

**ISSUES IN PROCUREMENT METHODS IN PUBLIC
ORGANIZATIONS:
A CASE OF TANZANIA AVIATION AUTHORITY (TAA)**

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ORGANIZATIONS:
A CASE OF TANZANIA AVIATION AUTHORITY (TAA)**

**By
Ashura Chimbeni Kheri**

A Research Dissertation Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Science in Accounting and Finance (MSc-A&F) of Mzumbe University Dar es Salaam Campus College

2013

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled; **Issues in Procurement Methods in Public Organizations: A Case of Tanzania Aviation Authority (TAA)**, in fulfillment of the requirements for award of the degree of Master of Science in Accounting and Finance (MSc-A&F) of Mzumbe University.

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Internal Examiner

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DECLARATION

I, **Ashura Chimbeni Kheri**, declare that this thesis is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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DEIDICATION

To my mother, father, my Husband and children for their tolerance during the entire time of my absence while I was attending the program

ABSTRACT

The research is on e-procurement is the business-to-business purchase and sale of supplies and services over the Internet. The objective was to investigate the effectiveness of e-procurement in Tanzania public institutions.

Both qualitative and quantitative approaches qualitative approaches were used. Data collection methods used interviews, observations and documentary analysis. Research instruments to be used during data collection included interview questions, observation schedule and documentary review schedules. Collected were analyzed based on research objectives.

Findings indicated that challenges that influenced the use e-procurement by TAA were: Budget and Executive support, user adoption and Supplier Buy-In and Enablement. Findings indicated that the challenge with regard to the use of e-procurement was on the side of management who sometimes resulted into the conflict of interests. It was also revealed from the study that the TAA management has a great task of ensuring that each user sees the simple to use and intuitive.

Findings indicated that there were issues that underpinned the use of e-procurement by TAA. Supplier Buy-In was revealed to be among issues.. Findings indicated that some of the major benefits of an e-Procurement system are punch-outs, e-Invoices and e-Payments. Associated Costs was another issue and it was noted from the study that as with any technology project, the costs go beyond just the costs. It was also revealed from the study that training costs was among issue that influenced e-procurement. Findings indicated that e-procurement tools included: Email, spread sheets and internet. Recommendations include availability of quality and enough ICT facilities and equipment and the same research to be done in other public institutions to enable different researcher on the same issue to come up with similar conclusion.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE PROBLEM

1.1 Introduction

E-procurement is the business-to-business purchase and sale of supplies and services over the Internet. An important part of many sites, e-procurement is also sometimes referred to by other terms, such as supplier exchange. Typically, e-procurement Web sites allow qualified and registered users to look for buyers or seller definition of goods and services. Depending on the approach, buyers or sellers may specify prices or invite bids. Transactions can be initiated and completed. Ongoing purchases may qualify customers for volume discounts or special offers.

E-procurement software may make it possible to automate some buying and selling. Companies participating expect to be able to control parts inventories more effectively, reduce purchasing agent overhead, and improve manufacturing cycles. E-procurement is expected to be integrated with the trend toward computerized supply chain management. In light of this, e-procurement systems are used to obtain materials and parts via the Web or using traditional e-procurement standards either for internal manufacturing (direct procurement) or office supplies and equipment (indirect procurement). E-Procurement is about the organization 'doing business' electronically with suppliers and is defined by the National Procurement Strategy as the use of electronic systems to acquire goods, works and services and payments from third parties.

The main objective of using technology in procurement is to reduce the cost of the procurement process for both the organization and its suppliers and contractors. Governments across the World also want local authorities to implement e-procurement, mainly through; priority services outcomes, and national procurement strategy targets on doing business electronically.

The practice of e-procurement has been a necessary strategy for cutting down costs in governments, public institutions and private companies. Georges (2005) explains that e-procurement have been a tool for avoiding purchasing of obsolesces and in most cases, the buyer through the internet get chances of making comparison of goods with regard to qualities and costs. In governments and public institutions, it have been explained that about 59% of the budget is spent on procurement and that have been affecting the development of other socio-economic sectors in the respective countries (Hughes, 2002). In light of this, Collonel (2004) argues that procurements of goods on line have been facilitating the growth of many private companies across the World because of the use of suppliers have been increasing costs on goods and hence, a burden to the companies.

1.2 Statement of the Problem

Businesses exist to sell goods and services to other businesses and / or consumers. In order to produce these goods and services, raw (input) goods and / or services must be purchased from other businesses in a supply chain. On average, procured goods and services generally represent at least 50% of a company's spend, and in some businesses, procured goods and services exceed 70%. Thus, it is important that a business be able to procure these goods and services efficiently and cost-effectively. That's where procurement comes in.

E-Procurement is the counterpart to sourcing, starting where sourcing ends and ending where sourcing begins. It is the "e" implementation of the procurement cycle which is concerned with the requisitioning, receiving, and reconciliation of the received goods as opposed to the analysis, auction, and award that takes place in the sourcing cycle. It is essentially the automation of the non-strategic and transactional activities that consume the majority of a buyer's time, but one that comes with increased enterprise level visibility of all purchases.

In public institutions e-procurement have been incorporated into different governments' policies to ensure effectiveness in purchasing and supply of goods. Preschal (2004) explains that in United Kingdom, the employment of e-procurement

in government institutions have been fruitful in cutting off costs with regard to public expenditure although about 24.6% of public institutions proved failure in practice of e-procurement. This information is different from the results of studies done in United States of America (USA) public institutions which about 89% proved fruitful with regard to the use of e-procurement (Hughes, 2002, Paschal, 2007).

In Tanzania public institutions, the practice of e-procurement has been incorporated into the government policy for the past five years there have been arguments for effectiveness among those which use e-procurement. In the year 2005, 46% of the public institutions that employed e-procurement managed to cut costs and the percentage increased up to 52% in the year 2007 (Daily News, 2009).

1.3 Research Objectives

There were two types of objectives that is general and specific objectives

1.3.1 General Objective

The general objective was to investigate the effectiveness of e-procurement in Tanzania public institutions.

Specific Objectives

- (i) The specific objectives were as follows:
- (ii) To determine if employees in public institutions are aware of e-procurement;
- (iii) To evaluate problems which public institutions face on employment of e-procurement; and
- (iv) To assess the effectiveness of e-procurement in public institutions.

1.4 Significance of the Study

The study is significant to public institutions as they will be able to use study findings to improve the procurement process and that will enable them to purchase quality goods. The company may use recommendations from this study to cut down costs and use funds for other development issues in the companies. Providers of internet services may use study findings to improve services to enable users to access information with minimum difficulties.

1.5 Limitations and De-limitations of the Study

First limitation expected is time. In this case, after coursework the researcher returned to the employer and continues working. Therefore, the researcher may not have enough time to do research work. This was solved by taking annual leave and or doing the research work after work hours or weekends.

The second limitation was researcher availability of enough funds for the study taking into consideration that the researcher is self sponsored with few sources of funds. This problem was solved by taking a loan from financial institutions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, reviewed literature is presented. The presented literature is both theoretical and empirical. The empirical literature and research gap are also provided.

2.2 Theoretical Literature

2.2.1 The Benefits of e-Procurement

E-procurement solutions level the playing field between large and small companies alike. For a reasonable investment, every company can bring significant improvements to the purchasing process and enjoy high returns by taking advantage of an e-procurement platform. From productivity improvements to efficiency increases to quantifiable cost savings, the benefits of e-procurement are concrete and eminently justifiable. To make the proposition even more attractive, service providers such as purchase pro offer hosted e-procurement solutions that can be deployed for a reasonable cost, with little time or effort, and no ongoing maintenance or support burden. PAGE Co-op, for example, a purchasing cooperative that buys products and services for 750 newspapers and printing facilities across the U.S., uses an e-procurement solution powered by Purchase Pro to aggregate and fully leverage its members' \$175 million in annual spending (Hole, 2001).

According to Schwan (2005), E-procurement benefits stem from automating procurement activities and streamlining purchasing workflow, both internally and with vendors. These extensive benefits include:

Productivity Improvements

- (i) Automating manual processes and reducing paperwork increases the throughput of purchasing requests, and frees purchasing agents for more important work such as managing vendors and negotiating better deals.

- (ii) Distributing purchasing capabilities to end users allows purchasing organizations to spend more time on management and oversight rather than administrative tasks.
- (iii) Allowing end users to purchase products directly shortens the cycle time between order and fulfillment.
- (iv) Standardizing purchasing methods reduces the learning curve for novice purchasers, ensures consistency between POs, and decreases the odds that a purchase order will be delayed due to missing or invalid information.

Efficiency Increases

- (i) Eliminating manual processes and paperwork reduces the opportunity for human errors, inaccuracies and reworks.
- (ii) Automating approvals, escalations and triggering events ensures that POs are expedited quickly.
- (iii) Finding products is easier when vendor catalogs and product information are available online and amenable to searches.
- (iv) Issuing a PO is quicker when it is generated and submitted automatically; line item POs -- a single PO with multiple items sourced from different vendors -- reduce the need for separate POs for each vendor.
- (v) Built-in auditing and reporting tools make managing the purchasing function more professional and predictable.

Cost Savings

- (i) Automating the purchasing process lowers transaction costs per PO and reduces the administrative overhead of the purchasing organization.

- (ii) Funneling all purchasing through an e-procurement platform reduces or eliminates maverick buying.
- (iii) Shortening the time between demand and fulfillment lessens the need to stockpile inventory, lowering overall inventory carrying costs.
- (iv) Using an e-procurement platform to track and aggregate corporate spending gives a company greater leverage with vendors and the ability to negotiate more favorable contract terms.
- (v) Relying on the auditing and reporting capabilities of the platform, a company can identify vendors that consistently outperform their peers and direct purchases to these high performers.

