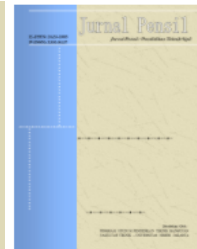


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ASSESSMENT OF E-PROCUREMENT SUBJECTS' MISSTEPS FOR CONSTRUCTION AND CONSULTANCY SERVICES THROUGHOUT THE SURABAYA CITY AREA AS AN EDUCATIONAL ADJUNCT FOR PROJECT TENDER COURSES

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Abstract

From the government's perspective, an electronic tender or e-tendering system in the procurement of goods and services in Indonesia is a platform to acknowledge good governance and public services since it enhances cost efficiency, effectiveness, shorter turnaround periods, delivers excellent public monitoring, fosters competitiveness, and increases government accountability. Nevertheless, numerous tenders have managed to fail during the implementation of e-tendering for construction works. The purpose of this study is to identify the factors that contribute to tender failures throughout the Surabaya City area. The factors that contributed to the tender's failure were identified from the results of the 220 construction tenders stated on the LPSE website. Descriptive statistical analysis was used to obtain factors that cause e-tender failures from the data obtained. Administrative, technical, price, and qualification criteria are the most dominant four failure criteria. The most apparent cause for auction failure is the provider's inability to attach references to previous projects.

Keywords: E-procurement, construction works, tender failure

P-ISSN: [2301-8437](#)

E-ISSN: [2623-1085](#)

ARTICLE HISTORY

Accepted:

9 Januari 2022

Revision:

21 Januari 2022

Published:

30 Januari 2022

ARTICLE DOI:

[10.21009/jpensil.v11i1.25294](https://doi.org/10.21009/jpensil.v11i1.25294)



Jurnal Pensil :

Pendidikan Teknik

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Introduction

Government procurement activities are critical to support improving public services and developing the national and regional economy. This procurement of goods and services can be done in three ways, namely by direct appointment method, direct selection method, and also through tender. Tender activities are efforts undertaken to ensure transparency in business competition when procurement projects for goods and services. Thus, the purpose of the tender is to provide the same opportunity for business actors to participate in providing price offers.

Today, along with the increasing and stable electronic infrastructure, tenders have also been conducted through the E-Procurement system. Tender with E-Procurement system is a process of procurement of goods and services within the scope of the government that uses information and communication technology tools in every process and step (Sitar, 2011; Dooley and Purchase, 2006; Sunmola and Shehu, 2020). The tender process has several stages, ranging from announcement, registration, explanation (*aanwijzing*), delivery, opening the evaluation of bid documents (Alfian Malik, 2010). The stages in the tender process become more effective and efficient by adopting digital technology in it, namely the existence of automation in some tender procedures (Piera et al., 2014); Sunmola and Shehu, 2020). According to Hashima et al. (2013), there are several benefits of using e-procurement, among others: improved process quality, reduction in procurement costs, user satisfaction, improved responsiveness, improved customer service, product innovation, market expansion, reduction of purchase cycle time, reduction of staff time and managerial effectiveness.

The procurement of construction projects involves many parties and various aspects. Consultant planners will need to concentrate on refining the design, and intensive administrative work will have to be

done delegated to a construction management company. Furthermore, professionals in the field, such as contractors, need to be better equipped to handle the rigorous procurement, planning and scheduling, and engineering of projects. The complexity between construction, procurement, planning, and fabrication is especially evident for office buildings (Molavi and Barral, 2016). Contractors need to prepare everything related to the E-procurement process, both from the administrative and technical aspects. Both of these aspects are decisive in the contractor's efforts to win a tender. Often, a contractor's failure in a tender activity is caused by either of these two aspects. Many found that although the contractor was technically very strong, however because of lack of attention in preparing the required administrative documents failed the contractor in a tender; vice versa, the contractor who has a strong administration, does not necessarily meet the required technical aspects.

