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The challenges associated with the current procurement system of the University of Benin Teaching hospital (UBTH).

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#### ABSTRACT

E-Procurement (electronic procurement, sometimes also known as supplier exchange) is the business-to-business or business-to-consumer or business-to-government purchase and sales of supplies, work and services through the internet as well as other information and networking systems, such as Electronic data interchange and enterprise resource planning. E-procurement can be an invaluable tool for organizations experiencing problems in their supply chain. If purchase orders are not being processed in a timely fashion and delivery dates are not being met through manual purchasing methods, e-procurement can be extremely useful in streamlining the procurement process. The main aim of this research was to identify the challenges associated with the current procurement system of the University of Benin Teaching hospital (UBTH). From observation, interviews and multiple discussions done with the staff of the institution, the following problems are associated with the current system. Delays in issue of tender schedules to suppliers, formation of cartels hinders competition, physical threats to bidders, manual movement of tender files, delays in finalization of tenders and lack of Transparency.

Keywords: E-Procurement, transparency, electronic data, hospital.

### INTRODUCTION

Electronic procurement is quickly emerging as the model procurement method in both the private and public sectors. With the advent of the internet. many businesses now sell only via computer [1,2,3,4]. It is an excellent way for businesses to cut overhead costs and reach a larger customer base. Eprocurement systems allow users to search for products and services from suppliers pre-selected (along with negotiated prices and options), verify product availability. and route approvals according to policy or statute. E-procurement also incorporates an easy-to-use, self-documenting

infrastructure, which arms а procurement department with valuable data to analyse current sourcing practices, leverage volume discounts with suppliers, and manage compliance. With accurate relevant information at procurement professionals hand become strategists who can focus on strategic activities such as contract negotiations and supplier compliance [5,6,7]. This reduces operating costs and turns the procurement department into a far greater asset to the organization. Over the years, the Nigerian government procurement procedure has been done manually by the process of inviting contractors to bid for projects (i.e. Invitation for Pregualification/Tender) to the selection of successful bidders and then finally project completion. In this procurement procedure, purchase orders are not being processed in a timely fashion and delivery dates are not being met [8,9,10,11]. The failure of Nigeria National carrier. Nigeria Airways is traceable to poor procurement system and the resultant effect is that Nigeria and Nigerians have had to suffer this defect for a long time [12] According to [13] procurement accounts for about 80 per cent of Nigerian government expenditures at alllevels. In this wise procurement of goods, works and services are central to dailygovernment activities and as such form the centre point of our economic rating. Nigeria's public procurement system is reportedly prone to corrupt practices, with as many as 45% of companies expecting to give gifts to public officials order to secure a government in contract. Analysis have shown that most contracts awarded by the government or its officials are awarded through corrupt means. Some of these contracts are awarded to contractors who have agreed give the procurement official a to certain percentage of the original

INOSR Experimental Sciences 7(1): 39-46 2021. amount.This encourages contract contractors to use substandard goods, render poor services or sometimes

project abandonment.Business Anticorruption portal [14].

# Statement of Problem

University of Benin Teaching The Hospital is one of the country's major health institutions. It provides health care to member of the public and is a training centre for doctors, nurses and other technical health professionals. Its procurement department still uses the manual paper based system. This system comes with many challenges such inordinate delaysin as tender/order processing, heavy paper work. multi-levelscrutiny that consumes a lot of time, physical threats to bidders, cartel formation by thecontractors to

The main aim of this research was to identify the challenges associated with the current procurement system of the

For collecting and analysing the data, we first interviewed some of the staff at the hospital, medical and non-medical staff. Previous records used for procuring items were considered as important source for the data. In this phase, the correctness of data is important. For designing the e-procurement system, we used java script, PHP, MySQL and Dream- Over. The project was started by first clarifying what kind of prototype was envisaged to solve the problems of

# **RESEARCH MOTIVATION**

Concern has been raised about essential drugs shortage in public hospitals in Nigeria, this is as a result of suppliers not being able to deliver and fulfilled their part of commitmentin contract to supply drug to the hospital, which could lead to drug stock-out, drug wastage,

and patients' failure to access drugs and others. These have put people's lives at risk. These problems associated with drug usage may be due to ineffective and efficient procurement methods and procedures in Uganda public hospitals.

