

Emerging Payments Products

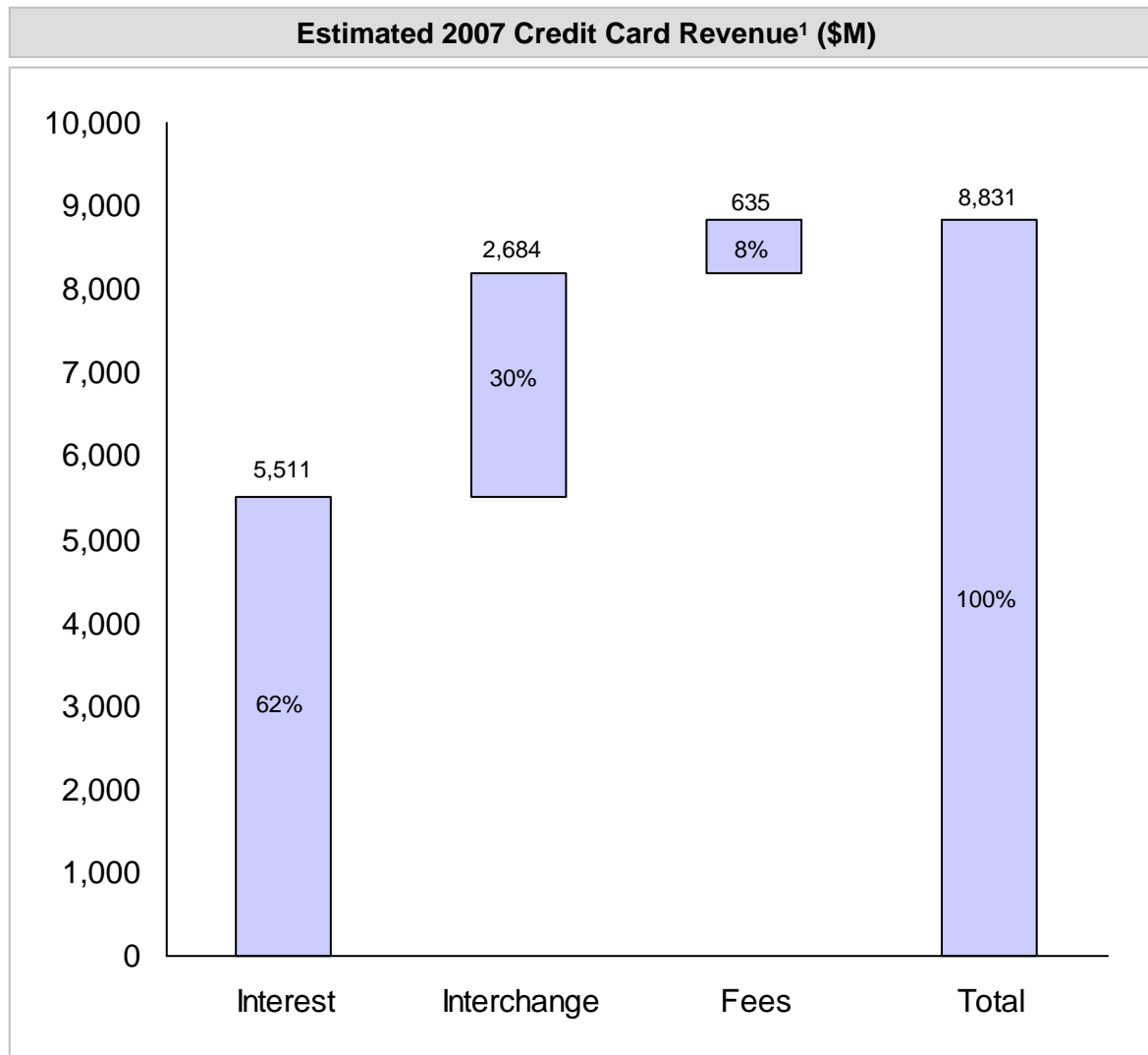
CUCC Annual General Meeting

May 6, 2008



Deloitte.

