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Factors Affecting Procurement Performance in Technical Training Institutions: A Case Study of Ol'lessos Technical Training Institute (OTTI)

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Abstract:

The current economic conditions and resource constraints call into question many of the implicit assumptions in procurement functions in our technical training institutions. The inefficiency and incompetence of overall administration and management of procurement functions in many public institutions contributes to loss of over Ksh 50 million annually PPOA, (2010). This study precisely sought to determine whether: staff competencies, adoption of technology, ethical issues and contract management affect procurement performance at Ol'lessos Technical Training Institution (OTTI). A population size of 48 employees was targeted from which a sample size of 38 was chosen and out of the 38 questionnaires that were distributed, 32 questionnaires were filled and returned. The study used both descriptive and explanatory research design and the data was collected mainly from primary sources. Interviews, questionnaires and observations were instruments used to collect and collate data. This was complemented by secondary sources like Procurement Act 2005 and Procurement Regulations 2006, journals, government circulars and newsletters. A stratified sampling was used as it was more suitable for this type of research. The data was analyzed using both qualitative and quantitative techniques because it involved both numerals and opinions. Analysis and presentation of findings were done by use of pie charts, graphs and tables.

Keywords: Adoption of technology, staff competency, contract management, ethical issues, procurement performance

1. Introduction

The Public Procurement Disposal Act, 2005 and Public Procurement and Disposal Regulations, 2006 govern public procurement in Kenya. The act and the regulations which were operationalized in January 2007 and it established practices for procurement and disposal of unserviceable, obsolete or surplus stores and equipment by public organizations which are the government, the commissions, the local authority, the state corporations, the central bank, corporative societies, public schools, public universities and colleges (Procurement Act, 2005). In Kenya, Procurement methods are ; open tendering, restricted tendering, direct procurement, request for proposal, request for quotations, specially permitted procurement and practices for low value procurements (Procurement Act 2005 and Procurement Regulations 2006). Open tendering is the most preferred method because it is fair and transparent. The rest are alternative procurement methods and should only be used where expressly allowed by the law (Procurement Act 2005). For each method, there exists a threshold of expenditure beyond which an entity cannot exceed, but the minimum level of expenditure usually depends on the procurement entity's budgetary allocation.

There is need for strict adherence to these thresholds in order to remain compliant with the law, (Procurement regulations, and 2006). The bodies which regulate public procurement are Public Procurement Oversight Authority (PPOA), Public Procurement Oversight Advisory Board (PPOAB) and Public Procurement Administrative Review Board (PPARB). These three can be termed as the pillars of the procurement practice in Kenya (procurement Act, 2005). Before 2005, procurement in Kenya was a sub unit in other departments mostly Finance. Personnel who performed procurement duties were not trained in that field and were mostly accounts clerks or clerical officers. From 1963-69, local purchases were determined by Individual entities. 1969-78 Treasury Circulars were issued from time to time to guide on procurement by entities. 1978-2001 saw the coming up of a Supplies Manual that further made procurement processes more procedural. In the years between 2001-07 Exchequer & Audit (Public Procurement) Regulations were used by public entities as references to purchase decisions and subsequent payments. From 2007 up to now, Public Procurement and Disposal Act, 2005 and the regulations thereof of 2006 are used and must be adhered to by all public entities as far as procurement of goods, services and works is concerned. Once the public procurement and disposal act was passed into law in 2005, all

this changed and presently, procurement departments stand on their own and are run by qualified officers in that field(General procurement manual, 2008).

1.1. Adoption of Technology and the Rogers' Diffusion Theory

Rogers' Diffusion of Innovation theory (cited by Van Akkeren and Harker, p.205) argues that media and interpersonal contacts provide information that influences a person's opinion and judgement. The theory comprises four elements: invention, diffusion through the social networks, time and consequences. Roger further claims that there are five adopter categories that include: innovators, early adopters, early majority, late majority, and laggards. Interestingly, the five categories follow a standard deviation curve where very little innovators adopt at the beginning (2.5%), early adopters constituting 13.5%, the early majority constituting 34%, the late majority another 34%, finally the laggards at 16%. Rogers' model is shown in Figure 1

