

CHIP Happens! Is Your Credit Union Ready?

CUCC Annual General Meeting

May 6, 2008



Chip and PIN is very much top of mind in Canada and globally

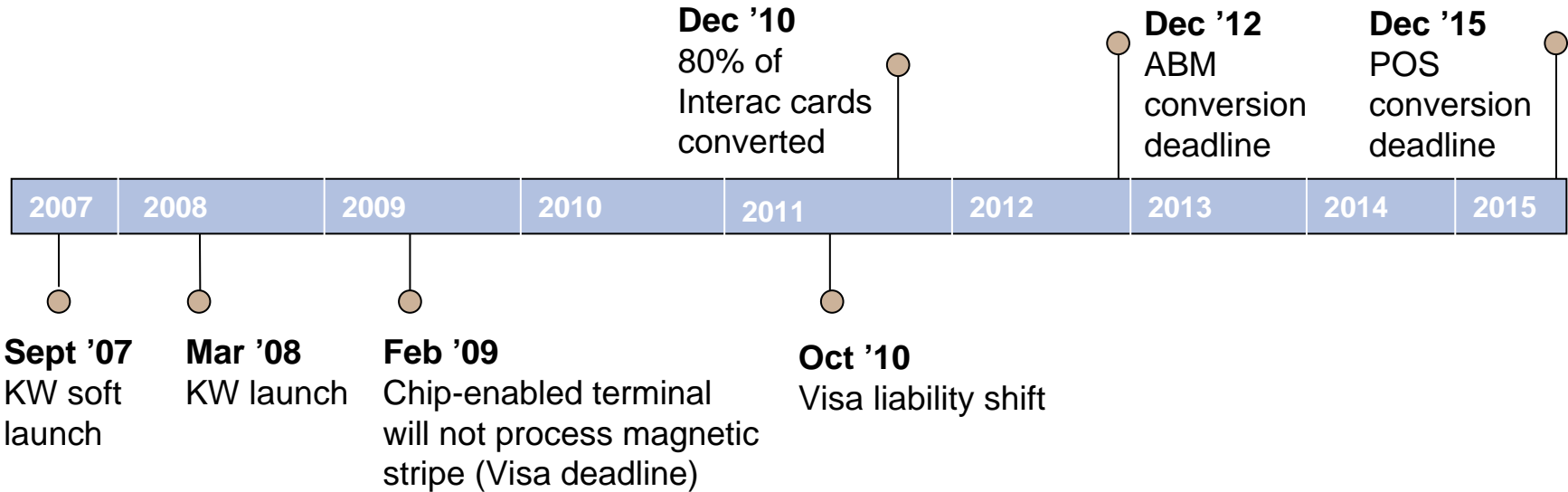
...Swiping will soon be passé and it will be hip to dip... ("It's a new way to pay Chip to keep the banks a step ahead of the crooks"
Winnipeg Free Press
(March 2, 2008))

"Desjardins confirms the commitment it has made to its members and clients to offer them an improved and more secure payment system" – Jean Yelle, Vice-President of Desjardins Card Services
(November 8, 2007)

Credit card holders risk falling victim to fraudsters because chip and pin machines are not protecting their bank details, experts have warned. ("Credit card crooks foil chip and pin security"
The Daily Telegraph
(February 29, 2008))

TD Canada Trust has announced that the Visa payWave contactless payment feature will be added to TD Visa chip cards issued in Kitchener-Waterloo as part of the ongoing market trial of chip-enabled debit and credit cards ("TD Visa card adds Visa payWave contactless feature"
Datamonitor (January 25, 2008))

The Canadian migration to Chip and PIN is well underway, with critical mass expected to be achieved by 2010



