

ICT COMPETENCY FOR QUANTITY SURVEYING PROFESSION
IN MALAYSIA

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A report submitted in partial fulfilment of the
requirements for the award of the degree of
Bachelor of Quantity Surveying

Faculty of Built Environment
Universiti Teknologi Malaysia

MAY 2011

ACKNOWLEDGEMENT

As a result of the completion of this research, I would like to take this opportunity to record my sincere appreciation to everyone who has contributed me in every way possible throughout the research. The research would not have been successful without the great support, sacrifice and generous contributions from them.

First of all, I would like to express millions of appreciation to my research supervisor, Dr. Kherun Nita Ali, for her encouragement, guidance, critics, friendship, advices, and motivation throughout the completion of this research. She gave a lot of impressive ideas regarding my research, especially the way I should present my writing for the research. Her contributions are very much appreciated. Without her continued support and interest, this research would not have been the same as presented here.

Apart from that, special appreciation to Mr. Syamsul Hendra Mahmud for his reading and constructive comments about the research for better understanding. On the other hand, I also wish to thank those parties involved whom have lending their hand in helping me getting the related information during the researching process, especially the research respondents.

Besides, I also express my gratitude towards my parents and brother who have contributed in any way for the completion of this research either physically or mentally. Last but not least, special thank to the Buddha, for the success of this research.

ABSTRACT

Usage of information and communication technology (ICT) in construction industry among design team is very common since the implementation of ICT in construction industry. The usage of ICT is able to decrease quantity surveyors (QS)' workload and increase their productivity. However, the rapid development of ICT in these several years causes big changes in construction industry, such as the existing of new Computer Aided Cost Estimating Software, which is very helpful for QS to prepare bills of quantities for tender document. Furthermore, previous research by Ku (2009) proved that there is ICT skills gap between quantity surveying students and the industrial demand. Hence, the objectives of this research is to determine the level of ICT skills among QS in Malaysia, to identify ICT skills demanded by the employers of quantity surveying profession in Malaysia and to determine ICT skills gap between QS's competency and expectation skills from the employers, in order to achieve the aim of the research, which is to investigate ICT competency among QS in Malaysia. The research was focused on the QS and employers from registered quantity surveying consultant firms in Kuala Lumpur, Selangor and Johore. A comprehensive literature review on the current application of ICT in QS profession and ICT competency for QS had been carried out. Total of 97 sets of questionnaires had been collected. Data collected were analysed using Mean Value Analysis. Overall, it was found that QS are having high level of ICT competency and having small skill gap for most of the core ICT competency. Nevertheless, QS should focus more efforts on Computer Aided Cost Estimating Software and Measurement Devices as they are having low competency on it besides increasing their skills on core ICT competency.

ABSTRAK

Setelah pelaksanaan teknologi maklumat dan komunikasi (ICT) dalam industri pembinaan, penggunaan ICT dalam kalangan kumpulan reka bentuk dalam industri pembinaan sangat popular. Penggunaan ICT berupaya mengurangkan beban kerja juruukur bahan lantas meningkatkan produktiviti. Namun demikian, pembangunan pesat ICT dalam beberapa tahun ini mengakibatkan perubahan besar dalam industri pembinaan, umpama pengwujudan perisian anggaran kos berbantuan komputer baru, yang mana memainkan peranan penting dalam penyediaan senarai kuantiti untuk dokumen tender oleh juruukur bahan. Tambahan pula, kajian sebelumnya oleh Ku (2009) membuktikan bahawa terdapat jurang kemahiran ICT antara pelajar ukur bahan dengan permintaan industri. Justeru itu, kajian ini bertujuan untuk menentukan tahap kemahiran ICT dalam kalangan juruukur bahan di Malaysia, mengenalpasti kemahiran ICT yang diminta oleh industri di Malaysia, dan menentukan jurang kemahiran ICT antara juruukur bahan dengan permintaan industri. Kajian ini menumpukan kepada juruukur bahan dan majikan dari firma perunding ukur bahan berdaftar di Kuala Lumpur, Selangor, dan Johor. Kajian literatur yang menyeluruh tentang aplikasi semasa ICT dalam profesion ukur bahan dan kompetensi ICT juruukur bahan telah dijalankan. Borang soal selidik yang telah dikutip balik berjumlah 97 set. Data yang diperoleh dianalisis dengan menggunakan Analisis Nilai Min. Secara keseluruhan, didapati kompetensi ICT juruukur bahan berada di tahap tinggi dan mempunyai jurang kemahiran yang kecil dalam kebanyakan kecekapan teras ICT. Selain itu, juruukur bahan harus berusaha lebih dalam perisian anggaran kos berbantuan komputer dan alat pengukuran di samping meningkatkan kemahiran kecekapan teras ICT mereka.