Driving Competitive Advantage with Comprehensive Customer Information Management

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About RBC Royal Bank

- Royal Bank of Canada (TSX/NYSE: RY) is Canada's largest bank & one of North America's leading diversified financial services companies

- Employs over 70,000 people*

- More than 15 million personal, business, and public sector clients*

- Market capitalization of $71.5+ billion ($CDN)*

- Offices in North America and over 36 countries around the world

- Named to the "Global 100 Most Sustainable Corporations In The World"

- Canada's Most Respected Corporation for the fourth year in a row*

- RBC rated most valuable brand in Canada, and in Top 100 Most Powerful Brands in the world *

* April 2008

Customer Info Management Timeline

| Pre 1997 - Focus on strong data management capabilities, develop client profitability model, early segmentation & sales management | 1997- 00 Complete CRM gap analysis & form CRM Program Office, to implement "Quick Wins" and built CRM framework to generate revenue/ results "as you go"… | Post 1999 - Organize around the segments - adopt CRM as a "way of doing business"… then next generation CRM based on "enterprise view of clients" |

Up to 1996   **1997/1998**   **1999/2000**   **2001-2007**

Up to 1996	1997/1998	1999/2000	2001-2007	
Real Time operational client information	New and more precise client value model	Campaign management automation	e-Offers via On-line Banking	Pricing based on client value
Client and account information available internally online	Life Stage Segmentation and Potential		Enterprise client data warehouse	Client Preference and Choice – enterprise consent and solicitation management
Client profitability model and segmentation	First client strategies and automated leads to the desktop		Business Markets data mart integrated in data warehouse	Enhanced enterprise profitability
New sales routines and processes	Automated decisions		Contact centre queuing based on client value	Enhanced enterprise segmentation approach
RBC Banking "Do not Solicit" capability	Retention management			
Implemented industry leading Marketing data mart	Client risk/collection management			
Re-designed sales and service desktop supporting new sales routines				

Information Management contributes to RBC's Strategic Priorities & Other Initiatives…

Support analytics modelling, segmentation, client value measurements

- Improved client value calculation, analysis & reporting
- Analysis and modelling to provide deep client insight in order to strengthen client relationships and increase customer value

Support client decisioning & execution

- Improved precision of client decisioning for marketing, service and operational initiatives
- Improved efficiency of campaign execution.

Support performance management

- Scorecards, dashboards, trending reports
- Marketing reporting
- Full suite of product MIS capabilities