# SYSTEM ANALYSIS AND DESIGN

### Analysis of the Existing System

University of Benin Teaching Hospital (UBTH) as a tertiary health facility came into being in 1973 following the enactment of an edict (number 12). As the sixth of the 1st generation Teaching Hospitals in Nigeria, it was established to complement her sister institution,

University of Benin, and to provide secondary and tertiary care to the then Midwestern Region (now Edo and Delta State) and its environs. A major player in healthcare delivery, research and training in Nigeria and Africa at large.

of the art facilities on ground. These

#### CLINICAL SERVICE AT UBTH

includes:

UBTH renders quality healthcare services and boasts of numerous state

suppress competition, human interface at every stage, inadequatetransparency, discretionary treatment in the entire process, tender Sometimes. etc. contractors claim that they are even unaware of Federal Government Procurement noticesor Tenders that are advertised in the national dailies or Federal Tenders Journal. In view of all this problems, it became necessary to develop an application to overcome these administrative problems at the institution by providing a web-based eprocurement system.

AIM

University of Benin Teaching hospital (UBTH).

# **METHODOLOGY**

procurement at the University of Benin Teaching Hospital by means of gathering concepts from a focus group by conducting interviews and surveys. The analysis of this data led to the first prototype. The e-procurement system we came up with eliminated some of the associated bottlenecks within the existing system and showcased the attendant benefits of the proposed system, which can lead to an improved procurement cycle process flow.

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- 1. Facilities for over 900 inpatients.
- 2. Consultation by Doctors on diseases
- 3. Diagnosis for diseases
- 4. Proving treatment facility
- 5. Immunization for patient/ children
- 6. A functioning Renal Dialysis Centre
- 7. CT Scanning Centre.
- 8. Endoscopy for special investigation.

- 9. Oxygen plant that supplies the Hospital with all that is needed amongst others.
- 10. In-vitro Fertilization HRRP/IVF Unit.
- 11. UBTH School of Nursing.
- 12. UBTH School of Midwifery.
- 13. Centre for Training Community Health Officers in Ekpoma.
- 14. School of Health Information Technology.
- 15. School of information Management.

UBTH has 34 departments which includes; Department of pharmacy and pharmaceutical services.

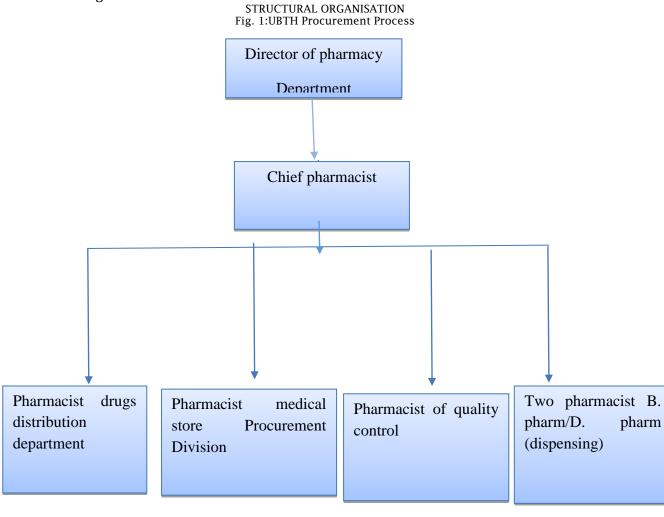
## Pharmacy and pharmaceutical Services

The Pharmaceutical Services rendered are:

Evaluation and Assessment of prescriptions.

