

**BIDDING PROCESS AND TENDER PERFORMANCE OF
PERSONS WITH DISABILITIES IN PUBLIC PROCUREMENT**

PATRICIA N WANYOIKE

D61/72517/2014

**RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE FOR MASTER OF
BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF
NAIROBI**

2021

DECLARATION

This research project is my original work and has not been submitted for any qualification by anyone to any other university.



Signature


Date: 29.10.2021

PATRICIA N WANYOIKE

D61/72517/2014

This research project has been submitted for examination with my approval as the university supervisor.

Signature



Date

29/10/2021

DR. WAINAINA GITHII

DEDICATION

I dedicate this project paper to all persons with disabilities and to my family Nancy, Pauline, Timothy, Brian and Stephen also Manasseh my children and Kennedy Wanyoike my husband for their support, love, encouragement and enduring patience throughout my studies.

ACKNOWLEDGEMENT

First and foremost, I'm grateful to Almighty God for all the grace that He positioned for the pursuit this study including overcoming many challenges.

Secondly I acknowledge my supervisors Dr. Wainaina Githii and Professor Njihia Muranga for their patience, advice and impartation of knowledge during the study.

Last and not least I acknowledge all who contributed to this study in one way or another, just to mention but a few, the respondents for their helpful responses, T. Gafna for relentless research assistance, S. Makambo for typesetting and proof reading.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
ACRONYMS AND ABBREVIATIONS.....	x
DEFINITION OF TERMS.....	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 The Bidding Process	2
1.1.2 Tender Process Performance.....	3
1.1.3 The AGPO Program.....	4
1.2 Research Problem	5
1.3 Research Objective	7
1.4 Research Hypothesis	7
1.5 Value of the Study	7
CHAPTER TWO: LITERATURE REVIEW.....	9
2.1 Introduction.....	9
2.2.1 Public Interest Theory of Regulation	9
2.2.2 The Auction Theory	9
2.2.3 Signaling Theory.....	10
2.3 Bidding Process	10
2.4 Bidding Process and Tender Performance	13
2.5 Independent and Dependent Variables	13
CHAPTER THREE: RESEARCH METHODOLOGY	14
3.1 Introduction.....	14
3.2 Research Design.....	14
3.3 Population	14

3.4 Sample Size.....	15
3.5 Data Collection	11
3.6 Data Analysis	11
CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION	13
4.1 Introduction.....	13
4.2 Response Rate	13
4.3 Reliability of the Research Instrument	14
4.4 Demographic Characteristics	14
4.4.1 Nature of Respondents	15
4.4.2 Type of Business.....	15
4.4.3 Industry Focus of the Business	16
4.4.4 Participation in Tender Process	17
4.5 Bidding Process Components	18
4.5.1 Prequalification Process Results	18
4.5.2 Tender document Descriptive Statistics.....	19
4.5.3 Call for Bids and Submission of Bids.....	21
4.5.4 Tender Opening Process	22
4.5.5 Tender Evaluation Process.....	23
4.5.6 Tender Award Process	23
4.5.7 Supplier Payment Process.....	25
4.5.8 Reviews and Appeals Process.....	26
4.5.9 Bidders Professionalism.....	27
4.6 Tender Process Performance of Persons with Disabilities	27
4.7 Sources of Information	31
4.8 Challenges that Prevent Persons with Disabilities from Utilizing Government Procurement Opportunities	32
4.9 Factor Analysis	34
4.10 Relationship between Bidding Process and Tender Performance	36
4.10.1 Regression Co-efficient.....	36
4.10.2 Model Summary	38
4.10.3 Model Fit	38
4.11 Discussion of Findings.....	39

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	43
5.1 Introduction.....	43
5.2 Summary of Findings.....	43
5.3 Conclusion	44
5.4 Recommendations.....	45
5.5 Limitations of the Study.....	46
5.6 Areas for Future Research	46
REFERENCES.....	47
APPENDICES	58
APPENDIX I: QUESTIONNAIRE	58
APPENDIX II: PWDs AGPO LIST AS AT SEPTEMBER 2019.....	63
APPENDIX III: SAMPLING FRAMEWORK	64

LIST OF TABLES

Table 3.1: Sampling distribution.....	10
Table 3.2: Summary of Research Methodology	12
Table 4.1: Response Rate.....	13
Table 4.2: Reliability Results of the Instruments.....	14
Table 4.3: Designation of the Respondent in the Enterprise	15
Table 4.4: Type of Business.....	16
Table 4.5: Industry registered for PWD AGPO	16
Table 4.6: Views of the Respondents on Prequalification Process.....	18
Table 4.7: Views of Respondents on Tender Documents.....	20
Table 4.8: Views of Respondents on Call for Bids.....	21
Table 4.9: Views of Respondents on Tender Opening Process	22
Table 4.10: Views of Respondents on Tender Evaluation Process	23
Table 4.11: Views of Respondents on Tender Awards Process	24
Table 4.12: Views of Respondents on Supplier Payment.....	25
Table 4.13: Views of Respondents on Reviews and appeals.....	26
Table 4.14: Views of Respondents on Professionalism Regards AGPO Procurement Process	27
Table 4.15: Tender Submitted over the 3 Year Period of 2017-2019	28
Table 4.16: Tender Awarded over the 3 Year Period of 2017-2019	30
Table 4.17: Sources of Information on Tenders.....	32
Table 4.18: AGPO Challenges Faced by Persons with Disabilities	33
Table 4.19: KMO and Bartlett's Tests.....	34
Table 4.20: Determinants of Tender Analysis (Factor Analysis)	35
Table 4.21: Regression Co-Efficient on Relationship between Bidding Process and Tender Performance.....	37
Table 4. 22: Model Summary Statistics.....	38
Table 4. 24: Model Fit	38

LIST OF FIGURES

Figure 2.1: Conceptual framework	13
Figure 4.2: Participation in AGPO Tendering Process	17

ACRONYMS AND ABBREVIATIONS

AGPO	Access to Government Procurement Opportunities
CEO	Chief Executive Officer
GoK	Government of Kenya
MSE	Micro and Small Enterprises
NCPWD	National Council for Persons with Disabilities
PE	Procuring Entity
PPADA	Public Procurement and Disposal Act
PPARB	Public Procurement Administrative Review Board
PPOA	Public Procurement Oversight Authority
PPRA	Public Procurement Regulatory Authority
PWD	Person with Disability

DEFINITION OF TERMS

The Act	The Public Procurement and Disposal Act as amended from time to time
Procuring Entity	as defined in the PPADA
PWD	The Persons with Disabilities Act (GoK, 2003) defines disability as impairment which adversely affects a person socially, economically and limits environmental participation.

ABSTRACT

This study set out to establish Bidding process and Tender Performance of Persons with Disabilities in Public Procurement. The objectives were to establish factors influencing the bidding process of AGPO and to establish the relationship between the bidding process and tender performance of Persons with Disabilities (PWDs). The study adopted a cross sectional descriptive survey and sampled 172 out of 302 PWD entities registered in AGPO using stratified random sampling to participate in the survey. The research used questionnaires as the main data collection tool. SPSS was used for data analysis using descriptive statistics. Data is presented in graphs, frequency tables, percentages and pie chart. The study found out that PWDs businesses are mostly limited companies and that majority of PWD businesses are in the wholesale and retail sector. The study concluded that tender documents, tender evaluation, tender awards, supplier payment, reviews and appeals, and professionalism are the most important factors influencing bidding process. The study also concluded that there is a significant relationship between bidding process and tender performance. Only supplier payment, bidding, professionalism and reviews and appeals contribute significantly to tender performance. Based on the conclusions, the study recommends procuring entities (PEs) should use mandatory tender documents, strengthen the tender committees, flag supplier payments that exceed 30 days for immediate attention, and hold workshops and seminars for PWD suppliers. The Treasury and PPRA should consider reducing charges for reviews and appeals and strengthening the Public Procurement Administrative Review Board. The government should encourage PEs to comply with PWD tender reservation. The study also concluded that in spite of challenges the bidding process in public procurement is useful for implementation of government policy such as economic empowerment of PWDs.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Public procurement involves high expenditure of public resources for purchases. One of the core principles requires inclusion of disadvantaged businesses (Dorobek, Sandra, Leuger, Glas, & Essig 2008; Walker & Brammer, 2009). Public procurement can deliver government objectives such as support of domestic markets, (McCrudden, 2004). Other fundamental principles include promotion of local industry, economic development and economy. Government policy is directed towards economic growth, reducing poverty and service delivery to citizens (PPOA, 2009). The preferred procurement method in Kenya is open tendering. Other methods are reverse auctions, design competition, competitive negotiation, two stage tendering and force account among others. Force account is not recommended for preference and reservations because it excludes community participation (GoK, 2016).

Kenya introduced Access to Government Procurement Opportunities (AGPO) to encourage participation of women, youth and persons with disabilities (PWDs) in tenders reserved for them (GOK, 2015). Some of the factors hindering participation in AGPO are over prescriptive qualification criteria, unclear specifications, prohibitive resource requirements, incompetent procurement officers, waste, fraud, abuse, lack of transparency and favoritism. According to PPOA, (2014; 2015; 2016) in spite of positive bias to improve their participation, including law reforms and separation of PWDs their performance lags behind other target groups. The Public Interest theory of Regulation can be associated with government use of regulation to achieve equity for the disadvantaged. The Auction Theory emphasizes the importance of competition in

the tender process. The Signaling Theory shows that communication between parties must be clear and honest to be effective. The tender document is the communication tool between the procuring entity and the bidder and therefore must be precise.

1.1.1 The Bidding Process

According to Newman (1969) competitive bidding is a technique for securing the lowest possible price in procurement and criteria necessary for competitive bidding is that the dollar value of the purchase should justify the cost to both buyer and seller, specifications are explicit to both buyer and seller, the market has an adequate number of suppliers, Sellers in the market are willing to bid competitively and adequate time for this type of purchasing.

Hassan (2012) found that competitive tendering is preferred whereby suppliers submit written bids to supply goods, services and works. In Kenya open tendering is the default public procurement method (PPADA, 2015). According to Woodall (1993) there are three generic forms of government procurement systems; open competitive tendering system where bids are accepted from all qualified parties and the contract awarded to the lowest evaluated bidder, discretionary contracts and the designated competitive tendering system. According to Hoeckman (1998) the Government Procurement Agreement (GPA) encourages competitive tendering procedures like open tendering, or restricted tendering which only invites prequalified suppliers.

In open tendering invitations to tender must be published with details of requirements, procurement method, quantity, delivery date, specification and terms of payment. Contracts are awarded to the best evaluated bidders in accordance with evaluation

criteria in the bid document. According to Ayoti (2012) the tendering process can be costly to the government if mismanaged and management of tenders is a core competency. According to Ancarani (2008); Hassan (2012); and Chrisostom (2012) the tender process is regulated for public procurement with details on advertising, bidding and evaluation based on predetermined criteria. According to Ngure & Simba (2015) the tender process facilitates participation in public procurement by special interest groups. According to Hassan (2012); Kiruja (2014) competitive tendering hinders favoritism, monopolies and cartels. The preference and reservations of a tender should be captured in the tender document (Mavavi O., Nagati, H., Pache, G., Wehri,e F., 2015).

