

# Trusted Center based Data Transfer System using RSA Digital Signature

**Pan War, Zin May Aye**

Computer University (Mawlamyine)

[flower.pan72@gmail.com](mailto:flower.pan72@gmail.com), [zinmay110@gmail.com](mailto:zinmay110@gmail.com)

## **Abstract**

*This paper presents data transfer system between two users by applying a Trusted Center acts as a third party between two entities and it allows users to transfer data more reliable than other system by using its owns private key before sending the user's information to the destination. In some countries, Trusted Center need to be licensed in government and need to offer value with regard to integrity or confidentiality and assurance of the services in the communication. In this system, Trusted Center publishes its public key to users who involve in the data transfer system to attain the non-repudiation service between them. Trusted Center is responsible to forward information to another entity by verifying and signing is a technique for non-repudiation based on the public key cryptography. RSA digital signature and SHA-1 hash Function are applied to provide integrity and authentication in this data transfer system. No two users can deny the transaction of data transfer in the system as they both rely on the Trusted Center between them. Non-repudiation, authentication and integrity are all necessary to install trust in the electronic age. This system can be applied in the application of e-business, digital payment system, credit card system and also in the banking systems where non-repudiation services plays an essential crucial role.*