

# Alternative Procurement Processes in the Land Transportation Office (LTO) Region V

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**Abstract:-** This study determined the alternative procurement processes in the Land Transportation Office (LTO) Region V. Specifically, it answered the following sub-problems: 1) What are the alternative procurement processes employed in the Land Transportation Office Region V?; 2) What is the level of compliance with the alternative procurement processes along negotiated procurement in terms of small value and lease of real property and venue as well as shopping?; 3) What are the completed procurement projects from fiscal year 2022-2023?; 4) What are the issues in alternative procurement processes met by the respondents?; and 5) What agency procurement plan may be proposed to address the issues? This research study utilized the descriptive-survey method of research. It is descriptive for it presents the alternative procurement processes in the Land Transportation Office in Region V. This employs the survey design since it used a questionnaire to collect information using pre-identified indicators. The researcher also identified the completed procurement projects of the office from fiscal years 2022-2023. The issues on alternative procurement processes are also a part of this study. The respondents of this study are thirty-five (35) regular as well as non-regular employees of the Land Transportation Office Region V. Total enumeration was employed. The statistical measures used are frequency count, percentage, weighted mean and ranking.

## I. INTRODUCTION

The global perspective on alternative procurement processes in government sectors is increasingly gaining attention for its potential to enhance transparency, efficiency and innovations. Across the world, governments are exploring and adopting various alternative procurement methods such as e-procurement, public-private partnerships (PPPs), framework agreements, and dynamic purchasing systems. These methodologies aim to streamline procurement processes, reduce costs. And improve the quality of public services. Meanwhile, PPPs allow for the collaboration between the public sector and private entities, bringing in the private sector efficiencies and innovation into public projects. This shift towards alternative procurement practices reflects a broader trend of governments seeking more effective ways to meet public needs, while also ensuring value for money, promoting fair competition. And encouraging economic development.

The Philippines had undergone a lot of economic reforms to address the challenges of government procurement system. It is the area that has suffered a lot of controversies for the past years under different administrations. The direction is towards achieving integrity, transparency and accountability in government procurement. After all, it is the taxpayers' money that is involved in dealing with public purchases. The movement of money through the government and outward to its allies in business and civil society has a significant impact on the functioning of economies, the ability of governments to serve their citizens, and the effectiveness of the current system. Republic Act No. 9184, also known as An Act Providing for the Modernization, Standardization, and Regulation of the Procurement Activities of the Government and for Other Purposes, is a seminal piece of law that significantly alters the intricate structure of government procurement. Section 3 of the aforementioned Act outlines the guiding principles for government procurement, which include, among other things, openness, competitiveness, efficiency, accountability, and public oversight. An open and competitive procurement system is established by the Act and the Implementing Rules and Regulations (IRR). This is to guarantee justice predicated on equal access and value for money.

The Land Transportation Office Regional Office no. V, like other government agency conducts government procurement processes to effectively discharge its mandates. These include rationalization of land transportation services and facilities as well as implement effectively the various transportation laws, rules and regulations. Following a decentralized form of management, there are areas in government procurement that the Regional Office are allowed to cover. For complex and highly technical projects, the Central Office through its Bids and Award Committee maintains its management while there are limited procurement opportunities rest in the Regional Office. This study aims to understand the government procurement process in the Regional Office to provide current data on fiscal administration. The data that was generated in this study may serve as input in the effective and efficient utilization of budget of the office.

The researcher, who is an employee of the Land Transportation Office is interested to look into the procurement process in the office to offer new insights in the understanding of the alternative procurement which can serve as model for other government offices. The level of

compliance to the prescribed alternative procurement processes was determined that can support the thrusts and agenda of the present administration towards accountability and transparency which are important pillars of good governance.

## II. THEORETHICAL FRAMEWORK

The researcher identified four key theories relevant to their study. **The Government Procurement Framework by Jensen & Meckling (1976)** advocates for using cost accounting to evaluate bids based on life-cycle costs rather than just price, promoting transparency and competitive negotiation for more economic, innovative, and appropriate solutions. **The Process Model by Jones (1984)** outlines the steps in policy-making, such as problem identification, proposal formulation, legitimation, budgeting, implementation, evaluation, and resolution, emphasizing the need for early discussion and resolution of policy issues to improve processes. **The Theory of Negotiated Procurement** describes a method where negotiations between the purchasing agency and suppliers replace formal competitive bidding, with a focus on transparency, value for money, and justified use based on specific procurement needs. **The Shopping Procurement Theory** involves buying goods or services directly from the marketplace without formal bidding, useful for low-value or emergency purchases, stressing efficiency and expediency while maintaining transparency and accountability. These theories support the researcher's proposition that alternative procurement processes using cost accounting and improved policies on transaction costs and collective efforts ensure good governance.