Retail payments are very strategic to Canadian banks

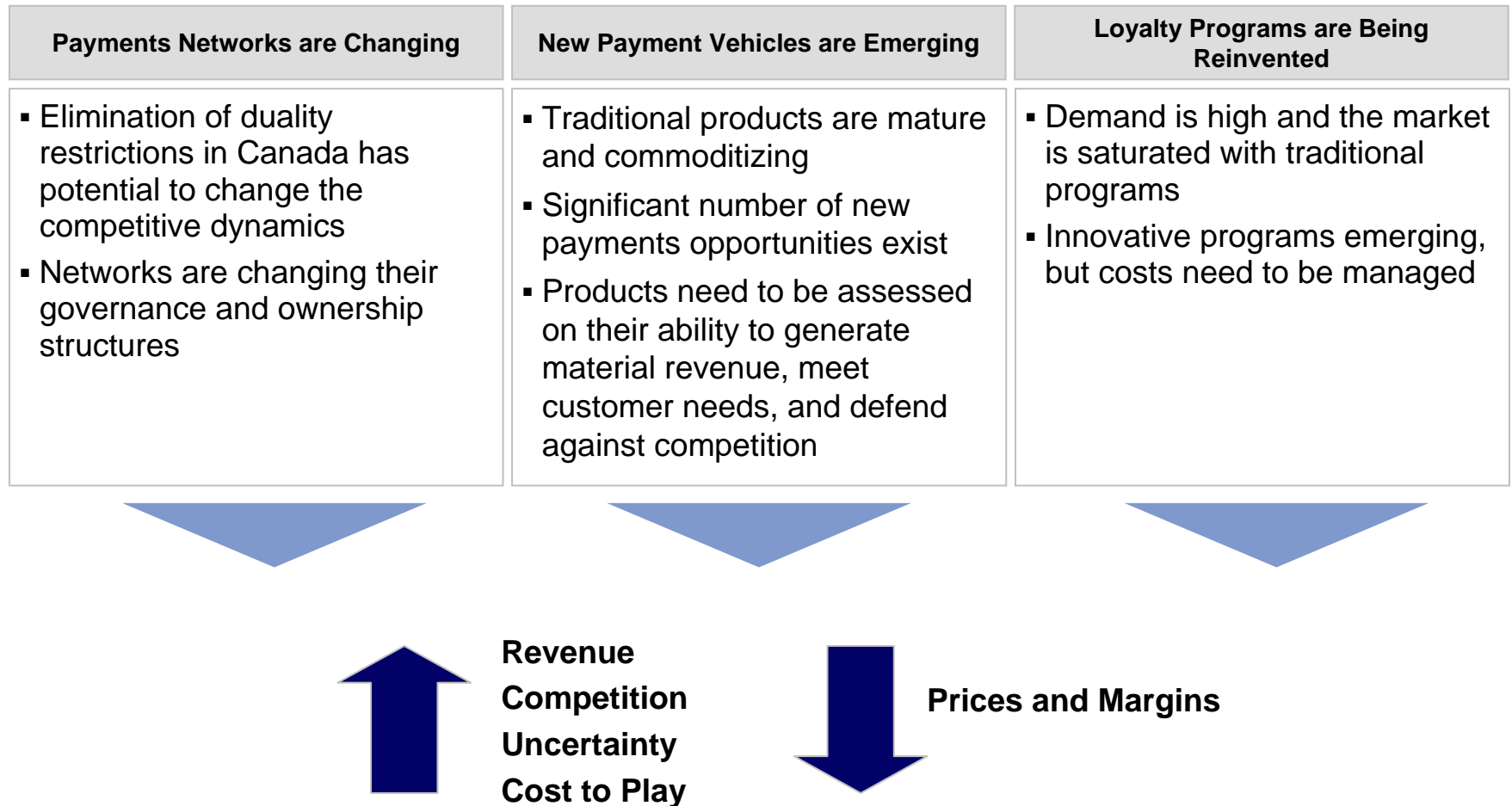


- Payments revenue can generate between 20-35% of retail banking revenue
- New revenue sources are emerging
- Regulatory measures and competitive innovation could also place pressure on margins

¹Only Visa issuers:

Sources: Deloitte Analysis, Nilson Report, June 2005, Feb 2008

The degree of change in the Canadian retail payments market is unprecedented



Source: The Wall Street Journal – Trends: Credit Cards – Cash? What's Cash?; Trends in the Use of Payment Instruments in the United States; BCG Global Payments 2004; Deloitte Research

Payments networks are in the midst of extensive structural change



- Merger, IPO, and commercialization in 2007
 - Direct subsidiary of Visa Inc.
 - Currently undergoing a varying degrees of change in all parts of the organization as a result
 - Largest IPO ever (\$17.9B)
- Visa is moving aggressively to introduce branded debit into the Canadian marketplace






- Regional division of MasterCard Incorporated
- MasterCard Incorporated went public in 2006, with the financial institutions that previously owned it holding approximately 40% of its current stake
- Raised \$5.6B in IPO
- MasterCard is aggressively pursuing contactless and duality in Canada



- Interac is currently composed of two primary entities
 - Interac Association: Debit and ATM
 - Acxsys Corporation: Online debit and email money transfers
- Interac is currently subject to a consent order by the Competition Tribunal which constrains the Association's activities

