INVESTIGATE THE IMPACT OF IMPLEMENTING FUZZY LOGIC IN DETERMINING COCOMO EAF VALUE

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ABSTRACT

This project investigates the hypotheses that by integrating Fuzzy Logic concepts on Constructive Cost Model (COCOMO) it will tolerate imprecise input and generate more reliable results compared to traditional methods. The traditional COCOMO uses $\mathbf{E=a_i(KLoC)^{(b)}_i \cdot EAF}$ as the formula to calculate the effort applied in an IT project. **EAF** stands for effort adjustment factor. This factor is categorized as very low, lo, nominal, high, very high and ultra high. However, there is no standardized methodology in defining this factor. Thus, this will cause inaccurate final results. This project investigates this particular problem in COCOMO model and proposes a solution to solve it. Research on Fuzzy Logic will be conducted in order to integrate its concept into COCOMO model. Benefit of implementing fuzzy logic is that it able to accept "uncertain" EAF input and produces accurate results.