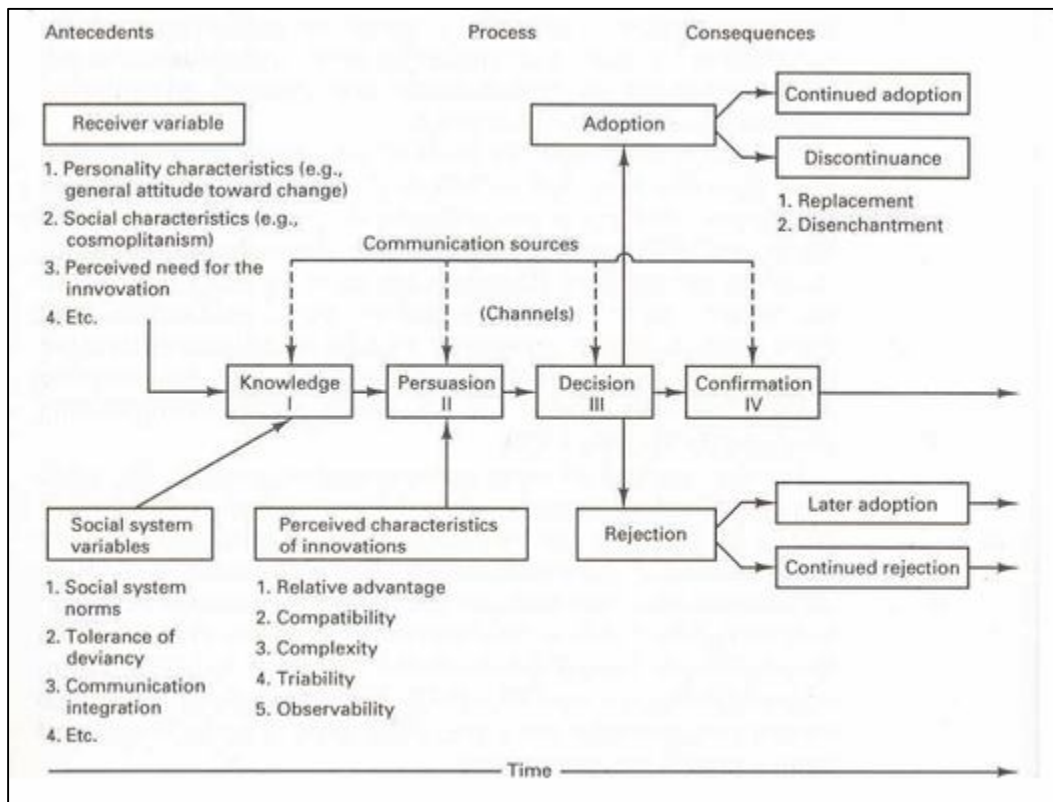


Figure 1: Rogers' Diffusion of Innovation model
(Source: Rogers, 1995)

The need to have a competitive edge requires organizations to be aware of the current dynamism in ICT and embrace it in their day to day operations. The selection of suppliers and negotiation of all aspects of contracts are activities in which procurement professionals are expected to play a leading role. Modules such as ERP, MRP, Bar-coding, RFID and DRP have been able to achieve this need and organizations should aspire to include these systems in their procurement procedures. When ICT tools are well implemented, organizations benefit from them and as a result save on costs, boost performance, wastes are eliminated and inventory holding reduced thus releasing capital. For decades, Rogers' diffusion theory has been the main starting point for much research activities in the ICT innovation and adoption domain, and still provides a widely used framework for forecasting purposes, service and infrastructure requirements, business modelling and policy measurements. Due to profound transformations in the ICT environment, however, questions have arisen about the validity of the assumptions of diffusion theory in today's complex technology ecosystem. Although the theory has been frequently updated, criticisms for its lack of attention to use contexts gave rise to new user research paradigms such as the domestication approach.

1.2. Ethics and Ethical Theories

Two extremes of the normative ethical theories include, on one hand, normative *relativism* which states that all moral points of view are relative. The problem with this theory is that it is now impossible to discuss because all norms and values are allowed. On the other hand, is *absolutism*, also known as *universalism*? It states that there is a system of norms and values that is universally applicable to everyone, and it makes no exceptions. However, there is no set of norms and values that never contradicts itself. So, both relativism and absolutism don't work. More useful ethical theories need to be somewhere between relativism and absolutism. *Consequentialism* theory maintains that the majority of an action depends on the non-moral consequences that the action brings about. *Utilitarianism* theory, (Bentham, 1780) states that the moral standard should be promotion of the best long term interests of everyone concerned.

Whereas values are ideals which people want to achieve, norms are the means to realize these ideals. Examples of virtues are honesty, courage, loyalty, creativity, humor, and so on. Metal Rules by Lynch; bronze rule: 'don't do to others if you'll get caught or punished', silver rule: 'don't do to others what you wouldn't want done to you and golden rule: 'do for others what you'd like done for you or the rest of humanity.

1.3. Contract Management and Relational Contracts Theory

Relational Contracts Theory is a theory mainly developed by Iain MacNeil in U.S.A. some decades ago and has been the object of theoretical research in common law jurisprudence ever since. According to relational contracts theory, relations are governed by a set of common characteristics (norms) that play an important role, regarding the content of the relation, the formation of parties' obligations and the actual operation of the contracts.. According to MacNeil, there are ten norms common for all kinds of contracts: role integrity, reciprocity, implementation of planning, effectuation of consent, flexibility, and contractual solidarity, the 'linking norms' (restitution, reliance and expectation interests), creation and restraint of power, propriety of means and harmonization with the social matrix¹. A prerequisite requirement for the enforcement of a contract, amongst other things, is the condition that the parties to the contract accept the terms of the claimed contract.

1.4. Staff Competencies and Agency Theory

According to Jensen and Mackling (1976) an agency relationship is "a contract under which one or more persons (principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the Agent. When executing the tasks within the principal-agent relationship, the agent must choose actions that have consequences for both the principal and the agent. Since these outcomes can be either negative or positive for each of the actors, the chosen action of the agent affects the welfare of both. Continuous training of agents to improve performance is therefore imperative.

