

Public Procurements Performance Measurement in Indonesian FDA According to Head of National Public Procurement Agency's Circular Letter Number 2 of Year 2021 Concerning Procurement Governance Index

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Abstract

Public procurement defined as purchasing process of goods, services and works, by governments. Government as public procurement entity are expected to conduct the process under highly standards, to report it transparently and to ensure its efficiency and effectiveness, under value of money principle. In accordance with this issue, Indonesia governments continuously develop public procurement system, led by The National Public Procurement Agency. E-procurement system was built, transactional covering the whole cycle, and public procurement regulations are revised as an adaptation of national economic development. In order to evaluate governance of procurement process, The Public Procurement Policy Agency develop set of performance indicator to reflect internal procurement governance of public procurement accounts, as issued in Head of National Public Procurement Agency's Circular Letter Number 2 Year 2021. This indicator also acts as a measurement aspect of the bureaucratic reform that must be implemented by government ministries/institutions, including The Indonesia Food and Drug Agency. The purpose of this study is to capture The Indonesia Food and Drug Agency procurements governance according to Head of Public Procurement Policy Agency's Circular Letter Number 2 Year 2021. Considering that the indicator has just implemented in 2021, there would be some internal hindrance that potentially influence the performance of public procurements which may affect its continuity. This condition can cause delays in the utilization of output so that the principles of efficiency and effectiveness can't be achieved. 25 internal public procurements practitioners and stakeholder participated in this research. 25 potential problems were identified and analyzed under Kepner-Tregoe situation appraisal. The result of this research expected to be useful to determine which public procurement strategies should be implemented to overcome obstacles.

Keywords

public procurement,
 bureaucratic reform,
 procurement governance index,
 Indonesia Food and Drug
 Agency, government policy,
 performance measurement



I. Introduction

Established in January 2000, Indonesia Food and Drug Administration Agency, in Bahasa Indonesia is called Badan Pengawas Obat dan Makanan (BPOM), is one of the government institutions which currently on the spotlight, since playing its strategic role in safeguarding and increasing Indonesians' quality of life during pandemic. According to Presidential Regulation of the Republic of Indonesia No. 80/2017 concerning the Indonesian

FDA, Indonesian FDA critical task include other commodities such as cosmetics, traditional medicine and biological product (e.g vaccine). (BPOM, 2020)

Indonesia FDA's Headquarter is in Jakarta, with 33 provincial office and in 2018, expanded with the additional of 40 district offices. These district offices commonly mentioned as Unit Pelaksana Teknis (UPT) in Indonesia act as headquarters extension for technical implementation in each office's catchment area. Routine tasks, such as laboratory testing, food and drug counselling, market monitoring, are carried out by them.

To ensure the continuity of programs, state budget is allocated to each office proportionally, money spent wisely and reported to the headquarters annually to be consolidated in Indonesia FDA's Financial Report. Accountability is a crucial point, as President mandated each government to reach Unqualified (Audit Opinion). To stress institution concern, Indonesia FDA stated one of its missions to manage clean, effective, and reliable government, to provide excellent public services in the field of Drugs and Food.

Public Procurement refers to government purchasing process of goods, services and works which outputs have direct affect into institution's function. For example, Indonesian FDA Laboratories need chemical reagent and microbiology media in order to conduct routine market sample analysis. Failure of reagent procurement process can cause delay to absence of sample analysis which further interrupt drug and food control process. At this state, society is on a stake for high risk of food and drug.

Success of procurement process determined by capability to organize operational, human resource and organization, so called good procurement governance which should be able to measure. The result of measurement itself will give feedbacks to the institution as a fundamental base for continuous improvement. The existence of the government is closely related to the function of public service (Karyono, 2019).