## III. CONCEPTUAL FRAMEWORK

This study uses the inputs-process-output (IPO) approach, also known as The System Approach, which includes three major sub-systems: inputs, process, and output. The inputs consist of government procurement processes used by the Land Transportation Office Region V, compliance levels with procurement processes for small value procurement, lease of real property and venue, and shopping, as well as completed procurement projects from fiscal years 2022-2023 and issues encountered by respondents. The process sub-system involves preparing and validating the research instrument, administering the questionnaire to respondents, and retrieving the completed questionnaires. The research tool was developed by the researcher with guidance from the Thesis Adviser and underwent face and content validation. Permission to conduct the study was obtained from the Regional Director of the Land Transportation Office Region V. The researcher personally administered the questionnaire to co-employees, making the process easier. After collecting the responses, the data were entered into a Master Tally Sheet and analyzed statistically. The results were then tabulated. This study involves evaluating the effectiveness and efficiency of different procurement methods, such as competitive bidding and direct contracting, to meet the agency's needs while ensuring transparency, fairness, and value for money. Feedback on the

output of these alternative procurement processes allows the Land Transportation Office (LTO) to assess whether the chosen methods have achieved their intended objectives, such as cost savings, timely delivery, and quality standards. This includes soliciting input from stakeholders, including end-users, suppliers, and internal departments, to identify strengths, weaknesses, and areas for improvement in the procurement process. By incorporating feedback into the procurement process, the LTO can refine its approach, adopt best practices, and address any issues or concerns raised by stakeholders. This iterative process helps enhance transparency, accountability, and trust in the agency's procurement activities while driving continuous improvement and better outcomes for the transportation system and the public it serves.

## IV. REVIEW ON THE RELATED LITERATURES AND STUDIES

### ➤ Literatures

Stiglitz (2019) asserts that institutional trust is essential for guaranteeing adherence to rules and regulations and serves as the cornerstone for the legitimacy of governments. It is necessary to put changes into action and guarantee that governments are able to rule without using force. He went on to say that trust affects public policy outcomes as well as the connection between citizens and the government. Public procurement has the potential to benefit the environment in addition to a nation's population and economy. Erdmenger (2013) asserts that in order to lessen environmental effects and develop new markets that support the preservation of natural resources, there should be a demand for environmentally conscious government procurement, or "green procurement." In terms of the environment, effective public procurement can also lower carbon dioxide (CO<sub>2</sub>) emissions, protecting natural resources that are essential to human health and welfare in the future.

It is crucial to recognize that the effectiveness of procurement practices largely hinges on the leadership and expertise of the procurement stakeholders within an organization. Consequently, procurement officers must fully comprehend all procurement objectives and principles, which encompass key concepts such as efficiency, effectiveness, transparency, accountability, competitiveness, confidentiality, non-discrimination, and fairness. Additionally, the government should establish a code of exemplary customer practices, to be enforced by an independent agency, to enhance accountability in public procurement.

In many international public sector organizations, it is considered best practice to incorporate guidelines on staff ethics and professional responsibility into procurement manuals. This ensures that procurement officers are well-versed in government policies regarding the acceptance of gifts, favors, remuneration, economic benefits, hospitality, entertainment, and job offers from any non-governmental sources, including suppliers. Such measures are essential to prevent procurement abuse or mismanagement in less

developed countries and to avoid path dependence—a situation described by Kelman (2012)<sup>12</sup>, where a practice becomes entrenched and resistant to change even when it is no longer appropriate.

To prevent the practice of tailor-fitting specifications for required goods, the GPRA prohibits referencing brand names. Bawan (2017)<sup>17</sup> highlighted that the GPRA has simplified the prequalification process by using transparent and nondiscretionary criteria for a straightforward eligibility screening, avoiding unnecessary delays. Previously, each document submitted by prospective bidders was thoroughly checked and validated during the pre-procurement stage, extending the procurement cycle significantly. The new law shifts this detailed verification to the post-qualification stage, focusing on the bidder with the Lowest Calculated Bid. Additionally, due to computerized facilities, the GEPS and the DPWH now require suppliers and contractors to submit their eligibility documents only once a year.