2. Conceptual Framework

The study sought to establish factors that influence procurement performance at Ol'lessos Technical Training Institution. The aspects of procurement planning, resources allocation, staff competency and contract management are the independent variables while procurement performance is the dependent variable. The conceptual can be summarized in figure 2

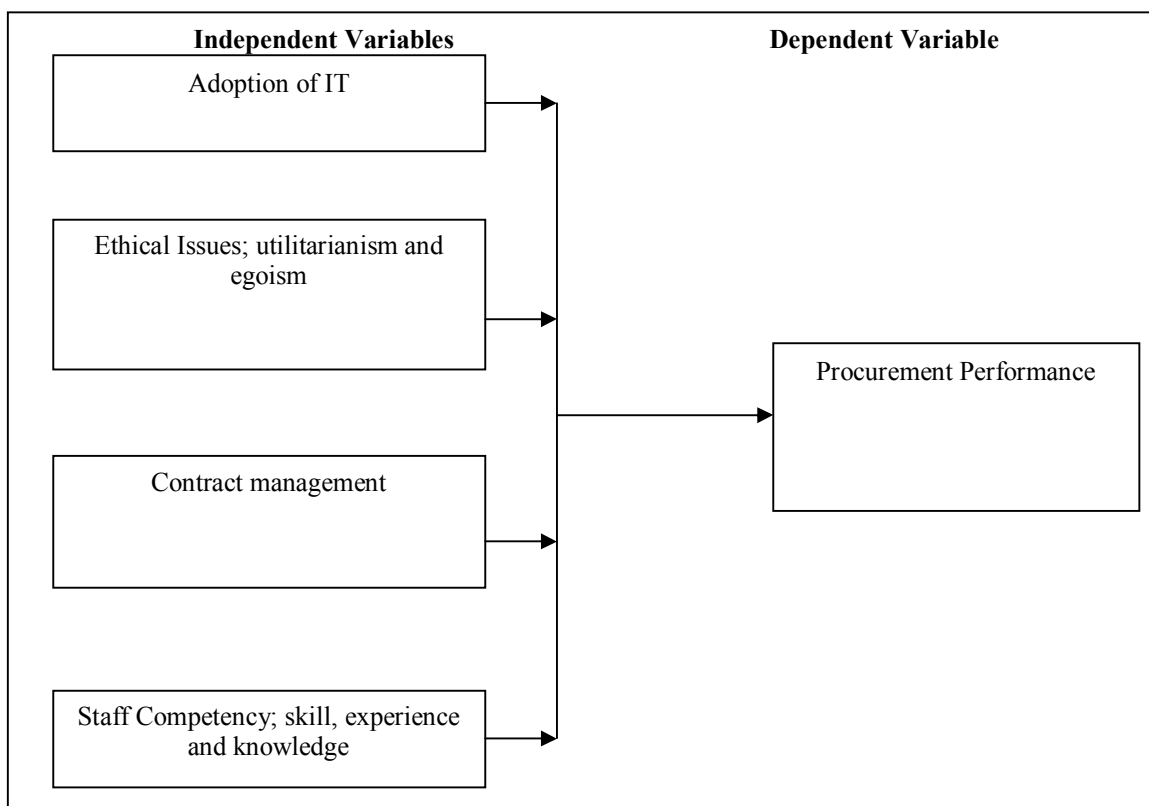


Figure 2: conceptual framework

2.1. Adoption of Technology

This variable has enormous effect on procurement performance because the need to stay ahead of competition requires organizations to embrace and remain on top of the most recent technological advancement in their day to day operations. The selection of suppliers and negotiation of all aspects of contracts relating to all activities in which procurement professionals are expected to play a leading role are only possible by employing the newest technologies such as; system contracting, ERP, MRP, Bar-coding, RFID and DRP.

When ICT tools are well implemented, institutions benefit from them in terms of saving on costs, time and boosting production/performance. Wastes are reduced, lead time shortened and inventory holding greatly reduced thus releasing capital for emergency needs and reinvestments.

2.2. Ethical Issues

This variable has a direct impact on procurement performance because it establishes institutional culture and routines that determine the attitude and ultimate actions of staff involved in production/performance. It is right from an ethical point of view if and only if the sum total of utilities produced by those acts are greater than the sum total of utilities produced by any other acts the agent could have performed in its place" (Velasquez, 2001, p.8). Jeremy Bentham's theory on the other hand is based on utility principle and emphasizes on "the greatest good for the greatest number of people" and egoism (Bentham, 1780). This is another variable that greatly affects procurement performance in terms of how the pre-award and post-award activities are handled. (Ashley and Workman, 1986), claim that at a minimum, project engineering.

3. Contract Management

This is another variable that greatly affect procurement performance in terms of how the pre-award and post-award activities are handled. (Ashley and Workman, 1986), claim that at a minimum, project engineering must be 40–60% complete to establish reasonable cost and schedule targets. A prerequisite requirement for the enforcement of a contract, amongst other things, is the condition that the parties to the contract accept the terms of the claimed contract. Contract management on the other hand, refers to the systematic and efficient manipulation of post- award activities which include; initiation, execution, and control and closure for maximizing operational and financial performance and minimizing risk. The pre-award activities involved include; request,authoring, negotiation, approval, execution and obligations management. When the two facets (pre-award and post-award) are dealt with according to the book, performance /production is effectively and greatly improved.

