

Factors Influencing the Selection of Reservoir Construction Providers through the E-Purchasing Method: A Systematic Literature Review at the Jakarta Water Resources Department

Aditya Putra¹, Agung Wahyudi Biantoro²

^{1,2}Department of Civil Engineering, Universitas Mercu Buana, Jakarta, Indonesia

ABSTRACT: Water resources activities that use E-Purchasing through electronic catalogs begin with the procurement of goods and the installation of waterways in the Greater Jakarta area. However, for reservoir/retention basin development, which is implemented through tender or self-management mechanisms, the procurement of construction services via provider selection—such as tenders—has been criticized in recent years for appearing to prioritize the lowest price. In response, the Water Resources Office, in the 2022 Fiscal Year, initiated several reservoir/small lake/retention basin developments using the E-Purchasing mechanism through the local electronic catalog provided by the GREATER Jakarta Provincial Goods/Services Procurement Service Agency. The adoption of the E-Purchasing method via electronic construction catalogs for reservoir/retention basin construction is a new approach, which has encountered numerous challenges during provider selection and activity implementation. To ensure the selection of capable service providers for construction contracts, it is essential to identify the dominant factors influencing Commitment-Making Officer/Budget User in selecting providers for reservoir/small lake/retention basin development construction works using the E-Purchasing method through catalogs. The objective of this research is to identify and analyze the most dominant factors affecting the selection of providers for reservoir/retention basin construction works at the Greater Jakarta Provincial Water Resources Office using the E-Purchasing method via electronic catalogs. This study employs a quantitative research method, with data collected through research instruments such as questionnaires and interviews. Data processing is conducted using the Statistical Product and Service Solutions (SPSS) application to perform tests on questionnaire validity, questionnaire reliability, normality, correlation, classical assumptions, and factor analysis. The results include the formation of selection factors for providers using the E-Purchasing procurement method via electronic catalogs for reservoir/small lake/retention basin development and the identification of dominant factors influencing the selection of providers under this method.

KEYWORDS: E-Purchasing, Electronic Catalog, Reservoir/Small lake/Retention, Dominant Factors.

I. INTRODUCTION

In the implementation of goods and services procurement, as regulated by Presidential Regulation of the Republic of Indonesia Number 12 of 2021 concerning Amendments to Presidential Regulation Number 16 of 2018 on Government Procurement of Goods/Services, Article 38 Paragraph (1) outlines the methods for selecting providers of Goods/Construction Work/Other Services, which include: a. E-Purchasing; b. Direct Procurement; c. Direct Appointment; d. Fast Tender; and e. Tender.

Water resources activities that utilize E-Purchasing through electronic catalogs begin with the procurement of goods and the installation of water channels in the Greater Jakarta area. However, in recent years, the implementation of reservoir/small lake/retention basin development through a tender mechanism has faced criticism for appearing overly focused on the lowest price. In response, the Water Resources Service, in the 2022 Fiscal Year, has trialed several reservoir/small lake/retention basin development projects

using an E-Purchasing mechanism via the local electronic catalog provided by the Greater Jakarta Provincial Goods/Services Procurement Service Agency.

This approach represents a new method for the construction of reservoirs, resulting in the application of general regulatory guidelines by Commitment-Making Officer/Budget User in selecting providers. However, field implementation has revealed issues such as delays in project completion and the need for renovations in some cases. Therefore, future evaluations are necessary to improve the selection process for providers using the E-Purchasing mechanism via electronic catalogs, particularly regarding selection indicators and dominant factors to guide Commitment-Making Officer/Budget User in making informed decisions.

The following provides data on reservoir/small lake/retention basin development packages for the 2022 Fiscal Year at the Greater Jakarta Provincial Water Resources

“Factors Influencing the Selection of Reservoir Construction Providers through the E-Purchasing Method: A Systematic Literature Review at the Jakarta Water Resources Department”

Service that utilized the E-Purchasing mechanism, as summarized in Table 1 below.