According to Chesang (2013); Hassan (2012); Chemjor (2015) lack of public confidence and trust in government due to waste, fraud, abuse, low quality, poor communication with suppliers, disputable review mechanisms, unfairness, lack of transparency, prequalification bottlenecks and underfinancing, malpractice, unprofessionalism, naive committee members, existing suppliers, external influence and institution size influence the tender process. Other factors are vendor ploys, poor planning, selection mistakes, over documentation and ineffective negotiation. Others are fear of negative publicity, reactive procurement, and powerlessness to manage the process, poor specifications and also payment delays. According to PPOA (2015) PEs have difficulties identifying PWD bidders.

1.1.2 Tender Process Performance

According to Kloot and Martin (1997) value for money stimulated performance measurement systems in local governments. According to Wakhungu (2013) public

procurement goals include promoting local industry and economic development. According to Ancarani (2008) Public procurement has competing goals of conformance, performance, reform, broader strategic political goals and procurement values of efficiency and transparency. According to Raymond (2018) and Chrisostom (2012) the principles supporting the principle of value for money include industry growth.

The performance of the tender process will be measured using the number of reserved tenders submitted against the number of reserved tenders won by a PWD enterprise in AGPO in a specified period. The number of reserved tenders submitted by PWDs is assumed to be an indication of willingness to participate and the number of tenders won is assumed to demonstrate the performance of the PWD in the tender process.

1.1.3 The AGPO program

AGPO was founded on Presidential directive and anchored in the Constitution. It is regulated by PPADA and its regulations. AGPO aims at facilitating women, youth and PWDs to participate in government procurement. PPADA requires setting aside of 30% of all government procurement for youth, women and PWD owned enterprises (GOK, 2015). According to PPDA (GoK, 2015), subsequent circulars and regulations bid bonds are no longer required, contracts may be unbundled, reserved categories were identified, and registration criteria was clarified. According to PPOA reports, PWDs performance slightly improved in 2016 but still lags behind relative to other disadvantaged groups, their attendance of training is also reported to be low. The reports also indicate that some PEs have zero compliance. See below table 1.1 below.

Table 1.1: Contracts Awarded to AGPO Beneficiaries

Year	2014		2015		2016	
No. of reporting PEs	19		22		156	
Contracts awarded	%No.	% Value	%No.	% Value	%No.	% Value
Women	54	N/A	40	9	50	40
Youth	45	N/A	57	90	42	50
PWDs	1	N/A	3	1	8	10

Source: PPOA Annual reports for 2014-2016

1.2 Research Problem

Public procurement contracts have an important economic role in the social inclusion of disadvantaged or discriminated groups, including PWDs (European Disability Forum, 2016). However, factors affecting the tender process according to Gaspard-Boulin and Conversy (2017); Uyarra, Edler, Garcia-Estevez, Georghiou, & Yeow (2014) are unclear specifications, Small and Medium Enterprises (SME'S) under-representation (Loader, 2014), complex and biased public procurement processes, over prescriptive qualification criteria, prohibitive resource requirements and incompetent public procurement officers. According to Dastidar & Mukherjee (2014) corruption increases prices. Diaby and Slywester (2014) adds that lack of collaboration with PEs, low risk management and lack of feedback for unresponsive bids (Uyarra, Edler et al 2014) discourage participation in tender process.

According to GoK (2015) all bidders should participate in bidding without discrimination except where the Act allows limited participation. According to Gatere & Shale (2014) youth, women and PWDs are categorized as part of vulnerable populations which are overlooked in government initiatives and programs. Ngure & Simba (2015) identified lack of information on tender notices, lack of funds and

requisite documentation. According to Njeri & Getuno, (2016) PEs found working with SMEs frustrating with a considerable portion not delivering on tenders awarded.

All public entities (PE) should reserve at least 30% of budget allocation to women, youth and PWD enterprises. Procurement circular No.1/2014 and Treasury circular no.1/2015 directs that at least two percent (2%) but not more than 50% of the thirty percent (30%) must be reserved for PWDs. PPOA reports indicate in spite of positive bias e.g. legal reforms and separation, PWDs performance is lower than other disadvantaged groups. There is need to study what factors influence the tender performance of PWDs and therefore affecting the government's target for PWDs participation.

According to McCrudden (2004) information on how public procurement achieves social outcomes is scarce. According to Obiri (2016) target groups were not fully participating. According Olang'o (2014) SMEs encountered perceived corruption, lack of information, lack of feedback, lack of capital, selection criteria, cost of tendering, and poor business infrastructure. According to Wleh (2015) uptake of opportunities by youth was affected by access to information, finance, legal framework and ethics. According to Muraguri (2013) youth preference was not fully implemented. According to Wangai (2014) corruption, lack of information on tenders, unfairness, opaque bidding processes, lack of feedback, payment delays, lack of law enforcement, eroded values and norms, unprofessionalism, greed and abuse of power affected uptake of tenders.

The above studies did not focus on PWDs as a distinct group in AGPO. PWDs perceptions of the bidding process are not captured yet the government has set an allocation for PWD participation in Public Procurement tenders which has not been met in spite of favorable law reforms and a lot of government support. The study intends to study the bidding process and tender performance by PWDS to establish factors influence the bidding process and determine the relationship between the bidding process and tender performance of PWDs. The research question is what factors influence the bidding process and tender performance of PWDs in the Kenya AGPO program?

1.3 Research Objective

The research objectives are;

1. To establish factors influencing the bidding process of AGPO.
2. To determine the relationship between the bidding process and tender performance of PWDs.

1.4 Research Hypothesis

Ho: There is no significant relationship between the bidding process and tender performance of PWDs.

1.5 Value of the Study

Researchers can use the findings for further research. The findings may confirm previous findings or uncover areas for further research.

Public procurement professionals can use findings to help them comply with statutory requirements. The research might provide a deeper insight into the factors affecting PWDs which can help in problem solving.

The findings can clarify to the PWDs on factors affecting their performance in AGPO. By becoming more aware of their role in implementation of AGPO they can become more proactive in their participation.

Government policy makers may be prompted on areas needing their attention for facilitating implementation of AGPO. Policy makers have made AGPO terms very favorable but clearly there is more to be done to fully implement the policy.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The theory and past research are relevant to the study of factors influencing the bidding process and tender performance for PWDs, for identifying literature gaps and construction of the conceptual framework. The theories relevant to this study are the Auction Theory, the Public Interest Theory of Regulation and the signaling Theory.

2.2.1 Public Interest Theory of Regulation

According to Wleh (2015) the best possible allocation of scarce resources to the public can be achieved by regulating public service. According to Muthini, Namusonge, Guyo & Shale (2017) government regulation can overcome imperfect competition, unbalanced market operation and adverse market conditions. According to Muange (2013); Muraguri (2013) regulation facilitates, maintains, and imitates market operation thus improving allocation.

According to Hantke (2003) the theory is similar to welfare economics rational for regulation and either does not exist or was misrepresented. This Theory is relevant to the study because AGPO is anchored in the constitution, regulated by law and is biased towards PWDs to encourage their participation in AGPO which is a government policy for PWD economic empowerment.

2.2.2 The Auction Theory

Wleh (2015); Cullen (2017) argue that in auction theory competitive tendering in public procurement is similar to common value auctions using sealed bids. The method is

market oriented, transparent and objective in awarding tenders. Feldman and Feldman and Mehra (1993) argue that an auction is simply an allocative mechanism which plays an important role in price discovery. Further, auctions that are not distorted allocate resources to those that value them most and sellers receive maximum value for auctioned item. The theory underscores the importance of competition in tender process of public procurement.

2.2.3 Signaling theory

Connelly et al (2011); Brian et al (2010) concur that Signaling Theory (ST) applies when two parties have different information. Gambetta (2008) states that ST is concerned with how the receiver can establish that the signaler is being truthful or misrepresenting the truth and how the signaler can persuade the receiver that he is being truthful. The question arises when the interests between the signalers and receivers diverge and there is asymmetric information whereby the signaler knows the truth better than the receiver. According to Ellram et al (1997) “effective two-way communication” enhances performance. The bid document is the communication tool between the buyer and the supplier must be clear and honest to be effective.

2.3 Bidding Process

In Kenya open tendering is the default public procurement method (PPADA, 2015). Tender documents - Lennerfors (2006); Woodall (1993) note that tender invitation is relied on by bidders to find reasons for filing appeals. Additionally, Woodall (1993) observed that exacting specifications in Japan’s public construction prevented shoddy jobs. PPADA (2015) requires that tender documents should be sufficiently detailed, facilitate fairness, equitability, transparency, cost-effectiveness and competition. Call

for bids - According to Hoekman (1998) and DeAses (2005) Active disclosure of bidding opportunities encourages bids because bids are published. In passive disclosure suppliers, the media and public search for the same. According to Wleh (2015) business opportunities are not effectively communicated to small businesses in developing countries. The reservation for PWDs must be clearly stated in the bidding documents, (PPADA, 2015). According to Njeri & Getuno (2016) procurement opportunities for youth are advertised on print media but youth prefer social media. According to World Bank (2017) e-procurement enhances access for suppliers and government which facilitates participation of suppliers. According to Sumba (2015) PEs should use youth friendly media like social media besides websites and mainstream media.

According to Mateus, Ferreira and Carreira (2010) the European Union (EU) requires all public procurement tender evaluation criteria to be published in advance. According to Chesang (2013) a supplier who complies with tendering criteria is likely to be reliable. The Act requires that the rules to be clear and applied equally to all parties (GoK, 2005). According to Hassan (2012); Yarra Ranges (2019); Chesang (2013) all bidders in an open and fair competition are given equal access to information concerning the procurement to enable them bid on the same basis. Tender award - Procurement contracts should be awarded to the best evaluated tender which conforms to the requirements and evaluation criteria stated in the tender document (Shrestha, 2014). According to Bergman, Mats, & Lundberg (2013); Shrestha (2014); Hassan A (2012) public contracts are awarded to the best evaluated tender.

According to Wakhungu (2013) transparency includes eliminating discretion and subjectivity by evaluating tenders on criteria known to bidders in advance. According to Wangai (2014) bidders should be informed why their bids were unsuccessful. This encourages participation and improvement of tenders. According to Olang'o (2014) publication of tender process results enhances competition and discourages collusion. Competitors can examine the tendering process and improve their future bids. Post award review - Hoekman (1988); Lennerfors (2006) note that an impartial review authority enables suppliers to object to inappropriate criteria. In Kenya all complaints are lodged with the Public Procurement Administrative Review Board (PPARB). According to Lennerfors (2006) if a supplier is dissatisfied with the evaluation they may file review and demand indemnification plus a right of appeal against the evaluation. Supplier payment - According to World Bank (2017) reducing the payment period can increase supplier participation. According to PPADA (2015) procuring entities paying a PWD owned enterprise should pay to an account where the mandatory signatory is a PWD and without undue delay.

Professionalism - PPADA 2015 requires that procurement function be operated by professionals as specified in the Act. Further, Njeri and Getuno (2016) found that lack of requisite technical experience in works and services was a barrier to youths. According to reports courses and seminars are poorly attended by PWDs (PPOA, 2014; 2015; 2016).

A PWD enterprise should be registered with the relevant authority. At least 70% membership of PWDs and 100% leaders being PWDs. Requirements are prescribed by the Act (GOK, 2015). According to Wleh (2015) most SMEs lack requirements and are

eliminated early in the tendering process. According to Wleh (2015); Wangai (2014); Njeri & Getuno (2016) SMEs lack access to long term credit and rely on expensive short term financing which is not sustainable. According to Wangai (2014) SMEs feel that public procurement processes are complex, costly, time consuming and most lack tendering experience, knowledge and skills or resources to participate in the public sector.