Data governance and productivity enhancements

- Data stewardship, governance and security
- Concentrating on elimination of redundant data
- Streamlining & automating processes in order to reduce support & maintenance costs
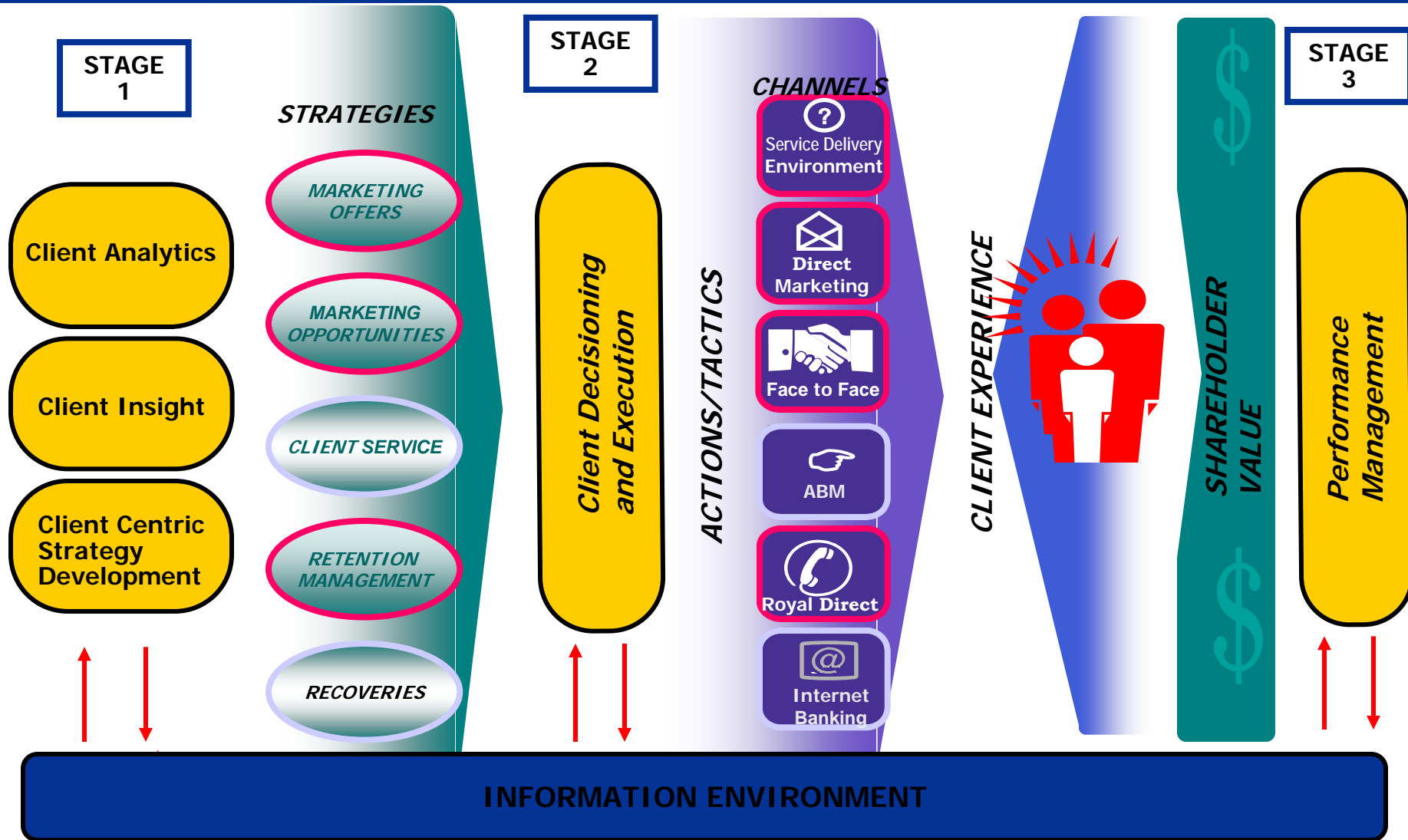- Increased consistency and ease of access to data

Contributes to the following Strategic Priorities

- *Revenue Growth in Canada*
- *Superior Client Experience*
- *Cost Management & Risk Mitigation*
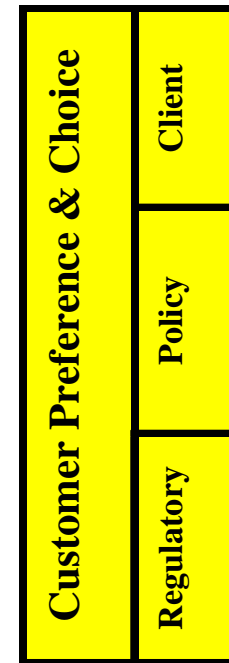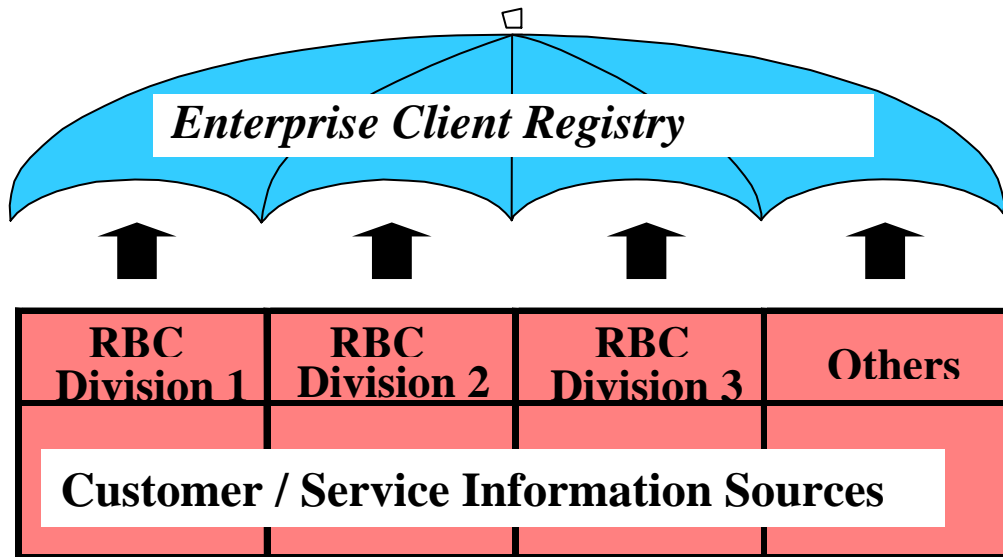- *Cross Platform Leverage*