II. Review of Literature

2.1 Public Procurement

Procurement must be established under principles of efficient, effective, transparent, openness, competitive, fair, and accountable. Purposes of public procurement in Indonesia are:

- a. generating output under "value for money" principle
- b. intensify usage of domestic products
- c. increasing the role of micro, mall and cooperative enterprises
- d. increasing the role of national business

(Presidential Regulation of the Republic of Indonesia No. 16/2018 concerning Public Procurement). Public Procurement Process in general as shown in Figure 1. Planning as initial step of procurement cycle define as activities of identification, method and strategy and timetable. Planning stage started a year before financial year, because accurate planning is crucial to avoid mistakes which may lead into conflict precedence of procurement principles. In Preliminaries stage, planning documents are reviewed, updated, and detailed as preparation to produce Selection Plan documents in Selection Arrangement stage. Vendor Selection stage carried out to choose qualified vendor as regulated under Presidential Regulation concerning Public Procurement. This stage used to be a hotspot, but since electronic procurement was develop, integrity issue within the stage able to be eliminated. The chosen vendor who stated in Official Report of Tender will bind contract and start to work to provide good/service/work. Contractual implementation is crucial stage that affect quality of outputs as much as concern of integrity, since Contract Change Order and Re-negotiation are allowed, under certain condition. (Head of NPPA Decree No 11/2021).



Figure 1. Government Procurement Process

Source: Head of NPPA Decree No 11/2021

Electronic Public Procurement System (EPPS) commonly mentioned as Sistem Pengadaan Secara Elektronik (SPSE) in Indonesia is developed by The National Public Procurement Agency (NPPA), or in Indonesia acronym is known as LKPP, which was established on December 6th, 2007, based on Presidential Regulation No 106/2007. It is a non-ministerial government agency that reporting duty to President of the Republic of Indonesia. NPPA has authorities to be the only government agency to formulate strategic planning and development, policymaking as well as legal provision regarding public procurement handling that is dynamic.

EPPS existence meant to increase transparency and accountability, to increase market access and healthy competitiveness, to improve level of efficiency, to support monitoring and audit process and to fulfil the need of real-time information. EPPS provide feature in which cover each stage, transactionally, in such manner of data flow that should be followed accordingly.

2.2 Public Procurement Measurement

The Methodology for Assessing Procurement Systems (MAPS) provides a common assessment tool which can be used to assess the quality and effectiveness of public procurement systems. Generally, MAPS is covered around 4 aspects, consist of indicators and sub-indicators within:

1. Legislative, Regulatory and Policy Framework
2. Institutional Framework and Management Capacity
3. Procurement Operations and Market Practices
4. Accountability, Integrity and Transparency of the Public Procurement System

The Key Performance Indicators (KPIs) should be developed to gauge implementation of public procurement toward systems:

1. Efficiency of the public procurement cycle
2. Openness and transparency of the public procurement
3. Professionalism of the public procurement workforce
4. Contract performance management. (OECD, 2020)

In April 19th, 2021, Head of NPPA issued Circular Letter Number 2 of the year 2021 concerning Procurement Governance Index as an “Intermediate” Indicator Aspect in the Bureaucratic Reform Index. It gave detailed explanation on public procurement indicator as a part of Bureaucratic Reform program, in period of 2020-2024, which measure operational, human resources and organization performance. (SE LKPP, 2021)

First indicator is Utilization of Procurement Information System. Conformity level is used to utilize EPPS is used as an approach to measure efficiency, transparency and openness, professionalism and contract management through 5 sub-indicators. They are utilization of: a) procurement planning information system (SiRUP), b) e-Tendering/e-Selection, c) e-Purchasing, d) Non e-tendering and Non e-Purchasing, and e) e-Contract.

Second indicator is Human Resources Qualification and Competency. The indicator measures procurement functional position (namely PPBJ) occupancy in respect to formations

that have been calculated, namely formations that have obtained the determination of PPBJ needs from the Ministry of Administrative and Bureaucratic Reform or recommendations for PPBJ functional position needs from LKPP.

