

**Universiti Teknologi MARA**

**The Usability of Online Certificate  
Injection System (OCIS) at  
Digicert Sdn.Bhd**

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**Quantitative Science**

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## **DECLARATION**

**I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline**

**NOVEMBER 30,2006**

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## **ABSTRACT**

Identity is our most valuable commodity on the Internet or online transaction. It defines who we are and is essential in doing business and carrying personal information over the net. Unfortunately on the Internet, identity can be ambiguous. The online users can now protect themselves with the use of Digital Certificate which is using a cryptographic system. A cryptographic system that uses two keys- a public key is known to everyone and private or secret key only known to the recipient of the message. An important element to the public key system is that the public and private keys are related in such a way that only the public key can be used to encrypt messages and only the corresponding private key can be used to decrypt them. Moreover, it is virtually impossible to deduce the private key if you know the public key. OCIS was developed to request the certificate from CCM server and then inject the certificate into the smart card. The smart card contains two certificate, Digital Signature certificate and Non repudiation certificate and can be used to make a secured online transaction. There is a need to understand the users' perspective and their acceptance of OCIS System. Technology acceptance model (TAM) was used as a theoretical basis to understand individual acceptance of users. In this study, five individual and system components are used to explore individual user acceptance of an OCIS system. Antecedents such as search function, screen design, navigation and system reliability have significant effects on perceived ease-of-use and perceived usefulness which in turn have a significant effect on individual user acceptance.