A principle in public governance asserts that public officials should be accountable for the outcomes of their decisions, whether positive or negative, on the community. Gabriel (2017)<sup>19</sup> argues that this accountability is crucial for preventing negative bureaucratic behaviors, such as graft, corruption, and bureaucratic red tape, which impede efficient government operations. Moreover, Gabriel & Ong (2018)<sup>20</sup> emphasized the importance of transparency in local government performance, linking it to legislative effectiveness. They argue that transparency should be practiced both in theory and in reality to enhance government accountability, ensuring adherence to the Code of Conduct and Ethical Standards for Public Officials and Employees.

#### ➤ Studies

COVID-19 significantly impacted society and economies, causing many industries and economic activities to halt. Lochan (2021)<sup>24</sup> delved into how this crisis affected organizational procurement, focusing on public and private entities in the Twente region. The research aimed to understand changes in purchasing processes due to the pandemic. The crisis introduced numerous internal and external risks and negative consequences. After a literature review, qualitative research through expert interviews was conducted to collect valuable data. Despite lower national incomes, developing countries have advanced their e-government infrastructures. However, there's limited knowledge on leveraging electronic and internet technologies for sustainable supply chain management, particularly Sustainable Public Procurement (SPP). Adjiei-Bamfo, Maloreh-Nyamekye & Ahenkan (2019)<sup>23</sup> conducted a systematic literature review affirming that government use of electronic tools promotes SPP towards sustainable development. The study reviewed 68 articles from 2001–2017.

The paper concluded that building robust ICT infrastructure, online portals, and human capacity enhances developing countries' ability to share and communicate SPP requirements. E-government facilitates broader market readiness assessments and integrated e-procurement systems

for effective SPP monitoring and evaluation. This study has significant implications for promoting sustainability in public sector supply chain practices in developing countries.

Many companies now use e-procurement strategically to remain competitive. Patel (2017)<sup>26</sup> investigated e-procurement practices in India, particularly in the manufacturing sector, which is more likely to adopt such technologies. This research, based on the novelty of the technology, employed a quantitative methodology with questionnaires to examine e-procurement practices in 72 manufacturing firms across Gujarat. Data was collected through non-probability convenience sampling, targeting executive managers involved in e-procurement. Descriptive and inferential statistics, including frequency distributions, cross-tabulations, exploratory factor analysis, Kruskal-Wallis, and chi-square tests, were used. The study examined the relationship between e-procurement practices and industry type, company size (based on investment and employee count), and ownership through Kruskal-Wallis and chi-square analyses. Hypotheses were tested at a 95% confidence interval and 5% significance level.

Seoung-Taek (2019)<sup>27</sup> explored China's e-government procurement, its development strategies, and how Korean companies could enter the Chinese procurement market. The study reviewed western and Chinese literature, highlighting the need for government procurement certification and the "Made in China" qualification to penetrate the market. Providing products to public institutions and state-owned enterprises was also suggested.

Mwangi (2018)<sup>30</sup> found that public procurement professionals excel at operationalizing contracts but lack enthusiasm for monitoring and managing suppliers. Issues included poor purchasing strategies, understaffing, lack of competence, poor contract understanding, duplicated contracts, inadequate reporting systems, and distant supplier relationships. The study suggested improving contract management by employing skilled staff, fostering strategic supplier relationships, implementing category management, increasing performance monitoring, using technology for supplier monitoring, updating contracts to reflect actual conditions, and ensuring transparent reporting systems. The study also recommended leveraging the Public Procurement Act of 2017 for innovative and sustainable procurement practices.

Scholl & Ubaydi (2017)<sup>31</sup> examined the relationship between technology use and corruption in Ukraine's public sector e-procurement. Inspired by studies on e-government and corruption, they measured e-procurement's impact on prices and competition. Results showed that ProZorro reduced government purchase prices.

Paul (2020)<sup>33</sup> assessed factors affecting procurement processes in Arusha City Council, focusing on procurement practices, supplier selection, and challenges. The study used an exploratory design and concurrent mixed methods, collecting data from 41 respondents through questionnaires and interviews. Quantitative data was analyzed using cross-

tabulation, chi-square, and Fisher Exact tests, while qualitative data was analyzed through content analysis. Findings highlighted the importance of procurement planning, e-procurement adoption, supplier relationship management, effective communication, and cost estimation.