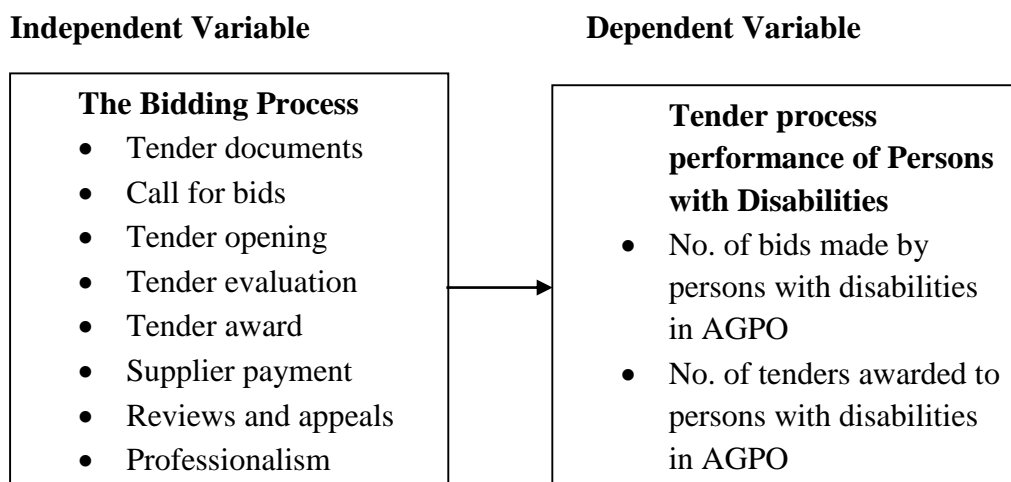
2.4 Bidding Process and Tender Performance

Tender performance indicators are the number of tenders reserved for PWDs submitted and the number of tenders reserved for PWDs won for specified years. A relationship between these and Bidding process will be established.

2.5 Independent and Dependent Variables

The independent Variable is the bidding process and the dependent variable is the tender performance of PWDs. The relationship between the independent variables and the dependent variables is captured in figure 2.1 below.

Figure 2.1: Conceptual framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the research methodology adopted in the study. The research design, study population, sample size, sampling technique, research instruments, data collection method, data analysis tools and methods in addition to data presentation are discussed in this chapter.

3.2 Research Design

According to Kothari (1990) and Kumar (2011) research design are the decisions concerning a research study regarding what, where and by what means. It is concerned with collection and analysis of data for research purpose.

Research methodology employed is a cross sectional descriptive survey. According to Kothari (1990) descriptive research studies describe the characteristics of an individual or a group. This research method was successfully used by Wleh (2015) and Wangai (2014).

3.3 Population

The study population consists of 302 PWD suppliers prequalified between March 2018 and August 2019 for AGPO by the National Treasury (PPOA, 2019) as found in the September 2019 PPOA list. The list is assumed to be representative of active PWDs participating in AGPO.

3.4 Sample Size

According to Israel (2013); Singh and Masaku (2014) the following formula can be used to determine the sample size;

$$n = N / [1 + N(e)^2]$$

Where; n=Sample size N= Population size e = Sampling error of 5%

Assuming a 95% confidence level; N = 302 then $n = 302 / [1 + 302(0.05)^2] = 172$

Stratified random sampling was used, and as explained by Singh and Masaku (2014) random sampling was conducted in each stratum. The population is segmented by distinct characteristics defined by business type as illustrated in Table 3.1 below.

PWD firms registered for AGPO between March 2018 and August 2019

Table 3.1: Sampling distribution

	Business type									TOTAL	
	Limited Company			Partnership			Sole Proprietorship			POPULATION	SAMPLE
	Population	%	Sample	Population	%	Sample	Population	%	Sample		
TOTAL	150	49.7	85	15	05%	9	137	45.3	78	302	172

Researcher (2020)

3.5 Data Collection

Primary data was used. Questionnaires had open ended and close ended questions. A Likert scale of 1-5 was employed. Target respondents were CEOs or Managers of PWDs owned firms in the May 2019 PPOA list. The questionnaire was administered to one respondent from each selected firms using mobile phone and responses captured by the researcher. Some of the firms are small one person establishments. The questionnaire had three main sections. Section A seeks demographic information concerning the enterprise, Section B examines factors influencing the tender process and Section C examines tender performance by PWDS.

3.6 Data Analysis

The returned questionnaires were edited and coded for SSPS analysis. Descriptive statistics such as mean and standard deviation were used to analysis the data. Percentages, and frequency tables present data. Regression analysis determined the relationship between identified factors and tender performance by PWDs and tested Ho: There is no significant relationship between the bidding process and tender performance of PWDs Table 3.2 below is a summary of Research Methodology.

Table 3.2: Summary of Research Methodology

Research Objective	Questionnaire item(s)	Data Analysis technique
To establish factors influencing the bidding process of AGPO.	Tender Documents	Descriptive analysis.
	Call for bids	
	Tender opening	
	Tender Evaluation	
	Tender Award	
	Access to financing	
	Supplier payment	
	Reviews & Appeals	
	Professionalism	
To determine the relationship between the bidding process and tender performance of PWDs.	Number of reserved tender bids	Descriptive: tender performance Regression analysis: the relationship.
	Number of reserved tenders won	

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter describes the findings and discussion of results of the study on factors influencing the bidding process of AGPO and to determine the relationship between the bidding process and tender performance of PWDs. A total of 172 PWDs were targeted for data collection, but descriptive results and inferences is only made on the basis of 107 data collected. Descriptive statistics and inferential statistics were used for the first objective while logistic regression was used to analysis the second objective and tested the research hypothesis Ho: There is no significant relationship between the bidding process and tender performance of PWDs

4.2 Response Rate

Baruch & Holtom (2008) observed that a 50% response rate is adequate, 60% and above good, while 80% is rated as excellent. Based on this assertion, the response rate of 62.2% in this case is therefore good and is considered satisfactory for analysis and making of inferences. Hence the findings of the study can be relied on for they are representative of the targeted sample size. Table 4.1 below represents the response rate.

Table 4.1: Response Rate

Response	Frequency	Percentage
Filled questionnaires	107	62.2%%
Unfilled questionnaires	65	37.8%
Total	172	100.00%

The approximately a third non response rate as shown in Table 4.1 is attributed to the data collection procedures. Because of the prevailing pandemic the researcher relied on mobile interview, which tends to have high non-response rates in comparison to face to face interviews (Dillon, 2012).

4.3 Reliability of the Research Instrument

Reliability tests of the questionnaire was conducted via SPSS with results presented in table 4.2 below.

Table 4.2: Reliability Results of the Instruments

Cronbach's Alpha	N of Items
0.768	36

Results in table 4.2 indicates that the overall reliability of the questionnaire was 0.768. This is above the recommended reliability cut-off of 0.7 (Pallant, 2013). Hence, it can be concluded that the research questionnaires were reliable for data collection and data analysis. During pilot testing for reliability and validity it was also realized that the respondents were complaining about the length of the question. As a result, the questionnaire items for the main study were reduced to minimize respondent fatigue and enhance quality of data.

4.4 Demographic Characteristics

The section describes the general characteristics of the respondents in terms of responsibility in the firm.

4.4.1 Nature of Respondents

The first part of the questionnaire established the designation of the respondents of the study as represented in table 4.3.

Table 4.3: Designation of the Respondent in the Enterprise

Designation in the enterprise	Frequency	Percent
Owner	78	72.9
Manager	17	15.9
CEO	12	11.2
Total	107	100

The results indicated that approximately two thirds of the respondents (72.9%) were owners of the businesses while managers were 15.9% and CEO's were 11.2%. This suggests that all the respondents who participated in the study had knowledge on the tender and bidding process of business run by PWDs in Kenya. Hence the findings of the study are deemed as valid and useful in understanding tender processes and performance of PWD's in AGPO.

4.4.2 Type of Business

The study sought to establish the type of business registered by PWDs in Kenya as represented in table 4.4.

Table 4.4: Type of Business

Type of company	Frequency	Percent
Limited Company	64	59.8
Sole Proprietorship	32	29.9
Partnership	11	10.3
Total	107	100

Results in table 4.4 shows that majority business are limited companies (59.8%) followed by sole proprietorship (29.9%) and partnership (10.3%) in that order. This aligns with the study by Kangethe, Mukabi & Simiyu (2020) that revealed that majority of youth's business that have registered for AGPO are limited companies and sole proprietorship.

4.4.3 Industry Focus of the Business

For the various business registered, the research sought to investigate the different industries in which registered business are located. Results are shown in table 4.5.

Table 4.5: Industry registered for PWD AGPO

Industry registered for PWD AGPO	Frequency	Percent
Retail and wholesale	58	54.2
Construction	22	20.6
ICT	10	9.3
Agribusiness and food processing	5	4.7
Professionals consultants	4	3.7
General supplies	4	3.7
Hospitality	3	2.8
Security and cleaning	1	0.9
Total	107	100

Findings in table 4.5 indicated that majority of the business registered are in the retail and wholesale sector (54.2%). Other business is involved in the construction sector (20.6%), ICT Sector (9.3%), Agriculture sector (4.7%), Professional consultants (3.7%), General supplies (3.7%), Hospitality (2.8%) and security and cleaning services (0.9%). This is in support of the report by HIVOS (2017) that showed that majority of youths, women and PWD's are in retailing sector in Kenya.

4.4.4 Participation in Tender Process

The researcher sought to know whether the business owned by PWD's have participated in AGPO tendering process as shown in figure 4.2.

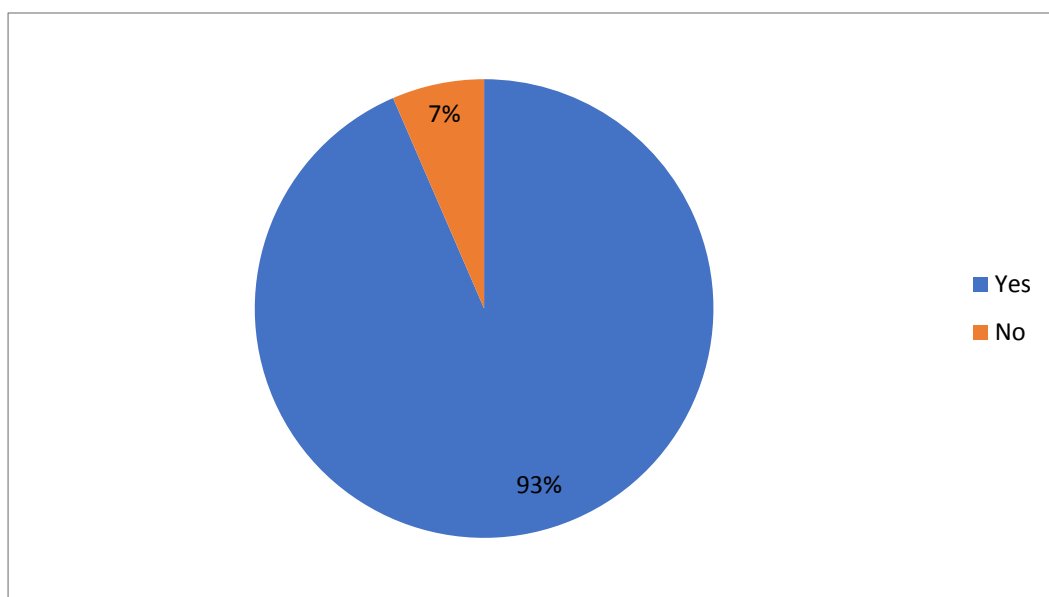


Figure 4.1: Participation in AGPO Tendering Process

Results in figure 4.2 indicates that most of the AGPO registered business owned by PWD's have been involved in AGPO tendering process. This demonstrates that the respondents from the business involved are knowledgeable on the factors affecting tender process and tender performance of their business in AGPO procurement process.