Successful new payments products need to be simple and deliver value

Successes	Problem to be solved	Why did it work?
	<ul style="list-style-type: none"> How can I safely pay for my product on eBay? 	<ul style="list-style-type: none"> Simple, safe, and secure method for online payments Untapped market Met customer needs
 <p>Contactless Transportation Cards</p>	<ul style="list-style-type: none"> Payment is a bottleneck; how can I get passengers on the train faster? 	<ul style="list-style-type: none"> Speedier method of payment Identified key markets
 <p>Prepaid Cards</p>	<ul style="list-style-type: none"> Why do I always need to have loose change to make small purchases? 	<ul style="list-style-type: none"> Easily expandable to other markets Piggyback on existing infrastructure






Simple and Safe

Benefits Multiple Stakeholders

Leverages Current Infrastructure

By contrast, many unsuccessful payment products have tended to “overshoot” the customer’s needs






Failures	Problem to be solved	Why did it fail?
	<ul style="list-style-type: none"> Is there a way to make online purchases more secure? 	<ul style="list-style-type: none"> Not user friendly Acceptance is an issue
 <p>Mondex / Visa Cash</p>	<ul style="list-style-type: none"> Why do I always need to have loose change to make small purchases? 	<ul style="list-style-type: none"> Technology push, and not a market pull Loading money was inefficient (phone or limited ABMs)
	<ul style="list-style-type: none"> Why do I always need to have loose change to make small purchases? 	<ul style="list-style-type: none"> Full scale rollout never achieved Inconvenience of the closed-loop network Lack of merchant acceptance

Complicated / Not User Friendly

Benefits Limited to Single Stakeholder

Requires New Infrastructure









Numerous payment products will be vying for Canadians' "wallet" space in the near future

	Contactless Cards	<ul style="list-style-type: none"> ▪ Payment without physical contact with the POS (or equivalent) ▪ Leverages RFID technology
	Debit	<ul style="list-style-type: none"> ▪ Debit cards that use the Visa or MasterCard networks instead of Interac ▪ Interchange on Interac debit is possible
	Mobile Payments	<ul style="list-style-type: none"> ▪ "Top-of-the-phone" ▪ "Bottom-of-the-phone"
	Prepaid Cards	<ul style="list-style-type: none"> ▪ Load money onto a card for future use ▪ Open, semi-open or closed network
	Search-to-Purchase	<ul style="list-style-type: none"> ▪ Integrated targeted advertising, search capabilities and a payment methods (e.g., Google Checkout)
	Others	<ul style="list-style-type: none"> ▪ Micropayments ▪ Transportation contactless cards ▪ Dual debit / credit cards ▪ Decoupled debit





Contactless payments have been deployed and will gain market traction this summer

 <ul style="list-style-type: none"> ▪ First issuer to launch, Petro Points card ▪ Pilot in November 2005 ▪ Began deploying in 2006
 <ul style="list-style-type: none"> ▪ Offering to its Mosaik cardholders ▪ Currently piloting the fob to targeted GTA cardholders ▪ Began deploying in 2007
  <ul style="list-style-type: none"> ▪ Offering mag-stripe PayPass to all MasterCard holders ▪ Began deploying in 2007
 <ul style="list-style-type: none"> ▪ Staff testing in 2006 ▪ Full rollout plans in 2008
   <ul style="list-style-type: none"> ▪ TD and RBC will be adding Visa payWave to EMV cards in KW trial ▪ Began deploying in 2008



Source: Deloitte research, "TD Visa card adds Visa payWave contactless feature" Datamonitor (January 25, 2008)

Visa and MasterCard are pursuing the Canadian debit market aggressively and Interac is planning changes to its core offering



Current State

- It is anticipated that Visa- and MasterCard-branded debit cards will gain increasingly more traction
- Merchant opposition and a clear business case represent the last hurdles before branded debit can be launched successfully

Stakeholder Value Proposition

Issuer	Interchange for transactions on MasterCard network
Merchant	Displacement of cash Increased speed of throughput (contactless) Increased Internet sales
Consumer	Online purchases (eCommerce) New ways to pay (e.g., International, MOTO) Recurring bill payments Zero liability Rewards programs (e.g., Visa Perks)
Acquirer	Potential new revenue through re-pricing merchant relationships





New developments in mobile payments in 2007 and 2008 signal renewed interest








M-Commerce (“Top of the Phone”)	NFC (“Bottom of the Phone”)
<ul style="list-style-type: none"> ▪ Payments made using the phone keypad or interface 	<ul style="list-style-type: none"> ▪ Payments made using a card embedded card via near-field communication
Recent Developments	
<ul style="list-style-type: none"> ▪ CoastCapital and Mouth Lehman CU offer m-banking in March 2008 ▪ RBC announced an NFC trial in 2007 for Visa PayWave in handsets ▪ In 2007, ClairMail and Telus offer m-banking / m-payments solutions to FIs ▪ Telus, Rogers, Bell created Wireless Payment Services (WPS) as JV in 2006; no evidence that WPS still exists ▪ US trends <ul style="list-style-type: none"> – Non-traditional competitors forming in niche markets (e.g., Western Union/RadioShack for mobile transfers in US¹) – US banks have developed robust m-banking offerings 	