Vendors also benefit from participating in e-procurement platforms. Automating and streamlining their selling and order processing functions produce many benefits complementary to those cited above. For example, vendors can enjoy cost savings through improved forecasting. By analyzing e-procurement transaction data, vendors can better match their products and services, and time their production schedules, to fit customer needs.

2.2.2 The Procurement Cycle in both Public and Private Institutions

The basic procurement cycle consists of up to nine steps, depending on the complexity of the buy and organizational policies. At a bare minimum, it consists of an order (requisition or purchase order), an invoice (which might be one with the receipt), and payment. For high-dollar purchases, the process will generally also include authorization and reconciliation of the invoice. In addition, if taxes were paid that the organization is capable of reclaiming, then the forms or entries to reclaim such taxes at the proper time will also be filled out or made. Finally, in a leading procurement organization, every step will be completed, although many will be completed automatically for low-dollar or non-strategic purchases by the eProcurement system using defined rules in the workflow engine. These includes.

Requisition

The first step of the full procurement cycle is the requisition. This is where a buyer recognizes a need and places a request for goods or services. This request may or may not be off an existing contract, depending on whether a relevant contract is in force and whether or not the supplier(s) with whom contracts exist can meet the need. If the purchase is one time or of a small-dollar amount, the buyer might be allowed to skip straight to the purchase order step.

Authorization

Each requisition made by a buyer gets routed to an appropriate approval agent. The approver verifies that the goods or services are needed, that they are either off of an appropriate contract or acceptable as a stand-alone non-contract order, and that the purchase amount is acceptable. If everything pans out, the request is approved and a purchase order is generated by the system. If one or more elements of the requisition is not acceptable, the requisition is denied and a message is sent to the requisitioned informing her why. The requisitioned can then resubmit with corrections, if appropriate.

Purchase Order

Once a requisition is approved, a purchase order is created and automatically delivered to the suppliers. The purchase order will contain all relevant data pertaining to the order including the goods or services being ordered, identifying SKUS, corresponding contract number, agreed upon pricing information, inco and delivery terms, and desired delivery date.

Receipt of Goods

Once goods are received, the buyer issues or confirms a receipt of such goods to the supplier. At this point, an invoice can be accepted, reconciled, and, if all is in order, paid.

Invoice

After a supplier prepares goods for shipment, an invoice is created that denotes the individual goods ordered by SKU and the amounts being charged. The invoice may be sent with the shipment, but if the supplier is capable of conducting business electronically (and a considerable number of suppliers dealt with by the organization need to be for eProcurement to be effective), it is usually sent to the buyer using an eProcurement system.

Reconciliation

After the goods are received, the invoice needs to be reconciled to the purchase order and goods receipt before payment is made. Are the charges for the right goods or services? Are the amounts the contracted amounts? Were the quantities correct? Are any other charges, including taxes, valid and correct? Do any deductions need to be made, possibly due to inferior quality or the need to return a portion of the shipment?

Payment

Once the goods have been received and the invoice reconciled with the order and contract, payment is scheduled and made using an appropriate payment method, which could be p-card, electronic funds transfer, or good old fashioned cheque.

2.2.3 Barriers to Successful e-Procurement Implementation in Public Organizations

While various governments are encouraging public sector agencies to adopt e-Procurement, its implementation does not appear to have been smooth and the rate of e-Procurement implementation success has been less than spectacular, as supported by Steinberg's (2003, p. 1) claim that "Government e-Procurement projects have been notoriously unsuccessful". The development and implementation of e-Procurement has not been as easy as some of the solution providers have suggested, nor has it necessarily brought the anticipated savings. Furthermore, engaging suppliers in the process - especially smaller organizations - is also proving to be difficult given the level of investment expected in terms of providing catalogue

information to buyers, and marketplaces using different technologies, platforms and business languages

Difficulties also seem to stem from the tension between Buy Local policies designed to promote a local economy, and the efficiencies to be achieved through volume purchasing from large suppliers (AGV, 2003). Although a number of public sector agencies are actively pursuing e-Procurement, evidence from business press reveals that many of the efforts are not meeting original expectations. In fact, implementation rate of public procurement systems has been slow and many government agencies tend to overstate the degree to which they are involved in e-Procurement (MacManus, 2002). Despite the benefits that can be achieved from a successful e-Procurement implementation in the public sector, the business press has reported a number of failures of e-Procurement initiatives in a number of public sector agencies in the USA, UK and New Zealand in recent years. As observed by Heywood (2002), e-Procurement will result in large investments of time and money, without absolute certainty that its full potential will be achieved every time.

These views are supported by a number of cases reported in the business press. The US Government's General Services Administration had been criticized following embarrassing revelations that it was unreliable and error-prone (KableNet, 2002), while the British government decided not to extend its pilot e-tendering system across Whitehall (KableNet, 2002). In a similar vein, Bell (2003), Doesburg (2003), and Gifford (2003) report that the New Zealand Government's GoProcure e-Procurement system has proved more complex to develop than expected, while the UK Ministry of Defence is yet to achieve savings three years after its e-Procurement service first started running (KableNet, 2003). According to Garson (2004), the State of South Carolina abandoned its e-Procurement system in June 2002 and pilot projects were shut down in 2002 in Massachusetts, Indiana, and Michigan. The Virginia state auditor reported only 1.5 percent of the state's business was transacted through its state-of-the-art \$USD14.9 million system (Garson, 2004).

There is, however, a view that the rumors of e-Procurement's demise have been greatly exaggerated (Harris, 2002). For example, Davila, Gupta and Palmer (2003), using a survey of 168 US public and private sector organizations, indicate that e-Procurement technologies will become an important part of supply chain management and that the rate of adoption will accelerate as the adopters share their experiences of success factors and perceptions of low risk. Similarly, Barua, Konana, Whinston and Yin (2001) identified e-Procurement as the element of e-business most contributory towards the e-Business operational excellence of large corporations.

Such success and failure stories imply that there is a need for a much better understanding of CSFs in regards to the e-Procurement implementations and use in the public sector. Tonkin (2003, p. 13) provides a succinct summary of this sector's relationship with e-Procurement: "The public sector cannot afford to uncritically follow the latest fads and fashions, it can, however, form a strong base of self knowledge, confidence and with an eye to the future become an innovator in this field".

Reclamation of Taxes in e-Procurement

In some situations, the supplier of a good or service will be obligated to charge a tax, but the buyer may be eligible to retain some or all of that tax because of its corporate status. Examples include European Value Added Tax, Canadian Goods and Services Tax, and out-of-state sales taxes.

2.2.4 Practical Implementation of E-Procurement Cycle in Organizations: Analysis of Underpinning Issues

After a number of procurement cycles have been completed, it is important to take measurements of the efficiency and accuracy of the procurement process. eProcurement should significantly reduce cycle time, significantly increase accuracy, and improve the overall process. If any snags or inaccuracies are identified, they represent inadequate processes or data that need to be improved or corrected to maintain efficiency and return on investment.

Core Capabilities

Every provider has their own take on what an eProcurement system is and what it should do. However, based on this wiki's definition of the core e-Procurement process, it is straight-forward to identify a core set of capabilities that are essential in order for a system to be classified as an eProcurement system.

Requisitioning

Since the first step of the eProcurement process is the requisition step, it is critical that the eProcurement system allow for electronic goods and service requisitions. Furthermore, this functionality must be accessible to all individuals in the enterprise authorized to make purchases.

Approval Routing and Workflow

Since the second step of the eProcurement process is often the approvals step, it is crucial that the eProcurement system contain workflow capabilities and the ability to set up automatic approval routings by good, service, dollar value, and any combination thereof.

E-Purchase Orders

From the buyer's perspective, the purchase order is probably the most critical component of the procurement cycle. Therefore, any system that is not capable of automatically producing and delivering electronic purchase orders is definitely not an eProcurement system.

E-Receipts

The eProcurement system must also be capable of automatically producing and delivering goods and services receipts upon delivery when appropriate. To enable this, the system should integrate with barcode or RFID scanners to allow for automatic recognition of delivered goods.

E-Invoicing

From the supplier's perspective, the invoice is probably the most critical component of the procurement cycle, as it is the document that defines, and ultimately leads to, payment. Therefore, any system that is not capable of accepting and processing electronic invoices is definitely not an eProcurement system. Furthermore, for those suppliers who do not have systems that automatically generate electronic invoices, it should provide an easy means of on-line creation, either through a supplier portal or document scanning.

Automatic Reconciliation

Any system capable of capturing purchase orders, receipts, and invoices automatically must also be capable of linking and reconciling such electronic documents automatically to truly be useful.

E-Payment Options

An e-Procurement system should not only support electronic payments, but support multiple electronic payment options, such as purchasing cards, electronic funds transfer, electronic cheque, and automatic cheque printing - for the old-school die-hards.

Payment Scheduling

In addition to supporting multiple e-payment options, the system should also allow payments to be scheduled in advance.

Taxation Support

The system should also be capable of understanding the relevant taxation codes and linking into standard tax tables to allow the buyer to accurately compute tax, reconcile taxes charged by suppliers, and determine any exemptions the organization is eligible for.

Reporting

Basic reporting is also a must. The reports must be capable of computing all basic measures on purchase orders rendered, invoices processed, and payments made. It should also be capable of automatically computing basic metrics on throughput rates, inaccuracies detected, and identified process and payment savings.

Alerts

The system must be capable of raising alerts whenever an approval is required, an invoice is received without associated goods, an invoice contains inaccuracies, a payment is due, or another important user-defined (and user definable) event occurs.