These findings corroborate the results by HIVOS (2017) that revealed that approximately 10% of youths, women and person with disabilities have not participated in tendering process.

4.5 Bidding Process Components

4.5.1 Prequalification Process Results

The respondents were asked about tender documentation process. Responses are presented in table 4.6.

Table 4.6: Views of the Respondents on Prequalification Process

Descriptive Statistics	N	Me an	Std. Deviation
NCPWD Certificate	107	2.30	0.676
Pin and tax exemption certificate	107	3.34	0.726
AGPO certificate	107	2.26	0.520
All information on tenders is available	106	2.25	0.536
Tender invitations are in the buyer's portal or Treasury's portal	107	2.56	0.617
Bid documents are similar in design and language	107	2.44	0.569
We attended seminar, training or workshop organized by govt. in the last two years	107	2.02	0.582
Average mean		2.45	0.604

The results show that the respondents agreed that acquisition of NCPWD certificate (m=2.3, SD=0.676) and AGPO certificate (m=2.26, SD=0.52) are obtained within reasonable time while they showed neutrality on the ease of obtaining of pin and tax exemption certificate (m=3.34, SD=0.726). Further, the results revealed that the respondents were in agreement that all information on tenders are always availed (m=2.25, SD=0.536), bid documents were similar in design and language (m=2.44, SD=0.569) and that they attended seminar, training or workshop organized by government in the last two years (m=2.02, SD=0.582). The respondents demonstrated neutrality to the question: Tender invitations were in the buyer's portal or Treasury's portal (m=2.56, SD=0.617). These findings imply that prequalification of AGPO opportunities is relatively easy for the persons with disabilities. This can be attributed to the reason that the sample size of the study included persons with disabilities who have been trained by the Public Procurement Oversight Authority (PPOA). Similar results were obtained by Korir, (2018) who established that prequalification of trained women on AGPO is high as compared to women without training.

The overall mean of the study was 2.45 and standard deviation was 0.604. The findings suggest that not all tenders are advertised in the buyer's portal or the treasury's portal as required by PPADA (2016) section 96(2) thus limiting access to opportunities for PWDs and this may explain PPOA (2014,2015 and 2016) annual reports indicating low participation of PWDs relative to other disadvantaged groups of women and youth.

4.5.2 Tender document Descriptive Statistics

The respondents were asked about tender documentation process. Responses are presented in table 4.7.

Table 4.7: Views of Respondents on Tender Documents

Descriptive Statistics	M	SD
Reserved tenders do not separate PWDs from youth and women	2.29	0.701
Mandatory, technical and financial requirements are too high	2.27	0.653
Main terms and conditions of the tender are always indicated	2.19	0.585
Payment schedule under the contract are always indicated	1.98	0.532
Evaluation criteria is always clearly stated	2.16	0.675
Specifications are always clear	2.31	0.589
Average mean	2.20	0.623

The respondents agreed that: reserved tenders do not separate PWDs from youth and women (mean=2.29, SD= 0.701); mandatory, technical and financial requirements are too high (mean= 2.27, SD = 0.653); main terms and conditions of the are always indicated (mean= 2.19, SD= 0.585); payment schedule under the contract are always indicated (mean = 1.98, SD), evaluation criteria are always clearly stated (mean= 2.16, SD= 0.675), specifications are always clear (mean= 2.31, SD= 0.589). This finding suggests that people with disabilities have both positive and negative feelings on public procurement procedures. Further it can be deduced that the respondents have negative feelings towards accessibility of the tender and positive feelings towards technical aspects of the procurement process. This aligns with the results of study by Monari Iravo, & Kibet (2017) that indicated that equal access to tender opportunities is the main hindrance facing persons with disabilities in Kenya. In particular, HIVOS (2017) highlighted the failure of having specific tender for different group as the main reason as to why persons with disabilities don't submit bid for tenders. This point was echoed by UN-WOMEN (2017) report that revealed that majority of the reserved tenders for

women, youth and PWD's are won by the first two groups with the last group winning less than 20% of tenders reserved for special groups. The overall mean of agreed for the tender documents could be attributed to mandatory standardization of tender documents.

4.5.3 Call for Bids and Submission of Bids

The respondents were asked about call for bids and submission process. Responses are presented in table 4.8.

Table 4.8: Views of Respondents on Call for Bids

Descriptive Statistics	M	SD
Reserved tender notices and tender documents are easily obtained	3.38	0.832
Procuring entities allow electronic submission of tender (web, email)	3.3	0.792
I'm always allowed to ask the procuring entity questions	3	0.752
Responses by procuring entity are sent to all interested bidders	3.51	0.623
Adequate time for bid preparation is always provided	2.75	0.859
Average mean	3.11	0.812

Results revealed that the respondents were neutral as to whether: reserved tender notices and tender documents are easily obtained (mean=3.38, SD= 0.832), procurement entities allow electronic submission of tender (mean= 3.3, SD= 0.792); bidders are allowed to ask the procuring entity questions (mean= 3.30, SD = 0.752); there is provision of adequate time for bid preparation (mean = 2.75, SD = 0.859). The findings also showed that the respondents disagreed that responses by procuring entity are sent to all interested bidders (mean = 3.51, SD= 0.623). This implies that the respondents consider that call for bidding process is still fraught with challenges. This

could be attributed to what Mohammed (2019) labels the organization driven public procurement process in Kenya that is not yet responsive to the suppliers and bidders. These results are consistent with the findings by Munyu (2016) that showed that information challenges are common problem faced during calls for bids.

4.5.4 Tender Opening Process

The respondents were asked about tender opening process. Responses are presented in table 4.9.

Table 4.9: Views of Respondents on Tender Opening Process

Descriptive Statistics	M	SD
I'm always allowed to attend the bid opening session	2.50	0.862
Bid opening take place at the precise time of bid submission deadline	2.75	0.766
Minutes of the opening session are always availed on request	3.00	0.801
Average mean	2.75	0.810

Findings in table 4.8 reveal that the respondents were neutral to all the tender opening questions: I'm always allowed to attend the bid opening session (mean = 2.50, SD= 0.862); Bid opening take place at the precise time of bid submission deadline (mean = 2.75, SD = 0.766); minutes of the opening session are always availed on request (mean = 3.00, SD = 0.801). This shows that people with disabilities consider the tender opening process as not satisfactory. This may point to the need to improve the process as suggested by Mwangi (2017) who found out tender opening is still fraught with process weaknesses. The findings also question the effectiveness of Tender Opening Committees.

4.5.5 Tender Evaluation Process

The respondents were asked about tender evaluation process. Responses are presented in table 4.10.

Table 4.10: Views of Respondents on Tender Evaluation Process

Descriptive Statistics	M	SD
When unsuccessful we are always notified of tender results	3.38	0.854
We always get feedback on reasons for not winning	3.51	0.873
Evaluation criteria stated in tender documents is always used	3.51	0.945
Average Mean	3.47	0.891

In regard to the tender evaluation process, the findings revealed that the respondents were neutral about receiving notification of tender results when unsuccessful (mean =3.38, SD= 0.854) but disagreed about getting feedback on reasons for not winning (mean = 3.51, SD= 0.873) and following of evaluation criteria stated in tender documents (mean = 3.51, SD= 0.945). This implies that tender evaluation process is deemed ineffective by persons with disabilities and Evaluation Committees may not be as effective. Similar findings were established by Boateng (2014) who concluded that tender evaluation practices of public procurement process in Ghana were not fair.

4.5.6 Tender Award Process

The respondents were asked about tender award process. Responses are presented in table 4.11.

Table 4.11: Views of Respondents on Tender Awards Process

Descriptive Statistics	M	SD
Post award variations are notified to all bidders	3.56	0.729
Procedure for acceptance of completed service/goods is adhered to	2.64	0.745
The contract is always signed on paper by both parties	2.44	0.689
An online platform is available for signing the contract	3.31	0.706
Procedures for terminating the contract are always clear	2.45	0.717
Tenders are always awarded to the lowest /best evaluated bidder	3.55	1.03
Average Mean	2.99	0.769

Findings show that the respondents disagreed that post award variation are notified to all bidders (mean = 3.56, SD= 0.729) and that tender are always awarded to the lowest/best evaluated bidders (mean = 3.55, SD= 1.03). This affirms the HIVOS (2017) report that revealed that women, youths and person with disabilities have misgivings about the tender award process in Kenya. Similarly, IEA (2018) also established that tender award process in most public procurement is not fair and transparent as envisaged in PPOA.

The respondents were neutral on adherence of procedure for acceptance of completed service/goods (mean = 2.64, SD = 0.745) and on availability of online platform for signing the contract (mean = 3.31, SD = 0.706). The neutrality of respondents to existence of electronic tendering system for signing of contract points to lack of full operationalization of electronic tendering process in Kenya. A point that has been emphasized Kennedy (2017) who concluded that although electronic tendering process is been promoted by the government, procurement entities are yet to fully operationalize

it for all the tendering stages. Additionally, the respondents agreed that the contract is always signed on paper by both parties (mean = 2.44, SD = 0.689) and that procedures for terminating the contract are always clear (mean =2.45, SD= 0.717). This finding highlights Tender Evaluation Committee is not very effective and procedure is not fully complied with during tender awarding in AGPO.

4.5.7 Supplier Payment Process

The respondents were asked about supplier payment process. Responses are presented in table 4.12.

Table 4.12: Views of Respondents on Supplier Payment

Statements	M	SD
Payment is always made as per agreed schedule	3.39	0.877
Reasons for delayed payment are always availed	3.60	0.787
Average Mean	3.50	0.832

The findings show that the respondents were neutral to whether payment is always made as per agreed schedule (mean = 3.39, SD = 0.877) while they disagreed that reasons for delayed payment are always availed (mean = 3.60, SD= 0.787). These findings have been amplified in the HIVOS (2017) and UN-WOMEN (2018) reports that demonstrated that failure to pay within timelines and lack of communication by procuring entities on reasons underpinning the delay in payments as problem affecting supplier participation in tender process. Reasons for supplier payment challenges in public procurement in Kenya includes: organization politics, delays in releasing money from national government, loss of records, failure of suppliers to give their full details

and ethics surrounding the supplier payment process (Kwamboka, 2017; Karanja, 2014).

4.5.8 Reviews and Appeals Process

The respondents were asked about review and appeal process. Responses are presented in table 4.13.

Table 4.13: Views of Respondents on Reviews and appeals

Statements	M	SD
The cost of filing a complaint is affordable	3.47	0.718
Decisions are timely available to all interested bidders	3.64	0.782
Average mean	3.56	0.750

Results on review and appeal indicated that the respondents were neutral on the cost of filling complaints being affordable (mean = 3.47, SD = 0.714) while they disagreed that decision are timely available to all interested bidders (mean = 3.64, SD = 0.782). It can be deduced from these results that the cost of a filling a complaint may be on a higher side. This could be linked to the costing procedure before PPARB that must include: filling fees, legal representation costs, bidding preparation costs and cost suffered by tax payers in delayed service delivery. Another reason attributed to the cost involved in accessing the service. For instance, to file an appeal one is expected to travel from upcountry to Nairobi and this means one has to bear transportation and accommodation costs. PPARB are yet to devolve their services as they are not required to do so under the existing legal framework (Mathenge, 2014). The findings herein support the results

by Mbae (2014) that showed that most SMEs in Machakos County view the filing of appeal and review as prohibitive to small and medium business.