Table 1. Reservoir Development Packages E-Purchasing Method via Electronic Catalog of GREATER Jakarta Province Water Resources Service

No.	Package Name	Budget (IDR)	Contract Type
1	Construction of the Cilangkap Reservoir	15.300.000.000,00	Unit price
2	Construction of the Aseni Reservoir	30.660.506.752,00	Unit price
3	Construction of the Munjul Reservoir	20.100.000.000,00	Unit price
4	Construction of the Mabas Hankam (Waduk Wanatirta) Reservoir	30.581.433.000,00	Unit price
5	Construction of the Waduk Belibis Segmen I Reservoir	9.277.894.515,00	Unit price

In implementing reservoir construction, the e-purchasing method using an electronic construction catalog is a relatively new approach. However, there are numerous challenges in the process of selecting providers and implementing activities.

The aims of this research are as follows:

1. To identify and analyze the process of selecting a provider for reservoir construction work at the greater Jakarta Provincial Water Resources Service using the e-purchasing method through a competent electronic catalog.
2. To identify and analyze the factors that influence the selection of reservoir construction work providers at the greater Jakarta Provincial Water Resources Service using the e-purchasing method via an electronic catalog.
3. To identify and analyze the most dominant factors influencing the selection of reservoir construction work providers at the greater Jakarta Provincial Water Resources Service using the e-purchasing method via an electronic catalog.

Data on the Reservoir Development Research Objects Using the E-purchasing Method via the Jakarta Water Resources Service Electronic Catalog:

1. Construction of the Cilangkap Reservoir

Sepakat Street I, RT.1/RW.1, Cilangkap, Sub-District Cipayung, East Jakarta City, Special Capital Region of Jakarta 13870

Reservoir area = 4.38 Ha.



Figure 1. Construction of the Cilangkap Reservoir 2022

2. Construction of the Aseni Reservoir

H. Aseni Raya Street, Semanan Village, Kalideres District, West Jakarta Administrative City.

Reservoir area = 3.08 Ha



Figure 2. Construction of the Aseni Reservoir 2022

3. Construction of the Munjul Reservoir

Dalang Alley 125-87, RT.14/RW.2, Munjul, Sub-District Cipayung, East Jakarta City, Special Capital Region of Jakarta 13850

Reservoir area = 6.27 Ha



Figure 3. Construction of the Munjul Reservoir 2022

II. RESEARCH METHOD

The type of research conducted is quantitative, utilizing the processing of research instrument data in the form of questionnaires and interviews. The data analysis employs the Statistical Product and Service Solutions (SPSS) method for conducting questionnaire validity tests, reliability tests, normality tests, correlation tests, classical assumption tests, and factor analysis. These analyses aim to identify the dominant factors influencing Commitment-Making Officer/Budget User in selecting providers for reservoir construction work using the e-purchasing method via an electronic catalog.

In this research, the variables are based on previous studies, the procurement process up to implementation, and applicable regulations. The variables are first reviewed and validated by the supervisor to ensure they align with the facts and requirements of the study. The variables in this research address the following problems:

1. What factors influence the selection of providers for reservoir construction work at the Greater Jakarta Provincial Water Resources Service using the e-purchasing method via an electronic catalog?
2. What are the dominant factors influencing the selection of providers for reservoir, construction work at the greater Jakarta Provincial Water Resources Service using the e-purchasing method via an electronic catalog?