- Worked collaboratively with its issuers and acquirers



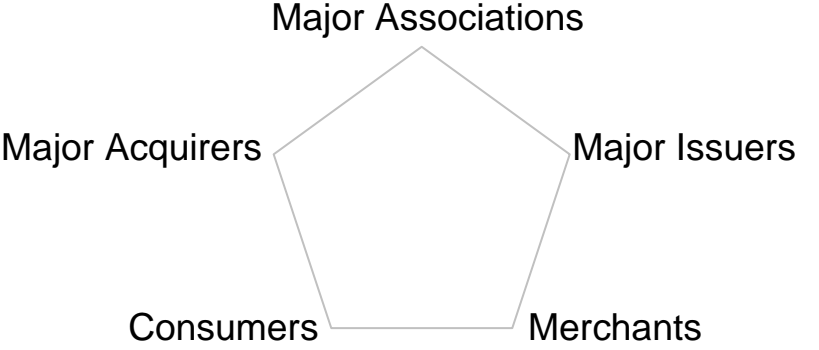
- Mandated migration by 2010 to meet the liability shift deadlines






- Debit and ABM services will be enabled for Chip
- Migration complete by 2015
- One million merchants and terminals converted

Source: "The Canadian Migration to Chip" - OneSource, Cardware '07

The KW trial is on track and there are no major issues so far

Participants	What is Working Well?
 <p>Major Associations</p> <p>Major Acquirers</p> <p>Major Issuers</p> <p>Consumers</p> <p>Merchants</p>	<ul style="list-style-type: none"> ▪ Interoperability of cards ▪ Trial messaging to consumers and merchants ▪ Governance and communication: Good dialogue between acquirers and issuers
Trial Issues	Lessons Learned
<ul style="list-style-type: none"> ▪ Merchant training is insufficient ▪ Minor bugs in the cards have delayed some issuers from full trial rollout ▪ Technical issues with terminals (e.g., service code 220, debit AID) ▪ Participation in trial and national rollout (e.g., integrated merchants, retail gas stations, white label ABMs) 	<ul style="list-style-type: none"> ▪ Terminal certification needs to be more rigorous <ul style="list-style-type: none"> – Tracking of issue such as service code 220 and debit AID ▪ Training for customers and merchants on pre-authorization; ensure consistency (e.g., restaurant tipping, deposits on rental cars) ▪ Pace of PIN change by cardholders may change for national rollout

While fraud has been the driver of the transition we are beginning to see product enhancements leveraging the Chip

Product	Description
	<ul style="list-style-type: none"> • Contactless: allows customers to “Tap & Go” • RFID wireless technology • Currently only mag-stripe for MasterCard • RBC is launching a chip version of Visa PayWave
 <p>OneSMART Chip Authentication Program (CAP)</p>	<ul style="list-style-type: none"> • “Two factor authentication” • Reduces fraud in card-not-present transactions • Combination of PIN and one-time password
 <p>New Product Innovation</p>	<ul style="list-style-type: none"> • Branded debit (Visa and MasterCard) • Mobile payments • Loyalty programs • Pre-paid cards • Multi-functional transit cards