Self-Service Supplier Portal

It's critical, especially from an adoption and maintenance perspective, that a supplier be able to self-register, self-activate, self-update, and, at the appropriate time, self-terminate. They should be able to automatically send electronic invoices through the appropriate interfaces or create them manually through the portal.

Furthermore, portals benefit the suppliers as much as they do the buyers. These web-based solutions drive collaboration between buyers and suppliers by improving supplier visibility into invoice and payment status and decreasing processing time and errors. A supplier's ability to upload, view, and track invoices in real-time as they flow through a buyer's workflow processes strengthens the visibility and control suppliers have over their own accounts receivable processes and can be used as a selling point during the supplier on-boarding process.

2.2.5 Important Features

In addition to the core capabilities defined in the last section, there are another set of features that a good eProcurement system should possess. Some of them are defined in this section. Although most of these features are not essential, their absence will limit the flexibility, usability, or efficiency of the system.

Intuitive in E-Procurement Process

A procurement system can be the most advanced procurement system in the world with twice as many features as any other system on the market, but if it's not intuitively usable, chances are it will not be adopted by organizational users if they can at all avoid it and circumvented at every opportunity if they cannot.

Real-Time Data Transmission & Status

Just because an e-Procurement system allows for the creation and transmission of e-Purchase Orders, e-Invoices, and e-Receipts does not mean it is a real-time system. It could be an old-style batch system that only transmits data once a day, week, or, gasp. Month depending on the type of feed that it uses.

Robust Search Capabilities

It should be possible to find and pull up a purchase order, receipt, invoice, or payment by any identifying piece of information, not just by document number.

Internal Catalog & Punch-out Support

A truly useful procurement system puts the goods the buyers need at their fingertips, it does not make the buyers search for them or enter SKUs. Buyers should be able to search internal catalogs, external punch-out sites, and supplier catalogue sites to find the items they need, click a button to select them, and create a requisition (or purchase order) on the fly.

Multi-Currency & Multi-Language Support

Even if an organization only buys and sells in one country, if it is large enough, chances are it still buys from a global supply base. Thus, a good eProcurement system will be internationalized and support multiple currencies, and multiple languages.

Back-End System Integration

A good e-procurement system will integrate with an organization's back end accounting and enterprise resource planning (ERP) systems.

Security

A good e-Procurement system will be secure and safely deployable over the open internet.

Open Standards

A good e-Procurement system will be based on open data-interchange standards to allow for easy integration with back-end systems, supplier data feeds, and external catalogs and content sites.

Supplier Network Integration inn e-Procurement

A great e-Procurement system will allow for easy integration with third party supplier networks that can assist a supplier with identifying the right supplier and collecting appropriate supplier data.

Contract Repository Integration

A good e-Procurement system will integrate with the organization's contract repository, most likely in its e-Sourcing suite, and negate the need for a buyer to re-enter contract information.

Scanning / Invoice Imaging

A good e-Procurement system will integrate with an invoice scanning and imaging system to assist an organization dealing with those suppliers that are still in the dark ages.

Dashboards

A great eProcurement system will have executive, supervisor, and buyer dashboards that will allow an individual buyer to determine which of her requisitions are still pending and which orders have not yet been received, a supervisor to determine which requisitions are waiting approval and which orders have not yet been paid for, and an executive to determine the order, receipt, invoice, and payment throughput of the system.

Online Dispute Resolution

A great e-Procurement system will also enable online dispute resolution between buyer and supplier that will track all relevant information and make it accessible to both parties at each stage of the process.

Electronic Forms Support

In addition to electronic invoices, electronic goods receipts, and electronic purchase orders, an eProcurement system will also support the creation and transmission of other electronic forms required in the procurement process including, but not limited to, regulatory reporting, taxation, and security filings.

Controls to Prevent System by Passing

A great eProcurement system will contain numerous controls to prevent buyers and supplier from bypassing the system. It will not allow buyers to transmit orders without the proper approvals, and, when appropriate, will not allow suppliers to transmit invoices without corresponding purchase orders.

Primary Benefits

An appropriate eProcurement system will come with many benefits from transactional, information management, compliance, and payment viewpoints that go well beyond just process and cost savings. This section will overview some of those benefits.

Transactional

The transactional benefits of an e-Procurement system are among the clearest: process streamlining, process cost reduction, and better payment control.

Process Streamlining

By automating most of the process, an e-Procurement system considerably cuts the time required to place an order and process the resulting invoice for payment, freeing up personnel for more strategic and valuable work. Some research studies have found that procurement professionals often spend one-third of their time just reviewing and

processing paper-based purchase requisition. Thus, just automating the paperwork is obviously going to considerably streamline the process.

Process Cost Reduction

By considerably reducing the amount of manpower required to place, process, and pay for an order, an eProcurement system will provide an organization with significant cost savings. Many estimates place the cost of processing an invoice in an average organization at over \$100 and the savings associated with an eProcurement system at 70% to 90% on a per-invoice basis.

One might initially think that the costs associated with eProcurement are minimal compared to other costs, and that any savings associated with the implementation of an eProcurement system might also be minimal, but when you consider the steps involved from identifying a supplier to creating a requisition to cutting a purchase order to reconciling an invoice to scheduling a payment to reclaiming taxes, the costs add up.

Better Cash Management

By automating the payment as well as the processing, an eProcurement system allows an organization to choose when they want to pay. This is especially valuable if a supplier provides a discount for early payment. Furthermore, with enhanced visibility into invoice status and cash flow, an enhanced solution will allow a buyer to proactively propose early settlement discounts to suppliers. If its more cost effective for the supplier to take the discount than to maintain financing, both parties can benefit.

Compliance

The compliance benefits of an eProcurement system go beyond simply standardized processes to enforced approvals, reduced maverick buying, and, in more cases than one might want to admit, fraud reduction.

Standardized Processes

An eProcurement system standardizes processes across the organization. This automatically takes compliance to the next level since all buyers will be following the same process through the same system.

Automatic Spend Approvals

A good eProcurement system will not allow a buyer to circumvent required approvals and automatically route all requisitions to the appropriate authority immediately upon creation.

Reduced Maverick Buying

A good compliance system with appropriate controls prevents maverick buying by forcing all buyers to use the system and all requisitions to go through proper channels. Considering that some surveys have found that over 25% of indirect expenditures in some organizations are off-contract, this benefit alone could almost justify the acquisition of an eProcurement system.

Fraud Reduction

A great procurement system will either contain Travel & Expense functionality or integrate with the Travel & Expense system. This will enforce requisite authorizations and prevent fraud and misuse. The reality is that, without controls, it is more likely than one cares to admit that there will be more questionable, and even fraudulent, transactions, especially in a large organization.

Information Management

The information management benefits of an procurement system are also quite substantial. Besides quicker query resolution, supported by robust search capabilities, online collaboration, and online dispute resolution, the improved quality of accounts payable and master invoice data allows for timely payments and better working capital planning.

Improved Quality of Accounts Payable & Master Invoice Data

A complete eProcurement system that centralizes purchase orders, goods receipts, invoices, and payment records exponentially increases the quality, accuracy, and completeness of accounts payable and master invoice data. Considering that bad data usually leads to bad decisions, significantly reducing the amount of bad data in enterprise systems is very valuable. This enables better payment and working capital planning as well as overpayment detection and fraud reduction.

Quicker Query Resolution

The improved quality of master data combined with robust search and online collaboration pave the way for quicker query resolution. No longer does one have to manually wade through limited-use reports, whether they be automatically or manually generated, to find an answer to a question.

Better Working Capital Planning

Having complete payment data, along with complete financial data in the ERP system, allows the organization to undertake better working capital planning by analyzing payment schedules against discounts for early payment and cost of capital calculations.

Payment Benefits

An eProcurement system also comes with a number of payment-related benefits.

Electronic Payment

The most obvious benefit of an procurement system is electronic payment, which should include P-card support, electronic cheque and electronic funds transfer, and automated cheque preparation (for the die-hard old-school vendors stuck in the dark ages) at a bare minimum.

Increased First Time Invoice Matching

An automated system that stores all purchase orders, goods receipts, and relevant contract information greatly increases the chance that an invoice will be matched the first time, insuring proper reconciliation and payment.

International Taxation Management

An eProcurement system with good internationalization that supports tax rules, codes, and tables can greatly assist in taxation management and increase the chances of an organization identifying, and reclaiming, all tax amounts that it is eligible to get back.

Miscellaneous Benefits of E-Procurement

Benefits of an eProcurement system go beyond the basic transactional, information management, compliance, and payment benefits outlined above. This subsection outlines a view of those benefits.

Increased Spend Under Management

Obviously, the more spend that goes through the procurement system, the more spend that is managed and it is the end-to-end management of spend, from sourcing through procurement back to sourcing, that offers the greatest value to an organization, since every dollar of spend under management usually translates into a significant increase to the bottom line for an organization.

High Visibility of Supplier Performance

The more spend that flows through the Procurement system, the more visibility an organization has on supplier performance from a delivery, invoicing, and collaboration viewpoint.

Controlled Supplier Proliferation

Without good visibility into its procurement and spend data, an organization may not realize just how many suppliers it is doing business with. Usually, the number of suppliers with whom an organization is actually dealing with is multiples of the

number of suppliers an organization without good visibility thinks it is doing business with. Usually this multiplier is three to five, but sometimes it is as high as ten (or more)!

Good visibility allows an organization to rationalize and consolidate its supply base to the right number of suppliers and helps buyers to determine if the organization is already dealing with a supplier that could potentially supply the good or service needed. Supplier proliferation does nothing but increase the complexity and cost of processing invoices, making payments, and maintaining all of the relevant supplier data in the various enterprise systems. And even though it is generally unwise to single source any critical direct good or service from a single supplier, it is also generally unwise to source the same good or service from twenty (or more) suppliers.