&

Enables Transformational Initiatives

Customer Management Operating Model

STAGE 1

STRATEGIES

- Client Analytics
- Client Insight
- Client Centric Strategy Development

- MARKETING OFFERS
- MARKETING OPPORTUNITIES
- CLIENT SERVICE
- RETENTION MANAGEMENT
- RECOVERIES

STAGE 2

Client Decisioning and Execution

ACTIONS/TACTICS

CHANNELS

- ? Service Delivery Environment
- Direct Marketing
- Face to Face
- ABM
- Royal Direct
- @ Internet Banking

CLIENT EXPERIENCE

SHAREHOLDER VALUE

$

$

STAGE 3

Performance Management

INFORMATION ENVIRONMENT

4

Enterprise Client Registry - Business Model
CRM across channels, and across enterprise

Enterprise Client Registry

RBC Division 1	RBC Division 2	RBC Division 3	Others
Customer / Service Information Sources			

Customer Preference & Choice
- Client
- Policy
- Regulatory

Enterprise Customer Views / Sales Force Views
- Strategy
- Models
- Profitability

Data Warehousing Environment

Successful data and info integration is critical to fully realize enterprise benefit & value

Core uses to date –
- *Client profiling, "shared client" analytics & metrics*
- *Market research*
- *Performance management reports – i.e. scorecard*
- *Client value measurement – enterprise and divisional*
- *Campaign management & decisioning – client exclusions*

RBCFG Confidential

# Enterprise Client Registry - Functionality

- Application that creates a unique identifier that links a customer across the RBC Financial Group enabling an enterprise customer view.

  ➔ Daily delta process

  ➔ Monthly load of linkages to the DWE

- Uses Ascential's Quality Stage software (tool)

  ➔ ECR modified rules for name & address for standardization to increase the match rate. Eg: 'Bob' gets changed to 'Robert'

- Matches are either derived (automated match) or confirmed (provided by the client by using their client card#).

- Once matched a client remains matched forever; unless, one of the client records is deleted, in which case the client will become a "singleton".

- The ECR Number is **<u>not</u>** persistent month over month; refer to new monthly table for historical linkages

> **ECR is designed to match any entity to any entity**

Difference between a 'derived match' and a 'confirmed match' …

Total of 110 profiles

ECR matching example (Direct Investing / Dominion Securities to Bank)

100 derived

10

80

20

Confirmed but not derived
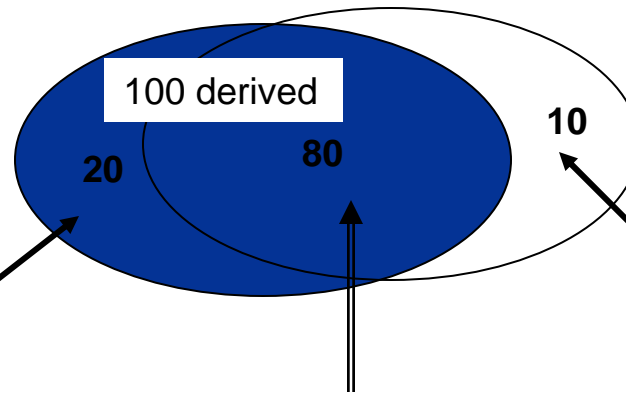
Derived but not confirmed

• not confirmed because NO RBC client card# is on file

• derived because fields used in algorithm can be matched up to the minimum score required
eg:
Name, Address, Phone, DOB, DL, acct #

Derived
AND
confirmed

Reason #1
• AD client has provided spouse's card#

Reason #2
• confirmed because the RBC client card# is on file
• NOT derived because fields used in algorithm cannot be matched
eg:
Name = S.Hayes and Sheila Hayes
Address = old and new address
Phone = old and new
Date of Birth = different

ECR Functionality…use across enterprise

- **Client profiling** / analytical analysis (eg: shared client analysis)

- **Sharing** of "Do Not Solicit" codes and exclusion lists

- Profitability and predictive **models** (e.g. EPV)