Third indicator is Maturity Level of Procurement Unit, consist of 9 Sub-Indicators within. Procurement Unit, abbreviated UKPBJ in Indonesia has characteristic of strategic, collaborative, performance oriented, proactive and continuous improvement capability, driver of added value creation to optimize benefits of government procurement. To this end, public procurement has been changing from administrative to a strategic governance tool. Maturity Level of Procurement Unit reflects its capability to organize procurement through variables which act as Sub-indicators. They are: a) procurement management, b) vendor management, c) performance management, risk management, organizing, Duties and Functions, Human Resurces Planning, Human Resources Development, Information System (LKPP Regulation 10, 2021).

2.3 Root Cause Analysis and Kepner-Tregoe

Root Cause Analysis (RCA) refers to process for investigating and reporting the causes of occasions, in order to find adequate corrective action to prevent recurrence, that carried out under complete logical thinking and evidence based. RCA involving five phases of data collection, assessment, corrective action, inform and follow-up. Common problem of undesirable outcome might form as physical root, human root and/or latent root. Physical roots usually tangible cause which find in very first place as a consequences of human decision error. Physical roots are surfaced by action or inaction of human, so call Human Roots. Latent Roots come as organizational cause, use to called as systematic cause as well. (Latino, 2011).

Kepner-Tregoe (1981) has introduced 4 patterns of analytical thinking: a) Assessing and Clarifying, b) Cause and effect, c) Making Choices, and d) Anticipating the Future. Based on those thinking patterns, 4 basic rational process for organizational context has developed. First, Situation Appraisal. It is a process where management situation is broken down into components, sorted into priorities and assigned into plan of action of future events. Second, Problem Analysis, is a rational process where problem can be found without explanation, by analysing cause and effect. Third, Decision Analysis, is rational process based on Choice making thinking pattern. And fourth, Potential Problem Analysis, is rational process which related to the future anticipation.

II. Research Methods

Indonesia FDA's Procurement Governance Index was quantified using secondary data from Procurement Unit's report. And then, qualitative method is used to conduct this research by carried out focus group discussion among public procurement practitioner, sub-coordinators and structural function of procurement unit within Indonesian FDA. Primary data gathered from FGD is used to build Root Cause Analysis (Fishbone). Situation appraisal of Kepner-Tregoe is used to scrutinize problems by priority.

III. Discussion

3.1 Procurement Governance Index Assessment

At first, weigh of each components were established, as shown in Table 1.

Table 1. Indicators and Sub-indicators' weight of Procurement Governance Index

No	Indicators	Sub-indicators	weight*
1	Utilization of Procurement Information System	a. SiRUP	20.0%
		b. e-Tendering/e-Selection	20.0%
		c. e-Purchasing	20.0%
		d. Non e-Tendering/Non e-Selection	Year 2022
		e-Contract	Year 2022
2	Human Resources Qualification and Competency	HR Qualification and Competency	20.0%
3	Maturity Level of UKPBJ	a. Variable of procurement management b. Variable of vendor management c. Variable of performance management d. Variable of risk management e. Variable of organizing f. Variable of Duties and Functions g. Variable of Human Resources Planning h. Variable of Human Resources Development i. Variable of Information System	20.0%
		Total	100.0%

*Head of NPPA Circular Letter Number 2 of the year 2021

3.2 Utilization of Procurement Information System

There are five sub-components that describe the organization's ability to control operational of procurement process.

a. Procurement Plan (SiRUP)

Procurement plan and strategy must be announced since it had established up until March 31st current year to promote transparency and to accelerate public procurement. (Presidential Instruction Number 1 Year 2015).

