

A Security Mechanism for Protecting the Customer Privacy when Purchasing Digital Products

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Abstract

In the current era of e-commerce, purchasing digital products on the Internet is a popular trend. However, ensuring the confidentiality of customers' identities and their purchased products, including to the online shops and servers, and protecting the privacy of customers during the process of purchase and payment transaction is a great challenge to the designers of information security mechanism.

This paper proposes a security mechanism that combines e-cash payment function to protect the customer privacy, in order to solve the problem of personal information leakage when purchasing, paying for, or transmitting digital products online, and achieve the protection of customer privacy. For consumers of online transactions, the proposed mechanism can effectively achieve the customer privacy protection, and make the e-cash payment mechanism more practical and secure in the e-commerce environment.

Keywords: customer privacy protection, e-cash, e-commerce