Sources: “The Changing Retail Payment Systems Landscape”, Forrester, 2007; ¹Western Union, RadioShack team up for cellphone money transfers”, Globe and Mail, 2008; ²Consumers ready for mobile payments, but insutry must do their part to win them”, Prepaid Trends, 2008; CWTA; Deloitte analysis



Entry into the prepaid space in Canada is increasing rapidly

<p>Pay Linx and RBC</p>	<ul style="list-style-type: none"> ▪ Replace paper cheques issued by government agencies ▪ Allows cash withdrawal at ABMs and purchases at POS terminals through Interac network 	
<p>Vancity</p>	<ul style="list-style-type: none"> ▪ The first “main-stream” Canadian financial institution to launch a Visa flagged prepaid card ▪ Min value is \$25, and max is \$500, plus \$2 load fee 	
<p>Cadillac Fairview</p>	<ul style="list-style-type: none"> ▪ Multi-retailer card ▪ Program managed by Store Financial ▪ Issued by LaSalle Bank (now B of A) – Master Card 	
<p>GE Money</p>	<ul style="list-style-type: none"> ▪ White label issuance for MuchMusic prepaid card ▪ Program managed by Mint Technologies ▪ Program has recently been discontinued due to financial issues at Mint 	
<p>Bank of Montreal</p>	<ul style="list-style-type: none"> ▪ Travelers' cheque replacement ▪ \$9.95 issuance fee ▪ Accumulates air-miles 	

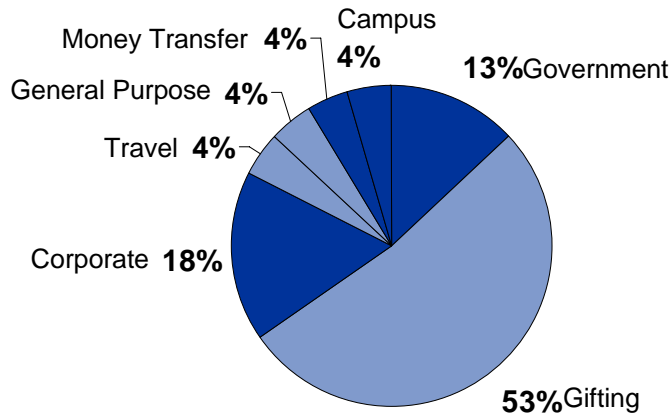
Source: Company Websites; Deloitte Analysis



Prepaid cards are expected to grow dramatically in the near future, but economics vary by use category

Growth Potential in Prepaid Credit Card Spend

2010 Forecast for Prepaid Spending in Canada¹
Total Market: \$23 billion



- 39% of prepaid spending forecasts have recurring potential
- No recurring potential