4.5.9 Bidders Professionalism

The respondents were asked about professionalism in Public procurement. Responses are presented in table 4.14

Table 4.14: Views of Respondents on Professionalism Regards AGPO Procurement Process

Descriptive Statistics	M	SD
I attend at least two public procurement seminars/ workshops	2.12	0.855
I completely understand the public procurement process	2.21	0.952
Average mean	2.12	0.904

Table 4.14 shows that the respondents agreed that they have attended at least two public procurement seminars/ workshops (mean = 2.12, S.D = 0.855) and completely understand the public procurement process (mean = 2.21, S.D = 0.952). This finding suggests the existence of knowledge and skills on public procurement process amongst PWDs in Kenya. This is consistent with the results by HIVOS (2017) that showed that youths, women and PWDs that have attended training on AGPO opportunities are knowledgeable on the process.

4.6 Tender Process Performance of Persons with Disabilities

The respondents were asked about the number of tenders they have submitted and been awarded annually over a three-year period. Responses are presented in table 4.15 which

show the tenders submitted over a three-year period and 4.16 shows the tenders awarded over the same period, after transformation and computation of the variables. Response rate on submission and awards was lower than the overall response rate because of refusal of some respondents to provide data on this section, particularly on tender awarded.

Table 4.15: Tender Submitted over the 3 Year Period of 2017-2019

Tenders submitted		Frequency	Valid Percent
Tenders 2019	None	6	5.9
	Between 1 and 5	19	18.6
	Between 6 and 10	48	47.1
	Between 11 and 15	25	24.5
	16 and above	4	3.9
	Total	102	100
Tenders 2018	None	4	4.5
	Between 1 and 5	20	22.5
	Between 6 and 10	50	56.2
	Between 11 and 15	13	14.6
	16 and above	2	2.2
	Total	89	100
Tenders 2017	None	7	8.9
	Between 1 and 5	30	38
	Between 6 and 10	35	44.3
	Between 11 and 15	6	7.6
	16 and above	1	1.3
	Total	79	100

The findings show that for tenders submitted in 2017, most of the respondents submitted between 6 and 10 tenders (44.3%) while 38% submitted less than 6 tenders, 8.9% didn't submit tender, 7.6% submitted between 11 and 15 tenders and 1.3% submitted above 15 tenders. In 2018, 56.2% submitted between 6-10 tenders, 22. % submitted less than 6 tenders, 14.6% submitted between 11-15 tenders, 4.5% submitted no tender and 2.2% submitted tenders above 15. In 2019, the results show that 47.1% submitted between 6-10 tenders, 18.6% submitted less than 6 tenders, 24.5% submitted between 11 and 15 tenders, 5.9% didn't submit any tenders and 3.9% submitted tenders above 15.

This finding indicates that across the three-year period, most business submitted 6 to 10 tenders. This is consistent with the report by HIVOS (2017) that showed that most business submitted less than 10 tenders in a year. The results also demonstrate that 2017 had the lowest number of tenders submitted over the three-year period. This could be linked to the protracted electioneering period in 2017 that took approximately 8 months, and as a result there were limited business opportunities. This is supported by HIVOS (2017) report that indicated that very few businesses submitted tenders in 2017 in comparison to the years 2015 and 2016.

Table 4.16: Tender Awarded over the 3 Year Period of 2017-2019

Tenders Awarded		Valid	
		Frequency	Percent
Awarded 2019	None	20	20.4
	One	30	30.6
	Two	30	30.6
	Three	17	17.3
	Four and above	1	1
	Total	98	100
Awarded 2018	None	26	29.2
	One	40	44.9
	Two	13	14.6
	Three	8	9
	Four and above	2	2.2
	Total	89	100
Awarded 2017	None	46	59.7
	One	24	31.2
	Two	4	5.2
	Three	2	2.6
	Four and above	1	1.3
	Total	77	100

The findings reveal in 2017, 59.7% were not awarded any tenders, 31.2% were only awarded one tender, 5.2% were awarded two tenders, 2.6% were awarded three tenders and 1.3% were awarded above three tenders. In 2018, 44.9% were awarded one tender, 29.2% were not awarded any tender, 14.6% were awarded two tenders, 9% were awarded three tenders and 2.2% were awarded more than three tenders. In 2019, 30.6% of the respondents were awarded one and two tenders, 20.4% were awarded no tender, 17.3% were awarded three tenders and only 1% were awarded tenders above three. This result suggests that the success rate of persons with disabilities on tenders is low as most of them had less 3 tenders in a year. This could be explained by the high competition that for tenders involving person with disabilities, as they in most cases also involve women and youth competing for them (UN-WOMEN, 2018). Besides, the tender that targets persons with disabilities only are less than 5% in Kenya (HIVOS, 2017), a situation that leads to increased competition for the limited tenders. This concurs with PPOA annual reports (2014, 2015 and 2016) which indicate low compliance among procuring entities implying that only a small pool of tenders is available for PWDs.

4.7 Sources of Information

It is expected that information on tenders will reach as many people as possible. In order to understand how such information reaches a person with disability the research assessed their sources of information on tender. Table 4.17 below illustrates the sources on information.

Table 4.17: Sources of Information on Tenders

Sources of information	N	Percent
Website	82	46.9%
Friends and family	45	25.7%
Newspaper	38	21.7%
Other	10	5.7%
Total	175	100.0%

From the study, it emerged that most of the persons with disabilities rely on website/social media for information on tenders. This source was distantly followed by friends and family (25.7%) and Newspaper (21.7%) while others was at 5.7% as shown in Table 4.17. Further investigation on other sources revealed that they included county notice boards and workshop/seminars. These findings align with the results by UN-WOMEN (2018) study that showed that website/social media and friends are the most common sources used by special groups targeted by AGPO in Kenya. This aligns with Ngure & Simba (2015) who found that lack of information on tender notices is a challenge to target reservations. Findings also concur with Sumba (2015) who recommended PEs should use youth friendly media like social media besides websites and mainstream media.

4.8 Challenges that Prevent Persons with Disabilities from Utilizing Government Procurement Opportunities

The persons were asked what factors affect their performance in bidding for AGPO opportunities. Responses are shown in Table 4.18.

Table 4.18: AGPO Challenges Faced by Persons with Disabilities

Responses	N	Percent
Corruption and bribery in the application process	39	34.5%
Lack of capital/funds/finance	31	27.4%
Delayed payments	17	15.0%
Lack of access to information on AGPO opportunities	8	7.1%
Limited opportunities in other sectors when compared to construction sector	7	6.2%
Hard to obtain the required documentations sometimes	5	4.4%
High interest rates charged by banks for loans	2	1.8%
Some procurement procedures are difficult to understand	2	1.8%
Separate PWDs tenders from those of women and youth	1	0.9%
Inadequate digitization of the tender applications	1	0.9%
Total	113	100.0%

A number of challenges were given by the persons with disabilities. These included: Corruption and bribery in the application process(34.5%); lack of capital/funds/finance(27.4%); delayed payments(15%); lack of access to information on AGPO opportunities (7.1%), limited opportunities in other sectors when compared to construction sector (6.2%), hard to obtain requisite documentation (4.4%), high interest rates charged by banks for loans(1.8%); some procurement procedures are difficult to understand(1.8%), separation of PWDs tenders from those of women and youth(0.9%); inadequate digitization of the tender applications(0.9%). The most cited

challenges by persons with disabilities have also been corroborated by the findings of UN-WOMEN (2018) that established corruption and financial challenges as the main challenges limiting the utilization of AGPO opportunities. The findings also concur with Olang'o (2014) and Wangai (2014) who found that corruption, lack of capital lack of information limit access to AGPO.

4.9 Factor Analysis

To further analyze the factors to understand the factor with greatest potential to affect tender performance, factor analysis was conducted through varimax rotation as will be described in the section herein.

Table 4.19: KMO and Bartlett's Tests

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.624
Bartlett's Test of Sphericity	Approx. Chi-Square	1298.882
	df	406
	Sig.	0.000

Table 4.19 shows that Bartlett's test is significant, p value < 0.05. This suggests that the factor analysis is suitable to establishing factors influencing tender performance amongst person with disabilities in Kenya.

Table 4.20: Determinants of Tender Analysis (Factor Analysis)

	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.486	15.47	15.47	4.486	15.47	15.47
2	3.286	11.331	26.802	3.286	11.331	26.802
3	2.82	9.724	36.526	2.82	9.724	36.526
4	2.184	7.53	44.056	2.184	7.53	44.056
5	2.01	6.931	50.987	2.01	6.931	50.987
6	1.64	5.656	56.643	1.64	5.656	56.643
7	1.484	5.116	61.759	1.484	5.116	61.759
8	1.181	4.072	65.831	1.181	4.072	65.831
9	1.073	3.701	69.532	1.073	3.701	69.532
10	1.026	3.539	73.071	1.026	3.539	73.071
11	0.877	3.026	76.096			
12	0.809	2.79	78.887			
13	0.754	2.599	81.485			
14	0.656	2.262	83.747			
15	0.623	2.149	85.896			
16	0.51	1.76	87.656			
17	0.447	1.541	89.197			
18	0.4	1.381	90.578			
19	0.389	1.342	91.92			
20	0.351	1.212	93.132			
21	0.332	1.143	94.276			
22	0.324	1.118	95.394			
23	0.263	0.908	96.302			
24	0.221	0.763	97.064			
25	0.203	0.698	97.763			
26	0.193	0.667	98.43			
27	0.187	0.643	99.073			
28	0.165	0.568	99.641			
29	0.104	0.359	100			

Table 4.20 shows the Determinants of Tender Analysis. Through factor analysis, 10 factors were identified which had the biggest influence as bidding process with cumulative variance of 73.071%. The ten factors were selected because ideally only components with an eigenvalue 1 or greater should be retained for factor analysis for further investigation. These factors were on: reserved tenders not separating PWDs

from youth and women, attending public procurement seminars/ workshops, usage of evaluation criteria stated in tender documents, complete understanding of the public procurement process, awarding of tender to the lowest /best evaluated, feedback on reasons for not winning, mandatory, technical and financial requirements are too high, the cost of filing a complaint is affordable and payment is always made as per agreed schedule. This implies that various aspects of the bidding process affect tender performance. It is also evident that not separating PWDs tenders from youth and women and attendance of public procurement seminars/ workshops contribute the most to tender performance.

4.10 Relationship between Bidding Process and Tender Performance

To establish the relationship between bidding process and tender performance, binary logistic regression was performed with the components of bidding process as the independent variable while tender award as the dependent variable. Binary logistic model was chosen after ANOVA model was found to be unfit for the data. The component of bidding process included were tender documents, call for bids, tender opening, tender evaluation, tender awards, supplier payment, review and appeal and professionalism. From the factors only supplier payment, review and appeal and professionalism were included because they were significant in the first regression model that included all the bidding process variables.