Variable Indicator

Several variables that can be used in this research are: X1. Administrative Qualification dengan indikator: a) Have a business permit according to the required field; b) Have a Taxpayer Identification Number and Confirmation of Taxpayer Status; c) Have a Deed of Company Establishment and its Amendments; d) Not currently subject to blacklist sanctions; e) Not under court supervision, not bankrupt and its business activities are not being stopped; f) Leaders and Management of Business Entities are not currently in criminal proceedings; g) Leaders and Management of Business Entities are not employees of Ministries/Institutions/Regional Apparatus; h) Verify Provider Qualification Data on the SIKAP application. Next variable is X2. Technical Qualification Criteria with indicators: a) Fulfill all item components in the Electronic Catalog in accordance with the Bill of Quantity; b) Have the required personnel, namely Natural Resources Experts, K3 Experts, Hydrology/Hydraulics Experts, Geotechnical Expertsothers; c) Have the ability to provide equipment as required; d) Have a Quality Management Certificate, Environmental Management Certificate and Occupational Safety and Health Certificate; e) Submitting the Pre-Contract Occupational Safety and Health Plan Form (Pre RK3K); f) Submit a Letter of Support or Cooperation Agreement from the Manufacturer/Agent/Distributor/Producer/Principal; g) Fulfilling Remaining Capability Packages (Offer Statement Letter). Variable X3. Experience Criteria with indicators: a)

Have experience of similar work by submitting proof of contract and minutes of handover; b) Have HSE Equipment; c) Accurate quality of work implementation; d) Timeliness of work implementation; d) Have carried out product mockups / introductions; e) Able to coordinate with all parties in the field; f) Able to re-check planning designs; g) Timeliness of work administration. Variable X4. Price with indicators: a) Reasonable prices with the best quality; b) Having a price formation structure for each product; c) Have proof of the last transaction for the product being negotiated; d) Able to provide prices including costs according to field conditions (etc. work access). Variable X5. Other Commitments and Responsibilities with indicators: a) Responsible for carrying out repairs in the field during maintenance; b) Commitment to accompany Service Users during inspections; c) Compliance and responsibility for inspection results; d) Commitment to respond well to Non-Governmental Organizations; e) Commitment to the legal process; f) Commitment to supporting technical service work that supports work.

The research flow chart can be seen in Figure 4

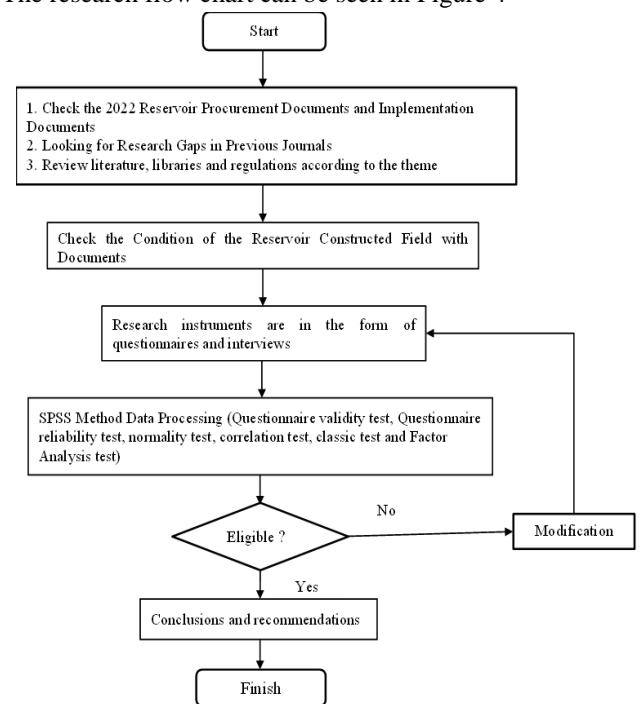


Figure 4. Research Stages

III. RESULT AND DISCUSSION

In this research, there is several literatures on E-Purchasing via Electronic Catalogs.

1. Identify Groups of Articles

A study was conducted by Ika Kurnia, Suryawan Murtadi, Ngudiyono, and Tri Sulistyowati (2022) with the title Risk Assessment Using the Road Maintenance Construction Catalog Using Factor Analysis. The research focused on road maintenance, utilizing various methods such as data collection (review of the implementation of the West Nusa Tenggara Province road maintenance catalog and catalog

“Factors Influencing the Selection of Reservoir Construction Providers through the E-Purchasing Method: A Systematic Literature Review at the Jakarta Water Resources Department”

socialization materials) and data testing, which included: Questionnaire Validity Test, Questionnaire Reliability Test, Bartlett's Test of Sphericity, Kaiser-Meyer-Olkin (KMO) Test, Measures of Sampling Adequacy (MSA). The research results indicated that the validity tests on 28 initial risk variables led to the reduction of the variables to 27. The study was published in the *ejournal.binawakya.or.id* journal (1).