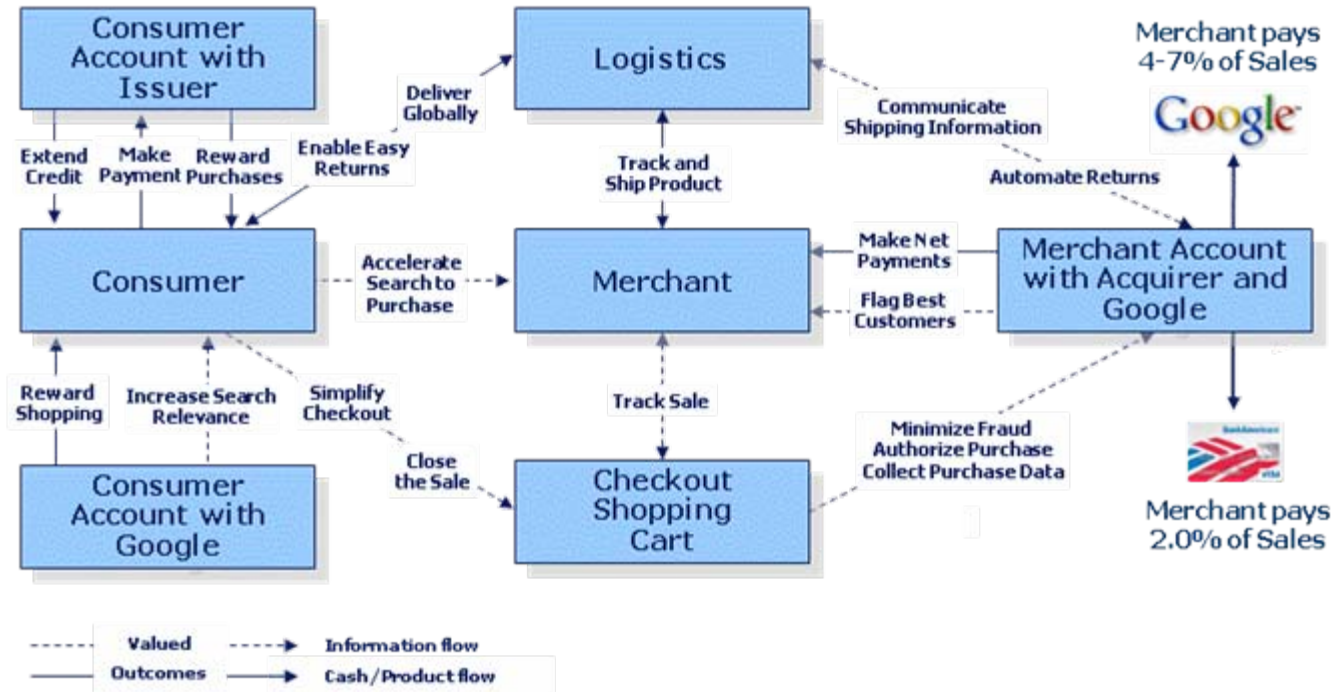


Source: Visa Canada "Canadian Prepaid Market", Jan 2004; MasterCard Prepaid Market Sizing, Apr 24, 2007; Deloitte Analysis; ¹Prepaid Trends, March 2008





“Search-to-purchase” could envelop existing payments platforms due to different economics

How Search-to-Purchase works



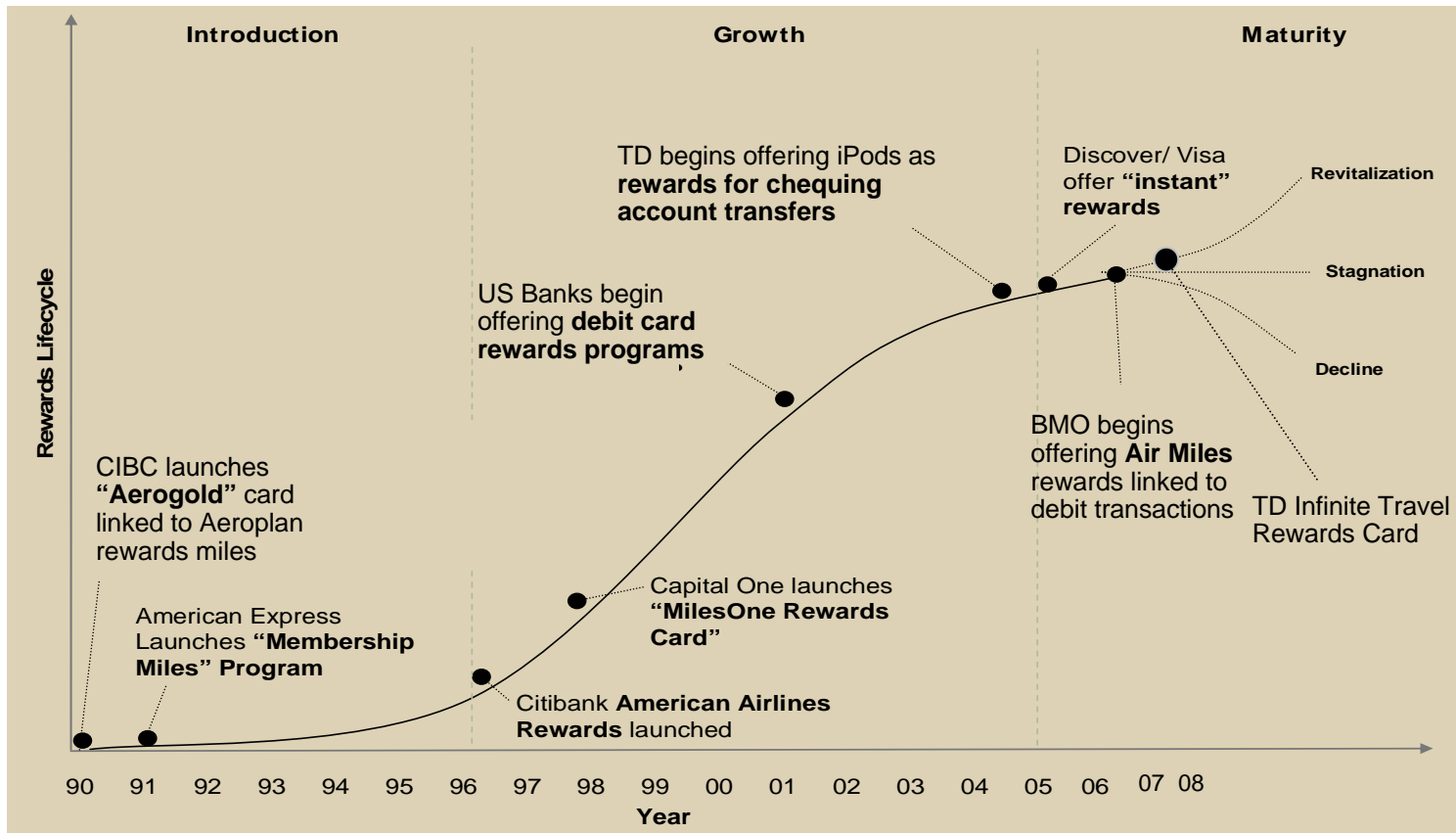
Source: "Is the retail payments industry headed for disruption?", Deloitte, 2007;