- 1. Counselling of Patients on Drug Utilization pattern.
- 2. Dispensing of Drugs.
- 3. Stock and Inventory Control/Logistics.
- 4. Monitoring and reporting adverse, drug Reaction (Pharmacovigilance)

- other Health care providers and clients.
- 6. Pharmaceutical Care.
- 7. Individualized dosage preparation.
- 8. Quality Assessment of Procured Drugs.
- 9. Training of Intern Pharmacist and Students.
- 10. Weekly Clinical Meeting/Update lectures
- 11. Research and Development.
- 12. Drug utilization and evaluation.
- 5. Dissemination of Information on drugs to Doctors Nurses and



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The procurement division works with the director of pharmacy to select forecasts, products. prepare and quantify needs. UBTH uses a revolving drug fund, internally generated revenue, credits, and donor sources to finance the procurement of essential medicines. including drugs to combat HIV. and antiretroviral (ARVs), non-drug consumables (NDCs). The procurement process begins with selection. forecasting. quantification of and product requirements. It includes the development exacting of product

specifications. identification of financing, and a budget process to secure that financing. The process then orchestrates a number of additional functions: the preparation of tender documents; management of the bidding preparation. award. process: and management of the contract; quality assurance processes to ensure that only products that meet requirements are accepted for delivery of the contract; and the management and monitoring of each function in the process.

The figure 1 shows the procurement processes and how each of the process flows, from one procurement stage and the other.

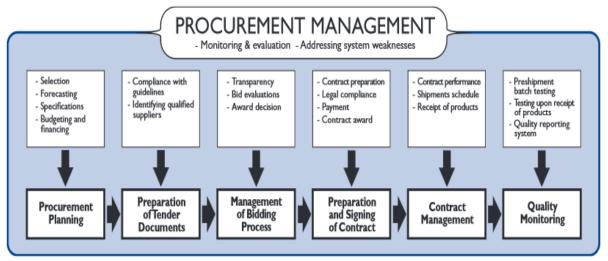


Figure 2: Procurement

Selection and Forecasting

The procurement process begins with product selection. Decisions on procurement quantities are based on forecasts and quantifications that are done using logistics information. demographic data, health service statistic and a formulary system. The pharmacy service, in cooperation with

From observation, interviews and multiple discussions done with the staff of the institution, the following problems are associated with the current system.

1. Delays in issue of tender schedules to suppliers: There were delays in preparing the schedules of tenders in physical forms because of constraints like lack of stationery items. Because the Pharmacy and Therapeutics Committee develop and maintain a formulary system, based on both the therapeutic and economic considerations of drug use, governing the selection and usage of medication in the hospital, which is approved by the Medical Advisory Committee.

Problems with the Existing System

- of this, bidders were not in a position to receive the tender document on the specified dates, which results in putting the bidders under pressure.
- 2. Formation of cartels hinders competition: Competitors or participating bidders can gather Information about all the bidders from the institution. This information encourages the

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- participating bidders to lobby for formation of Syndicates or Cartels and bid for the tender for higher quotations to the disadvantage of government departments.
- 3. Physical threats to bidders: Sometimes the genuine bidders were physically threatened and prevented from submitting their bids. The bidder or his agent had to risk their physical safety for submitting the bids in the tender box placed in the office.
- 4. Manual movement of tender files: For the purposes of evaluation, the bid documents are manually transported across the administrative hierarchy. The transportation of bid documents manually and using surface mail is a time consuming activity. Additionally, the possibility of bid details being tampered or lost, while the documents are physically transported across the administrative hierarchy, could be avoided.
- 5. Delays in finalization of tenders: Red tapism, lack of transparency, manual movement of files across the administrative hierarchies involved in the tender process, were all resulting in inordinate delay in finalization of tenders. Typically, tenders for major projects used to take longer tender process time ranging from 90 days to 150 days, these delays

were contributing to cost, and time overruns for the projects.