Canonigo et al. (2020)<sup>34</sup> assessed compliance with the Government Procurement Reform Act (RA 9184) in Cebu's engineering districts. Using descriptive research and surveys, the study aimed to reveal compliance levels and differences in perceptions among respondent groups, leading to a continual improvement plan.

Magtalas et al. (2019) described the observance of transparency in government procurement under RA 9184, focusing on public bidding procedures, stakeholder participation, and public access to bidding information. The study used descriptive qualitative research, interviews, and focus group discussions, selecting participants through purposive sampling.

Navarro & Tanghal (2017) examined procurement policy issues related to project delays and underspending by government agencies. Reports cited procurement as a cause for underspending. Congress proposed emergency powers to the president to bypass competitive bidding for transportation projects, but data showed higher bid failure rates under alternative procurement modes. Interviews with government agencies revealed procurement challenges and good practices. Recommendations included investing in systems change, planning, innovation, and value-for-money procurement.

Duyan et al. (2020) measured awareness of the Procurement Law (RA 9184) and its IRR among Kalinga's provincial government. Using a descriptive survey, the study assessed awareness levels through questionnaires, utilizing weighted mean and ranking to analyze the data.

The findings demonstrate that respondents are well-versed in all aspects of R.A. No. 9184 and its Implementing Rules and Regulations (IRR), with the highest awareness in Electronic Procurement and the lowest in Bid Document Preparation. The researcher suggests improving respondents' understanding of R.A. No. 9184 and its IRR and recommends future research to document best practices as references for other procurement entities in Kalinga Province.

Lombres (2020) addressed the necessity for a reliable and secure information system to monitor procurement processes and inventory at Aurora State College of Technology (ASCOT). Currently, ASCOT's manual transaction process results in slow processing, inventory issues, poor monitoring, data inaccuracies, and transparency problems. This study aims to eliminate these issues by developing a Procurement Monitoring System (PMS) that automates procurement transactions. Data was gathered through interviews to analyze transaction processes.

The developmental research method and V-Model of the SDLC were used to develop the system. To evaluate the system's acceptability, the researcher employed a questionnaire based on ISO 25010 Software Product Quality Standards. The evaluation yielded an overall mean of 3.69, indicating that the PMS met software quality requirements. The system streamlined operations and simplified tasks related to supply recording and transaction monitoring, allowing users to track transaction movements efficiently. This study on the Land Transportation Office Region V's procurement process compliance is related, focusing similarly on monitoring procurement processes and inventory. However, Lombres' study involves a more developmental design using the SDLC model, while also incorporating interviews for data collection.

Sangil (2020) investigated how open government data can encourage supplier and contractor participation in public bidding by reducing the cost of acquiring information, thus influencing bidding decisions and strategies. The researcher used data scraping, preprocessing, and exploratory techniques on procurement data from 19 Local Government Units (LGUs) in Albay, Philippines, and triangulated results with insights from local government actors, contractors, and businessmen from the Albay Chamber of Commerce and Industry. The study found that current procurement data released per Philippine law can meet four out of six key information needs of bidders, thereby enhancing bidding confidence. Additionally, data exploration revealed non-compliance with procurement deadlines as prescribed by the law.

This study on public bidding is connected to the current work but differs in methodology. Sangil's research is exploratory, involving government actors, contractors, and businessmen, while the present study is descriptive, focusing on employees of the Land Transportation Office of Region V.

Hiwatig & Carvajal-Amanse (2019) analyzed public procurement dynamics in the Philippines, providing insights for potential improvements in procurement policy. Utilizing PhilGEPS open datasets on bid and award notices, network science was employed to create three network topologies revealing patterns not apparent through traditional analysis. Key findings included a growth in supplier degree distributions from 2009-2018, with 43% of suppliers partnering with the government for only one year and only 2% maintaining partnerships over ten years. Additionally, there was a high correlation between the number of suppliers and awarded projects in most delivery areas but not between budget spend and supplier numbers. Intermediaries were consistently present in the networks studied.

This study relates to government procurement, similar to the current work, but differs in research methodology. The current study uses a descriptive survey, a quantitative approach, while Hiwatig & Carvajal-Amanse's study is qualitative. Consequently, data collection methods differ, with the current study using questionnaires and the other study utilizing open datasets on bid and award notices.



