ABSTRACT

A STUDY OF CUBICOST FOR REBAR QUANTITY TAKE-OFF ON TENDER PROCESS

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Ajeng Ayu Anindya

No. Mahasiswa: 327181001

(Study Program Master of Civil Engineering)

The short duration of the tender process causes the time to do quantity take off for rebar is also short. This needs innovation to speed up the quantity take off for rebar in the tender process. The technological developments can be utilized to speed up quantity take off for rebar, one of that is Building Information Modeling (BIM). One of the BIM's that can be used to do quantity takeoff for rebar is "Take Off for Rebar" (TRB) produced by Cubicost company. The use of Cubicost TRB is currently still often found obstacles, but these can be anticipated by conducting analysis. The analysis was carried out to identify the possibility of problems that were encountered, in example: making work procedures, analyzing time requirements, analyzing comparative results and analyzing excellence or constraints in using Cubicost TRB. Data analysis was obtained from interviews, questionnaires and doing quantity takeoff for rebar using Cubicost TRB and conventional methods. From this study, it can be said that the use of Cubicost TRB can be recommended, because in addition to accelerating the work time to only 58% compared to conventional methods, respondents also said they preferred using Cubicost compared to conventional methods. This is rated based on the needs of the time, accuracy, and how to operate the calculated media. In all three classifications, Cubicost TRB obtained an average value of 8.31 compared to conventional methods which only received an average value of 6.81. This study also shows that there are still differences in the calculation of quantity takeoff for rebar using Cubicost TRB and conventional methods, although the percentage is only around 3%.

Key words: *quantity take off*, Building Information Modelling (BIM), Cubicost TRB.