

**Decision Support System for Competency Testing in the Field of Information
and Communication Technology using *Profile Matching* Method
(A Case Study at TUK Adi Utama Komputer, Bondowoso Regency)**

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ABSTRACT

The main objective of this research is to develop a web-based decision support system that applies the Profile Matching method to select ICT competency tests. This system is designed to assist participants in choosing the appropriate competency tests based on their abilities and provide accurate recommendations. The research also involves application testing using blackbox testing methods and accuracy testing of the Profile Matching method using Confusion Matrix.

The results of the system testing successfully demonstrate consistent and accurate recommendations. The Profile Matching method in selecting ICT competency tests achieves a significantly higher level of accuracy compared to conventional methods that rely on criteria such as interest interviews and previous experience in the ICT field. The Confusion Matrix results show that the system's accuracy rate reaches approximately 91.66%. Thus, this system can help participants achieve career success in the field of ICT and improve the pass rate of participants in competency tests.

Key words: Web-based Decision Support System, Profile Matching, Competency Tests, Information and Communication Technology, Recommendations, Blackbox Testing, Accuracy, Confusion Matrix, Conventional Methods, Development.