## V. METHODOLOGY

This research employed the descriptive-survey method. It is considered descriptive because it outlines the alternative procurement processes used in the Land Transportation Office of Region V. It collects data on the level of compliance to the alternative procurement processes along negotiated procurement and shopping. Vizcarra (2003) cited that descriptive studies were useful in obtaining the prevailing status or condition of the problem which were essential in understanding the past and the future. It is a method which collects detailed and factual information to describe the present phenomena.

On the other hand, Sanchez (1998) explained that descriptive research includes all studies that purport to present facts concerning the nature and status of anything which one may wish to study. This employs the survey design since it used a questionnaire to collect information using pre-identified indicators. The researcher also identified the completed procurement projects of the office from fiscal years 2022-2023. The issues on alternative procurement processes are also a part of this study.

## VI. FINDINGS

This study determined the government procurement processes in the Land Transportation Office (LTO) Region V. Specifically, it addressed the following sub-problems: 1) What procurement processes does the Land Transportation Office in Region 5 utilize? 2) What is the level of compliance with the alternative procurement processes along negotiated procurement in terms of small value and lease of real property and venue as well as shopping?; 3) What are the completed procurement projects from fiscal year 2022-2023?; 4) What are the issues in alternative procurement processes met by the respondents?; and 5) What procurement plan may be proposed to address the issues? This research study utilized the descriptive-survey method of research. It is descriptive for it presents the alternative procurement processes in the Land Transportation Office in Region V.

This employs the survey design since it used a questionnaire to collect information using pre-identified indicators.

The researcher also identified the completed procurement projects of the office from fiscal years 2022-2023. The issues on alternative procurement processes were also a part of this study. The respondents of this study were thirty-five (35) regular as well as non-regular employees of the Land Transportation Office Region V. Total enumeration was employed. The statistical measures used are frequency count, percentage, weighted mean and ranking.

➤ There were thirty-five (35) or 100 % of the respondents perceived that the procurement processes in negotiated procurement such as small value procurement and lease of real property and venue as well as shopping are the common procurement processes in the Land Transportation Office, Region V.

- The study evaluated the compliance of the Land Transportation Office (LTO) in Region V with various procurement methods, including negotiated procurement and shopping. The results for Negotiated Procurement along Small Value Procurement show very high compliance. Key indicators like ensuring the procurement amount does not exceed ₱1,000,000.00 and awarding contracts to the lowest responsive quotation received perfect scores of 5.00. Other indicators, such as the BAC's recommendation for contract awards and submission requests from the End-User, followed closely with scores around 4.80. The average compliance level for small value procurement was 4.79, described as very high.
- For Negotiated Procurement along Lease of Real Property and Venue, the highest-rated indicator was the requirement to post transactions exceeding ₱50,000.00 on the Philippine Government Electronic Procurement System, scoring 5.00. Other indicators, such as following authorized procedures for lessor selection and conducting cost-benefit analyses, received scores around 4.43 to 4.60. The overall compliance level for lease procurement was 4.51, also described as very high.
- In the category of Shopping Procurement under Unforeseen Contingency Requiring Immediate Purchase, all indicators achieved very high compliance. Indicators like ensuring the purchase amount does not exceed ₱200,000.00 and promptly awarding contracts to the lowest responsive supplier received perfect scores. Other steps, such as submitting purchase requests and validating supplier capabilities, scored around 4.43 to 4.54. The average compliance level for this category was 4.65.
- For Shopping Procurement of Ordinary or Regular Office Supplies and Equipment Not Available in the Procurement Service, nine indicators were assessed, all showing very high compliance. Indicators like ensuring the amount does not exceed ₱1,000,000.00 and submitting purchase requests received perfect scores. Other indicators, such as extending submission deadlines and preparing abstracts of quotations, scored between 4.43 and 4.77. The overall compliance for this category averaged 4.65, maintaining the very high adjectival description. Overall, the LTO Region V demonstrated very high compliance across all assessed procurement methods, indicating effective adherence to procurement standards and procedures.
- The completed procurement projects of the Land Transportation Office for Fiscal Years 2022-2023 reveals that there were twenty (20) completed procurement projects for the fiscal year 2022 while there were twenty-two (22) for 2023. In the year 2022, there were thirteen (13) small value procurement projects that were completed with a percentage of 65.00; six (6) completed procurement projects under shopping with 30.00 % and 1 or 5.00 % under lease of real property and venue. In 2023, out of the twenty-two (22) total completed procurement projects, nine (9) or 40.91 % were procured under small value procurement, eight or 36.36 % under shopping and five (5) or 22.73% under lease of real property and venue.