- **SRF Suspect duplicates project**

  - 135,465 duplicate records exists as of January-2006 month-end (very low percentage on a 10 million client base – better than Best in Class)
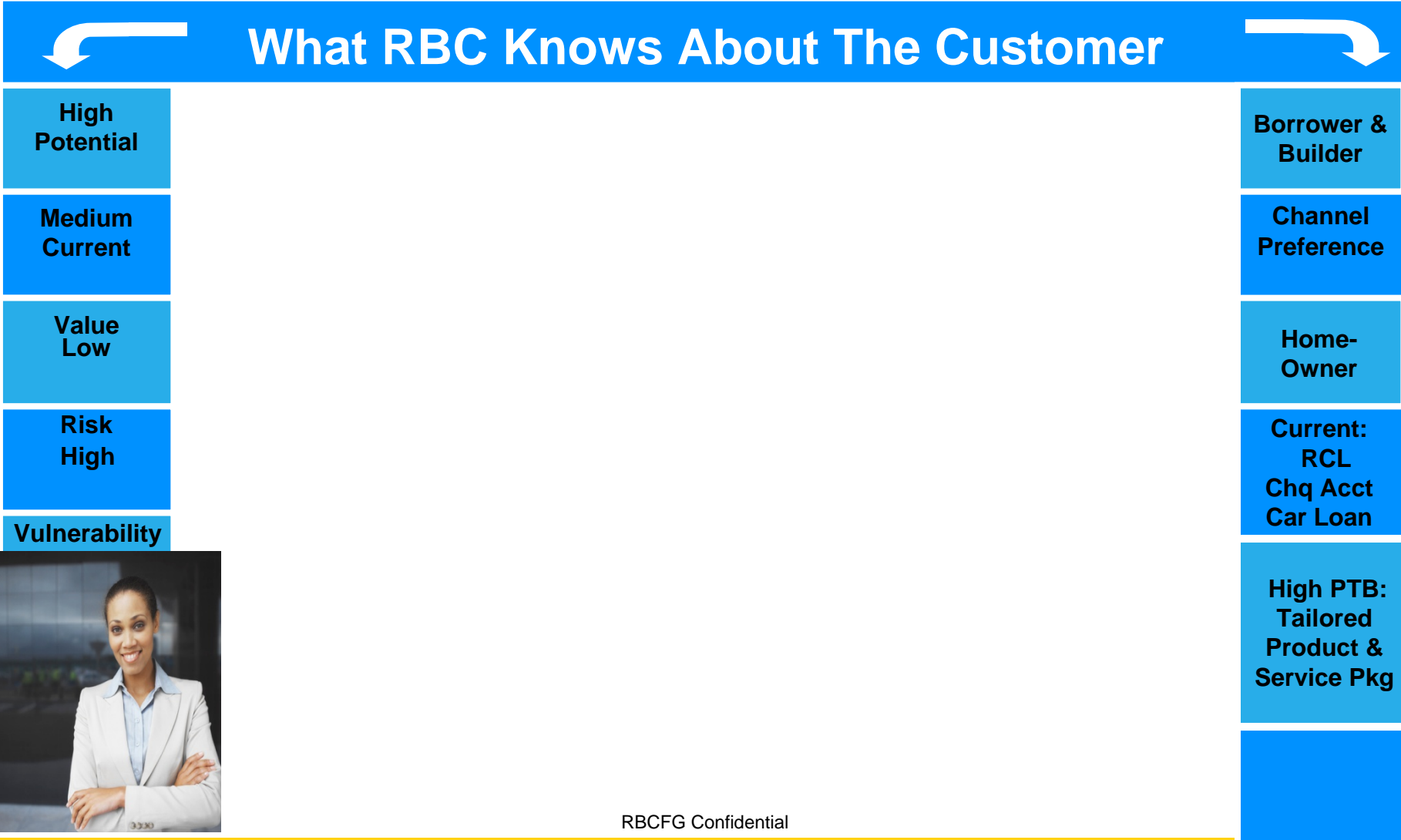
    Last clean up done in 2002/03

- **Scorecard** for the field

- **Regional President's** market contribution

- **Campaign Decisioning**…..client exclusions

- **Market Research**

- **Direct Investing**…used to provide staff discount if CPC is Share for Service = 'yes'

ECR Functionality…use across enterprise

External File Matching:

- **Dun & Bradstreet**
  - ➤ RBDM file and D&B file run through matching algorithm quarterly
  - ➤ Matched file is stored on RBDM
  - ➤ Used to append to bank data

- **Visa Enrolment** via paper applications (runs three times a day)
  - ➤ New applications received prior to going through the BDP/TSYS process
  - ➤ Passed through ECR to determine if client has an existing SRF profile within the bank and if so, additional information is provided back to assist in the credit approval process.

