### UNIVERSITITEKNOLOGI MARA

# EVALUATING PERFORMANCE OF GREEN COMPUTING USING THIN CLIENT TECHNOLOGY: A CASE IN MINISTRY OF ENERGY, GREEN TECHNOLOGY AND WATER MALAYSIA (KeTTHA)

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#### **ABSTRACT**

Green Computing focuses on business strategy so that efficient application of intelligent, energy, eco-friendly technology and techniques throughout the organisation in order to create and add value for organisations. It focuses its research and analysis on performance issues of Thin Client to deliver quality services to staff at Ministry of Energy, Green Technology and Water (KeTTHA). The user is always complaining on a relatively slow performance, get the error "login fail", have trouble reaching application that have been provided and failure to perform a variety of jobs at a time. Through analysing a current situation, this research evaluates the performance of thin client technology using The Unified Theory of Acceptance and Use of Technology (UTAUT) model to explain factors that leads to problem performance of Thin Client among KeTTHA staff. The data collected was analysed using SPSS version 16. The study confirms that UTAUT model predict successful behavioural intention to use Thin Client at KeTTHA. The correlation analysis shows that Effort Expectancy, Performance Expectancy, Social Influence, Facilitation Condition, Attitude, Seft-Efficacy and Anxiety have significant correlations with behavior intention to use Thin Client. This research also used the usability attributes in which the task completion method of user testing done to see the level of performance based on efficiency. The study further confirms that the performance of Thin Client is slower than Personal Computer. It also determined the strength, limitation of using thin client and future recommendations towards implementing thin client effectively and efficiently in KeTTHA and public sector.

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