



## Readiness for E-Tendering in the Construction Sector- Designing a Computer Programme

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Received 10 April 2019; Accepted 19 July 2019

### Abstract

Development of a country is measured by the number and quality of modern and contemporary projects that have been and are being established. As the construction industry is the nucleus for the development of any country, the stages of each project are tracked and monitored. It was found that the procurement stage has the biggest and most important influence in the successful completion of the project with the desired results. This research aims to eliminate corruption in the procurement process, identify the additional factors relating to a contractor's qualification that contribute towards an increase in the quality of the project; designing a computer programme that conducts the tender process electronically to avoid any human contact. The researcher designed a questionnaire which contains a number of factors that would increase the efficiency and quality of the project. The researcher distributed 50 questionnaire forms and received back 46 completed forms. The questionnaire outputs were analyzed by using the SPSS software which can be defined as a software package used in statistical analysis for data. After analyzing the results a nominal group session was held. This consisted of eight employees with technical, financial, legal, and supervisory and IT expertise. The work was collective and many questions were asked. All relevant factors were discussed. It was agreed to cancel three factors only as being irrelevant to the contractor's qualification process. The most significant findings were that if the organizations adopt the E-T system in the tendering process, corruption cases will disappear, the tendering process will be achieved with high level of integrity and transparency, and in order to implement the E-T system, the organization must be ready to change, the employees should have enough courage to adopt the system, and there would be a need for at least one person to play the role of champion/leader.

**Keywords:** Computer Programme; Corruption; Electronic-Tendering; Electronic-Procurement; Joint Venture; Standard Bidding Documents (SBDs).

### 1. Introduction

The construction industry is classified as an information-intensive industry and is described as one of the most important industries in any developed/developing country that is undergoing a period of rapid change. Now a days, the construction industry is also acclaimed as having a great lack of knowledge and awareness about information and communication technology (ICT) and innovative information and web-based communication processes, systems and solutions which may be useful in the procurement, life cycle and delivery of projects [1]. From 2005 to 2018, through the monitoring of the Government Contracts Department for projects and supervising of the contracting process, the defects in the contractual processes were noticed at several points. Consequently, many methods have been restored in solving these problems: the 1st solution was issuing instructions to execute government contracts, followed by issuing

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 <http://dx.doi.org/10.28991/cej-2019-03091369>



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