Other new products have gained varying levels of adoption globally, but remain several years away from gaining commercial traction in Canada

Product Type	Description	Implications
<p>Micropayments</p>	<ul style="list-style-type: none"> Products that address the payments market under \$10 	<ul style="list-style-type: none"> High volume / low margin structure of the marketplace
<p>Transportation Contactless Cards</p> 	<ul style="list-style-type: none"> Contactless cards that carry a prepaid balance for use in transportation systems 	<ul style="list-style-type: none"> Potential exists to co-brand for other non-transport payments
<p>Dual Debit / Credit Cards</p>	<ul style="list-style-type: none"> Card can be used for debit or credit transaction based on customer preference 	<ul style="list-style-type: none"> Would require changes on POS terminals and therefore a few years away
<p>Decoupled Debit</p> 	<ul style="list-style-type: none"> Allows non-traditional issuers to issue debit cards that route payments across the ACH network 	<ul style="list-style-type: none"> Non-bank could offer a debit-type product in Canada by leveraging the ACSS network

Everything in business has a lifecycle; rewards programs for financial institutions are no different

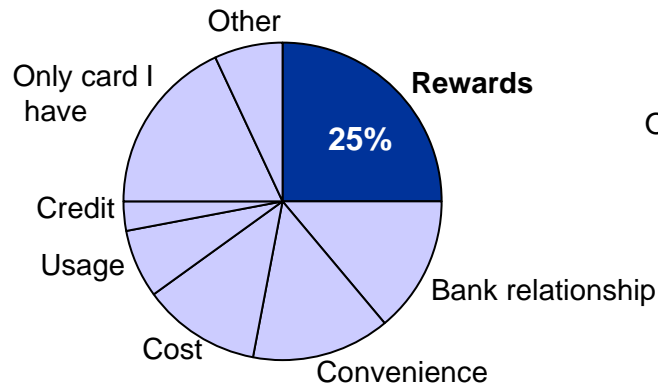
Rewards Lifecycle



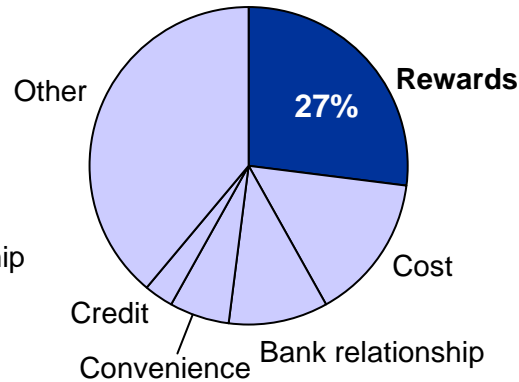
Customers have come to expect reward offerings in an increasingly competitive market

Rewards Drive Credit Card Use in Canada

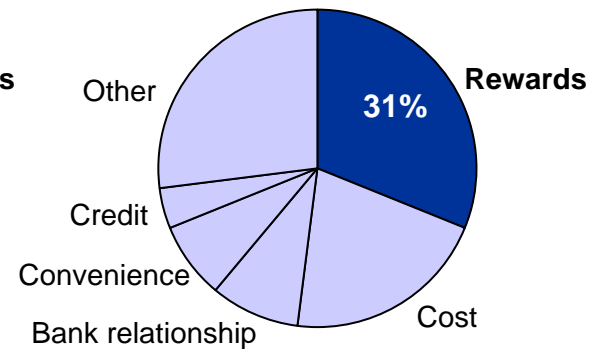
Reasons for Using a Primary Credit Card¹