Formula to measure this Sub-indicator is:

$$SiRUP = \frac{\text{Total procurement budget announced in SiRUP}}{\text{Total procurement budget}} \times 100\%$$

Valuation criteria:

- Range of $90\% \leq SiRUP \leq 100\%$, is valued at 100 (one hundred)
- Range of $70\% \leq SiRUP < 90\%$, is valued at 75 (seventy-five)
- Range of $50\% \leq SiRUP < 70\%$, is valued at 50 (fifty)
- Less than 50% ($SiRUP < 50\%$), is valued at 0 (zero).

In half-year of 2021, Indonesia FDA has announced 94.85% of procurement plan, which is valued at 100. It means transparency and openness of Indonesia FDA in respect to procurement plan announcement is at max., however, deviation of 5.15% should be followed-up by conducting root cause analysis

b. E-Tendering/E-Selection

Formula to count this sub-indicator is:

$$e - TS = \frac{\text{Total packet has processed through e - tendering \& e - selection}}{\text{Total packet of tender \& selection announced in SiRUP}} \times 100\%$$

Valuation criteria, government organization that has:

- Implemented 100% (one hundred percent) of process through e-Tendering/e-Selection, is valued at 100 (one hundred)
- Has not implemented 100% procurement process through e-Tendering/e-Selection, is valued at 0 (zero).

2-layer valuation criteria emphasize the importance utilization of e-Tendering and e-Selection. While we are already aware importance of openness, transparency and professionalism by using EPPS, procurement unit can actually measure efficiency of public procurement by price comparison. First, a comparison between owner-estimate to budget, and second, a comparison between tender price to budget. Although this “price savings” is debatable because it is changing objectives of maximizing value of money, to realize savings always important for government especially with tight budget due to COVID-19 handling and state-debt (Spagnolo and Glas: 2021).

Per June 30th, 2021, utilization of e-tendering/e-selection in Indonesian FDA is 58.32%, then it should be valued at 0. Through EPPS can be seen that many tenders packet still on-going while there were also several packet that still hadn’t under Vendor Selection stage yet. These findings followed-up by conducting root cause analysis.

c. E-Purchasing

E-Purchasing is electronic method to procure goods and services that already registered in LKPP’s e-Catalogue or Online Store. E-Catalogue contain information of list, type, technical specification, price, appointed vendor and other information. Process of e-Purchasing is considered complete when all these steps are fulfilled:

- Registering e-Purchasing packet
- Negotiation (if any) and e-Purchasing packet approval
- Creating Purchasing Order/Contract
- Delivery of goods or services
- Hand-over of goods or services
- Payment
- Vendor’s performance evaluation

Formula to count this sub-indicator is:

$$e - Purchasing = \frac{\text{Total packet has processed through e - Purchasing}}{\text{Total packet of e - Purchasing in SiRUP}} \times 100\%$$

Valuation Criteria, government organization that has:

- finished 100% (one hundred percent) of process through e-Purchasing with respect to announced RUP, is valued at 100 (one hundred)
- finished process through e-Purchasing within range of $80\% \leq \text{e-Purchasing} \leq 99\%$, with respect to announced RUP, is valued at 75 (seventy-five)
- finished process through e-Purchasing within range of $60\% \leq \text{e-Purchasing} \leq 79\%$, with respect to announced RUP, is valued at 50 (fifty)
- finished less than 60% (sixty percent) of process through e-Purchasing with respect to announced RUP, is valued at 0 (zero)

Per half-year of 2021, Indonesian FDA has processed 43% of public procurement through e-purchasing.

d. Non-E-Tendering & Non-E-Purchasing

This sub-indicator requires obedience to report offline-public procurement method such as Direct Appointment or Direct Procurement (which is allowed under certain condition, with respect to Presidential Regulation of Public Procurement) either for transactional or information report. This sub-indicator not to measure in 2021, will officially be measured in 20211 (object of measurement is taken from data within 1 January to 31 December 2021).

