

## ABSTRACT

The contractor selection process is the critical part of a construction project because the performance of the contractor directly contributes to the success of the project. From data analysis, ABC hospital selected the contractor based on the lowest bid price. This practice led the hospital to award the construction project to an incapable contractor. The review of historical data reveals that the incapability of the contractor was the major cause of delay in this construction project. The delay in construction created huge damage to the hospital including the loss of opportunity in generating revenue of nearly 12 million baht from the construction area if it had been completed on time, and also the loss of customer satisfaction.

Therefore, this research proposes a new contractor selection model for the ABC hospital based on a value judgment method. The model comprises four main steps: capability evaluation by the weighted score model, motivation evaluation by the supplier perception model, combining the result of capability and motivation to see the overall performance, and comparing the performance with the bidding price. Under the proposed model, the hospital selects the contractor who offers the best combination of performance and price. In this research, the model was developed by the construction committee of ABC hospital. Finally, the validation of the proposed model was tested by examining two previous construction projects of ABC hospital.