3.1. Staff Competencies

This variable triggers all the other variables mentioned above and has the greatest impact on procurement performance. It entails identifying critical training needs, managing people development and setting a succession plan as a means of establishing employees who have critical skills needed for promotion. A competent staff comes with a host of benefits ranging from, suitable skills, behaviors, and intuition born out of experience. It involves managing your training budget, identifying skill gaps across your organization, planning by identifying and targeting new skill areas that you might need for the long term and providing a framework of common skills required. Training provide individual with personal growth, knowledge, awareness and skills. Institutions must attract and retain the best thinkers to stay ahead of their competitors. The ability to create, absorb and utilize knowledge is the paramount skill of the new economy. Countries that perform the best in the west make use of their brightest people and survey to use those assets to their fullest. Those in operations will need to foster learning. The management should therefore employ staff that is qualified in the areas of work they are involved in. Employees from top to bottom of an organization should be provided with the right level of standards of education and training to ensure that their general awareness and understanding of quality management concepts, skills, competencies and altitude are appropriate and suited to the continuous improvement philosophy, known as (Kaizen W. E. Deming, 1980)

3.2. Research Design

The research will be descriptive in nature. Descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in anyway. Descriptive research, according to Best and Khan (1993), is non experimental in that it deals with relationships between non manipulated variables in a natural rather than artificial setting. It is designed to obtain pertinent and precise information concerning the current phenomena and where possible to draw valid general conclusions from the facts discovered, Lockesh (1984). Since the events or conditions have already occurred or exist, relevant variables are merely selected for an analysis of their relationships, (Khan 1993).

According to Churchill (1999), a descriptive research approaches is used when the purpose is to describe the characteristics of a certain group, estimate the proportion of the people specified in a certain way and to make specific predictions. The descriptive research enhance a systematic description that is as accurate, valid, reliable as possible regarding procurement performance.

3.3. Target Population

According to Sekaran, (2005), population is a group of individuals, objects or items from which samples are taken for measurement or it is an entire group of persons, or elements that have one thing in common. The study targeted the employees of Ol'lessos Technical Training Institution in Nandi County. The targeted population included the top management, heads of departments (middle managers), and the lower cadre (support staff). Tables 1 and 2 below; illustrate the target population and the sample size respectively.

Department	Target Population	%
Top management	9	19
Heads of Departments	9	19
Lower staff	30	62
Total	48	100

Table 1: Target population

3.4. Sampling Method

The researcher used survey/census method. According to Zickmund (2003), the census method is preferred where the target population under study is small.

Staff category	Population Frequency	Sample size	%
Top management	5	3	9
Middle management	10	9	28
Lower staff	23	20	63
Total	38	32	100

Table 2: Sample size

4. Findings and Discussions

4.1. Findings

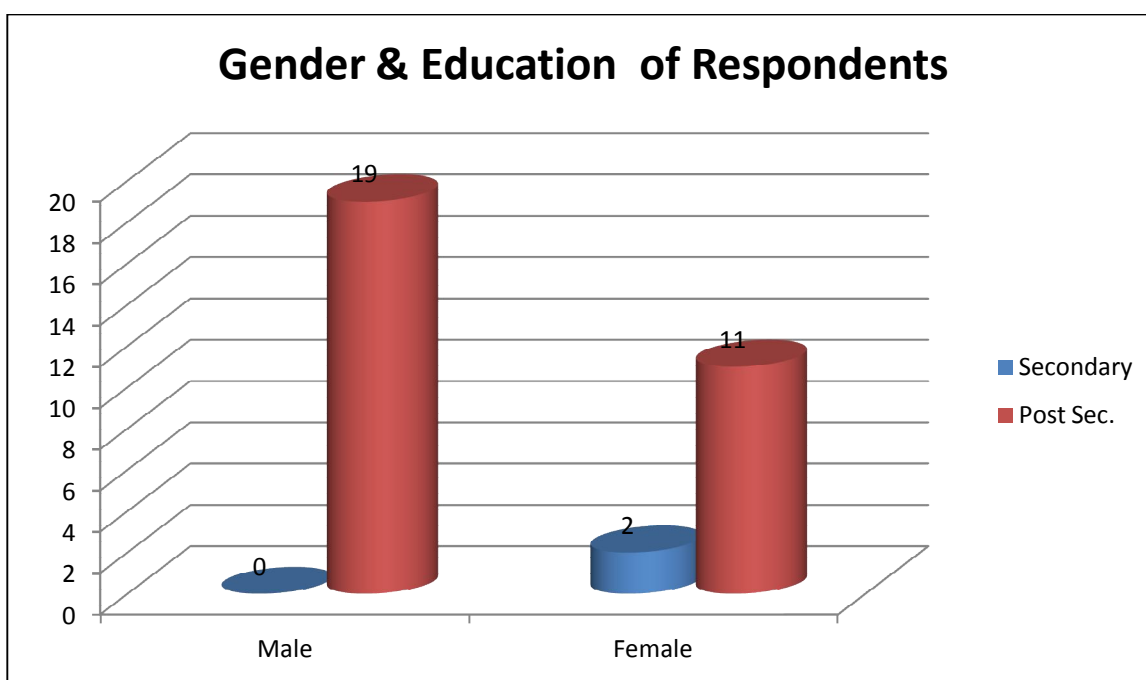


Figure 3: Gender & Education of Respondents

Of the 32 respondents, 19 were male and 13 were female. All the 19 male respondents had post secondary education while 2 female respondents had secondary education and 11 had post secondary education. Figure4:1 above gives the details.