Formula to count this sub-indicator is:

$$\text{NeT and NeP} = \frac{\text{Total packet has processed through NeT and NeP}}{\text{Total packet of NeT and NeP}} \times 100\%$$

Valuation Criteria:

- Government organization has implemented more than 60% (sixty percent) SPSE is valued at 100 (one hundred)
- Government organization has implemented within range of $40\% < \text{e-Purchasing} \leq 60\%$ (sixty percent) is valued at 75 (seventy-five)
- Government organization has implemented within range of $20\% < \text{e-Purchasing} \leq 40\%$ (sixty percent) is valued at 50 (fifty)
- Government organization has implemented less or equal to 20% (twenty percent) process through SPSE is valued at 0 (zero).

e. E-Contract

This sub-indicator measures Contract Performance Management through contents of document and timetable while quality management of contractual stage and hand-over reflect professionalism. This sub-indicator not to measure in 2021, will officially be measured in 20211 (object of measurement is taken from data within 1 January to 31 December 2021).

Formula to count this sub-indicator is:

$$\text{e - Contract} = \frac{\text{Total packet has utilized e - Contract}}{\text{Total packet of utilized SPSE for vendor selection}} \times 100\%$$

Valuation Criteria:

- Government organization has utilized $\geq 20\%$ (twenty percent) of e-Contract is valued at 100 (one hundred)
- Government organization has utilized $< 20\%$ (twenty percent) of e-Contract is valued at 0 (zero).

f. Human Resources Qualification and Competency

Formula to count this component is:

$$HR\ qualification\ and\ competency = \frac{\text{number of PPBJ in Ind FDA}}{\text{Total formations of PPBJ in Ind FDA}} \times 100\%$$

Valuation Criteria, when this indicator is:

- $\geq 75\%$ (seventy five percent) to achieve value of at 100 (one hundred)
- within range of equal to 60% (sixty percent) to $< 75\%$ (seventy five percent) to achieve value of at 80 (eighty)
- within range of equal to 45% (forty five percent) to $< 60\%$ (sixty percent) to achieve value of at 60 (sixty)
- within range of equal to 30% (thirty percent) to $< 45\%$ (forty five percent) to achieve value of at 40 (forty)
- within range of equal to 15% (fifteen percent) to $< 30\%$ (thirty percent) to achieve value of at 20 (twenty)
- $< 15\%$ (fifteen percent) to achieve value of 0 (zero).

Currently, HR Qualification and Competency of Indonesian FDA's valuation is 59.7% (40 of 67 PPBJ functional position), thus score 60.

g. Maturity Level of Procurement Unit

Five level of Procurement Unit maturity, respectfully, are:

- a. Initiation. It is passive Procurement Unit in term of responding to every request, ad-hoc and has not reflected the expansion of functions within Procurement Unit.
- b. Essentially. In this level, Procurement Unit focuses on the basic functions, which is the selection process. It has a segmented working pattern and has not formed collaboration between procurement function.
- c. Proactive. Procurement Unit focuses to customer need through collaboration, both internal and external, to strengthen planning stage.
- d. Strategic. Procurement Unit which carries out innovative, integrated, and strategical action to support the achievement of organizational performance.
- e. Superior. In this stage, Procurement Unit continuously create added value and implement best practice, so that it become the role-model and mentor to other Procurement Unit. (LKPP Norma Standar Kematangan: 2019)

Procurement Unit in each government organization is mandated to reach Proactive level to support National Strategy Against Corruption. This model related to organizational change theory, refers to adaptation on disruptions caused by both internal and external factors. Changes, as responds to disruptions, are expected to improve performance of, not only the procurement unit, but also to organization in a whole.

Key Drivers of each variable in general are given in Table 2. These Key drivers have different character in each maturity level.