Reduced Inventory Costs

Reduced procurement cycles lead to better control over inventory cycles and inventory costs since a buyer will not need to estimate demand as far in advance.

Collaboration

An online eProcurement system, particularly one with a good supplier portal, can greatly enhance collaboration between a buyer and a supplier, especially if such a system allows the buyer and supplier to collaborate on-line in real-time!

Cultural Change

Implementation of an eProcurement system across the organization will lead to a cultural change. Provided the system is approached and implemented properly, this can be a cultural change for the better that instills best practices throughout the organization.

2.2.6 Best Practices

Contrary to the popular opinion of some vendors, there's more to successful eProcurement than just buying and installing an off-the-shelf software package and 'flicking the switch'. An implementation must be carefully planned. These section

overviews some basic best practices that are sure to get any eProcurement project off on the right track.

Understand the Drivers for Change

A successful eProcurement project starts with a deep understanding of why the procurement function needs to change. Where are the inefficiencies, the costs, and the problems? What needs to be done about them? Make an effort to standardize processes across the organization.

Also understand the benefits that will come with the project early on, even if they can't be precisely quantified. Also make sure to document, qualify, and wherever possible, quantify the losses and disadvantages that come with the status quo. This will be crucial to selling the project and gaining the support required throughout the organization.

2.2.7 Form Cross-Functional Teams to Examine & Re-engineer Business Processes

A successful e-Procurement project starts with cross-functional teams at the needs identification phase, not after a system has been selected and processes locked down. It's important to re-engineer the processes not just because new processes can be more efficient and more suitable to automation, but because the processes have to work for all affected parties, not just the buying team or finance organization.

Remember to keep the cross-functional teams in place after implementation since constant communication is the key to success. As noted in a Supply & Demand Chain Executive article, your colleagues should not know more about the new product kick-off party than the procurement department's ten million dollar cost-cutting project.

Focus on End-to-End Supply Chain Business Process Optimization

A successful eProcurement project focusses on improving the entire supply chain, not just the invoicing and payment mechanisms. It's true that automatic invoice

processing, reconciliation, and payment can drastically reduce invoice processing costs, by up to 90% in some organizations, but these are only fixed one time savings. True savings come from the collaboration and enforced compliance that comes from reduced maverick buying, automatic matching of purchases with contracted rates, and fraud deterrence.

Be sure to take a strategic view of procurement across the organization, especially from a treasury, financial accounting, and operations viewpoint. This will help to ensure that the business processes are re-engineered appropriately and that changes do not benefit one business unit to the detriment of another.

Involve Suppliers Early

A successful eProcurement project involves key and strategic suppliers in the planning stages and gets their input early on. This insures that the processes, and systems, are tuned to supplier needs as well as buyer needs and enables greater collaboration.

Clearly Define Metrics for Measuring Costs & Improvements

What's measured gets managed and only a managed project will turn into a successful project. In order to measure progress, it is important to have clearly defined metrics from the start and measure against them regularly after each stage. Make sure these metrics capture the effect of eProcurement on key financial metrics of the organization, since management will eventually be concerned with the bottom line.

Furthermore, consider establishing standard guidelines that creates a common definition for the term "savings" across the corporation. This will help in the creation of a framework that ensures all financial elements, including financing and cash flow, are considered and tracked. The guidelines should define a methodology for classifying cost reduction versus cost avoidance, identify methods of measuring other recognizable procurement benefits such as productivity, resource reallocation, and risk mitigation, indicate the milestones, systems, and reports that will be used to

validate, audit and verify results, allocate savings and benefits by period, business unit, and geography, and designate approvals required for measurement sign-offs.

Link Incentives to e-Procurement Performance

What gets rewarded gets done and an effective eProcurement program is one that rewards employees for following the process and using the system. Make sure the incentives include compliance, productivity, quality, and cost avoidance - not just cost savings. The following is suggested by Collings and Burden (2006).

Establish a Clear Channel Strategy

Not all purchases, buyers, or suppliers are the same and this need to be taken into account. Since one size does not fit all, an organization needs to make sure there are different processes and approvals set up for the different kinds of buys based on whether or not they are on-contract or off-contract, low-value or high-value, or strategic or non-strategic, for starters. Set up different types of integration points for the suppliers that are appropriate to their different levels of technological capability. The channel strategy should also encompass all of the methods of payment that are at your disposal. Payment methods might include purchasing cards for higher volume, lower value categories of spend, travel & entertainment cards for business travel and related expenses, electronic funds transfer (such as electronic cheque or wire), and traditional paper cheques.

Have the Right Systems & Tools

The right process only works with the right systems and tools. The systems and tools need to embody the organizational processes and make them easy to follow and implement. If it's a hassle to implement the preferred processes using the current systems and tools, or if the systems and tools make another process easier, users will get tired and ignore the processes.

Make sure the systems and tools tie into the disparate ERP, GL, and AP systems that contain the organizations orders, invoices, and payment data and undertake consolidation of disparate systems whenever possible. Make sure the systems selected contain good analytics, reporting, and business intelligence capabilities.

Implement in Phases

Generally speaking, technology projects that try to do too much, too fast, fail, regardless of what the technology is, be it ERP, eSourcing, or eProcurement. Break the implementation into multiple phases of manageable size and complexity, and be sure to have a success plan for each step.

Although it might be tempting to shoot for the finish line in an initial project, since that's where the benefits reach their full potential, such a goal is at least as difficult as a goal to sprint the entire length of the Boston Marathon, and not likely to come to fruition. Start by focussing on key areas of tangible benefits, such as the manually intensive processes that generate non-added value activities. This will get some early wins and increase support for, and visibility of, the project.

Also, consider on-boarding suppliers in phases as well. Considering that this will be a significant effort in many organizations, and not just technologically speaking, it might be wise to start with the subset of suppliers that account for the majority of invoices, which will generally be less than 20% of all suppliers, or to focus on key verticals first, where all suppliers are likely to be similar in technological capability.

Remember it's not just about Quick Wins

It's really easy to get a quick win with the implementation of an e-Procurement system that reduces invoice processing time to a mere fraction of what it was, saving 70% to 90% of invoice processing costs, but the real value of an e-Procurement system is in overcharge avoidance, rebate capture, and fraud prevention - value which only appears with regular, repeated, and monitored use of the system.

Ensure Continued Commitment of the Finance Organization

A successful eProcurement initiative requires continued support from finance as the system must link into, and capture, accounting data as well as procurement data. Furthermore, the best improvements will generally be those that result from close collaboration between procurement and finance.

Integrate Procurement Objectives with Business Strategies

As with e-Sourcing, the most successful eProcurement initiatives are often those that are in line with overall business goals, objectives, and strategies. Furthermore, it is easier to get executive support for initiatives that complement the business goals.

Consider working with finance to ensure specific procurement objectives are clearly integrated into corporate plans and their impact on key financial metrics continuously validated. In addition, be sure to have a solid procurement plan that addresses procurement's impact on the corporate vision, business plan, and key financial metrics, costs and cash-flow forecast, prioritization of key spend categories and associated goals, actions to measure supplier relations, touch-points with other business initiatives, assigned resources, and a time-phased savings and avoidance plan.

2.2.8 Critical Factors that Influence e-Procurement Implementation Success

While the terms “e-Procurement” and “e-Purchasing” have been used synonymously in many jurisdictions in an attempt to prove their involvement in the e-Commerce revolution (MacManus, 2002), the term “purchasing narrower scope. e-Procurement refers to the use of Internet-based (integrated) information and communication technologies (ICTs) to carry out individual or all stages of the procurement process including search, sourcing, negotiation, ordering, receipt, and post-purchase review (Croom & Brandon-Jones, 2004). While there are various forms of e-Procurement that concentrate on one or many stages of the procurement process such as e-Tendering, e-Marketplace.

Auction/Reverse Auction, and e-Catalogue/Purchasing, e-Procurement can be viewed more broadly as an end-to-end solution that integrates and streamlines many procurement processes throughout the organization. Although the term “end-to-end e-Procurement” is popular, industry and academic analysts indicate that this ideal model is rarely achieved (DOIR, 2001) and e-Procurement implementations generally involve a mixture of different models (S&A, 2003).

Although such end-to-end solutions offer robust and usually rich functionality, they are designed specifically to excel in just one or a few applications and thus pose various challenges (Cuthbert, Hamzic & Archer, 2003). While e-Commerce is simply a transaction conducted electronically, e-Procurement is the automation of many procurement processes via electronic systems, especially the Internet. Having defined e-Procurement for the purpose of this paper, it is also important to also define the term “implementation. As with e-Procurement, implementation has been defined in different ways.

A typical general definition from the Information Systems (IS) literature, states that implementation is “an effort beginning with the first thought of developing a system and not ending until the project is completed or abandoned” (Ginzberg, 1979, p. 408). Chan and Swatman (1998), however, state that IS implementation is best described as a process of organizational change that extends over a considerable period of time. More recent definitions of the term stem from the diffusion-based models of innovation adoption in relation to e-Commerce/e-Business (Srinivasan, Lilien & Rangaswamy, 2002). Cooper and Zmud (1990) propose a five-stage framework of initiation adoption, acceptance, routinization, and infusion explaining how an IT solution (application) is implemented in organizations, which, with the exception of infusion, forms the framework of this analysis. Infusion is the stage at which the e-Procurement solution is used within the organization to its full potential. As most e-Procurement initiatives are in their infancy, this sort of approach will guide the selection of some e-Procurement initiatives in the public sector.

