Smart Card Ends Plastic Proliferation

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Smartcard technology is developing at a rapid rate both in Australia and globally. The Multos card is a significant development in smartcard technology as it will be able to hold multiple products and services on the one card with the cardholder having the ability to customise. It will also signify the development of a smartcard standard. Australia is actively involved in this project as well as a number of smartcard trials in the last 2 years. Government involvement in this area is also strong in Australia with state and federal government agencies currently preparing strategies for the implementation of smartcards.

"One Card Trick Spells End of Plastic Proliferation"

By Fred Brenchley,
Australian Financial Review

A breakthrough in credit card technology may soon allow consumers to combine all their cards issued by banks, shops, phone companies - even corporate security systems - into a single piece of plastic.

The new system, called Multos, will be launched later this year by a consortium of eight global groups, including the big Australian Bank and Sydney company Keycorp.

Business travellers may find the "open" high-security operating system particularly useful, as a single Multos card could contain electronic tickets, passport, credit cards and stored money value in five different currencies.

Other card holders will be able to customise their single card into "lifestyle cards" containing a banking credit card, retail loyalty scheme, electronic purse, telephone credit card and TV pay-per-view applications of their choice.

Card holders will be able to update, add or change applications via the phone, automatic teller machine or the Internet.

The Multos consortium members claim the technology will do for smartcards what Windows did for personal computers: provide a single operating system housing numerous applications. Mr Richard Phillimore, senior vice-president of MasterCard's chip business, believes Multos will also enable banks to fight back against inroads made by non-bank financiers.

MasterCard has already endorsed Multos for its 23,000 member and more than 40 million card holders. Multos is an adaptation of Mondex's electronic purse technology. Essentially it enables different smartcard applications to be embedded in "firewalls" in the card's silicon chip, which guarantees security of each function.

Mondex International, 51 per cent owned by MasterCard and 49 per cent by an international group including Australia's major banks, leads the Multos consortium.

Seven other groups - Dai Nippon Printing, Gemplus, Hitachi, Key-corp, MasterCard International, Motorola and Siemans - have joined to form Maosco, which will drive the adoption of Multos as a global smartcard standard.

Gemplus is the world's leading producer of plastic cards and smartcards. Keycorp specialises in design and manufacture of electronic payment terminals, flatscreens and smartcards. Hitachi is the world's leading global electronics group, and Motorola is a tele-communications leader.

The consortium will license Multos systems on a non-proprietary "open systems" basis in a bid to make it the industry standard across all industries that use smartcards, from finance to telecommunications.

Licensees will pay a small administration fee only for the application program language, and then be able to add whatever applications they, or their customers, wish. It is possible that an Australian bank might have MasterCard and Visa on the one smart card, together with an electronic purse function as well as added retail and telephone functions. Multos opens the door to intensified smartcard marketing. Smartcard issuers will be able to tender out for smartcards suppliers using the Multos technology as well as selecting different product attractions to put on their cards to woo consumers.

Nick Hopgood of the Maosco consortium said an Australian Bank, for instance, could offer customers using ATMs special offer at a retail chain which cardholders could use and then delete from their card.

Card issuers could build in Internet Transactions, including Internet banking. Workplace access could also be on the card as well as bus and rail cards, GSM mobile telephone access and membership cards for institutions such as libraries.

The Maosco consortium will jointly fund the Multos system development, using their various strengths across different industry sectors to drive home the widest acceptance. Licenses to use its applications programming language will be openly available by the end of June 1997, with first cards expected to be offered to consumers early next year.

The keys to the unique Multos technology are the first time ability for multiple products and services to be held on the one smartcard, the "firewall" protecting the integrity of each service, and the cardholders ability to customise. "This gives us a tremendous lead in the race to deliver a global smartcard standard and gives all Mondex issuers the opportunity to exploit a secure, multi-applications operating system within the next 12 months", said Mike Keegan, Mondex Chief Executive. MasterCard's president and chief executive Robert W. Selander, said Multos would enable Master Card to leapfrog the competition towards the goal of migrating its cardholder base from magnetic strip to chip.

But Maosco consortium members stressed there would be no exclusivity on the system. Banks using the operating system would be free to offer whatever credit/debit card providers the wanted to.