Budianto et al. (2021) declares that contractor classification and appraisal play a prominent part and necessitate careful consideration, especially for government-led public sector projects. The evaluation process of construction companies is critical for the governmental agency in charge of the construction subsystem accomplishment (Watt et al., 2009). In order to complete successful construction projects, it is critical to select a competent contractor (Semaan N and Salem M, 2017). Government tenders were also plagued by a slew of issues, including unqualified candidates, forgery of qualified documents, and exorbitant tender costs (Hanák T and Muchová P, 2015). Dyah et al. (2015) argues that many failures of contracting companies in the process of following the auction need to be analyzed on what variables affect the failure of the bid evaluation process conducted electronically in view of several stages, including the administrative evaluation stage, technical evaluation stage, price evaluation stage and qualifying/clarification

proof stage (Dyah et al., 2015). Therefore, this paper aims to identify the factors that cause tender failures in e-tendering for construction services throughout the Surabaya City area.

Procurement of Government Goods and Services

According to Dimiyati and Nurjaman (2014), goods and services can be classified into public goods and services and private goods and services. Goods are physical objects that can be seen and stored and have a certain value, while services involve intangible interactions between one party and another. So, although different in terms of circumstances, goods and services are two entities that have the same value. Public goods and services are entities whose use is closely related to the interests of the general public. In contrast, private goods/services are the opposite, only intended for certain individuals or circles.

Furthermore, related to the understanding of procurement, according to Nur Bahagia, can be interpreted as an effort to get goods and services in a transparent, effective, and efficient manner in accordance with the needs and desires of its users (Dimiyati and Nurjaman, 2014). In line with this understanding, according to the www.pengadaanbarang.co.id website, the nature of procurement of goods/services is the effort of the user to obtain or realize goods/services in accordance with their needs, through the use of certain methods and processes in the fulfillment of agreements that include specifications, prices, time, and other agreements. Edquist et al. said that in principle, procurement of government goods/services is the process of an acquisition carried out by the government and public institutions to obtain goods (goods), buildings (works), and services (services) in a transparent, effective, and efficiency in accordance with the needs and desires of its users (Dimiyati and Nurjaman, 2014).

Some regulations in Indonesia write the definition of procurement of government goods and services, while some regulations

become the legal basis of government procurement activities. Based on Presidential Decree No. 54 of 2010, procurement of goods and services is a procurement activity in terms of obtaining goods and services. The definition that provides an overview of ownership and the process contained in Presidential Decree No. 16 of 2018 has the meaning of Procurement of Goods/Services by the Ministry/Institution/Regional Device financed by the state budget whose process since the identification of needs, up to the handover of work results. Regulations issued by the government that are the legal basis of procurement of goods and goods are 1) Presidential Decree No. 54 of 2010 on guidelines for procurement of government goods and services, 2) Presidential Decree No. 5 of 2003, on Economic Policy Packages Near and After the End of cooperation programs with international monetary funds, 3) Presidential Decree No. 5 of 2004 on accelerating the eradication of corruption, 4) Presidential Decree No. 8 of 2006 on the Fourth Amendment to Presidential Decree No. 8 of 2003 (on Guidelines for the Implementation of Government Procurement of Goods/Services).

Implementation of elections through Tender/ Selection

Based on Presidential Decree No. 16 of 2018, there are several stages in the process of selecting service providers through tenders. These stages include: 1) Implementation of Qualifications, 2) Announcements and/or Invitations, 3) Registration and Collection of Election Documents, 3) Giving Explanations, 4) Submission of Offer Documents, 5) Evaluation of Offer Documents, 5) Determination and Announcement of Winners, and 6) Refute. Prospective service providers should follow all stages in the tender process and fulfill all necessary documents to avoid the failure of service providers in following the tender (Kamil et al., 2019).

The stage of qualifying implementation is an effort to ensure that each prospective

service provider meets the specified requirements by conducting an assessment of the qualifications of the competence of each company. In the implementation in the field, there are two systems used, namely prequalification and post-qualification. Prequalification is an election that is first held to assess competence and business capabilities and fulfill requirements for prospective service provider companies before entering the offer document. Thus, if this system is used, only qualified companies can enter an offer. Prequalification is usually used for complex projects with tender values above 50 billion Indonesian rupiahs. While the post-qualification system is an assessment of competence and business capabilities and fulfillment of requirements for prospective service providers conducted after the offer document is entered.