Over the last 40 years, while private and public sector organizations have been utilizing Information Technology (IT) systems to streamline and automate their purchasing and other processes, it is only in the past decade that e-Procurement systems have attracted attention. While there is debate about how recently e-Procurement has emerged. (Dai & Kauffman, 2001; Koorn, Smith & Mueller, 2001), there is no doubt that the use of the Internet in e-Procurement provides several advantages over earlier inter-organizational tools. For example, Electronic Data Interchange has been providing automated purchasing transactions between buyers

and their suppliers since it was launched in the 1960s. Enterprise Resource Planning (ERP) followed in the 1970s, and then came the commercial use of the Internet in 1980s. It was only in the 1990s that the World Wide Web - the multimedia capability of the Internet - became widely enabled and provided the essential resource for the automation of procurement (OGC, 2002).

According to Koorn, Smith and Mueller (2001), there are three types of e-Procurement Systems: Buyer e-Procurement Systems, Seller e-Procurement Systems and Online Intermediaries. While various e-Marketplaces have been launched based on the Enterprise Portal philosophy, the implementation of e-Procurement systems usually consists of two technologies within the Enterprise Application philosophy: a workflow system integrated with an e-Procurement application that supports requisition to payment; and the electronic catalogue that lists suppliers' items and prices over the Internet. Within these two philosophies, there are again two different approaches that the public sector agencies have used for implementation of e-Procurement: an end-to-end e-Procurement solution (the "big bang" approach), and the incremental implementation.

Some of the commonly used tools in the public sector are e-Tendering, e-RFQ, e-Auctions, e-Catalogues, and e-Invoicing. These tools, including complete marketplace technologies, have been developed by the key players in the e-Procurement market such as Ariba, Commerce One, Oracle, and SAP. Regardless of the various shapes and sizes of e-Procurement systems in the market, it has been argued that the basic procurement process is the same across the public sectors and can be addressed with straightforward technology to automate standard processes (NePP, 2005). However, this paper has more of a conceptual approach to implementation of an innovation and, therefore, does not focus on the precise technical description of these e-Procurement tools. The fundamental problem motivating this study is the need to understand the CSFs underlying the implementation of e-Procurement initiatives in the public sector.

2.4 Empirical Literature

A research done by Andstro (2006) on the place of ICT on e-procurement revealed that the ICT was important in the procurement process because of enabling easy communication between the suppliers and those who needed materials to purchase. The similar research was done by Hoisler (2009) and results indicate that e-procurement was cost effective. According to the findings the Ford Company was able to serve about ½ of the money which was used for other managerial activities.

Pradesh (2006) on the importance of e-procurement in Motor industry in India, discovered that the method was effective in enabling motor companies to reduce the rate of obsolete and wastes.

2.5 Research Gap

Availability of few empirical literature implies that little have been cover on the use of e-procurement in organizations. Indeed, based on this study, there is no evidence that indicates that the same research have been done in the environment which is similar to the environment where this research was done. Therefore, findings from this research will cover the gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents methodologies which were employed during the study. In this case, study area, research design. Research approach, population, sample and sampling procedures are explained. Furthermore, methods used during data collection and instruments are well elaborated. The chapter is concluded by the explanation on the procedure used during data analysis.

3.2 Study Area

The study was done at Tanzania Aviation authority (TAA) headquarters which is located in Dar es Salaam city. The TAA is a government agency responsible for keeping national statistics and have been employing e-procurement for a number of years. Thus, the expertise available was vital to the researcher as she was able to collect valid and quantity data.

3.3 Research Approaches

Both qualitative and quantitative research approaches were employed during the study. Qualitative approach was used by the researcher to collect data through direct conversation with the respondent. The qualitative approach allows the use of research methods such as interview, documentary analysis and observations. Thus, the use of different research methods during data collection facilitates collection of quality data and in this case, primary and secondary data.

Quantitative research approach was used during tabulation and computation of percentages. Reasons for intending to use quantitative approach is that the approach does not consume time and therefore, much data can be collected, analyzed and computed within a short time. Thus, according to Marshall and Rossman, (1980) quantitative approach reduces data to numerical indices and hence leads to the

generalization. Furthermore, data collected from quantitative approach in most cases is free from bias.

3.4 Population

In this study the population was all stakeholders and employees of TAA a number which was 201 employees.

3.5 Sample and Sampling Method

The sample was obtained from the population and consisted of 134 respondents that is Top staff 50 and 84 stakeholders. Purposive sampling method was used to get respondents who were actively involved in procurement and those in management. In light of this, random sampling technique was used to get the required number of respondents specifically the suppliers.

3.6 Data Collection Methods and Instruments

The researcher used three types of research methods namely interviews, observations and documentary analysis. Research instruments to be used during data collection included interview questions, observation schedule and documentary review schedules.

During interviews open-ended questions was used and respondents were given much freedom to provide many questions as they wished. Interview questions were administered to all respondents. Furthermore, during observations no-participatory observation method was used whereby the researcher observed the procurement process that is the use of e-procurement (e-procurement documents) In this case, a schedule for observing different incidents was designed to ensure effective observation process. Similarly, documentary analysis was effected through employment of documentary review schedule which was designed before the study. However, documents to be reviewed were first identified before preparing the schedule.

3.7 Data Analysis Procedures

Data analysis is an important step towards finding solution of a problem under study. Guba and Lincholin (1994) describe data analysis as being a systematic process involving working with data, organizing them and dividing them into small manageable parts. Guba and Linclin (ibid) continue to explain that data are further synthesized in order to discover what is important and what has been learned so as to decide what to tell others. In this case, the first step was to transcribe data.

Data analysis begun with individual response and responses from different respondents was purposively sorted and grouped to make them coherent with research objectives and research questions. Comparison of data was done to identify those similar. This activity reduced the data into small manageable and analytical packages which were used for analysis and drawing the conclusion.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

In this chapter collected data is resented, analyzed and discussed based on research objectives and research questions formulated in chapter one of this thesis.

4.2 Challenges which influence the use of E-Procurement in Public Organizations

The objective intended to determine challenges that influenced the use of e-procurement in public organization-TAA. Respondents 134(100%) provided responses which was then validated through the use of documents. Respondents were required to tell if there were challenges when effecting e-procurement. Table 4.1 indicates responses.

Table 4.1: Responses on the Presence of Challenges which influence e-Procurement at TAA

Response	Number of Responses	Percent
Yes	130	97
No	4	3

Source: Research data, 2012.

Table 4.1 indicates that 130 respondents (97%) agreed that there were challenges during the use of e-procurements. They said that users used to get difficulties when using e-procurement. Table 4.1 also indicates that 4 respondents (3%) said that there were no challenges that were faced by the organization on using e-procurement. They simply explained that they just used the method and viewed to be good and effective in ensuring quality procurement. Then challenges that are faced were investigated and Table 4.2 indicates findings.

Table 4.2: Challenges which Influence the Practice of e-Procurement

Issue	Number of Responses	Percentage
Budget & Executive Support	45	33.5
User Adoption	60	44.7
Supplier Buy-In & Enablement	29	21.6
Total	134	100

Source: Field Data, 2010

Table 4.2 indicates that responses 45(33.5%) mentioned Budget and Executive Support to be a challenge and respondents 69(44.7%) mentioned user adoption to be another challenge that affected the use of e-procurement. Data in table 4.2 indicates that respondents 29(21.6%) mentioned Supplier Buy-In and enablement

It was revealed from the study that TAA management that although have been striving hard to ensure availability of enough funds for effectiveness of e-procurement, the allocated funds have not been enough. According to the respondent, financial constraints have been resulting in some cases NBS not to use e-procurement when purchasing goods.

Documents indicated that the company budget have been increasing year for the past five years as indicated in Table 4.3 below.

Table 4.3: E-Procurement Budget

Year	2008	2009	2010	2011
% increase	10.4	23.5	29.5	34

Source: Research Data, 2010.

According to data in Table 4.3, the trend with regards to the budget incise for e-procurement purposes have been increasing lineally. For example for the year 2008, the percentage budget increase was 10.4% and 23.5% for the year 2009. This indicates and increases of 13.5% from the year 2008 and 2009.

Similarly, for the year 20010, the percentage increase was 29.5 and this indicates an increase of 6% for years between 2009 and 20010. Furth more, the percentage increase for the year 2011 was 34% and this also indicates a percentage increase of 4.5%. Based on this data it is obvious that NBS management have been very positive to the use of e-procurement.

Respondents who mentioned a change of budget and executive Support explained that greatly influenced the use of e-procurement. Three respondents (2.2%) explained that really budget and executive support not an issue in any organization and when it's not, there are usually other issues a procurement professional has to contend with, but that could be a whole other week.

One respondent (0.7) argued that with any initiative, the value proposition will have to be clearly presented and understood According to the respondent, this will require a significant amount of homework, well above and beyond the materials that the vendor-du-jour will be providing or which need to be procured.

Findings indicated that the challenge with regard to the use of e-procurement was on the side of management who sometimes resulted into the conflict of interests. Respondents (2.9%) explained that some executives have been part and parcel of procurement processes and possessed procurement companies. One respondent highlighted that ‘..... They have been supplying goods and they know how much they were paying..... It seems not to be happy with adoption of e-procurement’.

According to the above situation, it was revealed by respondents (34%) that passiveness among executives prevailed and that was a huddle to e –procumbent implementers. This problem was similar to the problem revealed by Kajiado (2007) on implementation of annual budget plan in Kericho District-Kenya. Kajiado proposed the following to all junior staff dealing with issues that involved conflict of interest with bossed that ‘Make sure to identify the 'hot buttons' of the senior executives who will ultimately make the decisions and address them early on’.