- The issue in negotiated procurement that obtained the highest frequency of twenty-nine (29) is absence of technology with a rank of first. This is followed by difficulty tracking contracts with twenty-eight (28) with a rank of second; procurement bypass with twenty-seven (27) and third in rank. The next issue is lack of internal communication with twenty-six (26) or fourth in rank and poor supplier relationships with twenty-three (23) or fifth in rank. Along shopping, the issues with the highest frequency of twenty-nine (29) is obtained in the following with the same rank of second. These are lack of transparency, supply risk mitigation and supplier related issues. The last two (2) issues have the same frequency of seventeen (17); thus, both have the same rank of 4.5. These were purchases that were made outside the defined procurement process and inaccurate data.
- In the area of negotiated procurement, the identified issue was limited of technology. To address this, the researcher proposed to conduct an inventory of information technology resources on April 2024 by the IT head and staff of the Land Transportation Office Region V. After that needs assessment may be done to identify the needs in IT resources the following month. The Head of Office has a major role in this activity while will be followed by the preparation of the annual procurement plan of the office. Procurement of the needed IT resource cannot be done unless identified in the 2024 budget which was approved in 2023. The procurement plan and budget will undergo series of deliberation and consultation before its approval. Along the area of shopping, the first issue identified is lack of transparency. This could be partially resolved by the establishment of internal control mechanisms which being primarily by designating member of the Internal Control System and establishment of the Office. This could be probably be started on November till December by the Head of Office and the Human Resource Officer. The last two (2) issues since they were related will be tackled simultaneously. To address supply risk mitigation and supplier related issue, the researcher recommends timely payment of transactions as well as the delivery of procured items. This could be addressed by a strong tracking system of financial system, and documents by the Head of Office. The means of verification include vouchers and cheques that will substantiate for the transactions of goods and services.

## VII. CONCLUSION

Based from the findings, the researcher concludes the following:

- The Land Transportation Office of Region V successfully conducts procurement process along negotiated procurement in terms of small value procurement and lease of real property and venue as well as shopping.
- The level of compliance of the Land Transportation Office along negotiated procurement in terms of small value procurement and lease of real property and venue as well as in shopping in terms of unforeseen contingency

requiring immediate purchase and procurement of ordinary or regular office supplies and equipment not available in the Procurement Service was very high.

- The small value procurement have the most number of completed projects of the Land Transportation Office Regional Office No. V during the two (2) fiscal years covered in this study followed by shopping and lastly lease of real property and venue.
- The topmost issue along negotiated procurement was limited of technology while in shopping there were three (3) issues with the same rank and there were lack of transparency, supply risk mitigation and supplier related issue.
- A procurement plan may address the topmost issue along negotiated procurement and shopping.

## RECOMMENDATION

The researcher forwards the following recommendations:

- The Land Transportation Office Region 5 may evaluate further the different transactions and be authorized to manage its own resources independently from the Central Office.
- To sustain the very high level of compliance of the Land Transportation Office with the procurement processes, it should strengthen more the Bids and Awards Committee by providing additional manpower to monitor transactions of the office.
- The Land Transportation Office have to evaluate the completed procurement projects as to the impact of the performance of the office.
- The Regional Director of the Land Transportation be furnished with the issues identified in this paper for discussion and appropriate action.
- The agency procurement plan that addresses the issues in procurement process be presented to the concerned officials for consideration.

## REFERENCES

- [1]. World Bank, (2020). Global public procurement database: Share, compare, improve. <https://www.worldbank.org>. Accessed: September 18, 2023, 5:30 p.m.
- [2]. J. Stiglitz, (2019). Knowledge as a global public good. <https://cgt.columbia.edu>. Accessed: September 19, 2023, 9:20 p.m.
- [3]. O. Bawan, M. Marcos & A. Gabriel, (2017). E-Participation of selected professional students in the governance of Cabanatuan City in the Philippines. *Open Journal of Social Sciences* No. 5.