4.10.1 Regression Co-efficient

The regression co-efficient in the logistic model shows that all the three variables have a significant relationship with tender performance. Of these professionalism and supplier payment is positively associated with tender performance while review and

board is negatively associated with tender performance amongst person with disabilities. Given that the Logistic model is significant, the results can be relied upon to predict the relationship between bidding process and tender performance amongst persons with disabilities.

Table 4. 21: Regression Co-Efficient on Relationship between Bidding Process and Tender Performance

Variables in the Equation	B	S.E.	Wald	df	Sig.	Exp(B)
Supplier Payment	0.613	1.021	6.908	1	0.016	3.842
Reviews and Appeal	-0.139	0.916	3.923	1	0.041	0.032
Professionalism	0.446	1.051	4.537	1	0.032	1.612
Constant	29.634	18.152	12.678	1	.0000	0

Based on the model, the resulting equation is:

$$Y = 29.634 + 0.613x_1 - 0.139x_2 + 0.446x_3$$

Where Y = Tender performance (measured through number of tenders awarded)

X₁= Supplier payment, X₂= Review and appeal X₃= Professionalism.

Thus, it can be seen that supplier payments followed by professionalism greatly impact positively on tender performance while reviews and appeal have a negative impact on tender performance. These results are in support of the findings by Korir (2018) that indicated that supplier payment and training on procurement procedures leads to an increased participation of women in AGPO opportunities in Nakuru County. The results also refute the research hypothesis Ho: There is no significant relationship between the bidding process and tender performance of PWDs.

4.10.2 Model Summary

Model summary was used to analyze the combined effect of bidding process on tender performance by persons with disabilities.

Table 4. 22: Model Summary Statistics

Step	-2 likelihood	Log Cox & Snell Square	R Nagelkerke Square
1	135.1574a	0.626	0.703

a Estimation terminated at iteration number 20 because maximum iterations has been reached.

In establishing the supposed relationship bidding process, supplier payment, reviews and appeal and professionalism were regressed against tender awarded. The results indicate that between 62.6% and 70.3% of the changes in tender performance can be attributed to bidding process. This suggests that bidding process has a significant effect on the tender performance amongst person with disabilities in Kenya.

4.10.3 Model Fit

To establish the fitness of the model in analyzing the regression analysis, model fit was conducted for binary logistic regression as shown in table 4.20.

Table 4. 23: Model Fit

Omnibus Tests of Model Coefficients		Chi-square	df	Sig.
Step 1	Step	35.343	8	0.048
	Block	35.343	8	0.048
	Model	35.343	8	0.048

Results of the model fit shows a p-value of 0.048 that is less 0.05. Hence it can be concluded that the model is fit to be used in establishing the relationship between bidding process and tender performance of persons with disabilities in Kenya.

4.11 Discussion of Findings

PWDs in the AGPO have businesses that are largely registered as limited companies followed distantly by sole proprietorship and partnership. This can be attributed to the potential benefits that business that are registered as limited companies can enjoy in public procurement opportunities in Kenya as outlined by Mwangi (2017). They include easier access to finance and limited tender opportunities for business registered as partnership as sole proprietorship. Majority of the respondents who participated in the study from the persons with disabilities were business owners. This could be explained by the reason that these businesses are categorized as SMEs, and with SMEs run and managed by the owners themselves (Kangethe, Mukabi, & Simiyu, 2020).

On sectors analysis, the findings revealed that majority of business registered are in the retail and wholesale sector (54.2%) with the remaining business coming from construction sector, ICT Sector, agriculture sector, professional consultants, general supplies, hospitality and security and cleaning services. This in the arguments of Mbae (2014) is because most of the enterprises under retail and wholesale can easily participate in general supplies that is to a great extent reserved for the special group such as women, youth as persons with disabilities due to their low-cost requirements. Nearly all the respondents had participated in AGPO tendering process. These shows a very high level of participation amongst persons with

disabilities in AGPO tendering process. A possible reason for this is the targeted training that has been offered to persons with disabilities on public procurement opportunities and also the fact that most of the participating business were from Nairobi country where there is high awareness on AGPO opportunities and potential benefits.

Analysis on factors influencing bidding process revealed mixed findings amongst the persons with disabilities in Kenya. The findings from descriptive statistics showed that the respondents were in agreement on importance of prequalification process, tender documents and professionalism of bidders. The results showed that the respondents were neutral to bidding call and submission, tender opening process, tender evaluation, tender award process neutral.

The respondents also disagreed about effectiveness of the supplier payment process and review and appeals process. Further the results from factor analysis revealed that only 10 factors are considered as the most influencing in bidding process. These factors were established to be reserved tenders not separating PWDs from youth and women, attending public procurement seminars/ workshops, usage of evaluation criteria stated in tender documents, complete understanding of the public procurement process, awarding of tender to the lowest /best evaluated, feedback on reasons for not winning, mandatory, technical and financial requirements are too high, the cost of filing a complaint is high and payment is not always made as per agreed schedule.

This suggests that factors influencing bidding process are largely compliance issues. Separation of reserved tenders, evaluation criteria, awarding of tender and supplier payment are stated in the public Procurement and Disposal Act 2015 and

compliance by public procuring entities is mandatory but the study suggests that this is not well implemented by PEs. This is consistent with (Mavavi). Nagati H., Pache G., Wehri F., 2015) who observed that preference and reservations of a tender should be captured in the tender document.

The findings are consistent with Shrestha (2014) that public contracts should be awarded to the best evaluated tender that conforms to the requirements and evaluation criteria stated in the tender documents, and Wakhungu (2013) who observed that this eliminates discretion and subjectivity. This aligns with Wangai (2014) and Olangó (2014) that feedback on unsuccessful bids encourages participation and improvement of tenders but is lacking. The study confirms what Chesang (2013); Hassan (2012); Chemjor (2015); Wangai (2014) observed that supplier payments are delayed. This concurs with World Bank (2017) that reducing the payment period can increase supplier participation. This agrees with Wangai (2014) that SMEs feel that procurement processes are complex. It is also consistent with Wleh (2015) that most SMEs lack requirements and are eliminated early in the tendering process.

The findings suggest that the bidders view the cost of filing a complaint high and this can be an obstacle to obtaining an impartial review which according to Hoekman (1988); facilitates objections on inappropriate criteria. It is also consistent with Ayotui (2012) that tendering process can be costly to the government if mismanaged. This aligns with the suggestion by Kwamboka (2017) that procurement methods, procedures and systems in Kenya are still largely ineffective and compares to Muraguri (2013) who found that youth preference was not fully implemented by PEs.

The coefficient of determination R² value of 62.6% and 70.3% indicates that between 62.6% and 70.3% of the changes in tender performance is explained by bidding process. This implies that bidding process influences tender performance to a high extent. Of the aspects of bidding process that affects tender performance, the findings revealed that only supplier payment, bidder's professionalism and reviews and appeals have significant relationship with tender performance amongst persons with disabilities. This is consistent with the results by Kennedy (2017); World Bank (2017) that revealed that supplier payment significantly affects tender performance positively. The statistical results refute the research hypothesis H₀: There is no significant relationship between the bidding process and tender performance of PWDs.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study set out to establish factors influencing the bidding process of AGPO and to determine the relationship between the bidding process and tender performance of PWDs. This chapter contains a summary of findings, the conclusions of the study, the recommendations for stakeholders and limitations of the study. The chapter then presents areas for future research.

5.2 Summary of Findings

PWDs in the AGPO have businesses that are largely registered as limited companies followed by sole proprietorship and partnership. On sectors analysis, the findings revealed that majority of business registered are in the retail and wholesale sector with the remaining business coming from construction sector, ICT Sector, agriculture sector, professional consultants, general supplies, hospitality and security and cleaning services. Nearly all the respondents had participated in AGPO tendering process.

Analysis on factors influencing bidding process revealed mixed findings amongst the persons with disabilities in Kenya. The findings from descriptive statistics showed that the respondents were in agreement on importance of prequalification process, tender documents and professionalism of bidders. The results showed that the respondents were neutral to bidding call and submission, tender opening process, tender evaluation, tender award process. The respondents also disagreed about effectiveness of the supplier payment process and review and appeals process. Further the results from factor analysis revealed that only 10 factors are considered

as the most influencing in bidding process. These factors were established to be reserved tenders not separating PWDs from youth and women, attending public procurement seminars/ workshops, usage of evaluation criteria stated in tender documents, complete understanding of the public procurement process, awarding of tender to the lowest /best evaluated, feedback on reasons for not winning, mandatory, technical and financial requirements are too high, the cost of filing a complaint is affordable and payment is always made as per agreed schedule

The coefficient of determination R^2 value of 62.6% and 70.3% indicates that between 62.6% and 70.3% of the changes in tender performance is explained by bidding process. This implies that bidding process has a significant relationship with tender performance. The findings revealed that only supplier payment, bidder's professionalism and reviews and appeals have significant relationship with tender performance amongst persons with disabilities. The findings refute H_0 : There no significant relationship between the bidding process and tender performance of PWDs.

5.3 Conclusion

The study concludes that tender documents, tender evaluation, tender awards, supplier payment, reviews and appeals and professional are the most important factors influencing bidding process. Hence it can be concluded that bidding process is affected by different factors. The study also concludes there is significant relationship between process and tender performance and refutes H_0 : There is no significant relationship between the bidding process and tender performance of PWDs. Further it can be concluded that within 95% confidence level only supplier

payment. Supplier professionalism, and review and appeals contribute significantly to tender performance. Statistically the other factors do not significantly contribute to tender performance of PWDs. In conclusion, study also concurs with McCrudden (2004) that Public procurement can deliver government objectives and Walker & Brammer (2009) that inclusion of disadvantaged businesses is a core principle of public procurement. According to 2019 Kenya census 2.2% of the population lives with disabilities and can be economically empowered through AGPO if properly implemented by PEs.

5.4 Recommendations

This study recommends that PEs should comply and use mandatory standard tender documents, strengthen Tender Opening, Tender Evaluation, Tender Award and Inspection and Acceptance Committees. PEs should review supplier payment exceeding 30 days for immediate attention. PEs can hold workshops and seminars for PWD suppliers to improve bidder's professionalism. The National Treasury and PPRA should consider reducing charges for reviews and appeals. This is because factor analysis selected these factors as the most important factors.

In regard to the relationship between bidding process and tender performance, the study recommends that procuring entities should improve supplier payment process by tagging payments that exceed 30days for action and make use of standard tender documents. The government can reduce the fees for reviews and appeal board and strengthen the Board to reduce perceived ineffectiveness. Training of procurement officers and accounting officers, and creation of awareness on AGPO should be stepped up by PPRA. The government should revise procurement policies with an

aim of addressing delayed supplier payments process, and perceived ineffectiveness of reviews and appeals process and also strengthen committees so that they are effective. The government should also encourage the PE's to comply with PWD tender reservations as this will increase the number of tenders available to PWDs within the validity period of AGPO certification.

5.5 Limitations of the Study

The sample used for the study was largely drawn from Nairobi County and hence the results cannot be deemed as representative enough to be generalized to the whole country. Given that the study was conducted during the prevailing pandemic, the researcher faced challenge to do with respondent co-operation.

5.6 Areas for Future Research

This study focused on bidding process and tender performance of persons with disabilities. The researcher recommends that future studies explore a comparison of different factors that influence bidding groups for women, youth and person with disabilities groups. This is because these three groups largely bid from the same group of reserved tenders. There is also need for more mixed design studies that will include in-depth qualitative and quantitative studies more so on uptake of AGPO by public entities. Research may also explore the challenges faced by tenderers in PWD mainstreaming as a topic under green supply chain management and inclusion. Research may also focus on Procurement function's perception of the effectiveness of Tender opening, evaluating and inspection committees.