Kajiado also insisted identification of senior management champion(s) early on and make sure their needs and concerns are also addressed early.

User Adoption was also mentioned by 60(44.7%). It was revealed from the study the e-Procurement system only generates value if it is used. According to the findings, e-procurement have been resulting into being cost effective compared to the period before adoption of e-procurement by NBS. In this regard, it represents a considerable change to the traditional procurement process. The traditional system of procurement was explained to result into goods being procured at high prices and sometimes money were paid but no goods received.

Respondents (41%) argued that using e-procurement it is easy to identify what have been procured for a given period, at what price, quality and specifications. Findings indicated that the adoption of e-procurement resulted into a challenge to users especially to those who used other procurement system.

According to the 10 respondents (7.4%), there could be some considerable user pushback if e-procurement system was not handled properly. In order to mitigate the risk, it is important to involve representative users at the beginning and develop appropriate training sessions that explain why the new process and technology is important, how it helps them do their job, and what benefits it brings to them as end users, which should be of the easier, faster, and better variety.

Furthermore, respondents 45(33.5%) elaborated that the NBS management have a great task of ensuring that each user sees the simple to use and intuitive. In this case, the user Interface understands that the e-Procurement system can be used as a "one-stop-shop", and has full visibility into the status of her requests at any time. In this regard, this will go a long way to establishing the easier, faster, and better.

4.3 Issues that underpin e-Procurement

Supplier Buy-In and Enablement was mentioned by 29(21.6%) to be a challenge to TAA with regard to the use of e-procurement. Findings indicated that some of the major benefits of an e-Procurement system are punch-outs, e-Invoices and e-Payments, which require suppliers to buy-in to the system and use it.

This has been a problem to suppliers because greatly reduced the rate of cheating. One respondent criticized this that ‘..... It is wastage of time and resources and it is capitalized into bureaucracy and not accuracy’. The respondent praised the traditional system of procurement by arguing that it was very good due to instant delivery of goods once needed.

Analysis of the above responses indicated a need for deliberate management of e-procurement. In this case, in order to insure supplier buy-in, one needs to involve key suppliers in the project early in order to design a system that they can use and plug into quickly and easily. Furthermore, the team needs to develop self-guided training sessions to allow new suppliers to quickly and easily set themselves up and plug into the system.

The importance of supplier adoption should not be overlooked, since any e-Procurement initiative that does not gain supplier adoption will ultimately fail. Some reports have called it the single greatest barrier hindering e-Procurement initiatives and have noted that persuading suppliers to change their processes to align with buyer's needs can be a time-consuming process, especially if the supplier perceives it as an unjustified cost. It will be important for the buyer to present a compelling value proposition to all suppliers, large and small.

For some suppliers it will be efficiency and reduced costs in the long-run, for others it will be opportunity for quicker payment and reduced disputes. In some cases it might just be increased visibility into the invoice approval and settlement process. In this regard, a team can start by establishing a hierarchy of suppliers, establish a clearly defined strategy for each type of relationship, establishing key requirements,

and implementing good supplier relationship management best practices. Findings indicated that there were other underpinning issues in e-procurement. Ten respondents (7.4%) explained that technology seduction at the management level.

Respondent (0.3%) argued that every now and again a project starts with an executive seeing a cool new application in an area/section they know they need to do something in and get seduced by the technology to be adopted. According to the respondent, if the application is wrong for the business, this poses not only a risk but a threat. According to three respondents (2.2%) in order for e-Procurement to be successful, it has to easily and natively support the processes and best practices that are appropriate for the business, complement the e-Sourcing platform, and work for the suppliers as well as the buyers.

Documents indicated this to be one of the hardest risks to mitigate, and requires that the project team does a considerable amount of homework, researches alternative systems, and clearly differentiates the benefits of the process from the benefits of a system as well as the differences between different vendor offerings.

Findings indicated that the project team have to find a champion on the senior management team that backs up their proposal, as well as research and findings, who is well respected, charismatic, and vocal and willing to help the team sell the management on the right technology, all the while insuring management that their goals will still be achieved with the proposed technology, which will have even more of an impact.

Findings indicated that it may also take some ego-stroking that simultaneously applauds management on their forward-thinking nature to recognize that there is a problem, that technology is needed to solve the problem, and that only they and the project team are capable of clearly Cross-Organization Cultural Differences in Process Re-engineering was explained to be another issue in the implementation of e-procurement. It was revealed from the study that TAA started e-procurement project for all department with difficulties. According to 23 respondents (17.2%), the

company first examined the development of the company with regard to business process. One respondent explained that is the examination of business process enabled the management to identify problems with regard to the use of traditional procurement system.

The examination of the development of business and the performance of organization was valid because it was revealed from literature that a successful e-Procurement project is one that first examines the business processes, determines what is really important, and streamlines those processes for not only implementation in an appropriate technology platform, but for automation wherever possible (Hoile, 2004).

It was revealed from the research that payments due employment of e-procurement was quite correct and that resulted into TAA to be cost effective in various functional areas including procurement. Based on this, one respondent (0.7%) explained that a purchase order for office suppliers within a buyer's budget should not need approval, as long as it is off of the standard contract or from a competitive supplier if no contract exists. In this case, the e procurement system will automatically indicate the eligibility of purchase and hence, the justification.

However, the caution was given by the respondent that it should be as simple as a buyer adding the items to a virtual cart in the e-Procurement system and a supplier indicating mode of supply. Three respondents (2.2%) explained that TAA was in good position of combating cheating in procurement because with aid of e-procurement system, purchase order creation, invoice creation, reconciliation, and payment are all automatic.

Respondents' arguments are valid because manually processing the invoice has been costing more than the invoice was for. The example was cited that three million off-contract buy for core product components should probably be authorized and reviewed. The researcher noted that the point was that user intervention should only be at the level that is required, and no more.

However, the researcher have a that getting to that point could be different as a global organization would cross cultures, and ideas on what the best process is and the best way to get there. It is important to involve stakeholders from various global operations from the beginning to allow them to contribute and shape the processes and solution. This may aid in early identification and resolution of any cultural differences that could be problematic down the road if not addressed and dealt with early.

Catalog Content and Contract Management was another issue that was revealed to influence the use of e-procurement. It was revealed from the study that e-Procurement system was only as good as the products and services that can be bought through it. Based on this finding, twenty five respondents (18.6%) explained from a buyer's viewpoint, this may come down to the completeness and correctness of the catalogs it manages and the contracts it references. It was revealed from the study that it was important to make sure that the solution selected integrates with the organization's contract management system to make sure contract data is always current and that the organization taps into supplier punch-outs whenever possible, since a good supplier will be active about keeping their content current.

It was revealed from the study that catalogue contract management proves to be significant, consider outsourcing to, and integrating with, a third party content management firm that specializes in content management. Thus, the effectiveness of e-procurement resulted into NBS being successful in budget control for the past five years. The reason behind the success was that prior adoption of e-procurement, procurement exercises used to constitute 45% of total budge but now constitutes 13.4%

Associated Costs was another issue mentioned by 45 respondents (33.5%). It was noted from the study that as with any technology project, the costs go beyond just the costs. It was revealed from the study the issue overviews the costs that should be expected/used or have been used when/during undertaking an e-Procurement

practice. This is in line with issue of Business Process Re-engineering Costs which was mentioned by 51 respondents in this study.

It was revealed from the study that a successful e-Procurement project starts with careful process examination, and where appropriate, re-engineering. In this regard, automation of the wrong process can be worse than no automation at all, since it will just create and propagate mistakes faster. This will take time, and people, and thus incur overhead costs. TAA was found to aware of this and according to the careful examination during introduction of e-procurement resulted into avoidance of paying over head costs.

Implementation Costs was another issue identified by 19 respondents (14.2%) to underpin the use of e-procurement at TAA. Findings indicated that the implementation costs were quite significant upon initial implementation. According to the respondents, it was important to understand what they are when doing the cost/benefits and return on investment analysis. In addition to the procurement costs, there might also be items costs, customization costs, integration costs to current systems, and associated personnel costs.

It was also revealed from the study that training costs was among issue that influenced e-procurement. Documents indicated that internal users in procurement and in finance as well as external suppliers need to be trained. This requires preparation and qualified instructors, each with their own costs. It was revealed from the study that TAA used to train employees on e-procurement in order to be effective. Documents indicated that about 90% of total employees in procurement department got training on e-procurement and that included other skill learning on computer use and internet.

It was also revealed from the study that all employees in management attended training on e-procurement. According to the responses provided by 4 respondents (2.9%) training enabled them to gain knowledge and skills on procurement by using

e-procurement system and hence increased capabilities for managing funds budgeted for procurement purposes.

The process used by TAA to first train employees dealing with procurement and then those in management was in line with the principle of training for users which stipulates that – for good outcomes from training, minimize the costs by training super-users and trainers first to handle ongoing questions and support issues (Climan, 2004). Ongoing Costs was another issue revealed during this study. It was revealed from the study that an e-Procurement system needs to be maintained to be effective. In addition to software upgrade and maintenance costs, there will also be hardware upgrade and maintenance costs, ongoing data maintenance costs, and ongoing training.

E-Procurement Tools used by TAA

The objective intended to probe the extent TAA have been using the existing technology as tools to achieve elements of e-procurement. In this case, the study empirically covered covers the use of various tools to replace manual and paper-based tasks and processes with electronic ones.

Table 4.4: Indicates Findings

Type of Tool	Number of Responses	Percentage
Email	100	74.6
Spread sheets	10	7.5
Internet	24	17.9

Source: Research Data, 2010.