The Announcement and/or Invitation stage is a stage that is carried out with the aim to disseminate information to prospective service providers related to tender activities (Hui et al., 2010). The implementation of the announcement is carried out for seven working days. Media announcements or invitations are many varieties, can be through print media such as newspapers or with notice boards at the agencies that hold. In the current digital era, announcements can also be made online through the official page of procurement agencies such as LPSE. After the announcement stage is carried out, it continues with the Registration and Selection Document Collection stage. This stage is carried out within a period of 1 day after the announcement up to one day before the deadline for document entry. Next is the stage of giving explanations, or *aanwijzing* which is usually carried out as early as four working days from the date of the announcement to give time for prospective service providers to study documents and prepare things that may be less clear so that they can be asked at the time of *aanwijzing*. All doubts or discrepancies in documents received at the registration stage must be checked and

confirmed prior to tender submission because the contractor's profit or loss depends on the rigor during the tender (Kamil et al., 2019). The next stage is the entry of the offer document, which is carried out one day after the implementation of the explanation or *aanwijzing* activity.

The procurement committee carries out the evaluation of the next Offer Document. In general, there are three evaluations that can be done, namely arithmetic correction to prices, administrative evaluation, and technical evaluation—in the administrative evaluation, checking all administrative documents in detail, especially the truth and novelty of the documents submitted. The next stage is the determination and announcement of winners. In the e-procurement system, the winner's announcement can be seen on the LPSE website, and all participants also get an official email regarding the winner's announcement. The last stage of the entire series of tenders is the time of denial. Unlike conventional tenders, in the e-procurement system, only one refute is the initial refute without any appeal. Rebuttals should only be made by companies that enter the offer document.

Research Methods

Research Data and Location

Data was obtained by conducting observations on the LPSE Surabaya website. The research population is a construction work tendered electronically through e-procurement facilities in Surabaya.

Population and Sample

A total of 220 projects have been carried out on an e-procurement basis in Surabaya in the 2019 and 2020 budget years.

Variable Operational Failure

The analysis aims to get information about failure variables: administrative evaluation stage, technical evaluation stage, price evaluation stage, and proving

qualifications. In order to get more information, samples are made in a saturated sample (saturation sampling), which takes the entire population to be studied.

Data Processing Techniques

Data were analyzed descriptively using Microsoft Excel, and the results were depicted with the help of bar charts and pie charts.

Results and Discussion

Research Data

The company's qualifications strongly influence the success of tenders for construction services work. The qualifications of construction service companies (contractors) are determined by net worth, experience, the person in charge of classification (PJK), engineering responsibility (PJT), business entity in charge (PJBU), ability to carry out work, limit the value of one job, number of packages for a moment, maximum number of classifications and subclassifications, ((LPJKN), 2017). The qualification determines the contractor's quality, which of course, significantly affects its performance, including in following the tender. The qualifications of contractors as stipulated in the Regulation of the National Construction Services Development Agency (LPJKN) No. 3 of 2017 concerning Business Certification of Construction Implementing Services.

Data from the study showed that there are 220 state-building projects in Surabaya classified based on the qualifications of the small, medium, and small contractors, which can be seen in Figure 1. This figure shows that for state-building projects that require small qualified contractors 107 projects (48.64%), medium 98 projects (44.55%), and large are 15 projects (6.82%).

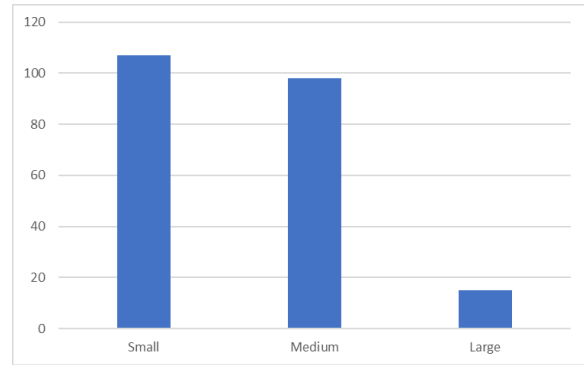


Figure 1. Number of Projects Based on Contractor Qualifications

Criteria and Results of Contractor Evaluation

The evaluation of contractors is carried out based on the provisions contained in Presidential Regulation (Perpres) No. 16 of 2018 on Procurement of Government Goods/Services. Technically, the implementation of Presidential Decree No. 16 of 2018 related to contractor evaluation is determined by the Ministry of Public Works and Public Housing (PUPR) through The Minister Regulation (Permen) PUPR No. 07/PRT/M/2019 on Standards and Guidelines for Procurement of Construction Services Through Providers by undergoing the latest changes through PUPR Regulation No. 14 of 2020 on Standards and Guidelines for Procurement of Construction Services Through Providers. Contractor evaluation criteria based on Presidential Decree No. 16 of 2018, Permen PUPR No. 07/PRT/M/2019, and Permen PUPR No. 14 of 2020.