Source: Deloitte research

It is still very early days in understanding Canadians' perspectives on Chip

Early Thoughts from Canadians

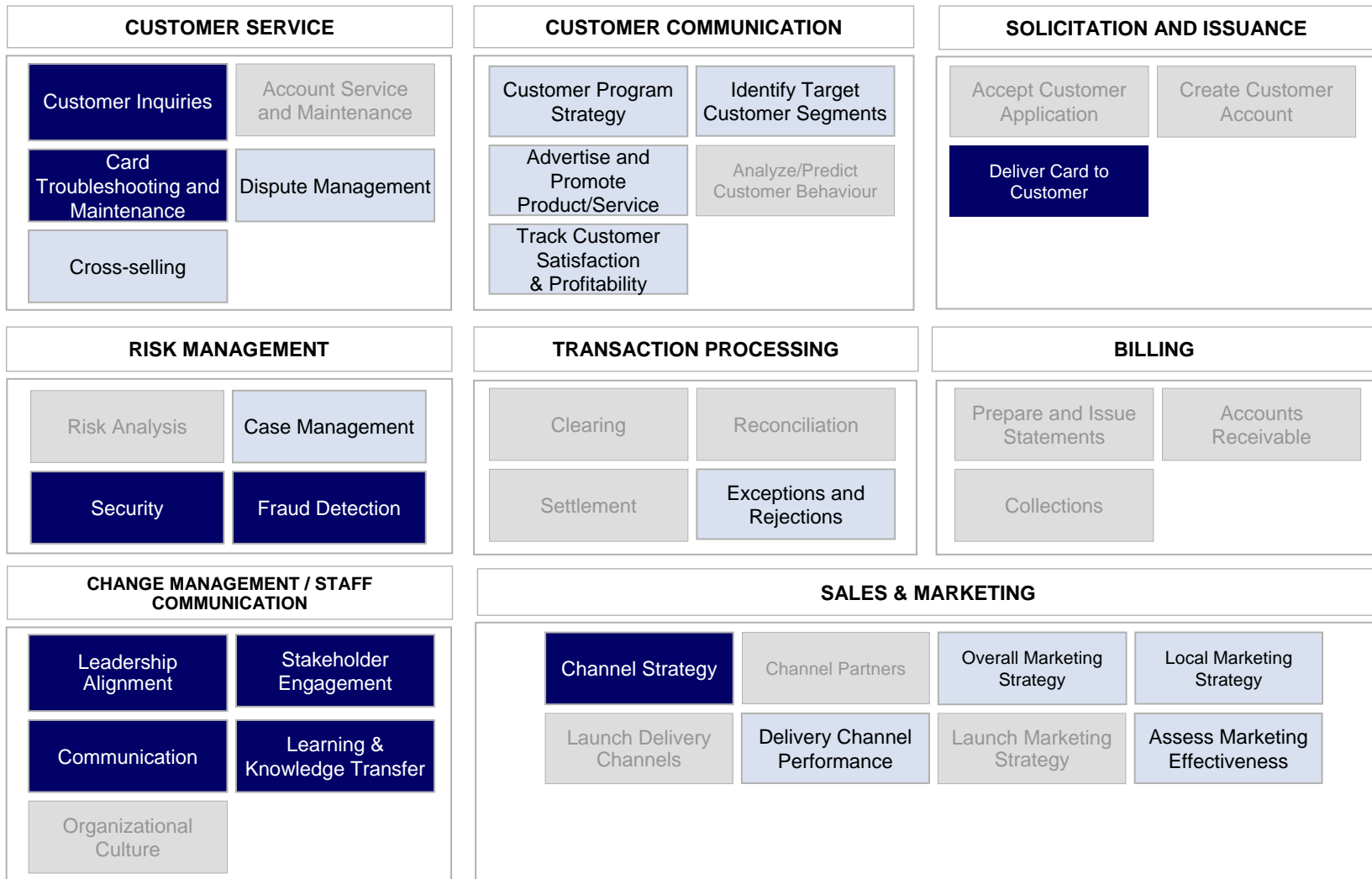
- Awareness is relatively high at 46%
- Over 50% of Canadians are very or somewhat interested in obtaining a Chip card with automatically or proactively