Reasons for Acquiring a New Card¹

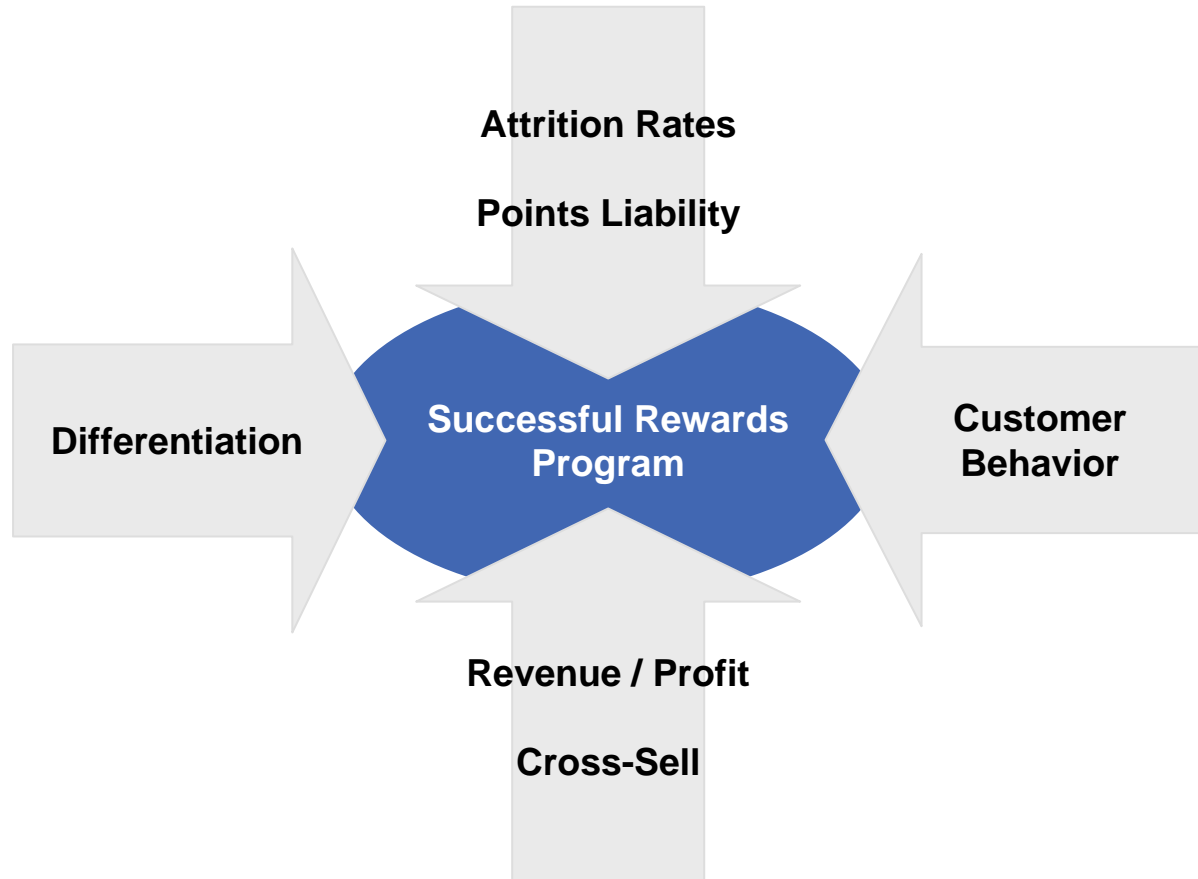


Reasons for Switching Cards¹

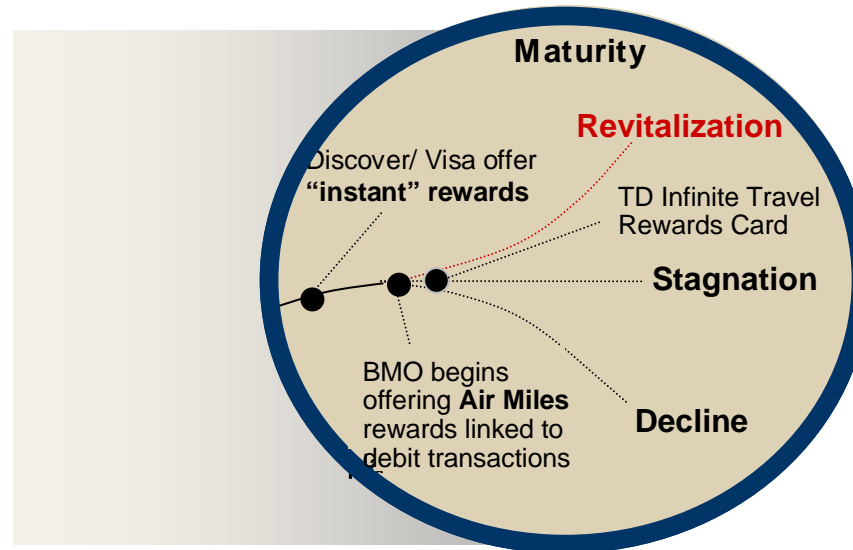


¹ "The Dynamics of the Canadian Credit Card Market", Ipsos-Reid, 2006; ² "With new credit card, BMO shows it's not just playing defence", Globe and Mail, April 2008

