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A Quantity Model for Controlling and Measuring Software Quality Based on the Expert Decision-Making Algorithm

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Author(s)

Che-Wei CHANG, Der-Juinn HORNG, Hung-Lung LIN

ABSTRACT

Researchers have been active in the field of software engineering measurement over more than 30 years. The software quality product is becoming increasingly important in the computerized society. Target setting in software quality function and usability deployment are essential since they are directly related to development of high quality products with high customer satisfaction. Software quality can be measured as the degree to which a particular software program complies with consumer demand regarding function and characteristics. Target setting is usually subjective in practice, which is unscientific. Therefore, this study proposes a quantity model for controlling and measuring software quality via the expert decision-making algorithm-based method for constructing an evaluation method can provide software in relation to users and purchasers, thus enabling administrators or decision makers to identify the most appropriate software quality. Importantly, the proposed model can provide s users and purchasers a reference material, making it highly applicable for academic and government purposes.

KEYWORDS

software quality characteristics, software quality model, multiple criteria decision making (MCDM), analytic hierarchy process (AHP)

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