The authors analyze the causes of tender failure for each qualification of construction service providers; therefore, there are three classes of providers, namely small, medium, and large. These causal factors are classified into four types: administrative, technical, price, and qualification. The results of data from 220 projects can be listened to in the following explanation.

Small Qualification Provider

For small qualified contractors, the cause of tender failure can be seen in the image below.

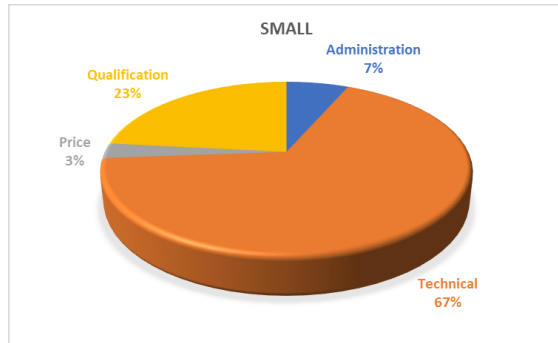


Figure 2. Distribution of percentage causes of tender failure for providers with small qualifications

The cause of tender failure for a small qualification was dominated by technical criteria (67.29%) and followed by qualifying criteria (23.36%). The description for each criterion can be seen in the following table.

Table 1. The description of The Criteria for Causing Minor Qualification Failures

No.	Criterion	Description	%	
1	Administration	Not submitting an offer guarantee	6,54	
2	Technical	The method of execution is not as required	2,80	
		Not attaching a material support letter	4,67	
		Errors in preparing implementation schedule plans	1,87	
		Not uploading equipment data	0,93	
		Not uploading proof of lease/ownership of tools or evidence that is not appropriate	23,4	
		Equipment does not meet the required amount/specifications	6,54	
		Personnel misalignment (qualifications, experience,	19,6	

		references)	
		Mismatch of RKK documents	7,48
3	Price	Indications of conspiracy	1,87
		Did not respond to requests for clarification of bid prices	0,93
4	Qualification	Personnel qualifications are not in accordance with the requirements	4,67
		Mismatch of newspaper accounts	0,93
		Nonconformity of business field qualifications	0,93
		K3 certificate discrepancy	0,93
		Nonconformity of tax evidence	4,67
		Nonconformity of personnel support documents	4,67
		Not present at the proof	6,54

Intermediate Qualification Provider

The results of the analysis of the causes of tender failure for providers with intermediate qualifications can be observed in the figure below.

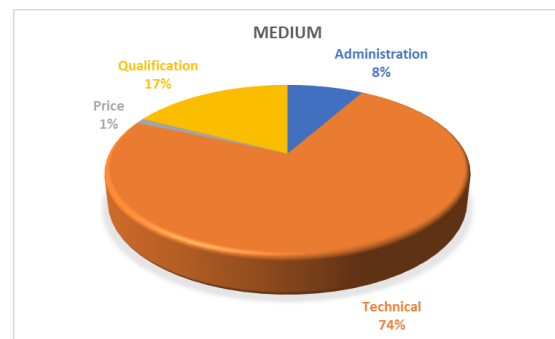


Figure 3. Distribution of percentage of causes of tender failure for providers with medium qualifications

As is the case with small qualifiers, the cause of tender failure in intermediate qualifications is also dominated by technical

factors (73.47%) and followed by qualifying factors (17.35%). The description for each criterion can be seen in the following table.