- [4]. Arneil G. Gabriel, (2017). Praxis in local legislative governance: Measure of organizational effectiveness of the component cities of Nueva Ecija, Philippines. <http://www.apjmr.com>. Accessed: September 18, 2023.
- [5]. G. Gabriel & Darwin U Ong, (2018). Linking transparency and accountability to local legislative performance in the Province of Nueva Ecija in the Philippines. *Journal of Public Administration and Governance*. Vol. 8, No 2.
- [6]. Nick Lochan, (2021). COVID 19 and its impact on procurement processes of organizations in the private and public sector within the Twente region. (Published Thesis, Master of Science in Business Administration Purchasing & Supply Management, University of Twente, Netherlands)
- [7]. Prakashkumar Hasmukhbhai Patel, (2017). A study on e-Procurement practices in selected organizations in Gujarat. (Dissertation, Doctor of Philosophy in Management, Gujarat Technological University, Ahmedabad)
- [8]. Lee Seoung-Taek, (2019). A study on the possibility of e-government procurement in China. (Published Institutional Research, Wonkwang University, South Korea, *Journal of Korea Trade*, Vol. 23, No. 6)
- [9]. Dennis Van Den Akker, Riad Samir Wakim, (2019). Sustainable public procurement as a driver of change: The case of surgical instrument. (Published Institutional Research, UPPSALA University. <http://uu.diva-portal.org>. Accessed: September 25, 2023)
- [10]. Charles Nguyo Mwangi, (2018). Contract management strategies in public procurement. (Thesis, <https://himolde.brage.unit.no>, Accessed: September 26, 2023, 5:30 p.m.)
- [11]. Anja Scholl & Doriyush Ubaydi, (2017). Impact of technology on corruption: A study of impact of e-procurement on process of various government purchases. (Thesis, Master of Science in Economic and Business Administration, Norwegian School of Economics)
- [12]. Francis Paul, (2020). Assessment of factors affecting procurement process in public sector: A case of Arusha City. (Thesis, Master of Business Administration in Procurement and Supplies Management, Institute of Accountancy Arusha)
- [13]. Julia Torres Canonigo, Key Jane D. Siega & Jose Guisadio, (2020). The impact of Government Procurement Reform Act to infrastructure development. (Published Institutional Research, Cebu Technological University-Main Campus, *International Journal of Social and Humanities Research*, Vol. 8, Issue 1)
- [14]. Angemil Mayette F. Magtalas, Marc Jon S. Flores, Rocido D. Domingo, Christopher Dave B. Musa & Vilma B. Ramos, (2019). Assessing the transparency practices in public bidding of Philippine Rice Research Institute in the Philippines. (Published Institutional Research, *Public Policy and Administration Research*, Vol. 9, No. 2)
- [15]. Shiela Mae L. Lupian-Poliran, (2015). Procurement processes in a state university in Mindanao: A case study. (Published Institutional Research, University of San Carlos, *National Business and Management*)
- [16]. Adoracion M. Navarro & Juan Alfonso O. Tanghal, (2017). The promises and pains in procurement reforms in the Philippines. Discussion Paper Series no. 2017-16. Philippine Institute for Development Studies, Quezon City)
- [17]. Juan Moshe M. Duyan, John John C. Venus & Karen Razelle M. Duyan, (2020). Level of awareness on the procurement law and its IRR by the Provincial Government of Kalinga employees. (Published Institutional Research, Kalinga State University, Philippines, *International Journal of English Literature and Social Studies*, Vol. 5, No. 6)
- [18]. Cristelita P. Lombres, (2020). Streamlining solution for procurement management through automation. (Published Institutional Research, Aurora State College of Technology, in Proceedings of the 1<sup>st</sup> International Conference on Psychology)
- [19]. C. B. Si, (2017). Knowledge of the procurement system and its relationship to completion of transaction in a government agency in Iloilo City, (Unpublished Master's Thesis, Central Philippine University, Jaro, Iloilo City)
- [20]. Kyll Deither E. Gabiana, Mark Anthony Polinar & Grace Caroline H. Baquero, (2017). The bidding process of the Cebu Provincial Government: A case study. *International Journal of Multidisciplinary: Applied Business and Education Research*, Vol. 4, No. 5.
- [21]. Maria Jihan Sangil, (2020). Exploratory data analysis of government procurement data to influence bidding decision and strategy in Albay, Philippines. Proceeding in the 7<sup>th</sup> International Conference on Behavioral and Social Computing.
- [22]. J. Hiwatig & T. M. Carvajal-Amanse, (2019). A study of the dynamics of public procurement in the Philippines using network analysis. Published Research. [site.aim.edu](http://site.aim.edu).