

## E-CATALOGUE ATTRACTIVENESS STUDY TO INCREASE SUPPLIERS PARTICIPATION

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**Abstract:** *E-catalogue is a comprehensive transaction portal developed by the Policy Institute for Procurement of Goods / Services (LKPP) to facilitate the process of government procurement in Indonesia. The advantage of the e-catalogue should be felt by both parties both providers and buyers of goods / services. The main objective of this study was to determine how much the appeal of e-catalogue for providers and what is needed to make the e-catalogue more attractive to providers since only a handful of providers that have participated in the e-catalogue. The research subjects were divided into two categories, the first being LKPP as an institution running the e-catalogue itself, and the second is the goods/service providers as the one that provide goods and services sold in the e-catalogue. In-depth interviews (IDI) with systematic sampling along with Focused Group Discussion (FGD) chosen as a way of collecting data in this study, combined with benchmarking against e-catalogue system in other countries. The study concluded that the e-catalogue market in Indonesia is a bit unattractive according to the supplier of goods / services, mostly due to the complex systems and the lack of strong regulations that require the use of e-catalogue for all government agencies. Therefore, the central government and LKPP should take over control in imposing the use of e-catalogue for all government agencies. Increase the availability of technology infrastructure among government agencies, seeks to change some of the rules related to Framework Agreement adverse providers, educating providers to better understand the e-catalogue system, and establish cooperation with external parties such as SMEs and logistics companies.*

**Keywords:** *e-Catalogue, e-Purchasing, e-Government, Market Attractiveness, e-Procurement*

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## **Introduction**

### **Background**

Nowadays, more and more government around the world is embracing electronic government. The complete transformation process of Governance using the implementation of Information and Communication Technology (ICT) is called e-Government. It promotes more efficient and effective government, facilitate more accessible government services, allow greater public access to information, and make government more accountable to citizens. Along with the increase of abuse procurement of goods and services cases by government and public agencies, it is necessary to form a system in order to reduce an opportunity to break the law, some main reasons why transparent and clean procurement system is required, because: Public procurement of goods and services is a government activity which leads majority of graft cases (Rose-Ackerman & Palifka, 2016, and Edler, & Yeow, 2016); Thirty-eight (38%) of graft cases handled by Indonesian Corruption Eradication Commission/KPK come from procurement of goods and services activities. (KPK, 2016); Public procurement of goods and services continue to increase every year along with the increase of government spending. Indonesian procurement of goods and services budget is approximately 30% from APBN (Afif & Fatturroyhan, 2017); Management regulation of public procurement will reduce government spending corruption (public money) also increase efficiency the use of government budget (best value for money) ; As a major interface between the public and the private sectors, public procurement provides multiple opportunities for both public and private sectors to divert public funds for private gain. For example, bribery by international firms in OECD countries is more pervasive in public procurement than in utilities, taxation, judiciary and state capture (Haddad & Hornuf, 2016). E-Government Procurement breaks down the physical barriers of space and time and allows a more transparent, efficient information flow, and wider access to information and services. One of E-Government Procurement component is e-Catalogue. Electronic Catalogue or e-Catalogue is a web resource that provides information on products and services offered and sold by a vendor and supports online ordering and payment capabilities (Rahmiyati, & Irianto 2018 and Mehrbod, et. al., 2017).

E-Catalogue is predominantly used for procuring frequently replenished indirect goods and services but may also provide purchasing guidelines to facilitate procurements that are rare and valuable. Key elements of e-Catalogue are product names, hierarchy, descriptions, supplier, prices and internal barcodes.

### **Company Profile**

*Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah (LKPP)* or the National Public Procurement Agency (NPPA) in English came from a working unit called the Centre of Public Procurement Policy Development (Huda, et. al., 2017).

LKPP has their own duty and functions as government agency. Its functions are to: Drafting and formulation of strategies as well as policies and standard procedures in the field of public procurement, including the private sector procurement within the framework of public private partnerships; Drafting and formulation of strategies as well as policies to develop human resources in the field of public procurement; Monitoring and evaluation of its implementation; Development of information systems as well as monitoring public procurement electronically (e-Procurement); Provide technical guidance, advocacy and legal counsel for those who related; Conducting general administrative services in the field of planning, corporate governance, staffing, finances and equipment.

LKPP's duty is to implement development and formulation of public procurement policies. This institution designed as a non-ministerial government agency and has a reporting duty directly to the President of the Republic of Indonesia. LKPP is under the coordination of the National Development Planning Agency.

### **Business Issue**

Overview According to APEC research, calculating from 2010-2014 government report, at average 31% of national budget (APBN) are spent on public procurement (Nurmandi & Kim, 2015). Around 35% of the central government money is transferred to local government as development assistance fund, on average 60% of all the money available from development assistance is being used for procurement and purchase of goods and service. This translate to  $31\% + (60\% * 35\%) = 51\%$  of total yearly government budget are used to purchase goods and service from external supplier. There are also procurement and purchase done by government agencies and other institutions that have not been accounted for in which it is safe to assume that at least 60% of government budget are spend on procurement and purchase. With more than 2000 Trillion IDR national budget plan for 2015, this translate to at least 1200 Trillion IDR of government procurement and purchase.