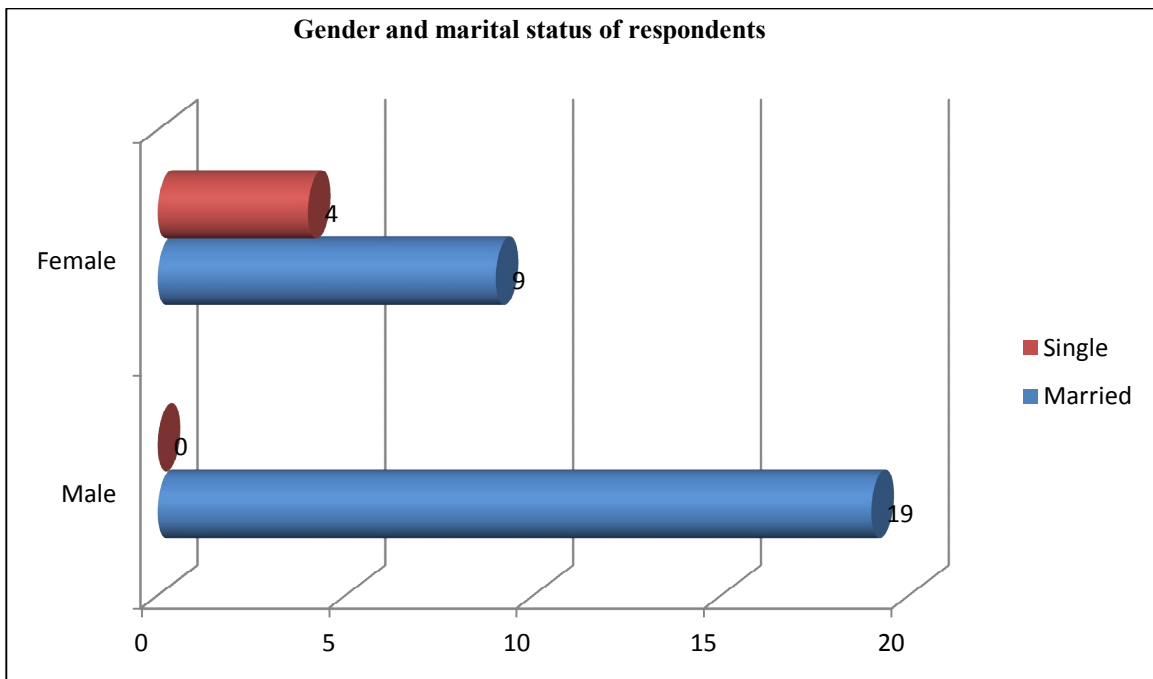


Figure 4: Gender and marital status of respondents

As shown in figure 4 above, all the 19 male respondents were married while out of the 13 female respondents 9 were married and 4 were single.

When asked "What is the level of technology application in your institution?" and given the three options; High, Moderate and Low, one person (3%) out of the 32 respondents said application of technology at OTTI was still low, 13% said it was high while 84% said it was moderate as demonstrated in figure 5

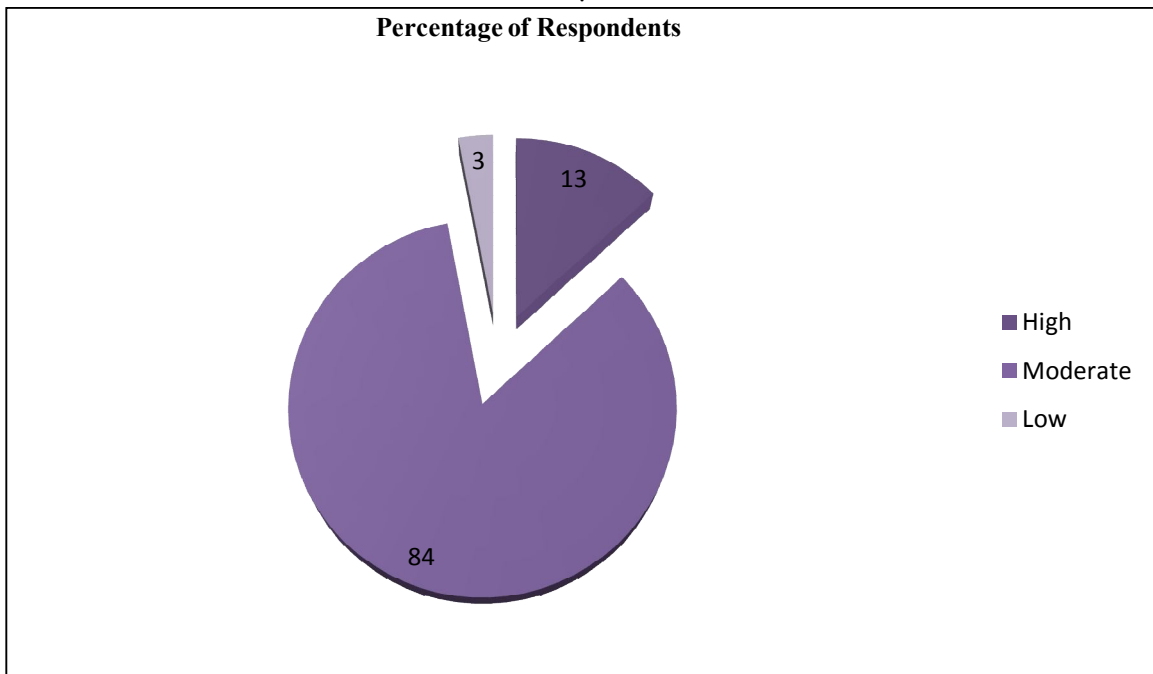


Figure 5: OTTI's ICT Adoption Rate

The question “Is the procurement procedure/process in this institution completely ethical?” with the following options; Yes, No and Not sure was responded to as shown in Figure 6 bellow.