The results of research conducted by Imam et al. (2022), titled *Selection of Construction Work Providers by Service Users Using the E-Purchasing Method at the Greater Jakarta Province Highways Service*, focused on the activities of the Greater Jakarta Bina Marga Service (Roads/Sidewalks). The study employed quantitative research methods, utilizing Microsoft Excel to calculate Relative Importance Index (RII) values. Data processing tests included validity and reliability tests. The research findings identified a sequence of factors influencing service users in selecting e-purchasing construction work providers at the Greater Jakarta Province Highways Service. This study was published in the *Construction Journal (Sinta 4)* (2).

According to Malinda (2018), in her study titled *The Dominant Inhibiting Factor in the Use of E-Catalogs in the Procurement Process for Road Construction Projects Using the SPSS & RII Method*, the research focused on roads and employed survey methods, as well as SPSS and Relative Importance Index (RII) techniques. The results revealed that the dominant factor hindering the procurement of goods and services using the e-Catalog system is the lack of knowledge about the e-Procurement system. This study was published in *Civil Engineering (Sinta 3)* (3).

Research (Lestyowati, 2018) with the title *Analysis of E-Purchasing Problems in the Procurement of Goods and Services in Work Units*, where the object of research is the Goods Procurement Process. The research method used is descriptive analysis with a qualitative research type, and the method used is in-depth interviews. The research results show that there are several obstacles in implementing electronic catalogs. Not all goods and services needed by work units are included in the electronic catalog. There are still other costs beyond the prices listed in the catalog. In some small locations, the prices offered in electronic catalogs are higher than elsewhere as stated on *Jurnal.bppk.kemenkeu.go.id* (4).

(Kristianto, 2022) has researched the title *Negotiating E-Purchasing Catalog Prices in Government Procurement of Goods/Services*. The object of the research is the Goods Procurement Process, using qualitative descriptive research methods. The research results show that Commitment-Making Officer in negotiating prices for e-Purchasing catalogs have been given technical guidance by LKPP through the Decree of the Chair of LKPP Number 122 of 2022 concerning Procedures for Organizing Electronic Catalogs. From the *Goods and Services Procurement Journal* (5). Results of research conducted by (Ariesta, 2021) entitled *Effectiveness of Procurement of Goods and Services Through*

E-Catalog in Kebayoran Lama Village, South Jakarta Administrative City. The research object is goods, using descriptive research methods. The results of the research show that there is a lack of effectiveness in the implementation of the procurement of goods and services in Kebayoran Lama District, South Jakarta Administrative City, Greater Jakarta Province, as indicated by indicators including production, efficiency, satisfaction, adaptation, and development. From *Jurnal.ascarya.or.id* (6).

According to (Yuhanah et al., 2021) entitled *Research on E-Purchasing Risk Identification in Goods and Services Procurement Activities at the Bandung State Polytechnic*. The object of research is goods, with quantitative and qualitative research methods using a case study approach. The research results identified thirteen risks from three stages. From *journal.polban.ac.id* (7).

(Iqbal, 2020) conducted research entitled *The Effect of Implementing E-Catalogs in Procurement of Government Goods/Services on MSMEs*. The object of the research is the Goods Procurement Process, with normative juridical research methods. The results of the research show that the application of e-Purchasing makes it easier to implement. E-Purchasing is also effective in controlling State Budget of Revenues And Expenditures spending on state-owned goods. From *USM LAW Journal Review (Sinta 3)* (8).