Within the government procurement and purchase that accounted for more than 500,000 procurement packages, 15-20% of the value is done using direct appointment or direct purchase mechanism which should be able to be done using e-catalogue given the needed goods and service are available. With those calculations, there is at least 180-240 Trillion IDR market potential of goods and service that should be purchased through e-catalogue.

With initial assumption of 180-240 Trillion IDR of transaction that should be procured through e-catalogue, e-catalogue have not been fully optimized and used by the users (government). With assumption of 2015 transaction value through e-catalogue will reach 20 Trillion IDR, there are only 10% of transactions that should be channelled through e-catalogue are realized. With a market this large, theoretically, e-catalogue should be very attractive for vendors as it serves as separate market segment, moreover with recent development of issued Presidential Decree no. 4 2015 on the mandatory nature of e-catalogue use given the products needed are available. The fact shows that it is not as attractive as we think that shows only handful of items that participate their products and service in e-procurement system.

According to the interview, 70% of the corruption cases within government body are originated from procurement and purchase of government institutions. The use of e-procurement will reduce the room for corruption within government procurement. With only 10% of potential realized by e-purchasing and around 20% realized by e-tendering, the successful implementation of e-procurement become very vital towards the clean government system that everyone in Indonesia wished for.

### **Problem Formulation**

Due to the complexity of the initial business issue gathered from pilot interview, author limits himself to assess what considered being the most important problem from the marketing point of view. Which is to answer one big question from LKPP perspective: *"How to increase the value and attractiveness of e-catalogue in order to attract more vendors to better address the demand from user side (government)"*

Problem stated above are chosen due to several ties that it has with the variability of goods and service provided. The logic of choosing the problem are in line with original purpose of the e-catalogue. The issue is still valid, as the current problem is still being faced by the company.

### **Objective and Limitations**

The research is intended to find out the problem that makes e-catalogue are less attractive for the vendors judging from the fact that only a handful of products and type available within e-catalogue nowadays due to vendor hesitations to join. Despite large market potential of e-catalogue and presidential decree no. 4 2015 that instruct all government-funded institutions to use e-catalogue, only 10% of potential transactions are realized by e-catalogue with their limited range of products and service. By finding out the root cause of the problem, using data gathered and input from stakeholders, strategic recommendation is to be made. This study was limited by the author in order to focus more on the important issues.

### **Literature Review**

#### **Business Issue Exploration**

The framework used in finding solution for this problem is based on initial business issue provided from pilot interview. Internal and external assessments are done in order to understand better the full scope of current internal and external condition regarding the use of e-catalogue. User and vendor side is necessary since e-catalogue is a trade portal / facilitator that accommodate the business between two sides that is both important towards the success of e-catalogue.

Focused group discussion that meet the stakeholder to discuss all the data gathered are necessary in order to gain additional insight given the fact found in assessment process. Finally, all the data gathered will be used in pinpointing the most important problem using root cause analysis in order to design strategic recommendation that needs to be implemented by e-catalogue in order to increase the program's attractiveness.

#### **Importance of e-government procurement**

Governments and public sectors agencies that have implemented e-GP systems have reported several benefits including: Enhanced transparency from online publication tender notices, contract award notices and online bid submission; Increased bidder participation due to better awareness and access to opportunities; Savings on procurement spend from lower bid prices due to better and open competition; Enhanced reporting and procurement analytics to better monitor procurement activities; Faster processing of procurement activities resulting from online workflow; Enhanced tools to address fraud and corruption; and Reduction in paper documents.

The total of public procurement in Indonesia reached around 15-30% from its GDP. A huge amount of government procurement creates many opportunities to break a law and corruption (Lewis-Faupel, et al., 2016; Sovacool, 2018; and Thai, 2017). Amount of loss from government procurement corruption is approximately 10-25% in normal scale. In several cases, amount of loss reached 40-50% from contract value (Kostyo, K. (2006). Transparency International stated in their official statement that 44% of corruption cases from Indonesian Graft Commission (KPK) are procurement cases, including in local government. Meanwhile, BPKP stated that if we saw just from government procurement spending, there were many leaks cases,

approximately 30% or around 25 trillion rupiah and it just come from central government (Amirudin. 2012).

## Research Methodology

For this study, a combination of literature analysis, based on current studies, desk analysis based on LKPP data, and focus group discussion will be used. For the literature analysis and desk analysis will be used to provide preliminary analysis and findings for the study, while the focus group discussions are conducted to verify and produce recommendation for the current study. The respondents for the focus group study comes from the supplier and the LKPP staff. The suppliers in general are categorized into type A, which is supplier with strong relationship, type C, which is supplier with little relationship/ partnership, or type B, which is supplier with in-between relationship (Faraz, et al., 2018).

### Business Solution

For business solution of this study, the paper will discuss about the internal assessment using marketing mix and external assessment using Porter five-forces (Safari, Farhang, & Rajabzadehyazdi, 2016) and PESTLE analysis (Rastogi & Trivedi, (2016).