REFERENCES

- Ancarani, A. (2008). *Service Sourcing, Public Administration and Public Policy International Handbook of Public Procurement*. Retrieved from AU5457_C001.indd, <https://doi.org/10.1108/JOPP-01-01-2001-B001>
- Ayoti, N. (2012). *Factors Influencing Effectiveness in Tendering Process in Public Sector, the Case of Nyeri County*, University of Nairobi, Kenya, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/9680>
- Bergman, M. A., & Lundberg, S. (2013). Tender evaluation and supplier selection methods in public procurement. *Journal of Purchasing and Supply Management*, 19(2), 73–83.
- Bergman, Mats, A. & Lundberg, S. (2013). Tender evaluation and supplier selection methods in public procurement <https://doi.org/10.1016/j.pursup.2013.02.003> *Journal of Purchasing and Supply Management*, Volume 21, Issue 2, June 2015, Pages 103-112.
- Boateng, V. (2014). *An examination of tender evaluation practices in Metropolitan, Municipal and District Assemblies in Ashanti Region (Doctoral dissertation)*.
- Brian, L. et al (2010). *Signaling Theory: A Review and Assessment*, <https://doi.org/10.1177/0149206310388419>
- Brinker, L. (2014). Introducing New Weapons In The Fight Against Bid Rigging To Achieve A more Competitive U.S. Procurement Market, *Public Contract Law Journal*, Vol. 43, No. 3 (Spring 2014), pp. 547-565, American Bar Association <https://www.jstor.org/stable/44740646>, Accessed: 13-10-2018 10:23 UTC
- Chemjor, R. (2015). *Supplier Evaluation Criteria and Procurement Performance in Parastatals in Kenya, MBA unpublished Thesis*, University of Nairobi, Nairobi, Kenya, <http://hdl.handle.net/11295/93970>

- Chesang, S. (2013). *Procurement Challenges in Public Universities in Kenya unpublished MBA project University of Nairobi, Kenya*, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/60335>
- Chrisostom, A. (2012). *The Perceived Effect of Public Procurement Law on Procurement Efficiency and Effectiveness among parastatal in Kisumu County, Kenya, MBA Project University of Nairobi, Kenya*, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/9150>
- Connelly B. et al (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67. <https://doi.org/10.1177/0149206310388419>
- Cullen, S. (2017). *Contract theories you should know, PASA, APAC symposium*, Retrieved from <https://procurementandsupply.com/2017/03/contract-theories-you-should-know/>
- Dastidar, K., Mukherjee, D. (2014). *Corruption in delegated public procurement auctions* <https://doi.org/10.1016/j.ejpoleco.2014.05.003>
- DeAses, A. (2005). Developing Countries: Increasing Transparency And Other Methods Of eliminating Corruption In The Public Procurement Process *Public Contract Law Journal*, Vol. 34, No. 3 (Spring 2005), pp. 553-572 American Bar Association, <https://www.jstor.org/stable/25755330> Accessed: 13-10-2018 11:00 UTC
- Diaby, A. & Slywester, K. (2014). *Bureaucratic competition and public corruption: Evidence from transition countries* <https://doi.org/10.1016/j.ejpoleco.2014.04.002> Technovation Volume 34, Issue 10, October 2014, Pages 631-645

- Dillon, B. (2012). Using mobile phones to collect panel data in developing countries. *Journal of international development*, 24(4), 518-527. DOI: 10.4236/odem.2014.22004
- Dorobek, Sandra, Leuger, S., Glas, A. & Essig, M. (Ed). (2008). Public Procurement in Germany, Public Administration and Public Policy. *International Handbook of Public Procurement*, ISBN978-1-4200-5457-6
- Ellram, M. et al (1997). Critical elements of supplier development The buying-firm perspective [https://doi.org/10.1016/S0969-7012\(96\)00003-2](https://doi.org/10.1016/S0969-7012(96)00003-2) Get *Journal of Purchasing and Supply Management Volume 16*, Issue 3, September 2010, Pg. 206-215.
- European Disability Forum (2016). Public Procurement. Retrieved from <https://www.edf-feph.org/public-procurement#>
- Gambetta, D. (2008). Signaling theory and its applications, *L'annuaire du Collège de France* [En ligne], 108 | 2008, mis en ligne le, consulté le 12 juillet 2019. URL: http://journals.openedition.org/annuaire-cdf/264_pg895-896
- Gaspard-Boulinec, H. & Conversy, S. (1998). *Usability Insights for Requirements Engineering Tools: A User Study with Practitioners in Aeronautics*, Requirements Engineering Conference (RE) 2017 IEEE 25th International, pp. 223-232, 2017. DOI: 10.1109/OZCHI.1998.732203 IEEE, Adelaide, SA, Australia, Australia
- Gatere, B. & Shale, I. (2014). Challenges affecting the implementation of access to government procurement opportunities for special interest groups in Kenya: A case study of Nairobi County. *International Journal of Social Sciences and Entrepreneurship*, 1(12), 831-847. https://www.ijssse.org/articles/ijssse_v1_i12_831_847.pdf

- GoK, (2003). Persons with Disabilities Act, retrieved from www.ppoa.go.ke
- GoK, (2005). Public Procurement and Disposal Act, retrieved from www.ppoa.go.ke
- GoK, (2006). Public Procurement and disposal Act, retrieved from www.ppoa.go.ke
- GoK, (2010). Constitution of Kenya, retrieved from www.ppoa.go.ke
- GoK, (2011). Presidential Directive, the Preference and Reservations Regulations, retrieved from www.ppoa.go.ke
- GoK, (2013). Public Procurement and Asset Disposal (Preference and Reservations) (Amendment) Regulations, retrieved from www.ppoa.go.ke
- GoK, (2015). Public Procurement and Disposal Regulations, retrieved from www.ppoa.go.ke
- GoK, (2015). Treasury Circular Ref: NT.PPD.1/3/26VOL.1 (66) of 15th January 2015. Retrieved from www.ppoa.go.ke
- GoK, (2016). Treasury Circular no.02/2016, retrieved from www.ppoa.go.ke
- Hantke, D. (2003). *Public interest theory of regulation Non-existence or Misrepresentation?* DOI: 10.1023/A: 1021814416688, European Journal of Economics
- Hassan, A. (2012). *Procurement Practices in Kenya's Public Corporations*, MBA Project, University of Nairobi, Kenya, retrieved from <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/9115>
- Hay, A. & Kelly, D. (1974). An Empirical Survey of Price Fixing Conspiracies. *The Journal of Law & Economics*, Vol. 17, No. 1 (Apr., 1974), pp. 13-38 Published by: The University of Chicago Press for The Booth School of Business, University of Chicago and The University of Chicago Law School Stable URL: <https://www.jstor.org/stable/724741> Accessed: 13-10-2018 10:49 UTC

- HIVOS. (2017). *Kenya's Efforts to Empower Women, Youth and Persons with Disability through Public Procurement*
- Hoekman, B. (1998). *The World Bank Research Observer*, Vol. 13, No. 2 (August 1998), pp. 249-269, Oxford University Press
<https://www.jstor.org/stable/3986341>, Accessed: 13-10-2018 10:18 UTC
- <http://www\PPDA&R\Access to Government Procurement Opportunities in Kenya - Biashara.html>.
- <http://www.treasury.go.ke/component/jdownloads/send/120-program-based-budgets/489-program-based-budget-2017-2018.html>
- IEA Kenya. (2018). *Public Procurement in Kenya: Analysis of the Auditor General's Reports*
- Israel, G. (2013). *Determining Sample Size*, University of Florida,
- Feldman, R. & Mehra, R. (1993). *Auctions: Theory and Applications*. Staff Papers (International Monetary Fund), 40(3), 485-511. doi:10.2307/3867445
- Kangethe, A. T. W., Mukabi, F. E. K., & Simiyu, D. N. (2020). Influence of Entrepreneurial Tendencies on Uptake of Access to Government Procurement Opportunities by the Youth A Study of ISIOLO County, Kenya. *International Journal of Academic Research in Business and Social Sciences*, 10(4).
- Karanja, A. N. (2014). *Factors affecting payment of suppliers in the public sector (Doctoral dissertation)*.
- Karon, D. (2002). Collusion Central: Helping your clients deal with price fixers, *Business Law Today*, Vol. 11, No. 3 (January/February 2002), pp. 8-12, American Bar Association, <https://www.jstor.org/stable/23291526> Accessed: 13-10-2018 10:42 UTC

- Kennedy, K.B. (2017). Effects of E-Procurement Adoption on Procurement Performance of Kenya Electricity Generating Company (*MA dissertation, KISII UNIVERSITY*).
- Kiruja, B. (2014). Procurement Methods and Procurement Performance Amongst State Corporations under the National Treasury of Kenya, *Unpublished Thesis, MBA Project*, University of Nairobi, Kenya, <http://hdl.handle.net/11295/75541>
- Kloot & Martin (1997). <http://www.idealibrary.com> on doi: 10.1006/mare.2000.0130
 Management Accounting Research, 2000, 11, 231–251 Strategic performance management: A balanced approach to performance management issues in local government Louise *European Journal of Purchasing & Supply Management* Volume 3, Issue 1, March 1997, Pages 21-31
- KORIR, N. J. (2018). Influence of Access to Government Procurement Opportunities on Tendering Participation by Women in Nakuru County (Doctoral Dissertation, Jkuat).
- Kothari, C. (Ed). (1990). *Research Methodology Methods and Techniques*, New Age International Publisher, <http://www.modares.ac.ir/uploads/Agr.Oth.Lib.17.pdf>
- Kumar, R. (Ed). (2011). *Research Methodology*, A step by step guide for beginners, Sage Los Angeles, DOI: 10.4236/ojbm.2019.71018
- Kwamboka, G. (2017). *An Assessment of Factors Affecting Supplier Payment in the Public Sector: A Case Study of Kisii County Government-Kenya*.
- Lennerfors, T. (2006). The Transformation of Transparency: On the Act on Public Procurement and the Right to Appeal in the Context of the War on Corruption *Journal of Business Ethics*, Vol. 73, No. 4 (Jul., 2007), pp. 381-390, Springer <https://www.jstor.org/stable/25075431>, Accessed: 13-10-2018 10:13 UTC

- Loader, .K (2014). *SME suppliers and the challenge of public procurement: Evidence revealed by a UK government online feedback facility*, <https://doi.org/10.1016/j.pursup.2014.12.003>
- Mateus, R., Ferreira, J. & Carreira, J. (2010). Full disclosure of tender evaluation models: Background and application in Portuguese public procurement. <https://doi.org/10.1016/j.pursup.2010.04.001> *Journal of Purchasing and Supply Management* Volume 21, Issue 4, December 2015, Pages 241-250
- Mathenge, B. W. (2014). *The Effectiveness of The Public Procurement Administrative Review Board in Adjudicating Public Procurement Disputes in Kenya (Doctoral dissertation, University of Nairobi)*.
- Mavavi, O., Nagati H., Pache, G., Wehrie, F. (2015). *How Does Performance History Impact Supplier Selection in Public Sector*, *Industrial Management& Data Systems* ISSN: 0263-5577
- Mbae, L. N. (2014). *Public procurement law and procurement performance of county governments in Kenya: Case of Machakos county government (Doctoral dissertation)*.
- McCrudden, (2004). *Using public procurement to achieve social outcomes*, *Natural resources forum*/vol 28, issue 4, <https://doi.org/10.1111/j.1477-8947.2004.00099.x>
- Mohammed, R. (2019). *Progress on the Economic Empowerment of Female Entrepreneurs in Kenya's 30% Preferential Public Procurement Policy*.
- Monari, V. O., Iravo, M. A., & Kibet, Y. (2017). Analysis of the factors influencing performance of the preference and reservation policy among persons with disabilities at Moi Teaching and Referral Hospital, Kenya. *International Academic Journal of Procurement and Supply Chain Management*, 2(1), 1-15.