Table 2. Key Drivers of variables of Maturity Levels

Domain	Variable	Key Drivers
1. Process	a. Procurement Management	<ul style="list-style-type: none"> • Focused on how Procurement Unit's ability to manage procurement's chain • Sufficient procedures to support Procurement Unit's role
	b. Vendor Management	<ul style="list-style-type: none"> • Interaction and socialization to vendor • Vendor performance analysis
	c. Performance Management	<ul style="list-style-type: none"> • Scope of performance management in application • Utilization of the results of performance management for the benefit of the organization
	d. Risk Management	<ul style="list-style-type: none"> • Scope of risk management that being applied into procurement chain • Utilization of the results of risk management for the benefit of the organization
2. Institutional	e. Organizing	<ul style="list-style-type: none"> • Procurement Unit's capability to support organization's vision and strategy • Procurement Unit's position within organization
	f. Duties and Functions	<ul style="list-style-type: none"> • Scope of customer service, both internal and external organization • Internal synergy which creates value to the organization
3. Human Resources (HR)	g. HR Planning	<ul style="list-style-type: none"> • Needs analysis and HR occupancy • Recruitment of Procurement Unit's HR
	h. HR Development	<ul style="list-style-type: none"> • Competency development of Procurement Unit's HR • Performance management of Procurement Unit's HR
4. Information System	i. Information System	<ul style="list-style-type: none"> • Automation coverage to procurement's chain • Availability of data and information for Procurement Unit's stakeholder

Procurement Unit should pass qualification of 9 variables through assessment procedure by NPPA to reach level 3 proactive.

Valuation Criteria:

- Procurement Unit reach 9/9 proactive level, is valued 100 (one hundred)
- Procurement Unit reach 8/9 proactive level, is valued 80 (eighty)
- Procurement Unit reach 7/9 proactive level, is valued 60 (sixty)
- Procurement Unit reach 6/9 proactive level, is valued 40 (forty)
- Procurement Unit reach 5/9 proactive level, is valued 20 (twenty)
- Procurement Unit < 5/9 proactive level, is valued 0 (zero).

Currently, Indonesian FDA has passed 6/9 proactive level.

NPPA has performed temporary assessment of Procurement Government Index in half-year of 2021. The result, compare to self-assessment, as shown in Table 3.

Table 3. Result Comparison of Indonesia FDA Self-assessment and NPPA Half-year Assessment

No	Indicators	Sub-indicators	weight*	NPPA Half-year Assessment	Ind FDA Self-assessment
1	Utilization of Procurement Information System	a. SiRUP	20.0%	20	20
		b. e-Tendering/e-Selection	20.0%	20	0
		c. e-Purchasing	20.0%	0	0
		e. Non-e-Tendering/Non-e-Selection	Year 2022	N/A	N/A
		e-Contract	Year 2022	N/A	N/A
2	Human Resources Qualification and Competency	HR Qualification and Competency	20.0%	12	12
3	Maturity Level of UKPBJ	a. Variable of procurement management b. Variable of vendor management c. Variable of performance management d. Variable of risk management e. Variable of organizing f. Variable of Duties and Functions g. Variable of Human Resources Planning h. Variable of Human Resources Development i. Variable of Information System	20.0%	4	4
Total			100.0%	56	36
Target (year 2021)				N/A	64

A point difference on utilization of e-Tendering should be confirmed to NPPA.

3.3 Root Cause Analysis and Kepner-Tregoe

A total score of 56 means “a little lack” or “kurang” in Bahasa Indonesia. To be bold, that this is half-yearly measurement, means that it is not final score of indicators. However, Human Resources Qualification and Competency indicator can’t be upgraded further in year 2021 because human resource occupancy would encounter bureaucratic issue.

25 findings were identified after performing focus group discussion and plotted into Fishbone. Categories of those findings are management, method and procurement system, human resources, procurement planning and learn & growth process. Learn & growth process

category was created for important findings that possibly able to be solved in line with Indonesian FDA growth.

