

A CASHLESS SOCIETY USING CASHCARD®

NETS was set up in 1985 by five Singapore banks - DBS Bank, OCBC Bank, Overseas Union Bank, POSBank and the United Overseas Bank to establish a cashless payment infrastructure. Tat Lee Bank and Keppel Bank joined as NETS' shareholder banks in 1990 and 1992 respectively. Over the years, NETS has become an indispensable link for businesses and consumers alike, providing both with efficient, fast and convenient methods for carrying out normal everyday transactions. In November 1996, NETS and its shareholder banks launched the CashCard®, a multi-function electronic purse based on leading-edge smart card technology. Today, the CashCard® is one of the most commonly accepted cashless payment methods in Singapore, used extensively for retail purchases, traffic tolls for the Electronic Road Pricing System (ERP) and even for transactions made over the Internet.

THE CHALLENGE – MOBILE MICRO-PAYMENT

To deliver an innovative solution to enable mobile micro-payments from every phone that is independent of network, SIM card and phones. On the back of explosive growths of 47.6% in Internet and 74.3% in mobile phones in Singapore as at June 2001, NETS set itself to lead the industry by opening new doors for Internet and mobile commerce. This was achieved with the NETS Virtual Card, a virtual account equivalent to CashCard®, an alternative payment service that allows a consumer to debit his virtual e-purse account to make micro-payments to a merchant to shop at online stores. The challenge is to enable consumers on the move to also initiate payment via their mobile phones.

THE SOLUTION - mPURSE™

mPayment's mPurse™ solution was the first to be fully integrated with NETS' extensive payment infrastructure, making it practical and convenient for consumers to make bill payments via phones. It overcomes the limitations of existing payment solutions that work only with WAP phones and special SIM cards. With mPurse™, all a consumer has to do is to send a simple formatted SMS (Short Message Service) instruction to make a bill payment to his selected merchant by debiting from his NETS Virtual Card. To effect payment using the mobile phone, the consumer simply needs to provide his NETS Virtual Card UserID, the service provider's bill number, the amount due and the service provider's name. Currently, the mobile micro-payment solution is used for bill payments.

THE RESULT

mPurse™ has enabled NETS Virtual Card merchants to reach out to a massive consumer market of more than three million mobile phone users in Singapore. Consumers were able to easily register for the NETS Virtual Card payment service at www.nets.com.sg from 1 August 2001. After revaluing his NETS Virtual Card through GIRO or direct debit from his bank account, the user can start using his mobile phone to initiate bill payments. Online merchants in the pilot period include Golden Village, Cold Storage, PlanetMG.com. SunPage is the first pilot for monthly bill payment services. NETS and mPayment are currently in talks with the respective merchants to extend the monthly bill payment service to SingTel, Starhub, PacNet and SCV's customers.

THE BENEFITS

mPurse™ works on every phone that is independent of network, SIM card and phone. It is faster and saves airtime. Consumers can compose, **check** and send SMS payment instructions at his convenience off-line. He does not need to restart a tedious Interactive Voice Response (IVR) payment cycle if he keys in a wrong number on-line, nor wait for a reply in the case of WAP. It greatly reduces the need to write and post cheques, or to spend time travelling to and queuing at payment centers. It is a good alternative to tedious IVR phone-banking where consumers may take a longer time to complete a transaction. SMS is a simple, very popular and widely-used medium of communication worldwide, thus making it extremely easy for consumers to adopt mobile SMS payment as part of a fast emerging m-lifestyle.