

# The Challenges faced by Public Sector Governance in implementing e-Procurement System: A Case Study of The Department of Education, Malacca

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**Abstract**—Previously, public procurement was conducted through manual process which involves a significant amount of paper, space and cost arrangement. However, the evolution of technology together with the environmental, the traditional public procurement is no longer relevant. E-procurement has replaced traditional method without putting aside all the policies and circulars in public procurement. This study highlighted the challenges faced by procurement unit in implementing “the new e-procurement” (known as *e-perolehan baharu*) in early 2018 such as the lack of ICT support and facilities, financial and human resource constraint, inadequate knowledge and technical skills of the system and the resistance from the people involved. These challenges affected procurement process as a whole, especially the Small and Medium Enterprise (SMEs). This paper concluded that the government should pay more attention towards the preparation of facilities and ICT support prior to the implementation of *e-perolehan baharu* by all agencies and government organizations.

**Keywords**—*procurement; e-procurement; public procurement; procurement good governance*

## I. INTRODUCTION

**M**ALAYSIA'S government has started using e-procurement system (known as *e-Perolehan*) for the past few years. Previous studies defined e-procurement in several terms.

Scholars defined e-procurement as “internet based purchasing systems that offer electronic purchases, ordering process and enhanced administrative functions to buyer and seller” [1]. In basic understanding, e-procurement is defined as “using internet technology in the purchasing process”. Other researchers consider that the implementation of e-procurement as a complement of e-government system of a country [2].

Implementations of e-procurement do give value towards good governance system and increase the level of efficiency of the government. Previously, all procurement arrangements such as servicing procurement, supplying procurement and work-base procurement were done manually [3]. Before the 14<sup>th</sup> election of Malaysia, the Government announced that all procurement arrangements must be implemented via online with *e-Perolehan* (currently known as *e-Perolehan Baharu*) effective from 1<sup>st</sup> January 2018 (with exemptions). However, after the election, the New Government shifted the effective date to 1st July 2018 [1]. Due to many reasons and circumstances, this decision had led to a foul situation in the procurement governance and subsequently affects the overall government system.

## II. PREVIOUS STUDY ON E-PROCUREMENT SYSTEM

In the early 2000, the transformational government (TGoverment) emerged as a new trend in delivering public services using information and communication technology [1]. Realizing the fact that technology may

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encourage a more transparent and efficient way of communication, a study has been conducted to determine the level of readiness among Malaysians towards the participation on e-government. There is a high percentage of usage for e-government platform services among Malaysians, and the high usage was associated with the positive perception on e-participation [1]. There are a few other studies that have been conducted pertaining e-procurement, both in public or private sectors,

A traditional procurement system has been the major cause of issue that led to delay in construction projects all around the world. An Example of this is shown in Saudi Arabia, where a quantitative survey was done [2], showed that the government has consistently increased the cost of construction and delay of 70% of their projects. This is due to the poor selection method which was based on the cheapest price that are offered from contractors, and the contractors chosen are not qualified enough to complete the job [2]. In Malaysia, Telekom Research and Development Sdn. Bhd. has developed and installed e-procurement internally. Based on the case study conducted, it is proven that e-procurement succeeded on saving cost and beneficial in many aspects including improving the efficiency and quality of communication, increase transparency of procedures, and reduce risk of corruption [3]. Inadequate providing of appropriate facilities and technology infrastructure from top management and difficulty of using the provided software are among the challenges faced by organizations [3]. Therefore, it creates negative perception among users and does not encourage the effort of implementation e-procurement.

### III. CASE STUDY – CHALLENGES OF IMPLEMENTING E-PROCUREMENT

Procurement is one of the main thrusts in a complex government service system. Fig. 1 shows an overview of procurement process which involves three types of procurement; services, supplies and projects. There were many challenges in executing e-procurementas highlighted in previous studies. Major factors that contribute to the challenges of implementing

e-procurement are technology, infrastructure, legislation, environment, and resources constraint and management characteristics [4, 5]. There is a divided barrier of implementing e-procurement into external and internal factors [5]. In this paper, we would focus on challenges that faced by Procurement Unit, Education Department of Malacca while implementing procurement via *e-Perolehan Baharu*. There were inadequate facilities and training provided by headquarters. The work instructions are received through circulars issued by the Ministry of Finance and subsequently distributed through their respective Ministries. It requires knowledge and skills related to the system in order to operate the system accordingly and mannerly (since the system was newly introduced for usage). The Third party who was responsible for developing *e-Perolehan Baharu*, was the *commercedotcom* (CDC), and they also provided one-to-one training services to all government agencies and companies registered with *e-Perolehan*. However, besides having a shortage of human resources, they were also not familiar with the technical matters. The delay had given a bad impact to the overall procurement process. The capability of *e-Perolehan Baharu* to cope with all procurement transaction, from all government organizations and agencies at a time was be questioned. The system is often interrupted and frequently distorts status of the procurement process as a whole.

