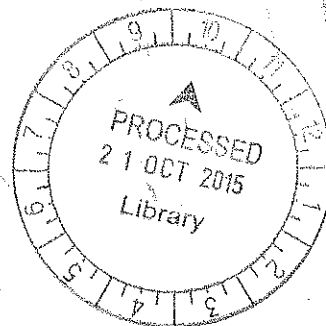


**THE BARRIERS OF IMPLEMENTING E-
TENDERING SYSTEM BY QUANTITY
SURVEYORS IN SELANGOR**

FOR REFERENCE ONLY

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DECLARATION

I, CHONG WON JIUN (I12000656) confirm that the work in this report is my own work and the appropriate credit has been given where references have been made to the work of other researchers.



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ABSTRACT

Nowadays, the trends of construction is growing up rapidly where the time saving and cost efficiency are the main considerations to all the construction players and others. However, the most common practice of tendering process in Malaysia is still based on the conventional method despite there are many benefits of using E-tendering system. The aim of this thesis is to identify and investigate the barriers of implementing E-tendering system by Quantity Surveyors in Selangor, and to produce recommendations for improving the use of E-tendering system as well. First, the possible barriers of implementing E-tender are identified by reviewing the related research and information from others. This is followed by the investigation of the barriers as aforesaid through an online survey and the results are used for data analysis in order to find out the few main barriers of implementing E-tendering system. Besides, the rank correlation and T-test are being used in the data analysis part as well. Based on the results, there are still many of Quantity Surveyors prefers to proceed the tendering process by using traditional method instead of using E-tender. Nevertheless, most of them shows that they are willing to use E-tender in the near future.

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Chapter 1.0 Introduction

1.1 Background of Study

Nowadays, E-tendering system is being used widely in other country such as Singapore, Australia and etc. Although it is still rarely being used in Malaysia construction industry, the Construction Industry Development Board (CIDB) is ready to implement an initiative for e-tendering or NeTI (National ETendering Initiative) in order to provide a platform for online tender job under Work Ministry. According to Alsagoff (2006), Malaysian construction industry is ready for ICT adoption to the E-tendering system, at least in a simplified form.

However, according to Khu Say Eei (2012), it is found that the e-procurement is not widely adopted by Small and Medium Enterprises (SMEs) due to the external factors which are the technology, infrastructure and legislation, and environment; besides, there are the internal factors that causing the barriers to implement the E-tender are the resource constraints and organizational characteristics. In this case, the stakeholders and the government encouragement to implement the E-tendering system is very important to overcome the barriers as well. Hence, in Malaysia, the practice of tendering process is still based on the manual or traditional ways even though the National E-tendering Initiative program has been initially adopted.

Instead of using E-tendering system, traditional tendering process is now the most common practice for tendering in the construction industry. It requires the long period of preparation of the tender documentation and laborious process, where the tender documents is formed based on the client's enquiry. (Tsen Soo Fui, 2006).

1.2 Problem Statements

Nowadays, the internet is an important information technology that has developed over the years and it is transforming the manner in which several companies conduct their business activities. The rapid growth of the information technology brings the efficiency and convenience to the human. Nevertheless, the traditional tendering process is the most common type of tendering process known in Malaysia.

In the current situation of traditional tendering process, it require a longer period to proceed the works which caused the time consuming and slow processing compare to E-tender. Traditionally this process is paper-based (involving large volumes of supporting tender documentation), and usually costly to both the client and contractor. Besides, the long lead-time is required the tenderers to come over the centralized location to purchase tender. The traditional tendering method incurred high working load. The tender need to be sealed when submit to the developer. Lastly, the documents must also be kept in secured place before open tender. All the issues as aforesaid may cause the delay of projects or may lead to be pressed for time if the construction need to be started in short time.

Although there are a number of problems occurred when using the traditional tendering process, it is still the most common type of tendering process being used in Malaysia, whereas, the E-tendering system has been implemented in construction industry of other countries for quite a long time, but it is still rarely used in Malaysia. The reason why E-tender is still not commonly being used in construction industry may due to the knowledge about E-tendering is not fully comprehended by the parties involved. Other than that, the instability of web protection system may cause the hackers to stand a chance of hacking into the E-tender website, this may lead to lower user confidence and the reluctance to try the use of E-tendering system.

The Barriers of implementing E-tendering System by Quantity Surveyors in Selangor

On the other hand, the most important issues is that the construction players especially consultant QS intentionally ignore E-tendering system due to some disadvantages which may lead to reduce their value in the field of construction industry. The development of IT was being improved very quickly over the past 30 years and it will become the most major and necessarily technology in the world in future. Therefore, the traditional tendering process will be eliminated and replaced by E-tendering process. When this scene is happened, the construction parties who intentionally ignore E-tender in the present time will be affected and it will be too late for them to start learn as they are the laggard at that moment. "Adopt and change before any major trends or change". (Jack Ma, 2014). Therefore, leading the construction players in Malaysia construction industry to accept the use of E-tender will be the biggest challenge at this time.