### Internal Assessment - Marketing Mix

Internal assessment shows that the systems are already well designed to make sure that the buyers benefit from it. However, according to the suppliers in the in-depth interview, the systems are not well designed to benefit the suppliers. The benefit of the e-catalogue supposed to experience by both buyer and supplier side. The following highlights the key issues related to the internal analysis from the suppliers' perspective (Pogorelova, et al., 2016).

**Table 1. Marketing Mix Results (Source: Author's Analysis)**

Elements	Findings
<b>Product</b>	E-catalogue product is the trade portal itself that facilitate the trade between suppliers and government. However, the facts that not all government institutions are actively using e-catalogue are giving negative stimulation towards the participation of suppliers. Quoting one of the suppliers, "not all government institutions are using e-catalogue as it is not mandatory for all of the institutions, with uncertainty market size despite the effort needed to be registered within e-catalogue, I better off selling my product to government using the old ways and wait for the system to be improved"
<b>Price</b>	Despite the benefit in price that the government receives from the purchase of product using e-catalogue, the suppliers did not experience the same benefit. To add salt to the wound, not only the suppliers have to set the lowest market price, the negotiation of the price with LKPP consumes a considerable amount of time. With the problem regarding the price, most of the type C suppliers perceive that they will gain less profit by selling through e-catalogue which also giving negative stimulation towards the participation of e-catalogue.
<b>Promotion</b>	Majority of type A supplier's state that joining the e-catalogue are acting as free promotion for them as their products can be potentially seen by focused target market, type B suppliers also feel the same way about the promotion aspect. From promotional view, these features really benefit them as they can save a lot of marketing cost, which usually spent in approaching several potential government customers to try their products.

<b>Place</b>	Small portion of the suppliers from all type are a bit pessimistic about the prospect of e-catalogue due to use of internet as the marketplace. Those respondents are not sure that all of the government have the capability to fully utilize the e-catalogue itself which reduce the potential buyer from e-catalogue.
<b>People</b>	Large portion of suppliers from all type stated that they spent considerable amount of time in the administration process of drafting their products. One of the problem source lies within the people from LKPP itself that did not act helpful in easing the administrative process. Most of the time, the additional time needed are spent on submitting redundant document and negotiation about the price. “We already set our e-catalogue price with the lowest price we sell to other buyer, then why those people from LKPP are still do tiring negotiation with us just to bring the price down” – Type B Suppliers
<b>Process</b>	Type “A” suppliers noted one important problem regarding the e-catalogue process, which is the payment process. Even though the suppliers deliver their product right on time, most of the time the payment of their goods are delayed. Even though this problem is considered a common problem when dealing with government institutions, they stated that with the low profit they get by selling their product within e-catalogue and the effort they put in registering their product within e-catalogue, they deserve to be paid according to the agreement. According to the regulation, payment method should be done 15 days after LKPP confirmed that the document regarding the purchase and tax are completed. However, most of the time the problem lies within the buyer, which takes a long time to complete the purchase document, needed. Other problem noticed are registration process experienced by type B suppliers and product drafting process experienced by Type A and B. All respondent agreed that the process involving a lot of documentation and paperwork, which is more or less the same with how procurement was done previously.
<b>Physical evidence</b>	There is no issue related with the physical evidence aspect perceived by suppliers from all type.

### **External Assessment – Porter’s five forces & PESTEL analysis**

External scanning shows a very favourable external condition for e-catalogue, with no threats from substitute, new entrants and existing firms’ rivalry, all that e-catalogue needs to do is managing the suppliers and buyers. However, the external conditions are not favourable towards e-catalogue usage and improvement. Such as the technology infrastructure, the stakeholders’ reception, and from the government policy itself. The main problems for e-catalogue to solve is to make sure more suppliers and buyers participate in using e-catalogue as it is predicted to have snowball effect, the more suppliers and buyer use e-catalogue the more attractive e-catalogue for both suppliers and buyers.

There is minor problem however, which is perceived by the suppliers, according to type A suppliers, the bargaining power of the suppliers are low as of now despite the initial analysis showing that suppliers have medium bargaining power. The problem lies within the non-mandatory use of the e-catalogue for most of the government institutions nowadays. Unless the purchases from e-catalogue are mandatory, buyers can always use old procurement scheme with their preferred suppliers. Moreover, suppliers can only pay after the product is delivered, and the purchase documents are completed by the buyer, which makes the bargaining power of the suppliers even lower.

### **Stakeholder Analysis**

The stakeholders within this study will be defined as Central Government, LKPP, Government Agencies, and Goods/Services provider. Four major attributes are important for Stakeholder Analysis: the stakeholders' position on the reform issue, the level of influence (power) they hold, the level of interest they have in the specific reform, and the group/coalition to which they belong or can reasonably be associated. These attributes are identified through various data collection methods, including interviews with country experts knowledgeable about stakeholders or with the actual stakeholders directly, which in this study are from the pilot interview. We can categorize each stakeholder into their nature, which is:

- Promoters: Stakeholders who attach a high priority to the reform policy a priority and whose actions can have an impact on the implementation of the policy, which in this case are the Central Government which have agenda on reducing malpractice in government procurement
- Defenders: Stakeholders who attach a high priority to the reform policy but whose actions cannot have an impact on the implementation of the policy which in this case are the LKPP itself as they can only suggest the government on making new regulations to support them
- Latent: Stakeholders whose actions can affect the implementation of the reform policy but who attach a low priority to this policy which in this case are the Government Agencies. Their support in using e-catalogue can further develop the e-catalogue itself while in the reality, most of them are intentionally do not use e-catalogue using other reasons on why they cannot or do not use.
- Latents-2: Another Latent Stakeholder in this case are the goods/service providers. These vendors mostly already have an established system on servicing government procurement beforehand, with the presence of e-catalogue, only a few that support its development and usage. However, their hesitation of joining can affect e-catalogue as there will be nothing to procure from if the vendor is deciding to stop their business in E-catalogue due to some reasons.
- Apathetic: Stakeholders whose actions cannot affect the implementation of the reform policy and who attach a low priority to this policy which cannot be found in this case. From the stakeholder analysis, despite having influence judging from the e-catalogue stakeholders' analysis, we can conclude that we should focus on government agencies and goods/service providers as they have high influence on e-catalogue but have low interest/support.

### **Market Attractiveness**

The theory of market attractiveness is an analytical tool that often implemented in e-commerce environment. The similarity of e-commerce environment and e-catalogue in general such as the competition across industry boundary, speed on response, new ways to bring value to customers, and reconfigure value chains and value system are the reasons why this theory is used. By using this tool, we can exploit and bringing up the trapped value creation of e-catalogue that currently has not been revealed due to asymmetric information between buyers and sellers, significant amount of time and resources needed to make a transaction in e-catalogue. Moreover, we may discover the new value that answers uncover the unmet or undeserved customers' needs. Insights from the interviews are summarized into data point below which will be incorporated into the analysis flow of the market opportunity. Within this analysis, "customer" will be referred to the buyer while the "company" referred to supplier. The focus will be more on the company side as they are considered the side with the needs that should be catered by e-catalogue in order to attract them to participate.

### Identify the Unmet and/or Underserved Buyer Need

The insights and perception gathered from in-depth interview are grouped by four type of suppliers mentioned in market opportunity methodology section. Common problems are marked to address as one problem later. To structure the analysis, several question to address are structured.

**Table 2. Identify the Unmet and/or Underserved Buyer Need (Source: Author's Analysis)**

Questions	Response
What is the ideal buyer experience?	According to the suppliers, most of the buyer, which is government institution, mainly requires low price, high product availability, fast lead-time, flexibility in purchase volume, and products that meet the specifications.
Is there a gap between buyers' actual and ideal experience?	There are several gap between buyers' actual experience according to the suppliers and Directorate of Complaint Handling: <ul style="list-style-type: none"> <li>• Product availability is not good, most of the time it takes more time for the supplier to ready the products than to deliver it</li> <li>• Lead-time is slower than expectations, this problem is having worse effect especially in the health related government institutions which needs to procure medical equipment and medicine fast to cater to their patient's needs. According to the suppliers, this trace back to the product availability which makes the suppliers need extra time to prepare the product as they often do not have the capability to stock up on large volume of products and deliver it directly when there are purchase order.</li> <li>• Flexibility in purchase volume cannot be reached for some products as most of the time for the small purchase, the delivery cost more than the product itself. The price they offer also require the suppliers to sell in large volume to gain profit as they have to put the lowest price in the e-catalogue</li> <li>• Group A and B suppliers stated that they have problem with the pricing especially when they have to deliver to rural area, even though they state their area capability. This problem mainly tied with the flexibility of purchase volume problem</li> </ul> In conclusion, the two main problem is product availability and flexibility in purchase volume.
What are buyer beliefs and associations about the selling process?	Common beliefs and associations about the selling process of the buyer according to group A and B suppliers are that e-catalogue offer simple transaction and purchase process, while the only simplification made is the tendering and appointment process. While the purchase itself still have several complexities as usual. The example are the suppliers still need to fulfil documents regarding the purchase, the specification, etc. despite that that information are already available in e-catalogue. This problem makes the suppliers take longer than it needs to in deliver the purchased products.
What barriers block some/all potential buyer?	As of now, the main barriers that block potential buyer are the same reason with question no. 2 with additional consideration, which is the unavailability of required product or service within e-catalogue.

Conclusion of main problem: Product availability from suppliers' side and complexity of deal with institutions which also affect lead time; Flexibility of purchase which tied to pricing issue; Availability of buyers' required products within e-catalogue

### **Identify the Specific Buyer a Suppliers Will Pursue**

In general, suppliers are only heavily attracted to join the e-catalogue when the local government or a ministry has clearly supported the purchase from e-catalogue. Suppliers will pursue specific government institutions that clearly need to buy a particular product from e-catalogue. Supports towards specific type of government institutions need to be initiated from the higher ups such as related provincial government, ministry, or agencies.

The example of this case is the purchase of medical equipment and medicine as instructed by ministry of health that attracts a lot of those products' supplier to e-catalogue. DKI Jakarta's provincial government moves by instructing the use of e-catalogue also have the same effect, but in wider terms as several local supplier is interested in joining the e-catalogue. The effect is understandable since the needs of provincial government are not as specific as healthcare public institutions. Conclusion of main problem: Suppliers are truly attracted to join e-catalogue when local government or related ministry instructed and support the purchase through e-government that gives the suppliers no other choices.