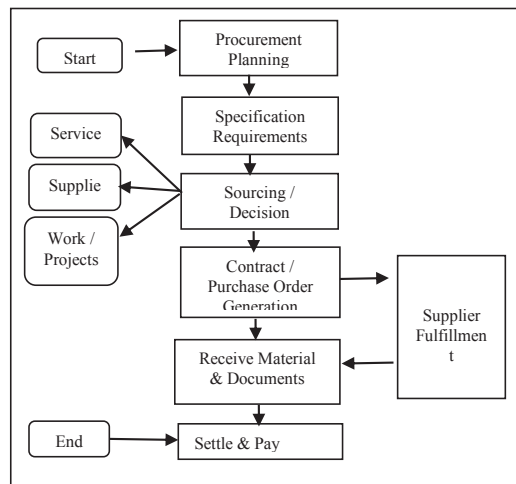


Fig 1: An Overview of procurement process

The challenges of implementing *e-Perolehan Baharu* are also felt by contractors especially the Small and Medium Enterprises (SME). Information and communications technology (ICT) is the main pulse of executing e-procurement. The adoption of ICT platforms allows for efficient and effective management of all procurement processes and encourages a transparent communication between the contracting authority and contracting parties [6]. Lacking of support in ICT facilities and knowledge, system developers and vendors raise a barrier to e-procurement among SMEs. The understanding and application of specialist softwares and start-up fees which are beyond the ability of SMEs may be required by the system developers [7]. The inavailability of supporting infrastructure such as sufficient internet networking is also one of challenges face by parties who are involved in e-procurement [5]. Resource constraints such as financial and human capital, the culture of organization, and perception of risk and benefits of e-procurement system [8] has inter-related reconciled and hard to be explained.

In this case, contractors need to get engaged with CDC in order to register in *e-Perolehan Baharu*, pay the required fees and be enabled before allowing them to utilize it. SMEs that are comfortable with traditional procurement method may find it hard to change and preparing for all ICT equipment, facilities, financial and human capital investment. Due to these challenges, the procurement process has been disrupted and the management is confronted with difficult times. Urgent short term solutions are needed to solve the problems at that point of time as well as long term solutions in order to prevent it from re-occurring in the future.

#### **IV. BENEFITS OF E-PROCUREMENT**

Despite all challenges, e-procurement does benefit the government and private sectors in many ways. Previously, contractors were mandated to pay three hundred Ringgit Malaysia to buy one set of printed copy of tendering documents for every single contract

that they intend to submit. Most contractors will buy more than one (the more offer the higher chances of award), and would cost them few thousands of Ringgit Malaysia. Through e-procurement, tendering document is free and available for contractors who are being invited from the contract authority. Government need not to prepare the printed version and so contractors need not buy as all processes and documents are created and able to be obtained online. The Cost of operations is likely to be reduced. It is believed that the main advantages of e-procurement are cost reduction, process reorganization and improved contract fulfillment [9]. Other researchers have identified and measured four (4) types of cost saving under e-procurement; order cost, administrative cost, lead time cost and opportunity cost of capital [10]. Each of the process has been segmented and being arranged by sequence orderly and mannerly. Next process would not be proceeded if the previous are not being completed.

The procurement system is offering a more effective and efficient process [3] and it is supposed to provide the latest information that will help government in making the best decision. Indirectly it also increases the transparency level of overall procurement process. Other researchers claim that e-procurement benefits government are by increasing the equality and transparency of government contracting and projects [11]. The information gap becomes smaller as the supplier is able to publish their supplies and services in wide perspective. They have a huge opportunity to reach a broader market. On the other hand, a research study found out that e-procurement is important in reducing the involvement of lobbyist. It helps to build and increase public trust and people's confidence level towards the management of public fund by the procurement officers in governments [12]. Since all processes are done inside the system, together with documented facts and justification, it closes the loop for lobbyist. Validation and approval are needed by a few personnel instead of one-man-show decision.

## V. METHODOLOGY

The methodology used in this study is based on the secondary method whereby online research has been conducted via Scindirect, Google Scholar, Emeraldinsight, ResearchGate and Scopus pages. Related articles pertaining procurement, e-procurement and e-government were selected and prior to the analysis. Besides that, the experience of the author as a desk officer who led the procurement unit and executes procurement through an *e-Perolehan* system while serving in the Education Department of Malacca was also used in the study.

## VI. CONCLUSION

An Organized and efficient procurement governance creates a competitive advantage to an organization. Therefore, the government needs to pay more attention to the procurement approach which has a positive impact in line with the implementation of digital government's policy towards an efficient and effective public service offering. Conducting a pilot-project may help to determine challenges and difficulties during the implementation at an early stage. It may also help in constructing a suitable and appropriate solution needed before the implementation take place within a huge market.

Besides the capability of the system itself, it is also important for the government to pay more attention to the availability of resources in supporting the initiative prior to the implementation. ICT support is very important in order to make sure the procurement processes are smoothly implemented, either in the government or the contractor point of view.

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