According to (Barjanawati & Suryaningrat, 2022) with the title *Research Overview of the Application of E-Purchasing in Drug Procurement at the West Kalimantan Health Service Pharmacy Installation*. The object of research is medicine, with research methods in a qualitative approach. The research results show that the application of e-Purchasing makes it easier to implement. E-Purchasing is also effective in controlling State Budget of Revenues and Expenditures spending on state-owned goods. From the *Journal of the National Pharmaceutical Society* (9).

(Purnomo, 2020) with the title *Research Analysis of the Implementation of Electronic Procurement of Goods/Services in the Gresik Regency Government*. The object of the research is the Goods Procurement Process, with a normative juridical research method. The research results show that if the electronic goods/services procurement process is carried out in accordance with the principles of good goods/services procurement, it will minimize the occurrence of irregularities, abuse, and fraudulent practices at each stage of goods/services procurement, which cause harm to state finances. From *Airlangga Development Journal* (10).

Research entitled *The Relationship between the Application of Electronic Catalogs to Procurement Efficiency and Drug Availability* was conducted by (Andryani Ningsih, Achmad Fudholi, 2015). The object of the research is medicine, with a descriptive analytical research method with a cross-sectional survey design. The research results show the implementation of e-catalogs, both by e-purchasing and manual-purchasing, including indicators of preparation,

implementation, and benefits. Constraints have a significant relationship with the efficiency of procurement and the availability of medicines in Class B Hospitals in Yogyakarta. From *Journal of Pharmaceutical Management and Services* (Sinta 2) (11).

The object of the research is the Goods Procurement Process, using research methods in the Structural Model with Partial Least Squares (PLS). The research results, according to (Luh Putu Resti, Lilik Handajani, 2016), reveal that e-Procurement has a role in suppressing fraudulent procurement of goods/services by local governments on Lombok Island. Taken from Onesearch.id with the title *Research on the Role of E-Procurement in Fraud Prevention in Regional Government Procurement of Goods/Services on Lombok Island*. (12).

The results of the research entitled *Research on Efforts to Prevent Corruption Crimes in Government Procurement of Goods/Services Through the Implementation of Direct Purchasing Based on an Electronic Catalog System (E-Purchasing)*, where research conducted by (NS, 2015) is the Implementation of purchasing through an electronic catalog system (E-Purchasing) has an impact on efforts to prevent corruption in the procurement of goods/services. Taken from the *Civil Engineering Journal*. The object of the research is the Goods Procurement Process, using Qualitative research methods. (Sinta 2) (13).

According to (Zahra et al., 2022) entitled *Research on the Role of E-Purchasing in Reducing Government Procurement Fraud Through Expanding Market Access*. The object of the research is the Goods Procurement Process. The research method used in analyzing the data was Structural Equation Modeling (SEM) with the support of the Partial Least Square program (WarpPLS 7.0) to test the relationship between the variables studied. The research results show that the implementation of e-purchasing directly reduces the level of fraud in government procurement in Indonesia. From *International Journal of Data and Network Science* (Scopus Q2) (14).

From the *Journal of Pharmaceutical Management and Services*, according to research conducted by (Sutriatmoko et al., 2015) with the title *Research Analysis of the Implementation of E-Procurement of Medicines with E-Catalogue Based E-Purchasing Procedures in District/City Health Services in Central Java*. The object of the research is medicine, using an analytical descriptive research method through cross-sectional surveys. The research results show that the variables of data management and control, quality of results and production, as well as relationships with work partners, both partially and simultaneously, influence the performance of e-procurement of drugs using e-catalog based e-purchasing procedures, with a significance value of 0.000. Performance of e-procurement of medicines using e-catalogue procedures. E-catalogue-based purchasing has an

effect on the efficiency of medicine procurement with a significance value of 0.001. (Sinta 2) (15).