Table 2. The description of The Criteria for Causes of Intermediate Qualification Failure

No.	Criterion	Description	%		
1	Administration	Not submitting an offer guarantee	2,04		
		Incomplete offer documents	6,12		
2	Technical	The method of execution is not as required	3,06		
		Not attaching a material support letter	13,3		
		Errors in preparing implementation schedule plans	2,04		
		Not uploading proof of lease/ownership of tools or evidence that is not appropriate	7,14		
		Equipment does not meet the required amount/specifications	5,10		
		Personnel misalignment (qualifications, experience, references)	36,7		
		Subcon support is not appropriate	1,02		
		Mismatch of RKK documents	5,10		
		3	Price	Unreasonable offer price	1,02
		4	Qualification	Personnel qualifications are not in accordance with the requirements	1,02
Not attaching financial statements	1,02				
Nonconformity of business field qualifications	4,08				
Not fulfilling Basic Capabilities (KD)	4,08				
Nonconformity of personnel support documents	6,12				
Not present at the proof	1,02				

The intermediate qualifications, the technical factors that led to the tender failure were dominated by personnel factors (36.73%) and material support (13.27%). From the personnel factor, much is obtained the fact that the provider does not attach the required experience reference. Every construction job also requires material support for a particular job, and this is often also unsuccessfully met by bidders.

Major Qualifying Providers

The main causes of tender failure for providers with large qualifications can be observed in the figure below.

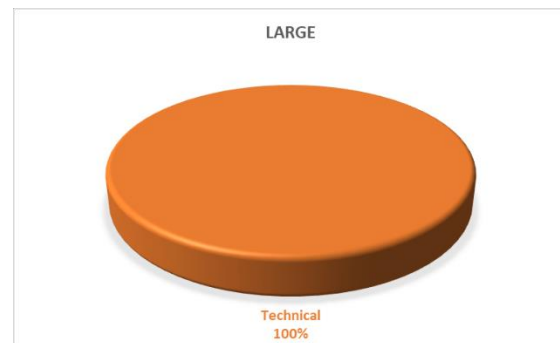


Figure 4. Distribution of percentage of causes of tender failure for providers with medium qualifications

The causes of tender failures on major qualifications all stem from technical factors. The description can be seen in the following table.

Table 3. The description of the Criteria for The Causes of Major Qualification Failures

No.	Criterion	Description	%
1	Technical	Offer file cannot be opened	6,67
		Equipment does not meet the required amount/specifications	13,33
		Personnel misalignment (qualifications, experience, references)	80,00

When viewed as a whole, the qualifications are both small, medium, and large, then the cause of the failure of the tender for the provider is as shown in the figure below:

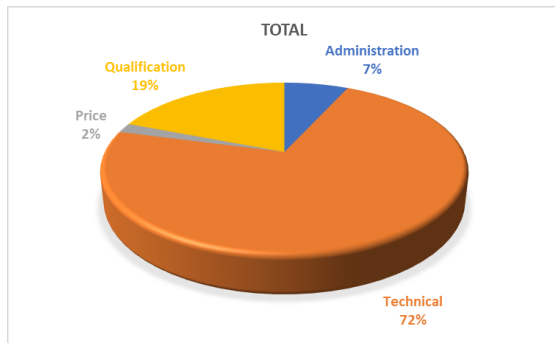


Figure 5. Distribution of percentage of causes of tender failure for providers

The technical factor that dominates the failure of the tender on major qualifications is the lack of disclosure of documents related to personnel. As is the case with small and medium qualifications, many bidders do not complete the required experience reference.

Of the three types of qualifications that have been described in each criterion, the factor of incomplete documents related to personnel is the dominant cause. Every construction job requires experience from each of the personnel offered, where experience must be proven with support in the form of references from previous users. This reference requires approval from the previous project's Commitment Making Officer (PPK). This causes providers to tend not to be able to fulfill them, and the consequence is not being successful in participating in tenders.

Conclusion

Based on the results of research and discussions that have been conducted, it can be concluded that the most dominant factor causing contractor failure for both small, medium, and large qualifications is technical factors related to the incompleteness of documents related to personnel. In providers

with a small qualification, the cause of failure is related to technical factors of 67.29%, qualifying factors 23.36%, administrative factors 6.54%, and price factors 2.8%, and there are medium qualification contractors the cause of failure is related to technical factors by 73.47%, qualifying factors 17.35%, administrative factors 8.16%, and price factors 1.02%, while there are large qualifying contractors the cause of failure is only related to technical factors. Therefore, it is important to be of concern to providers in participating in future tender activities to pay more attention to the completeness of the personnel documents offered.

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