There are a number of reward program levers that need to be balanced to entice customers and keep them loyal, active – and profitable



Leading companies are differentiating themselves by revitalizing their rewards programs with offerings that focus on creating value for both the consumer and institution



A. Instant Rewards

- Ability to **redeem rewards instantly** through retail point-of-sale transactions

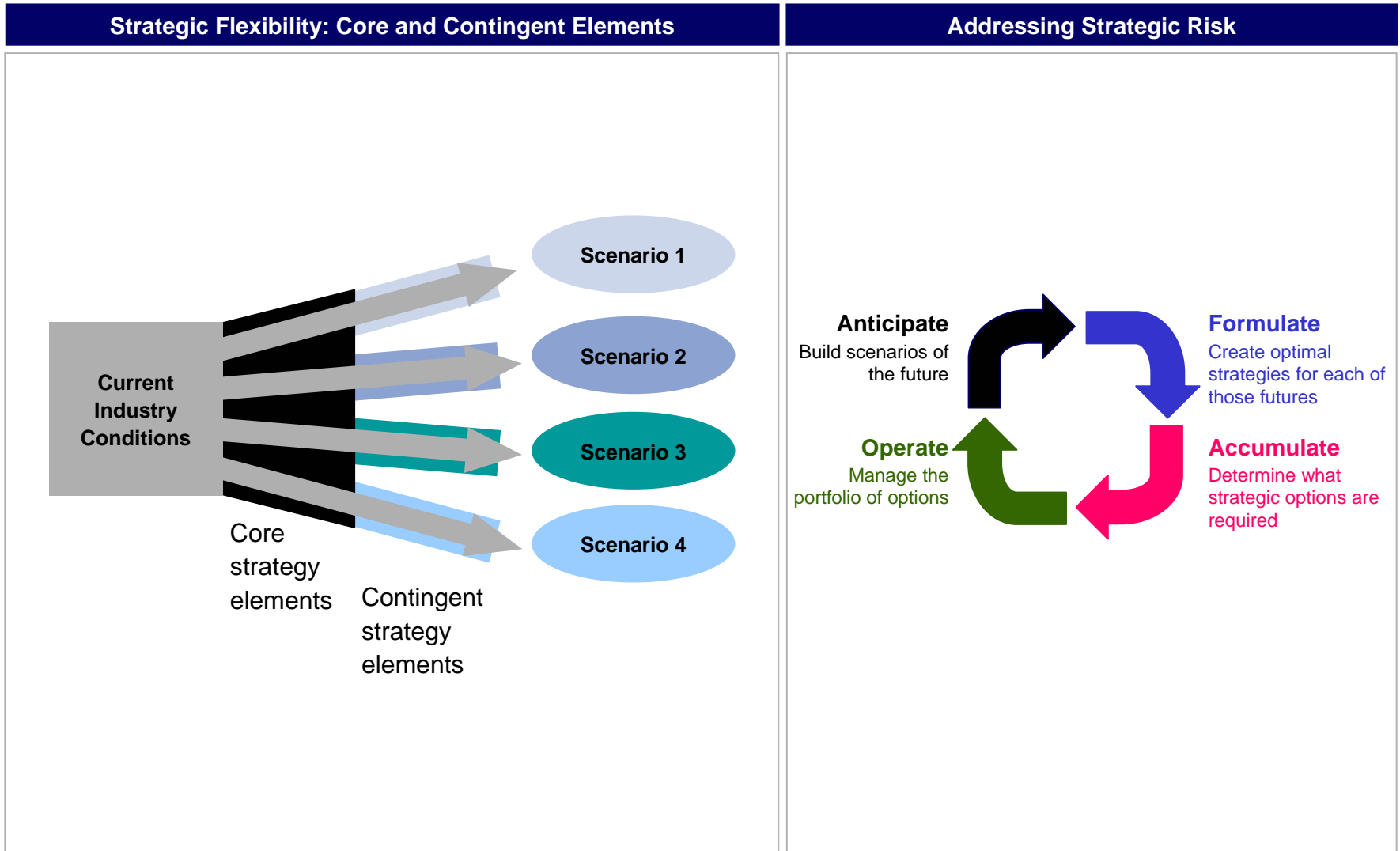
B. Cross-Product Rewards

- Allows customer to **earn points quickly** based on the number of bank products in use

C. In-House Redemption

- Creates **unique redemption options** that are tied to an institutions products and services

Core and contingent strategies can be developed to address future scenarios



Questions?

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