Source: IPSOS Reid, The Dynamics of the Consumer Credit Card Market Study, 2006

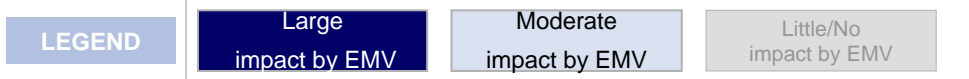
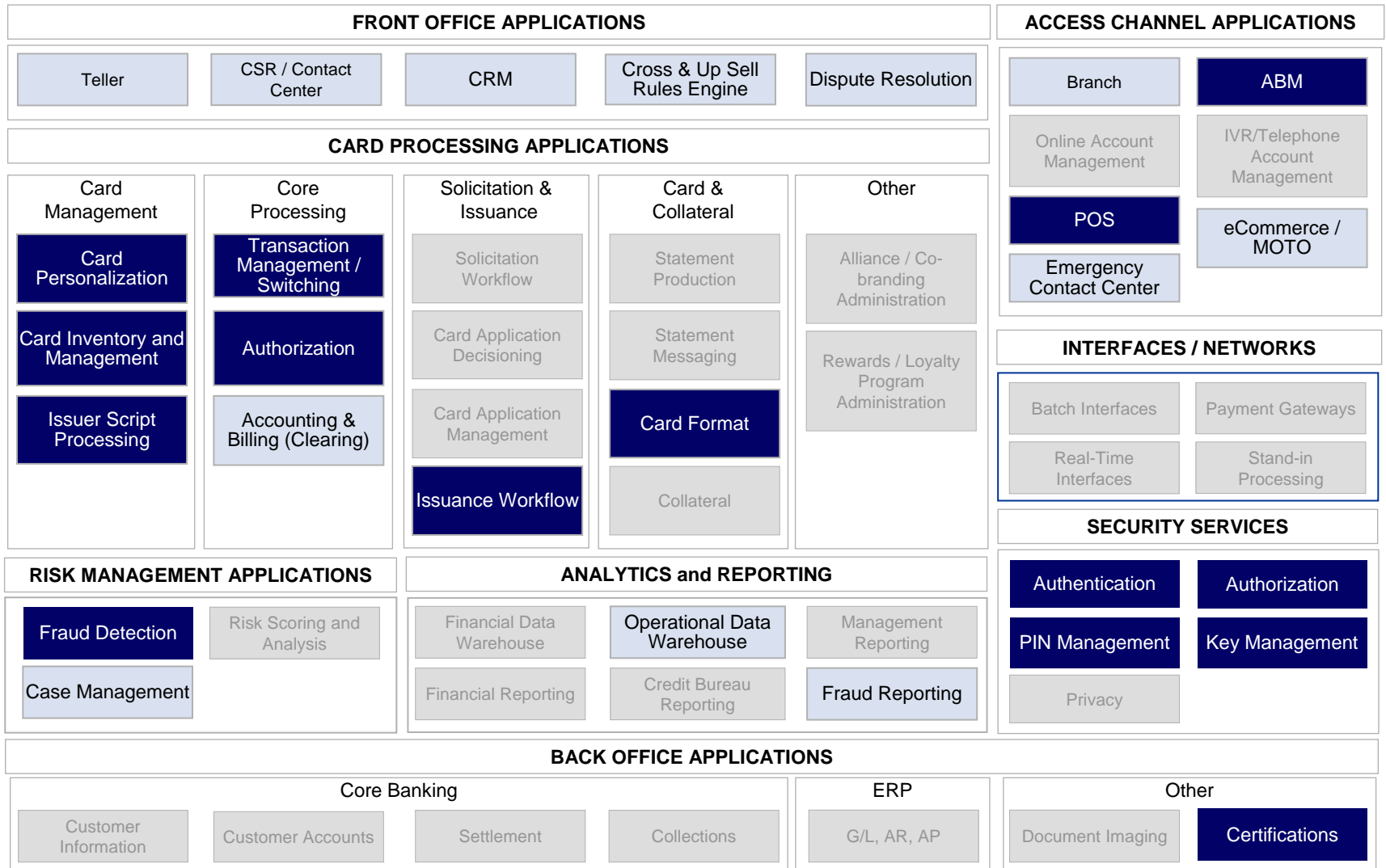
Indicative Segments – UK Experience		Comments
Sceptics	<ul style="list-style-type: none"> ▪ Concerned about fraud ▪ Reject the concept of new technology 	<ul style="list-style-type: none"> ▪ Communication ▪ Maintain service levels
Happy Coasters	<ul style="list-style-type: none"> • Relaxed about fraud • No barriers nor motivation to adopt technology 	<ul style="list-style-type: none"> ▪ No issue, ready to adopt
Convenience Seekers	<ul style="list-style-type: none"> ▪ Early adopters ▪ Technology is new, modern and simplifies life 	<ul style="list-style-type: none"> ▪ Manage expectations
Information Hungry	<ul style="list-style-type: none"> ▪ Very concerned about fraud & personal safety ▪ Want to understand technology ▪ Welcome technology as a solution to fraud 	<ul style="list-style-type: none"> ▪ Inform customers about the benefits

Source: Deloitte analysis

While the operational impacts of a CHIP are broad, particular attention must be paid to card issuance and customer service practices



The key technical impacts of Chip have significant impacts on card processing security and channels



Card issuance strategies will have an important impact on the business case, customers and operations

EMV Impacts of Card Issuance

- Most issuers in Canada are using a combination of natural and forced reissuance
 - Gold card, business card users are priority
 - Will you issue card on demand
 - If new products (multi-applications) are being offered may be prioritized
- Run issuance scenarios with card providers to ensure that changes in capacity can be addressed
- Key difference for credit is the issuance and required use of a PIN. UK experience found it best if customer selects PIN (if PIN not changed within 2 weeks card can fall to back of wallet)
- Need to determine how new card will be activated (on expiry of old card, IVR authentication, “chip switch”)



