaluated in purchase price (regardless of a recognition that this is an inadequate alternative for total cost). However, the industry of oil and gas in Nigeria is no exception, as many players have completed or are in the implementing process about strategic sourcing programs matched to their models of business models.

#### **2.1 E-Procurement**

E-procurement is a form of e-commerce, particularly designed to help the process of procurement. According to the Boer, Harink and Heijboer (2002), e-procurement intends to automate and make simpler the procurement process and enhance efficiency and simplicity as to minimize the costs of operating. Moreover, e-procurement can alter and ameliorate avenues such as internal and external interactions, business transactions, and also supply chain management. Usually, these systems comprise a web catalogue, payment, ordering and order tracking subsystem.

E-procurement is specified in a variety of ways. In accordance with Tatsis et al. (2006), e-procurement is the incorporation, management, automation and the empowerment of the

procurement process. It is employing tools and electronic technology, and web-based applications.

The opinion of Alanizand Roberts (1999) is that e-procurement is an internet-based solution that serves the company's purchase. Generally, procurement is assorted into direct and indirect purchases. The categorization is grounded on the goals of the goods received. The direct procurement comprises materials like raw materials and parts of the completed goods that will be sold to clients, while the indirect procurement integrates goods and services that are not fractions of the completed products; however, it required to assist internal business activities.

## **2.2 Impacts of e-Procurement Implementation**

By enforcing the system of e-procurement, numerous advantages could be acquired. The advantages of implementing e-procurement system have been shown by numerous studies; one of these studies was by the piece (2001) which concentrated on the e-procurement's status in the Nigerian oil and gas industry. According to this research study, e-procurement was inadequately comprehended by oil and gas sector in Nigeria and they were not drawing the advantages of e-procurement system.

A case study was conducted by Garaffa, Martins & Hoffman (2002) that concentrated on examining the Greek government procurement processes performed by the General Secretariat of Commerce. Tangible (quantifiable) and intangible (difficult to quantify) advantages were addressed in this study.

Tangible advantages comprised the cost of supply diminution, tender costs diminution and lead time savings. Intangible advantages integrated process amelioration and organizational advantages.

The study of Barclay (2010) exploited issues regarding enforcement and impact of e-procurement in the UK's public sectors. This study addressed five impacts, including change in acquisitions' total cost, changes in organizational traits, and changes in the structure of governance, management system pattern and enforces.

## **2.3 E-Procurement Strategies**

Cheng (2012) discussed that when an organization surges into a full-working e-acquirement methodology, there are some essential inquiries the top administration necessities to ask themselves. Initially, the business must consider whether the items they purchase could be effortlessly supplanted with substitutes. Numerous organizations require exceptionally particular

items and that don't dependably work well with e-obtainment frameworks. An alternate inquiry includes the level of rivalry both for and between suppliers. In the event that a business purchases various bottleneck (things supplied by just a couple of dealers), then they may need to secure and fashion enduring associations with those suppliers outside of an e-acquisition system. Besides, organizations necessity to painstakingly look at the productivity of their interior methods. In the event that those courses of action might be refined and more profitable it is likely that e-acquisition can offer assistance. At last, the organization must choose whether its using plan is worth making the change. Organizations that don't use a great deal on purchasing merchandise and materials may not discover the switch beneficial (Cheng, 2012).

## **2.4 Software for Procurement**

Coupa's cloud obtainment programming provision is an influential acquire to-pay framework that carries buyer e-business shopping simplicity and bottleneck-busting practicality to the acquirement workflow. Our obtainment programming can deal with transactions in numerous monetary standards and dialects so you can run a worldwide operation utilizing Coupa. Coupa obtainment programming could be designed for various commercial ventures, including attire, biotechnology, nourishment & drink and pharmaceuticals. Coupa helps organizations stay inside plan with its Executive Dashboards and Alerts, which give ongoing upgrades and significant sagacity to control using. Its shrewd review scoring audits those reports well on the way to be in danger of fake action or out of agreeability. Coupa streamlines the get to-pay prepare and likewise earnestly sways all representatives to help expense sparing activities.

It has some truly extraordinary characteristics to make life less demanding. Its irequest capacity lets clients scan the Internet for incredible arrangements, then immediately include the best-valued thing to demand with the click of a catch. It additionally coordinates with Google Maps, so workers can enter their begin focus and end and Coupa utilizes the organization's standard rate to focus the measure to be repaid. It likewise has an extraordinary apparatus, ongoing Benchmarking, in which organizations can immediately quantify funds created and benchmark that execution against eighteen business particular pointers.

## **2.5 Significance**

Several studies have been published on the matter related to procurement management system in the oil and gas industry. Practitioners, research workers, and academicians similarly convey great

interest in the value of Internet-based technologies in the ameliorating performance of the supply chain.

Moreover, a wide-ranging research stream about the vital role of inter- and intra-firm integration in successful supply chain management exists. However, exploration of the use of Internet-based technologies to attain supply chain integration has been chiefly restricted to the study of oil and gas firms. Moreover, past research studies on e-business resulted in categorization schemes grounded on a theoretical basis or on evidence from case studies.

### **3 RESEARCH METHODOLOGY**

#### **3.1 Research Design**

This study is a descriptive research study; importance of E-Procurement will be analyzed through its application, benefits and efficiencies to manage the problems of procurement in oil and gas sector. It will provide preliminary empirical data to assist the concept that the software applications of e-procurement can be categorized by their capability to serve supply chain integration.