### **Assess Advantage Relative to Competition**

Suppliers that do not join e-catalogue admit that they are afraid their products do not have competitive advantage within e-catalogue as they are not the big players, thus they will be surely lose in term of price offered. On the other hand, aside from pricing, those group D suppliers also perceive that they do not have the capability to supply their product in large quantity in the even such an order are placed upon them.

Insights above are in-line with what group A and B suppliers said that they are confident with their ability to provide competitive price and product availability (despite later on, product availability become one of the problem) Conclusion of main problem: Suppliers are afraid to not having competitive advantage and ends-up selling nothing.

### **Assess the Suppliers Resources to Deliver the Offering**

According to the market attractiveness framework, there are three type of resources need to be assessed in order to be able to deliver the offering.

a. Customer facing:

Brand names, well-trained sales force, multiple distribution channels: Several type A suppliers are worried about their own capability especially distribution channel but decide to join e-catalogue and try to figure it out later. Most of the type C suppliers are not joining due to their limitations in capability especially in distribution channel and brand names. Majority of type C suppliers thinks that their product does not have known brand to be chosen by buyer in which they perceive as the effort in registering their product within e-catalogue would not yield considerable amount of sales.

b. Internal:

Technology, product development, economies of scale, and experienced staff By limiting the price that suppliers are able to set, the framework contract are actually reducing the profit gain of the suppliers which in turn reducing the suppliers available resource in fully delivering the offer made by the buyer. With the lowest price the suppliers must offer, economies of scale play important role, however, only small number of suppliers can do their business with enough economy of scale to provide the required price.

Conclusion: Lack of suppliers' capability on distribution channel; and High economy of scale needed to cope with low profit and high-volume purchase

### **Assess Market Readiness of Technology**

According to the market attractiveness framework, there are three type of technological aspects need to be assessed to see the readiness of the market.

a. **Technological Vulnerability:**

Technology trends in Indonesia are moving forwards with higher technology adoption every year, however the same problem is faced by Indonesia as other developed countries where security is the main issue. With low public awareness on internet security, the information on e-catalogue is prone to security violation. However, with e-catalogue runs by government, there are expectations that the system will be more sophisticated and more secure than common trade portal.

b. **Technology adoption:**

Buyers' technology adoptions are very important to assess the market attractiveness of e-catalogue as all the process are done using internet. According to e-government surveys 2014 conducted by United Nation, Indonesia only receive 0.4487 e-Government Development Index (EGDI) rating, which is categorized under the third group, middle EGDI (Ali, Hoque, & Alam, 2018). The EGDI itself are calculated from three components: Online Service Index - Score: 0.3662; Telecommunication Infrastructure Index -Score: 0.3054; and Human Capital Index - Score: 0.6786. The breakdown of the EGDI above shows that despite the readiness of the human factor, Indonesia's e-government are still lacking in online service index and telecommunication infrastructure index. Which means that both the capability of the online service and the telecommunication infrastructure of Indonesia are close to less developed countries. According to the suppliers, most of the rural government office are hardly having good telecommunication infrastructure, which render them unable to use the e-catalogue. Uneven development between Java Island and other islands make it worse where the technological infrastructure outside Java Island are not enough to properly conduct e-purchasing process. With the problem in connecting all the related government institutions and the unavailability of good online service platform, low technology adoption of the buyers (government) rendering the market less attractive as the process itself involving the use of technology.

c. **Technological impacts:**

With the technological infrastructure of the government still in development, it is expected that the improvement in technological infrastructure will dramatically increase the participation in e-catalogue. Most of the suppliers are agreed with the statement above while almost half of type C suppliers believe that not all government staff able to properly use technology infrastructure.

Looking from supplier' perspective, considerable number of suppliers from all type is admit that they do not really understand the procedure of using the e-catalogue. Large suppliers can cope with this problem since they are more likely to have IT support or simply hiring tech-savvy people that will be responsible for the e-catalogue purchase. The problem lies within the smaller suppliers that do not fully understand on how to use the e-catalogue system, the system which should be facilitating the suppliers by making the process simpler are become the barrier for them to participate.

**Conclusion:** The suppliers are not fully ready to utilize technology in procurement due to complexity of the process involving technology; and the buyers are not ready at all especially in availability of decent technological infrastructure needed to conduct e-purchasing process properly.