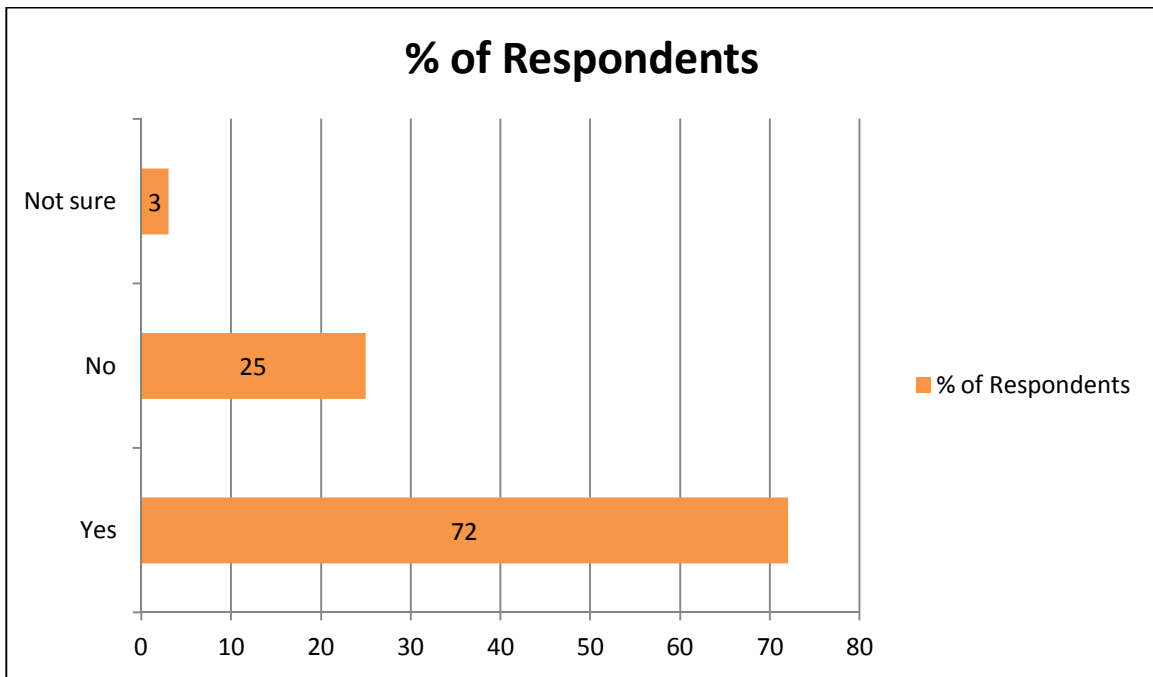


Figure 6: Ethical Issues in Tendering Process at OTTI

When asked “What is the level of management influence in tendering process at OTTI?” (28%) out of 32 respondents said it was high, 38% said it was moderate, 31% said top management had no influence in tendering process while 3% of the respondents were not sure as shown in figure 7