**Ontology:** The philosophy concerning the overall nature of what things are. It is concerned with identifying, in the most general terms, the kinds of things that actually exist. As discussed by Smith (2012), this research belongs to realism as it is ontologically independent. The applications are belonging to existence of a visible world. By existence, this research involves procurement companies, procurement resources, and management responsible to administer the procurement. They can be grouped as organisations and software solution providers.

**Epistemology:** The branch of philosophy concerned with the nature of knowledge itself, its possibility, scope, and general basis. This research is positivist in approach. There are things that will add to the knowledge on this subject. According to Smith (2012) epistemology involves theoried and models. Data collection will be done through primary sources and they will be derived from logical and mathematical treatments. This research will consider procurement management, opportunities for e-procurement, weakness of manual procurement management systems. The literature about technological development and competitive environment of industry will lead to epistemology application.

#### **3.2 Data Collection**

Data will be collected, after secondary analysis, from procurement managers. The problems and management of procurement will be analyzed. Instrument use to collect the data will be a

questionnaire. Total 100 questionnaires will be filled through random sampling from oil and gas sector in Nigeria.

As information required is diverse in nature and same set of questions will be asked from each participant, so it is better to use questionnaire. The questionnaire prevents from interviewer preconception and bias, leading and prompts that can affect the authenticity and reliability of the information collection.

According to Easterby-Smith (2012), for the most part it is generally fast to gather data utilizing a questionnaire. However in a few circumstances they can take quite a while to outline as well as to apply and examine (see burdens for additional data). According to Easterby-Smith (2012), questionnaires are institutionalized so it is not conceivable to demonstrate any focuses in the inquiries that members may confuse. This could be somewhat illuminated by steering the inquiries on a little aggregation of people or at any rate companions and partners. It is fitting to do this in any case. According to Easterby-Smith (2012), people may not be ready to answer the inquiries. They may not wish to uncover the data or they may feel that they won't profit from reacting maybe even be punished by giving their genuine sentiment.

### 3.3 Data Analysis

- The data will be analyzed through descriptive statistics using central tendency and dispersion measures. Researcher will calculate the following values for each question: arithmetic mean
  - median
  - max value
  - min value
  - standard deviation

### 4. Timing mileposts

Milestone	Description	Due date	Remarks
1	Stage 1: Area of interest identified	January , 2014	Completed
2	Stage 2: Specific topic selected	January, 2014	Completed
3	Stage 3: Topic refined to develop	February, 2014	Completed

	dissertation proposal		
4	Stage 4: Proposal written and submitted	13 <sup>th</sup> March, 2014	In progress
5	Stage 5: Collection of data and information	01 <sup>st</sup> April, 2014	
6	Stage 6: Analysis and interpretation of collected data/information	20 <sup>th</sup> April, 2014	
7	Stage 7: Writing up	May /June,2014	
8	Stage 8: Final draft prepared— submission of dissertation	15 <sup>th</sup> July, 2014	
9	Final Deadline—9 months from module start date.	10 <sup>th</sup> August,2014	

## REFERENCES

- Alaniz, R. (1999). E-Procurement: A Guide to Buy-Side Applications, *Stephens Inc., Industry*
- *Report* [online] Available from: <http://www.scribd.com/doc/77196691/E-Procurement-A-Guide-to-Buy-Side-Applications> [Assessed 13-Jan-2014].
- Barclay, M. A. (2010). *Procuring from Smes in Local Communities* [online] Available from:
  - <http://www.aemee.org.au/common/pdf/SME-Report.pdf> [Accessed 02-Feb-2014].
- Cheng, L. C. V., & Carrillo, E. E. (2012). Assessing supplier performances under partnership in project-type procurement. *Industrial Management & Data Systems*, 112(2), 290-312.[Viewed 11-Jan-2014]
- de Boer L, Harink J. & Heijboer G. (2002), A conceptual model for assessing the impact of
  - electronic procurement, *European Journal of Purchasing & Supply Management*. Vol. 8, pp. 25-33.[Viewed 12-Feb-2014].

- Garaffa, I. M., Martins, M. M. C., & Hoffman, R. (2002). Supply Chain: from physical to semantic e-procurement. [Viewed 18-Feb-2014].
- Gebauer J & Segev A. (2000). Emerging Technologies to Support Indirect Procurement: Two Case Studies from the Petroleum Industry, *Information Technology and Management*, Vol. 1, No. 1-2, Pp. 107-129 [Viewed 05-Jan-2014].
- Nam, C. (1998). Increase your profit margin through electronic procurement, *Journal of Internet Purchasing*, Vol. 1, Pp.3. [Viewed 02-Feb-2014].
- Paisie, J. E. (2001). Oil, Gas, and the Internet. *Oil & Gas Journal. London,. Special Report*, Pp.66-88. [Viewed 11-Jan-2014]
- Tatsis V et al. (2006). E- Procurement in the Greek food and drink industry: Drivers and Impediments, *Journal of Purchasing and Supply Management*. Volume 12, Issue 2 Pp. 63-74. [Viewed 25-Feb-2014]
- Easterby-Smith M. (2012) *Management Research*, SAGE Publications Ltd, 4<sup>th</sup> Ed [Viewed 05-Mar-2014]

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