- Muange, E. (2013). *Procurement Legislation and Performance of Constituency Development Fund Committees in Kenya*, MBA project, University of Nairobi, Kenya, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/59605>
- Munyu, J. (2016). Factors Influencing Youth Access to Government Procurement Opportunities in the Ministry of East African Community, *Labour and Social Protection*, Nairobi, Kenya (Doctoral dissertation, University of Nairobi).
- Muraguri, J. (2013). Implementation of The Youth Preference and Reservations Policy in Public Procurement: The Case of State Owned Enterprises in Nairobi, *MBA Project*, University of Nairobi, Kenya, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/58850>
- Muthini J, Namusonge S., Guyo, W. Shale, N. (2017). Role of Government Economic Regulations on Petroleum Supply Chain Management. *Journal of Business and Economic Development*. Vol. 2, No. 2, 2017, pp. 131-139. doi: 10.11648/j.jbed.20170202.19
- Mwangi, P. N. (2017). *Determinants of compliance with access to government procurement opportunities regulations for special groups by public universities in Kenya* (Doctoral dissertation, COHRED-JKUAT).
- Newman, G. (1969). An analysis of competitive bidding Strategy University of Missouri, *Journal of Purchasing* vol 5 issue 2 Kansas City, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1745-493X.1969.tb00116.x>
- Ngure, G. & Dr. Simba, T. (2015). *Factors Affecting Access to Government Procurement Opportunities for Disadvantaged Groups in Public Entities: (A Case Study of Ports Authority)* Volume 4 Issue 10, www.ijsr.net C

- Njeri, C & Getuno, P. (2016). Determinants For Youth Access To Government Procurement Opportunities in Kenya: A case study of Judiciary, *International journal of Innovative Social Sciences ^ Humanities Research* 4*3(31-49, July-Sept, 2016, ISSN: 2354-2926
- Nyathore, P. (2013). *Preference and reservations in public procurement for small and medium enterprises In Nairobi*, MBA Project University of Nairobi, Kenya, <http://hdl.handle.net/11295/63020>
- Obiri, L. (2016). *Consultancy on the assessment of the uptake of 30% public Procurement business opportunities for women, youth, and persons with disabilities at county level and availability of business development services*, UNDP, Kenya, <https://www.openupcontracting.org/assets/2018/04/Agpo-Report-Web-version-Full-Report.pdf>
- Olang'o, A. (2014). Challenges Faced by Small and Medium Enterprises in Accessing Public Contracts in Bondo, *Published MBA project*, University of Nairobi, Kenya, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/9104>
- Pallant, J. (2013). *SPSS survival manual*. McGraw-Hill Education (UK).
- PPOA, (2009). *Public procurement and disposal general manual*, Nairobi, http://www.ppoa.go.ke/manuals/general_procurement_manual.pdf
- PPOA, (2014). Annual Report, www.ppoa.go.ke
- PPOA, (2015). Annual Report, www.ppoa.go.ke
- PPOA, (2016). Annual Report, www.ppoa.go.ke
- Raymond, J. (2008). *Benchmarking in public procurement, Benchmarking: An international Journal*, Vol.15 Issue: 6, pp.782-793, <https://doi.org/110.1108/14635770810915940>

- Shrestha, S. (2014). Average Bid Method – An Alternative to Low Bid Method in Public Sector Construction Procurement in Nepal. *Journal of the Institute of Engineering*, 10(1), 125-129. <https://doi.org/10.3126/jie.v10i1.10888>
- Singh & Masaku (2014). *International Journal of Economics, Commerce and Management*, United Kingdom Vol. II, Issue 11, Nov 2014, <http://ijecm.co.uk/> ISSN 2348 0386, Sampling Techniques & Determination Of Sample Size In Applied Statistics Research: An Overview, University of Swaziland, Luyengo, Swaziland
- Sumba, G. (2015). Influence of The Implementation of Access to Government Procurement Opportunities Program on Business Growth in Youth Owned Enterprises in Murang'a South Sub County Kenya, *MBA thesis*, University of Nairobi, <http://hdl.handle.net/11295/89897>
- Uyarra E., Edler, J. Garcia-Estevez, J., Georghiou, L., Yeow, J (2014). *Barriers to innovation through public procurement: A supplier perspective*, Technovation, <https://doi.org/10.1016/j.technovation.2014.04.003>
- Wakhungu, N. (2013). Transparency in the Award of Public Tenders in Kenya, *MBA Thesis*, University of Nairobi, Kenya, <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/58541>
- Walker, H. & Brammer, S. (2009). Sustainable procurement in the United Kingdom public sector, *Supply Chain Management: An International Journal*, Vol. 14 Issue: 2, pp.128-137, <https://doi.org/10.1108/13598540910941993>
- Wangai, N. (2014). Uptake of Government tenders by youth owned small and micro enterprises in Nairobi City County, *MBA Project*, University of Nairobi, Kenya, <http://hdl.handle.net/11295/76921>

- Wleh, P. (2015). Factors influencing youth access to public procurement opportunities in Government ministries in Kenya, *MBA project*, University of Nairobi, Kenya, <http://hdl.handle.net/11295/93298>
- Woodall, B. (1993). *The Logic of Collusive Action: The Political Roots of Japan's Dangō System*, *Comparative Politics*, Vol. 25, No. 3 (Apr., 1993), pp. 297-312
Comparative Politics, Ph.D. Programs in Political Science, City University of New York, https://www.jstor.org/stable/422247?seq=1&cid=pdfreference#references_tab_contents, Accessed: 13-10-2018 10:48 UTC
- World Bank, (2017). Bench Marking Public Procurement, <http://www.worldbank.go.ke>
- Yarra Ranges Council (2019). Yarra Ranges Procurement Policy, [http://www.yarraranges.vic.gove.au>files>public>council>policies strategies](http://www.yarraranges.vic.gove.au>files>public>council>policies_strategies)

APPENDICES

APPENDIX I: QUESTIONNAIRE

BIDDING PROCESS AND TENDER PERFORMANCE OF PERSONS WITH DISABILITIES IN PUBLIC PROCUREMENT

INTRODUCTION

This questionnaire is for soliciting information from persons registered as PWDs under the Access to Government Procurement Opportunities [AGPO]. The objective is to establish factors influencing implementation of AGPO policy and tender performance by PWDs. Information gathered will be used for academic purpose only and will be treated with utmost confidentiality. Your cooperation will be highly appreciated.

SECTION A: PROFILE

1. Have you ever participated in government tendering process? Yes [] No []
If no, why? (Tick all applicable)
 - (a) Was unable to meet requirements []
 - (b) Was not aware of the opportunities []
 - (c) Specify other_____
2. Your Designation in the enterprise is
 - (a) Owner [] (b) CEO [] (c) Manager [] (d)
Other_____
3. What type of company are you?
 - (a) Limited Company [] (b) partnership [] (c) sole proprietorship []
4. Please tick to select the industry you registered for PWD AGPO;
Retail & Wholesale [] Construction []
Hospitality []
ICT [] Professional consultants []
Security and cleaning []
Agribusiness and food processing [] Other []

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

SECTION B: Factors that influence the Bidding Process	1	2	3	4	5
Prequalification Criteria: Acquisition of mandatory documentation for prequalification is done within reasonable time for tender participation:					
<ul style="list-style-type: none"> • NCPWD certificate • PIN and tax exemption • AGPO certificate 					
Availability of information: All information on tenders is available.					
Access to e-procurement: All tender invitations are posted in the buyer's portal or Treasury's portal.					
Use of standard bid documents: Bid documents are similar in design and in language.					
Access to Training opportunities: We attended seminar, training or workshop organized by government in the last two years.					

Please indicate the extent of your agreement to the following statements concerning the bidding process:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

SECTION B: Tender Documents	1	2	3	4	5
Reserved tenders do not separate PWDs from youth and women					
Mandatory, technical and financial requirements are too high					
Main terms and conditions of the contract are always clear					
Payment schedule under the contract is always indicated					
Evaluation criteria is always clearly stated					
Specifications are always clear					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section C: Call for bids and bid submission	1	2	3	4	5
Reserved tender notices and tender documents are easily obtained					
Procuring entities allow electronic submission of Tender (Web, Email)					
I'm always allowed to ask the procuring entity questions					
Responses by procuring entity are sent to all interested bidders					
Adequate time for bid preparation is always provided					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section D: Tender opening	1	2	3	4	5
I'm always allowed to attend the bid opening session					
Bid opening take place at the precise time of bid submission deadline					
Minutes of the opening session are always availed on request					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section E: Tender Evaluation	1	2	3	4	5
When unsuccessful we are always notified of tender results					
We always get feedback on reasons for not winning					
Evaluation criteria stated in tender documents is always used					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section F: Tender Award	1	2	3	4	5
Post award variations are notified to all bidders					
Procedure for acceptance of completed service/goods is adhered to					
The contract is always signed on paper by both parties					
An online platform is available for signing the contract					
Procedures for terminating the contract are always clear					
Tenders are always awarded to the lowest /best evaluated bidder					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section G: Supplier payment	1	2	3	4	5
Payment is always made as per agreed schedule					
Reasons for delayed payment are always availed					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section H: Reviews and appeals	1	2	3	4	5
The cost of filing a complaint is affordable					
Decisions are timely available to all interested bidders					

Please indicate the extent of your agreement to the following statements:

(1) Strongly agree (2) Agree (3) Not sure (4) Disagree (5) Strongly disagree

Section I: Professionalism	1	2	3	4	5
I attend at least two public procurement seminars/ workshops					
I completely understand the public procurement process					

Please fill the table below:

SECTION C: AGPO Tender Performance			
Year	If registered as PWD in AGPO for the year? Y= Yes N=No	No of AGPO tenders submitted	No of AGPO tenders awarded
2019			
2018			
2017			

How do you become aware of tender opportunities? Newspaper [] Website [] other (specify) _____

Please list other factors that affect your performance in bidding for AGPO opportunities

Please suggest what should be improved to help you participate successfully in AGPO _____

Have you benefitted from AGPO?

Thank you for taking your time to complete and submit this survey. Your insight and information are very valuable in contributing to the success of this survey.

Use the space below to provide additional comments on how the Tender process may be improved.

Should you have any further questions or concerns about this survey or any of its questions please contact P Wanyoike at Tel 0720925408 or email: <wanyoike.pan@students.uonbi.ac.ke>

APPENDIX II: PWDs AGPO LIST AS AT SEPTEMBER 2019

APPENDIX III: SAMPLING FRAMEWORK

PWD firms registered for AGPO between March 2018 and August 2019

	Business type									TOTAL	
Category	Limited Company			Partnership			Sole Proprietorship			POPULATION	SAMPLE
	Population	%	Sample	Population	%	Sample	Population	%	Sample		
TOTAL	150	49.7%	85	15	05%	9	137	45.3%	78	302	172

Researcher (2020)