Kepner-Tregoe Situation Appraisal is used to rationalize by assessing and sorting, with main goal to reduce confusion of problem complexity, so that priorities can be set, and action can be delegated. Criteria for sorting findings are given in Table 4, while result of analysis is given in Table 5

Table 4. Kepner-Tregoe Performance Score Criteria

Score criteria	Urgency	Trends	Impact (affect to KPI)
1	Years	Very Low	Affecting sub-component of 1 component
2	Half-years	Low	Affecting parts of sub-components of more than 1 component
3	Quarters	Medium	Affecting 1 full components
4	Months	High	Affecting 2 full components
5	Weeks	Very High	Affecting 3 full components

Table 5. Priorities of Problems using Kepner-Tregoe

No	Issues Category	Result	Priority
1	Management	8.5	3
2	Method and procurement system	10.2	1
3	Human resources	8.25	4
4	Procurement planning	9.5	2
5	Learn & growth process	10.3	possibly able to be solved along with growth of organization

IV. Conclusion

Root Cause Analysis and Situation Appraisal can be used for government organization to find hindrance that might be affecting performance. In this case, combination of those methods is executed to analyse root cause of lack-result of half yearly Procurement Governance Index, according to Head of National Public Procurement Agency's Circular Letter Number 2 of Year 2021.

References

- BPOM. (2020). Laporan Kinerja Badan Pengawas Obat dan Makanan Tahun 2020. Jakarta
- BPOM. (2020). Peraturan BPOM Nomor 22 Tahun 2020 tentang Organisasi dan Tata Kerja Unit Pelaksana Teknis di Lingkungan Badan Pengawas Obat dan Makanan. Jakarta.
- Presiden RI. (2018). Peraturan Presiden Nomor 16 Tahun 2018 tentang Pengadaan Barang dan Jasa Pemerintah.
- Presiden RI. (2021). Peraturan Presiden Nomor 12 Tahun 2021 tentang Perubahan atas Peraturan Presiden Nomor 16 Tahun 2018 tentang Pengadaan Barang dan Jasa Pemerintah.
- LKPP. (2021). Peraturan Kepala Lembaga Kebijakan Pengadaan Barang dan Jasa Pemerintah No 11 Tahun 2021 tentang Pedoman Perencanaan Pengadaan Barang/Jasa Pemerintah
- OECD (2017), Public Procurement for Innovation: Good Practices and Strategies, OECD Public Governance. Reviews, OECD Publishing, Paris.
<http://dx.doi.org/10.1787/9789264265820-en>

- LKPP. (2021). Surat Edaran Kepala Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah Republik Indonesia Nomor 2 Tahun 2021 tentang Penjelasan Indeks Tata Kelola Pengadaan Minimal Baik sebagai Aspek Indikator “Antara” Dalam Indeks Reformasi Birokrasi. Jakarta
- LKPP. (2021). Peraturan Kepala Lembaga Kebijakan Pengadaan Barang dan Jasa Pemerintah No 10 Tahun 2021 tentang Unit Kerja Pengadaan Barang dan Jasa
- Spagnolo, Giancarlo, Andreas H. Glas. (2021). Chapter 4 Calculating the Costs and Savings of Public Procurement. *The Challenges of Public Procurements Reforms*. Routledge. London and New York.
- LKPP. (2019). Norma Standar Prosedur Manual Model Kematangan UKPBJ. Jakarta
- Presiden RI (2015) Instruksi Presiden RI No 1 Tahun 2015 tentang Percepatan Pelaksanaan Pengadaan Barang/Jasa Pemerintah
- Latino, Robert J., Kenneth C. Latino, Mark A. Latino (2019). *Root Cause Analysis*. CRC Press Taylor & Francis group. 4th Edition. Boca Raton.
- Karyono, O., and Agustina, K. (2019). Determining the Priority Strategy in the Implementation of E-Government through Swot Analysis Model. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)* Vol 2 (2): 66-74.
- Kepner, Charles H, Benjamin B. Tregoe. (1981). *The New Rational Manager*. Princeton Research press. New Jersey