- **Prospect List Matching** (matched or unmatched exclusions)
  - ➤ Primarily used by the Campaign Execution team
  - ➤ Web-interface that was built for the purpose of matching external lists (approx. 100M records) against our client base and identifying matches in order to exclude existing clients from any marketing campaigns.
  - ➤ Output files is loaded to temporary tables

Developing personalized strategies

What RBC Knows About The Customer

High Potential

Medium Current

Value Low

Risk High

Vulnerability

Borrower & Builder

Channel Preference

Home-Owner

Current: RCL Chq Acct Car Loan

High PTB: Tailored Product & Service Pkg

Developing personalized strategies

Action To Take and To Measure

Targeted Marketing Offer	Tailored Retention Activity	Individualized Courtesy Overdraft	Effective Sales Practices
❶ While Viewing Account Transactions on Internet, Browses Service Package Offer	❷ Royal Direct Contacts Client For Customer Care Call	❸ RBC Pays Cheque by Extending a $750 Courtesy Overdraft	❹ Client Goes To Branch, Personal Banker Aware of Internet Offer and Sells the Service Package
Looks interesting, I'll investigate further when I have more time.	*RBC cares about me, I am not just a number.*	*RBC appreciates my business.*	*RBC is dependable.*
RBC understands my needs.			*I trust RBC.*
• Reduce Vulnerability	• Reduce Vulnerability	• Improve Efficiency • Increase Profits • Reduce Vulnerability	• Increase Profits • Reduce Vulnerability

Courtesy overdraft limit (COL)
- **Overdraft facility for personal customers**
- **Limit set at customer-level, reflects customer's entire relationship with RBC**
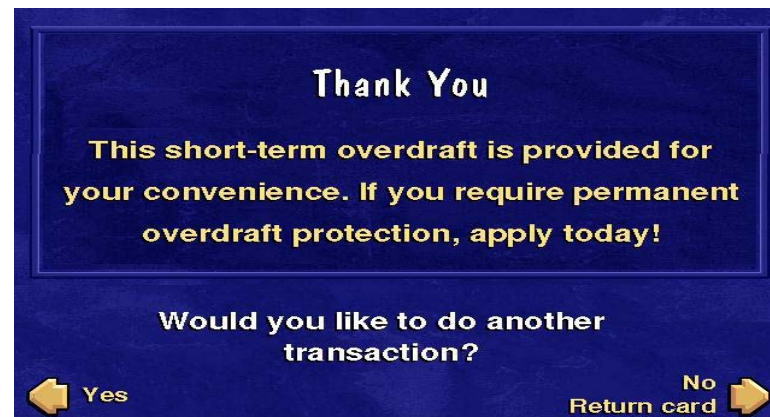- **Applied to primary chequing/ savings accounts**

Eligibility for COL
- **RBC customer for at least 90 days**
- **Current low credit risk score**
- **Made deposit in previous month**

Scenario: Client wants to withdraw $100. However, has only $43.52 available in account.

At the backend, client has been decisioned for COL. Hence, is allowed to overdraw and prompted to acknowledge the $5 handling fee to continue with withdrawal.

Note that once the client acknowledged the fee, the fee will not be reversed.

COURTESY O/D 1B

Funds available in this account are:

$43.52

You may continue and temporarily overdraw this account for a $5.00 handling fee.

(overdraft interest will apply)

Yes   **Would you like to continue?**

Start over

No
Return card

Thank You

This short-term overdraft is provided for your convenience. If you require permanent overdraft protection, apply today!

Would you like to do another transaction?

Yes

No
Return card

Sales Platform – Relationship Value Pricing

Lessons for Building Customer Information Management

○ Strong executive sponsorship is key

○ Articulate business vision for relationships and client experience goals (from client view!) and capabilities assessment – people, process, information and technology, to develop and maintain roadmap. Info and technology should support business vision and people/ process (not the other way around!)

○ Analytics, segmentation, modeling and metrics evolve over time, and the combination of research and analytics creates greater and more actionable consumer insights and should direct new information needs

○ Centralized information, modeling and analytics can accelerate learning and can be leveraged between businesses, however cross functional teams - executive and working teams – are fundamental to organization/ culture changes needed to cross internal divisions & develop enterprise solutions

○ Centralized information management business team, supporting data stewardship, governance and development funding is key for effective maintenance, however subject matter expertise and business information needs must be a shared responsibility and required for organizational credibility

THANK YOU !