The research method uses Relative Importance Index (RII) analysis, and the results of the research are that two important factors are obtained, namely: 1) "borrowing a flag" ("Proxy Tendering" atau "Fronting") to participate in the auction; 2) there is a "pattern" of bids by auction participants in the context of unfair competition. Research conducted by (Kautsariyah & Hardjomuljadi, 2015) entitled *Deviation Analysis in the Selection Process of Electronic Construction Service Providers in Regional Government*. The object of the research is the Procurement Process. From *Construction Journal* (Sinta 4) (16).

(Prihastuti, 2014) with the title *Research on Inhibiting Factors in the Implementation of Electronic Procurement of Goods/Services (E-Procurement) at the Papua Province Public Works Service*. The research object is the Procurement Process, with research methods using Relative Importance Index (RII) analysis. The research results show that technology, human resources, and legal factors are inhibiting factors in implementing e-Procurement at the Public Works Department of Papua Province. From the *National Seminar on Technology Management* (17).

Taken from the *MDPI Journal*, with the title *Research Evolution of Electronic Procurement Contemporary Review of Strategy Adoption and Implementation*. The research object is the Goods Procurement Process, using comprehensive systematic literature review (SLR) and PLR research methods. According to (Albert Chan, 2022), the results of his research reveal the emergence of electronic procurement (e-procurement) revolutionizing the operation of traditional procurement schemes, which use a manual approach in procuring goods, works, and construction services for other infrastructure-related projects in the AEC sector (18).

Research entitled *Procurement of Goods/Services and Electronically at the Pekanbaru City Cooperatives and UMKM Service in 2014*, conducted by (Hasibuan, 2014). The research object is the Procurement Process and uses descriptive qualitative research methods. The results of the research were an announcement stating that the procurement of goods and services at the Pekanbaru Cooperatives and UMKM Service was quite good. From *JOM Fisip UNRI* (19).

The object of the research is the Goods Procurement Process, using qualitative research methods, carried out by (Ahmad, Abd Kadir, 2020) with the title *Implementation of E-Procurement in the Procurement of Goods and Services in the Goods and Services Procurement Services Section of the Makasar City Regional Secretariat*. The research results show that there are five indicators. From *Journal of Public Policy and Management* (20).

2. Identify Research Articles

In this section, we will discuss the identification of articles based on the year of publication, research methods, and research objects used. The results can be seen in Figure 6.

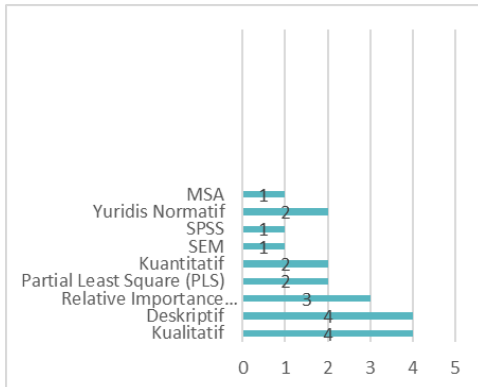


Figure 5. Journal Publication Research Methods

From figure 5, we can see journal publications based on research methods. The total number of journals is 20: 1 journal uses MSA, SPSS, and SEM; 2 journals use Normative Juridical, Quantitative, and PLS; 3 journals use RII; and 4 journals use Descriptive and Qualitative methods.

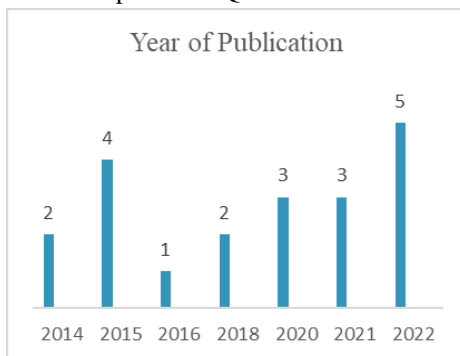


Figure 6. Year of Journal Publication

From the picture 6, we can see that the total number of journals is 20: 1 journal was published in 2016, 2 journals were published in 2014 and 2018, 3 journals were published in 2020 and 2021, 4 journals were published in 2015, and 5 journals were published in 2022.