From the international experience we have learned that at least three customer communications are required

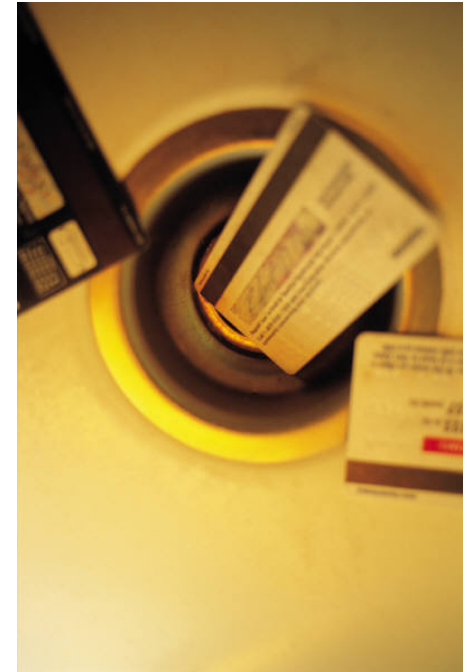
Customer Communications – Lessons Learned	
Communication Types	<ul style="list-style-type: none"> ▪ Wide range over migration period, without irritating customers ▪ Security (positive) not fraud (negative) ▪ Tailor channels and messaging to customer segments and needs
Communication Channels Efficiency	<ul style="list-style-type: none"> ▪ Statement Inserts: ~ 3% effectiveness rate ▪ Separate direct mail: ~ 15% effectiveness rate ▪ Targeted, relevant, line at the bottom of a statement: ~ 15% effectiveness rate ▪ Emails are usually considered spam
Direct Communication	<ul style="list-style-type: none"> ▪ Combination of broadcast and direct communication strategies enhanced the effectiveness of the direct communication channels
Point of Sale	<ul style="list-style-type: none"> ▪ POS messaging is probably the most effective ▪ Challenge: how can issuer influence merchant / acquirer messages & merchandising materials?

Source: Deloitte research

Source: APACS

Post-issuance card lifecycle management becomes important in a Chip environment

Element	Description
<p>Scripting</p>	<ul style="list-style-type: none"> ▪ Issuer scripting needs to include the following <ul style="list-style-type: none"> – PIN Change – PIN Unblock – PTC reset – Card block – Application block – Application unblock
<p>Post Issuance Personalization</p>	<ul style="list-style-type: none"> ▪ Change card parameters or download applications after issuance ▪ Most issuers not planning PI application downloads at this time as that is generally required with a segmented approach to application or parameter issuance
<p>Smart Card Management System (SCMS)</p>	<ul style="list-style-type: none"> ▪ Only three issuers have purchased SCMS <ul style="list-style-type: none"> – CIBC and CUETs (MBNA owned) bought Bell ID' SCMS – RBC bought ACI's SCMS ▪ Others are using existing basic card management systems, but are examining SCMS



Source: Deloitte research

Really important stuff often overlooked...

Relevant Topics	EMV Impacts
<p>Change Management and Staff Communication</p>	<ul style="list-style-type: none"> ▪ Gain buy-in from staff in all affected areas ▪ Customer-facing staff need to know migration goals and key messages ▪ Knowledgeable resources must communicate with staff ▪ Leverage all available internal channels ▪ Requires visible support from senior management
<p>Call Centre</p>	<ul style="list-style-type: none"> ▪ Ten simple messages address most issues ▪ All CSRs trained in basic messaging and should not stray from script ▪ Urgent, as cards are in the market now ▪ CSRs should be trained to spot 'tricky' questions and transfer to the supervisor (e.g., disability groups from UK experience)
<p>Other Key Processes</p>	<ul style="list-style-type: none"> ▪ New/augmented processes for dispute management and chargebacks ▪ Reporting and analytic requirements <ul style="list-style-type: none"> – e.g., usage, fallback, PIN changes, failures, customer/merchant feedback. In the U.K., this was left to the last minute causing many issuers to scramble

Source: Deloitte research

Questions?

Deloitte.

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