

Evaluation of the Impact of Information and Communications Technology (ICT) on the Accuracy of Preliminary Cost Estimates of Building Projects in Nigeria

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Abstract : The study explored the effect of ICT on the accuracy of Preliminary Cost Estimates (PCEs) prepared by quantity surveying consulting firms in Nigeria for building projects, with a view to determining the desirability of the adoption and use of the technological innovation for preliminary estimating. Thus, data pertinent to the study were obtained through questionnaire survey conducted on a sample of one hundred and eight (108) quantity surveying firms selected from the list of registered firms compiled by the Nigerian Institute of Quantity Surveyors (NIQS), Lagos State Chapter through systematic random sampling. The data obtained were analyzed with SPSS version 17 using student's t-tests at 5% significance level. The results obtained revealed that the mean bias and co-efficient of variation of the PCEs of the firms are significantly less at post ICT adoption period than the pre ICT adoption period, $F < 0.05$ in each case. The paper concluded that the adoption and use of the Technological Innovation (ICT) has significantly improved the accuracy of the Preliminary Cost Estimates (PCEs) of building projects, hence, it is desirable.

Keywords : accepted tender price, accuracy, bias, building projects, consistency, information and communications technology, preliminary cost estimates

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