CONTRACTOR’S PERCEPTION OF THE USE OF STATISTICAL APPROACH IN THE TENDER PROCESS AT THE PUBLIC WORKS DEPARTMENT, MALAYSIA

By

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of Requirements for the Degree of Master of Science

February 2006
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

PENGGUNAAN KAEDAH STATISTIK DI DALAM PEMILIHAN KONTRAKTOR

Oleh

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Ogos 2005

Pengerusi: Ir. Salihuddin Bin Hassim

Fakulti : Kejuruteraan

The usage .....
Contractor selection is one of the main activities of clients. Without a proper and accurate method for selecting the most appropriate contractor, the performance of the project will be affected. The usage of statistical method is implemented by Public Works Department as a better tool for the selection of suitable contractor. This method would avoid a personal preference during selection of contractor for government project. Furthermore, this method will ensure the price submitted by the tenderer is reflective of the current market conditions.

The statistical method uses mean, standard deviation and coefficient variation and this has been applied via a computer programme based
on Microsoft Excel for ease of calculation. Previously the contractor selection process is based on the lowest price or as compared to the Quantity Surveyor’s estimate and this method exhibit an inherent weakness. Result from the survey questionnaire shows that the contractors agreed that the government has implemented a systematic approach using statistical method.

One sample $t$-test was conducted to further validate the perception of the contractors to the new practice of tender selection using statistical method and the results from the respondents show that on the average, all the contractors agreed to the new practice of tender selection using statistical method.
Pandangan kontraktor- kontraktor terhadap penggunaan kaedah statistik di dalam proses tender di Kementerian Kerja Raya, Malaysia

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Kaedah statistik yang digunakan adalah min, sisihan piawai dan pekali ubahan dan kaedah ini dipermudahkan pengiraan dengan menggunakan program komputer yang berdasarkan ‘Microsoft Excel’.

Proses pemilihan kontraktor sebelumnya adalah berdasarkan harga yang terendah ataupun anggaran Jurukur Bahan dan penggunaan kaedah ini banyak menimbulkan keburukan. Keputusan daripada kaji selidik yang telah dijalankan menunjukkan pihak kontraktor bersetuju bahawa pihak kerajaan telah melaksanakan kaedah yang sistematis melalui pemilihan kontraktor berdasarkan statistik.

Satu ‘t-test’ yang dijalankan untuk pengesahan terhadap pandangan kontraktor terhadap kaedah pemilihan kontraktor yang terkini menggunakan kaedah statistik dan hasil daripada responden menunjukkan secara purata, kesemua kontraktor bersetuju terhadap kaedah yang terbaru pemilihan kontraktor menggunakan kaedah statistik.
ACKNOWLEDGEMENT

First of all, I would like to express my deepest thank to The Almighty Allah S.W.T for giving me the strength and patience during completing this research. The author appreciates the support provided by the main supervisor Ir. Salihuddin Hassim, Associate Professor Ir. Dr. Mohd. Razali Abd. Kadir and Associate Professor Dr. Megat Hamdan Megat Ahmad as a committee member for very helpful supervision of the research of which this report is a part of the compulsory to complete a Master programme in Project Management.

Much appreciated are the useful contributions of staffs at Public Works Department, Kuala Lumpur for their information regarding tendering procedure and provided their documents and cost data for this research, very helpful staff at Master Builders Association Sdn. Bhd. for giving me opportunity to conducting survey at their seminar and eminent construction managers who participated in the survey. Special thanks for their cooperation in this research.

Last but not least, my beloved family for their support and encouragement to complete this research.

THANKS YOU

I certify that an Examination Committee has met on 28 February 2006 to conduct the final examination of Faridah Bt. Muhamad Halil on her Master of Science thesis entitled "Contractor's Perception of the Use of Statistical Approach in the Tender Process at the Public Works Department, Malaysia" with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree)
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**DECLARATION**

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.
HALIL

FARIDA BINTI MUHAMAD

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