Table 4.4 indicates that respondents 100(74.6%) indicated that e-mail was a tool used as a procurement tool and 10 respondents (7.55) said that spread sheet was a tool for e-procurement. Table 4.4 also indicates that 24 respondents (17.9%) mentioned internet to be a tool for e-procurement.

According to respondents who mentioned email to be tool for e-procurement, NBS utilized email to communicate both internally and externally. It was revealed from the study that many of the more comprehensive e-procurement systems utilized workflow to automatically send emails to alert relevant staff when action was required.

One respondent provided example when an e-marketplace solution was set up to automatically send an email to a marketing and procurement managers when they were required to approve a requisition created by procurement officer. Similarly, an e-marketplace system was used to automatically alert a supplier that an order has been placed with them on the marketplace, via email. Another respondent explained that an e-tendering system used to include workflow to automatically email suppliers when a new invitation to tender was posted on the e-tendering site.

The researcher revealed that these used workflow to automatically alert responsible/targeted NBS officers to take some action and prompt the next stage of the process. However, it was revealed from the study that even without the automatic element provided by the workflow, the emails themselves represented a much more economical way of communicating and prompting action.

In this regard, the researcher contends that Emails can eliminate the need to speak directly to a person (either by phone or in person) while still communicating the necessary message. This is of benefit because the person you may wish to communicate with may not be available just at that moment when you want to pass on the message in person. Thus emails represent a convenient and time-efficient way of communicating.

In some cases, emails may be used to replace a communication that may have been made on paper and sent through the post. In such cases email reduces the cost of paper and postage, and reduces the time taken to pass on the communication. Email also provides a clear audit trail of communications which is difficult to achieve if communicating by phone or in person.

It was also revealed from the study that Supplier performance feedback was another way email was used to gather official views from members of staff on the service they have received from suppliers. Findings indicated that staff across the NBS used the same suppliers and had good information about how well that supplier performed against their service agreement. To this one respondent (0.7%) explained that there were questions which have been taken into consideration. Are they delivering on time consistently, is the quality of the goods as expected, are they good at solving issues when they occur. This anecdotal information is often lost because there is no formal way of gathering and recording it.

However, literature indicated that there are a number of ways that this information can be gathered. Using your internal intranet with a structured e-form that staff can complete when they have views about a supplier is one way. Using email is an even easier way. If one has an intranet with Procurement Pages you can encourage staff to express their views on suppliers they are using to a specified email address. It makes sense to set up a new email address specifically for collating this information rather than using a personal email.

It was also revealed from the study that TAA emailing information to suppliers who use email systems instead of sending information by post benefited NBS and suppliers. In this regard, TAA saves money on paper, printing and postage (and the time involved in preparing documents for posting) and gains a clear audit trail of what has been sent to whom.

On the other hand, it was reported by 34 respondents (23.3%) that suppliers received communications or documents more quickly and in electronic format. Thus, receiving documents electronically allows suppliers to store the documents electronically, saving on paper storage space. In the case of documents that require a response, such as a pre-qualification questionnaire, the suppliers can complete it electronically, ensuring that the information provided is legible. The suppliers are then also able to keep an electronic copy of their own response which saves the cost of photocopying.

For those who said that email was a procurement tool explained that the vast majority of TAA had an external web site providing information about their services to the public including citizens, businesses and other organizations. It was revealed from the study that TAA on near future was expected to begin to provide services online using transactional websites. However, providing static information (i.e. information which does not need to be updated frequently) to suppliers could be relatively easy and of real value to both TAA management and suppliers. In this case, providing standard information for suppliers about how to trade with NBS is the first step. Government procurement policy requires all councils to have a “How to do business with the council” section on their website. There is also other information which NBS used to post on website either to be read or to be downloaded by suppliers which is simple to add to your existing website.

Thus, It was noted that having a defined space on TAA website for suppliers to find out relevant information did not only make it easier for suppliers to trade with your taa, but should also reduced the number of queries that the company staff have to deal with from suppliers. Documents indicated that the following were information that was indented posted to website: How to do business with the TAA, standing order information, frequently asked questions. Spreadsheets and/or simple databases was also explained to be a tool for e-procurement used by TAA. Findings indicated that spreadsheets or simple database tools was extremely flexible, and many elements of e-procurement were achieved relatively simply by using them. Then hoe TAA managed to achieve elements of e-procurement and hence, procurement functions using these simple tools.

According to the responses from 45% respondents, the use of tender response form aimed at achieving elements of procurement. According to the research findings, electronic bid analysis tools take this as a starting point. In this case, suppliers are provided with a strict format in which to respond to tenders. It was revealed from the study that fields can be completed with a limited number of variables.

This was then easier for TAA to compare responses from a number of suppliers and according to the respondents, comparison resulted into quality procurement and cost effective. In general, electronic bid analysis tools do the analysis of supplier responses automatically, but even if y the company continues to do the comparison manually. From the supplier perspective it was revealed from the study the bid process is made easier since it is clear exactly what information the supplier needs to provide.

It was revealed from the study that in order to ensure that TAA is buying from the right suppliers the company ensured that all staff (procurement department) has access to information detailing which suppliers they should be using. It was noted from the study that most council suffers from 'maverick spend' where staff buy off contract. Some of this maverick spend was the result of staff simply not knowing which suppliers they should be using.

In this regard, a simple solution is to create a database of suppliers and provide access to it on the council's intranet procurement pages (Hughes, 2007). Thus, supplier database may be created so that staff can filter by commodity type. It should also include contact details for the supplier. In general, the researcher contends that spreadsheet system can be used on a pilot basis by a subset of TAA buyers. Thus, at the end of the pilot period the purchasing data can then be analyzed to assess what can be improved. This is based to the example provided by one respondent that '..... The data might highlight that most staff are not using NBS contracts, or that a very large number of small orders are being placed rather than staff waiting for sufficient demand before placing orders'.

The importance of spread sheet was revealed to be important because a spreadsheet solution recorded key purchase order information such as: Purchase order number , date raised, supplier name and code , budget codes/cost codes, buyer name, line item detail, commodity type, description of product, product code, quantity and price. Respondents 12(8.9%) elaborated that a spread sheet may include a column to record the date that delivery was made so that supplier performance can be assessed against

your service level agreements. Recording purchase order information not only provide the company with better management information, but also aid invoice matching activities and provide a clear audit trail of purchases.

Findings indicated that the use of list of contracts – a contract database resulted into richness with regard to the importance of spread sheet in e-procurement. Documents indicated that contract management technology solutions were available from procurement technology vendors. These solutions enabled the recording of contract information and also included workflow to automatically alert relevant individuals if action is required.

Respondents 56(41.8%) explained that spreadsheet or simple database solution was used to hold contract information. According to respondents explanations, while the spreadsheet is not as sophisticated as a full contract management solution, it significantly improve TAA's ability to manage contracts. Thus, staff responsible for tendering and administering contracts was given access to modify and update the spreadsheet. They can also used contract spreadsheet to assess which contracts were soon to expire, which need to be re-let etc, by filtering the data by commodity type or by end-date . A read only version of the contract database was made available on the TAA's intranet procurement pages, or by email to relevant staff, so that valid contracts were communicated to all departments.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter provides summary of the study. It also provides conclusion and recommendations.

5.2 Summary

E-procurement is the business-to-business purchase and sale of supplies and services over the Internet. An important part of many sites, e-procurement is also sometimes referred to by other terms, such as supplier exchange. The adoptions of e-procurement to many organizations in Tanzania have been a challenge. The general objective was to investigate the effectiveness of e-procurement in Tanzania private companies. The study is significant to organizations employing e-procurement as they will be able to use study findings to improve the procurement process and that will enable them to purchase quality goods.

The organization may use recommendations from this study to cut down costs and use funds for other development issues in the companies. Providers of internet services may use study findings to improve services to enable users to access information with minimum difficulties. Theoretical and empirical literature on e-procurement was extensively reviewed and research gap identified during the proposal stage was bridged after data analysis and discussions.

Various methodologies were used and that involved the use of both qualitative and quantitative approaches. Qualitative approach was used by the researcher to collect data through direct conversation with the respondent. The qualitative approach allows the use of research methods such as interview, documentary analysis and observations. Quantitative research approach was used during tabulation and computation of percentages. Reasons for intending to use quantitative approach is that the approach does not consume time and therefore, much data can be collected,

analyzed and computed within a short time. The study was done at TAA headquarters.

Data collection methods used interviews, observations and documentary analysis. Research instruments to be used during data collection included interview questions, observation schedule and documentary review schedules. Collected was analyzed. The first step was to transcribe data. Data analysis begun with individual response and responses from different respondents was purposively sorted and grouped to make them coherent with research objectives and research questions. Comparison of data was done to identify those similar. This activity reduced the data into small manageable and analytical packages which were used for analysis and drawing the conclusion.

Findings indicated that challenges that influenced the use e-procurement by TAA were: Budget & Executive Support, User Adoption and Supplier Buy-In and Enablement It was revealed from the study that NBS although have been striving hard to ensure availability of enough funds for effectiveness of e-procurement, the allocated funds have not been enough.

Findings indicated that the challenge with regard to the use of e-procurement was on the side of management who sometimes resulted into the conflict of interests. According to the above situation, it was revealed that passiveness among executives prevailed and that was a huddle to e –procumbent implementers. It was revealed from the study the e-Procurement system only generates value if it is used. According to the findings, e-procurement have been resulting into being cost effective compared to the period before adoption of e-procurement by TAA. In this regard, it represents a considerable change to the traditional procurement process. The traditional system of procurement was explained to result into goods being procured at high prices and sometimes money were paid but no goods received.