### Specify Opportunity in Concrete Terms

Based on the perspective from all type of suppliers, the opportunity within e-catalogue seen from the suppliers' side are:

**Table 3. Perceived opportunity of e-catalogue from suppliers' point of view (Source: Author's Analysis)**

Opportunity Items	Common Perspective
Target Segment	Government funded institutions, including central government, local and provincial government, agencies, ministry, public hospital and schools, and others.
Value proposition of e-catalogue	I Lower marketing and sales cost II High Volume purchase III Large customer base IV Sales area expansion
Benefit that the buyers expect	a. Fast lead time b. Low Price c. Products meet requirement d. Clean and transparent transaction. e. Wide choice of product f. Complete information regarding the product g. High item availability h. Delivery capability
Critical capabilities needed	<ul style="list-style-type: none"> <li>▪ Economy of scale (b, e, g)</li> <li>▪ Good distribution network (a, g, h)</li> <li>▪ Quality product (c, e)</li> <li>▪ Complete product information (d, f)</li> <li>▪ e-catalogue process understanding (a, d, f)</li> </ul>
Relative advantage of capabilities	<ul style="list-style-type: none"> <li>▪ With current pricing requirement, economy of scale is important to keep the cost down. Government institutions are more likely to purchase cheaper products to keep the purchase value within their budget.</li> <li>▪ Good distribution network is a must since the purchase can come from government institutions located anywhere and must be delivered within a week unless the agreement are more relaxed, it is also important in procuring the items so that it will be available when buyers purchase the item.</li> <li>▪ Quality product is not important in most cases, as the main consideration is price, but given the same price for better product, it will have better advantage to be chosen by the buyers.</li> <li>▪ Complete product information will give higher advantage as buyers will be more likely to purchase the product that they have complete information on</li> <li>▪ Process understanding is critical for several reason, one is to speed up the sales process to meet the buyers' lead time expectation. Second, by understanding the process and execute it correctly, the payment of the process will arrive faster</li> </ul>
Financial opportunity	<ul style="list-style-type: none"> <li>▪ Higher total profit through higher volume purchase</li> <li>▪ Higher profit through the saving in marketing and sales cost</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Increasing sales opportunity with larger customer base (all government institutions)</li> <li>▪ Increasing sales opportunity with wider sales area through e-catalogue</li> </ul>
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Despite opportunity perceived by the suppliers, there are also several problems, which contribute negatively towards the attractiveness of the market based on perception of suppliers. By combining and summarizing the perspective of the suppliers, author is able to map several main problems that negatively affect the attractiveness of e-catalogue that shown within the table below.

**Table 4. Issues that negatively affect e-catalogue attractiveness (Source: Author's Analysis)**

<b>Issue</b>	<b>Description</b>	<b>Impact towards suppliers</b>
The absence of strong regulation	Relatively low purchase volume, except for items that currently already mandatory to be purchased from e-catalogue such as medical equipment	Suppliers hesitate to join
	Buyer do not feel the need of using e-catalogue	Smaller than expected customer base
Low administrative efficiency	Complex and time consuming registration process Complex and time consuming product drafting and price negotiation with LKPP process	Suppliers hesitate to join
	Complex documentation process needed in order to issue payment of product purchase	Delayed payment disrupt the cash flow of suppliers
Low cost efficiency	Increased distribution cost	lower profit for suppliers
	Lower selling price	lower profit for suppliers
	Price can be cheaper than displayed value, but cannot be high	lower profit for suppliers
Low technology adoption	Insufficient government telecommunication infrastructure, especially outside Java and in rural area	Smaller than expected customer bas
	Low technology understanding regarding e-catalogue among suppliers	Supplier are not capable to participate in e-catalogue
Suppliers capability	Inability of the suppliers to distribute their product	Supplier are not capable to participate in e-catalogue
	Inability to fulfill large volume purchase	Supplier are not capable to participate in e-catalogue

#### **Assess Opportunity Attractiveness**

Based on series of assessment done previously, the market opportunity assessment are conducted by assigning positive, negative, or neutral impact towards market attractiveness using several factor below, the factor used are considered capable of covering all aspect of market attractiveness.

With the total value of (-2) which is close to zero (neutral), the market is considered as slightly unattractive. The results and findings of market opportunity assessment will be confirmed through Focused Group Discussion.

### **Benchmark Result**

Benchmark e-procurement system that other countries have and compare the best practices, the target country and consideration are shown below:

- South Korea: Developed industrial country which rise even later than Indonesia but achieve greater advancement compared to Indonesia
- Brazil : Country with similar characteristic with Indonesia in which both have large population, rising middle class, rich in natural resource and strong history of government corruption Benchmarking focusing on how the e-procurement (e-purchasing in particular) attract more suppliers and the general system design that gives benefit to the stakeholders. There are benefits from e-procurement:
- Including SME are excellent moves to increase the competition and number of suppliers
- Flawless payment method which is fast and simple are very important in determining the success of an e-procurement system so that the supplier would not have the problem with their cash flow
- Incentives are needed in order to attract more suppliers; SME suppliers should get better incentives so that they would be able to compete better with large suppliers
- E-procurement must be able to significantly reduce lead time, achieved not only by well-designed process, but also good implementation and practices
- Complete and sophisticated information of suppliers are vital to the success of e-procurement. This can be achieved by committed suppliers that provide their full information coupled with the e-procurement system that can show the information towards the buyer in an easy to interpret ways.

### **Focused Group Discussion Result**

The main topic of the Focused Group Discussion is to confirm the summarized findings from in-depth interviews and desk research. It is also used to confirm the result of initial analysis and stimulate discussion between the suppliers and LKPP itself to formulate the conclusion and helps designing appropriate solutions.