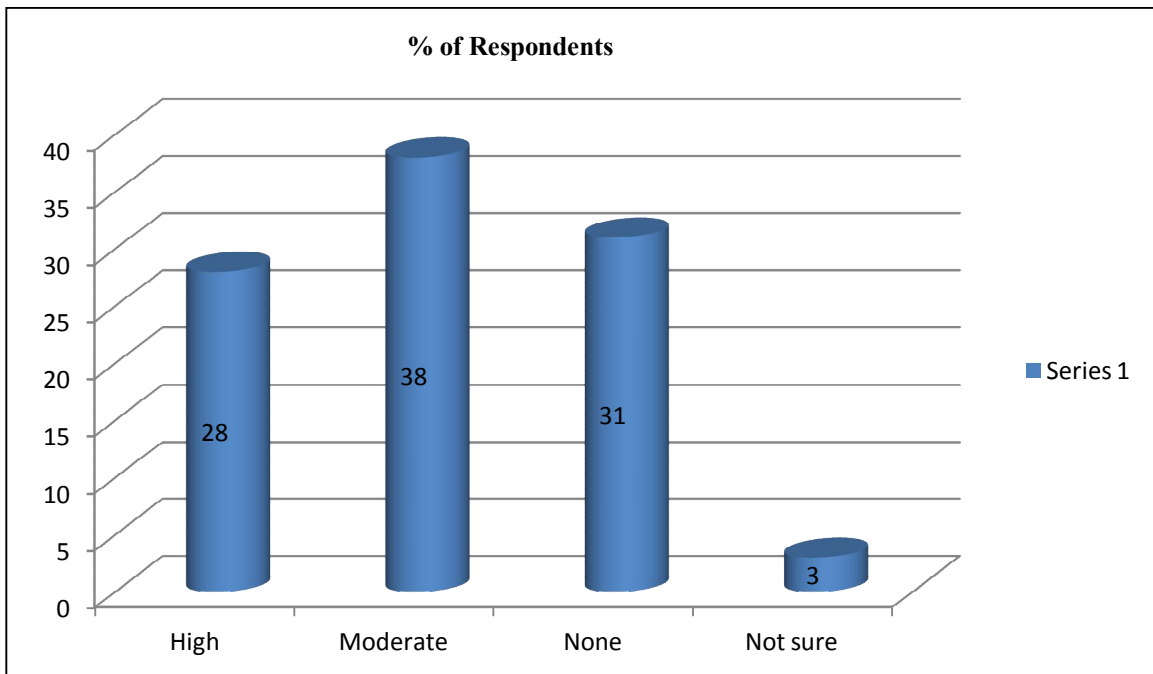


Figure 7: Ethical Issues at OTTI

This question,” Do you consider procurement department a standalone department or a unit under finance?” was responded to as indicated in the figure 8 below.

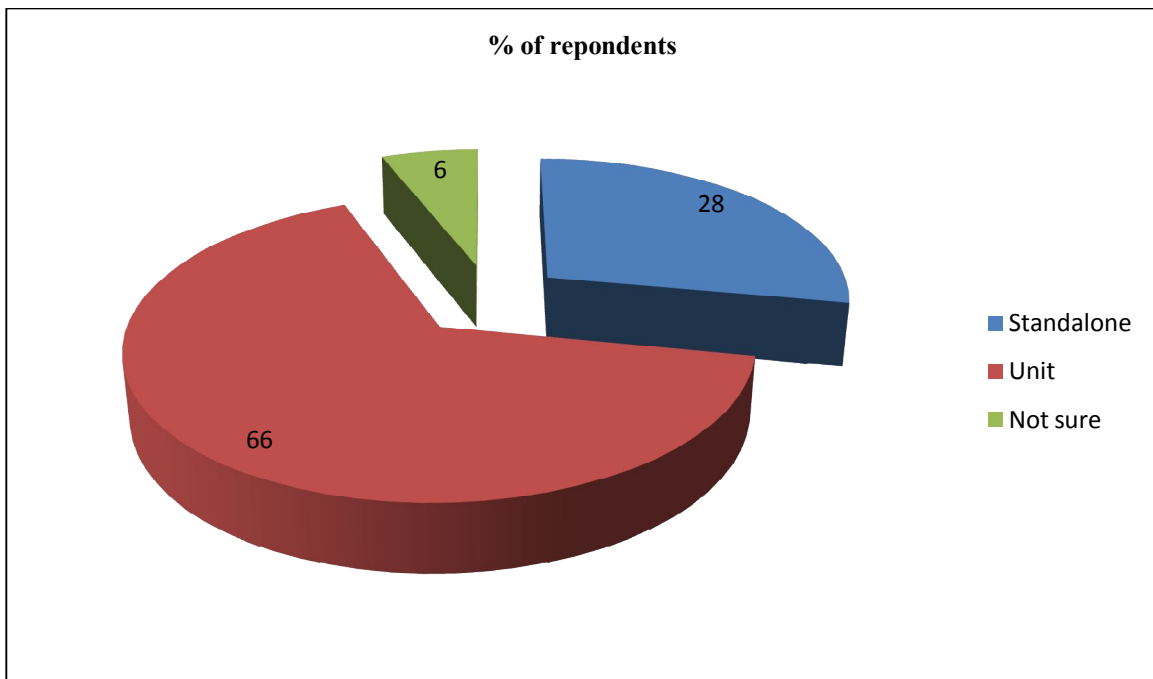


Figure 8: Ethical Issues

The question” How often is staff training carried out by OTTI? “With the following options: very often, often, fairly often and never. Out of 32 respondents, only 6% said training programs were very often, 19% said training was often, 53% said training was fairly often while 22% said OTTI had no training program for its staff. Figure 9 is used to demonstrate these findings.