It was also revealed from the study that the TAA management has a great task of ensuring that each user sees the simple to use and intuitive. In this case, the user Interface understands that the e-Procurement system can be used as a "one-stop-shop", and has full visibility into the status of her requests at any time. In this regard, this will go a long way to establishing the easier, faster, and better.

Findings indicated that there were issues that underpinned the use of e-procurement by TAA. Supplier Buy-In and enablement revealed to be among issues.. Findings indicated that some of the major benefits of an e-Procurement system are punch-outs, e-Invoices and e-Payments, which require suppliers to buy-in to the system and use it. The importance of supplier adoption was also revealed not to be overlooked, since any e-Procurement initiative that does not gain supplier adoption will ultimately fail. Some reports have called it the single greatest barrier hindering e-Procurement initiatives and have noted that persuading suppliers to change their processes to align with buyer's needs can be a time-consuming process, especially if the supplier perceives it as an unjustified cost. It will be important for the buyer to present a compelling value proposition to all suppliers, large and small.

Findings indicated that there were other underpinning issues in e-procurement and that involved technology seduction at the management level. It was revealed from the study that that every now and again a project starts with an executive seeing a cool new application in an area/section they know they need to do something in and get seduced by the technology to be adopted.

Cross-organization Cultural Differences in Process Re-engineering was explained to be another issue in the implementation of e-procurement. It was revealed from the study that NBS started e-procurement project for all department with difficulties then the company first examined the development of the company with regard to business process.

However, the caution was given by the respondent that it should be as simple as a buyer adding the items to a virtual cart in the e-Procurement system and a supplier indicating mode of supply. Three respondents (2.2%) explained that NBS was in good position of combating cheating in procurement because with aid of e-procurement system, purchase order creation, invoice creation, reconciliation, and payment are all automatic.

Respondents' arguments are valid because manually processing the invoice have been costing more than the invoice was for. The example was cited that three million off-contract buy for core product components should probably be authorized and reviewed. The researcher noted that the point was that user intervention should only be at the level that is required, and no more.

However, the researcher have a that getting to that point could be different as a global organization would cross cultures, and ideas on what the best process is and the best way to get there. It is important to involve stakeholders from various global operations from the beginning to allow them to contribute and shape the processes and solution. This may aid in early identification and resolution of any cultural differences that could be problematic down the road if not addressed and dealt with early.

Catalog Content and Contract Management was another issue that was revealed to influence the use of e-procurement. It was revealed from the study that e-Procurement system was only as good as the products and services that can be bought through it. Based on this finding, twenty five respondents (18.6%) explained from a buyer's viewpoint, this may come down to the completeness and correctness of the catalogs it manages and the contracts it references.

It was revealed from the study that it was important to make sure that the solution selected integrates with the organization's contract management system to make sure contract data is always current and that the organization taps into supplier punch-outs

whenever possible, since a good supplier will be active about keeping their content current.

It was revealed from the study that catalogue contract management proves to be significant, consider outsourcing to, and integrating with, a third party content management firm that specializes in content management. Thus, the effectiveness of e-procurement resulted into NBS being successful in budget control for the past five years. The reason behind the success was that prior adoption of e-procurement, procurement exercises used to constitute 45% of total budget but now constitutes 13.4%

Associated Costs was another issue mentioned by 45 respondents (33.5%). It was noted from the study that as with any technology project, the costs go beyond just the costs. It was revealed from the study the issue overviews the costs that should be expected/used or have been used when/during undertaking an e-Procurement practice. This is in line with issue of Business Process Re-engineering Costs which was mentioned by 51 respondents in this study.

It was revealed from the study that a successful e-Procurement project starts with careful process examination, and where appropriate, re-engineering. In this regard, automation of the wrong process can be worse than no automation at all, since it will just create and propagate mistakes faster. This will take time, and people, and thus incur overhead costs. TAA was found to aware of this and according to the careful examination during introduction of e-procurement resulted into avoidance of paying over head costs.

Implementation Costs was another issue identified by 19 respondents (14.2%) to underpin the use of e-procurement at TAA. Findings indicated that the implementation costs were quite significant upon initial implementation. According to the respondents, it was important to understand what they are when doing the cost/benefits and return on investment analysis. In addition to the procurement costs,

there might also be items costs, customization costs, integration costs to current systems, and associated personnel costs.

It was also revealed from the study that training costs was among issue that influenced e-procurement. Documents indicated that internal users in procurement and in finance as well as external suppliers need to be trained. This requires preparation and qualified instructors, each with their own costs. It was revealed from the study that TAA used to train employees on e-procurement in order to be effective. Documents indicated that about 90% of total employees in procurement department got training on e-procurement and that included other skill learning on computer use and internet.

Findings indicated that there was e-procurement tools which were used by TAA and those included: Email, spread sheets and internet. It was revealed from the study that email to be tool for e-procurement, TAA utilized email to communicate both internally and externally. It was revealed from the study that many of the more comprehensive e-procurement systems utilized workflow to automatically send emails to alert relevant staff when action was required.

It was also revealed from the study that Supplier performance feedback was another way email was used to gather official views from members of staff on the service they have received from suppliers. Findings indicated that staff across the TAA used the same suppliers and had good information about how well that supplier performed against their service agreement.

It was also revealed from the study that TAA emailing information to suppliers who use email systems instead of sending information by post benefited TAA and suppliers. In this regard, TAA saves money on paper, printing and postage (and the time involved in preparing documents for posting) and gains a clear audit trail of what has been sent to whom.

Spreadsheets and/or simple databases were also explained to be a tool for e-procurement used by TAA. Findings indicated that spreadsheets or simple database tools was extremely flexible, and many elements of e-procurement were achieved relatively simply by using them.

5.3 Conclusion and Recommendations

Based on study findings, benefits of e-procurement improved supply chain integration. It was also revealed to reduced employee overhead and improved supplier sourcing to e-procurement initiatives. E-procurement implementations are also subject to challenges that can affect the further adoption or levels of diffusion. In addition to which were revealed from the study, other include Issues relating to software and catalogue integration now rank as two major challenges facing organizations currently procuring Online.

These integration challenges are consistent with the increased reach of e-procurement implementation across the enterprise. Further, implementations are now deeper in terms of functionality thereby impacting a greater range of business processes and associated procurement practices across organizational boundaries. These changes are creating challenges in aligning

TAA organizational culture with new e-procurement practices. There is also a conclusive remark that should be put with regard to TAA transformations resulting from e-procurement initiatives. As the study indicates transformations to business processes, work practices and supply-chain arrangements occurred as a consequence of the adoption of e-procurement. These involved staff costs, staff development and training needs, Levels of outsourcing, purchasing procedures:, strategic positioning of procurement, changes to technological infrastructure and Inter-organizational information management:

It is also generally concluded that E-procurement has gained a more strategic position in organizations; and they are increasingly likely to have implemented an e-procurement strategy that is integrated with their supply chain management strategy.

This finding supports the earlier observation that e-procurement has increased in scope, spanning the whole of enterprise and is more integrated with other functions. As e-procurement has become a more strategic activity within organizations the role of the procurement professional also appears to be changing.

This is seen in the greater requirement for staff development and training to enhance business analysis skills in areas such as strategic sourcing and supplier analysis. E-procurement involves efforts to change how procurement functions, such as spending and budgets, employing staff, buying goods and services, and managing technological and organizational activity are carried out. It also has the potential to transform the relations between suppliers and customers.

However, while e-procurement is a label used globally, inscribed within its design may be a number of different assumptions and requirements relating to for example, technology, objectives, information, staffing and skills and institutional contexts. Therefore, its implementation may not be as simple as taking a design from one context into another one.

With regard to the scope, more organizations have implemented systems that span the whole enterprise and encompass a greater range of e-procurement functions and activities. For example, the inclusion of invoicing and payments in the top five e-procurement activities is consistent with the move towards more fully operational systems and the development of greater e-commerce capabilities. Consistent with, and a possible consequence of the increased reach and scope of e-procurement implementations is the emergence of integration and alignment challenges across the organization.

Thus, the benefits of e-procurement still remain largely un-realized by most organizations. Participating. Moderate benefits were realized with respect to improved supply chain integration, reduced employee overhead and improved supplier sourcing. It may be too soon after implementation for organizations to be reasonably able to identify benefits. Further, performance information may be

unavailable or inaccessible. A number of the organizations that have implemented e-procurement identified a reduction in employee overhead as a marginal benefit. However they also indicate that staff training and development needs have significantly increased. Further, a shortage of sufficiently skilled staff was identified in the top five factors inhibiting e-procurement adoption. This is consistent with the heightened strategic importance of e-procurement, which may require different skill sets.

Although achieving cost and operating efficiencies are important, the main value added benefit of e-procurement may be derived from better information for strategic decisions and governance practices, which do not at this stage, have much visibility. This requires further investigation. Inter-organizational information management has improved significantly. This is consistent with the increased integration and range of e-procurement activities. However, coordination of inter organizational information remains a major challenge. This may be a reason for organizations reporting difficulties in assessing e-procurement costs and benefits. Further, very few respondents reported they had implemented e-procurement evaluation methods, which may indicate that procurement information is not yet available or is inaccessible.

Improved procurement information is frequently claimed to be a perceived benefit in the research literature on e-procurement, however there are few empirical studies that investigate this phenomenon or establish the contribution of improved procurement information. There is a need for research to investigate and understand complex procurement information landscapes and to explore how procurement information is used to support strategic decision-making and operational improvement. This requires research that addresses the whole of the information lifecycle from identifying information users and information needs through creating, managing, monitoring, retention and disposition of the information assets.

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