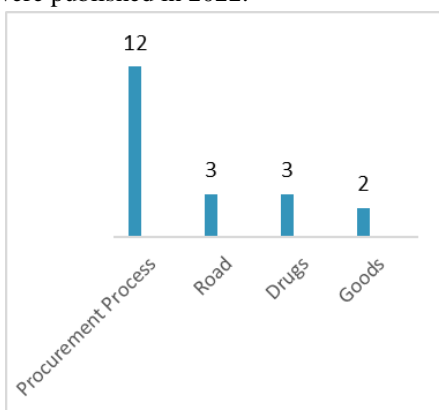


Figure 7. Journal Publication Research Objects

From figure 7, we can see that, based on the research object, 12 journals focus on the procurement process, 3 journals

focus on roads, 3 journals focus on medicines, and 2 journals focus on goods.

IV. CONCLUSIONS

From the 20 journals reviewed, it can be concluded as follows: the implementation of E-Purchasing through Electronic Catalogs is based on research methods, where 1 journal contains MSA, SPSS, SEM (5%), 2 journals contain Normative Juridical, Quantitative, PLS (10%), 3 journals contain RII (15%), and 4 journals contain Descriptive and Qualitative methods (20%). Based on the year of publication, the highest number of journals conducting E-Purchasing research via Electronic Catalogs is in 2022, with 5 journals, whereas in 2016, the lowest number is 1 journal. For research objects, the majority (12 journals) focus on the procurement process, while the least (2 journals) focus on goods. Meanwhile, from the results of the discussion, it can be concluded as follows:

1. The dominant factors in the selection process for Reservoir/Small lake Construction Providers using the E-Purchasing Method via Electronic Catalog at the Jakarta SDA Service are: X2. Technical Qualification Criteria, X1. Administrative Qualification Criteria, X3. Experience Criteria, X4. Price, and X5. Other Commitments and Responsibilities.
2. Technical Qualification Criteria are the most dominant factor according to Service Users in the selection of Reservoir/Small lake Construction Providers using the E-Purchasing Method via Electronic Catalog at the Jakarta Water Resources Service.
3. Fulfilling all component items in the Electronic Catalog in accordance with the Bill of Quantity is the main sub-factor in the selection process for Reservoir/Small lake Construction Providers using the E-Purchasing Method via the Electronic Catalog at the Jakarta Water Resources Department.

REFERENCES

1. Ahmad, Abd Kadir, N. H. (2020). Implementasi E-Procurement dalam Pengadaan Barang dan Jasa di Bagian Layanan Pengadaan Barang dan Jasa Pemerintah (BLPBJ) Sekretariat Daerah Kota Makasar. 2.
2. Albert Chan, E. kingsford O. (2022). Evolution of Electronic Procurement : Contemporary Review of Adoption and Implementation Strategies.
3. Andryani Ningsih, Achmad Fudholi, S. (2015). Hubungan Penerapan Elektronik Katalog Terhadap Efisiensi Pengadaan dan Ketersediaan Obat. 40, 241–248.
4. Ariesta, D. (2021). Efektivitas Pengadaan Barang dan Jasa Melalui E-Catalogue di Kecamatan Kebayoran Lama Kota Administrasi Jakarta Selatan Provinsi GREATER Jakarta. Ascarya: Journal of

“Factors Influencing the Selection of Reservoir Construction Providers through the E-Purchasing Method: A Systematic Literature Review at the Jakarta Water Resources Department”