With the help of the result from benchmark study, there is several ideas about the solutions for current issue with the suppliers, by looking at the success story of other countries e-purchasing system. Consideration are also made regarding the capabilities of buyer, supplier, and facilitator of e-purchasing in Indonesia

While presenting the market attractiveness result, all the suppliers agree that the market attractiveness of e-catalogue is considered as “slightly unattractive”. FGD members add up several point to clarify why the market is “slightly unattractive”: There are several foreseen opportunities presents within e-catalogue as mentioned in “Specify Opportunity in Concrete Terms” section, which is fully agreed by supplier’s respondent; Foreseen issues outweigh the opportunity for most of the suppliers except the one that have critical capabilities mentioned in “Specify Opportunity in Concrete Terms” section which is fully agreed by the suppliers with additional point:

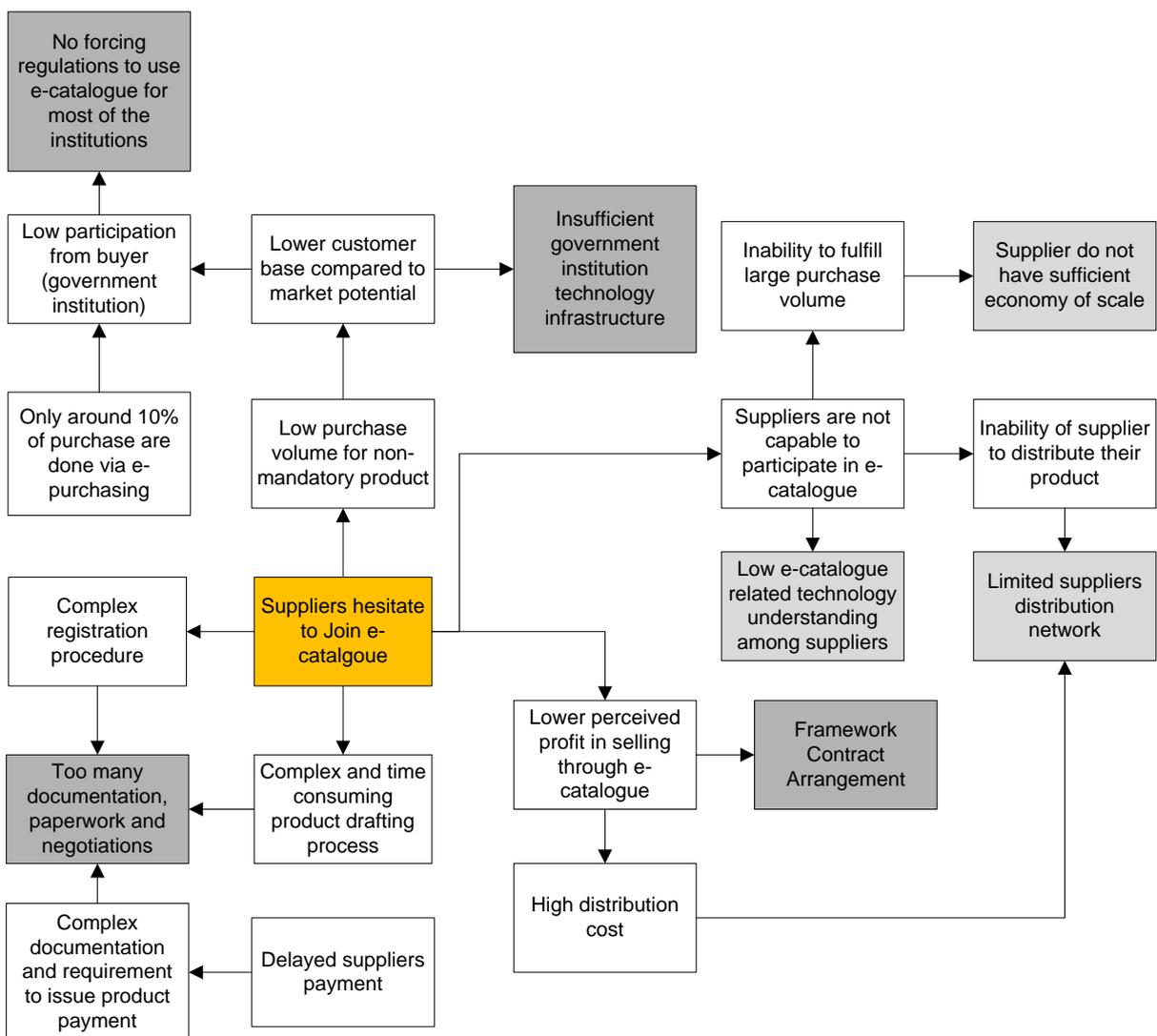
- a. Inefficiency of the purchase process due to several step of approval needed from LKPP.
- b. Despite the issues that outweigh the opportunity, in the future it is more likely that all government institution will be using e-catalogue, which forces the suppliers to participate.
- c. With current condition, suppliers agree that now is not the right time to join e-catalogue, they will mainly wait until the system improves and more mandatory purchase through e-catalogue is regulated. There are also several suggestions on what can be done in

order to attract more suppliers and address existing issues that will be incorporated in the next section.