- 6. Human interface at every stage: The manual system exposed the departmental personnel to the bidders at every stage of the process beginning with the Sale of tender schedules. issue clarifications, bid submission, bid evaluation and so on. This continued human interface has introduced subjectivity, favouritism and other undesirable elements in tender processes.
- 7. Lack of Transparency: Often times, a tender may have two or three bidders, but only one of them would be the real bidder the rest two being dummies, leading to forceful acceptance of the bid by the government. Lack of transparency is seen in the manual procurement process, right from tender publication, sale of tender schedules, and issue of clarifications to bidders. bid evaluation. Besides, even the departments were unwilling to share the information, which became the main cause for the bidders, media, and citizens, to lose confidence in the system. So in order to overcome all these limitations and to meet all their requirements the current process is replaced with an e-automation system [15,16,17,18,19,20,21].

# Proposed System

The proposed system is composed of a web-based application used to provide the traditional tendering process in an electronic form. Using e tendering, the departments can publish the tenders and users submit the tenders then finally the departments evaluate the tenders. This document is one that describes the requirements of the system. It is meant for use by staff in the procurement department of the institution and contractors. The department people are responsible for publishing and evaluation of tenders. The contractors are responsible for downloading and submission of tenders. The system will be getting input from the departments from various locations.

The output also given by the departments will depend on input given by the contractors. The system provides an easy way of selecting a particular Tender Details and it is very easy to know the tender granted details. There should be no difficulty for the suppliers to bid the amount for the invited tenders. The system is also able to access the information related to suppliers from the database using this system, services can be provide by the organization in the absence of personnel throughout the year, round the clock. The system is tailor in such a way to integrate and centralize all the various indent information and tenders information, so that minimum effort is

http://www.inosr.net/inosr-experimental-sciences/ Okorie *et al* INOSR Experimental Sciences 7(1): 39-46 2021. need to get all the jobs done. The centralize system makes sure that data

consistency is maintained (see figure 3).

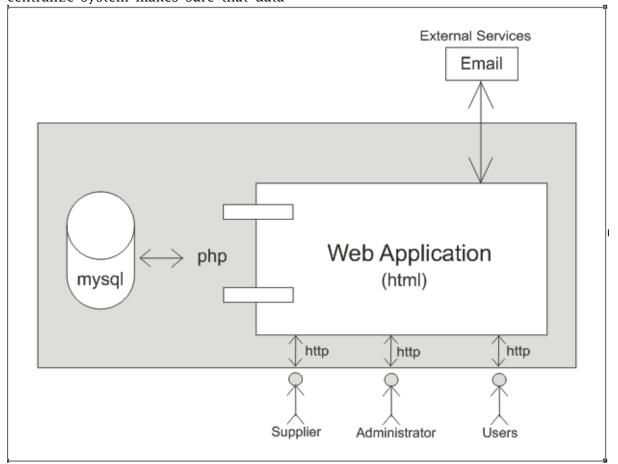


Figure 3.System diagram

# CONCLUSION

information **E-Procurement** as an system technology based with comprehensive processes has its own inherent adoption, implementation and application challenges. Nevertheless, it is worthy to state that there are benefits in the adoption and implementation of e-procurement. The results of this study have shown that procurement activities by the University of Benin Teaching are Hospital done through the traditional paper based method. Despite the years of experience of the procurement officials and the number of years the hospitals have been practicing procurement, they are affected in speed and efficiency of the activities due to

the paper based method of procurement still in use. There are structures and resources in place to support e-Procurement. Although computers were not adequate and strong enough and were not connected to the internet to facilitate electronic transactions. The infrastructure that the hospitals have can support the e-Procurement adoption since studies have confirmed that either stationary or mobile computer and internet systems could be used for the operations. After thorough investigation and analysis of the existing system, we suggest that procurement process in the UBTH should the done using e-tendering system.

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