1.3 Aim

To investigate the barriers of implementing E-tendering system by Quantity Surveyors in Selangor.

1.4 Objectives of Study

1. To identify the key barriers of implementing E-tendering system by Quantity Surveyors in Selangor.
2. To investigate the barriers to the implementation of E-tendering in construction industry Malaysia.
3. To develop the strategies to overcome the barriers of implementing E-tendering.

1.5 Importance of Study

Nowadays, traditional tendering process lead to the longer period of process, costly due to tender documentations, inconvenience of tenderers due to the personnel have to come over the centralized location to purchase tender, heavy work load and etc. In fact that E-tendering system could overcome the problems as aforesaid, however, it is still rarely being used in Malaysia construction industry. However, many companies are approaching the use of E-tendering with caution in order to test its practical advantages and encourage confidence amongst staff before implementation. (Geoff Tindsley, 2008).

E-tendering system should, by rights, more commonly be used instead of using traditional tendering method. Therefore, the purpose of this study is to investigate the barriers of using E-tendering system in Malaysia construction industry. According to the possible factors that lead to the lesser use of E-tender, the process of E-tender need be clearly identified while the investigation of possible problems which could occur during the process of E-tender will be implemented in this study as well.

On the other hand, a number of advantages and disadvantages will be identified in the use of E-tendering system to the construction players (including clients, quantity surveyors, contractors etc.) in order to identify whether the E-tender system is ready to be applied widely in Malaysia construction industry. The comparison between E-tendering system and traditional tendering process need to be implemented in order to investigate the critical factors that lead to the more preferable use of traditional tendering process rather than using E-tender.

Lastly, a questionnaire survey will be carried out toward the quantity surveyors involved in Selangor Malaysia, identifying their views on these different aspects of E-tendering, and exploring the reasons for the perceived slow uptake of the technology.

1.6 Scope of Study

There are few limitations in this study where the first is time constraint. Due to the 4 months of time frame, all the research and questionnaire survey have to be done within it. Accordingly, the population targeted will be focus on Selangor only instead of carrying out the survey for whole Malaysia.

1.7 Significant of Study

The Significant of this study will be as following:

1. The result of the finding will be used to determine the few main barriers of implementing E-tendering process in Malaysia construction industry.
2. This study can be a useful guide to implement certain plans to overcome the barriers.

1.8 Expected Outcome

1. The barriers of implementing E-tendering system can be determined.
2. The principal process of E-tendering can be determined.
3. The benefits of using E-tender to construction players can be determined.
4. The strategies for improving the use of E-tendering system can be determined.

Chapter 2.0 Literature Reviews

2.1 Introduction

This chapter will discuss basic information and theories about the barriers of implementing E-tendering system in Malaysia. Other than that, this study will also identify the principal process and benefits of using E-tendering system.

2.2 E-tendering

Tendering is the process of making an offer, bid or proposal, or expressing interest in response to an invitation or request for tender. Organizations will seek other businesses to respond to a particular need, such as the supply of goods and services, and will select an offer or tender that meets their needs and provides the best value for money. (Kajewski, S and Weippert, 2004). According to Simon Fong (2009), E-tendering system is the use of technology to its fullest to facilitate the whole process of tendering through online. He also said that the development was mainly on digitizing the documentations during the tendering process and publishing them on a website for public announcement. However, nowadays people have contributed much more effort to proceed the tendering mechanisms and also the ICT system in order to support the users participate in tendering online.

E-tendering is therefore defined as the process by which tender documentation, such as drawings, bills of quantities (BoQ) and specification are issued to construction firms in an electronic format and via the internet. (Rodrick Lengama Chilipunde, 2013). E-tendering has been defined for some time as being one of the potential tools to assist in changing the construction industry's culture and improving its processes during the tender stage. (Derek Lavelle, 2009).

Despite E-tendering being widely considered as providing a framework where both clients and tenderers can reduce their costs, remove unnecessary administration and streamline the overall tendering process, the perceived costs associated with web based e-tendering and the assumption that clients are not interested seem to be the greatest barriers to switching to a web based system. (RICS, 2009).

The Construction Industry Development Board (CIDB) is preparing to implement the National e-Tendering Initiative (NeTI) as the platform to process online job tenders under the Works Ministry. (CIDB, 2011). Ghazali (2011) stated that the total savings in the government job in the tender processes by using this system could come up to RM200 million from an average of 5,000 government tenders a year compared with the traditional tendering methods. Other than that, the National e-Tendering Initiative will be used by the Grade7 or Class A contractors for only government projects worth approximately RM10 million or above to allow contractors of other classes to prepare towards the use of this system. (CIDB, 2011).

2.3 Benefits of using E-tender

The use of E-tender may lead to possible reductions in the tender period or use of previously abortive time to concentrate on the production of the tender. Printing costs will be reduced, as well as copying and postage costs, together with the associated staff time and overhead costs. (Geoff Tindsley, 2008). E-tendering creates greater transparency; it is easier to track the progress of tenders through internal systems, consequently keeping a ready-made audit trail for both clients and contractors.