

# CASHING OUT

## Smart Cards, Digital Dollars and Big Change

**F**or all this talk about wiring stores for the 21st century, there remains one hold-out. Inventory has gone high tech, so too has security. But what about the cash register? Sure we have a more refined system for checking credit cards, and debit card use is up. But when it comes to everyday low-end purchases, customers are still digging around their pockets for loonies and twonies. Cash has proven a tough habit to break.

Tough, but maybe not impossible. Canadian banks are throwing their weight behind what they hope will be a great leap forward into electronic cash. Two trials already under way - in Guelph and Kitchener, Ontario - and a third pegged for Barrie, Ontario this fall signal the arrival of digital dollars in Canada. Home improvement retailers are among those testing three systems of electronic currency that may change the face of retail.

The early returns are mixed. "It's gone very smoothly," says Mike Leslie at Root Home Centre. He's a Home

Hardware dealer taking part in a Guelph test of the Mondex system. A month into the program he's doing about \$500 a week in digital cash sales. "The cashiers are all very pleased with it. The transactions are quite quick. It used to be that the old cash sale was the quickest method, but Mondex is far faster."

"It's no big deal here," says Danny Speck. His Township Pro Hardware is taking part in a pilot of the Exact system in

Kingston. "It's probably been used about 40 times since November. And I'd say out of all those times, 75% of the people using them have been bank employees."

Mark Brumm is assistant store manager at a Beaver Lumber just down the road. "Not that many people are using it. We don't even do five a day. I think the general feeling among consumers is that they don't see a big difference between Exact cash and a debit card." Management has since opted out of the pilot.

### Oh Canada!

The big three have relied heavily on Canadian retailers and consumers for market testing. That has a lot to do with our penchant for plastic - we're the second largest users of credit and debit cards in the world. There are over 46 million cards in circulation across the country, not bad for a nation of 29 million.

Our demographics are attractive too. Canada offers a healthy mix of large and small business, a wide ranging socio-economic profile and precious little fear of new technology.

Picture perfect for any organization testing western waters.

### THE RACE IS ON

The three technologies - Exact, Mondex and VISA Cash - work much the same. They rely on so-called smart cards embedded with computer chips. Instead of withdrawing cash from the bank machine, users load up their card with whatever dollar figure they wish. Retailers are supplied with counter-top terminals, much like today's debit card system, that read the card's information and carry out the transaction. The cashier

keys in the dollar amount, which the consumer approves with the push of an OK button. No more coins, no more bills. When the consumer runs out of money on his card, he heads back to the bank machine for a refill.

In these early days the technology is being marketed as an alternative to petty cash transactions - in the \$10 to \$20 range. That's sure to expand though as consumers grow more comfortable.

So the race is on. Visa was first out of the blocks in Canada with a number of 1996 trials. Those early tests featured non-reloadable technology (see sidebar *The Loaded Question*). In other words, the cards were disposable. Consumers purchased a fixed dollar value card. Once the money had been spent the card was trash.

Exact was first to market a reloadable system. But only barely - their December, 1996 launch edged out Mondex by just three months. Both feature an in-store terminal that records electronic cash sales. That information is then transferred to the merchant's bank account via modem.

Mondex had a first of its own to trumpet when it launched a Guelph trial this past February. An electronic wallet feature allows for person-to-person transactions. Hot dog vendors, pizza deliverers, even the babysitter can be paid with the system. The Guelph test also features the first commercial transfer of money over telephone lines in North America. Bell Canada has converted 250 payphones and is producing 2,500 personal screen phones to be compatible with the Mondex system.

Visa is jumping into the reloadable game this fall with a one-year trial in Barrie. They've tested their non-reloadable cards over the last 18 months in Vancouver, Toronto and Montreal.

## FEARS AND JEERS

Despite this pomp and circumstance, the big three haven't exactly enjoyed blind trust from Canadians. Concerns about individual privacy and security are widespread, and retailers are wise to heed these red flags. In fairness, the Advanced Card Technology (ACT) Association of Canada - which represents these new high tech companies - calls the fears "unfounded." The group insists personal data is protected, and that consumers will be able to make anonymous purchases.

Then of course there's the banks. Canadians have never been so unhappy with these institutions, and they're wary about any program they back. "People don't like giving their money to the banks before they spend it," explains Speck. There is a frustration out there that the system requires con-

## The Loaded Question

**C**onsumers have seen this smart card technology in two forms - reloadable and non-reloadable. They're also referred to as reusable and disposable. The disposable cards work like Bell Canada's QuickChange Payphone system. Once the face value - Bell's range from \$10 to \$25 - has been used up, they're tossed.

The focus has since shifted to reusable card technology. These come without a pre-determined value. Consumers load as much cash as they like onto the card, either at a specially-designed terminal or everyday bank machine. When the value has been used, the card can be reloaded.

Both Mondex and Exact are piloting this technology now. Visa has a reusable system planned for testing this fall. **O**

sumers to pay the banks their money before they spend it. In other words, the card-holder has to transfer the \$100 from his bank account to the bank before he actually purchases anything. That means lower interest on his savings account.

Add to all that the compatibility issue. Consumers may accept different systems of digital cash, but they won't be happy if any retailer can't process their card. Universal acceptance is a must - one terminal designed

to accept all smart cards.

Canadians are considered early adopters when it comes to this sort of technology. A survey by Interac Association says we're the second largest user of plastic in the world. Debit card use alone has ballooned 43% in the last year. The first national launches of digital cash are set for 1998, so we're very much on the cutting edge here. If you can prepare yourself and your staff for the many questions sure to come, you'll earn a fair bit of trust. **O**

## The Big Three

**B**y this fall there will be three major digital cash system trials under way in Canada. VISA Cash is being tested here by Visa Canada, Scotiabank and Toronto-Dominion Bank. TD Bank is also involved - along with Bank of Montreal and Canada Trust - with the Exact Card. Third on the list is the Mondex system (which is 51% owned by MasterCard International Inc.), it's been assayed in Canada by a group including Canadian Imperial Bank of Commerce, Royal Bank of Canada, Credit Union Central of Canada and Hongkong Bank of Canada.

The list of Mondex backers ballooned in recent weeks, suggesting it may emerge with a lion's share of the market. All of Canada's major banks have jumped on-board. Bank of Nova Scotia, Bank of Montreal, Canada Trust, National Bank of Canada and Quebec's Caisses Desjardins are each recent converts.

There are huge dollars at play here as the big three battle for global acceptance. While each covets the role of international standard, Canadian retailers may well see Mondex pull ahead of the pack.

VISA Cash was first off the mark in Canada with its non-reloadable (see sidebar *The Loaded Question*) trials in 1996. The first Canadian reloadable stored value card was launched in a Kingston, Ontario test in December, 1996. Although Mondex's Guelph, Ontario trial didn't get off the ground until February of this year, it can claim the first transaction via phone lines. They're hooked up with Bell Canada.

With the announcement that Visa is planning its first reloadable trial this fall, the technology gap between the three narrows considerably. Each is being promoted as an electronic system for primarily petty cash transactions. **O**