### Findings

Root cause analysis are mainly used to determine where a symptom lead and determine the source of the problem in order to be able to address the correct problem and implement result that gives larger magnitude towards the improvement.

The root cause analysis is the product of focused group discussion, which is formulated by author together with suppliers and LKPP. The darker box is the source of problem that originated from the e-catalogue program while the lighter grey one is source of problem originated from the suppliers itself. While the orange box indicates the main business issue that need to be addressed within this study.



**Figure 1. Root Cause Analysis**  
Source: Author's Analysis

## **Conclusion and Implementation Plan**

The main source of problem that resulted in “slightly unattractive” e-catalogue from suppliers’ point of view is split based on their origin. E-catalogue originated issue: No forcing regulations to use e-catalogue for most of the institutions; too many documentation, paperwork, and negotiation within e-catalogue administration process; insufficient government institutions technology infrastructure, and Framework contract arrangement itself

Suppliers’ originated issue: Low e-catalogue related technology understanding among suppliers; Limited suppliers’ distribution network; and Lack of economy of scale

### **Strategic Recommendation**

Strategic recommendations are made based on the source of problems with the goals of increasing the attractiveness of e-catalogue from suppliers’ point of view. The main concerns are to address the unmet needs of the supplier, which negatively affect the willingness of supplier to participate in e-catalogue.

#### **Recommendation to address E-catalogue originated issue**

- Central government to design and issue regulation such as Government Regulation (*Peraturan Pemerintah*) or Act (*Undang-Undang*) that enforce the use of e-catalogue as long as the type (not brand) of product needed are available within e-catalogue and able to meet specification
- LKPP to reduce the paperwork and documentation that need to be done by suppliers and buyers and incorporate the process within LKPP by coordinating with other agencies such as tax office and banks. The negotiation process should also shorten to reduce the time needed for product drafting
- Central government need to improve technology infrastructure, especially on computer and decent internet line for government institutions before ordering the use mandatory use of e-catalogue.
- LKPP and government need to revise several rules within framework contract to bring more benefits towards the suppliers
- LKPP to actively educate suppliers, especially suppliers that actively supply their product and/or service to government institutions on understanding more about e-catalogue. This move can also serve as advertising the e-catalogue towards the suppliers to join the system
- LKPP to form agreement with several logistic and Distribution Company in which their service can be used directly by e-catalogue suppliers that do not have or only have limited distribution capability.
- Or, LKPP actively engage existing suppliers to form joint distribution network which can be utilized to deliver product towards the buyers.
- LKPP to provide incentives towards smaller suppliers in form of additional payment to increase the suppliers profit and stimulate them to grow more in size to achieve better economy of scale. Or in the form of special privilege for smaller supplier.
- Follow up regulation to accelerate the implementation of e-catalogue

#### **Implementation Recommendation**

The following tables show the implementation recommendation in case that the strategic recommendation is followed. Several items of the implementation plan are also originated from the Focused Group Discussion.

### Further Research

Due to the focus on marketing side, the user side is not assessed within this study. Author thinks that in order to assess the problem better, a customer satisfaction study must be conducted in order to understand the insight mainly from the user side. The input from the customer satisfaction is no less important than the study in which it can address several problems that have more impact towards the customer rather than the vendor / supplier.

**Table 5. Implementation Action plan (Source: Author's Analysis)**

<b>Strategic Recommendation</b>	<b>Implementation action plan</b>	<b>Description</b>
1).Central government to design and issue regulation that enforce the use of e-catalogue	Assess the readiness of the government institution	Government is to conduct their own study about the readiness of the government institutions regarding the full use of e-catalogue
	Readiness of the e-catalogue to be used nationwide	Assess the capability of both the portal and the supplier in catering the needs of all government institution across Indonesia
	Design the e-catalogue enforcement regulation	Regulation design must be intended to make all government institutions purchase through e-catalogue
	Issue and socialize the regulation	Regulation should be issued, and socialized clearly so that no one left uninformed regarding the regulation
2). LKPP to reduce the paperwork, documentation and negotiation	Automatic document and paperwork generation system	Create a system where most of the paperwork are generated automatically using the combination of buyer and supplier profile information. Less involvement from supplier and buyer are expected
	Coordinating with other government related agencies	Coordinating with other agencies that provide the paperwork to eliminate the needs of it
	Create a standard for negotiation	To cut the negotiation time, it should be limited to 3 times negotiation, the negotiation also should have percentage limit from original price
3). Improve Technology Infrastructure	Improve telecommunication infrastructure	Improve the availability of decent computers and internet connection in every government institutions that still lack of it, mostly are in rural area or outside Java Island.
	Encourage government institutions to make use of technology information	Encourage institutions by held competition or providing intensive for properly using technology information in government institution
	Educate the civil servant in how to	Regular seminar and course in e-government must be held to ensure that the human resource in

	utilize e-government, mainly e-purchasing	government institutions are capable of using e-catalogue
4). Revise several rules regarding framework contract	Revise Pricing method	In order to bring benefit for the suppliers, pricing should made flexible regarding the volume of purchase; the display within e-catalogue should also support the flexible pricing. The flexible pricing should also the lowest supplier price

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