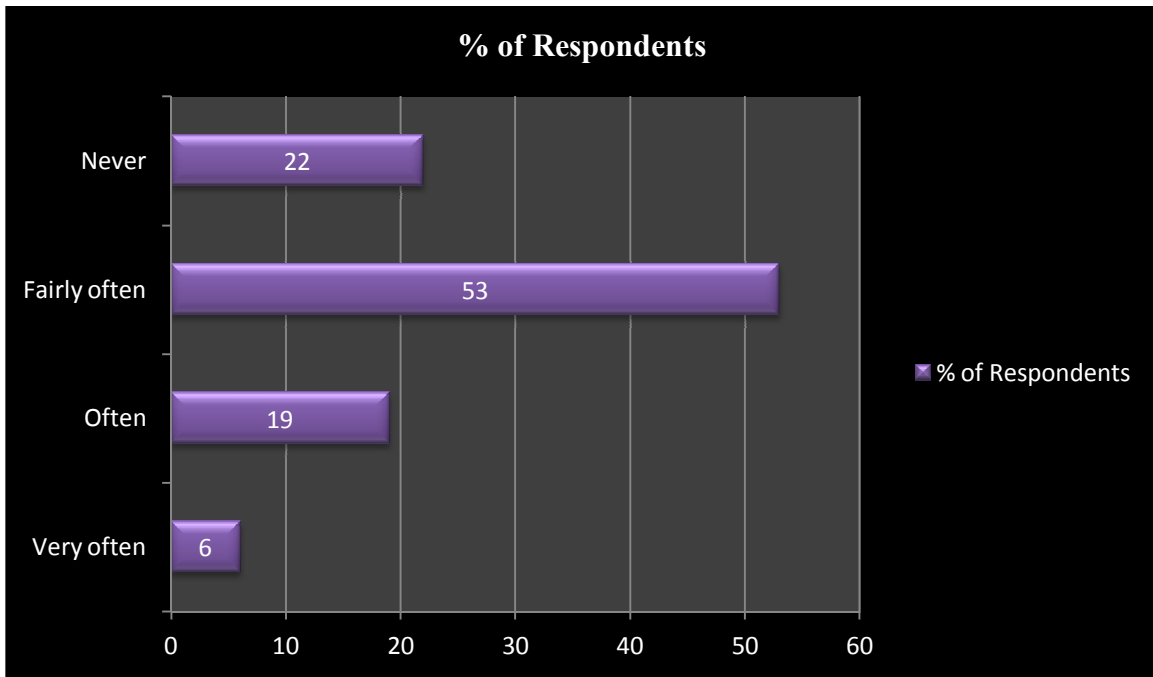


Figure 9: Staff training

4.2. Adoption of Technology

From the findings, 84% of the 32 respondents said adoption of technology by OTTI was moderate while 13% said it was very high. This by inference means OTTI has not yet fully embraced the benefits of e-procurement. Tenders are advertised through posters and the daily newspapers instead of government internet portal. Procurement staff said they have to walk to the administration block in order to make calls and negotiate with suppliers, a factor contributing to waste of time and money. Payments of bills are by the traditional paper cheque and not e-payment which is why there is the physical signing of payment vouchers, deliveries and cheques. Most suppliers have not yet embraced the benefits of technology a factor hampering OTTI’s system automation efforts.

4.3. Contract Management

The findings also indicate that 72% of the respondents said contract management was efficient and transparent, but this was contrasted by 66% of the respondents saying procurement was still operating as a unit under finance which implies that there could be an internal influence in procurement processes at OTTI. Many approval levels, bureaucracy and delays in payments to suppliers compromised greatly their service delivery. The weak controls in management of contracts left the user alone to manage and monitor own projects without involvement of procurement function. Inadequate project progress reports filed by management is a clear indicator that contract management is weak and yet to be automated.

4.4. Ethical Issues

From the findings it was revealed that 23 out of the 32 respondents (72%) indicated that, procurement procedures at OTTI were ethical. This was also supported by the existence of both tender evaluation and tender award committees. This could be because most of the respondents were not procurement professionals hence could not easily detect collusion in the tendering process. Internal influence by the top management and external influence by politicians was not reported. However, lack of a clear policy on ethical issues provides room for malpractice in procurement processes in public institutions.

4.5. Staff Competency

The most important factor was found to be staff competency because competent procurement professionals would trigger all the other factors to efficiently and effectively contribute towards improved procurement performance. . From the findings, 53% of the respondents said staff training was fairly often while 6% said staff training was very often. Unfortunately, procurement department at OTTI is not headed by procurement professional and also operates as a unit under finance. This is a clear indication that procurement department which accounts for more than 75% of the institute's resources is neither recognized nor appreciated in terms of staff training and recruitment of competent procurement professionals.

5. Conclusion

The study concludes that staff competency, adoption of technology, and contract management positively affected procurement performance at Ol'lessos Technical Training Institution. The most important factor was found to be staff competency followed by contract management, ethical issues and finally adoption of technology. This was because competent procurement professionals would trigger all the other factors to efficiently and effectively contribute to improved procurement performance. The study found out that there was weak contract management at OTTI characterized by delays in payments to suppliers which compromised greatly their service delivery. The weak controls in management of contracts left the user alone to manage and monitor own projects without involvement of procurement function. The study also found out that there were inadequate project progress reports filed by management.

6. Recommendation

The outcome of the study recommends that procurement professionals should be employed and be further trained continuously on procurement trends. The study further recommends that the procurement staff acquires the relevant skills and experience in procurement so that the right decisions are made at the right time. Supplier partnership and collaboration should be enhanced to reduce lead time and increase efficiency. The study recognized the need to review procurement strategy to ensure compliance with the international procurement systems requirement. It is also recommended that the internal bodies entrusted with monitoring and evaluation function should endeavor to ensure strict adherence to the Public Procurement and Disposal Act (2005) and its regulations (2006). This study established that ethical issues affect procurement function and therefore; an institutional policy on ethical issues ought to be formulated. The study further recommends training of staff on change management and involving them in key decision making so as to reduce resistance to change. Bureaucracy affected the efficiency of procurement function, hence there is need to streamline institutional operations by eliminating non value adding procedures. The study also established that OTTI was partially making use of ICT in procurement function and therefore recommends that OTTI embraces system contracting and office automation fully. Adoption and use of electronic systems to manage internal operations such as, e-payments, contract and inventory management is long overdue.

6.1. Recommendation for Further Research

This study restricted itself to ethical issues, adoption of technology, contract management and staff competencies as factors affecting procurement in technical training institutions in Nandi County, hence there is need to study how other factors affect procurement performance in technical institutions across Kenya. Further research should be carried out on other technical training institutions in other counties to ascertain the universality of the problem and findings mentioned here.

6.2. Acknowledgements

The author would like to thank the respondents who agreed to participate in the study and give their experiences freely.

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