Chip Card Technology and the Transformation of the Canadian Payment Card Industry

National Bank of Canada

March 5th, 2007



An evolving industry

1970's: Birth of Credit cards

1980's: ABM and banking cards are implemented

1990's: Interac Association launch Interac Direct Payment

2000's: Burst of Electronic Payment Methods

1970 1980 1990 2000





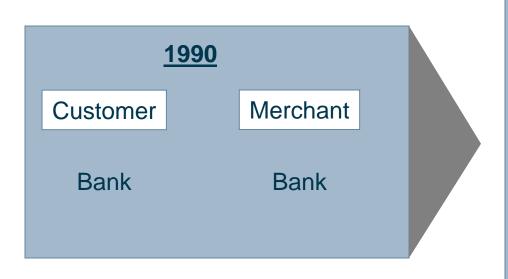






An evolving industry

The new millennium confirms the disintermediation trend in the Payments World.



Customer

- Bank
- Retailers
- « Monoliners »
- . com
- . com
- . com
- . com
- . Bank
- Acquirer
- Processor
- Integrator
- Terminal
providers
- Bank

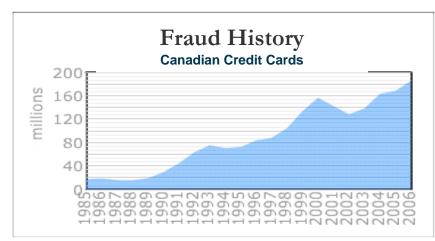
•Banks manages the complete Generic credit card Payment flow.

•Banks focus on card issuance



Chip Card Migration – Rational

The decision of Canadian associations to migrate toward Chip Cards is based on different factors



Source: www.cba.ca

Associations mandates

2

Interac

100% of cards for 2012 100% of ABM for 2012 100% of POS terminals for 2015

Visa

Liability Shift for 2010

International Trend

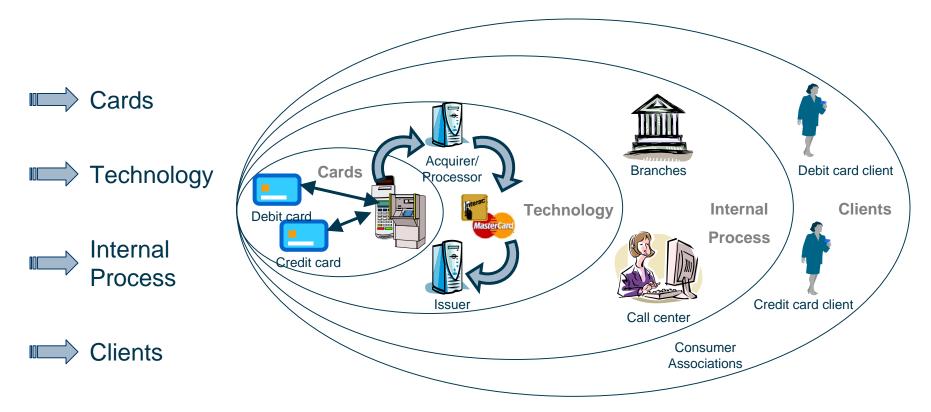


Source: EMVCo Stats



Banks Impacts

The Chip Card migration have impacts on issuer activities



The fraud projected savings will not cover the cost of migration



Customers Impacts

- Authentication method (Credit cards)
 - A PIN will replace the signature as customer identifier
- PIN management
 - PIN change require a complex infrastructure
- Transition Period
 - Customer will use both signature and PIN
 - Merchant and customer information will be key
 - Issuer's goal is to offer a seamless transition

The adoption of Chip Card technology will consolidate the customer's trust in the Payment system



The evolution continues

1970

1980

1990

2000

2010











Contactless payment
Near Field Communication (cell phones)
Remote Authentication
Multi-application

. . .