- Islamic Science, Culture, and Social Studies, 1(2), 156–172. <https://doi.org/10.53754/iscs.v1i2.26>
5. Barjanawati, B., & Suryaningrat, D. (2022). Gambaran Penerapan e-Purchasing Dalam Pengadaan Obat di Instalasi Farmasi Dinas Kesehatan Kalimantan Barat. *Jurnal Komunitas Farmasi ...*, 2, 284–299.
 6. Hasibuan, R. P. (2014). Pengadaan Barang dan Jasa secara Elektronik pada Dinas Koperasi dan UMKM Kota Pekanbaru Tahun 2014. 3(2), 1–10.
 7. Ika Kurnia;Suryawan Murtadi;Ngudiyono;Tri Sulistyowati. (2022). Kajian Risiko Penggunaan Katalog Bidang Pemeliharaan Jalan Dengan Analisis Faktor. *ejurnal.binawakya*, 16(9), 7481–7498.
 8. Imam, K., Hardjomuljadi, S., & Amin, M. (2022). Pemilihan Penyedia Pekerjaan Konstruksi oleh Pengguna Jasa dengan Metode E-Purchasing di Dinas Bina Marga Provinsi GREATER Jakarta. *Jurnal Konstruksia*, 13(i), 155–168.
 9. Iqbal, M. (2020). Pengaruh Pelaksanaan E Katalog Dalam Pengadaan Barang/Jasa Pemerintah Terhadap Umkm. *Jurnal Usm Law Review*, 3(1), 77. <https://doi.org/10.26623/julr.v3i1.2204>
 10. Kautsariyah, S., & Hardjomuljadi, S. (2015). Analisis Penyimpangan pada proses Pemilihan Penyedia Jasa Konstruksi secara Elektronik di Pemerintah Daerah. 75–86.
 11. Kristianto, A. (2022). Negosiasi Harga e-Purchasing Katalog Dalam Pengadaan Barang/Jasa Pemerintah. *Jurnal Pengadaan Barang/Jasa*, 1(1), 53–60. <https://doi.org/10.55961/jpbj.v1i1.14>
 12. Lestyowati, J. (2018). Analisis Permasalahan E-Purchasing Dalam Pengadaan Barang Dan Jasa Satuan Kerja. *Prosiding Simposium Nasional Keuangan Negara 2018*, 669–695.
 13. Luh Putu resti, Lilik Handajani, E. P. (2016). Peran E-Procurement terhadap Pencegahan Fraud pada Pengadaan Barang/Jasa Pemerintah Daerah di Pulau Lombok. 10(1), 16–32.
 14. Malinda, Y. S. H. (2018). Faktor Kendala Dominan Penggunaan E-Catalogue. *Rekayasa Sipil*, 7(2), 90–105.
 15. NS, R. J. (2015). Upaya Pencegahan Tindak Pidana Korupsi Pengadaan Barang dan Jasa Pemerintah melalui Penerapan Pembelian Langsung berdasarkan sistem Katalog Elektronik (E-Purchasing).
 16. Prihastuti, N. E. (2014). Faktor-faktor Penghambat dalam Pelaksanaan Pengadaan Barang/jasa Elektronik (E-Procurement) di Dinas Pekerjaan Umum Provinsi Papua.
 17. Purnomo, E. M. (2020). Analisis Pelaksanaan Pengadaan Barang/Jasa Secara Elektronik pada Pemerintah Kabupaten Gresik. *Airlangga Development Journal*, 1(1), 32. <https://doi.org/10.20473/adj.v1i1.18010>
 18. Sutriatmoko, Satibi, & Puspendari, D. A. (2015). Analisis Penerapan E-Procurement Obat Dengan Prosedur E- Kabupaten / Kota Di Jawa Tengah. *Jurnal Manajemen dan Pelayanan Farmasi*, 267–274.
 19. Yuhanah, Y., Ohan, D., Politeknik, R., & Bandung, N. (2021). Identifikasi Risiko E-Purchasing Dalam Aktivitas Pengadaan Barang Dan Jasa Di Politeknik Negeri Bandung E-Purchasing Risk Identification on Procurement Activity At Politeknik Negeri Bandung. *Sigma-Mu*, 15–22.
 20. Zahra, F., Iqbal, M., Din, M., Thahir, H., & Kasuma, J. (2022). The role of e-purchasing in government procurement fraud reduction through expanding market access. 6, 179–184. <https://doi.org/10.5267/j.ijdns.2021.9.010>.